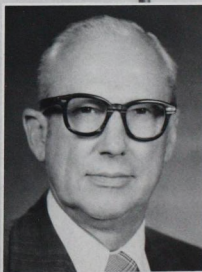


The **GEAR** of Theta Tau

Volume LXXI, No. 1

Fall, 1984





The Gear Of Theta Tau

VOLUME LXXI, NO. 1

Arthur T. Petrzalka, Editor in Chief

Fall, 1984

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The GEAR of Theta Tau

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The thing I like most about this job is all the mail I get. I have received more mail in the last ten weeks than I have received in the rest of my life. Of course most of it is bills, but there are a few things that break the monotony. One thing that breaks the monotony is the mail from the state:

Dear Theta Tau,

What would happen to the Tau Family if you were killed in an automobile accident? (uninteresting details deleted) So, all this coverage can be yours, Theta Tau, for just \$2.65 a month, and for just 70¢ a month more, coverage for the entire Tau Family, etc.

Maybe I should take them up on it. Wonder how they would react to a family of 35!

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The problem seems to be in maintaining that sense of family after you have flown the nest and gone off on your own, without the support of your brothers. Perhaps the Chapter doesn't write to alumni any better than when we were student members, or we have moved far away from our Chapter. Perhaps we don't have much in common with the alumni from other Chapters in our area. Many opportunities present themselves to remove us from the Family of Theta Tau.

Unlike an insurance company, Theta Tau is nourished on more than just money. It needs the means to grow both fraternally and professionally. Although the day-to-day operations of the fraternity are fed with money, the long-term health and growth is nourished more by the time contributed by its members.

Within the pages of the GEAR, we try to convey some sense of Theta Tau as Family. In this issue, we look at the professional aspect of the Theta Tau Family, specifically the 50th anniversary of NSPE, an organization which has many similar goals and purposes to Theta Tau.

NSPE's National Engineer's Week is one of Theta Tau's four traditions. Both organizations advocate engineering as a profession. Both offer engineers a way to cut across the technical divisions that separate us. Both are trying to create a Family of engineers in order to advance the status of its members and the profession as a whole.

In addition, both are celebrating major anniversaries. NSPE is 50 years old, and Theta Tau is 80 years old this year. Happy birthday to two organizations who are just like part of the Family!

Dear Mr. Tau,



Arthur Petrzeka
Editor-in-Chief

Phi Chapter of Purdue University recently received the above letter in the mail.

This letter is an obvious mistake . . . or, is it? It didn't do anything for the insurance company which sent it. But, it does give an interesting look at how we view our own Fraternity. Do we dismiss it as only a mistake, or do we wish that somehow we might be able to buy some insurance so that the Tau Family will be taken care of if we die?

In a larger sense, do we think of Theta Tau as family? There are certainly enough family stereotypes involved in Theta Tau. We have all seen brotherly concern, sibling rivalry, prodigal sons, and all other manners of family operations in our Chapters.



Delbert A. Schmand, P.E., of Little Rock, Arkansas is Assistant to the President, Garver & Garver, Incorporated, an Arkansas based consulting engineering firm. During his service to the Army Corps of Engineers, he supervised the design of locks and dams on the \$1.2 billion McClellan-Kerr Arkansas River Navigation system.

He has served NSPE as Vice President for the Southwest Region, Chairman of NSPE's Professional Engineers in Government practice division, and president of the Arkansas Society of Professional Engineers. Schmand also is active in the Society of American Military Engineers and the Institute of Electrical and Electronic Engineers. In 1969, he was appointed to the Arkansas State Board of Registration for Professional Engineers and Land Surveyors. He is a member of the National Council of Engineering Examiners.

Schmand and his wife, Frances, are active in church and civic affairs. For 25 years, he was active in the Boy Scouts of America. Other honors include the Corps of Engineers' Meritorious Civilian Service Medal, induction into the University of Arkansas' Hall of Fame for Distinguished Engineers, and charter membership of an advisory council to the University's College of Engineering.

DELBERT A. SCHMAND, P.E.

NSPE PRESIDENT, 1977-78

During my tenure as President of the National Society of Professional Engineers, several events and problems occurred which impacted greatly on the engineering profession. The Department of Justice had brought suit against NSPE alleging violation of the Sherman Anti-Trust Act in opposing competitive bidding among engineers. The case was settled in the Supreme Court. NSPE was also involved in helping celebrate the Nation's Bicentennial. In one instance, NSPE served as the lead society in organizing and sponsoring an "all-day" meeting at Valley Forge memorializing George Washington's call for engineering education. The original school con-

sisted of three captains and nine lieutenants, and was created by General Order at Valley Forge on June 9, 1778. NSPE also set up its own Political Action Committee (PAC) to broaden engineers' impact in the political arena.

The common denominator in all of these activities was the effort to conduct the business of engineering in a professional manner.

Professionalism is not being taught as a course, although a few people in education are pushing for that. The faculty must weave professionalism into the technical fabric of each course that they teach.

The Chapters of Theta Tau could help in this quest for professional-

ism. It would not take much more effort by the chapters to promote professionalism in the colleges. It will take a greater awareness of what NSPE is and what it does.

