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OUTSTANDING YOUNG ELECTRICAL ENGINEER

Introduction
by
James A. D'Arcy
Chairman, Award Organization Committee

Jesse E. Russell, Sr., is the Outstanding Young Electrical Engineer of 1980. The Award was presented to him at the 45th Annual HKN Award Dinner in New York City on April 6, 1981. 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, Warren J. Ayer, Jr. and Steven J. Temple were awarded Honorable Mention for 1980.

Warren J. Ayer, Jr.

Mr. Russell is a supervisor in the Transmission Analysis Software Development Department at Bell Laboratories, Whippany, New Jersey and was named Outstanding Engineer for his "original contributions to the field of telecommunications network support systems and for his involvement in civic and career guidance activities."

Dr. Ayer is manager of an engineering group at IBM Corp., Essex Junction, VT. He received his honorable mention for "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 received his honorable mention for "contributions to the field of microwave amplifiers and for his involvement in church and professional activities."

The award winners were honored both for their contributions to electrical engineering and for their contributions to society at large. Mr. Russell was nominated by Jess Chernak, Executive Director, Bell Telephone Laboratories, Whippany, New Jersey. Dr. Ayer was nominated by Raymond P. Sopher, Manager of process development, IBM Corp., Essex Junction, Vermont. Mr. Temple was nominated by Charles Jacobs, Vice President & General Manager of the Missile Systems Division of Raytheon Co., Bedford, Massachusetts.

The Eta Kappa Nu recognition is awarded 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. 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.

Jesse E. Russell, Sr.
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: Mr. Donald Christiansen, Editor & Publisher of IEEE Spectrum; Mr. James A. D'Arcy (RCA), Chairman, HKH Awards Organization Committee; Dr. John Hancock, Dean of Engineering, Purdue University; Major General Emmett Paige, Jr., Commanding General, US Army Communications Research & Development Command; Mr. S. William Shields, Senior Vice President, Nuclear Division, Public Service of Indiana; Dr. Alan Stoudinger, Chairman, Electrical Engineering Department of Tri-State University; Dr. William Webster, Vice President of Research for RCA.

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 HKH, by any section or group/society of the Institute of Electrical and Electronics Engineers, by the head of the EE department of any US 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 1981 awards should be submitted to the Chairman of the award organization committee, or to the Executive Secretary of HKH, by June 30, 1981. Any candidate who, by May, will have been graduated not more than 10 years from the regular electrical engineering course (B.S. in EE or equivalent) of a recognized US 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 “SelectaVision” VideoDisc Operations (Chairman); Irving Engelson, IEEE Vice Chairman; Frederick A. Russell, New Jersey Institute of Technology (Secretary); Clarence J. Baldwin, Westinghouse Electric Corporation; Herbert S. Bennett, US Army Electronics Command; Donald Christiansen, IEEE Spectrum; Larry Drown, Consultant (Formerly American Electric Power Service Corp.); Albert Fakhri, American Electric Power Service Corp.; Anthony F. Gabrielle, Gulf State Utilities; Quayne G. Genkens, New Jersey Bell Telephone Co.; Willard B. Groth, IBM; Everett A. Lee, General Electric Co. (ret.); Robert W. Lucky, Bell Labs; George A. Mangiero, Brooklyn Polytechnic Institute; Steven A. Mallard, Public Service Electric & Gas Co.; Ralph J. Preiss, IBM Corp.; Sheldon J. Raiter, IBM; Berthold Shefford, RCA (ret.); Lawrence D. Wechsler, General Electric Co.; and Roger I. Wilkinson, Bell Labs (ret.).

When you send an address change to national headquarters please send the old address and old Zip Code number as well as the new address and new Zip Code number.

THE ETA KAPP A NU
COLLEGE OF
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SUPREME BENEFAC TOR
Edith Ann Koerner
Paul K. Hudson

HIGH BENEFAC TOR
Helene Koerner Gahlen
Lloyd Hunt
Fritz A. Koerner

BENEFAC TORS
Marc Dodson
Larry Drown
Ira Hanssen
Fred Harrell
Edward Jordan
Eugene Messer
Evetett S. Lee
Howard H. Sheppard
Alan R. Stoudinger
Johanne Waite
MERRY MOMENTS WITH MARCIA

When a fellow is kicking, he has only one leg to stand on.

If only a person could lose weight as rapidly as a big road dog between the grocery store and the dinner table!

Watch it — Gasoline may be hazardous to your wealth.

It's better to sleep on what you plan to do than be kept awake by what you've done.

A man up for parole had worked several months in the warden's kitchen. His last act before leaving was to ask the warden's attractive wife if he could meet her at Eta Kappa.

In a hastily called meeting, the board revoked his parole.

Reason: Never end a sentence with a proposition.

