

The GEAR of Theta Tau

Volume LXXIX, No. 1

Fall 1997



**OMEGA
CHAPTER**

1932

**THEN
AND
NOW**



1997

BROTHERHOOD OVER THE YEARS

CHAPTER ANNIVERSARIES

Congratulations to chapters observing landmark anniversaries of their establishment this school year:

EB	10th	November 21, 1997	Y	70th	April 7, 1998
E	75th	January 13, 1998	Φ	70th	April 21, 1998
OB	10th	January 16, 1998	Π	75th	May 26, 1998
O	75th	February 3, 1998			

1998 RUBE GOLDBERG™ MACHINE TASK

The announced task to be accomplished (in 21 or more steps) is to turn off an alarm clock. Local contests on campuses with Theta Tau chapters should be scheduled early to be held during National Engineers Week, February 22-28, or at another time before the National Contest on the Purdue campus in March 1998. Information, entry forms, and deadlines are available from the Rube Goldberg Machine Contest web site: <http://expert.cc.purdue.edu/~thetatau/RUBE/>

ADVERTISING SPACE AVAILABLE

If your product or service targets engineers, this magazine reaches about 17,000 of them. Advertising from business card size to a full page is available for \$120 to \$800 per issue. Contact the Theta Tau Central Office for more information.

ALUMNI CONTRIBUTION PROGRAM

The goal of the 1997-98 program is to underwrite the cost of the magazine and the cost of maintaining current the membership database, and to help fund the Fraternity's program of extension through establishment of additional chapters. The "Top Ten" Chapters in response to the 1996-97 Alumni Contribution campaign were as follows:

Total \$ Given	Average Gift Size	% of Alumni Contributing
1. Zeta	Epsilon	Upsilon Beta
2. Epsilon	Omicron Beta	Zeta
3. Upsilon	Eta	Gamma Beta
4. Chi	Upsilon	Omega Beta
5. Omega	Zeta	Sigma Beta
6. Rho	Rho Beta	Mu Beta
7. Omicron	Tau	Sigma
8. Mu	Epsilon Beta	Chi
9. Tau	Iota Beta	Omega
10. Sigma	Xi	Xi Beta / Phi Beta

TELEPHONE SERVICE DISCONTINUED

Theta Tau has discontinued its relationship with TransNational Communication to provide long distance telephone service to members. If you are currently a TransNational (Members' Long Distance Advantage) customer, your service should not be interrupted. However, if you wish to continue to support Theta Tau through a long distance telephone affinity program, please contact the Central Office toll free at 800/264-1904 for information about another competitive and reliable carrier.

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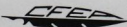
The Gear of Theta Tau

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BIGGER AND BETTER IN TEXAS

The 1997 National Conference established new standards for attendance (213 registrants) and efficient operation. The Conference, at the Arlington Hilton, August 14-17, was the first Theta Tau national meeting ever in the Dallas

area (the third in Texas). Host was **Tau Beta** Chapter at Southern Methodist University. This Conference was the first at which the newest chapter, **Eta Gamma** (University of Colorado at Boulder) was officially represented.



FOR THE FIRST TIME, GRAND REGENT HAAS PRESIDED AT THE NATIONAL CONFERENCE.

Getting Started

Extensive pre-registration made that process easy on arrival. Concurrently were held a First-Timers Orientation (new this year) and Credentials Committee Sessions and Chapter Delegation Conferences (combined for the first time this year) utilizing seven teams of national officers. As a result, this preliminary activity went smoothly. Other innovations included forums (ad hoc discussion groups set up when student members identified a topic they wished to study or to discuss in depth – one was on chapter housing); and “commercial breaks” between segments giving student members an opportunity to share briefly an activity or idea. There

were team-building projects which provided worthwhile evening activities to encourage cooperative efforts by those from different chapters and to teach

Nothing expresses the magnitude of Theta Tau like attendance at a National Conference or Convention.

Rita Ziemer, Zeta Delegate

group dynamics. The new Fraternity policy limited on-site possession or consumption of alcoholic beverages to the hotel bar. The result was that the attendees displayed better behavior than at some previous meetings and favorable comments were received from the hotel management.

Opening Session

After the ritualistic opening, **Lee C. Haas**, Rho '62, reported as Grand Regent and announced the creation of the Theta Tau Education Foundation and that the Fraternity would provide four scholarships next spring. **Michael T. Abraham** then reported as Executive Director. A brief oral report from each chapter followed.

Opening Dinner

Thursday evening, Mayor Elzie Odom of Arlington welcomed Theta Tau to the area and presented the Proclamation he had issued; a Greeting from Texas Governor George W. Bush was read; and those named Outstanding Student Members by their chapters were recognized. 1997 Hall of Fame Laureate **John**



PAST GRAND REGENT SCHEETZ INDUCTED THE 1997 ALUMNI HALL OF FAME LAUREATES.



W. F. Dulles, Chi '43, gave the Keynote Address. Others inducted into the Alumni Hall of Fame were **William C. Douce**, Zeta '41, **Joe H. Engle**, Zeta '56, and **Wesley H. Johnson**, Alpha '34. (See related article on page 4.)

Theta Tau 101

The Thursday evening session led by Past Grand Regent **Randall Scheetz** and Executive Director **Michael Abraham** expanded on the Grand Regent's question in his Report: “Who runs Theta Tau?” for which the appropriate response

...great chapters make a great national fraternity.
Lee C. Haas, Grand Regent's Report

is “We all do!” Priorities were established: to provide a positive experience for student members – to as many as possible (reasonably larger chapters, and more of them), and good feelings or experiences for alumni. Contributions of the national Fraternity and of the Central Office were explained. Sources and use of funds were reviewed. Strengths, weaknesses, opportunities, and threats for the Fraternity were discussed.



SKILL, STRENGTH, AND SPEED WERE NEEDED IN THE WHEELBARROW RACE.

Learning and Playing

Engineering-related team development activities in the evening provided the student members a pleasurable learning experience. Friday was filled with valuable presentations led by national officers in which much information on many aspects of chapter operation was provided

and discussed. The first was on Chapter Planning – Ensuring Success through Strategy and Planning. This was developed in three segments: Chapter Self Assessment, Brainstorming and Group Decision Making, and Project Management. Separate sessions were offered concurrently on Rush for Chapters over/under membership of 20, Professional Development, and Chapter Advisers. Topics featured during the second break out period were Alumni Relations, Campus and Community Relations, and Member Development and Motivation. In the third were Pledging, WWW Communications, Energizing Your Meetings, and Chapter Finances.

Cookout and Chapter Games were held at River Legacy Park, Arlington. The **Western Region** chapters won the Chapter Games, with **Tau Beta** recognized as most spirited.



CHEERS AND HIGH FIVES FOR WINNERS DURING CHAPTER GAMES AT THE COOKOUT IN LEGACY PARK.

Leadership and Fellowship

Saturday and Sunday morning Conference Sessions began with aspects of Coaching (a leader's role in developing those in the organization). Confronting and Challenging (to identify and correct behavior that is in conflict with the organization's goals or which impede success) were covered on Saturday, and Counseling (assisting the individual), Mentoring and Recognizing (positive components) on Sunday. Dr. Kent Gardner, Associate Vice President for Student Affairs, The University of Texas at Arlington, was the guest speaker on "The Leader Is a Risk Taker." There was time for Regional Meetings. Following the open lunch and a photo session, the Initiation Ceremony brought three into



SUCCESS REQUIRED TEAMWORK IN THE TOXIC WASTE DISPOSAL PROJECT.

Theta Tau membership. A review session followed, as required in the Ritual.

At the Awards Banquet Saturday evening, the Fraternity honored chapters and members whose participation during the Conference and achievements in

the past had been exceptional. The award for Member-Miles was again

presented to **Chi** Chapter. Best Display was awarded to **Zeta Gamma** Chapter. The award for Best Presentation went to **Phi** Chapter. (See *Phi's Keys to Rush*, page 13.) The Best Delegation Award (in each Region) went to **Gamma Beta** (Atlantic), **Phi** (Central), **Iota Beta** (Great Lakes), **Kappa Beta** (Southern), and **Tau Beta** (Western). Two named as **Outstanding Delegates** by vote of their peers were **James D. Beckwith**, Kappa Beta '97, and **Donald R. Hoffmann, Jr.**,



CHAPTER DISPLAYS WERE NUMEROUS AND ESPECIALLY WELL DESIGNED THIS YEAR.

Epsilon Beta '98. **Omicron** Chapter won the Best Newsletter Contest with **Nu Beta** Chapter second. The Best Photograph award went to **Chi** Chapter with second to **Zeta Gamma** and third to **Xi Beta** Chapter. Certificates for increasing chapter size by 20% were presented to **Xi**, **Rho**, **Gamma Beta**, **Iota Beta**, **Kappa Beta**, **Nu Beta**, **Tau Beta**, and **Chi Beta** Chapters. Honored for



RECOGNIZED BY EXECUTIVE DIRECTOR ABRAHAM (FIFTH FROM LEFT) FOR INCREASING CHAPTER SIZE WERE RHO, KAPPA BETA, XI, TAU BETA, IOTA BETA, CHI BETA, GAMMA BETA, AND NU BETA (NOT PICTURED).

maintaining a student membership greater than 40 were **Omicron**, **Chi**, **Omega**, and **Rho Beta** Chapters. **James D. Beckwith**, Kappa Beta '97, was named **Outstanding Student Member** of the Fraternity for service during 1996. Receiving certificates for scoring 700 or more points in the **Chapter Performance** competition during 1996-97 were **Omicron**, **Phi**, **Kappa Beta**, **Xi Beta**, **Rho Beta**, **Phi Beta**, and **Zeta Gamma**. **Upsilon** Chapter continued its tradition, presenting hand-crafted gear wheels (like those made as initiation projects by its pledges) to **Gamma Beta** and **Zeta Gamma** Chapters.