Theta Tau helped in my professional career, although it is not sufficient by itself to produce a well-rounded engineer. The Universities supply the technical and analytical skills that an engineer needs to succeed, but they do not supply the professional skills that are needed. These include skills in the areas of communications, leadership, ethics, and management of projects and personnel. This is where Theta Tau has its biggest opportunity to contribute to its members.



THOMAS M. LINVILLE, P.E.

NSPE PRESIDENT, 1966-67

Theta Tau was just 20 years old when I became a brother in 1924. I, too, was 20 years of age.

Recollections of the time and years since have been kept very much alive by the events of my life. For instance, Brother Britzius, Theta Tau's outstanding alumnus leader, and I, served together in the Cabinet of NSPE for several years in the eventful 1960's. NSPE also has a notable birthday this year, its golden anniversary.

Brother Britzius, the Cabinet members, and I became involved in the search for unity of the engineering profession. I had served as a director of the Engineer's Joint Council and chairman of the Intersociety Relations Committees of both IEEE and NSPE. I came to believe that an alliance of technical and professional interests was necessary for unity. Unity was synonymous with the establishment of a self-supporting, individual membership

society properly merging EJC, NSPE, and ASEE. Licensure under public laws would be required for principal engineers in industry as well as in private practice. However, it was important that each state license be valid in every other state. The prospectus was a powerful society, half a million strong, dedicated to the development and application of technology for global welfare.

Well, of course, the vision was untimely then, and its time is still to come. But we came close, and one day it will happen, brought about by the relentless force of need. In the meantime, NSPE has done much, as recounted in Paul Robin's book, "Building For Professional Growth."

According to my office records, I travelled more than 1.5 million miles by airplanes which, in my day, averaged no better than 200 miles per hour (no jets). At that rate, I sat for 7500 hours in airplane seats.

Brother Linville is a Fellow of IEEE, ASME, and AAAS. He has been president of the local museum, TV station (WMHT), Industrial Development Council, City Planning Commission, Housing Commission and is Vice-Chairman of the Hospital. He has been a Director of the Boys Club, Girls Club, and the Children's Home, and has been General Chairman for the United Way Campaign.

He has held several New York State jobs, to advance research and development, to enhance the public schools, and to establish the Science and Technology Foundation. He's been a member of the National Research Council and has served on technical commissions for the Federal, State, and Navy Departments.

That's close to eight hours, 7 days a week, for three years out of my 40-year career. The planes flew at only 3000 feet or so and details on the ground were clearly visible.

I spent a good deal of time studying what was down there: farms, forests, mines, factories, housing - in short, all the capital wealth of America. Who owned it? People did! I figured that in order to own my share of it, I'd have to own property worth at least half a million dollars. If I didn't succeed in doing that, I'd fail to carry my own weight in the enterprise of the nation, in particular in the preservation and growth of capital.

So my advice to young people is **BE THRIFTY! Be sure to SAVE! Acquire property and have that property work for you. SAVE RELENTLESSLY!**

(continued on page 6)

When I began with GE, my first job after the Test Course was in Pittsfield, MA, making repulsion-induction motors. Next I was in Corporate Engineering studying synchronous motors and taking the 3-year Advanced Course in Engineering. Then the Great Depression struck, and I moved into Large Motor Engineering to look for submarine propulsion business (Hitler had just taken over in Germany and war loomed ahead). I won the business, and I rode submarines in the Atlantic and Pacific, finally going into Germany with the British army to get an early-bird look at German technology. Then I went home to the Corporate Engineering Staff to look after the technology of the GE motor businesses. In a switch from engineering, I went to the Harvard Business School to take the Ad-

vanced Management Program and from there to corporate GE headquarters in New York City to manage the Executive Development Program, establishing the GE Advanced Management Research and Education Institute at Crotonville, N. Y. Was that engineering? The management division of ASME says positively yes!

It was a time for decision. I was offered positions as general manager of GE's metallurgical and chemical businesses division, and alternatively as president of Georgia Tech. I opted to go after the "world's finest job", looking for profitable business opportunities from discoveries through basic research in science, working on the cutting edge of technology. With observation posts manned by GE scientists in Asia and Europe, I was able to help guide corporate research and its applications by the Company's engineering

operations. Think of hi-tech as we know it today, and you can sense how exciting the job was.

Here time caught up with me, and it was time for retirement. Now, I'd like 50 million dollars or so to establish foundations to do the work necessary to find peace, liberty, and prosperity for the Earth's inhabitants. I'm working hard at it with the resources at hand and the generosity of friends. There has been encouragement from the Systems, Man, and Cybernetics Society of IEEE, International Federation for Automatic Control, and others interested in systems engineering.

I also was president of the Tau Beta Pi Association (the national engineering honor society) in 1974-76 when there was an opportunity to put the Association on its feet financially and to inaugurate a decentralized organization grouping the Chapters into 10 Districts, each with a District Director.

RUBE GOLDBERG CONTEST

National Engineers Week is designed to promote engineering on college campuses. This year, Phi chapter of Theta Tau sponsored the highest attended event of Engineering Week: the 1984 Rube Goldberg Contest (RGMC).

This year's contest had six entries, as compared to last year's two, and an estimated 250 spectators came to see the "craziest machines that pour a bottle of Pepsi."

