THE Z A P Of Theta Tau



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THE GEAR OF THETA TAU.

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2011 Theta Tau

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The Gear is the official magazine of Theta Tau Professional Engineering Fratteriny and has been published since 1909. The Gear is sent twice per year to all members for whom an address is on file, all chapters, parents of student members, and various engineering colleges across the country. Publication is in the fall and spring of each year with press rundistribution to approximately 17,500. The magazine is about people—our members & chapters, their activities & interests — but distribution is clearly to those with a scientific education, technical experience, and analytical minds.

Full color advertising space is available in virtually all sizes, shapes, and formats for affordable rates starting at just \$300 per issue. For more information, please contact Executive Director Michael Abraham at central.office@thetatau.org or 800/264-1904.



ON THE COVER

2011 Leadership Academy attendees enjoyed a boat tour in Chicago.

FROM THE Editor



Allison Pollard Tau Reta '05

You are the reason that I love being a volunteer

It is your stories, your feedback, and your interest in our fraternity that motivate me to continue to give back to Theta Tau Fittingly, the theme of this magazine issue is generosity, and it is due to YOUR generosity that Theta Tau is Engineering Leaders for Service, Profession, and Brotherhood. As you will read, our members are making time for our fraternity in their busy lives and volunteering to improve their communities; Theta Taus are learning to become better leaders, teaching children about science and engineering, protecting the environment, and rebuilding homes destroyed by a natural disaster.

Your generous support sets Theta Tau apart-you are making a difference



Mark Your Calendars-Upcoming Alumni Trip in California

March 9-11, 2012 in California Wine Country, For more information, join the Theta Tau National Alumni Club Facebook group or email NAC Vice President Katie Griffin at katie.griffin@thetatau.org

Expansion Highlights

ZETA DELTA CHAPTER INSTALLATION AT UNIVERSITY OF SOUTH CAROLINA Cristina Kubicki, Zeta Delta '12

On February 5, 2011, the University of South Carolina in Columbia, South Carolina was installed as the Zeta Delta Chapter of Theta Tau Since becoming a colony in January 2009, the group has grown and initiated over 50 members. Now it boasts a reliably large recruitment turnout in both the spring and the fall and has representatives of every engineering degree sponsored. The Zeta Delta Chapter is in the process of executing its largest fundraising event yet, the Pumpkin Chunkin', this fall. Teams from surrounding high schools that participate in the FIRST Robotics Lego League and many others are invited to an event that has the word of Zeta Delta Chapter to the community and business within it alike. Additional community involvement events are tutoring, the freshmen welcome committee participation, bowling nights, and Krispy Kreme fundraisers. The brothers of Zeta Delta were also proud to induct new leadership into office during the installation and performed a second initiation the Sunday following the installation with help from Stuart Kardian, Kappa Gamma '06, and the brothers of his chapter. The brothers of Zeta Delta were overwhelmed with the support from the neighboring chapters in this process and would like to thank everyone for being a part of this important step in our journey.

THETA DELTA CHAPTER INSTALLATION AT JOHNS HOPKINS UNIVERSITY Colleen Quinlan, Theta Delta '12 edited by Allison Tse, Theta Delta '13

On May 7, 2011, the Johns Hopkins University was installed as Theta Delta Chapter of Theta Tau. National officers, alumni, and students from the Atlantic region welcomed 47 new brothers into the fraternity. Hall of Fame Laureate Bob Miller, Omicron '41, also attended and congrarulated the new brothers.

In the past few years as a colony, we experienced a period of tremendous growth in both membership numbers and involvement. Our members participated in a number of community service projects, including Relay for Life and the President's Day of Service; we also volunteered at the Baltimore Center for Child Abuse. Furthermore, our professional development chairperson held weekly seminars in addition to organizing resume workshops and local plant tours.

The members of Theta Delta would like to thank all the national officers, alumin, student members, and guests who attended our installation for their support. We would also like to extend many thanks to those who have guided and advised us along the way-we are extremely garteful for your dedication, and we will continue to take your advice as we remain the continue to take your advice as we have the properties of the prope



Zeta Delta Chapter members and national officers



Theta Delta Chapter members



Omicron Chapter members Austin Gunn, Laura Mozdzen, Adam Smith, Alyssa Neiers, Jeff Skrentner and Nikki Becklinger at the 2010 National Convention in Denver.

Making **TIME** for Theta Tau

Laura Mozdzen, Omicron '10

When I first thought about joining Theta Tau at the University of lowa, I was hestant. I was already a Division I athlete, which meant practicing and competing at least 20 hours a week. In addition, engineering is not known to be an easy major, and certainly not one that many college athletes choose. However, I was assured that the chapter was understanding, and as long as I had a legitimate reason for missing an event or a meeting, there wouldn't be any problems. Four years later, I am now an alumna of the Omicron Chapter of Theta Tau, having held the positions of Treasurer, Vice Regent, and Regent over my years as astuder.