The purpose of the **Gamma Beta** Presentation on **University Relations** was to highlight campus resources and opportunities that can be used to enhance the student members, the student body, the whole university, and the community in general. As all campuses differ from one another, the presentation touched on each of these topics with the intention of



EXECUTIVE DIRECTOR ABRAHAM WITH THOSE FROM RHO BETA, OMEGA, CHI, AND OMICRON RECOGNIZED FOR MAINTAINING COMMENDABLE MEMBERSHIP LEVELS.

GRAND REGENT HAAS (FAR LEFT) PRESENTS CERTIFICATES TO DELEGATES FROM CHAPTERS HONORED FOR THEIR PERFORMANCE DURING THE PREVIOUS YEAR: KAPPA BETA, PHI BETA, PHI, XI BETA, OMICRON, RHO BETA, AND ZETA GAMMA.



...it's nice to have you, come back to see us.

Al Godfrey, Arlington Hilton

It would be great to have you back.

Cory Giddings, Senior Sales Manager
Arlington Hilton

Looking Ahead

sparkling ideas that related to each chapter. There are a wealth of opportunities that exist all around the country, and it is important that student members actively search out these opportunities to integrate them into regular chapter activities.

In legislative action, the Conference adopted Habitat for Humanity as the Fraternity's philanthropy focus, and accepted a report recommending production of a Yearbook by each chapter to provide each student member a lasting record of the chapter's activities.



THE CONFERENCE HOST TAU BETA CHAPTER WAS ALSO RECOGNIZED BY REGIONAL DIRECTOR WILEY (SIXTH FROM LEFT) AS THE WESTERN REGION'S OUTSTANDING DELEGATION.

Remembering

In the Memorial Service Sunday morning were honored those Brothers whose deaths had been reported during the past year. After the final session on Coaching, there were additional presentations on Being a Leader and on Leadership Succession Planning. Documenting and standardizing leadership functions provide for a smoother transition while helping each new leadership team to learn roles, expectations, and protocol. The Conference ended with a discussion of how leaders feel about their transitioning roles, and presentation of Grand Chapter certificates to those who had officially represented their chapters. ■

CHAPTER SERVICE

Omega Beta was the recipient at the National Conference of the Chapter Service Award presented this year for the first time. During the 1996-97 year, the Chapter organized and participated in ten chapter service projects with its members contributing 985 hours of effort. The projects were varied — old, new, short-term, and long-term.

One of the ongoing projects was the private tutoring of other university students by members on a regular basis. The students being tutored performed better in classes; the engineering department knew to whom to refer students in need of academic help; and the Theta Tau image was improved in the university. Omega Beta Chapter also sponsored an ongoing recycling program. This service provided a convenient way for the entire engineering department to recycle bottles and cans and to help the environment.

In addition, the chapter visited a Geriatric Center with the Hofstra University Hillel. Members sang and spoke with the residents, brightening their lives and involving some who interacted little with others.

SERVICE, CONTINUED PAGE 5



ON BEHALF OF OMEGA BETA CHAPTER, DELEGATE MICHAEL DALLAL (RIGHT) ACCEPTS CHAPTER SERVICE AWARD FROM GRAND VICE-REGENT WILCOX.

ALUMNI HALL OF FAME

1997 LAUREATES

Established in 1986, the Alumni Hall of Fame honors a member for exemplary contributions to his profession or to Theta Tau. Nominations may be made by chapters, alumni associations, and the Executive Council. No more than five may be selected for induction at each national meeting.



William C. Douce, Zeta '41, received the degree Bachelor of Science in Chemical Engineering from the University of Kansas. He is a member also of Phi Gamma Delta and of Tau Beta Pi. From 1942, his entire professional career was with Phillips Petroleum Company working in its refining and chemicals operations. Headquartered in Bartlesville, Okla-



homa, Phillips is involved with petroleum exploration and production throughout the world. He was named Senior Vice President and a member of its Board of Directors in 1969, President and Chief Operating Officer in 1974, Chief Executive Officer in 1980, and Chairman in 1982. He retired in 1985. He has been inducted into the Oklahoma Hall of Fame and the U.S. Jaycee's Leadership Hall of Fame. His alma mater has honored him with its Distinguished Engineering Service Award, the Fred Ellsworth Medallion, and with induction into the K.U. Chemical and Petroleum Engineering Hall of Fame. In 1976, it conferred on

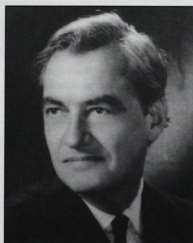
him its Distinguished Service Citation, the highest award the University of Kansas can bestow. He currently serves as a Trustee of the K.U. Endowment Association and has been Trustee of the University of Tulsa and of the Philbrook Art Museum in Tulsa. He has been awarded the National Order of Republic of Ivory Coast, the highest honor bestowed by that nation, for his efforts in furthering its economic and resource development; and the insignia of Commander of the Order of Leopold, one of the highest awards of the Belgian government, for significant contributions to the Belgian economy.

John W. F. Dulles, Chi '43, received the degree BS in Metallurgical Engineering with highest distinction from the University of Arizona after earning a BA degree from Princeton and his MBA from Harvard. He is a member also of Phi Kappa Phi, Tau Beta Pi, Pi Mu Epsilon, and Phi Lambda Epsilon.

He spent seventeen years with Compania Minera de Peñoles (American Metal Company subsidiary in Monterrey, Mexico), operator of non-ferrous mines, smelters, and a lead-gold-silver refinery.

Brother Dulles worked at its converter, smelters, and sintering plant. His most fascinating years were spent as ore buyer, traveling by train and burro, visiting most of Mexico's mines. Reports he

wrote about these mines helped him earn the professional degree, Metallurgical Engineer. As General Manager of Peñoles, and later, Executive



Vice President, his responsibilities included negotiations with Mexican cabinet ministers on mining taxes, freight rates, and the allotment of lead and zinc

exports to the United States. His talents in these areas might be expected. His father was John Foster Dulles who served as Secretary of State in

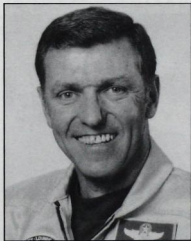
Theta Tau's members possess the two most needed characteristics, and they make it the world's foremost organization: engineering ability and character; that is, a dedication to justice, honesty, and fairness, and an appreciation of what is worthy in others . . . The United States, happily, has a map that is dotted with the locations of Theta Tau chapters that have been responsible for building up a large corps of people dedicated to engineering skills and exemplary character.

— J. W. F. Dulles in his Keynote Address

the Eisenhower administration. During protracted negotiations in the 1950s, he called on makers of the Mexican Revolution and wrote *Yesterday in Mexico*, published while he was in Brazil

serving as Vice President of a Hanna Mining Company iron ore subsidiary. Its assets included Brazil's largest and deepest gold mine. The book led to professorships at the Universities of Arizona and Texas. The author of ten books, mostly about Brazil, he has been honored by the Brazilian government and since 1962 has been University Professor of Latin American Studies at the University of Texas at Austin. During the spring semesters, 1966-91, he was also Professor at the University of Arizona.

Joe H. Engle, Zeta '56, received a BS degree in Aeronautical Engineering from the University of Kansas where he was commissioned into the U.S. Air Force through the AFROTC program. After flight school, he was assigned to fly F-100 fighters with then Col. "Chuck" Yeager. He was selected for the USAF Experimental Test Pilot School at Edwards AFB, and was then assigned to the Fighter Test Branch there. One of two active Air Force pilots on the X-15 rocket research airplane program, he logged 16 flights, three of them exceeding the altitude of 50 miles, qualifying him for the rating of "astronaut" and

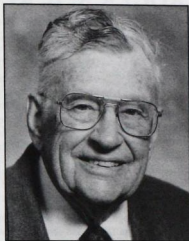


making him in 1964 and to this day the youngest ever to achieve this rating. That year he was named the Outstanding Young Officer of the USAF, and was named by the U.S. Junior Chamber of Commerce as one of the "Ten Outstanding Young Men of America." He was selected in 1966 for the Apollo lunar landing program. In 1977 he flew the

first test flights of the Space Shuttle off the top of a Boeing 747 carrier. He was commander of the second orbital test flight of the Space Shuttle, becoming the only pilot ever manually to fly a vehicle from the orbital speed of Mach 25 (17,400 miles per hour) to landing. As commander of Discovery in 1985, his Space Shuttle mission was acknowledged as the most successful yet flown. During that flight, three satellites were launched and the crew performed a rendezvous, manual capture and repair, and manual re-deploy of a 15,000 pound crippled satellite that was stranded in a useless orbit. After nearly 31 years of active service, he retired from the Air Force as Colonel and the next day was sworn into the Kansas Air National Guard. He flew F-4 and F-16 fighter aircraft, and as the ANG assistant to U.S. Space Command, attained the rank of Major General. He has been awarded the Department of Defense and Air Force Distinguished Service Medals, the Air Force Distinguished Flying Cross, the NASA Distinguished Service, Exceptional Service, and Space Flight Medals. He has received the prestigious Harmon International Aviation Trophy, Collier Trophy, Goddard Trophy, White Trophy, Kincheloe Trophy, and the Nolen Trophy. In 1982 he received from his alma mater its Distinguished Engineering Service Award and its Distinguished Service Citation, the highest award the University of Kansas can bestow. He has flown over 180 different types of aircraft, logged over 14,000 hours flying time – over 200 hours in space.

