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OUR COVER

The Tower of London introduces our special supplement starting on page 12. eta kappa nu

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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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Member Association of College Honor Societies

New York Award Dinner

by James A. D'Arcy Chairman of Award Organization Committee

Photos by Howard Sheppard

On Monday evening, April 6, 1981, over one hundred members and guests gathered at the New York Sheraton Hotel in New York City to witness the awarding of the 1980 Recognition of Outstanding Young Electrical Engineers in the United States.

The winner was Mr. Jesse E. Russell of Bell Laboratories, Whippaney, New Jersey. A supervisor in

the Transmission Analysis Software Development Department, Mr. Russell was honored for his original contributions in the field of telecommunications network support systems and for his involvement in civic and career guidance activities.

Honorable Mention was awarded to Dr. Warren J. Ayer, Jr. and Mr. Steven J. Temple. Dr. Ayer is



manager of an engineering group at IBM Corp., Essex Junction, Vermont. He was honored for his contributions to the field of semiconductor memory technology and for his involvement in church and community activities. Mr. Temple is a senior engineer at Raytheon Co., Bedford, Massachusetts. He was honored for his contributions to the field of microwave amplifiers and for his involvement in church and professional activities.

Initiated in 1936, the Eta Kappa Nu Recognition was created to "emphasize among electrical engineers that their service to mankind is manifested not only by achievements in purely technical pursuits but in a variety of other ways. It holds that an education based upon the acquisition of technical knowledge and the development of logical methods of thinking should fit the engineer to achieve substantial success in many lines of endeavor."

Since 1936, 45 electrical engineers who were less than 35 years of age and who received their Baccalaureate degree less than 10 years before, have received the award and 98 of similar characteristics have received honorable mention.

You can assist Eta Kappa Nu in discovering other outstanding recognition candidates by nominating worthy young electrical engineers from your company or acquaintance. Nomination blanks can be obtained from Professor Paul K. Hudson, Executive Secretary, Eta Kappa Nu Association, Department of Electrical Engineering, University of Illinois, Urbana, Illinois 61801. Nominations should be returned to him no later than May 31 each year.

IDENTIFICATION: Opposite page, Award winner Jesse E. Russell, Sr. receives congratulations from Toastmaster Irving Engelson (left) and F[†]a Kappa Nu President Syoney Parker.

This page, top to bottom: President Parker presents Honorable Mention Award to Warren J. Ayer, Jr. and to Steven J. Temple. Mr. Russell delivers his acceptance speech.























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MERRY MOMENTS WITH MARCIA

If you don't understand why Uncle Sam wears such a tall hat, you will when he passes it around.

You can be quite sure it is going to be a BAD day when:

You call suicide prevention and you are put on "Hold"!

You turn on the TV and they're showing emergency routes out of town.

Your beautiful birthday cake collapses from the weight of the candles.

You find the "60 minutes" news team waiting when you get to your office.

Your twin brother forgets your birthday.

A bank is just a place where you keep the government's money until the tax man asks for it!

Looking down at the sick man, the doctor decided to tell him the truth. "I feel that I should tell you: you are a very sick man. I'm sure you would want to know the facts. I don't think you have much time left. Now, is there anyone you would like to see?"

Bending down toward his patient, the doctor heard him feebly answer, "Yes."

"Who is it?"

In a slightly stronger tone, the sufferer said, "Another doctor."



A city fellow to a farmer: I could never figure out how the water gets into a watermelon.

Farmer: Well, we plant them in the spring!

A man was being interviewed for a job in an office, and was asked how he'd feel about having a woman boss. He hesitated, then smiled and said, "Well, I guess I'd feel at home."

Why must we have enough memory to recall to the tiniest detail what has happened to us, and not have enough to remember how many times we have told it to the same person?

Grandpa framed the first dollar he ever made in a 10¢ picture frame. Today the frame is worth a dollar and the dollar is worth 10¢.

It is certainly a fact that after all is said and done much more is said than done.

MAY YOU HAVE

Enough happiness to keep you sweet.
Enough trials to keep you strong,
Enough sorrow to keep you human,
Enough hope to keep you happy;
Enough failure to keep you humble;
Enough success to keep you eager,
Enough friends to give you comfort,
Enough wealth to meet your needs;
Enough enthusiasm to look forward,
Enough faith to banish depression,
Enough determination to make each day

by MARCIA PETERMAN

better than yesterday.

SOME THOUGHTS ON EDUCATION

Regardless of what one may think about the appropriateness and quality of the American educational system, we hope that everyone would agree that improvements could be made. Thus it would seem reasonable and helpful to put down some observations about what might be the characteristics and objectives of an ideal education. There are several aspects of this question, some of which we shall discuss in turn.

It has been said that a successful democracy depends on an informed citizenry. Thus the State should have the responsibility of providing enough education to ensure the literacy and basic knowledge of history and politics and economics, and the acquisition of a spirit of consideration and discipline, to all those who aspire to become voting citizens.