I started off small. My chapter needed a treasurer after I pledged, to I voluntered. Being treasurer meant that I needed to know everyone in my chapter, be able to contact them, and track them down to pay their dues if need be. However, these skills also meant it was easier to find brothers to do other things, like homework or something fun. Before long, I found myself hanging out with my Theta. Talu brothers more than my teammates.

I don't want to say that time wasn't an issue-it was. There were times when I wasn't able to attend initiations because of swim meets. And of course, there was the ever-present homework load

However, people make time in their lives for the people and things that are important to them, and I did. I learned to be efficient at doing my homework, planning events, and the rest of my schedule. If something is important, it's not hard to stay up an extra 30 minutes at night in order to fit it in.

Now I am currently attending the University of Illinois for my Ph.D. in Chemical and Biomolecular Engineering. In the end, I am extremely glad that I joined Theta Tau, as I met some of my best friends through the fraternity, and I continue to make time for Theta Tau.

LEADERSHIP ACADEMY 2011 RE-CAP

"The Leadership Academy allowed me to rekindle my leadership skills from my time as a Sergeant in the U.S. Army, identify my weaknesses, and gave me an entirely new perspective of myself as a leader." - Andrew Musto, Omega Gamma '12

The Leadership Academy is an interactive three-day program designed to inspire and equip participants to become visionary leaders, and it is one of the ways we live Theta Tau's mission of developing Engineering Leaders for Sensice, Profession, and Brotherbood. Over half the funding for the Academy comes from your generous donations to the Theta Tau Educational Foundation, and nearly every chapter is represented at the Academy as a result of your support, we've witnessed a growth in chapter leadership and performance over the past decade. This summer, Theta Tau members from across the nation converged in Chicago for the 2011 Leadership Academy.

The Leadership Academy is built on the Leadership Challenge model by Jim Kouzes and Barry Posner, which provides participants a core understanding of leadership practices, their personal strengths and weaknesses, and a fine mivinoment to practice new skills so they can more effectively transform their chapters and workplaces. The 2011 Leadership Academy offered a very special experience for our attendess with the master in leadership tratining and education, Dr. Barry Posner, joining us for a Friday attention essensier was a traly unique opportunity to meet and learn from a world-renowned expert in the field.

At the 2011 Leadership Academy, we took some time to recognize chapters for their operation and members for their achievements. Inducted



Alumni Programs Director, Jessica Adams (Eta Gamma '05), working the Academy registration table.

into the Alumni Hall of Fame for 2011 were Joseph W. Drey, I Rho '59, Milo Kechum, Kappa '31, William G. Lowrie, Sigma '66, and Glen A. Wilcox, Omega '90. Those named Oustanding Student Members by their chapters were recognized, and Ashley Chastain, Xi Gamma '10, was named the Robert E. Pope Oustanding Student Member for the 2010-11 shool year. Recognized as Oustanding Chapter Adviser were Kelli Delfosse of the University of Colifornia, Davis

The Best Website award was presented to Tau Gamma Chapter with Kappa Beta second and Chi Gamma third. Chi won the Best Newsletter Contest, with Tau Gamma second and Chi

Gamma third. The Best Photograph award went to Epislon, Zeta Gamma, and Kappa Beta. The Chapter Service Award was presented to Epislon Chapter for first place and Omicron Gamma for Second. Chapter Efficiency awards were presented to Zeta, Xi Beta, Upsilon Beta, Chi Beta, Omega Beta, Delta Gamma, Ex Gamma, Air Gamma, A

Receiving certificates for scoring 700 or more points in the Chapter Performance competition during 2010-2011 were: Alpha, Mu, Xi, Chi, Epsilon Beta, Kappa Beta, Xi Beta, Chi Beta, Delta Gamma, Theta Gamma, Kappa Gamma,



Mu Gamma, Nu Gamma, Omicron Gamma, Pi Gamma, Rho Gamma, Tau Gamma, Upsilon Gamma, and Chi Gamma.

The following chapters demonstrating at least 20% growth over the previous year were recognized: Alpha, Kappa, Upsilon, Epsilon Beta, Kappa Beta, Xi Beta, Delta Gamma, Land Gamma, Wang Gamma, Man Gamma, Tau Gamma, Upsilon Gamma, and Phi Gamma. And, those chapters that have maintained at least 40 members during the period were also recognized: Epsilon, Zeta, Kappa, Phi, Chi, Gamma Beta, Tau Beta, Psi Beta, Delta Gamma, Zeta Gamma, Epsilon, Zeta, Gamma, Theat Gamma, Theat Gamma, Theat Gamma, Theat Gamma, Theat Delta, Delta Gamma, Theat Gamma, Papelon Gamma, Rho Gamma, Tau Gamma, Upsilon Gamma, Rho Gamma, Tau Gamma, Upsilon Gamma, Psi Gamma, En Delta, and Theat Delta.