Don't ever overlook an opportunity to make other folks happy — even if you must leave them alone to do it.

WHY WORRY

There are only two things to worry about — either you are well or you are sick. If you are well, then there is nothing to worry about. But if you are sick, there are two things to worry about. Either you will get well or you will die. If you get well there is nothing to worry about. If you die there are only two things — either you go to heaven or hell. If you go to heaven there is nothing to worry about. But if you go to hell, you'll be so busy shaking hands with friends, you won't have time to worry!

Don't let the mistakes of yesterday and the dread of tomorrow ruin the only day you have — which is today!

I've heard that inflation is a stab in the buck.

Committee: a group of people who talk for hours to produce a result called minutes.

They say having to lose weight is the penalty for exceeding the feed limit.

An uptight person is a self-taut individual.

TODAY'S SMILE

A moonlighter is a man who holds day and night jobs so he can get from one job to the other in a better ear.

They tell me getting off on the wrong foot is bad, but not as bad as stepping on the wrong toe.

by MARCIA PETERMAN

CHAPTER NEWS

James Barnak

James Barnak, 23, President of The Pennsylvania State University Chapter of Eta Kappa Nu, was suddenly killed on December 26, 1980 in an automobile accident near his home in Allentown, Pennsylvania.

In his role as President, Jim's best qualities of ambition, enthusiasm and congeniality were clearly shown. He was directly responsible for many of the social and academic accomplishments of the Eta Kappa Nu organization.

In addition to Eta Kappa Nu, Jim was also a member and social committee chairman for Tau Beta Pi, a member of IEEE and a member of the Golden Key National Honor Society.

So he could graduate at the end of Winter Term, with a B.S.E.E., Jim carried course loads of his last two quarters. His future plans included joining the Solid State Devices Laboratory at The Pennsylvania State University in the Spring to pursue an M.S. and then possibly a Ph.D. He was going to research the characterization of silicon for VLSI technology.

Jim was an outgoing, friendly and good-humored guy. He was well liked among his peers and he contributed much to Eta Kappa Nu and the Electrical Engineering Department. The impression he made on his fellow electrical engineering students and on the faculty will never be forgotten.

DELAWARE CHAPTER, Illinois Institute of Technology — With the initiation of eighteen new members into Eta Kappa Nu this semester, the Delta Chapter plans to become much more active in activities on the IIT campus this year.

The induction ceremony for the new members was held on November 23, 1980. After the ceremony, the members and their guests attended a dinner at the Mandarin Inn in Chicago's Chinatown.

At the first general meeting this semester, four new officers were elected to fill vacant posts. In addition, plans were made for next year's activities. Included in these plans is a tutorial program to help undergraduate students in EE courses. The election of next year's EE instructor of the year is also being set up. Two social events have been slated for next year — a student rec night in IIT's game room, and a semi-formal party for both students and faculty members.

In general, the Delta Chapter of Eta Kappa Nu hopes to become a stronger organization on campus. It will help EE students in their coursework, and it will continually work to build a better relationship between students and faculty members at IIT, by Tom Crooman

BETA PSI CHAPTER, University of Nebraska — During the fall of 1980, we, the members at the Beta Psi chapter of Eta Kappa Nu made it our goal to become more active on the University of Nebraska campus than in previous years.

We offered tutoring sessions and scheduled them on different nights of the week in order to give all students a chance to seek help. We also made plans to compile a pamphlet...
describing how to operate an oscilloscope.
To help teachers to adjust to a class during the semester, we
offered mid-term evaluations. By
responding to areas of student con-
cern, the teacher can better benefit his
class.
In order to make the Beta Psi
chapter in Lincoln more efficient for
the present and the future, we went
through the old files to estab-
lish long-term problems. We noted
that lack of attendance, member
activity and lack of interest shown
by pledges was a definite concern.
We also noted that new officers
didn't know what their duties were.

As a result of our findings, we
heavily publicized meetings, tutor-
ing sessions, and other activities
through notices and the college
newsletter.
We also discussed invoking rules of
active membership to increase
attendance. That decision will be
acted on in the Spring of 1981.
Each officer was also asked to out-
line his duties throughout the
semester for the preceding admin-
istrations to use.
To reward our efforts of the
semester, we had the largest
recruitment of new members, in
nearly a decade. — by Paul Neu
sphereus