Wesley H. Johnson, Alpha '34, received his Bachelor's Degree in Civil Engineering from the University of Minnesota. In that depression year, he was one of only ten from a class of fifty to find a job that spring. His first job was with the Quincy A. Hall Testing Laboratory as a result of his acquaintance with **Charles W. Britzius**, A '33, (later to become Grand Regent) who was employed there following his graduation a year earlier. Brother Johnson served in several posts in North Africa and Europe during World War II, in Korea during the Korean War, and retired from the Minnesota National Guard as Lieutenant Colonel in 1962. He was with the U.S. Steel Supply Division in St. Paul from

1947, taking early retirement as Supervisor of Engineering Services in 1972. He then served as Senior Engineer with the Bridge Department of the



Minnesota Highway Department until 1977. He successfully completed courses in Advanced Structural Steel and Reinforced Concrete at the University of Minnesota at age 60. He served Alpha Chapter as Regent, and later as Chapter Adviser. First elected to the Board of Directors of Theta Tau Association of Minnesota, Inc., (Alpha's House Corporation) in 1954, he served as its President, 1959-1965, and as Treasurer since 1966. During these years, the current house site was purchased in 1955, Alpha's house (the first to be built for a Theta Tau chapter) was dedicated in 1957, and the mortgage retired in the summer of 1996. ■

SERVICE, CONTINUED FROM PAGE 3

The tradition of going to high schools and community colleges to speak about Hofstra Engineering and about Theta Tau was continued. The chapter also invited two middle schools to come to Hofstra to see its Rube Goldberg machine. Another event was a Turkey Trot to help the homeless. All of the brothers donated non-perishable food for this event, and three brothers ran. It also participated in a Walk-a-Thon for Diabetes. Finally, all of the brothers donated to the American Cancer Society in the name of an alumnus whose father had just been diagnosed with cancer. ■

ROGER R. D. REVELLE A GIANT IN AMERICAN SCIENCE



ROGER REVELLE
1909-1991

Geologist, oceanographer, educator, statesman, and patron of the arts, **Roger Revelle**, E '29, was inducted posthumously into the Theta Tau Alumni Hall of Fame in 1991. A graduate of Pomona College, he received his PhD from the University of California, Berkeley, where he studied under Past Grand Regent **George D. Louderback**. His achievements deservedly brought him many honors, including honorary degrees from thirteen universities.

Revelle College

He was recognized as the Founder of the University of California, San Diego, and served as Dean of Research for the



REVELLE PLAZA WITH ARGO HALL BEYOND
REVELLE COLLEGE, UCSD

entire University of California system. UCSD embodies his philosophy of the way great universities are created and sustained: recruit the finest scholars and students, use the world as your laboratory, and do what is important. Its first college, established in 1958, was named Revelle College. The college intends that graduates will have an acceptable level of general education in mathematics; foreign language; the physical, biological, and social sciences; the fine arts; and the humanities; together with pre-professional competence in one academic discipline and an understanding of an academic area outside their major field. The campus computer online information system is called ROGER, and the faculty club features a "Roger's Table," where faculty members gather to exchange views, as Revelle envisioned a new kind of university which would value fellowship as well as scholarship.

The Revelle Medal

The University of California, San Diego's highest honor is named The Revelle Medal, presented in recognition of distinguished and sustained service to UCSD (by ones not members of its faculty or staff). It commemorates Roger Revelle's role in establishing a general campus of the University in San Diego, as

well as his contributions to science. The image on the medal depicts Revelle looking out over the Pacific and symbolizes his global vision. Established in 1981, the medal has been awarded only eleven times. The 1986 recipient was **Kenneth E. Hill**, E '38, honored for the generous gift to UCSD of his renowned collection of rare books on voyages of discovery in the Pacific.

Roger and Ellen Revelle Building

In 1964, he was appointed Saltonstall Professor of Population Policy at Harvard and was asked to launch a new Center for Population Studies. Among his students was Al Gore, now Vice President of the United States. Revelle was concerned with resources — a systematic approach to land, water and energy, believing that uncontrolled population growth was more the consequence than the cause of underdevelopment. Now named the Harvard Center for Population and Development Studies, it is housed in the Roger and Ellen Revelle Building.

R/V Roger Revelle

Revelle's first association with the Scripps Institution of Oceanography was as a research assistant in 1931. He progressed from instructor to professor, and then to Director of SIO, 1951-64. In 1957, he became an early prophet of global warming. He led Scripps into a new age of exploration during which a series of major expeditions revolutionized knowledge of the sea floor and many cooperative international scientific programs were initiated. It was appropriate that its new state-



of-the-art research vessel should be christened the *R/V Roger Revelle* in August 1996. The 275-foot research ship includes lab space, sophisticated scientific equipment, and accommodations for sixty crew and scientific personnel.

Revelle Rise

In the western Indian Ocean, north of Madagascar, there is a mile-high elevation in the sea floor, nearly as large in area as New England. It is known as Revelle Rise, named to commemorate Roger Revelle's contribution to that part of the world. As Science Adviser to the U.S. Secretary of the Interior, he directed a project that greatly improved the agricultural productivity in the Indus Valley of Pakistan. ■

OUTSTANDING DELEGATES



J. D. Beckwith, Kappa Beta '97, was presented the Fraternity's Robert E. Pope **Outstanding Student Member Award** for 1996 and was also honored, along with Donald Hoffmann, as **Outstanding Delegate** of the 1997 National Conference. J.D. comes from Coila, a small rural community in central Mississippi. He was valedictorian of the 1992 class at Greenwood High School. On the co-op program at MSU, he has worked four semesters with Gencorp, a vinyl wall paper manufacturer in Columbus, and one with Bryan Foods in West Point, Mississippi, gaining valuable engineering design and AutoCAD experience.

Now a senior in mechanical engineering and a member of Phi Tau Sigma honor society, he is considering graduate work at MSU or a position involving design of customized machinery.

Soon after initiation in May 1995, he chaired his chapter's Pig Pickin' Committee. Since then, he has served on all but two of the chapter's standing committees, chairing Rube Goldberg Machine and Fundraising Committees. Now completing his second term as Corresponding Secretary, he has reduced the

Donald R. Hoffmann, Jr., Epsilon Beta '98, was honored, along with J. D. Beckwith, as **Outstanding Delegate** of the 1997 National Conference. He graduated from Troy (Michigan) High School, class of 1991. He first heard of Theta Tau when some members spoke to his "Introduction to Engineering" class at Oakland University.

An interest was sparked, but dimmed when he couldn't convince his study partners to look into the organization. Two classes later, the same ones came to speak again, and this time he was determined to investigate further. Since he was quite social in high school, he was hesitant about entering the office of a professional fraternity. Once inside, it was evident he would fit in. "That's Elvis!" Dave "Spike" Wisz, ΦB '94, exclaimed, and the name stuck.

During two years in Phi Beta Chapter, he rented a large house in Pontiac where he worked on developing the Chapter's social events and was Pledge Master his last semester there. His parents moved to Dearborn; he decided to move back home, transfer to Wayne State in Detroit, and check out the Chapter there.



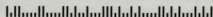
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Jeremy M. Tschaepe	Iota Beta
James D. Beckwith	Kappa Beta
Milan Bjelobrk	Xi Beta
Michael R. Biga	Omicron Beta

Thomas J. Cornish	Pi Beta
Michael Grandstaff	Rho Beta
Danielle Magee	Rho Beta
Miguel Rodriguez	Tau Beta
David Johnson	Upsilon Beta
Craig Hopkins	Phi Beta
Steven Emerick	Chi Beta
Haley L. Norman	Psi Beta
Snehal Thakkar	Omega Beta
Patricia Carder	Delta Gamma
Catherine Starr	Epsilon Gamma
Todd Swygert	Zeta Gamma

at EB but still had to fit in with the new group. responding Secretary for two years and moved house. He was Vice-Regent for a semester, and during his tenure, he sought to improve the chapter's has pursued graduation and has taken an on-campus coordinator and advisor for new members.

Time is spent on fraternity activities, when not working. His hobbies include extensive road trips, and it's no secret that he loves to have a good laugh. If asked what is the most important thing to a Tau, his answer, learned from Epsilon Beta, is, "You're a good brother – be a good brother."

MEMBERS

Those honored for their service to the Fraternity during the distinctive dangle to be worn on the guard by their chapters for this honor are recognized at the annual service during calendar 1996 were:

ROGER R. D. REVELLE A GIANT IN AMERICAN SCIENCE



ROGER REVELLE
1909-1991

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REVELLE PLAZA WITH ARGO HALL BE
REVELLE COLLEGE, UCSD

entire University of California system. UCS philosophy of the way great universities are attained: recruit the finest scholars and students, your laboratory, and do what is important. Established in 1958, was named Revelle College, intends that graduates will have an acceptable education in mathematics; foreign language; the logical, and social sciences; the fine arts; and together with pre-professional competence in one discipline and an understanding of an academic area outside their major field. The campus computer online information system is called ROGER, and the faculty club features a "Roger's Table," where faculty members gather to exchange views, as Revelle envisioned a new kind of university which would value fellowship as well as scholarship.