In addition, for meeting its Chapter Size Targets, Zeta, Gamma Beta, Delta Gamma, Eta Gamma, Lambda Gamma, Tau Gamma, and Psi Gamma were recognized, and each was awarded a \$2.50 prize. This was a record for 2010-11, and chapters are encouraged to review their 2011-12 size target with their Regional Director so that we can recognize and reward even more chapters in 2012.

Dr. Barry Posner, co-author of The Leadership Challenge, led an interactive session on what makes an effective leader.

"I took back the action plan, parking lot, and categorizing problems together to my chapter for our weekly meeting on Sunday. They all worked out really well during the meeting.

- Rodney Summers, Chi Beta '15

What is the Parking Lot?

At the beginning of your next meeting, write "parking lot" on a flip chart or dry erase board. When ideas are off topic, write them in the "parking lot." This acknowledges the individual, but reminds everyone to stay focused on the item at hand.

Remember to visit the parking lot at the end of the meeting. A very brief end-ofmeeting review of the parking lot should assign to each item someone to "own" it and follow it to resolution. Every item from the parking lot should make a later appearance as a part of a future agenda item, on the next edition of the parking lot resolution list, or on the cumulative parking-lor-awaiting-resolution list, whothing should disappear into the void. Each item's owner is responsible for tracking it.

Alumni Hall of Fame Laureates Inducted

IOSEPH WENDELL DYFR. IR. RHO '69. for Outstanding Service to Profession Vice Admiral Joseph W. Dyer (U.S. Navy, Ret.) holds a bachelor's degree in chemical engineering from North Carolina State Univer-



sity and a master's degree in finance from the Naval Postgraduate School in Monterey. California, Brother Dyer currently oversees operations at iRobot as Chief Operating Officer. Previously, he served as president of the Government and Industrial Robots division Brother Dyer came to iRobot in 2003 from a career in the U.S. Navv. He last served as the commander of the Naval Air Systems Command, where he was responsible for research. development, test and evaluation, engineering and logistics for naval aircraft, air launched weapons and sensors. Dver's naval career also included positions as naval aviation's chief engineer, commander of the Naval Air Warfare Center, Aircraft Division and F/A-18 program manager. Earlier in his career, he served as the Navy's chief test pilot. He is an elected fellow in the Society of Experimental Test Pilots and the National Academy of Public Administration. Dyer chairs NASA's Aerospace Safety Advisory Panel

MILO KETCHUM, KAPPA '31. for Outstanding Service to Profession Milo Ketchum graduated from the University of Illinois with a bachelor of science degree in civil engineering in 1931 and a masters degree in the same field in 1933

Brother Ketchum started his career at the U.S. Bureau of Reclamation in Denver. He later worked at the Portland Cement Association here in Chicago, and the Case Institute in Cleveland. He founded Milo S. Ketchum. Consulting Engineering and served as a partner in several consulting firms for many years.

He was a Visiting Professor at Pennsylvania State University and later was Professor at the University of Connecticut for 16 years, before spending the last 20 years of his career as a consulting engineer in Denver.

Major projects of Ketchum and his firm include the McDonnell Planetarium at the St. Louis Science Center, International Center at Broadmoor Hotel in Colorado Springs, Mummers Theatre in Oklahoma, Morris Mechanics Theater in Baltimore Denver Convention Center and McNichols Arena in Denver.

Milo Ketchum published Handbook of Structural Details for Buildings, and also The Status of Structural Engineering in the United States of America for the Institute of Structural Engineers at its 50th Anniversary Conference in London in 1958. He was Editor of Structural Engineering Practice magazine from 1982-84 and wrote various editorials, among them-Structural Engineering Education, Creativity in Structural Engineering, Problems of Computer Usage, and What Have Our Complicated Specifications Accomplished?