Should the State do any more? One answer is "no". All the rest should be the responsibility of the individual. At present, the situation is rather confused. One's university education, in practically all cases, is paid for in part by the State, in part by gifts, and in part by the student. In general, the students do not seem to understand this. In response to the question as to how much of their college education they themselves paid for many graduates have answered "100%". This shows a basic lack of understanding that might even be regarded as shocking. It indicates an acceptance of subsidies as a legitimate way of life in the future. The system has also led to fundraising ability being the primary requirement of a university president.

Should the State do any more? Another answer is that the State should provide equal opportunity for all. What does this mean? Not that everyone should be equally educated, but rather that the same amount of effort (i.e., money) should be spent on everyone. If we consider how much money can reasonably be allocated to education, this may not be enough to bring some students up to the acceptable degree of understanding required for full citizenship. On the other hand, it may well be enough to carry a really intelligent and industrious student well into the university years. The important principle is that everybody, rich as well as poor, brilliant as well as stupid, healthy as well as handicapped should have equal opportunity provided by the State. In our zeal to aid those we regard as unfortunate, we should not neglect those who are the resources of the future.

Regarding the structure of

education, we are very much in favor of the now-very-fashionable continuing education. We have observed that many, perhaps even most, people have careers that not only do not use a great many of the subjects in which they specialized while in school, but also require the learning of new knowledge in a completely different field. Also, a reading of the biographies of several thousand successful men and women has shown an astounding (at least to me) number who have changed their field (often drastically and against the wellmeant advice of friends and mentors) in their mature years. The person who ultimately reaches the top in his, or her, profession usually knows what he wants to do, and doesn't either seek or heed advice, but most of us are not so certain, and don't really know what we should study when we are young. Thus it might be best that we should have, for example, an education up to age 18, then earn our living for 8 years, then go back to school for 2 years, then work 8 more years, then back to school again for 2 years, and so on to the end of life. This could even be compulsory, as there is no difference in principle between compel-



CHARLES CONCORDIA, PE Consulting Engineer

ling someone of 15 years to go to school and compelling someone of 30 years or more. The education would be much more appreciated and effective. Such a system would be suitable for most people. If there are those who want more education when they are young, they would be free to have it at any time at their own expense, but they would not be permitted to have less.

We have mentioned very briefly some of the subjects that should be studied in preparation for citizenship. We shall add only one more,: the discipline of study itself. Several years ago some educators discovered something that most other people already knew, namely that one learned most rapidly the things in which one was interested. This led them to the conclusion that students should be taught those things in which they were interested, and that much effort should be made to arouse interest. But this misses the point that one of the most important and useful assets that we can have is the ability and the will to be able to study diligently subjects in which we are not interested. Even learning by rote should not be so utterly despised, as it has been remarked that, during the ascendency of the British empire, the then usual very disciplined Public School education provided the best background and preparation for the men who went all over the world to rule as governors and judges.

BETA CHAPTER!

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BETA CHAPT ER—PURDUE Initiation Banquet

COUNTER-CLOCKWISE

Paul K. Hudson, Executive Secretary of Eta Kappa Nu, presents the 1979/1980 Honorable Mention Outstanding Chapter Award to Malcolm Slaney, President of Beta Chapter. The yearly award was presented to the Purdue Chapter at its Spring Banquet held in West Lafayette, IN. Also present at the meeting was Dean John C. Hancock of Purdue, a past National President of Eta Kappa Nu.

Rich 'rsk' Kulawiec, a graduate student at Purdue, was presented the "Lounge Rat" award at the banquet by Chapter President Malcolm Slaney. The semi-annual award, one of many tongue in cheek presentations, honors the member who spent the most time in the lounge during the past semester. Kulawiec was chosen for his practice of studying all night in the HKN lab and then spending the day asleep in one of the lounge chairs.

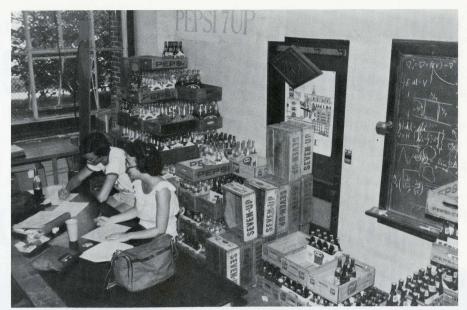
Teresa Phillips was presented the "Impersonating a Member" award by Beta Chapter President Mal-

colm Slaney at the chapter's Spring Banquet. This new award honors the non-member who spent the most time in the lounge.

Sue Dosse (left) and Lori Lucas, two EE's at Purdue, use the HKN lounge to finish their homework. During the last couple of years the lounge has become the focal point for EE's at Purdue. Often open 24 hours a day, the lounge has become a place to get help on the latest homework assignment, find out what is happening in the building, discuss the newest computer game or just relax with friends.