The Revelle Medal

The University of California, San Diego's highest honor is named The Revelle Medal, presented in recognition of distinguished and sustained service to UCSD (by ones not members of its faculty or staff). It commemorates Roger Revelle's role in establishing a general campus of the University in San Diego, as

well as his contributions to science. The image on the medal depicts Revelle looking out over the Pacific and symbolizes his global vision. Established in 1981, the medal has been awarded only eleven times. The 1986 recipient was **Kenneth E. Hill**, E '38, honored for the generous gift to UCSD of his renowned collection of rare books on voyages of discovery in the Pacific.

Roger and Ellen Revelle Building

In 1964, he was appointed Saltonstall Professor of Population Policy at Harvard and was asked to launch a new Center for Population Studies. Among his students was Al Gore, now Vice President of the United States. Revelle was concerned with resources – a systematic approach to land, water and energy, believing that uncontrolled population growth was more the consequence than the cause of underdevelopment. Now named the Harvard Center for Population and Development Studies, it is housed in the Roger and Ellen Revelle Building.

R/V Roger Revelle

Revelle's first association with the Scripps Institution of

What would you like to see in *The Gear*?

Here's information for an Alumnus Note:

Here's a new address for : _____

Name _____ Chapter _____ Year _____

Revelle in August 1996. The 275-foot research ship includes lab space, sophisticated scientific equipment, and accommodations for sixty crew and scientific personnel.

Revelle Rise

In the western Indian Ocean, north of Madagascar, there is a mile-high elevation in the sea floor, nearly as large in area as New England. It is known as Revelle Rise, named to commemorate Roger Revelle's contribution to that part of the world. As Science Adviser to the U.S. Secretary of the Interior, he directed a project that greatly improved the agricultural productivity in the Indus Valley of Pakistan. ■

OUTSTANDING DELEGATES



J. D. Beckwith, Kappa Beta '97, was presented the Fraternity's Robert E. Pope **Outstanding Student Member Award** for 1996 and was also honored, along with Donald Hoffmann, as **Outstanding Delegate** of the 1997 National Conference. J.D. comes from Coila, a small rural community in central Mississippi. He was valedictorian

of the 1992 class at Greenwood High School. On the co-op program at MSU, he has worked four semesters with Gencorp, a vinyl wall paper manufacturer in Columbus, and one with Bryan Foods in West Point, Mississippi, gaining valuable engineering design and AutoCAD experience.

Now a senior in mechanical engineering and a member of Pi Tau Sigma honor society, he is considering graduate work at MSU or a position involving design of customized machinery.

Soon after initiation in May 1995, he chaired his chapter's Pig Pickin' Committee. Since then, he has served on all but two of the chapter's standing committees, chairing Rube Goldberg Machine and Fundraising Committees. Now completing his second term as Corresponding Secretary, he has reduced the number of lost alumni by 50%, brought the chapter's Big Brother Family Tree closer to completion, and has been responsible for continued improvement of its web site as the chapter's webmaster. He counts serving as a Big Brother as one of his most important responsibilities. J.D. comments: "Theta Tau has taught and given me so much that I cannot fathom what my world would be like without it."

When not working on Theta Tau activities, J.D. likes to read science fiction books (of which he has over 300), play computer games, surf the web, and play chase through the house with his cat Knothead. His favorite author is Anne McCaffrey, and he is an avid Star Trek and Star Wars fan.

Donald R. Hoffmann, Jr., Epsilon Beta '98, was honored, along with J. D. Beckwith, as **Outstanding Delegate** of the 1997 National Conference. He graduated from Troy (Michigan) High School, class of 1991. He first heard of Theta Tau when some members spoke to his "Introduction to Engineering" class at Oakland University. An interest was sparked, but dimmed when he couldn't convince his study partners to look into the organization. Two classes later, the same ones came to speak again, and this time he was determined to investigate further. Since he was quite social in high school, he was hesitant about entering the office of a *professional* fraternity. Once inside, it was evident he would fit in. "That's Elvis!" Dave 'Spike' Wisz, ΦΒ '94, exclaimed, and the name stuck.



During two years in Phi Beta Chapter, he rented a large house in Pontiac where he worked on developing the Chapter's social events and was Pledge Master his last semester there. His parents moved to Dearborn; he decided to move back home, transfer to Wayne State in Detroit, and check out the Chapter there.

Elvis was known at EB but still had to fit in with the new group. He served as Corresponding Secretary for two years and moved into the chapter house. He was Vice-Regent for a semester, and then Regent. During his tenure, he sought to improve the chapter. Since then he has pursued graduation and has taken an active role as alumni coordinator and advisor for new members.

Most of his spare time is spent on fraternity activities, when not at school or church. His hobbies include extensive road trips with his brothers, and it's no secret that he loves to have a good time with lots of laughs. If asked what is the most important quality of a Theta Tau, his answer, learned from Epsilon Beta, is: "Don't just say you're a good brother – be a good brother."

OUTSTANDING STUDENT MEMBERS

The Outstanding Student Member program was inaugurated in 1991 with members honored for their service to the Fraternity during the previous year. The national Fraternity provides an appropriate certificate and distinctive dangle to be worn on the guard chain of the honoree's badge. Traditionally, at each national meeting, those named by their chapters for this honor are recognized at the Opening Dinner. Those honored as their Chapters' Outstanding Student Members for service during calendar 1996 were:

Kent Eberhardt	Zeta
Neil Burgard	Xi
Kendra Wyatt	Omicron
Todd Blankenship	Sigma
Ryan Gilmore	Upsilon
Daniel Colpi	Phi
Ryan R. Klems	Chi
Huy Nguyen	Gamma Beta
Jeremy M. Tschaepie	Iota Beta
James D. Beckwith	Kappa Beta
Milan Bjelobrk	Xi Beta
Michael R. Biga	Omicron Beta

Thomas J. Cornish	Pi Beta
Michael Grandstaff	Rho Beta
Danielle Magee	Rho Beta
Miguel Rodriguez	Tau Beta
David Johnson	Upsilon Beta
Craig Hopkins	Phi Beta
Steven Emerick	Chi Beta
Haley L. Norman	Psi Beta
Snehal Thakkar	Omega Beta
Patricia Carder	Delta Gamma
Catherine Starr	Epsilon Gamma
Todd Swygart	Zeta Gamma

OMEGA CHAPTER

65 YEARS OF BROTHERHOOD

In the beginning...

Phi Alpha Lambda was organized as a social fraternity in 1920, becoming the first fraternity at the South Dakota State School of Mines. The chapter was installed on March 16, 1932, completing the roster of single-letter chapters in the Fraternity. Among the charter members were three, **Jack Lampert**, **Earl Dake**, and **Jim Bump**, whose names would be written large in the history of the chapter. They provided long-term service to the chapter through its house association Omega Alumni of Theta Tau, including development of the financial plan which made the construction of the current house possible. Honorary members **Howard Wells** and **Harold Martin** were also among those involved in this way.



NEW CHAPTER DOG BRANDY
STANDS GUARD AT SIGN ON
NEWLY LANDSCAPED LAWN

Campus Overview

South Dakota School of Mines and Technology (its name since the early forties), known locally as Tech, is a school of approximately 2300 students. About 70% of the traditional students are male. Only 22% of the students (mostly freshmen and sophomores) live on campus.

Tradition plays an important role in the daily social life of the school. The beginning of the school year finds the new "frosh" (not yet considered freshmen) wearing green beanies adorned with a yellow "M." Seniors wear their own unique

hats, filled with the signatures of those the senior knows and the frosh the senior has just met. When M-Day rolls around, it is time to place the senior plaque, and have the frosh whitewash the "M" on M Hill, some electing to slide down the M with the whitewash. Mud volleyball follows, and then a student-alumni football game during which time the frosh run around the track and are then recognized as the freshman class at Tech.

Underclassmen live in three dormitory buildings, one named in honor of **Earl D. Dake**, '24, a charter member of Omega chapter. Also named for a charter member is the **J. D. Bump** Lounge, in the Surbeck Center, the largest non-classroom meeting space on campus. A quiet place to study is the Coyle Terrace, named for **Dr. William Coyle**, '44, former Civil Engineering Department Chairman. An endowed professorship honors **Dr. Robert L. Sandvig**, '44, retired Head of the Department of Chemistry and Chemical Engineering at Tech.

Omega Brothers playing important roles in the everyday life of campus include the President **Dr. Richard Gowen**, '57, and **Dr. Howard "Dean Pete" Peterson**, '50, who served on the Tech staff for 35 years, 23 as Dean of Students, Dean Emeritus since retirement in 1992. Still actively involved in campus and Theta Tau activities, Brother Peterson coordinates the Tech alumni reunions every 5 years. Current Theta Tau professors include **Dr. A. L. Riemenschneider**,

'58, and **Dr. David Grow**, '59, of the Electrical Engineering Department, the current chapter Adviser **Dr. Jon J. Kellar**, '84, of the Metallurgical Engineering Department, and **Dr. Wayne Krause**, '68, of the Mechanical Engineering Department, all of Omega chapter; and **Dr. Larry Bauer**, Iota '62, of the Chemical Engineering Department.