Brother Ketchum was a fellow of the National Academy of Engineering and a member of the American Concrete Institute and the American Society of Civil Engineers. He received an Honorary Doctorate from the University of Colorado, the University of Illinois Distinguished Alumni Award, the Turner Medal of the American Concrete Society, the Outstanding Engineering Achievement Award from the American Consulting Engineers Council for the TWA overhaul facility in Kansas City and the Outstanding Structural Engineering Achievement Award from ASCE for the University of Idaho stadium,

WILLIAM GROVER LOWRIE, SIGMA '66. for Outstanding Service to Profession

fund drives.



chemical engineering degree from The Ohio State University in 1966. Brother Lowrie served Sigma Chapter as Regent for two years in 1964 and 1965 and helped stage the Theta Tau National Convention in Columbus OH in 1964. He has been a regular contributor to Sigma Chapter

Brother Lowrie worked for a total of 33 years for Amoco before retiring in 1999, starting after graduation in a variety of engineering management positions of increasing responsibility. From 1989-1992 he served as President of Amoco Oil Company in charge of worldwide refining and marketing. From 1992-1996 he was President of Amoco Production Company in charge of worldwide oil and gas exploration and development. From 1996-1999 he was President and Director of Amoco Corporation. For a short period following the merger of BP and Amoco in 1999, he served as Deputy CEO and director of BP Amoco,plc. Since 2003 he has served as Director of Willams Companies, Inc. and is currently Chairman of the Audit Committee.

William Lowrie is a member of the Society of Petroleum Engineers, serving as Section President and serving on numerous committees for the national office on technical education and national meeting programs. In 1998 he was named a Distinguished Member of that society.

Brother Lowrie has been honored by The Ohio State University College of Engineering as Texnikoi Outstanding Young Alumnus, Distinguished Alumnus, Benjamin G. Lamme Gold Medal for meritorious achievement in engineering, and the Meritorious Service Citation. The University bestowed on him the Everett D. Reese Gold Medal for exceptional service in private philanthropy in 2004 and the Alumni Medalist Award in 2008 by the Alumni Association for professional excellence and bestowing great reeffl on his alima mater. The American Institute of Mining, Metallurgical and Petroleum Engineers presented its Charles E. Rand Gold Medal for distinguished achievement in mining administration in 2001.

William Lowrie was active for many years in Junior Achievent serving on the JA franchise board in Calgary and for 14 years on the National Board of Directors. He served on the 4H National Council Board of Trustes for five years, two as Chairman. He currently serves on the Nature Conservancy board of the South Carolina chapter. He was a significant supporter of United Way in Chicago for 20 years and held leadership positions in its annual campaign.

Brother Lowrie served The Ohio State University in a variety of ways over the years, including membership on the Chemical Engineering Advisory Board, Dean of College of Engineerings Industry Advisory Board and for 12 years on the Board of the University's Foundation, three years as Chairman. In 2009 in recognition of his support for the construction of a new building to house the Department of Chemical and Biomolecular Engineering, the Board of Trustees named the department the William G. Lowrie Department of Chemical and Biomolecular Engineering.



OMEGA '90, for Outstanding Service to our Fraternity Glen A. Wilcox earned his bachelor of science in mechanical engi-

GLEN A. WILCOX.

neering from the South Dakota School of Mines and Technology in 1990. Brother Wilcox served his chapter as Corresponding Secretary and Vice Regent and was captain of the SD Tech football team.

Brother Wilcox started his career as a process engineer at John Deere, where he worked for more than three years; he was responsible for establishing vehicle assembly line methods for large row crop tractors. He them worked as a project engineer at the Amenna Division at Centurion where he coordinated all aspects of the product development cycle involving concept, design, prototype, scale-up, production, and cost reduction. Here Brother Wilcox was an inventor of cellular telephone antennas and was granted two US Parents.

For the last 15 years he has served as project technical leader and now category manager at Novartis Consumer Health as a technical resource in the purchasing group, handling all supplier quality issues related to packaging components, supplier initiated changes, and cost reduction projects.

Brother Wilcox has been an outstanding National Officer for Theta Tau Fratenity, starting as Western Regional Director 1990-1994, Grand Marshal 1994-1996, Grand Vice Regent 1996-2000, and was elected Grand Regent in 2000 at the National Convention in Tempe, AZ and served with distinction through the Fraternity's Centennial Convention in Minneapolis, MN in 2004.

During Grand Regent Wilcox's tenure, five new chapters and numerous colonies were installed; the Educational Foundation's Leadership Academy grew due to Fraternity support; Risk Management Policies were formally adopted; the 2000 Alumni Membership Directory was published; the Fraternity website re-launched;

the first online membership directory launched; the Pledge & Membership Manual expanded to its current page count and published; the first fraternity-wide recommended New Member Education program was formulated and distributed; the number of regions expanded; and the Fraternity celebrated its Centennial.

Brother Wilcox has served as Church Council Leader for his local Methodist Church, is a Master Mason in the Masonic Lodge and is an avid fan of Lincoln Stars Hockey.