GAMMA XI CHAPTER, Uni-
versity of Maryland — The Fall
semester was off to a good start
with our chapter meeting on Sep-
ember 8. Many new ideas were
introduced and our committees
were organized. We also started
work on the Smoker to attract new
members. It was held on Sep-
ember 18 and we had a good turn-
out of interested people.
After the Smoker, working with
a group of very enthusiastic elec-
tees, our chapter organized some
new functions and continued or
expanded existing ones. We held
our course on the use of the univer-
sity's computer terminals and
helped many students who were
seeking an alternative to the
punched card.
We also initiated a new type of
tutoring program for a couple of
the sophomore electrical engineer-
ing courses. This was later ex-
panded to include all the electrical
engineering courses offered this
semester and almost every mem-
ber and electee was involved. Our
meeting program enabled the
department to open a terminal
room for general student use which
was previously only for graduate
students. These programs aided
many students and also helped
unite our membership.
To encourage faculty/student
interaction, we organized weekly
meetings between interested stu-
dents and a group of faculty. Also,
the display case containing faculty
pictures was updated to aid new
students in becoming familiar with
the faculty.
Our initiation was held on
November 7, and 18 new members
were initiated. The party after-
wards was very successful and
enjoyed by all.
During the preregistration ses-
ion for the spring semester, we
organized informal advising ses-
ions to assist new students or stu-
dents unfamiliar with the faculty
in the selection of teachers and
courses to match their needs.
At our last chapter meeting we
decided to nominate our president,
Carl Stahle, to the outstanding
senior competition and elected a
new bridge correspondent. Our
meeting was followed by a wine
and cheese party which finished off
this successful and enjoyable
semester. — by Thomas Loftus

EPSILON NU CHAPTER Cali-
ifornia State College at Los
Angeles — Eta Kappa Nu, Epsi-
on Nu Chapter, California State
University at Los Angeles, had
their semi-annual initiation and
business meeting December 5. Ten
new members were pledged and
several were elected to offices in
the Epsilon Nu Chapter. The new
members are: Gary Evans, Bridge
Secretary; Daniel Poole, Treas-
urer; Nick Ethynovles, Vice Pre-
ident; Rami Wissa, Correspond-
ence Secretary; Stuart Mur-
dami; Author Spiegel; Dwight
Streit; Cheukming Chiu; Lwag-
ching Tong; Reza Charognie.
Julio Illingworth took over the
Presidency from Robert Maleon.
Robert has done a fine job and was
re-nominated but declined because
of office commitments.
Following the business meeting
a dinner was served in honor of the
new members of Eta Kappa Nu
and Tau Beta Pi. Dinner arrange-
ments were made and co-ordinated
by Martin S. Kohn, Dean of Elec-
trical Engineering. Dean Roden
arranged to have John Trapani
from Walt Disney Enterprises
provide a presentation regarding new
adventures into "imagination" by
Walt Disney Enterprises.
Members of Epsilon Nu will par-
ticipate in Engineering Week
activities at CSULA. A field trip is
planned to the Los Angeles Times
as part of Engineering Week. The
Los Angeles Times depends heav-
ily on electronics for the produc-
tion of their newspaper, V. A.
Giroix. Epsilon Nu Advisor, is
helping to co-ordinate the field
trip and activities. — by Gary Evans

DELTA GAMMA CHAPTER,
Louisiana Tech — Cameron H. L.
"Cam" Wright has been selected
outstanding sophomore electrical
engineer of Louisiana Tech Un-
iversity for the 1980-81 school year
by the Delta Gamma Chapter of
Eta Kappa Nu, based at Louisiana
Tech.
Wright is 25 years old and a
former U.S. Navy electronics spe-
cialist. Wright has been on the
president's list, dean's list, and is
a member of Pi Mu Epsilon mathe-
matics honor society and chair-
man-elect of the Louisiana Tech
chapter of the institute of electrical
and electronics engineers.
Last year's outstanding sopho-
more was Nicky Albino of Bossier
City, LA. — by Randy Hall

BETA CHAPTER, Purdue Uni-
versity. On the opposite page is
shown the cover of the Resume
Book published by the Chapter.
The book, with the Resume of
each Senior and Graduate Stu-
dent, runs to 250 pages and is
sold to companies. The Chapter
derives a large profit from the
sales.
A Stranger At The Court Of Saint James

« Part One »

Getting There Is Half The Fun
Going to China, or maybe Siam
Far away over the sea...

China or Siam? No, not really.
Far away over the sea? Yes! Where then? Europe — England to be
effect. How to get there? Well now,
that is a real question. Columbus
crossed the Atlantic in a Sailing
Vessel and so did everyone else for
the next 350 years. It is still being
done but it is a chancy and irregular
business. You may wander all
over the place before you get to
where you are going. Or hang
around a while in a calm. No, it is
not the best way for passenger ser-
vice. Samuel Cunard recognized
this a little over a century ago when
he conceived the idea of regularly
scheduled transatlantic Steamship
service. The Cunard company has
been the leader in this field ever
since. But there are other ways to
get across. The cheapest way is to
row your own rowboat. Several
people have done this since Chay
Blyth and John Ridgeway showed
that it was practical — well at least
possible. However, the trip is long,
the food is poor, and the entertain-
ment miserable. The next cheapest
way is to go in one of those flimsy
crates they call airplanes. It is a
poor way to go — white knuckles
— claustophobia — I hope that
insurance policy does not get lost in
the mail. Cheese, what a way to
take a vacation. Oh?? you say you
have only two weeks for your vaca-
tion and must take a plane? Well let
me make a suggestion. Spend the
two entire weeks on the Queen Eli-
abeth 2. It is a floating resort-
hotel like no other place in the
world. Go to England, spend a day
in Southampton, get back on the
ship and come home. You get a
round-trip for the price of one-way.
The return trip is free. No where in
the world can you find a vacation
spot the equal of it. We decided to
take the boat — pardon please —
the ship. (A boat is defined as some-
thing that can be hoisted aboard a
ship).