Campus Organizations

Other fraternity chapters established there since Theta Tau include Triangle, Alpha Chi Sigma, and Delta Sigma Phi. The sororities on campus are Alpha Delta Pi and Alpha Omega Epsilon. Generally, the Greeks are the most involved in other organizations on campus. Every Omega student member participates in at least one extracurricular activity, most holding office within an organization at some time. All fraternities enjoy a friendly rivalry with the others.

Over the years...

During its 65 years, Omega Chapter has won awards from Tech and from the Fraternity for its achievements. Individual members have also distinguished themselves. **Douglas E. Aldrich**, '62, **Howard C. Peterson**, '50, and **A. Louis Riemenschneider**, '59, have been inducted into the Theta Tau Alumni Hall of Fame. **Michael D. Martin**, '67, initiated by Omega Chapter, was named Outstanding Delegate by the Convention in 1962. Members who have served on the Executive Council are Grand Vice-Regent **Glen A. Wilcox**, '90, Grand Treasurer **Mark R. Janssen**, '88, **Brad D. Besmer**, '86, **Dale G. Larsen**, '78, and



AT WORK ON A RUBE GOLDBERG MACHINE

Kurt A. Selze, '86. The first four and **Paul H. Schuelke**, '74, have served as Regional Directors. **John Littell**, '87, was employed in the Central Office as Staff Associate.

Installed during the Great Depression, the chapter was to experience other low points. One was certainly the outbreak of diphtheria in the early forties resulting in a quarantine of the house and several members being hospitalized. An uncommonly heavy snowfall (17 inches) caused cancellation of the Spring Ball in 1942. World War II saw Tech adopt a trimester system with classes year round. As a result, about a third of the record freshman enrollment of 150 in the spring of 1941 was able to graduate as the class of '44 in just two years and ten months. Many members served in the armed forces during this period. The Chapter hosted the Theta Tau Convention during 1976, the nation's bicentennial year.

Housing

As early as 1924, the local fraternity rented rooms at 409 Kansas City Street in Rapid City, and was occupying a house at 1117 St. Joseph Street by the time it petitioned Theta Tau in 1931. Later, after adopting a program of obligatory house notes, it was able to buy the "Jay" house which it had been renting from Mrs. Anderson. The current house at 109 Kansas City Street was constructed in the late seventies on the same property as the one just preceding it.

New initiates are expected to live in the house. Its nominal capacity is 28, but 30 men are currently accommodated. The house is also now home to three dogs: Rudy, the house dog since 1987, Max, personal dog of Jon Larson, and Brandy, who is partly Jason Mann's and perhaps the next house dog. Andrew Thielen also has his parakeet at the house, so the place is a veritable zoo.

Now that the second floor has been redone, as well as the bathrooms on third, focus is on smaller projects, such as stairwells and fixing up the network around the house. There is still some work to finish in the TV room, including re-hanging the old composites. It is planned to replace the sign outside with one of cast aluminum. Most projects are handled by members, saving money and giving them pride in their house.



(ABOVE) ORIGINAL
PHI ALPHA LAMBDA
HOUSE.



(RIGHT) CHAPTER
HOUSE WHICH WAS
DEMOLISHED IN THE
LATE 70'S WHEN NEW
HOUSE WAS BUILT.

Chapter Traditions

There are four official Interfraternity Council recognized rush events in the fall: The Theta Tau Open, Casino Night, Spaghetti Feed, and Chislic Feed. Rushes are also invited to Theta Tau social events in the fall. Unofficial rush events include going out to movies, playing paintball, visiting various tourist attractions around Rapid City, hiking, and attending professional development events. Students are also rushed through helping them with homework, playing pool at the house, and watching movies together.

During the fall, the chapter usually has two prospective pledges as supper guests every day from mid September until bids are given out. This is a great way for all of the members to get to know the rushees. Prospective pledges are photographed and the slides shown at rush meetings held every other Sunday from October until bids are issued the second week in December. Those electing to accept attend the pledging smoker during the second week of January. Obviously this works for Omega Chapter. Consistently among Theta Tau chapters with largest student membership, it has been at the top of the list for three of the last five years. It has initiated over 1100.

Besides the traditions of the rush program, there is the Christmas party combining presents and bad poetry. On the last day of finals week, the chapter hosts a hot tub party.

Spring semester brings with it the new class of pledges. With working on pledge paddles, interviews, getting a pledge project and a community service event completed, the semester goes quickly. Brothers slow down only for Cinchbuckle, when a bus or two transports members and dates, dressed as a bunch of misplaced Okies and assorted hicks, to the town of Hot Springs. After much merrymaking, family tree drinks, etc., members find their way home via bus and continue the merrymaking. Soon after, the new mem-



CURRENT HOUSE CONSTRUCTED ON SAME
PROPERTY AS THE ONE JUST PRECEDING IT.

bers are initiated the second week in March. The school year draws to a close, and the chapter holds one last hot tub party. July 4th brings on the annual reunion, the highlight of a mundane summer. As the school year begins again, the year comes full circle with new faces and green beanies. ■

Contributing material for this article: John Knie, Howard C. Peterson, John Redmond, and Robert L. Sandvig. 1997 photos by Jason Jackson.

20TH ANNIVERSARY OF WOMEN IN THETA TAU —

A RETROSPECTIVE

by Nikki Lowrey

Twenty years ago, on Founders' Day 1977, the first women were initiated into Theta Tau through Delta Chapter at Case Western Reserve University and Xi Chapter at the University of Wisconsin at Madison. In attendance at the ceremony in Cleveland was Past Grand Regent Dodd and in Madison was then-Grand Regent Barth.

The idea of female membership received little support when first proposed at the 1972 Convention. A compromise reached by the Convention in December 1976 became effective in mid 1977, allowed membership to be broadened to include females. Although debate remains today regarding coed membership, most on both sides have long since learned to respect one another's opinions, ideals, purpose, and motive. All wanted what was best for the Fraternity; the only disagreement was how to achieve it. To recognize the implications of this historic occasion, we recall the circumstances of the change and re-visit those women first initiated into Theta Tau.

Carol Ann Garratt, a mechanical engineering student at the University of Wisconsin, was a classmate and friend of several Xi Chapter members. She was a good student, a member of the UW women's crew and rugby teams, and she and the brothers enjoyed hanging out together. During the fall of 1975, one of the brothers asked, "Why shouldn't she be a Theta Tau, too?" The members agreed, aside from the fact that women were not allowed in Theta Tau, that she ought to be a member.

During its spring 1976 rush, Xi Chapter invited both women and men to learn about Theta Tau. Three men and seven women were "pledged." Subsequently, the men were initiated and the women were designated "Associate Members" without the secrets of the Ritual. In all chapter activities, the Associate Members participated along with the initiated members, but paid only local dues. An initial protocol against dating within the chapter was soon dropped.

At the next Theta Tau National Conven-

tion in Rapid City, SD, during Christmas week 1976, Delegate **Lauren Laabs**, NB '77 (who had transferred to Xi chapter), and Alternate **Donald Slavik**, Xi '78, along with 3 others attending from Xi chapter, officially proposed membership for women. Associate members Carol Ann, Barb, and Nikki were there, drinking coffee in the coffee shop all day during closed sessions, talking with the brothers during breaks, and partying at night with the brothers, to lobby for their cause. While some of the chapters present agreed that the time for women in Theta Tau had come, others were strongly opposed.

At the same time, changes in federal law (Title IX of the Education Amendments of 1972) might be interpreted to deny federal funds to schools recognizing single-sex organizations other than "social" fraternities which were exempted by statute. This could result in preventing the continuation or installation of a chapter at nearly every college.

The brothers from Xi chapter could not convince a four-fifths majority at this Convention that the time for women in Theta Tau had come. The final decision was to request exemption from the Department of Health, Education, and Welfare for Theta Tau newly redefined as an engineering social fraternity acknowledging its long operation in similar ways, including chapter houses. The Convention further agreed, that should HEW deny this request, Theta Tau would remain a professional engineering fraternity with its Constitution amended to permit women members. This was the result in 1977. Today, nearly all formerly single-sex professional fraternities are coed.

Currently, about 65% of Theta Tau chapters have female student members. Steadfastly followed has been the principle that each chapter is the only body with the authority and ability to select its members in accord with Theta Tau laws.

Where are they now?

Carol Ann Garratt, Xi '77, a mechanical engineer, has had an impressive career. Initially with John Deere, with which she

had worked in a co-op position, she is currently General Manager of Automated Material Handling for FMC in Chalfont, PA.

Nikki Abramoff Lowrey, Xi '79, a metallurgical engineer, works at Boeing Defense and Space Group in Kent, WA, where she is Manager of Electrical/Electronic Parts Analysis and Test Laboratories. She is married and has one child.

Cynthia Barsknecht Slavik, Xi '79, a civil engineer, became the first female Regent of Xi chapter. She married **Don Slavik**, Xi '78, in 1980. She is now Assistant Director for Environmental Engineering in the Real Estate Investment Department at Northwestern Mutual Life Insurance in Milwaukee, WI. She and Don have one child.

Susan Blockstein, Xi '79, an electrical engineer, worked for Hewlett Packard during college and continued there after graduation. She is currently a development engineer for HP in Santa Clara, CA.