Melora Schultz, a graduating member of Beta Chapter, uses one of the two computer terminals in the HKN lab. Besides serving as the center of the HKN food and drink business, the lab also supports several service projects. These include a student workshop with test equipment and hand tools, a large library of data books, homework solutions for many EE classes, and a large collection of resistors, capacitors and microprocessor chips donated by











A Stranger At The Court Of Saint James Part Two

The Tower That William Built



by PAUL K. HUDSON Editor — Bridge

I ondon is different and special. It is nothing like New York, Chicago or any other large American city. For one thing, it does not have any sky-scrapers, within the American meaning of the word. There is, no doubt, a problem with the sub-soil. Also, because it is much older than any of the American cities, it has many more important points of historical interest.

What, then, would be the most interesting "tourist" sight in London? There is no way to answer that because there are so many of them and personal tastes differ. Yet if I were permitted to visit only one, I suppose it would have to be THE TOWER OF LONDON. I have always been interested in castles and this one is perhaps the most fascinating in the

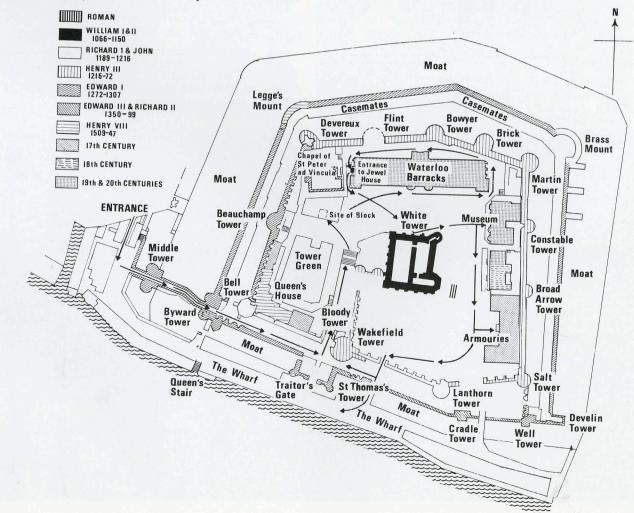
world. It all began with that problem on Hastings Hill in 1066, and that involved the selection of a new King to replace Edward the Confessor.

The English Kingdom claimed by William the Conqueror, Duke of Normandy, in 1066 had the most centralized government in Europe at the time. In theory the monarchy was elective and, in fact, it was by right of election that Earl Harold Godwinson (King Harold) claimed to be the lawful successor to the childless King Edward.

For many years past, however, the house of Wessex had established itself so firmly as the ruling house that by the middle of the eleventh century the entire elective principle had been discredited. Edward would not name Harold as his successor and, instead, nominated his cousin Duke William of Normandy. Thus the stage was set for the Battle of Hastings and the Norman conquest of England. But it was not all that easy. The Battle of Hastings was easy but Hastings is not England. William still had to finish

Opposite page—The White Tower from the south bank of the Thames. King William built this fortress on a site where 1000 years earlier another invader, The Roman Emperor Claudius,

had built a fort. The Tower of London still dominates the river approaches to the City. Below—A layout of the Tower of London.



off the entire island and then hold it against a people that did not think much of him. It was to solve this latter problem that the Conqueror built the Tower of London, as a stronghold of defense and order.

William the Conqueror did not start out in life as one of the "swells". Normandy was not a part of France in those years but was a Duchy, ruled by a Duke. William was the illegitimate son of the 17 year old Duke Robert and a 16 year old servant girl. When he was a small boy his father went off on one of those crusades to the Holy Land and got himself killed. For some reason or reasons, Robert's legitimate progency was unavailable and so William inherited the Duchy. Government officials had to look after him until he grew up and, of course, tried to kill him on numerous occasions. But he did survive all this love and caring and at about age 20 took over the government. He spent the rest of his life—every day of it—in warfare. During the first 25 years or so he tried to strengthen the Duchy by fighting the other near-by Duchies (Brittany, Flanders, etc.) and the King of France twice. And then came the affair at Hastings.

But what manner of man was William? He was much like the other conquerors in his modus operandi of warfare. Any city that resisted him or gave him any trouble was taught a lesson by having all its citizens, including all women and children, slaughtered. But in some ways he was different and respectable. Ghengis Kahn was driven by the terrible poverty of his life and world. Alexander the Great had an unbridled desire to drink all the alcohol in the world and "marry" all the women. Hitler was a lunatic. William was none of this. He just wanted to protect and strengthen what was his. He was a family man, deeply in love with his dear little (tiny) wife Matilda and her brood. If we can overlook the

circumstances of his birth (Queen Victoria would never have been able to) and the demands of effective warfare, he was a fairly solid citizen. The major changes he made in England was to convert it from a nobility to an aristocracy and then tax the living daylights out of it. He died quite suddenly and no one knows why. The best guess is that he injured his side on a saddle horn. When he knew he was dying he suddenly had great compassion for humanity. He sent a large gift of money to the city of Mantes to help the poor people who, only a few days before, he was in the process of killing. But, of course, he is not the only person who ever had to wait until he was dying before he realized that someday he would have to do that. His tomb is not in London, but in Caen, France.

