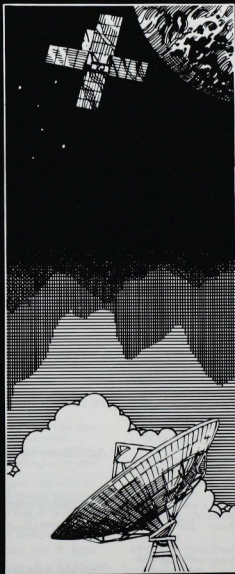


The GEAR of Theta Tau

Volume LXVIII, No. 1

Spring, 1982



Columbia Space Shuttle:

ENGLE RECYCLES SPACESHIP



The Gear Of Theta Tau

Volume LXVIII, No. 1

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Spring, 1982

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Professional Registration Made Easy

Dale Larsen, Omega '78

As engineers, we often fail to stand up and receive the recognition that we deserve. The recognition that I am talking about comes through registration as a professional engineer. Though many of us consider registration a luxury, in many fields of engineering it is a necessity for optimum career success. In private practice, engineers usually must be registered. In state and municipal government, most engineers in responsible jobs need to be registered. In industry, legal implications relating to product liability, and qualifications needed to serve as expert witnesses, have made it desirable to be registered. In education, the American Society for Engineering Education encourages voluntary faculty registration.

The need for registration as professional engineers is here, and the

Professional Development Committee of Theta Tau is here to help. In general, an 8-hour Fundamentals Exam near the end of your college career and, after 4 years practice, another 8 hour exam on the practice of engineering is required for P.E. registration. I also have in my possession a bibliography of helpful review books for the P.E. exam as well as for the Fundamentals Exam. The list is too long to show here, but please contact me for order addresses, professions covered, and any other information on this library.

Registration is important to your career and to your professional attitude. Please let me help you become a member of the Professional Engineer group.

Dale Larsen

930 N. Vernal Ave. #46
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Dale Larsen

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What is an Alumni Field Secretary?

John Catledge, Kappa Beta '74

Roughly 18,600 living alumni are on the roll books of Theta Tau. Of these, approximately 14,500 receive the publication you are now reading. This represents seventy-five percent of all living Theta Tau members, including students. It was for this group that the Alumni Field Secretary (AFS) program was conceived some six years ago. This article is to inform you of what the AFS program has accomplished and/or could accomplish, as revealed from the perspective of the Alumni Field Secretaries.

A survey of the twenty-two existing secretaries yielded ten responses. The responses were varied, but the majority of the group has been contacting alumni in their area as they receive address cards from the Executive Secretary. This is the primary, if not the only, activity requested of each AFS. Some have ventured into the areas of establishment of colonies and alumni group meetings with only limited success to date.

Since the purpose of the AFS program has not yet been defined, it is difficult to judge this present level of activity as success or failure. The survey was as much to determine this purpose as it was to gauge the activity level. I wanted those who had put their name on the line to tell us what they thought the AFS program should accomplish. They offered both their goals and their concept of the ideal AFS program.

Their immediate goals are embodied by six words: keep the alumni informed and active. Most Alumni Field Secretaries want to be an informed liaison between the national Fraternity and the alumni, between any local chapters and the alumni, and among the alumni themselves. They offered specific recommendations now under consideration as to how the national Fraternity can better assist them in accomplishing these goals.

These immediate goals reveal the basis behind the AFS group's concept of the ideal AFS program. The following is a list of things they say the AFS program should do:

- a) Provide goals for alumni other than financial support; i.e. speakers bureau, job contacts, regional reunions, etc.
- b) Provide liaison between industry and local chapters for professional development; e.g. field trips, engineering speakers.
- c) Maintain contact with the alumni.
- d) Develop social dialogue with the brothers.
- e) Provide assistance to any alumnus, either indi-

vidually or collectively,

- f) Provide support for potential alumni groups and/or colonies
- g) Aggressively pursue new chapters.
- h) Provide assistance to national and regional officers of the Fraternity.
- i) Should *not* force Theta Tau into the schedules of the alumni.

Although some of these comments are varying shades of the same goal, they present an encouraging group of ideals; a tougher group than I would have come up with myself. These are, however, attainable, depending on availability of time, motivation, and opportunity.

In addition to these, the AFS program provides at least one additional service. It is a means of staying involved in the Fraternity, of putting one's name in the hat for involvement on a national basis. It is essential to the future of the Fraternity that any fertile ground for leadership development be cultivated to the fullest.

Based on this, and the fact that personal contact is being made with alumni, I would suggest that the AFS program is indeed a success. The goals provided by the Secretaries themselves show a lot of room for growth, and for more Alumni Field Secretaries.



Craig Huff, Delta Beta '76, John Catledge, and Richard Bonomo, Delta '78 discuss alumni programs at the Convention.



Brother **Loren W. Neubauer**, Alpha '26, received an Award of Distinction from the Sixth National Passive Solar Conference in Portland, Oregon, on September 9, 1981. The conference program has these notes:

"Loren W. Neubauer, professor emeritus of Agricultural Engineering at the University of California, Davis, is being honored by the Sixth National Passive Solar Conference for his pioneering work in solar design.

"Dr. Neubauer has been active in solar research and development for over thirty years. His work is noted for its emphasis on simple, practical, and economical methods of passive solar heating and cooling. Much of this work has been directed to the needs of farmers, ranchers, and homemakers and is as useful today as when it was written.

"More recently, Dr. Neubauer was one of the authors and advocates of the Davis, California, Energy Conservation Building Code. This innovative code was the first climatically adapted solar building code in the country. Dr. Neubauer's enthusiasm, energy, and expertise was instrumental in the preparation and passage of this performance-based code.

Dr. Neubauer has also acted as a consultant for Living Systems, of Winters, California, in their innovative passive solar developments, including the culvert based water wall, the design of a State Office Building for Site 1, and the cool pool concept. His practical, low-cost test methods for these new applications were a logical extension of his earlier work testing wood strength for building design criteria.

"During his long tenure in the U.C. Davis agricultural engineering department, Dr. Neubauer also researched the strength of adobe construction, again reflecting his concentration on practical, durable, and low-cost materials and design—in contrast with society's frequent fascination with the expensive, complex, and short-lived.

"Dr. Neubauer's continuing enthusiasm for his work and his far-ranging interests have been an inspiration to his students at U.C. Davis throughout his career. His papers and his book co-authored with Harry Walker, *Farm Building Design*, are straightforward,

practical, and recommended reading for anyone interested in passive solar design."

Neubauer, who goes by "Tod," received his B.S. in Civil Engineering at the University of Minnesota in 1926, his M.S. in 1932, and his Ph.D. in 1948.

Brother **Frederick William Mast**, Kappa '33, has been included in the 22nd edition of *Who's Who in Finance and Industry*. Except for ten years on various Illinois highway departments, Brother Mast has spent his professional career as a consulting engineer in Waterloo, Iowa, with Jens Oleson and Sons Construction Company. His most recent title there was Chairman of the Board. He also owned Frederick W. Mast and Associates from 1946-60. Other notable activities from an extensive list include official U.S. delegate to the Soviet Union under the US/USSR Exchanges Agreement, Waterloo-Cedar Falls Symphony Orchestra Endowment Fund Chairman, Chairman of the Board of Directors of St. Francis Hospital, decorated with the Legion of Merit, and member of the Iowa Engineering Society, National Society of Professional Engineers, Society of American Military Engineers, Waterloo Technical Society, Amvets, American Legion, Phi Eta Sigma, Sigma Phi Epsilon, Tau Beta Pi, and Tau Nu Tau.