Barbara Boyer, Xi '80, returned to her hometown to work in the family business.

Judith Dodd Mills, Xi '79, a metallurgical engineer, has been with Detroit Diesel Allison, now Allison Engine Division of Rolls Royce, currently as an Applications Engineer working with its small engine line in Indianapolis.

Diana Denzer, Xi '79, a metallurgical engineer, married shortly after graduation and joined Alcoa Aluminum.

Laurie Weiss Kern, Delta '79, a biomedical engineer, was the only female initiate of Delta Chapter early that day. She received her master's in Manufacturing Engineering Management from GMI. After 14+ years as a manufacturing engineer, she is now a consultant as a Microsoft Certified Solution Developer. She and her husband live north of San Diego, sell a small geo-magnetic sensor, and are avid vegetable gardeners. ■

Historical facts and perspective were inserted by the Editor.

AN AVERAGE DAY IN MALAWI

by Rob Martin

Fourth in a series of articles by Theta Tau members living and working abroad.

My day began like that of any American teacher. I woke up early, made some finishing touches on lessons to be taught, ate breakfast, bathed, etc. But, as I swung on my backpack and headed out the door, I was reminded very quickly that I am in a foreign land.

Students walking by my house on their way to the primary school nearby yelled "Mzungu" (white person in their native tongue) at the top of their lungs while jumping up and down with excitement as

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my lesson, hoping their friends will supply them with the notes I give. I then assigned two homework problems which later took me three hours to grade all 120 notebooks. Only 13 students answered

been humbled by their ability to run faster than I have despite the fact that I have trained much more. Today was a scheduled easy run of 30 minutes which we run as a team. Each day we have these runs, I dispel some myths which they have heard about AIDS or about America. Today I told them about the discussions which occur between a pregnant woman in America and her friends. Here, talking about pregnancy is taboo since many times the baby and/or the mother will die during childbirth. So they were very surprised to learn about baby showers and ultrasounds.

As the team passed through the village, we again gained the attention of everyone. Some even joined us and soon I must have looked like "Forrest Gump" his followers. We passed by the post office so I could retrieve my mail. My letter from Mom with a section of our newspaper. As we returned to school, the teachers are gathered together with the one whose daughter had died away. We had a prayer together and gave him some money to use in buying food for the family that will come to mourn with him. Then, I ended up my teaching materials and left.

MALAWI, CONTINUED PAGE 12

CONTINENTAL
PROGRESSING CAVITY
ULTRAPUMP

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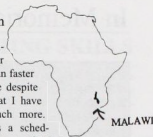
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FAX _____ Date _____

about students chatting before classes. The school is a Distance Education Centre (D.E.C.). The secondary schools only accept 1% of the students while another 10% attend a D.E.C. As I greeted seven of eight fellow teachers, I was told that the newborn daughter of the absent one had passed away during the night. Soon, five of the teachers left to console him. I stay, hoping I can attempt to catch up on teaching my senior level trigonometry class which has struggled since my first day at the school.

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Rob Martin, Phi Kappa Phi, received his degree in Mathematical Science from Purdue University. He is on a two-year contract with the Peace Corps teaching mathematics in Malawi, the fifth poorest country in the world, located in Southeast Africa. Its area and population are about the same as the State of Pennsylvania, but it covers only 0.4% of the continent as indicated on the map above. He teaches in the District of Ntchisi, an elevated area that gets as cool as 30°F but only as hot as 80°F. Classes range from 100-200 students with ages from 16 to 30 years. The teaching is in English, but many students struggle to learn it.



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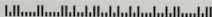
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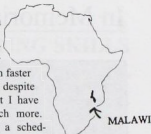
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Students walking by my house on their way to the primary school nearby yelled "Mzungu" (white person in their native tongue) at the top of their lungs while jumping up and down with excitement as soon as I opened my door. Some started repeating sentences in their language which I had spoken yesterday. Others attempted English asking "Where going?" Another, without my asking how she was, said "Fine and you?" Then laughter broke out as they heard each other speaking English.



Brother Martin with the Cross-country team

As I walked through a few acres of corn and up a hill to the school, I heard the 600 students chatting before classes. The school is a Distance Education Centre (D.E.C.). The secondary schools only accept 1% of the students while another 10% attend a D.E.C. As I greeted seven of eight fellow teachers, I was told that the newborn daughter of the absent one had passed away during the night. Soon, five of the teachers left to console him. I stay, hoping I can attempt to catch up on teaching my senior level trigonometry class which has struggled since my first day at the school.

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my lesson, hoping their friends will supply them with the notes I give. I then assigned two homework problems which later took me three hours to grade all 120 notebooks. Only 13 students answered both problems correctly. Soon, the seniors will be taking the Secondary Education National Examination. I estimate only about 20 of the students have a chance to pass the mathematics section of the Exam. If all of these pass, it would be a 400% improvement over last year's five. Nationwide, 10% will pass the mathematics section.

The Prefect rings the bell announcing the end of classes and the mad rush of students to leave the hot, crowded classes begins. Some, however, stay for extra classes which cannot be taught during the regular school hours. Others await football (soccer) or cross-country practice. One of the runners today asked me if he had to run, since yesterday during practice he stepped on a sharp stone which caused a deep cut on the bottom of his bare foot. To show respect, he was kneeling by my desk with his face looking down. Although this attitude seems extreme for a 28 year old student to a 23 year old teacher, it is engrained in their culture to act thus to those in authority over them. I released him from running today and he left the room walking bent over to show respect to the teachers standing near my desk.

After the "Late Classes" I started cross-country practice. As the coach, I have

been humbled by their ability to run faster than I have despite the fact that I have trained much more. Today was a scheduled easy run of 30 minutes which we run as a team. Each day we have these runs, I dispel some myths which they have heard about AIDS or about America. Today I told them about the discussions which occur between a pregnant woman in America and her friends. Here, talking about pregnancy is taboo since many times the baby and/or the mother will die during childbirth. So they were very surprised to learn about baby showers and ultrasounds.

As the team passed through the village, we again gained the attention of everyone. Some even joined us and soon I must have looked like "Forrest Gump" and his followers. We passed by the post office so I could retrieve my mail. Another letter from Mom with a section of our newspaper. As we returned to school, the teachers are gathered together with the one whose daughter had passed away. We had a prayer together for him and gave him some money to use for buying food for the family that will soon come to mourn with him. Then, I picked up my teaching materials and left.

MALAWI, CONTINUED PAGE 12



Rob Martin, Phi '96, received his degree in Mathematical Science from Purdue University. He is on a two-year contract with the Peace Corps teaching mathematics in Malawi, the fifth poorest country in the world, located in Southeast Africa. Its area and population are about the same as the State of Pennsylvania, but it covers only 0.4% of the continent as indicated on the map above. He teaches in the District of Ntchisi, an elevated area that gets as cool as 30°F but only as hot as 80°F. Classes range from 100-200 students with ages from 16 to 30 years. The teaching is in English, but many students struggle to learn it.

BEQUESTS

Loyal members whose wills provide bequests in any amount for Theta Tau can thereby benefit the Fraternity in perpetuity. Income from such a bequest will help Theta Tau just as if the member were continuing to make annual gifts which are so essential to the Fraternity's continued progress. A leaflet discussing the need for estate planning *Eleven Things to Remember* may be requested from the Central Office (800/264-1904).

ALPHA

David Gerald Barry, '61
Roy Swanson Dynesius, '36, 5/26/97
Richard Lee Jacobsen, '49
Clifford Byron Ohman, '39, 12/25/96
Bernard R. Prusak, '40

BETA

Florindo Peter Ambrosiani, '38, 6/26/96
Bruce James Nekervis, '36

GAMMA

Robert Warren Stewart, '32, 4/4/97

ZETA

Donald L. Flanders, '39, 3/26/97
Dwight Daeschner Kurth, '40, 7/8/97
Robert Shepherd Patterson, '27, 10/26/97
George Byron Stephens, '33, 6/9/97

MALAWI CONTINUED FROM PAGE 11

As I was leaving, a few students were cutting grass with machetes. Some were caught drinking beer during the evening while others were just misbehaving in class. Other students are packing their belongings as they have just been told to leave since their school fees have not been paid. On my way home through the cornfield, one woman was working while her baby was quite content strapped on her back. An older villager who does not speak English passes by me and says "Zikomo, Abwana...Zikomo, Zikomo..." meaning "Thank you, my boss, thank you, thank you." A common response for foreigners receive because of the large number of us who come to help their country.

ETA
Elliot Brown Grover, '28, 4/7/97

THETA
Robert Lee Taylor, '40, 7/10/97

IOTA
Joseph William Eisman, '43, 10/20/95
William Jarrard Goodwin, '44, 4/8/97
Bernard J. Gross, '33
Robert John Yochum, '49, 12/4/96

KAPPA
Edwin Francis Bicknell, '27, 4/30/97

LAMBDA
Frederick Dale Cortner, '41, 8/7/97
Edward Pixton Eardley, '35, 12/31/96

MU
Joseph Russell LeRoy, '43, 4/4/97

NU
Joseph Parke Franz, Jr., '46, 5/10/97
Joseph Edward Ward, '26

XI
Wesley G. Martin, '26, 5/14/97

OMICRON
Erwin Edward Beaudry, '41, 11/30/96
Harold Robert Hatcher, '48, 7/22/97
John Carson Nutt, '56
William Herbert Olson, Jr., '51, 4/16/97

Students from the primary school are waiting for me to come home; no television to go home to watch the "Brady Bunch" or cartoons so I am their entertainment. Some were ready to speak the English they had learned today. "I have 5 pencils" "What is *Agriculture*?" and most just reply "Hello, sir." Of course, all stopped what they were doing, whether it be playing with a ball made of plastic bags or eating a piece of sugar cane, and stare until I am out of sight or have entered my home.