William built the Tower of London just east of town—adjacent to the medieval wall that enclosed the square mile of the city. A castle normally has three things—a central building called the Keep, an outer wall called the Curtain Wall, and a yard between called the Bailey. The Keep of the Tower of London is the tower that William built. In centuries past it was kept whitewashed and it is for that reason it is now called The White Tower. Over the centuries many other structures have been built within the Curtain Wall and the word Tower, or Tower of London, now refers not to the White Tower or Keep, but to the entire establishment.

The White Tower, or Keep, of the Tower of London is a fascinating place. It is a square structure, 90 feet tall and 110 feet on an edge. The walls vary in

Below: The Resident Governor inspects the Yeomen Warders. Facing page: The Chief Warder (left) and the Yeoman Gaoler.



thickness from 15 feet at the base to 11 feet in the uppermost storey. Stairways are to be found only in the four corners and only one of them serves all the floors.

For me, the most interesting place in the White Tower is the starkly beautiful early Norman Chapel of Saint John the Evangelist. It is, of course, a Royal Chapel and was used for many different kinds of Royal functions, including such things as the proxy wedding of King Henry VIII to Ann of Cleves. King Henry IV, in the 14th century, started the custom of using the Tower for ceremonial purposes before the procession through the city on the day before

coronation. On the previous night he had a ceremonial bath, as a symbol of the washing away of sins, etc. The young noblemen who attended him were created Knights of the Bath. After the bath ceremony they kept vigil until dawn in the Chapel. As I stood in the Chapel, I had the feeling that it was not real and that I was dreaming the whole thing. I had known about the Chapel and seen pictures of it for many years but it was not until I stood there that I could visualize many of the events that took place over the centuries. In my imagination I could see the new Knights of the Bath milling around and speaking softly with an occasional yawn.





The basement was used primarily as a storage room but in some years it was a prison and at other times a zoo. When used as a prison it was not generally for the famous people but for the rank and file. Prisoners like the first Queen Elizabeth and Robert Devereux were housed in other towers and places. They generally were allowed a great deal of freedom—were not required to stay in their rooms. The Curtain Wall was their prison. A friendly guard showed us some interesting things that we otherwise might have missed. There was a stone slide in the side of one outer wall. Prisoners were not brought to jail but were thrown into jail down the stone slide. The guard said. "There are some terrible dungeons below this floor but we are not allowed to take you there. If that is the case, then it would explain the claim, always denied, that some prisoners drowned in the Tower. One floor below the basement would be, I think, below the water line.

The second most interesting place in the Tower of London is the Jewel House. It is not in the White Tower. Shortly after the restoration of the monarchy in the 17th century the state jewels were kept in the Martin Tower and at that time they were almost

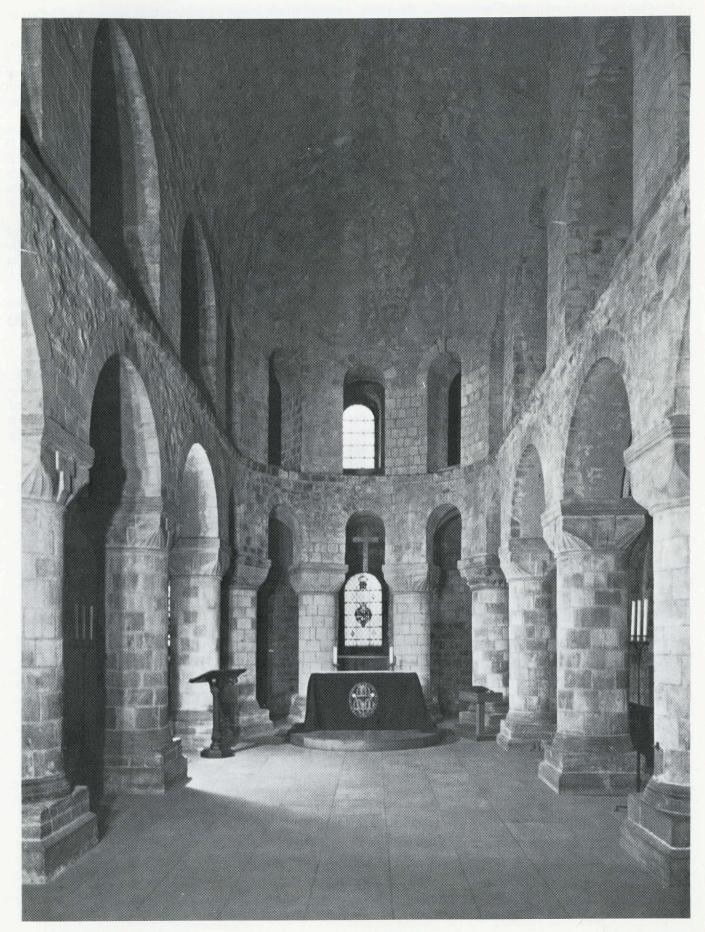


stolen by an adventurer named Thomas Blood. Now the jewels are kept in a vault below ground. The entrance is by means of a very large stairway that goes down and down and down. Before I got to the bottom I thought of the answer the Mad Woman of Challot gave when a friend asked where some stairs in her house went. "They don't go anyplace — they just go down."