In July, 1980, President Carter appointed **Marcus B. Crotts**, Rho '53, of Crotts & Saunders Engineering, Inc., Winston-Salem, North Carolina, to serve on the United States Metric Board. The appointment is for a full six-year term, representing the engineering interest.

The U.S. Metric Board is an independent Federal agency charged with planning and coordinating the increasing use of the metric system. Members of the Board are appointed by the President and confirmed by the Senate to represent all walks of American life including small and large business, labor, science, retailers, education, consumers, engineering, and the public at large.

Marcus B. Crotts is a native of Winston-Salem, North Carolina, was graduated from North Carolina State University, and from the University of Illinois. He is a member also of Phi Kappa Phi, Pi Tau Sigma, and Tau Beta Pi.

He has served as president of the North Carolina State University Alumni Association, and is currently serving as a trustee of the University. He is also a trustee of Catawba College, and Nazareth Children's Home.

He was employed by Duke Power Company, by Babcock and Wilcox Company, and by Western Electric Company. He is presently a partner in the firm of Crotts & Saunders Engineering, Inc.

He was elected to serve as president of the American Machine Tool Distributors Association for 1982-1983.

He is a Korean veteran, having served in the United States Air Force.

He is a life member of the American Society of Mechanical Engineers, and the Society of Manufacturing Engineers. In 1973, he received the SME Award of Merit. He has served as president of the North Carolina Society of Engineers. He is a licensed registered professional engineer. He has written technical papers in the fields of dimensional metrology and metric conversion. He is listed in "Who's Who in Engineering."

In 1980, he was awarded the University of Illinois Distinguished Engineer Award, and in 1981, he was recognized as the North Carolina State University Distinguished Engineering Alumnus.

He has served Rotary as a District Governor, and is a private pilot.

He is a member of the First United Church of Christ.

He is married to the former Margo Jackson of Champaign, Illinois, and they have two children, Van and Laura.

Many educators believe their students should learn not only subject matter concepts but how these concepts are used in the decision-making process. So does Exxon Education Foundation which has provided a \$214,000 grant over three years to establish a Center for Guided Design at West Virginia University.

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Theta Tau—A Look Backwards

By George G. Dodd, Zeta '60

Twenty-four years ago as a fresh new initiate into Theta Tau, I viewed alumni as funny old people that came around on football weekends and for a few other events during the year. They held "secret" meetings where they talked about our chapter house and general direction of the chapter's finances. I tolerated them because of their stories about the olden days and because of their interest in us. Little did I know the strength they were contributing to my chapter.

I now understand what my older alumni brothers were seeking. Those early days had a profound and positive influence on my life and the lives of many of my brothers. And going back to the old stomping grounds revitalizes and renews that early H & T spirit. It reminds me that, as a pledge, my pledge brothers and I were given the word "enthusiasm" to be our operational motto. Enthusiasm for action, for life, for excellence. And now as an alumnus I feel a sense of

duty to provide these same warm but important feelings to present student members through Fraternity support.

We can support our Fraternity in many ways—by serving on local house corporation boards, or speaking at a chapter's professional development meetings, by helping with extension which is being done with a new colony at Iowa State, by serving as Alumni Field Secretaries to promote alumni activities in a region of our country, in giving guidance to National Conventions or through financial contributions to our Operating and Founders' Memorial Funds. Perpetuating our Fraternity, and contributing to Theta Tau's growth and strength, gives us that feeling of work well done with the knowledge that many will enjoy the same benefits and lifelong influence given to us by our "funny old" alumni of yesteryear.

George G. Dodd, Zeta '60
Past Grand Regent

Alumni News (cont.)

The Center, directed by Drs. Charles E. Wales, Epsilon Beta '53, and Anne Nardi, will provide information on Guided Design—What it is, who does it, where, and in what discipline—through a Newsletter and workshops. Center staff will give the workshops: six regional two-day workshops as well as five longer workshops each year at colleges or universities where an active faculty instructional development program exists. The Center also plans to give talks or workshops at six national professional meetings each year.

To provide for the systematic development of decision-making skills, Guided Design course activities are organized around the solution of a series of open-ended problems. Each problem is designed in such a way that to arrive at a solution, the students must apply the subject matter they are learning. The decision-making practice itself is guided by printed materials prepared by the teacher, material that provides students with a "slow-motion" experience with the solution of each problem.

The students use this material in class where they work in teams of five or six. Activity starts with an instruction that describes the problem situation and specifies the role the students are to play. Then they are asked to identify the "real" problem and set the goal for their work. After the group members agree on an answer, their result is compared with a printed feedback page which shows how others have responded. Students are not asked to agree with this answer, but rather to examine and consider other viewpoints. This pattern of question-response continues until the students complete their solution of the open-ended problem. The solution however, isn't the important factor, the process is. The Guided Design process requires students to look closely at each of the steps in the decision-making process, apply the subject matter they have learned, exchange ideas with each other, and reflect on solutions developed by others.

Brother Wales is a charter member of Epsilon Beta Chapter, and a past Grand Regent of the fraternity.



George Dodd

Omicron student is Excellent

Kevin J. Smith, Omicron '81, was selected to receive the 1981 American Institute of Industrial Engineers' Student Award for Excellence, presented annually to the most outstanding industrial engineering senior in the nation. Kevin has maintained a high level of involvement in scholarship, politics, and student activities for many years. As a senior in high school, he was one of twelve Iowa students chosen for the Iowa Senate Student Page program. In college, he maintained his activity in local politics, serving on the Johnson County Democratic Central Committee, as a deputy mobile registrar, and as president of Voters Organized To Educate and Register Students (VOTERS). He was also president of Associated Students of Engineering, vice-president of Collegiate Associations Council, a Student Senator, publisher and writer for the *Hawkeye Engineer* magazine, editor of the *Missing Link*, and served as pledge trainer and chairman of the National Engineers Week Speakers Committee for Theta Tau. In the last position, he was instrumental in bringing in Ralph Nader to speak on *Ethics and Professionalism*. Kevin was awarded the 1981 Virgil M. Hancher Memorial Award, and is also a member of Tau Beta Pi, Phi Eta Sigma, Mortar Board, and Omicron Delta Kappa.

JOE ENGLE: A ONE OF A KIND PILOT

Brother Joe H. Engle, Zeta '56, has come a long way since he was Marshal of Zeta Chapter at the University of Kansas in Lawrence. But he's probably not very surprised at where he's gotten to. He has wanted to be an astronaut since he was in second grade.

Colonel Engle had the important job of proving that the space shuttle Columbia could complete more than one mission. Never before had any vehicle gone into space more than once. Before his launch, Col. Engle stated, "But because it is used, that makes our job much more important. The first flight proved that the shuttle can be flown back through the atmosphere to a controlled, aircraft-like landing on a runway. We're going to establish that it is indeed a reusable vehicle."

Col. Engle and his partner, Captain Truly, were to run several experiments. They were to test the composite, articulated robotic arm, use Shuttle Imaging Radar A for geologic exploration, check the distribution of carbon monoxide in the troposphere, examine algae in the ocean to find fish and pollution damage, and take the first motion pictures and photocell readings of lightning and thunderstorms as seen from orbit. All of this will be done upside-down relative to earth.

At the University of Kansas, he was a member of the Air Force ROTC, and graduated with a degree in aeronautical engineering. After graduation, he went to work for Cessna as an engineer, draftsman, and flight test observer. In 1956, he was called to active duty in the Air Force and entered flight school the next year. He served with the 474th Fighter Day Squadron and the 309th Tactical Fighter Squadron at George Air Force Base in California, flying F-100 Supersabres. Over the next twenty-four years, he would log over 9200 hours in more than 135 types of aircraft.