I quickly started cooking rice on my kerosene type stove and sat down to read the section of news sent by Mom. I read every article, and even though they are over a month old, I find each one interesting. The Pizza Hut advertisement waters

TAU
Kenneth Francis Fellows, '30, 1/31/97
Conrad Anthony Reinhard, '35, 12/20/96

UPSILON
Leon King Smith, Jr., '52, 5/20/97

PHI
Harry Eason Curtis, '29, 8/24/97,
Charter Member

PSI
Edward Daniel King, '44, 10/31/94
Robert James Woody, '33, 3/3/91

OMEGA
Albert Wrede Hall, '33, 8/94

GAMMA BETA
Robert Henry Randall, Jr., '41, 4/9/97

DELTA BETA
Russell D. Harned, '43, 3/29/97

Correcting an Error

The Fraternity is pleased that **James R. Osina**, HB '66, is alive and well, and regrets that it published in the previous issue the erroneous report of his death which it had received. His address is 12754 Shepherd Hill Road, Willis, TX 77378.

my mouth and reminds me of Sunday nights at the Fraternity or going to all-you-can-eat buffets with pledge brothers. The church listings remind me of my friends and family at churches I have attended and Sunday afternoon feasts with my family.

After dinner, I wrote a reply to the family and began preparing for my classes tomorrow. I looked in the Peace Corps cookbook under "Pizza dough without yeast" and later I was paid a visit from my new church friends. My neighbors bring me some bananas from their tree and the children next door helped me fetch water. Then I realized - this is my home. Finally, before I retired for the night, I made a journal entry. Title: "An Average Day." ■

PERPETUATING THE FRATERNITY

CHAPTERS HONE RECRUITING SKILLS

At the National Conference, a Workshop, Phi Chapter's Award-winning presentation, and much discussion were centered on effective techniques to recruit students of high quality the chapter will want to pledge. Chapter Notes this time focus on this vital topic.

Three Strikes and You're In

This Conference workshop was designed to give a broad overview of the fundamentals involved with planning a rush program. The theme stressed the importance of clear communications and the negative effect of information overload. One way to avoid information overload is to group tasks into manageable multiples of three. Plan three main rush events. Plan three distinct main points for each event. Plan to intermix with a prospective on three different levels. The first being at one of three rush events. The second being at a social or professional event. The third being by e-mail or on campus. The three steps covered to plan a successful rush event were: 1. Utilize all student members, 2. Utilize alumni, 3. Utilize campus faculty. Each event should have one from each category sharing a few words. The workshop concluded by encouraging students to share with others successful ideas and address specific problems with their own chapter's rush.

Phi's Keys to Rush

Best Presentation Award went to Phi Chapter for its presentation on rush by **Aaron Hexamer**, '98, and **Daniel Colpi**, '98. Its purpose was to give a chapter a bare-bones model of a program it could adapt for itself.

Among the points stressed: be proactive and persistent in rush efforts. They spoke of the Three times "No" Rule - be sure a potential rushee declines an invitation to rush three times before giving up. The presentation included an overview of the three major sections of rush: obtaining names, inviting rushees, and the actual events. Phi Chapter's Rush presentation is available in its web site: <http://www.expert.cc.purdue.edu/~thetatau/>

A New Way to Rush

Due to limited engineering enrollment at Lawrence Technological University, **Ki Beta** seeks every edge available in competition with the three other fraternities on campus. So we came up with a technological advantage only engineers could perceive: Computers.



Starting with its old rush booth, a little paint was added to the pillars and the back walls, and a security box was built by Brother Bill Dismuke, '97, to protect the computer from theft. The next step was creating the Powerpoint presentation to display Rush Calendar and other Theta Tau information. The result was the best Rush Booth of all Greek organizations on campus. This year sound will be added to help spark additional interest in the presentation. And a new Powerpoint slide show will be added with updated graphics. Over 50% of the chapter had a hand in creating this extension of what Theta Tau and engineering represents.

Chi Beta Grows

In the last year **Chi Beta** has more than doubled its active membership. We finished out last year with the annual canoeing/camping trip over Memorial Day weekend during which many of our eight pledges earned their nicknames and were then initiated the next weekend. We also held our Teetering-for-Tots charity event in which we teeter-totter for 24 hours and raise money for a local charity.

Some of the brothers have been very busy helping the engineering college with its freshman orientation programs. We have been speaking about the fraternity during these events, helping the freshman register, and sponsoring cookouts. Next year's Rube Goldberg machine and contest are

already being planned as well as some new fundraising and community service ideas. We are hoping to have another successful year.

Eta Gamma Sets Record

Eta Gamma is now reaping the rewards of an active and successful rush. Our Fall rushees totaled over fifty students. This was Eta Gamma's largest rush class to date and we just started our Fall pledge class of twelve quality students. To put it simply: Do EVERYTHING! and get EXPOSURE!

We first assisted the College of Engineering in freshman orientation before classes had even begun. This was a great opportunity for us to make a first impression on the freshman class. During the first week of classes we advertised extensively for our two informational meetings which were held on the fourth and seventh days of classes. Our advertising included an informational booth set up in the engineering center lobby, chalk advertisements written on sidewalks near the engineering center, ads written on classroom chalkboards, hallway flyers, a mass mailing of rush information to all engineering students living in the dorms, and speaking to classrooms of students before lectures began. All rush activities were listed on wallet-sized cards which were distributed in the mail, at the booth, and at informational meetings. The large number and variations of advertisements were very effective in grabbing students' attention. Other rush activities included: a night hike in the mountains of Boulder (no one was injured), a party, and a barbecue.

The activities listed above are by no means so extraordinary that they, alone, attracted fifty students. However, our exposure was the key to our popularity this fall. ■

See also the **Omega** Chapter article, page 9, *Chapter Traditions* for additional membership recruitment activities.

Z Robert R. Rosander, '67, is President of Wichita Technology, Inc., in Wichita where he lives with wife Jan and son Andrew.

Π Christopher Krus, '93, was married in late August 1997.

P Brad Clark, '92, is a production engineer with Hewlett-Packard in Greeley, CO. He lives in Boulder, CO.

Σ Jay Pierce, '87, married Ann Harle on February 15, 1997.

Brett D. Steen, '94, lives in Chattanooga, TN. He is a process/product development engineer for Phelps Dodge High Performance Conductors and is in graduate school at the University of Tennessee at Chattanooga.

T Dan E. Miller, '65, is a manufacturing development engineer with Hewlett-Packard at their Integrated Systems Division in Sunnyvale, CA. He leads teams introducing new products into production.

John Speidel, '97, is working for Lockheed Martin in Syracuse.

Φ John F. Gustafson, '94, has taken a position with the European office of Detroit Diesel Corporation and will be living in The Netherlands for about two years. **Nathan Weiland**, '97, is a graduate student in mechanical engineering at Georgia Tech.

X Carl A. Shelley, '93, is a field service engineer at Vanguard Automation and lives in Tucson, AZ.

Ω Daryl Hawkins, '56, writes that he is enjoying retirement and lives in Hopkins, MN.

Keith Beck, '90, and wife Lisa live in Elmwood, NE. He continues to work at Ash Grove Cement Company in Louisville, NE. In June he hosted Glen Wilcox, Kelly Whiting, Sean Stucker, Shawn Klabunde, and Brad Osterloo during the College World Series in Omaha.

Brad Osterloo, '92, and Merrilllee were

married in October 1997.

James Peterson, '92, is working for RE/SPEC, Inc. in Rapid City, SD. He and his wife Tylee have a daughter Jessica who is one year old.

Chad Travnicek, '93, is a field engineer for Schlumberger and lives in Dallas, SD.

Patrick Hehn, '94, and Jody were married in October 1997.

EB Michael Benoit, '91, completed his MBA at the University of Detroit-Mercy in Spring 1997. He is a systems analyst with Ford Motor Credit Company in Dearborn, MI. **Chad Harnish**, '97, is a software engineer with Dearborn Group Technology and lives in Redford, MI.

HB The Fraternity is pleased that **James R. Osina**, HB '66, is alive and well, and regrets that it published in the previous issue the erroneous report of his death which it had received. His address is 12754 Shepherd Hill Rd., Willis, TX, 77378.

IB Jeremy M. Tschaep, '97, Student Member of the Executive Council, is currently participating in Semester at Sea. His ship left Vancouver on September 14 and will return to Port Everglades, FL, on December 23, 1997.

Anthony Copp, '97, is living in Crystal, MI, and working for Ford Motor in Ypsilanti.

NB Michelle Schleusener, '91, received a Master's degree in Industrial and Systems Engineering from Auburn University. She is currently working as a senior industrial engineer for Kraft Foods Post Division in Battle Creek, MI.

Dave Watry, '97, is a staff engineer with Kimberly Clark and lives in Saukville, WI.