Brother John Michael Dealy, Zeta '58, was presented with his Alumni Hall of Fame Laureate plaque during a dinner with Grand Regent Liv-

ebec on June 15 2011

ingston in Montreal, Quebec on June 15, 2011.
Brother Dealy was inducted into the Theta Tau
Alumni Hall of Fame in 2010.

Brother Chester Lee, Theta '70, was presented with his Alummi Hall of Fame Laureate plaque during a dinner with Grand Regent Livingston and brothers in New York City on June 16, 2011. Brother Lee was inducted into the Theta Tau Alumni Hall of Fame in 2010.



From left to right: Brother Al Lau, Theta '71; Brother Chester Lee, Theta '70; Grand Regent Livingston, Gamma Beta '92; and David Chew. Theta '71.

Focus on Community Service at the University of California, Berkeley *Epsilon Chapter*

Austin Chang, Epsilon '13, Spring 2011 Event Coordinator



Pictured left: Stacey Chueng, Epsilon '12, forms a bond with a young mentee at Discovery Expo. Pictured below: Young mentees learn some basic circuitry at Discovery Expo.

Photo credits: Nikolas Katigbak, Epsilon '12



The Discovery Expo is a children's fair dedicated to providing campus societies the opportunity to share in the growth of local youth. The event targets underprivileged school children from grades 3-8 and gives them the opportunity to see the excitement of higher education and careers in science, technology, engineering, and mathematics (STEM). The need for the Discovery Expo is evident from the lack of resources offered to the youth around the Berkeley/Oakland area. namely in the areas of engineering and sciences. This event specifically targets these subjects in order to give young students an experience to remember. Our hope is that Epsilon Chapter's service to these children will inspire them to become future engineers, doctors, and scientists.

This year was the second annual Discovery Expo; last year, the Discovery Expo won the UC Berkeley ASUC Oski Award for "Educational Event of the Year." Compared to last year's event, attendance grew 25% in 2011. The Discovery Expo served over 70 kids and allowed each of their mentors to be involved in their growth and development. One hundred percent of the student members and pledges of Epsilon Chapter volunteered to make this event a success. Between designing and testing Jeson plans to practicing the Jesons prepping supplies to to practicing the Jesons to preprint a Jesons J

Brothers created eight interactive booths to allow kids to explore professional fields that focus on engineering, medicinal, and general science disciplines. Lessons included the chemistry behind Coca-Cola and Mentos rocket launches and the making of ice cream through ice and salt. Brothers also provided lessons on simple conservation of energy and circuitry in order to give kids an opportunity to apply their knowledge to build protective egg drop capsules and be hands-on in creating a personal antiburglary knick-knack box, complete with an alarm system.

We feel that this is a great method for outreach to the local youth and hope to make it an annual chapter event for years to come. If a few of the 70 kids that attended this year want to pursue a career in higher education, then the Discovery Expo event has done its job.

ZETA CHAPTER'S UPCOMING Centennial Celebration in Lawrence, Kansas

The student members of Zeta Chapter at the University of Kansas look forward to welcoming alumni members back to Lawrence for this special event to reaffirm 100 years of brotherhood.

The Zeta Chapter Centennial Celebration Weekend will commence in the evening of Friday, April 13, 2012, with an open-house reception serving hors d'oeuvres. Saturday's events will

begin with a lunch to reacquaint with good friends followed by the option to participate in an afternoon of various social events around Lawrence. The day will culminate with an evening banquet hosted at Maceli's in downtown Lawrence.

For more information email: zetathetatau@gmail.com or visit http://sites.google.com/site/kuthetatau/



THETA TAU HONORED AT SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY



Dr. Howard Peterson, Omega '50, in front of the residence hall named in his honor with student members of the Omega Chapter. Dr. Peterson is lovingly referred to as Dean Pete because of his 35 years as Dean of Students, and he still volunteers at the School of Mines as a Scholarship Coach.

Engineering and Business Mix for a GREEN FUTURE David Sherman, Omicron Beta '06, Alumni Adviser

In the first guarter of 2011, Alumni Adviser David Sherman worked

"I love my job," remarks David Sherman, with a huge smile. "It's the most technically challenging position I've ever had. And therein lies the greatest education," As a project engineer at Mercedes-Benz Research and Development NA, Inc. in Ann Arbor, Michigan, Sherman oversees the vehicle procurement process for a new emissions law. CAP2000.

"In the past, automotive companies certified their newest green emissions technology as the last step in engineering. Once the designed vehicle passed the EPA tests, new models were built at the factory and sold to the public. CAP2000 added a greater challenge. Two years after sales, auto companies must bring a few of those same vehicles back to the same engineering center where the design was born and certify the vehicle is still producing environmentally clean."

It's an ingenious challenge to automakers: prove to the EPA that innovative green technology lasts in the real world.