Finally at the bottom we came to the vault with a door much like any large bank-vault door. The jewels are in a very large circular, glass enclosed display case. Visitors walk around the case but are not permitted to stop. However, there is a raised platform back away from the display case where the visitor can stand and observe as long as he wishes. The attraction for me was not the Star of Africa diamond in the royal Sceptre-the largest cut diamond in the world, — because I do not care much about diamonds. My love is rubies and the most famous ruby in the world is in the front of the Imperial State Crown. This crown was made for the coronation of Queen Victoria in 1838, but the ruby has a longer history than that. It is the famous Black Prince's Ruby. No one knows when it was discovered but the presumption is that it was mined in the great ruby mines of Moguk, Burma, about a thousand years ago. It has a long and fascinating history and it is a shame that some first-class scholar has not turned the light of scholarship on this precious gem. In the 14th century it was owned by King Pedro the Cruel of Spain. He would not trust anyone with it so he had a small hole made in the back of the ruby so that he could sew it into his hat. I tried to see if I could find any shadow of the hole but could not. Pedro sold the ruby on numerous occasions to other heads of state and then either stole it back or marched out his army and took it back. I do not remember how the Black Prince got the ruby — a lot of people owned it at one time or another.

Outside the Tower we found a cab to take us back to our hotel—the Royal Lancaster, a distance of several miles. Cab drivers in London surely are the best in the world. To get a license they must go through a training program that lasts a year or two, and take examinations at the Police Station frequently. The drivers really know the town by the time they get their license. Our driver was a tall, thin, handsome, intelligent, witty gentleman who could have been a movie actor if he had had the chance. He was very proud of the fact that he knew the town so well and asked if he might take us by a round-about way so that he could show us some interesting things that we otherwise might miss. He was just what we were looking for. He showed us many fascinating things,

This page: The Imperial State Crown of England with The Black Prince's Ruby and a large diamond in the front. Facing page: The starkly beautiful early Norman chapel of Saint John the Evangelist.



including a restaurant that contains a Sherlock Holmes Study. After a while we started down the Mall to Buckingham Palace. "I see the flag is flying over the Palace", he said. "That means the Queen is in residence."

I said, "Yes, I know. She has been in Scotland but she heard that I was in town so she hurried back."

"As a matter of fact I was the one who told her, he replied. She called me on the phone and asked if there was anyone interesting in town, and I told her about vou. She said she would be right back."

"Well I don't have any time for her today, but I will be in the Palace tomorrow and I will see her then if she wants to come to where I am. I wouldn't want to climb all those stairs to her reception room."

"Ah, yes, the impossible dream. Every tourist wants to get into the Palace, but no tourist has ever gotten in and none will ever get in."

"Well this tourist is going to get in and he is going to get in tomorrow."

"And how do you think you are going to arrange that?"

"I am going to walk up to a guard and tell him that I want to sign the Queen's Visitor's Book, and he will take me right in."

The delightful man grew very silent, realizing that there just might be a big gap in his beautiful education. In a few minutes he pulled up at the curb in front of the main gate of the Palace and said, "Will you please walk up to that policeman standing there and tell him what you just told me. If he takes you into

the Palace I will wait for you at no charge and when you come out I will buy you a TOPHAT.

I couldn't let him get by with that so I got out and went over to the policeman and told him what I wanted. He replied, "The Queen has just returned from Scotland. There is a conference taking place in the Palace and so it is closed to everyone. Please come back tomorrow and we will take you in."

I handed him one of my Eta Kappa Nu business cards. He looked at it and put it in his pocket. I HAD PRESENTED MY CREDENTIALS AT THE COURT OF SAINT JAMES. Don't laugh. The Queen paid as much attention to me as she does those playboy-diplomats who swarm in from all the twodollar Dictatorships of the world.

I got back in the cab and told the driver what had been said. I felt sorry for the dear man. It was clear that I had given his pride quite a blow. The student was teaching the teacher. As we drove away, he said. "How did you know about all of that?"

I replied, "Oh, I don't know, I wasn't born yesterday."

The Chapel Royal of St. Peter ad Vincula (St. Peter in Chains) and the scaffold site on Tower Green. On the board are inscribed the names of the six tragic figures of history who were beheaded there. A scaffold was erected only when an execution was pending.



"Well, if all the other tourists knew about it they would form a line all the way from here to Scotland waiting to get in.'

"Well, maybe it is better that they don't know. And now, if I remember right you mentioned something about a tophat."

"I will just have to take your name and address and hat size and mail it to you."

I knew that he could not afford to buy me a tophat so I did not mention the matter again.