In the glory days of transatlantic
passenger shipping, Cunard ships
were household words. There was
the Aquitania, Mauretania, Beren-
geria, Lusitania, Carmania, Fran-
conia, Queen Mary and Queen
Elizabeth. At one time, the Cunard
advertising slogan, Getting there
is half the fun, was well known
together the entire world. The
last great transatlantic liner, the
Queen Elizabeth 2, entered service
in 1969 a luxury Atlantic liner for
half the year and a cruise ship the
other half. It is the last bastion of a
mode of travel and a way of life
—the highest expression of the
shipwrights art. Technically it is
masterpiece of workmanship with
a sophisticated high-pressure
steam turbine far ahead of its time.
Space saved by technical advances
in the power plant makes it possi-
bile for this ship of 67,000 tons to
carry almost as many passengers
as the old Queens at 80,000 tons and
at about the same speed. The
Queen Mary required 24 boilers
and the Queen Elizabeth 12.
The QE2 has only 3.

The future of transatlantic
steamship travel rests solely with
the QE2 and an occasional posi-
tioning voyage by one or the other
of the world's small cruise ships.
Beyond the QE2 lies only conjec-
ture and a dream. Perhaps there
will be a technological advance
that will make a great new pas-
senger ship possible. It is a remote
likelihood, but a dream that ship-
lowers like to keep. Until then, the
QE2 is the last.

The QE2 was scheduled to leave
the passenger terminal in New
York City at 5:00 P.M. At 4:55 we
slid out into the Hudson River and
headed towards the open sea.
Cunard does not get their em-
ployees from Antrak. We were
standing on deck, with the World
Trade Center passing on the left
and the Statue of Liberty on the
right, when I had a strange sensa-
tion that I could not identify. It
was a sense of alarm — a sense of
danger. Something was warning
me about something. But that was
ridiculous. A QE2 passenger is
very little danger. There is always
the possibility of fire, but it is very
remote, and rescue in the shipping
lanes of the North Atlantic is quick
and easy. And besides, I have
always loved the sea. When I was a
civilian scientist attached to the
Navy I had several scrapes in small
ships and enjoyed every minute of
it. I was once on board a submarine
in the Atlantic when the waves
became so high we had to dive
to get out of them. When we got down
about 250 feet the ship promptly
cought on fire. I had a thoroughly
nice time. Another time I was at
sea in a small personnel boat when
the waves started going completely
over the top of us. We did not cap-
size but did not miss it by much.
Again, I thought it was great fun. I
love the sea. So there is no way the
QE2 could give me any anxious
moments, even if there were an
emergency. And yet, I had a feel-
ing that something was wrong. An
hour later when we were on our
way to the Tables of the World din-
ing room, we passed the Theater
Bar, and the feeling came back to
me in spades. I stopped and stared
at the Bar. I had never been on this
ship before and I never frequent
Bars anyway, but I had seen this
Bar before. Then a passenger
walked up and when the bartender
spoke to him, everything came into
register. I was Outward Bound — a
movie I had seen so many years ago
that I had all but forgotten it. The
story takes place on a large ocean
cruiser like the QE2, but none of
the passengers can remember why
they are on board or how they got
there. In one scene a man walks up
to the Bar and orders a drink, but
when he tries to pay for it, the Bar-
tender says, "No, we do not take
money here — the drink is free. Later a man in a white suit comes aboard from a personnel boat and sets up court in the ballroom. Then everyone realizes who he is there. They are all dead and this is judgement day. How they answer, will determine their port of call. How could a movie like this end happy? Well, it did. A young couple is walking on the deck when they hear some glass breaking. The girl starts to scream and run down the deck. A deck-hand shouts to the man, "Don't let her go — go after her — stay with her." So the man runs after her and they wake up together in a room alive. They had been overboard by a faulty gas heater. The glass breaking was a window being broken by some children playing baseball outside. The broken window let in some fresh air that revived them. I no longer had any cautious feelings about the QE2, and walked on into the Tables of the World to a delicious dinner with two dear old ladies from England who responded to most everything I said by replying, "What an ex-TROJIDinary idea."