The contest is a tradition that started in the 50's as a competition between the minds of Theta Tau and Triangle, and is named for the late cartoonist who drew complicated machines on the pretense of making life easier. With the advent of the Grand Prix go-cart race, however,

the contest soon faded away.

RGMC was revived last year as part of Engineering Week to show the diverse, perverse, and fun applications of engineering. This year, with the addition of Pepsi Cola as a financial backer, Theta Tau was able to broaden advertising, and thus interest in the contest. Local television coverage and a quarter page article in Newsweek's On Campus magazine are some of the media coverage Theta Tau received for the event.

This year Phi Chapter sponsored a successful contest. Next year it will hopefully be an even more successful and popular contest than this year's.



NSPE's 50th

The year-long celebration opened January 16, 1984 in San Francisco during NSPE's five-day winter board meeting.

In addition to the San Francisco festivities, four other major anniversary events were scheduled as follows:

Feb 24, New York City—The national finals of MATHCOUNTS, the first nationwide mathematical skills contest for junior high school students, was held at NASA's Goddard Space Center.

July 9-14, Washington, D.C.—The program for NSPE's annual meeting included a joint event with the National Park Service and the Army Corps of Engineers marking the 100th anniversary of the Washington Monument.

September 19-21, Kansas City—A 'mid-continent gathering' commemorated the signing of the original NSPE charter in 1934. Special guests included original charter signers and the first members of NSPE.

In addition NSPE's five practice divisions had initiated individual undertakings to celebrate the Society's 50th. Professional Engineers

in Private Practice for example, sponsored a colloquium at Purdue University on the Improved Quality of Engineering Service; Professional Engineers in Construction held a series of special seminars around the country.

The Professional Engineers in Government have endowed a \$1,000 annual fellowship for a practicing engineer to earn an advanced degree in management. The Professional Engineers in Industry have initiated a \$1,000 annual scholarship for a senior engineering student. And the Professional Engineers in Education honored the high-school-aged winners of the national JETS TEAM math contest at a special ceremony in Washington.

In conjunction with the 50th anniversary of the National Society of Professional Engineers, the U. S. Postal Service issued a commemorative stamp honoring the engineering profession and engineer Lillian Gilbreth. The stamp was issued February 24, 1984, during National Engineers Week.

Acknowledging the Postal Service's selection, NSPE Executive Director Donald G. Weinert said, 'As

we celebrate our 50th anniversary, it is especially fitting to honor the growing influence of women in the profession. Lillian Gilbreth's work epitomizes the creative capacity, aptitude and inventiveness that characterize the engineering profession.'

Gilbreth was the first woman elected to the National Academy of Engineering (1965) and the first woman to receive the prestigious Hoover Medal (1966) for distinguished public service by an engineer.



NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

The National Society of Professional Engineers is the only engineering organization devoted solely to the professional interests of engineers. It was founded in 1934 by the engineering societies of New York, Pennsylvania, New Jersey, and Connecticut.

NSPE's founders envisioned an organization that could look out for the professional interests of all engineers, regardless of their specialty.

Other existing societies were already dealing with technical areas of the profession or promoting specific disciplines. None represented the non-technical concerns of all engineers, such as professional standards and ethics, communications and government affairs.

Members are individual professional (licensed) engineers, engineers-in-training, land surveyors, students and experienced graduate engineers. They practice in all technical branches of the profession and are employed in private practice, industry, education, government and construction.

Three-Tiered Association

NSPE's founders recognized the importance of strong grass-roots support and control of a national organization, and established one of the earliest three-tiered professional associations. NSPE has 535 local chapters and 54 state and territorial societies, in addition to its national organization. Each level functions as a semi-autonomous unit dealing with problems and opportunities affecting engineering practice and the public welfare.

Professional Standards

From its founding in 1934, NSPE promoted the enactment of engineering registration laws in every state; this goal was reached in 1950. Engineers are granted the title of Professional Engineer (P.E.) upon successful completion of a standard examination administered and reviewed by the State Boards of Engineering Registration.

In 1953 the Society created the Board of Ethical Review to interpret ethical principles. The board is educational, not punitive or disciplinary. Opinions are published and used by engineers in their practices and by professors in their engineering classes.



MATH COUNTS

Engineering Education

The Society met a national crisis head on in 1957. It was the year the Soviets launched Sputnik and the U. S. found itself with a shortage of engineers and scientists. Working with the U. S. Office of Emergency Management, NSPE's state societies held more than 50 conferences on the utilization and training of scientists and engineers for the space program.

NSPE followed up in 1960 by establishing its own foundation to promote education in engineering. The foundation continues to grow and in 1984 will award more than \$1 million in scholarships and grants, the largest engineering scholarship program in the world.

Legislative Concerns

Since 1960 NSPE has presented engineering planks to the platform committees of both the Republican and Democratic parties at their national conventions. It is the only

between engineers and their employers. NSPE also supported the creation of the National Science Foundation.

The Society currently is concerned with legislation and regulations pertaining to hazardous waste disposal, engineering education, technology policy, public works infrastructure and procurement of professional services. It works with Congress, State Legislatures and government agencies at all levels to present the technical viewpoint in these areas.



project conducted by NSPE's Alabama Society has become the springboard to a national math program being cosponsored by NSPE.