In 1963, he was accepted into the Aerospace Research Pilot School, the program that trains pilots for manned space flights. He was in the third group of ten pilots that were chosen to be trained at Edwards Air Force Base. That June, he was chosen as one of

two men to join the elite corps of pilots flying the North American X-15, the world's fastest winged airplane.

In October, 1963, Brother Engle was outfitted with the pressure suit and physical monitoring electrodes typical of space flight, and dropped from the wing of a B-52 at 45,000 feet in the small, black, rocket-powered X-15 for the first time. He reached a velocity of 2,795 mph, soared to 77,000 feet and glided home. The flight lasted eight minutes. At the age of 31, Joe had become the youngest man to fly the X-15.

In June, 1965, he took the X-15 into outer space for the first time. He went up 53 miles, reaching a velocity of 3,432 mph. The flight qualified for astronaut wings by exceeding the fifty mile altitude requirement. He was the youngest man to do that.

Joe comments, "I remember looking up and seeing velvet black, then looking down at Earth, and it was brighter than anything I'd ever seen before. It's a very humbling experience. You're actually seeing things you've read about, but that haven't hit home. You really see that we are all on one ball, and we need to get along and take care of it."

He took the X-15 into space two more times for a total of 16 flights in the planes.

In April, 1966, he was picked as one of the 19 astronauts to join NASA. He was assigned to the Apollo program. He was backup lunar modular pilot for Apollo 14, and was to go to the moon with Eugene Cernan in Apollo 17 in 1972. However, five months before the flight, NASA decided to send a geologist instead of another test pilot. Joe was bumped by Harrison Schmitt.

He was reassigned to the space shuttle. But because of funding cuts, Col. Engle has had to wait until 1981 to get his chance to fly the space shuttle.

What are his plans for the future? What could top flying the space shuttle after 15 years in NASA? Joe Engle is going to stay with NASA and wait for another trip.

ISU COLONY CERTIFIED

Xi Beta Fraternity was officially certified as the Iowa State University of Science and Technology Colony of Theta Tau Fraternity on January 31, 1981. The certification team consisted of Grand Regent Barth, Grand Marshall G. Richard Newell, Gear Editor Arthur T. Petzelka, Omicron Advisor Richard Rummelhart, and Grand Scribe Robert E. Pope. Those certified as colony members were Gregory D. Stolp, Steven A. Frandson, Anwar A. Maasarani, Robert L. Brown, Brian D. Lindemann, Lisa H. Christensen, John A. White, Daniel K. Ahern, Cynthia Lach, and Professor John B. Jacobson.

The ceremony was held in the Regency room of the Iowa State University Memorial Union at 3:00 P.M. A banquet was held after the ceremony in the Campanile Room of the Memorial Union.

Iowa State University was one of the earliest institutions established in the movement to create an educational system uniquely suited to American democratic philosophy.

It was chartered by the Iowa General Assembly in 1858. Four years later the national "people's college" movement was underwritten by the Morrill Land-Grant Act. The act made federal lands available for sale

to endow colleges whose aim was to promote "liberal and practical education . . . in the several pursuits and professions of life."

Originally these colleges were primarily concerned with subjects relating to agricultural and industrial pursuits. Thus this institution was chartered as the "Iowa Agricultural College," and in 1896 was given the more inclusive name, "Iowa State College of Agricultural and Mechanic Arts." In those beginning years it established a national—and in many cases international—reputation in the areas of agriculture, veterinary medicine, home economics, and engineering.

Adapting land-grant philosophy to the changing needs of the twentieth century, Iowa State has maintained its preeminence in these areas, but has broadened and strengthened its work in other areas, to the point that its largest enrollment now is in the sciences and humanities. Increasing numbers of students find in the broad-based curriculum of Iowa State opportunities to specialize in excellent programs of science and technology,

and to acquire a broad general background of education in the liberal arts tradition.

Iowa was the first state to accept the terms of the Morrill Land-Grant Act. In March, 1863, the General Assembly awarded Iowa's grant to the recently chartered institution at Ames. The school opened its doors to a preparatory class in the fall of 1868. Instruction at the college level began the following March. A class of 26 was graduated at the first commencement in 1872. In the 12 months ending July 1, 1979, there were 3,459 baccalaureate, 805 advanced, and 87 Doctor of Veterinary Medicine degrees awarded, plus 30 certificates for special programs.

Iowa State pioneered in the establishment of agricultural curricula, was the first state institution to found a veterinary school, and helped move engineering from a small and narrow profession to its present key position in our industrialized society. The basic sciences were emphasized. Coeducational from its beginning, Iowa State took leadership in domestic economy (later to become home economics).

Graduate study was offered almost as soon as classes began, and the first graduate degree was conferred in 1877. Experimentation and research also started early, first in agriculture and shortly thereafter in home economics, engineering, science and veterinary medicine.

Iowa State shared the conviction with other land-grant institutions that all people should have access to the ideas and knowledge of the campus. By 1870 it was holding educational institutes in various Iowa towns. In 1903 Iowa State set the pattern of county cooperative extension as it is conducted now throughout the United States.

Iowa State's program became that of a university with special teaching responsibility in science and technology, an extension education program throughout the state,

(continued on page 9)



Grand Regent Barth presents certification papers to past president Greg Stolp and president Brian Lindemann.

ISU Colony (cont.)

and extensive research interests to advance the frontiers of learning.

Since 1959 it has been known as Iowa State University of Science and Technology.

Iowa State University is accredited by the North Central Association of Colleges and Secondary Schools as well as appropriate professional organizations, and is a member of the Association of American Universities.

Instruction is offered throughout the year. The regular academic year, September through May, is currently divided into three quarters of approximately eleven weeks each. Beginning in 1981, the University will operate on a semester calendar.

In 1979 Iowa State had an enrollment of more than 26,000 and a faculty of nearly 2,500.

In 1860, only two years after Iowa State College was founded, the "Mechanical Course" was divided into the departments of Mechanical Engineering and Civil Engineering. It wasn't until 1872 that the first Engineer graduated from Iowa State College with a Bachelor of Science degree in Mechanical Engineering.

The late 1890's and early 1900's saw quite a few additions to the future College of Engineering. In 1891 Electrical Engineering was organized within the Physics department. One year later the Mining Engineering department was organized. In 1902 the Agricultural Engineering department was founded, and four years later a Ceramic Engineering program was begun. In 1909 the Electrical Engineering curriculum changed to a department of its own. Also that same year the Chemical Engineering department was organized.

The 1920's saw the organization of Architectural and Industrial Engineering programs, and also the authorization to establish a General Engineering department. Later, in 1942, Aeronautical Engineering was offered as an option of Mechanical Engineering. It wasn't until 1961, though, that it was changed to its own department and called Aerospace Engineering. Iowa State is

proud of its excellence Aerospace program.

Iowa State's College of Engineering has a world renowned reputation for the high standards it sets for its degree programs as well as being a consistent leader in research and development. Other Engineering curricula offered include: Construction Engineering, Computer Engineering, Engineering Operations, Metallurgical (the old Mining department) Engineering, and Nuclear Engineering.