Can you imagine receiving a call from a real Honda engineer? "Sir, can we borrow your Fit for a few weeks? In the mean time, please enjoy a brand new Fit for a few weeks as our thanks, plus a \$300 gift card to RFL."

Sherman performs similar requests on behalf of Mercedes-Benz. "It's great to meet cus-

tomers, share their passion for the products, and connect with them. They get to sample our newest models, hybrids, and BlueTec Diesels-all of our latest green technology, And we have the opportunity to learn more about how our products perform in the real world with real customers, CAP2000 may seem a burdensome law, but it's truly a great opportunity."

Beyond the fun, there are significant business responsibilities. Sherman also manages the business side of the program.

"I'm responsible for a half-million dollar budget, timing, and the deliverables. I work closely with my team to plan procurements-when each vehicle will arrive at the facility. Not only do I have to ensure the technicians have enough work. I must balance weekly revenue targets for management. Each procurement must be planned weeks in advance to meet everyone's needs. It has truly challenged my business skills as an engineer."

But Sherman's passion shines through. "I may be planning business strategy with the company's EPA liaison in the morning and fueling an E63 "Rocketship" at the gas station two hours later. You should see the envious gazes I get at the gas station," he says with a wink. "It's a truly amazing job."



THE REWARD OF A LONG CAREER...RETIREMENT

Michael T. Garrison, Zeta '6.

Brother Mile Garrison, Zeta '62, rettred from Conge Buler Associates in Lenox, Atmass in 2004. This coliminated a great career in mechanical engineering, and one Borber Carrison is enjoying the fruits of life. He originally learned to fly in 18'99 and in 19'76 became a flight instructor. Today he flies several times a week both in his role as an EAA Designated Bile Essamine; the person that conducts the Practical Test and issues the pilot certificate to a new pilot, and as a flight instructor. He is also an instrument and multilengine flight instructor and one of the very few Muster Certified Flight Instructors in the country.

Brother Garrison is also a Master BBQ Judge, and he brought together several of his former students to form the Hying BBQ Judges. They fly around the country judging BBQ and have a great time. He publishes a monthly column on the "Adventures of the Hying BBQ Judges" in the Kansas Ciri BBO Society's monthly publication, the Bull Sheet. It just doesn't get any better than this as Mike reminiscences about retirement.

In September, 2009 the EAA awarded him the Wigils Brothers, Master Plack Award for, 50 years of accident fee flying. He is a Silver Charter member of the Society of Awation Flight Educators, (SAFE), a member of the National Association of Flight Instructors, (NAFI), and a 51 year member of the Awards Downers and Plions Association, (AOPA). He publishes regularly in The Cirrus Flor and has published in Private Flora and AOPA Flor Is a addition to all of this, he and his wife of 50 years, Roberta, treat themselves to several ruises each very

A Topeka, Kansas, native, Mike attended the University of Kansas on the Navy NROTC Scholarship. His third Class Midshipman Cruise was to Europe on the USS Cassin Young which is now a

museum in Boston, aloneside the USS Constitution His Second Class Mission was to Corpus Christi. Texas, for aviation training and Coronado, California, for Marine Corps training, His Third Class Cruise was aboard the USS Marshal out of San Diego. He served as Regent of Zeta Chapter from 1961-62. After he was commissioned an Ensign he served two years on the USS Peterson out of Key West, Florida. He picked up the ship in Guantanamo during the Cuban Crisis in October, 1962. Following sea duty he served at the Naval Supply Research and Development Facility in Bayonne, New Jersey, and he earned his master's degree in mechanical engineering from Stevens Institute of Technology in Hoboken, New Jersey, Lieutenant Garrison resigned his commission in 1966 and joined the Kansas Power and Light Company in Topeka for 12 years. Here he worked on one of the first Limestone Scrubbers for removal of SO2 from stack gases.

As his career expanded he moved to Kansas City where he joined AC Kirkwood as Vice President of Business Development for another 12 years. During that time he was President of the Kansas Engineering Society, IKES, in 1990, President of the Kansas Groy Chapter of the Society for Marketing Professional Services (SMPS) and Profesioned Testine Clark of the Engineers Club of Kansas City. He concluded his care with 15 years service as an owner and Director of Business Development for George Butler Associates, a 300 person engineering firm in Leneus, Kansas. The ME Department at XL awarded Brother Garrison their Distinguished Allumin Award. Dots careers the beginning of the article.

Brother Garrison says:

For those entering your engineering career, it is a wonderful profession and a decision that I would never change. I had some great experiences, many challenges, and worked with some great professionals. I sincerely hope that at the end of your career that you have the experiences and fun that I am having at the end of my engineering career. Go For It!



Brother Garrison in a Cirrus SR-22 wearing a Kansas Jayhawk shirt.