The program is "MATHCOUNTS," unveiled nation-wide in September, 1983. MATHCOUNTS is the first national mathematics competition and coaching program for 7th and 8th grade students.



Community Action

In February, 1951, NSPE inaugurated National Engineers Week to focus public attention on engineers. In 34 years, this annual observance has grown from a few scattered proclamations and dinners to elaborate programs and week-long activities in every state.

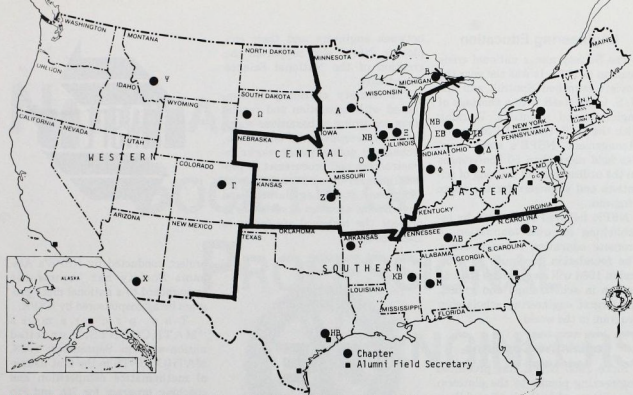
An outgrowth of Engineers Week is NSPE's community action program, started in 1968. One such



individual-membership engineering society to have a Political Action Committee which, in 1982, disbursed funds to more than 200 candidates.

NSPE has worked on legislative issues concerning provisions for professionals set forth in the Taft-Hartley Act (1947), the status of engineers under labor and wage and hour legislation and the promotion of sound professional relations





ALUMNI FIELD SECRETARY

The Grand Regent may appoint as an Alumni Field Secretary an alumnus who is interested in serving the Fraternity and in maintaining contact with fellow alumni.

The Alumni Field Secretary's primary responsibility is to welcome and offer assistance to any member of Theta Tau moving into the area, and to establish local contact with every alumnus already located there.

Additional duties have been recommended by Theta Tau Conventions. These are not requirements, but the Conventions have perceived areas of need where the Alumni Field Secretaries can help if so inclined.

A. Attempt three or more contacts per year with the Deans of Engineering at sites of prospective colonies suggested by the Regional Director.

B. If a colony is established within the area, the Alumni Field Secretary should attend its certification ceremony, and later contact it periodically to check on its progress.

C. Attempt to set up annually at

least one professional development activity such as a seminar or plant tour, for a chapter in the area.

D. Coordinate alumni activities in the area, help to organize an alumni club or help an existing club or association to organize alumni functions in the form of Founders Day events, chapter anniversary celebrations, informal luncheons, bridge or poker games, yearly reunions, etc.

E. Encourage alumni response to letters soliciting annual contributions to the Fraternity through follow-up, perhaps by phone.

F. Maintain an address list of alumni in the area.

G. Contact the Regional Director annually to report accomplishments.

H. If possible, supply the Regional Director with a list of job openings for distribution to chapters in the Region.

Each Alumni Field Secretary will be on the mailing list for the Executive Council Bulletin sent periodically to national officers, chapter and alumni organization officers. Each Alumni Field Secretary will be in-

cluded on the list of ALUMNI CONTACTS in the calendar folder sent each alumnus each year.

The Central Office will provide each Alumni Field Secretary with a list showing the name, address, chapter, and roll number of each alumnus in the area on the Fraternity's mailing list, with semi-annual updates. Theta Tau letterheads and envelopes (not personalized) for use by Alumni Field Secretaries will be supplied by the Central Office upon request specifying quantity. Expenses incurred in official duties will be reimbursed to the Alumni Field Secretary upon submittal of an expense voucher to the Central Office. The Executive Secretary should approve in advance expenditure of significant sums for which reimbursement will be requested. The Central Office can supply copies of Theta Tau laws governing alumni organizations, suggested alumni club bylaws, promotional material, and a manual for use in establishing a colony, etc. The Central Office may be asked for any assistance needed.



PURCELL

William J. Purcell, P.E., N'46, project manager with Westinghouse Electric Corporation in Oak Ridge, Tenn., has been named a Fellow of the American Society of Mechanical Engineers (ASME).

The Fellow grade is conferred upon a member who has had at least ten years active engineering practice and who has made significant contributions to the field of engineering.

Mr. Purcell received his B.S. in Mechanical Engineering from Carnegie-Mellon University (CMU) in 1946, after spending three years in the Marine Corps during World War II. He received an M.S. in Mechanical Engineering from the school in 1949.

After working at the Gulf Oil Company R&D labs and as an instructor at CMU, he joined Westinghouse in 1951 as an engineer at the Bettis Atomic Power Laboratory. In 1979 he assumed his present position as project manager for Westinghouse at the Clinch River Breeder Reactor Plant.

He is a member of the American Nuclear Society, the American Society for Engineering Management, Tau Beta Pi, and Pi Tau Sigma. He has also been a member of the U.S.-Japan and U.S.-British Liquid Metal Fast Breeder Reactor Experience Working Groups.