Once again, it was shown that nothing works like work! Omicron actives and alumni chose to put a lot of work into starting a colony after several months of trying to develop personal contacts at Iowa State University of Science and Technology failed. The direct approach in this case turned out to be a massive bulk rate mailing to every freshman engineering student in the ISU student directory. They were invited to attend a dinner meeting at one of Ames' nicer restaurants, to be followed by a presentation by Brother William Ashton, Omicron '61, on the design and construction of a coal transhipment terminal facility on the Mississippi by Keokuk, Iowa. (Ed. note—Don't schedule recruiting dinners during term

breaks.) An organizational meeting held two days later was attended by four men, who became the nucleus of a growing group of interested engineers. Further help and encouragement was provided by helping to set up rush events, professional development events, and just plain fun events. Less than one year after the first dinner, Grand Regent Barth certified the Iowa State University Colony of Theta Tau.

Some fortunate breaks were provided by several people in establishing a colony. Omicron was willing to make several trips to Ames to help with rush. Professor Lane Mashaw, Omicron Hon., provided invaluable assistance in taking RSVP's, providing contacts, recommending advisors, and helping the new group get recognized on campus. Several Alumni gave technical presentations: Bill Ashton, Gene Giltner, Omicron '80, Jeff Gullickson, Omega '79. Richard Rummelhart donated a sizable chunk of time and money to get the group on its feet in its early days. And G. Richard Newell always reminded the Editor that it was time to go to Ames again.

But the biggest break was that the first group of students to join was a very motivated, very spirited group of people. When a group like that gets together, they're hard to stop.



Colony members Anwar A. Maasarani, Robert L. Brown, Lisa H. Christensen, Gregory D. Stolp, Steven A. Frandson, John A. White, Cynthia Lach, Brian D. Lindemann, Advisor John B. Jacobson, and Daniel K. Ahern.



Editor's Corner

The National Affairs Committee and the Editor had a long talk at the last Convention. Discussion ranged from content to image to improving alumni relations to frequency of publication (or is it infrequency?). We all agreed that the Gear is published primarily for alumni. We all agreed that the Gear should come out more often. We seem to have gotten on to a "de facto" annual publishing schedule. The most that the Editor could handle on a volunteer basis would be a semiannual schedule, given the money and the articles to fill the need. Content will be used from the following sources:

- 1) Contributions from members;
- 2) Excerpts from *The History of Theta Tau* (Buy a copy anyway, it will take thirty years to use up all the good parts.);
- 3) Chapter highlights—a feature devoted to one chapter per issue in depth;
- 4) Excerpts from chapter newsletters of notable interest;
- 5) Past officers' recollections of their tenure;
- 6) Alumni achievements.

Alumni achievements could fill the Gear by itself, given the high quality of alumni that we are—but it hasn't yet. Erich Schrader used to get letters from all over the world. The Editor hereby volunteers to take any and all mail from alumni informing him of how and what they are doing—even if they are postage due letters.

It is with egg on our face that we announce the opening of the Second Annual Writing Contest. The first was announced in the September, 1981 Theta Tau Update. Since the Editor received his copy two days before the entry deadline, it seemed only fair to start all over again. Since the schedule says that the Gear will be mailed on April 4, 1982, we will assume a fudge factor of two weeks, and ask that all entries be received by the Editor of the Gear no later than May 15, 1982. The winners will be notified by June 15, 1982.

Prizes will be awarded to the authors of the best articles entered by an alumnus and a student member on the subject "My Experience with Theta Tau." Desired articles should relate some memorable experience of the author

concerning Theta Tau, its principles, its people, or some other aspect. The story should have some human interest, emotional or inspirational impact, and should be limited to 1000 words, or roughly two single-spaced typewritten pages. However, length will not be a factor in judging, nor will minor spelling or grammatical errors. Judging will be based on content, development of theme, and impact. The alumnus and the student member writing the best articles will receive expense-paid trips to the next Theta Tau Convention.

The Gear is now accepting advertising. We are attempting to keep costs down to our members while keeping content up. The rates will be initially set at \$500 per full page, 300 per half page, 200 per third page, 150 per quarter page, and 25 per column inch, three column format. In addition, business card rates will be set at \$50 per issue. Page size is 8½ × 11 inches. Circulation includes 14,600 alumni and 700 student members. Copy may be submitted to Arthur T. Petzelka, Editor-in-Chief, 1715 S. 4th St., Marshalltown, Iowa 50158. The next issue will be mailed no later than January, 1983.

Charles W. Britzius, Past Grand Regent, is the author of a very interesting and informative history of the Fraternity recently published. There is an extensive section on the founding and early history, as well as sections on the early years of expansion, national activities, prominent members, and other items of interest, including a toast by Founder Erich J. Schrader at the installation of Omega Chapter. A copy may be purchased for \$10 from the Central Office, 13 Sona Lane, St. Louis, MO 63141.

The Editor regrettably forgot completely about credits in the last issue. We are very grateful for the assistance rendered from Julie A. Nelson, Omicron '82 for the cover photo, and the pictures on pages 4, lower left, 6, upper left, and 7, upper right. Ye Editor took the foggy photos on pages 4, upper right, and 6, lower right.

As a result of erroneous reports to the Central Office, the names of Brothers Frederick M. Woodruff, Theta '36, and Paul D. Wibbeler, II, Phi '67, were included in the In Memoriam section of the last issue of THE GEAR. Both responded to the Central Office to correct the error. The Fraternity regrets the error, and apologizes to these brothers and to those dear to them for the inconvenience caused. It rejoices, however, on learning that both are alive and well.

The recent edition of the Gear showed in the Directory on the back cover that there doesn't seem to be any Gamma Beta Chapter at George Washington U. any longer. As I had not read or been aware of any discontinuation of Gamma Beta of which I was a regent in the '40's, I wondered how and when it all happened and why. Perhaps other Gamma Betas around the country may wonder also and an item in a future issue of any communication would be of interest to quite a number of us alumni.

If you have time to send a personal response, I would appreciate it. If not, may I look forward to seeing something in a future issue?

Yours in H & T,
Julius C. Ritter
Gamma Beta
13 Pine Knoll Road
Lexington, MA 02173

(Gamma Beta Chapter is not currently functioning at The George Washington University. Handicapped by a diminishing engineering enrollment there of ones who had traditionally been interested in membership, and experiencing very limited success in recruiting new members, the chapter was down to three student members in the fall of 1978, a low from which it was unable to recover despite alumni and national Fraternity support. The Executive Council is very interested in revitalizing this chapter in the near future. Interested alumni living in the Washington area, and those elsewhere who may have contacts at The George Washington University, are asked to volunteer their help by writing to the Executive Secretary.)

(continued on page 13)

CONVENTION '81 NEWS

The Thirty-Fourth National Convention at Madison, Wisconsin, was named to honor William K. Rey, Mu '45. Brother Rey was on the Executive Council, 1956-1966, serving as Grand Regent from 1962 to 1966. He has maintained a high level of activity in the Fraternity, and was very involved in the 33rd Convention in Tuscaloosa where he is a Professor and Assistant Dean of Engineering at the University of Alabama.

Kappa Beta Chapter captured first place in both the Newsletter and Photograph competitions. Sigma Chapter took second place in the Newsletter competition and Nu Beta Chapter second place in the Photograph competition. Best Display Award went to Omicron Chapter. The Outstanding Delegate was Dean W. Bettinger, Tau '81, Regent of his chapter, who also served as Delegate to the previous Convention.

Not only through chapter and Central Office displays, but also through workshops on rush, chapter finances, alumni relations, and paperwork, those attending the Convention had an opportunity to share experiences and ideas with others. Although the weather did not cooperate for scheduled outdoor activities, unstructured times during the Convention allowed informal contact like that previously enjoyed at Regional Conferences.