Mu Chapter

Sailing Through the STORM

Keyannah Holloway, Mu '13, Corresponding Secretar







op row L-R: Mu Chapter house. Elizabeth Cheney, Mu '10, articipating in Habitat for Humanity. The first rainbow after the torm-a symbol of hope for all of Tuscaloosa.

ottom row L-R: Brian Lashomb, Mu '08, at one of Tuscaloosa's

Tuscaloosa, Alabama was hit by a F4 tornado on April 27, 2011. At least 15 student members and pledges were at the Mu Chapter house at the time of the tornado.

We wanched the tornado his a transmitter down the street and started to panic. We lost power and communication with the rest of frown. A hig portion of the city was destroyed, and six University of Alabama students (along with more than 50 other people) were killed. We were lucky and didn't received damage, and we were all oksy. Our school year was terminated, and our focus turned to helping the people of Tusacolosaw hos had for properties. and loved ones. We are still working towards seeing Tuscaloosa get back on its feet, and so far we have donated clothing and food; we have also helped with various projects around town including Habitat for Humanity.

Although the tornado disturbed some of our final projects, we still managed to have a thriving year. We had a goal to complete 600 hours of community service and ended up with 1000 hours. We also had a goal of 12 new initiates for the year and ended with 16. We finally achieved our goal of reaching 1500 members last semester and are excited to see 1600!

Inaugural offering of the Steven Zellers Hammer and Tongs Scholarship Gross Alan Grance, Phi '11



Phi Chapter members award scholarship to Alec Smith

This scholarship, offered to all incoming male freshman engineers at Pundue University and named after one of Phi Chapter's best conributing alumni, was made possible due to efforts from the Alumni Board and officers. I led the committee that created the scholarship criteria, the explanatory documents sent to student's homes, the online application, and the process for determining a recipient.

The scholarship was a great success. Twentyone applications were received, leading to eighten candidates interviewed at the Phi Chapter facility. The scholarship was awarded to Alec Smith of Plainsfield, IN. Mr. Smith was the most well-spoken candidate interviewed and boasted a great academic record, as well as leadership experience and the philanthropic nature necessary to become an exemplary engine.

Phi Chapter has benefited from this offering in many ways: by bolstering our reputation amongst the academic community at Purdue, by increasing awareness of Theta Tan Fratering inty as an organization on campus, and by meeting some of the best and brightest students who are within our recruiment pool. It truly was a rewarding experience for the selection committee and has already shown to assist the entire chapter in recruitment and community relations.

Your child's safety should always come first.



At GEICO, we understand the importance of solid safety engineering. When it comes to your child's safety restraints, be especially careful. If your vehicle's safety belt system isn't compatible with your child's safety restraint, don't force it. There are special clips, available from car dealers, that can help fix this problem. After the restraint is secured in the back seat, and your child is buckled in safely, you can drive off with peace of mind. Auto safety—now that's a policy we can all be proud of.

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Theta Tau Engineers Get Together in California

Jim Gibboney, Phi '58

In the spring of 2011, Freeman Rittenbouse, Phi '37, was wondering how to celebrate his 75th birthday. He decided to mixe some Pardue brothers and their wives to California for a guthering at his home near searamento. When he graduated in 1987, he went west to Southern California. But most of his buddies went east. So he emailed several invitations across the country.

Not everyone could come, but two said they would, in Park, Phi 'S', roun Knowille, fremsees agreed to stop with his wife on the way home from their Golden Wedding amiversary trip to Alaska on Labor Day weekend. My wife and I then planned a west coast vacation and could drop in on their way home from their California tour which also ended on Labor Day weekend. Both couples would fly from Iox Ancels on the sune Palare.

Brother Rittenhouse and his daughter Diane met both couples at the airport on Sunday afternoonwhat a meeting! Freeman hadn't seen the Gibboneys for 20 years, the Parks for 45 years. The three engineers (all 75 years old) have advanced degrees and have retired from successful engineering careers: Rittenhouse from several California, Utah and Texas aerospace companies; Park worked for several contractors that operated the Oak Ridge National Laboeatory for the US Peparment of Energy-Union Carbide in Oak Ridge, Tennessee was one but not the only; and I retired from Lockheed-Martin in Orlando, Florida.