Mr. Purcell is a professional engineer licensed in Pennsylvania.

ALEXANDER

David C. Alexander, U'71, of Kingsport, TN is the recipient of the Institute of Industrial Engineers' 1984 Outstanding Young Industrial Engineer Award. He is a senior industrial engineer at Tennessee Eastman Co., a division of the Eastman Kodak Co.

Given annually when merited, the award is for outstanding characteristics of leadership, professionalism and potential in the field of industrial engineering.

Alexander was recognized for his significant contributions to the technical practice of industrial engineering. His peers describe his experience as "a unique blend of industrial engineering, human factors, engineering (ergonomics) and behavior science applications."

In addition to being a senior member of IIE, he is a member of the Human Factors Society, Alpha Pi Mu, Tau Beta Pi, the Southern Highland Handicraft Guild, the President's Committee on Employment of the Handicapped, the editorial board of the Association for the Habilitation and Employment of the Handicapped, editorial board of the Association for the Habilitation and Employment of the Developmentally Disabled and the advisory board for the Deep South Educational Resource Center.

Alexander received his bachelor's and master's degrees in industrial engineering from the University of Arkansas in 1971 and 1973, respectively.

NEUBAUER

Dr. Loren W. Neubauer, retired professor from University of California, Agricultural Engineering Department, has received the 1984 Metal Building Manufacturers Association (MBMA) Award from the American Society of Agricultural Engineers (ASAE).

Neubauer's citation recognizes "his outstanding work in basic structural and energy research." His studies have included work on the structural mechanics of wooden beams and columns, farm fences and the development of housing plans and foundations. His development of a "solaranger" design made possible simulation of sun movement over and around a building leading to applications of solar energy.

ASAE is a non-profit, technical, scientific and educational society committed to improving agriculture through the application of engineering principles.

KOPP

Max J. Kopp, U '57, president of Validyne Engineering Corporation, has just finished a one year term as president of the Instrument Society of America (ISA). ISA is a not-for-profit educational organization recognized as the leading society for instrumentation professionals and practitioners worldwide.



In Memoriam

ALPHA

Nathan C. Davies, '28, 06/19/84
Ernest C. Kron, '30, 3/8/83
George W. Langenberg, '30, 11/12/83
Richard Henry Mick, '42, 6/4/84
Lynn C. Rood, '31, 83
George John Schroepfer, Hon. '28, 3/11/84

BETA

Harold Carl Anderson, '36, 6/82
Neil Luther Hanson, '47, 9/29/83
William J. Harris, '13
Earl S. McCarthy, '25, 4/8/83
Alan McKay Morrison, '36

GAMMA

James Andrew DeLapp, '44, 3/1/83
Dr. James Holver Hook, '29, 1/2/84
Clyde Vernon Johnson, '45, 3/26/82
Max Carl Scheble, '30

DELTA

Harold LaRue Bailey, '25, 2/10/83
Edmund Belfour Bossart, '27, 10/25/83
Clarence A. Bever, '13/9/84
Albert Caleb Ellsworth, '28, 11/15/83
John Joseph Graham, '38, 10/26/83
Donald Vernon Hampton, '23, 6/12/83
William J. Hopkins, '29, 11/9/82
Charles Justyn Hunter, '33, 9/75
Robb Warren James, '34, 5/22/84
Andrew Lewella Janes, '24, 3/31/84
Walter John Karash, '41
Dr. Frederick R. Mautz, '29, 2/3/84
Robert Sherwood Shankland, '29, 3/5/82
Frank Steve Takacs, '48, 5/23/83
Lloyd Augustus Yesberger, '28, 10/28/83

EPSILON

Philip Andrews, '21, 3/13/83
David T. Hoenshell, '24, 7/8/83
Robert Perry Miller, '20, 1/14/84
Walter William Phillips, '18, 11/2/83

ZETA

Henry G. Gregory, '23, 10/11/83
Curtis B. Hostetter, '14, 3/20/83
Edgar Palmer Shelton, '22, 5/26/84
Frederick August Thudium, '38
Franklin Archer White, '35, 11/29/83

ETA

James Donald Flagg, '27, 2/27/83
Edward Smith Johnston, '25
Amos N. Prescott, '19, 12/8/83

THETA

Albert Lawrence Chudoba, '38, 1/27/84
John David Kenney, Jr., '42, 4/16/83
Henry Joseph Petrie, '43, 1/28/84

IOTA

Richard Henry Aberle, '57
Philip L. Blake, '24, 10/1/82
George Augustus Hale, '34
Howard Alfred Herder, '26, 10/6/83
William Bennett Machin, '28, 6/25/82
Clefford Franklin Page, '30, 11/13/82
Allen D. Potts, '19, 9/83
Joseph M. Wilson, '21

KAPPA

Carl A. Borgeson, '25, 12/29/83
Kenneth H. Gordon, '20, 82
Arnold Hopkins Heineman, '26, 10/9/83
Thomas Joseph Hynds, '26, 6/4/83
Ernest M. McEvers, '20
Rudolph E. Peterson, '25, 11/82
William K. Pierce, '25
Julian Walter Steinmetz, '28, 1/10/84