When we reached the hotel I paid him and gave him a larger than normal tip. But I couldn't resist one final shot. "Listen my dear friend, some day when you I can't answer that

have the afternoon off, come by and I will be glad to show you this town." We both laughed and I could see that he was starting to enjoy his new-found knowledge. I wish I could see him again sometime as he was a real pleasure. But it will never happen. How does the poem go-

But we? Another shift of scene, Another pang to rack the heart; Why meet we on the bridge of Time To chance one greeting and to part?

PURDUE

industry. The chapter gives these parts to students needing them for projects.

A student reaches for a cold bottle of pop in the HKN lounge in the Purdue Electrical Engineering Building. The commercial Refrigerator, purchased this year by Beta Chapter, keeps 10 brands of pop and several kinds of fruit juices. The chapter also sells potato chips, coffee, tea, hot chocolate and donuts. Members donate over 100 hours a week to keep the lounge operational.

Two students study in Beta Chapter's lab in front of a large collection of empty pop bottles. The chapter sells 70 cases of pop and 140 dozen donuts each week.

University of California, Irvine - The past year has been an extremely busy and active year for the Zeta Omega Chapter of HKN

ZETA OMEGA CHAPTER,

at the University of California, Irvine, or UCI. Our many events include sponsoring contests for Engineering Week, receipt of key awards by HKN members, a tutoring program, and lectures of the research of UCI's electrical engineering faculty.

Engineering Week at UCI always has seen the vigorous participation of HKN. For both this year 1981 and for last year, HKN sponsored (a) the generatorcranking contest, in which contestants try to get the highest EMF out UCI. The tutoring was — and is —

generator (have you ever tried to taking advantage of it, and it is crank one?), and (b) the all-day video games contest, in which contestants test their wits against a as a point of rendzevous for UCI's computer in a simulated battle. engineering students. The tutoring Both contests were enormously is administered by having HKN successful in bringing in contest- members devote one hour per week ants and in getting people to have of their time toward being in the fun. In addition, during Engineering Week 1981, HKN sold engineering hats: this made our session" means that students chapter a nice profit and aided in creating that proper atmosphere of celebration which made Engineering Week so successful.

At the end of Engineering Week at UCI was an awards banquet, at which the Hewlett-Packard Company gave calculators (HP 39C or HP 41C) as awards to various out-1980, the award of Outstanding Electrical/Mechanical Engineer went to Robert Troxel, now our Treasurer our candidate for the Alton Zerby Award. In 1981, HKN "cleaned up" all the awards! The Outstanding Junior Award went to Timothy Maier, an HKN candidate; the Outstanding Electrical/ Mechanical Engineer Award went to Michael Laham, our Bridge Correspondent: the Outstanding Woman Engineer Award went to Suzanne Tylka, our President; and UCI's nomination for the Orange County Engineering Council's Outstanding Student Award went to Dario Parola, our Chapter Secretary. In fact, Dario Parola was one of the three winners of this county-wide award!

In the fall of 1980, HKN began a tutoring program for the benefit of the entire School of Engineering at of a high-current hand-turned DC provided at no cost to the students

conducted in the engineering students' study-room — which serves engineering room to provide opensession tutoring — the "openneeding help need not sign up they simply bring their bodies in when the tutor is there! A complete schedule of tutors for each class is posted so that the students know when each tutor is to be in. Response from the students has been sizable: the HKN tutors are almost always able to help students standing engineering students. In needing it. The tutoring has greatly added to the visibility of HKN at the UCI campus.

Finally, HKN has operated a professor/speaker program in which UCI Electrical Engineering faculty give lectures about their research. In the fall of 1980, Professor Jack Sklansky, himself a member of HKN, gave a talk about medical imaging and enhancement techniques by computer. The lecture went into detail of what the various medical tasks are for which the computer is used, what image-recognizing powers the computer has, and how the computer is applied to the job of sorting and interpreting medical images and other medical data.

The lectures, along with the tutoring, awards—"gathering", and Engineering Week contests, made this year one of note and excitement for the Zeta Omega Chapter of HKN. by Michael

THETA MU CHAPTER, State University of New York at Stony Brook — This year, Theta Mu Chapter members worked hard to firmly establish our chapter as a major contributor to the Engineering College here at Stony Brook. Among our successful activities this year was an academic advising period, during which Eta Kappa Nu members helped lower division engineering students choose their courses and make some career choices. This advisement helped many students plan a productive course schedule for coming semesters.

Also, on March 29, the induction of new members was held at the Three Village Inn in Stony Brook. The inductees, officers, and present members, as well as some faculty members from the Electrical Engineering Department attended. After a friendly cocktail hour, where present members and new members became better acquainted. the induction ceremony took place. This was followed by a dinner, which was most enjoyable with fine food, pleasant service, and a warm colonial atmosphere.

After dinner, our guest speaker, Arnold Goldman of Hartmann Systems in Huntington, addressed the chapter. Goldman emphasized the importance of having good communication skills as well as sound technical background as engineers. He also spoke about Professional Activism and working to keep engineering a highly respected profession. The dinner concluded with Mr. Goldman answering questions from the members.

by Robert J. Gohn

EPSILON BETA, Arizona State — The activities of the past semester(s) were limited solely to the initiation barbeque and the initiation banquet Sixty-three new members were in

ducted, bringing the active member-

ship to eighty.