Next Convention

This Summer in Houston

The Thirty-fifth National Convention will be hosted by Eta Beta Chapter on August 19-22, 1982 at the Quality Inn, 3815 Gulf Freeway, Houston, Texas 77003. Special speakers are being invited to address the Convention, and the schedule includes a tour of NASA. Alumni and their families are encouraged to include attendance as part of their vacation plans.

A very educational presentation was given by Dr. Paul Ginsberg, Dean of Students, University of Wisconsin-Madison, who addressed the Convention on "Suicide Prevention." He regularly counsels with students suffering from depression who are potential suicides. His enlightening talk could well find practical application for any of us. Dr. Ginsberg's basic message was that a depressed person needs to know that someone cares about him, for whatever reason, and is willing to listen to his problems without judgment or prejudice. He stressed being alert to danger signals such as talk about suicide, and behavior changes; and the importance of intervening, even at the cost of being rejected, and staying with such a person; and then seeking professional help. Few are qualified to help a person recover from deep depression, but anyone can give a brother or someone else comfort by reaching out, and letting him know that he is a worthwhile human being.

Professional Development Report

The National Society of Professional Engineers, Professional Engineers in Education Practice Division (NSPE/PEE) believes that the following characteristics typify a professional Engineer:

1. Possesses a body of distinctive technical knowledge and art gained by education, research, and experience;
2. Recognizes a service motive to society in vital and honorable activities;
3. Believes in standards of conduct, such as represented by ethical rules;
4. Supports legal status and standards of admission to the profession. The most common forms are registration to practice engineering and graduation from an accredited engineering curriculum; and
5. Has a pride in the profession and a desire to promote technical knowledge and professional ideals.

Charles Britzius, the other member of Theta Tau's Professional Development Committee, brought these five points to my attention. I agree that they are guidelines that the professional engineer should live by. The Professional Development Committee is making a strong push for registration of professional engineers right now (see article in this issue). It is my hope that all engineers, whether registered or not, would follow these guidelines throughout their career.

Professional Development is a part of the purpose of Theta Tau, and the Committee feels it should be a very active part of the Fraternity. However, more work needs to be done than can be handled by Charles and myself if Theta Tau's professional standard is to be raised. Therefore, we are soliciting applications for membership in the Professional Development Committee from alumni and students who feel that they

can contribute something to professionalism. The goals and objectives of this Committee were defined in May, 1980. They are restated here because I feel that they support the ideals mentioned at the beginning of this article:

1. Increase student attendance and participation in local chapters of engineering societies, and in professional engineering conventions and seminars;
2. List convention dates and locations for all professional societies to which Theta Tau belongs;
3. Within limits, offer Theta Tau's help in running these conventions;
4. Promote Theta Tau speakers at conventions whenever their expertise qualifies them;
5. Distribute professional pamphlets and bulletins available from the Central Office;
6. Help to publish more, or secure available professional bulletins or pamphlets;
7. Organize professional projects among chapters;
8. Obtain and utilize the list of Outstanding Theta Tau Alumni who are willing speakers at professional events;
9. Promote the registration of all eligible Theta Tau candidates as Professional Engineers;
10. Work with the Central Office concerning budgetary adjustments that may be necessary because of the Committee's work.

Anyone interested in applying for membership in the Professional Development Committee should contact me at 930 N. Vernal Ave. #46, Vernal, Utah 84078. Please enclose a brief resume of your background for our information.

Dale Larsen, Chairman
Professional Development Committee



ALPHA

Conrad Robert Appledorn, '49
Webster F. Soules, '31
Frank Daniel St. Vincent, '40, 12/16/80

BETA

Rosser C. Brophy, '26, 10/80
Arthur Paul Siewert, '43, 12/12/81

GAMMA

Thomas H. Allan, '18, 12/19/80
Louis C. Rhodes, '22, 1/2/81

DELTA

Frank G. Fortune, '16, 1975
Lorran Foster, '23, 2/10/81
William Charles Oatis, '49

EPSILON

J. Wallace Bostick, '15
Edward A. Hassan, Jr., '31, 5/80
John Minor Rogers, '21, 12/1/79

ZETA

Robert Ray Gebo, '28, 4/13/81
Dean Wilson Lemon, '41
Adrian H. Lindsey, '17, 10/2/80
Lewis Robert Tucker, '30, 12/21/79

Russell G. Glass, Sigma, '25

Russell G. Glass, a charter member of Sigma Chapter, died October 19, 1981 at the Perry (Ga.) Hospital at the age of 79. Brother Glass' professional activity included positions at Pocohontas Fuel Co., owner of Building Products Co. in Cleveland; vice-president and treasurer of Moore and Glass, Inc.; and vice-chairman and president of Macomber, Inc., a division of Sharon Steel Co.

Ohio State University, his alma mater, named him a distinguished alumnus in 1959 and gave him an outstanding fraternity alumnus award in 1954.

He was a past director of the American Institute of Steel Construction, past president of the Professional Interfraternity Council, past president of the Euclid Kiwanis Club, and past lieutenant governor of the Ohio Kiwanians. He

ETA

Paul Herbert Caskey, '24
Theodore Z. Haviland, '17, 1/7/81
Ormond M. Lissak, #297
Charles T. Shewell, #219
Wilfrid Mulock Thomson, '22, 11/28/80

THETA

James Lee Darnell, '28, 4/10/80
James Dickson Prince, '28, 12/2/79
Anthony Joseph Ratichek, '42, 11/5/80
Frederic Jay Wade, '58

IOTA

Richard H. Beck, '34
William E. H. Knight, '24
Samuel H. Lloyd, Jr., '21
William George Maloney, '37
James Wilson Snider, '44
John Vincent Sundstrom, '29, 11/18/79
John Frederic Winters, '51, 6/2/80

KAPPA

Samuel Allen Richards, '28

LAMBDA

Leiland Stanford Richards, '25
Carl B. Shipp, '15

XI

B. K. Breed, '24
Clyde Arthur Plaskett, '50, 1/10/81

was on the Euclid Board of Education for 11 years and president for 9 years.

He received a Bronze Star for Navy amphibious operations service in the Mediterranean Sea during World War II. He served in the Far East and attained the rank of lieutenant commander.

He was a member of St. Christopher of the Crossroads Episcopal Church in Perry, Georgia, the American Legion, the Ohio State University Alumni Association, Phi Sigma Kappa, Thatcher Masonic Lodge, and Al Koran Shrine.

His service to Theta Tau was extensive. He was elected to the position of Grand Outer Guard in 1933, and served as Grand Inner Guard, and Grand Vice-Regent before he became Grand Regent in 1939. In 1940, he made a nationwide tour, visiting nearly every chapter, and many alumni associations. He guid-

PI

Ralph Livingston Hawkins, '26, 10/5/80
Robert Francis Selden, '27, 3/18/81

TAU

Kenneth Roosevelt Brown, '41, 7/12/81
Alexander Teslik, '41
George Alfred Whitehurst, '29, 7/27/80

UPSILON

Richard Boyd Bullock, '40, 3/16/81
John Hunt Carnahan, '33

PHI

Thomas C. Hanson, '30
John Joseph Rados, '49, 10/3/80
Frederick George Zwinger, '32, 2/7/81

CHI

Walter Charles Waidler, '31, 11/1/80

GAMMA BETA

Samuel Harry Baker, '48, 2/1/81
Thomas Alden Bradford, '39, 3/7/81
Howard Avery Grayson, '49, 4/26/81
Alfred Brox Moore, '52, 3/22/81

DELTA BETA

Earl Foree Gibbons, '44
Patrick William Lenahan, '48, 12/21/80

ed nearly every chapter, and many alumni associations. He led Theta Tau through the difficult years of World War II, during which time only one chapter became inactive, although there was a greatly reduced number of students to draw upon. He served as Grand Regent until 1946. The 17th Biennial Convention was named in his honor in 1948.