After the first night, passengers are assigned tables in the dining room for the entire voyage and most of the tables are for four people. Our dining partners were a very friendly and interesting English couple. They were having a ball on a 10-day vacation on the QE2. They boarded at Southampton, spent a day in New York and were now on their way back to Southampton. Meals run to 10 courses and if you wish, and can hold it all, you can order all the items in each course.

After dinner we stood on deck and watched the sun go down and the moon come up over the ocean. Next a choice had to be made. Either to attend a floor-show and a bon-voyage party or go to the movies. The movie was the Russian Bolshoi doing Swan Lake in technicolor. We could not decide so we did a little of both. Next we were fortunate enough to break even, after a few minutes in the Casino. Then to bed, for tomorrow was another day and we did not want to miss any of it. It is my private opinion that sleeping in a cabin of an ocean liner is one of the greatest joys that can come to a person in this life-on-earth. As I was dozing off I thought of Emma Willard's poem that ends:

Oh calm and peaceful is my sleep
Rocked in the cradle of the deep.

For transatlantic class passengers on the QE2 the most important of the many places to be are the Double-Room and The Theater. The Double-Room is so called because there is an upstairs and a downstairs. The downstairs is a large lounge and dance-floor and there are activities of all kinds during the entire day and evening. There is a coffee hour in the morning, tea-time in the afternoon. Dance classes, slide presentations, and other things all day long. Bingo, a floor-show and dancing in the evening. The upstairs is another lounge and a shopping arcade with stores completely around the room. The 832 seat theater is adjacent to the Double-Room and is used for live-theater presentations, movies, and lectures.

On board with us was Phyllis Newman, the actress, and her husband, Adolph Green, the composer. Adolph probably would prefer that I use his name first, but Phyllis is much better known to the rank and file because of, among other things, her frequent appearances on the Johnny Carson show. Phyllis gave a lecture the first day which included parts of her solo Broadway production The Mad Woman of Central Park West. On the second day Adolph gave a lecture outlining his many years in the theater, and sang several of the songs he wrote many years ago. He was a real delight. It was obvious that he had all the talent that was needed to make it big in the theater, but he explained that his career got a big boost from his friendship with Leonard Bernstein. When they were young they met at a summer resort where both were entertainers. Adolph loved classical music and had listened to it frequently over the years of his young life. One afternoon Leonard played several pieces of music on the piano and asked Adolph to identify them, which he did. Then he mixed in a number that Adolph had never heard before and he stated that fact. That was when the friendship began. Leonard had just made up the music as he played it to see if Adolph would claim to have heard it when in fact he had not. Truthfulness and sincerity paid off and sometime later Leonard arranged some commissions for Adolph.

On the third day Phyllis and Adolph came to the Double-Room and had a rap session with the passengers. After it was over, I said to Phyllis, "If I wanted to send you a greeting, where would I send it?" She gave me their home address. I was deeply touched. I had supposed that she would give me the address of her agent or theater, or something. Her happiness of heart and spontaneous laughter are the real articles and not a put-on. She could make a stone come to life. Adolph had written the songs for the play The Twentieth Century and some of the songs for Peter Pan. When we got to England we saw the first one and when we returned to New York we saw the other one. It made both evenings more enjoyable for us, having met the composer.

There were 1800 passengers on board and several were delightfully flaky. One was a little old man of about 80 who walked around all the time with bells tied to his feet. They were not intended to prevent him from catching birds or to make it possible for his wife to catch him. He just loved the sound of bells and this arrangement made it all possible. The other was a man of about 50 who showed up at the passenger dock in a chauffeur-driven limousine. But after he got on board he went around in rugged shorts and t-shirt. He would stand on chairs and recite bible verses to anyone who would listen, dance all the dances without a partner, and engage in other interesting activities. On the third day out he somehow flooded his cabin and tried to
mop up the water with the mat-
tress of his bed. Finally he dragged
the mattress out into the hallway
and went to sleep on it, holding up
an English flag in one hand and an
American one in the other. That
was the last anyone saw of him
until the boat landed. Cumard
was a no-nonsense outfit and does
not assume that the passenger
is always right. I do not know what
happened to him but I saw him
again just as we were getting off
the ship and he was very subdued.
The floor shows were quite var-
bled but usually included a chor
dance-line of beautiful girls in
skimpy but elaborate costumes.
They were the same girls who
bustled in slacks in the afternoon,
taught as folk-dance. One night,
as part of the evening's entertain-
ment, the concert artist Sasha Tor-
mas played several numbers on his
Stradivarius. About half-way
through his program the chat-chat
audience became very silent as
he played the lovely and deeply mov-
ing Meditation from the second act
of Thais. At the same time I saw
flashes from a distant storm show
through the large side windows of
the lounge. It has often been said
that when the blood cools, the mind
clears. I thought about how people,
as they grow more mature, spend
more time in meditation on that
last great storm which, however far
away it may seem to be at the
time, will eventually arrive. At
the end of his part of the concert,
I thanked Tormas for the pleasure
he had brought, and commented on
how beautifully he had played. But
the room was now in darkness as
a band was being set up.