EB Christopher Stockman, '97, is a plant investigative engineer in the Detroit Axle Plant of Chrysler Corporation. He lives in Warren, MI.

PB Mike Stevens, '92, and his wife Sandy welcomed a daughter Rachel Jean on May 29, 1997. They live in Oak Hill, VA (DC area) where Mike is a software engineer for Boole & Babbage, an automation software company based in San Jose, CA. **Michael Grandstaff**, '97, is an applications engineer with Structural Dynamics Research Corp. and lives in Wyoming, OH.

Ross A. Wagner, '97, is an industrial engineer with Brake Parts, Inc. and lives in Danville, KY.

ΦB Catherine Jacobs Viergever, '94, is a software engineer at General Dynamics in the Land Systems Division. She lives in Shelby Township, MI.

ΨB Jennifer Stapp, '97, is an installation engineer with Tokyo Electron America, Inc. in Austin, TX.

Angela Reagan Cotton, '97, married Cullan Cotton on June 7, 1997. She is a civil engineer with Carter & Burgess in Fort Worth, TX.

ΩB Frank Zagari, '97, is living in Valley Stream and working as an industrial engineer for Linear Lighting in Queens.

ΔΓ Rosaura Nolasco, '96, is a test engineer with Intel in Chandler, AZ.

Patricia J. Carder, '97, is on the Chemical Engineering Staff with Earth Tech and lives in Phoenix, AZ.

HT Tracy Ragland, '96, is currently a production engineer at Hewlett-Packard in Loveland, CO. **Adam Pederson**, '96, has moved to Seattle, WA, to pursue a career at Boeing as a project engineer doing structural design for the CALCM program.

Abdal Hamid Abouyssef, '97, (a.k.a. Mido) has returned to Egypt to continue his undergraduate education in ME at the American University in Cairo after spending a year with us as a foreign exchange student. ■



Heavy Duty Industrial Pumps

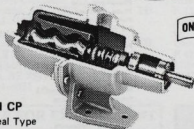
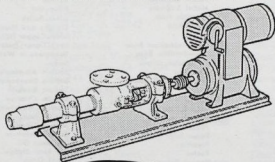
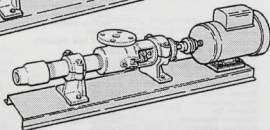
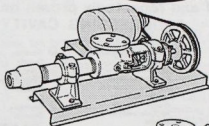


Models CL-CM-CG-CJ

less than 1 gpm to 400 gpm

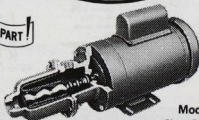
...pressure to 450 psi depending upon Model.

CONTINENTAL Pumps can be furnished separate or built into complete Units mounted on a Welded Steel Base and driven directly through a Flexible Coupling — V Belts — Gear Reducers or Variable Speed Drive Units by an Electric Motor, Gasoline/Diesel Engine or Air Motor and with specified Coupling or Belt Guard.



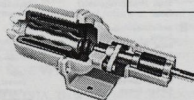
Model CP
Rotary Seal Type

ONLY ONE MOVING PART!



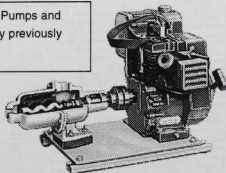
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Model CP
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CAPACITY
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to as much as 150 psi.



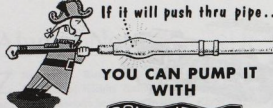
Model CPG
Gasoline Engine Driven Type

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Brewers Yeast
Brine, Calcium Chloride
Brine, Sodium Chloride
Butane, Liquid
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Calcium Brine
Calcium Carbonate Slurry
Calcium Chlorate
Calcium Chloride
Calcium Hypochlorite
Calgon (sodium hexameta-phosphate)
Candy Fondant
Caramel
Carbide Sludge
- Chlorinated Hydrocarbons
Carbon
Chloroform
Dichloroethylene
Ethylene Dichloride
Methyl Chloride
Propyl Chloride
Tri Chloroethylene
Chalcate
Chromic Acid (diluted)
Cider
Citrus Juices
Citric Acid
Clay, Insulator
Clay Slip
Coal Tar Oil
Coal Tar Solvents
Coffee, Soluble
Concrete (cement)
Coolants
Copper Nitrate
Copper Sulphate
Copperas
Corn, Cream Style
Corn Meal Mix
Corn Meal Mush
Corn Oil
Corn Starch, Cooked
Corn Steep Liquor
Corn Syrup
Cottage Cheese
Cotton Seed Oil
Cream
Creosote
Creosote Oil
Cyanide
Cyanide of Potassium
- D** Detergent Soap Stock
Diethylene Glycol (alcohol)
Diethylene Glycol
(monoethyl-ether)
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Distillery Wort
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- E** Edible Oil
Egg Slurry
Enamel
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Ethyl Alcohol
- F** Fat and Water
Fatty Acids
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Ferrous Chloride
Ferrous Sulphate
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Formaldehyde
Formic Acid
Fruit Juices
Fuel Oils
Fuming Sulphuric Acid
Furfural
Fusil Oil
- G** Gasoline
Gallatin
Glass, Ground,
Glass Polishing Compound
Glucose
Glue
Glycerine
Glycerol
Grain Alcohol
Grape Juice
Graphite and Water
Greases
Ground Meat
- H** Hash, Meat & Vegetables
Honey
Haps
Hydrochloric Acid
(muriatic acid)
Hydrocyanic Acid
Hydrofluosilicic Acid
Hydrogen Peroxide
Hydrogen Sulfide
- I** Ice Cream, Semi-Hard
Ice (cake)
- J** Jelly
- K** Kerassene
Ketones
Acetone
Ethyl Methyl
Methyl Acetone
- L** Lacquers
Lard
Latex
Lignol Liquor
Lignosol
Lime Slurries
Lime Water
Limestone Dust Slurry
Lined Oil
Liquified Gases (liquid CO₂,
butane, propane)
Lotions
Lubricating Oils
Lye (sodium hydroxide)
- M** Magnesium Chloride
Magnesium Hydroxide
Magnesium Sulfate
Manure
Marshmallow
Mayonnaise
Mercuric Chloride
Mercury
Methanol
Methyl Chloride
Mica Water
Milk
Milk of Lime
Mine Waste Water
Mine Water
Mineral Oil
Malasses
Mud (core drilling)
Mustard
- N** Naptha
Nickel Chloride
Nickel Sulphate
Nicotinic Acid
Nitric Acid
- O** Oil—Asphaltum Base
Oil—Paraffin Base
Oil Sludge, Waste
Opacifier
Organic Liquid Solution
- P** Paints
Pale Oil Sludge
Palmitic Acid
Paper Coating
Paper Pulp
Paraffin
Peas
Peanut Butter
Penicillin Mold—85% Water
Phenol
Phosphoric Acid
Photo Emulsion
Pickling Acid
Pie Filling—Cherry,
Peach, Apple, Berry
- Plaster
Plaster, Quick Setting
Plastics
Plastisol
Plating Solution
Polymer Slurry with AlCl₃
Potassium Carbonate
Potassium Chloride
Potassium Cyanide
Potassium Hydroxide
Potassium Nitrate
Potassium Phosphate
Potassium Silicate
Potassium Sulphate
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Preserves
Printing Inks
Propane
Pulps (fruit & vegetable)
Putty
- R** Red Oxide Primer
Resin
Resin Plastic
Resins
Roofing Cement
Rosin
Rubber Cement
Rubber Dough
- S** Salammoniac
Salt Brine 3% to 30%
Sand and Silt
Sardines, in Water
Sea Moss
Sea Water
Sealing Compound
Seam Paste
Septic Tank Effluent
Sewage
Shampoo
- Shaving Cream
Sheller
Silica Gel
Silver Polish
Sludges and Slurries
Soap, Copper Flake Slurry
Soap Liquid (thin)
Soapstone in Water
Soda
Sodium Aluminate
Sodium Bicarbonate
Sodium Bisulfite
Sodium Chloride
Sodium Hydroxide
Sodium Nitrate
Sodium Silicate
Sodium Sulphate
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Soy Bean Sludge
Spent Grain
Starch
Stybelite Resin
Stearic Acid
Sugar
Sugar, Liquid
Sulfurous Acid
Synthetic Soap
Syrup
- T** Talk Slurry
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Titanium Pigment
Tobacco Flavoring Syrup
Toluene
Tomato Pulp
Tomato Puree
Tomato Seeds and Water
Tomatoes, Cooked
Tooth Paste
Turpentine
- U** Urine
- V** Varnish
Vegetable Oil
Vinegar
Vinal
Viscose
Vitamin Concentrate
Vitriol—Blue
Vitriol—Green
- W** Water
(sewer, dirty, and
treatment chemicals)
Welding Rod Flux
Whiskey
White Lead
Wine (clear - sludge)
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- Y** Yeast
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520/881-8031
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605/343-7768
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313/832-4042
- *IB** 4026 West McNichols Road
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313/862-2488
- *KB** P. O. Box 2983
Mississippi State, MS 39762
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To: All members of Theta Tau

From: Dean W. Bettinger, Grand Scribe

Official notice is hereby given that the following individuals are no longer members of Theta Tau. Each member should take due notice thereof and govern himself accordingly:

Anthony Thomas Bavuso, Pi #949

Todd Aaron Bell, Sigma #815

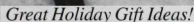
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