Editor's Corner (cont.)

The meeting of Theta Tau members in Little Rock during the NSPE Convention last week was not as successful as I had hoped. Upon my return from the Tuscaloosa Convention, I sent out notices of a breakfast meeting that was to be held. I also contacted Dick Hall in Little Rock, who was listed as our contact there. I also received a list of the NSPE delegates and found that only one, Walter Larsen, from South Dakota was a Theta Tau member.

The meeting was held in the dining room Saturday morning at which time Walter Larsen plus myself plus three other brothers were present. We had a discussion of fraternity affairs. The previous day at noon at a meeting, I met one of our members from Hot Springs who could not be at the meeting on Saturday.

I would suggest that this activity be continued . . .

In H & T,

C. W. Britzius

(This sounds like an excellent idea. I believe I'll start wearing my badge to conventions.—Ed.)



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ALPHA

- 904 David Charles Bofferding, '82, Marshall, MN
905 Gregory Allen Enkhaus, '85, Fridley, MN
906 Gary Lynn Heyes, '82, Buffalo Center, IA
907 Thomas James Lee, '83, LaCrosse, WI
908 Mark Aaron Isaacson, '85, Milwaukee, WI
909 Michael Gordon McFarland, '84, Inver Grove Hts, MN
910 James Michael Moskalik, '84, Champlin, MN
911 Thomas Dean Ravn, '84, Inver Grove Hts, MN
912 Robert Scott Shew, '83, LaCrosse, WI
913 Dana Dale Strandmo, '84, Mankato, MN
914 Paul Magnus Skare, '83, New Brighton, MN

BETA

- 1146 Richard Peter Nicolas, '82, Iron Mountain, MI
1147 Clark William Cryderman, '82, St. Ignace, MI
1148 Michael Frank Colombino, '82, Amasa, MI
1149 Mark David Sesselmann, '82, Muskegon, MI
1150 Charles Richard Ruth, II, '82, Carlisle, PA
1151 James Steven Skoglund, '82, Iron Mountain, MI
1152 Victor Michael Vukorpa, '81, Paw Paw, MI
1153 Keith Walter Weishuhn, '81, Flint, MI
1154 Michael Alan Guenther, '82, Sterling Hts, MI
1155 John Anthony Horst, '82, Farmington Hills, MI
1156 Douglas David Geiger, '82, Davison, MI
1157 David John Sandri, '83, Amasa, MI

XI

- 462 Hilbert Schultz, '83, Oshkosh, WI
463 Laura Marie Brins, '84, Madison, WI
464 Jane Marie Costello, '84, Fond du Lac, WI
465 Nancy Marie Diederich, '82, Madison, WI
466 Michael John Femal, '84, Kaukauna, WI
467 Daniel Lawrence Slavik, '84, Appleton, WI
468 Gary Michael Van Asten, '84, Kaukauna, WI
469 Mark Francis Weber, '82, Milwaukee, WI

DELTA

- 1235 Elizabeth Anne Byers '81, University Hts, OH
1236 Barbara Jean Bellay, '83, Warren, OH

Additions to Membership

- 1237 Annette Marie Durisin, '81, Lakewood, OH
1238 Tracy Lynn Faber, '82, Apollo, PA
1239 Albin John Gasiewski, Jr., '81, Independence, OH
1240 Todd Richard Grey, '82, Toledo, OH
1241 Ronald William Arden Hutton, Jr., '82, Ringoes, NJ
1242 Robert Alan Nedorost, '82, Valley City, OH
1243 David Alan Valentine, '82, Clinton, OH
1244 Jana Kay Wobser, '81, Mentor, OH
1245 Joel Robert Ivec, '82, Cleveland, OH
1246 Dianna Lee Chute, '83, Erie, PA
1247 Constance Gay Clark, '82, Akron, OH
1248 Ralph Eugene Cowan, III, '83, Mansfield, OH
1249 David Thomas Cramer, '82, New Martinsville, WV
1250 Dannie Lee Kelly, '82, Dayton, OH
1251 Linda Leveranz, '83, Cleveland, OH
1252 Kelyne Elizabeth Reed, '84, Gloversville, NY
1253 Cornelia Foote Rivers, '84, Baltimore, MD
1254 William Allen Seaman, '82, Willoughby, OH
1255 Louise Marie Wheeler, '83, Kent, OH

ZETA

- 796 Johnathan Ivan Macy, '83, Hoisington, KS
797 Jere Don Sellers, '83, Ottawa, KS

MU

- 1118 Steven Gregory Moore, '82, Pine Hill, AL
1119 Jimmy Braswell Autrey, '85, Pine Hill, AL
1120 John Henry Mullis, III, '82, Tuscaloosa, AL
1121 Michael Glenn Crane, '82, Huntsville, AL
1122 Mark Alexander Andrews, '83, Citronelle, AL
1123 Joseph Grady Snyder, '81, Tuscaloosa, AL
1124 Edward Day, VI, '82, Maplesville, AL
1125 Samuel Eric Johnson, '84, Tuscumbia, AL
1126 William B. Harrell, '82, Birmingham, AL

OMICRON

- 913 Penny Ann Davis, '82, DeKalb, IL
914 Kimberly Kay Flaherty, '82, Davenport, IA
915 Enrique Alberto Scanlon, '83, Mexico City, Mexico
916 John David Hillsten, '83, Bettendorf, IA
917 Laurie Kay Lambrecht, '82, Moline, IL
918 Cathy Sue McElhiney, '81, Dubuque, IA
919 Reanne Marie Romens, '82, Protivin, IA

(continued on page 14)

Membership (cont.)

- 920 Cheryl Lynn Alig, '82, Ottumwa, IA
921 Elizabeth Ann Ashton, '82, Princeville, IL
922 Thomas Keith Bauman, '85, Brooklyn, IA
923 Nanette Suzanne Bianchi, '82, Northbrook, IL
924 Susan Patricia Bowers, '83, Wausau, WI
925 Tamara Lynn Flaherty, '84, Davenport, IA
926 Darcy Lynn Hagist, '85, Keota, IA
927 David Darrell Kite, '83, Bettendorf, IA
928 Beth Elise Klindera, '83, Western Springs, IL
929 Cynthia Anne Kraushaar, '82, Ft. Dodge, IA
930 Rebecca Ann Lance Svatos, '82, Oxford, IA
931 James Louis Lopez, Jr., '82, Sterling, IL
932 Bruce Edwin Nordmann, '83, Gowrie, IA
933 Henry Wyatt Priestner, '83, Iowa City, IA
934 Louis John Sedig, '82, Iowa City, IA
935 John Francis Williams, '83, Iowa City, IA

RHO

- 920 Richard Hughes Bazemore, '84, W. Simsbury, CT
921 Douglas Robert B. Deming, '84, Columbia, MO
922 Roy Bryan Stoker, '84, Hickory, NC
923 William Bernard Graves, '83, Raleigh, NC
924 Charles Emmett Guldge, '83, Hamlet, NC
925 Patrick Thomas Penuel, '83, Charlotte, NC
926 Ginger Lynn Branton, '85, Greensboro, NC
927 Mark Francis DeStefano, '83, Webster, NY
928 Jeffrey Baine Johnson, '84, Conover, NC
929 Patrick Alexander Keane, '84, Randolph, NJ
930 Craig Stuart Keller, '83, Middletown, NJ
931 Sven Harald Thesen, '84, Raleigh, NC
932 Walter Lee Willard, Jr., '84, Oak Ridge, NC