"Come back stage when the show is
over and I will let you play it," he
said. "The thing I can play on from
my violin is Flow, Gently, Sweet,
Aftenon, and I did not think I wanted
to insult his ears and Strad, with that.

It is possible to be a passenger
on the QE2 (as we were) for a reason-
able price. On the other hand you
can pay as much as you wish.
A ticket for the best cabin on the
world cruise comes to $220,000.00.
However, we noticed that the passen-
gers who looked and acted rather
poor, usually were the ones with
the monopoly on the rich. Who tried
to act rich were usually the
poor ones. At tea one afternoon we
struck up a conversation with a
lovely couple from Kansas. They
opened their hearts to us and told
us about their likes, dislikes, fam-
ily problems, and other things that
only people from "down home" talk
about. At one point they mentioned
that they took this trip because
they had to cancel their tickets on
the world cruise. Their mother was
ill and she could not leave her for
such a long stay. I asked what busi-
ness he was in and he replied, "I
buy sell grain." In Illinois, anyone
who is even on the Board of
a large grain elevator is fairly well
off, I said. "Do you own your own
elevator?" She replied, without
much more than an apology,
"My father left me a number of
elevators in West Kansas."

Pleasure is where you find it and
I have to admit to a tiny bit of girl-
watching. But don't get excited, it
is not what you think. Assigned
to the table next to ours in the dining
room was a married couple of
about 30 with some small children.
The woman was very beautiful and
nicely made with a flat tummy and
not an ounce of unwanted fat any-
where. Her eating habits were deli-
cate, feminine, and charming.
Her table manners were exquisite
and appealing. She would make an
excellent addition to anyone's
dinner-party, except for one thing.
She just about ate Cumard out of
house, home and ship. She took
enough for a brace of lumberjacks
on a frosty morning. There are
some things in this world that I do
not understand and can not
explain. I heard a woman at another
table say, as she slurped her
soup, "The kids can't be hers." I
took glances when I could and
regretted that I had not been
assigned to her table so that I
would have had a better seat for the
show.

I was at the other end of the eat-
ing spectrum. Several months
before I had had major surgic-
ral operation that left my internal
arrangements not fully opera-
tional in a manner to which they
were formerly accustomed. I was
OK but had to be careful and take
things easy. One day at lunch I ate
entirely too much and to top it all,
the show was over. The table steward
told me into a large portion of
deepest apple pie. An hour or two
later I felt like a big football player
had kicked me in the back. I went
to my cabin but I could not stand
up or lie down. There was a large
ledge under the port-holes so I went
over and rested my arms on that
and sort of hung there like hanging
on a clothesline. I was vertical but
had to put up no effort to be in a
little while the pain started to let
up and I started to enjoy looking
out at the sea. Medium waves of
fairly constant amplitude, fre-
quency and velocity were coming
in at the ship and, as I lay there,
reflected back. Standing waves
were established that sometimes
pitched almost two wave-lengths.
I was thinking through the equa-
tions and had no trouble until I got
to gamma. I did not try very hard
because I was thinking how beauti-
ful were the waves and the sea
itself. Lots of people have fallen
in love with the sea and, fortunately,
some of them were creative-types.
Among them were Massfield,
Hemingway, Debussy, and others.
I tried to hum a few bars of Debuss-
ny's famous tone-poem Dialogue
in the Wind and the Sea (La Mer)
but it was not easy. His music often
rises above music and becomes a
living presence. The idea of a dia-
logue between the wind and the sea
is beautiful and thoughtful. In
some ways it is a man-woman rela-
tionship. Most of the waves of
the sea are caused by the wind. It con-
trols the sea and yet it does not own
it. It made me think of Longfello-
low's Hiawatha:

As unto the bow the cord is
So unto the man is woman
Though she binds him, she obeys
him
Though she draws him, yet she
follows
Useless each without the other.

By analogy, the wind is the woman
and the sea is the man. The
man, as always, wants her person,
and that is attainable. But having
attained it he realizes that that was
not what he wanted. He wants her
spirit because he knows that she is
divine creature and will lead him
to the Holy Spirit. But that is
not attainable. And so he is troubled,
frustrated, hurt and angry. He
rages, crashes and storms. Finally
he realizes that there is nothing to
that and becomes more quiet and
calm — resigned to a life in which
there is no fate but destiny and no
world but this. But then he consid-
ers that he must be wrong, and
starts again. It is all there in
Debussy's tone-poem. My stomach
stopped hurting and I came out of
my reverie. I went upstairs to the
Double-Room and listened to one of
the ship's bands play for afternoon
tea.