The new officers are anticipating next year, and the Epsilon Beta chapter at Arizona State University should prove much more active.

by Marvin L. McCarthy

GAMMA EPSILON, Rutgers

University - Professor Louis A. Rosenthal, Beta Pi '46, will retire from Rutgers University on July 1, 1981. after 37 years of teaching and research. He has been the faculty adviser for the Gamma Epsilon Chapter for 19 years. Plans are to continue a consulting career in the areas of electroexplosives and static electricity hazards and controls.

EPSILON IOTA CHAPTER, San Jose State College — The ordinary daily business of the chapter was carried out, including the initiation of new members, the holding of a very successful and enjoyable initiation banquet, and the selection of new officers. Progress was made in increasing regular attendence to meetings due to the addition of an interesting fundraising activity. Furthermore, pledge projects were diversified to benefit more sections of the school of electrical engineering.

Our fundraising project was conceived as a service to provide monies to update the electrical engineering student library, housed in the I.E.E.E. lounge. It was decided to hold a "Piathon", that is a publicized event at which one of our members, Peter Lam, would write out as many digits of Pi as possible from memory alone. Money pledges were taken before hand on a per hundred digit basis. Contributors were found throughout the student body, faculty and business community



THE ETA KAPPA NU COLLEGE OF **BENEFACTORS**

Admission to the College of Benefactors is available to members and non-members who would like to have their names associated with the Award Programs of Eta Kappa Nu. Or you may designate the name of a loved one or a name In Memoriam.

For details, please contact Eta Kappa Nu's Executive Secretary:

Prof. Paul K. Hudson E.E. Department University of Illinois Urbana, Illinois 61820

THE ETA KAPPA NU COLLEGE OF BENEFACTORS

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Distinguished Service Award to...

Bert Sheffield

Berthold Sheffield was present- ACCOUNTING ed the Distinguished Service Award of ETA KAPPA NU at a Never by the leaves that fall special luncheon held in his honor by The Board of Directors. The luncheon was held at the Plaza Hotel in New York City.

The audience included officers and families of ETA KAPPA NU and thirty-eight invited guests, including Bert's relatives and business associates, all of them close friends.

After the luncheon, the ETA KAPPA NU President, Dr. Sydney Parker presented Bert with a framed citation. Bert received also a surprise gift, an FM-AM clock radio.

As everyone settled back for a standard post-luncheon response. Bert startled the audience with a characteristically innovative approach. He had computed that he average of approximately twentyfive years per guest." He pointed out highlights in his life and identified the guests who were involved with each event. Beginning chronologically with his birth in Germany to the present, he was able to include and introduce every guest. It was a remarkable assemblage of distinguished friends.

As a result of these introductions, Bert's address helped establish new friendships and re-establish old ones. Bert concluded his recognition of each of the guests by reading a moving poem which had been his father's favorite:

> Text by Dr. ALLEN KATZ **Trenton State College**

> > Photos by SUZAN JOFFE

Count your garden by the flowers Count your days by golden hours Don't remember clouds at all.

Count your nights by stars—not shadows,

Count your life with smiles, not tears:

And with joy through all your lifetime

Count your age by friends, not vears.

Bert received the Distinguished Service Award in recognition of his many activities on behalf of ETA KAPPA NU. He began as Bridge Correspondent of the New York Alumni Association (1963) and rose rapidly to its Presidency (1964). During these and later had known the guests for a total of years, he served wherever he was "more than one thousand years, an needed, such as organizing and installing new chapters. He served as Chairman of the Award Organization Committee for the Out-

standing Young Electrical Engineers Award (1967-1970) and was elected a National Director of ETA KAPPA NU for a two year term (1973-1974). From 1974 to the present, he has been serving as Chairman of Publicity.

Bert worked for RCA for 36 years in a variety of engineering assignments. Since his retirement from RCA's Astro Electronic Division (1973), he has served as consultant in tele-communications and also as a teacher. He is presently an Adjunct Professor of Electronics Engineering Technology at Trenton State College in Trenton, NJ. Some of his other spare time activities include leading a Great Books discussion group, ham radio (W2ANA), gardening and playing piano.

Bert and his wife, Gertrude, have been living in Belle Mead,

Bert Sheffield with his two daughters Margot (left) and



near Princeton, NJ for over ten years. Gertrude "my faithful supporter in all my activities," said Bert, died in January 1980. Their daughters are: Margot Elissa Kruskall, a physician at Beth Israel, the Harvard Teaching Hospital, in Boston, Mass., and Susan Denise Sheffield, a manager for Fiscal Affairs at Highland, the University of Rochester Teaching Hospital, in Rochester, N.Y.

Column one.

Dr. Sydney Parker, President of Eta Kappa Nu presents citation and gift to Bert Sheffield.