LAMBDA

Frederick Cyrus Bates, '26, 7/20/84
Marshall Hayes Bell, '47
Harold R. Bradford, '31
Elmer Butler, '35
Winslow C. Cole, '13
Claude Cyril Cornwall, '11
Arthur Clarence Deck, '28
Roy J. Fairclough, '33
George Merrell Jones, '27, 9/23/82
Hugh M. Lyman, '24, 10/80
James Morgan Orr, '32
Finn B. Paulsen, '46
John Orson Reeve, '35
Max F. Schick, '08
William Blair Scott, '30
Robert Sidney Tirnmanan, '28

MU

Jess Orville Long, Jr., '26, 4/2/75
John J. Shannon, Jr., '25

NU

Paul Robert Ford, '46, 81
James Walter Kirkpatrick, '38, 1/8/84
Edward R. Patton, '24, 8/15/83
Gerard Addison Rohlich, '34, 9/16/83
Joseph Thompson Ruby, '28, 4/82
John Theophile Sabol, '31, 12/6/81
John Cykler Stephenson, '47, 11/21/83

XI

Richard J. Hellen, '51, 4/8/84

OMICRON

George C. Ashton, '23
Albert D. Carlson, '27, 2/84
Alvin W. Green, '40, 2/83
Mark James Hess, '25, Charter Member,
9/13/82
Dean Carter Peterson, '67, 11/6/83
Dr. Lawrence A. Ware, '26

PI

Merryman Priddy Bailey, Jr., '36, 1/27/84
Elmer Morton Knight, '23, 1/15/84
William W. Parkinson, '23, 4/25/83

RHO

Fred C. Davis, '28
Carl Dawson Delamar, '37, 4/83
George Roland Killam, Jr., '28, 7/6/84
Vincent Cowgill Outland, '53, 80

SIGMA

Theodore Joseph Kauer, '28, 7/22/83
Frank Anton Valentine Zorko, '49, 5/16/83

TAU

Reginald G. Easton, '29, 11/30/83
Donald Edward Francis, '44
Andrew Joseph Paucek, '33, 11/6/83

UPSILON

Gerald R. Sisk, '33
Randall William Steward, '34, 10/6/83
Horace Gordon Thomasson, Jr., '32, 2/5/84
Robert Rhamy Wagstaff, '34, 5/16/83

PHI

Wilbur Clarence Osha, '32, 83
Robert Earl Stradling, '31, 83

CHI

James John Bickerstaff, '49, 6/23/80
Mark Ray Golden, '67, 2/17/77

PSI

Robert Lewis Applegate, '61
Albert Wilbur Schlechten, '37

OMEGA

Ralph E. Atwater, '36
James Otto Harder, '31
Edward Freidhoff Jacobson, Jr., '42, 9/5/83
Max Harold Monheim, '29
Fred Russell Petersen, '52

GAMMA BETA

Donald Vernoy Davis, '49, 4/7/82

DELTA BETA

Joseph Wolf, '81

EPSILON BETA

Dr. Glen Hiatt Howell, '34, 10/14/83

IOTA BETA

Louis Joseph Urban, '66, 8/83

Additions to Membership



ALPHA

934 Kenneth LeRoy Harnack, '88, Wells, MN; 935 Michael George Richardson, '88, Mankato, MN; 936 Richard Alan Rosvold, '88, Inver Grove Heights, MN; 937 Bruce Elliott Sorensen, '88, Stillwater, MN; 938 Stephen James McFarland, '88, Fridley, MN; 939 Teck Chen Yee, '86, Singapore; 940 Carl Robert Ziller, '86, New Richmond, WI

GAMMA

1288 Kerry Lee Bierbaum, '85, Littleton, CO; 1289 John Anthony Thomas Boselli, '86, Boulder, CO; 1290 Mark Alan Oberle, '83, Lakewood, CO; 1291 Michael Johnson Read, '84, Bennett, CO; 1292 Kevin Lee Stansbury, '84, Littleton, CO; 1293 Michael Van Strain, '85, Houston, TX

DELTA

1272 William Arthur Groves, '85, Edinboro, PA; 1273 Alan Sherrill Martin, '87, San Antonio, TX

ZETA

829 Laura Christine Bulgren, '88, Lawrence, KS; 830 David Joseph Burdick, '87, Kansas City, KS; 831 Shawn M H Byrd, '87, Overland Park, KS; 832 Kenneth Stuart Dawson, '86, Wamego, KS; 833 Jeffrey David Green, '84, Overland Park, KS; 834 Susan Eve Litman, '85, Prairie Village, KS; 835 Renee Denise McGhee, '87, Lawrence, KS; 836 David Alan Palm, '86, Wichita, KS; 837 Cynthia Louise Rice, '87, Huntsville, AL; 838 Charles Bernard Richardson, '87, Atchison, KS; 839 Susan Rene Skube, '87, Overland Park, KS; 840 Vincent Ronnell Turner, '85, Kansas City, KS; 841 George Hyungjik Yoo, '86, Topeka, KS