After tea, as we sat in the lounge
looking out over the sea, we saw
a tiny bird come flitting over the
waves. He was not fishing — he
was too much too tiny for that — he
was just having a nice time enjoy-
ing life and the sea. We were at
least a thousand miles from any
land. Occasionally he would land
on the water and just float for a
while. When a breaker came at
him he would shoot out of the way,
apparently having learned the wis-
dom of that. He lived on the refuse
that was damped from ships in the
shipping lanes, but that did not
hurt his pride and he was delighted
to be alive. We were told that he
would live over the ocean for sev-
eral months before heading back
to land. And when he wanted to
get back to land, how would he
know the way? Who would guide him?
I thought of the lines in Bryan's
poem:

Part of the shopping arcade in
the upstairs section of the Double
Room

Sasha Tormas

We met an electrical engineer
from London who had been on
a business trip to the U.S. He
explained that he used to go
by plane but had to tell his company
that he would not do it any longer.
The company always requested
that he fly from London to Cleve-
land for an afternoon conference,
then fly back to London and go to
work. London to a conference
in Cleveland and then back to
London takes a 24 hour day. And then
to go work?????

18

19
There is a Power whose care Teaches thy way along a pathless coast. The desert and illimitable air. Lone wandering but not lost.

What hauntingly beautiful words: "Lone wandering but not lost." So it is God that teaches the bird which way to fly. But how does he do it? Does he yell at the bird in bird language and say, "Hey bird, fly this way?" Of course not. The bird rests peacefully on the water and considers his problem. He says to himself, "I want to do the right thing—I want to fly the right way—not necessarily the way the other birds are flying—not necessarily the easiest way with the wind—but the right way—I want to do the right thing.

I thought about how, in an ocean as vast as the north Atlantic, this ship we were on—the QE2—was really no larger than the tiny bird, and we, like it, were alone wandering but not lost. Thinking farther, the planet Earth we live on is but a tiny speck in the vast ocean of our galaxy—and it also, is lone wandering but not lost. And our galaxy is but a speck in the breathtaking and unimaginable ocean of intergalactic space. It too, is lone wandering but not lost. Finally our galaxy and all the others we can and cannot see are but atoms (Bohr did not get it quite right) of an organic cell in the happy heart of a tiny bird fluttering over a great ocean. Lone wandering but not lost. Ah, is it all true? It doesn't matter either way because there really is a Power who cares.

The last night out the Captain threw a party for the passengers. The fog had come in that day and I asked him how he knew where we were since he could not see either the sun or the horizon. He replied that the ship ran itself and did not need a captain except for emergencies. Before they start out they plot the entire course into a computer. The computer also gets their position (at all times of the day and night) from the satellites (Comsat). When the position obtained from the satellite does not agree with the plotted course, the error is used automatically to correct the rudder to bring the ship back onto its course. We talked briefly about the Titanic and agreed it had some things that we had heard in a lecture that morning. The Titanic would not have been sunk if it had plowed straight into the iceberg. The bow of the vessel would have been caved in but the water-tight compartments would have kept the ship afloat, at least until they reached land. The Titanic sank because the Captain tried to miss the iceberg and didn’t quite do it. The iceberg tore out one whole side of the ship. We were deeply touched to learn that the Engineer Officers of the QE2 have purple between the bars on their shoulders in memory of the Engineering Officers of the Titanic who gave up their lives by staying at their posts to keep the engines running so that the ship would have lights until the very moment it went under.

The next day there was the excitement of "landfall." We could not see France because we were so close to England that the channel was very wide. However, we caught a view of the channel islands. We docked at Southampton because the Thames is not large enough to float a vessel like the QE2 as far as London. Getting off the ship is not like walking out of a theater. There were 1800 passengers and 900 crew members. We sat in the Double Room until we were called. It took two hours. We were greeted by our good friend Ben Bennetts, of the University of Southampton. He apologized for the rain and explained that the sun had shown that morning. There was no need to apologize as we did not come there for the weather. We intended to have a most enjoyable time on that beautiful, wonderful and historic island of Great Britain, and no way was the weather going to bother us at all.