Dr. and Mrs. Harold Knudson, Director of HKN; Ethel Shaefitz; Professor Sam Shaefitz; HKN Vice President Russell Lueg and Mrs. Lueg.

Ludwig and Eva Sheffield.

Mrs. Sally Katz, and Dr. Allen Katz.

Column two:

Sonia Sternberger, Dr. Steven Kruskall; Harold Sternberger.

Donald Bond; Mrs. Sally Bond; Dr. Steven Kruskall; Dr. Margot Sheffield Kruskall.

Amos Joel; Mrs. Rhoda Joel; Mrs. Beatrice D'Arcy.

HKN Director Dr. R. G. Bennetts Southampton, England; Dr. Margot Kruskall; Dr. Steven Kruskall.

Column Three:

Dr. R. G. Bennetts; Mrs. Claire Judd; Dr. Frank Judd.

Mrs. Eva Sheffield; Bert Sheffield; Dr. Sydney Parker; Mr. Ed. Baer.

Dr. Fritz Moses; Gertrude Baer; Dr. Kruskall; Mr. Jack Finlay; Mrs. Betty Plamjack

Betty Plamjack; Mr. Harold Plamjack.

























SHEFFIELD

Present but not appearing on the photos were: Marge and Bob Aha; Fay Baer; Pearl Baer; Ruth Coen; Bob Curry; Jim D'Arcy; Minnah and Irv Engelsohn; Hilde Finlay; Esther and Suzan Joffe; Alex McPhee; Sarah and Bob Miller; Officers and Directors of HKN.

CHAPTERS

A total of 1081 digits were successfully memorized bringing in \$400.00 from pledges and \$100.00 from the IBM Corporation. This further focused favorable attention upon the school of electrical engineering as demonstrated by the enclosed front page clipping from the Spartan Daily (SJSU daily newspaper).

Finally, an increased sense of fellowship was fostered by working together towards a common goal. In this regard, our chapter achieved its most lasting success, one which can be carried far beyond the semesters end, by both participants and future students who will benefit from the update' library material.

by Larry J. Kashur.

DELTA EPSILON, Ohio University — The Delta Epsilon chapter of Eta Kappa Nu conducted several activities in the last quarter before summer. First, new members were selected and sworn in. Also tutoring sessions were set up and conducted by our members for the sophomore level circuits class. In addition, a Sophomore of the Year award was given to the best qualifying sophomore which included a plaque with his name inscribed on it and a \$25.00 gift certificate.

DELTA ZETA, Washington University — Our chapter has just had its busiest time of the year. Initiation was held on April 21 in Lopata Hall, a recently completed engineering building. An impressive 32 members were initiated, including four distinguished faculty. Following the initiation, officers for next year were elected. Then the group was enlarged as HKN joined IEEE for the annual Banquet to celebrate. Folk dancing followed the dinner, but due to a number of major tests the next day, more people went home to do square roots and such than square dancing. Our initiation project was photographing the faculty for an updated wall display.

by Steve Burns

DELTA NU, University of Alabama — The Delta Nu Chapter at the University of Alabama participated in several activities during the 1980-81 School Year. Two hours each week members of HKN tutored students taking first and second level EE courses. Members acted as guides and demonstrated lab projects for Engineers Day in the Spring. Awards were presented to the Outstanding EE Professor and EE Senior as a result of HKN conducted poll. Twenty-three members were initiated into HKN during the year.

by Richard Goodson

EPSILON NU, California State at Los Angeles — Epsilon Nu cosponsored with the IEEE chapter the Micro-mouse project. Micro-mouse is a computerized robot that can solve a maze. Our mouse took first place in collegiate competition.

We held our Smoker on May 8 and met many of the initiates. Members

interviewed the initiates and talked with them about their goals and reasons for joining the Epsilon Nu Chapter of Eta Kappa Nu. On May 15, we initiated ten new members into our chapter and elected new officers.

On May 23, our chapter is cosponsoring with the Cal Iota Chapter of Tau Beta Pi a field trip to the nearly completed experimental solar generation plant, Solar I, near Barstow, California. We are expecting a film presentation and tour of the contruction site.

The spring quarter has been interesting, active, exciting and productive as noted by the report.

by Gary D. Evans

ZETA CHI, University of Central Florida—In past years, this chapter of Eta Kappa Nu has participated in a joint initiation banquet with the other Engineering Honor Societies; the arrangements for the banquet made by Tau Beta Pi. This year, it was the desire of the members of this chapter to hold an initiation banquet exclusively for Eta Kappa Nu. The banquet was held on campus in the University Dining Room. Before the initiation. there was a Wine and Cheese Reception for the members, initiates and guests to get acquainted. A candle light initiation followed using the revised Initiation Ritual. After dinner our speaker was Dr. Brooke Hindle, a historian on leave of absense from the Smithsonian Institute. During the reception, dinner, and after dinner music was provided by the Wilcox IV

We feel we succeeded in giving the initiates an enjoyable introduction to Eta Kappa Nu as well as impressing them and their guests with the honor of the occasion.