XI

482 Sadik Jaffer Al-Musawe, '84, Madison, WI; 483 Carl John Burkhalter, '84, Hopkins, MN; 484 Roger Reed Chuppa, '85, Grafton, WI; 485 Kurt David Everson, '85, Madison, WI; 486 Angela Marie Hoffmann, '86, Milwaukee, WI; 487 Bruce Jacob Kinjerski, '86, Kewaunee, WI; 488 Katherine Colleen Bowen, '88, Milwaukee, WI; 489 Trent Alan Kohl, '86, Manitowoc, WI; 490 Vicki L. Papez, '85, Waupun, WI

OMICRON

952 Mary Ann Bartholomew, '85, Oskaloosa, IA; 953 Nancy Ann Bowers, '85, Ottawa, IL; 954 Margaret Jane Donkers, '86, Red Wing, MN; 955 Paul Daniel Guidotti, '85, Buffalo Grove, IL; 956 Richard Wayne Hanson, '85, Sergeant Bluff, IA; 957 Stephen Dean Kelley, '85, Morton, IL; 958 Janice Ann Kirsch, '85, Emmetsburg, IA; 959 Rhett Eugene Livengood, '85, Freeport, IL; 960 Barbara Lynn Lockwood, '85, Davenport, IA; 961 Robert Alan Moellering, '85, St. Louis, MO; 962 Glenn Robert Olson, '85, Miles, IL; 963 Robert Alan Schroeder, '85, Dubuque, IA; 964 Sara Evelyn Schuck, '85, Davenport, IA; 965 Scott Alan Tolson, '85, Newton, IA; 966 Kimberly Dee Marshall, '85, Vermillion, SD

RHO

948 Timothy Patrick Howard, '88, Raleigh, NC; 949 Robert Shawn McComas, '84, Cary, NC; 950 David Leonard Overby, '86, Mt. Airy, NC; 951 Richard Egon Tatem, '87, Concord, NC

SIGMA

736 Eric John Martin, '86, Dayton, OH; 737 David Alan Hart, '86, Yellow Springs, OH; 738 Terry Lee Stewart, '85, London, OH; 739 Theodore Charles Burnham, '85, Gates Mills, OH; 740 Samuel Emmett Horne III, '85, Brecksville, OH; 741 James Michael Light, '86, Greenville, OH; 742 Jay Joseph Pierce, '87, Hamilton, OH; 743 Thomas Joseph Creek, '87, Reynoldsburg, OH; 744 Joseph Edward Coogan, '86, Worthington, OH; 745 Atul Gupta, '86, Ditwe, Zambia; 746 Bradley Charles Basile, '88, North Lima, OH; 747 Mark Allen Taylor, '88, N. Olmsted, OH; 748 Dean Mark Latta, '86, Chesterland, OH

CHI

917 John Samuel Allen, '85, Gilbert, AZ; 918 Edward J Caracappa, '85, Hoboken, NJ; 919 Eric John Gudorf, '86, Minneapolis, MN; 920 Donald Vierson Penners, '86, Tucson, AZ; 921 William Waldo Don Carlos II, '87, Scottsdale, AZ

PSI

632 Philip Lee Gyger, '86, Big Timber, MT; 633 Gregg Duncan Teets, '83, Green River, WY; 634 Brent Lee Miller, '84, Butte, MT; 635 Ben David Ryan, '86, Butte, MT; 636 Brian Daniel Hohn, '86, E. Helena, MT; 637 Ralph Wade Anderson, '84, Ballantine, MT; 638 Bryce Coleman Martin, '86, Calgary, Alta; 639 Michael Lynn Mehlhoff, '86, Garrison, ND; 640 Stephen David Willner, '86, Butte, MT; 641 Nicki Gage McCaslin, '86, Gillette, WY; 642 Matt Floyd Olson, '87, Ronan, MT; 643 Michael Steve Hellen, '86, Somers, MT; 644 Steven Jay Gossard, '86, Seely Lake, MT

EPSILON BETA

315 Timothy Bryan Smigels, '85, Detroit, MI

ETA BETA

307 Samuel Glenn Campbell, '85, LaMarque, TX; 308 Melvin Joseph Parker, '86, Houston, TX; 309 Mark Albertis Whitt, '86, Garland, TX

IOTA BETA

220 Edward G Brown, '86, Mt. Clemens, MI; 221 Brian Timothy Cronan, '87, Hudson, OH; 222 Richard Michael Haynes, '86, Roseville, MI

KAPPA BETA

353 Robert Wayne Anderson, '85, Grand Junction, TN; 354 Arthur Finley Cooper, '86, Tupelo, MS; 355 Phillip Dale Mashburn, '85, Bartlett, TN; 356 Gary Allen Pryor, '84, Pulaski, MS; 357 Steven Paul Sides, '85, Tupelo, MS; 358 Kevin Jean Daigle, '86, Picayune, MS; 359 James Jeffrey Hood, '85, Amory, MS; 360 Brian Evans Lampkin, '88, Starkville, MS; 361 Katryn Irene Powell, '89, Tomnolen, MS; 362 James Douglas Riser, '88, Long Beach, MS

OBSERVATIONS

At the 1984 National Convention



Lambda Beta's display was set up for all to admire in the display room.

Brother Bob Pope makes a point during a convention session as Bradd McCaslin listens intently.



Registration went smoothly, as members were shuttled in from Kansas City International Airport.

By the time the Saturday night banquet rolled around, delegates were glad to have some time off.