SIGMA

- 723 Barry Douglas McBride, '83, Novelty, OH
724 Jeffrey Scott Dailey, '83, Bay Village, OH

TAU

- 779 Pablo Adolfo Marulanda, '82, Cali, Colombia
780 Eugene Edward Leonardo, '83, Rochester, NY
781 Joseph Puchalski, '83, Cos Cob, CT
782 Gayle Ann Kloecker, '84, Erie, PA
783 Edwin Rudolph Khadaran, '83, Bronx, NY
784 John Gregory North, '83, Valatie, NY

UPSILON

- 878 Dr. William Keith Warnock, Hon., Fayetteville, AR
879 Timothy Jon Welty, '84, Osceola, AR
880 James Paul Belloza, '82, Harrison, AR
881 Mark Anthony Thomey, '82, Morrilton, AR
882 John Edward Rutledge, '83, Charleston, AR
883 Samuel Lewis Boyster, '83, Osceola, AR
884 Randall Martin Bohannon, '83, Charleston, AR
885 Keith Anthony Pilcher, '82, Fort Smith, AR
886 Raymond Jeffrey Chastain, '83, Charleston, AR
887 James Robert Dean, Jr., '83, Osceola, AR
888 John Christopher Lucas, '83, Fayetteville, AR
889 Richard Raymond Fitzgerald, '84, Sheridan, AR
890 Thomas Franklin Lee, Jr., '84, Camden, AR
891 Paul Steven Posey, '83, Fayetteville, AR
892 Kent Michael Johnson, '86, Stuttgart, AR

PHI

- 596 David Joseph Kapalka, '84, Munster, IN
597 James Thomas Payne, '84, Chagrin Falls, OH
598 George Bradley Shuler, '85, Crawfordville, IN
599 Scott Lindsey Williams, '84, Evansville, IN
600 Jeff Welker Wolford, '84, Westerville, OH

CHI

- 886 Kathleen Celeste Kreyns, '82, Tucson, AZ
887 Larry Donald O'Neal, '83 Apache Jct., AZ
888 Russell George Pittmann, '83, Tucson, AZ
889 Sylvia Yvette Riddle, '84, Safford, AZ
890 Sandra Louise Collins, '84, Tucson, AR
891 Eric Blow Barrington-Ward, '84, Tucson, AR

PSI

- 626 Robert Campbell McCoy, '82, Lonepine, MT
627 Thomas Richard Russell, '83, Butte, MT
628 Randal Scott Martin, '82, Great Falls, MT

ETA BETA

- 277 William Allen Atkins, '83, Houston, TX
278 Robert Wilson Bowman, '83, Houston, TX
279 Ralph Sheldon Drake, Jr., '84, Houston, TX
280 Leopold Eloy Flores, '82, Houston, TX
281 Roger Terrance Gault, '85, Houston, TX
282 James Gilbert Gonzales, '83, Houston, TX
283 Kenneth Ray Pierce, '84, Pasadena, TX
284 Martin Luther Spears, III, '84, Houston, TX
285 David Keith Withington, '85, Houston, TX
286 Richard Acero, '84, Houston, TX
287 William Patrick Conditt, '85, Pearland, TX
288 Herbert Foster Kent, Hon., Houston, TX

KAPPA BETA

- 309 Kenneth Wayne Fallin, '83, Gulfport, MS
310 Danny Keith Hester, '83, Jackson, MS
311 Gregory Wayne Irvin, '82, Raymond, MS
312 Bennett Jay Johnson, Jr., '82, Jackson, MS
313 John Mac Kirksey, Jr., '83, Mantachie, MS
314 Shelia Dewanda Purser, '83, Jackson, MS
315 Ray Thomas Reid, '82, Pearl, MS
316 Richard Ray Rieger, '82, Pearl, MS
317 John Henry Weathersby, Jr., '82, Coahoma, MS
318 Paul Winford Young, Jr., '83, Columbus, MS
319 Denise Christine Buchholz, '83, Columbus, MS
320 Edwin Scott Carpenter, '84, Hattiesburg, MS
321 Eddie James Dixon, '82, Clinton, MS
322 Stephen Michael Hart, '85, Vicksburg, MS
323 Jack Lamar Marshall, Jr., '86, Tupelo, MS
324 Martha Frances Mashburn, '84, Vicksburg, MS
325 Samuel Scott Massingill, '84, Meridian, MS
326 Thomas Charles Reeves, '84, Ocean Springs, MS
327 Donald Walter Wendland, Jr., '83, Jackson, MS

LAMBDA BETA

- 202 Thomas Harold Keane, II, '83, Pleasant Hills, TN
203 Roswell William Nourse, III, '84, Nashville, TN

NU BETA

- 115 Dennis James Burt, '83, Park Forest South, IL
116 Gary John Goldberg, '81, Port Washington, WI
117 Michael Wayne Huebner, '83, Manitowoc, WI
118 Michael Edward Martin, '81, Freeport, IL
119 Joseph Patrick Michaels, '83, Cascade, WI
120 David Anthony Weber, '83, Prairie du Chien, WI
121 Mark Steven Harris, '83, Grafton, WI
122 Jeffrey Dwight Horsfall, '83, Madison, WI
123 Richard Frank Jones, '81, Portage, WI
124 Mark Steven Makemson, '82, Wautoma, WI
125 Mark Hilary Brosman, '84, Appleton, WI
126 Joseph Francis Korzilius, '84, Racine, WI
127 Paul Temple Melby, '84, Platteville, WI
128 Bruce Stephen Ruzek, '83, Manitowoc, WI
129 Jill Kathleen Schiesl, '84, West Allis, WI
130 Randal Nicholas Simons, '83, DePere, WI
131 Bradley James Smith, '85, Rockford, IL

Registration (cont.)

IDAHO: Board of Professional Engineers and Land Surveyors, 842 La Cassia Drive, Boise 83705.
*R. W. Underkofler, P. E., Executive Secretary, Telephone: (208) 334-3860.

ILLINOIS: Department of Registration and Education, Professional Engineers' Examining Committee, 320 W. Washington Street, Springfield 62786.
*Beverly Welch, Section Supervisor, Telephone: (217) 785-0800.

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*Otto C. Andres, P. E., Secretary, Telephone: (317) 232-1840.

IOWA: State Board of Engineering Examiners, State Capitol Complex, Des Moines 50319.
*Bonita Fagerstrom, Executive Secretary, Telephone: (515) 281-5602.

KANSAS: State Board of Technical Professions, 535 Kansas Avenue, Suite 1105, Topeka 66603.
*Jean Martin, Executive Secretary, Telephone: (913) 296-3053.

KENTUCKY: State Board of Registration for Professional Engineers and Land Surveyors, P.O. Box 612, (Rt. 3, Millville Rd.), Frankfort 40602.
*James D. Wilson, Executive Director, Telephone: (502) 564-2860 & 564-2681.

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*Daniel H. Vliet, Executive Secretary, Telephone: (504) 581-7938.

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*Sylvester L. Poor, Secretary, Telephone: (207) 289-3236.

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*James F. Lawrence, P.E., Executive Secretary, Telephone: (301) 659-6322.

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*G. Dale Sheckels, P.E., Secretary, Telephone: (617) 727-3088.