A two-hour bus ride brought us to London where we checked into the Royal Lancaster Hotel on Lancaster Square. It was now quite late in the evening but the Mediterranean coffee shop was still open and served a tasty supper. Back in the room I felt some disappointment. I did not feel that I was in a foreign land. It was like I was in a large American city. Then I turned on the TV to get the news and weather. I was used to the weatherman showing a map of the United States and telling about storms being formed in western Canada. This weatherman showed a map of England and talked about storms being formed in the North Sea. I now felt like I was in a foreign land.
**CHAPTER DIRECTORY**

<table>
<thead>
<tr>
<th>Gamma Pi</th>
<th>Lafayette College</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamma Omeg</td>
<td>Mississippi State University</td>
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<tr>
<td>Delta Alpha</td>
<td>Wayne State University</td>
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<td>Delta Beta</td>
<td>Lamar State College of Technology</td>
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<tr>
<td>Delta Gamma</td>
<td>Louisiana Tech University</td>
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<td>Ohio University</td>
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<td>University of Massachusetts</td>
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<td>Duke University</td>
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<td>Tuskegee University</td>
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**Gamma Gamma Chapter, Clarkson College—** The Gamma Gamma Chapter of Eta Kappa Nu located at Clarkson College of Technology has had an active and exciting semester. The big project of the year was the compilation and publication of an updated lab manual for the Electrical Engineering laboratory. Peer advising sessions were organized to inform underclassmen about courses which would be best to take for their interests and about the curriculum in general. A graduate school seminar was also held. This was an informal get-together of professors and students. The students attending learned a lot about what to expect from grad school, how to apply, and how to get financial aid. The chapter contributed an exhibit at Clarkson College's Engineering Day. Assistance was given by members in course evaluations and videotaping of classes. An enjoyable spring banquet—initiation was held.

*by Ann Minor*

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**John A. Tucker Honored**

At its annual Awards Convocation, held May 11, 1981, the Massachusetts Institute of Technology presented John A. Tucker, with its prestigious Gordon Y. Billard Award "in recognition of exemplary service to the Institute."

Mr. Tucker is a past National Director of Eta Kappa Nu and served for many years as the Faculty Advisor of Beta Theta Chapter at M.I.T.

The Billard Awards are made from a fund established by Gordon Y. Billard, a member of the class of 1924. They are given annually for special service of outstanding merit performed for the Institute. The award was presented by Dr. Paul E. Gray, M.I.T.'s president.

The Citation read, "a sometime Departmental administrator, Executive Officer for Student Affairs, advisor to student honorary and professional societies; perceptive enhancer of student-faculty relations; and for 12 years Director of the VI-A Cooperative Program in Electrical Engineering & Computer Science; but, above all, warm friend to everyone whose path you cross, wherever located and at whatever age. You have been unfailingly to make your Department and M.I.T. memorials for each of us in not only intellectual but also emotional terms."

Mr. Tucker joined the M.I.T. staff in February 1956 following service with the Bell Laboratories, Inc., and the New England Telephone Co. He is currently Director of M.I.T.'s largest work/study program which leads to the combined Bachelor's and Master's degrees at the end of five years of study.

Above photo—John Tucker at left, and Gordon Billard.

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**Beta NU, Georgia Tech—** We conducted two initiation ceremonies in the school year, including 37 new members on November 21, 1980, and 36 new members on March 6, 1981. The officers and members of the chapter are currently planning for the annual School of Electrical Engineering Student-Faculty Picnic. Over 800 attended last year, and over 900 are expected this year.
Zeta Upsilon ............... Old Dominion University
Zeta Phi .................. Tri State University
Zeta Chi ................... Florida Tech. Univ.
Zeta Psi .................... Southern University
Zeta Omega ................ Univ. of Cal.-Irvine
Theta Alpha .............. Tulane University
Theta Beta ................ Univ. of Portland
Theta Gamma ............. Fairleigh Dickinson U.
Theta Delta .............. U.S. Naval Postgraduate School
Theta Epsilon ............ General Motors Institute
Theta Zeta ................ Univ. of Colorado-Denver
Theta Eta ................ University of Alabama-Huntsville
Theta Theta .............. Poly. Inst. of N.Y.-Farmingdale
Theta Iota ............... The George Washington Univ.
Theta Kappa .............. Calif. State Univ.-Fresno
Theta Lambda ............. University of South Alabama
Theta Mu .................. State Univ. of N.Y.-Stony Brook
Theta Nu .................. N.C.A. & T.-Greensboro
Theta Xi .................. Norwich University
Theta Omicron ........... So. Ill. Univ.-Edwardsville
Theta Pi ................... Univ. of Mo.-Kansas City
Theta Rho ................ Rice University
Theta Sigma .............. University of Bridgeport
Theta Tau ................ Univ. of Mich.-Dearborn
University of Evansville Eta
Merrimac College Eta
University of Southampton Eta
Aristotelian University Eta
London City University Eta

INVITATION

The Eta Kappa Nu Award Dinner in honor of the Outstanding Young Electrical Engineers of the United States will be held this year on Monday February 1st, 1982, at the Statler Hilton Hotel in New York City. All Eta Kappa Nu members and guests are invited. For tickets please contact Mr. Albert Fakheri, American Electric Power Co., 180 East Broad Street, Columbus, Ohio, 43215. Phone 614-223-1045.