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The GEAR will soon be accepting fractional and full page ads as well as card ads. If you would like to advertise in a magazine which is circulated to roughly 15,000 engineers in all stages of their careers, send for further information to The GEAR of Theta Tau, P. O. Box 2810, Iowa City, IA 52244.

IN THE NEXT ISSUE

The Spring '85 issue of the GEAR will have a new theme. The theme is "BURNOUT". This seemed like an appropriate topic for engineers who are usually involved on several fronts at any given time.

We intend to have a feature article on the subject which will explain the phenomenon, and offer several smaller articles on the positive aspects of maintaining a stress-free career.

These might include hobbies, time management techniques, motivational techniques, temporary "fixes", or anything else which is suggested to us.

If any of you have an interesting way of coping with incipient burnout, drop us a line. Ideas may be published, and certainly will be tested.

We will continue publishing themes in advance, in the hopes of hearing from more of you, and thus increasing the interest of the magazine to our members.

HANES

Brother C. Ramond Hanes, Past Grand Regent, celebrated his 60th wedding anniversary with his wife, Aline, this past summer.

ALUMNI DIRECTORY NEARS COMPLETION

All telephone contact has been completed by Harris Publishing Company, publishers of our official alumni directory. The purpose of the telephone contact was to verify the information which the alumni provided on the directory questionnaires and the information currently held on the alumni records.

At the same time, the telephone representatives of the publishing company invited alumni to purchase personal copies of the directory.

The directory is tentatively scheduled for release in January, 1985. If you have not received your copy by January 31, 1985, or if you are interested in purchasing a copy, and have not heard from the publisher, you may contact them directly at the following address:

Doreen Luff
Customer Service Representative
Bernard C. Harris Publishing
Company, Inc.
3 Barker Avenue
White Plains, NY 10601

MAILING LABELS

For those of you who have wondered what the codes on the mailing labels stood for, we have an explanation. The code consists of a set of letters and a number. The letters stand for your chapter, while the numbers are your chapter roll number. The code on my mailing label is O 878. O stands for Omicron chapter, and I am the 878th initiate of that chapter. A list of Chapter letter codes follows.

A	Alpha	N	Nu
B	Beta	NB	Nu Beta
D	Delta	O	Omicron
DB	Delta Beta	Ome	Omega
E	Epsilon	P	Rho
EB	Epsilon Beta	Phi	Phi
G	Gamma	PI	Pi
GB	Gamma Beta	Psi	Psi
H	Eta	S	Sigma
HB	Eta Beta	T	Tau
I	Iota	Th	Theta
IB	Iota Beta	ThB	Theta Beta
K	Kappa	U	Upsilon
KB	Kappa Beta	X	Chi
L	Lambda	Xi	Xi
LB	Lambda Beta	Z	Zeta
M	Mu	ZB	Zeta Beta
MB	Mu Beta		



Chapter Directory

*Alpha:	515 Tenth Avenue, S. E.	*Phi:	416 N. Chauncey
**C	Minneapolis, MN 55414	E	West Lafayette, IN 47906
*Beta:	Box 77, Route #1	*Chi:	1614 East Speedway Boulevard
C	Houghton, MI 49931	W	Tucson, AZ 85719
Gamma:	Box 13, Colorado School of Mines	Psi:	c/o Prof. Charles Herndon
W	Golden, CO 80401	W	Montana College of Mineral Science & Technology
Delta:	c/o Student Activities		Butte, MT 58701
E	Thwing Center	*Omega:	109 Kansas City Street
	11111 Euclid Avenue	W	Rapid City, SD 57701
	Cleveland, OH 44106	*Epsilon	478 West Alexandrine
*Zeta:	1935 Heatherwood	Beta:	Detroit, MI 48201
C	Lawrence, KS 66044	E	
*Mu:	P. O. Drawer AM	*Eta Beta:	7487 Santa Fe Street
S	University, AL 35486	S	Houston, TX 77061
	(#10 Bryce Lawn	*Iota Beta:	4026 West McNichols Road
	Tuscaloosa, AL 35401)	E	Detroit, MI 48221
*Xi:	1633 Monroe Street	*Kappa Beta:	P. O. Box 2983
C	Madison, WI 53711	S	Mississippi State, MS 39762
Omicron:	3115 Engineering Building		(56 South Park Estates
C	University of Iowa		Starkville, MS 39759)
	Iowa City, Iowa 52242	*Lambda	513 North Walnut Avenue
Rho:	Box 5325, State College Station	Beta:	Cookeville, TN 38501
S	Raleigh, NC 27650	S	
*Sigma:	1946 Indianola Avenue	Nu Beta:	Ottensman Hall Engineering Dept.
E	Columbus, OH 43201	C	University of Wisconsin-Platteville
*Tau:	1105 Harrison Street		Platteville, WI 53818
E	Syracuse, NY 13210	Iowa State	114 Marston Hall
*Upsilon:	1322 West Cleveland	University	Iowa State University
S	Fayetteville, AR 72701	Colony:	Ames, IA 50011
		C	

* Chapter House

** Each chapter's Region is denoted under its name, thus: C, Central; E, Eastern; S, Southern; and W, Western.

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