MICHIGAN: Board of Registration for Professional Engineers, P.O. Box 30018, (808 Southland), Lansing 48909.
*Jack C. Sharpe, Administrative Secretary, Telephone: (517) 373-3880.

MINNESOTA: State Board of Registration for Architects, Engineers, Land Surveyors and Landscape Architects, 5th Floor, Metro Square, St. Paul 55101.
*Lowell E. Torseth, Executive Secretary, Telephone: (612) 296-2388.

MISSISSIPPI: State Board of Registration for Professional Engineers and Land Surveyors, P.O. Box 3, (200 S. President St., Suite 516) Jackson 39205.
*Margaret Husband, Office Manager, Telephone: (601) 354-7241.

MISSOURI: Board of Architects, Professional Engineers and Land Surveyors, P.O. Box 184, (3523 North Ten Mile Drive) Jefferson City 65102.
*Shirley Nixon, Secretary-Treasurer, Telephone: (314) 751-2334.

MONTANA: State Board of Professional Engineers and Land Surveyors, LaLonde Building, Helena 59620.
*Bernice A. Luck, Administrative Secretary, Telephone: (406) 449-3737. Ext. 9.

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*Arthur Duerschner, Arch., Executive Director, Telephone: (402) 471-2010, or 471-2407.

NEVADA: State Board of Registered Professional Engineers and Land Surveyors, 100 North Arlington Avenue, Mezzanine Floor, Reno 89501.
*John N. Butler, P.E., Executive Secretary, Telephone: (702) 329-1955.

NEW HAMPSHIRE: State Board of Registration for Professional Engineers, Room 318, 105 Loudon Road, Concord 03301.
Stanley P. Sawyer, P.E., Secretary, Telephone: (603) 271-2219.

NEW JERSEY: State Board of Professional Engineers and Land Surveyors, 1100 Raymond Boulevard, Newark 07102.
*Ruth Weisman, Executive Secretary, Telephone: (201) 648-2660.

NEW MEXICO: State Board of Registration for Professional Engineers and Land Surveyors, P.O. Box 4847 (1505 Llano Street) Santa Fe 87501.
*Fred Mares, Secretary-Director, Telephone: (505) 827-2241.

NEW YORK: State Board for Engineering and Land Surveying, The State Education Department, Cultural Education Center, Madison Avenue, Albany 12230.
*Stanley M. Greenwald, P.E., Executive Secretary, Telephone: (518) 474-3846.

NORTH CAROLINA: Board of Registration for Professional Engineers and Land Surveyors, 3620 Six Forks Road, Raleigh 27609.
*Montgomery T. Speir, Executive Secretary, Telephone: (919) 781-9499, or 781-9547.

NORTH DAKOTA: State Board of Registration for Professional Engineers and Land Surveyors, P.O. Box 1264, (609 N. Broadway), Minot 58701.
*A. L. Bavone, Executive Secretary, Telephone: (701) 852-1220.

OHIO: State Board of Registration for Professional Engineers and Surveyors, 65 South Front Street, Room 302, Columbus 43215.
*Joseph J. DeJonghe, P.E., Executive Secretary, Telephone: (614) 466-8948.

OKLAHOMA: State Board of Registration for Professional Engineers and Land Surveyors, Oklahoma Engineering Center, Rm 120, 201 N.E. 27th Street, Oklahoma City, 73105.
*Mrs. Norma Unruh, Executive Secretary, Telephone: (405) 521-2874.

OREGON: State Board of Engineering Examiners, Department of Commerce, 4th Floor, Labor and Industries Building, Salem 97310.
*Paul D. Christerson, Executive Secretary, Telephone: (503) 378-4180.

PENNSYLVANIA: State Registration Board for Professional Engineers, Mail P.O. Box 2649, (Transportation & Safety Bldg., 6th Floor, Commonwealth Avenue & Forester St.) Harrisburg 17120.
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RHODE ISLAND: State Board of Registration for Professional Engineers and Land Surveyors, 308 State Office Building, Providence 02903.
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SOUTH CAROLINA: State Board of Engineering Examiners, 2221 Devine St., Suite 422, Columbia 29205.
*Mary M. Law, Agency Director, Telephone: (803) 758-2855.

SOUTH DAKOTA: State Commission of Engineering and Architectural Examiners, 2040 West Main Street, Suite 212, Rapid City 57701.
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TENNESSEE: State Board of Architectural and Engineering Examiners, 590 Capitol Hill Building, 301 7th Avenue, North, Nashville 37219.
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Registration (cont.)

UTAH: Representative Committee for Professional Engineers and Land Surveyors, Dept. of Registration, 330 East 4th South Street, Room 210, Salt Lake City 84111.

*Paul T. Fordham, Executive Director, Telephone: (801) 533-5711.

VERMONT: State Board of Registration for Professional Engineers, Norwich University, Northfield 05663.

*Peter E. Kyle, P. E., Executive Secretary, Telephone: (802) 485-9341.

VIRGINIA: State Board of Architects, Professional Engineers and Land Surveyors, 2 South Ninth Street, Richmond 23219

*Lester G. Thompson, Jr., Executive Director, Telephone: (804) 786-8818.

VIRGIN ISLANDS: Board for Architects, Engineers and Land Surveyors, Submarine Base, Mail: P.O. Box 476, St. Thomas 00801.

Arnold M. Golden, L. S., Secretary, Telephone: (809) 774-1301.

WASHINGTON: State Board of Registration for Professional Engineers and Land Surveyors, Mail: P.O. Box 9649, (3rd Floor, Capitol Plaza Bldg.) Olympia 98504.

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WEST VIRGINIA: State Board of Registration for Professional Engineers, 608 Union Bldg, Charleston 26301.

*Ann Hicks, Administrative Assistant, Telephone: (304) 348-3554.

WISCONSIN: State Examining Board of Architects, Professional Engineers, Designers and Land Surveyors, 1400 East Washington Avenue, Room 288, Madison 53702. Telephone: (608) 266-1397.

WYOMING: State Board of Examining Engineers, Barrett Building, Cheyenne 82002.

*Elva Myers, Secretary-Accountant, Telephone: (307) 777-6156.

*indicates not a member of the Board

†denotes Affiliate Member Board

To: All Members of Theta Tau

Official Notice is hereby given that the following are no longer members of Theta Tau:

Robert Keith Bass, Delta Beta Roll No. 514
Steven Wayne Brown, Delta Beta Roll No. 502
Randle Edward Bullard, Eta Beta Roll No. 235
Kenneth Butschek, Kappa Beta Roll No. 272
Robert George Casper, Delta Beta Roll No. 520
Claude Marion Connell, Kappa Beta Roll No. 131
Mark Thomas Devore, Iota Beta Roll No. 128
Jack Cammelle Dewailly, Jr., Upsilon Roll No. 835
Bruce Christopher Duffin, Zeta Roll No. 768
James Paul Erler, Xi Roll No. 375
Stephen Roger Green, Upsilon Roll No. 876
Kenneth Ricardo Harris, Omicron Roll No. 873
Lawrence Martin Heil, Delta Beta Roll No. 515
Douglas Alan Klotter, Delta Beta Roll No. 495
Stephen Andras Kovacs, Delta Beta Roll No. 501
Douglas Edward Kyr, Delta Roll No. 1203

Each member should take due notice thereof, and govern himself accordingly.

In H and T,
Robert E. Pope, Grand Scribe

John William Lowry, Zeta Roll No. 779
Steven Walter Marlow, Mu Roll No. 1079
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