The next day, Labor Day, the three couples swised the annual celebration of Gold Rush Days in Old Sacramento; it was to Sacramento that thousand of men came after it was announced that gold had been discovered in California. The old section of Sacramento was the perfect setting for the celebration: a locale where the few streets are paved in cobblestones (some covered with sand for the week-endig the sidewalds are all woodeny the stores and the buildings are all original or reproductions. Many groups were on hard to renare gain fights, extinguish an imaginary fire at a building that was once a bordello, and to give speeches in the street on temperance and the abolition of slavery, all in period

Lunch was on the top deck of the Deha King, a pald, die wheel seamboat that once pile diet Neazamento River to San Francisco and back. In that era (mid 1800a), the river was the only way to San Francisco. After lunch, we watched a reenactment as a Pony Express rider rode in to Old Sacramento, which was the western terminus of the Pony Express riders. The horse, rider, and mail pouch would then ride a steam boat to San Francisco.

The following day was spent at lessure at Freeman fall fall's home. The sperced a pleasure IRO Junch in the backyard in wonderful California weather. The rest of the day was spent relaxing and trading yarns about driving trips to South Bend, New York. City, Iowa City, New Ofleans and other escapaded during their time at the Thea Tau Chapter house. Like all great gatherings, this one came to a close too soon. The next day the two visting coughts turned in their rotal car and flew home, taking great memories of a truly enjoyable Thea Tau get coughts.



Sharon Gibboney, Jim Gibboney (Phi '58), Lila Rittenhouse, Freeman Rittenhouse (Phi '57), Jim Park (Phi '57), and Cynthia Park

VIRGINIA TECH MEMBERS Volunteer in Ghana

Abigail Watson, Psi Gamma '12

Ben Anderson, Psi Gamma '12, and Abby Watson. Psi Gamma '12, recently traveled to Ghana to pursue a community service engineering project through Community Water Solutions (CWS), Community Water Solutions is a not-for-profit organization that aims to bring clean water to rural communities in Northern Ghana. The villages that work with Community Water Solutions lack access to potable water, and it is very unlikely the main water distribution network will extend from the main city of Tamale to these rural villages in the next 25 years. These communities rely solely on a dugout reservoir that fills with water during the rainy season. The "dugout" water is highly turbid and riddled with disease. In result, many people die from diarrheal disease, especially children under the age of five

Unlike many other organizations with similar goals, CWS provides a sustainable water source for communities that are willing to work in a partnership with the organization. The Community Water Solutions water treatment model is on a community-sized scale and is easily incorporated into the villages that choose to be involved. The treatment system itself is very simple-water is collected from the dugout reservoir, placed into three large drums. and treated with a simple coagulant. After sedimentation, the clear water is moved into a large rank where it is treated with a disinfectant tablet. Once disinfection is complete, the village members may collect water using "clean water" buckets provided by CWS from the tan out of the large tank. Education about the distribution of the clean water is a very important aspect of the Community Water Solutions implementation process. After providing each household in the village with one "clean water" bucket. CWS ensures that all community members understand that the water may not be touched prior to drinking to avoid re-contamination.

In order to make these treatment centers a longlasted component in each village, CWS promotes village and women empowerment and requires that the villages follow a very simple business model. First the village is given the opportunity to make decisions regarding the treatment center, including the loation of the center as well as the election of the women that will an the center. After the women are selected by the village, CWS trains the women to maintain the treatment center as well as how to collect a small fee for each bucker filled with clean water. Not only does this component of the CWS water treatment model allow for the women working at the center to make a small profit, it ensures that the center could run independently of CWS. The fees are collected in order to purchase additional village works with CWS in an amicable manner and follows basic CWS rules, permanent CWS employces will monitor the village quite frequently to make sure the autility of the water is always safe.

Brothers Anderson and Watson participated in the Community Water Solutions fellowship program during the summer of 2011. This program allows students of any background the opportunity to work in groups to implement these water treatment businesses. Students are placed into teams of frout and are responsible for raising \$2,300 each to cover the costs of the treatment centers and their stay in Ghana. Each team is assigned to a village and must introduce, implement, and monitor the CWS water treatment system over a three-week period. This is an amazing opportunity for any one that is intersed in community service constrainties alroads.

I would personally like to thank Allison Pollard, Tas Beat 95, for donning to this cause on our behalf. Each donation made such an amazing impact on the lives on hundreds of people that have rever had the opportunity to drink clean water! I gained a new outlook on like, and the privileges I have each day that many people do not have after living and working in Ghana. I would recommend any Theta Tau pursae an opportunity like this to not only broaden your horizons, but change the way you look at life.

If you would like to learn more about Community Water Solutions and the fellowship program, please visit: http://www.communitywatersolutions.org/







Pictured top – Abigail Watson, Psi Gamma '12, pictured middle – Ben Anderson, Psi Gamma '12, pictured bottom – The Community Water Solutions treatment system.

Teaching Florida Children Science The Viva Technology Program

Gina Chin Fatt, Omega Gamma '12, Scribe

The Omega Gamma Chapter at Florida International University has been involved with the Viva Technology program since spring 2010. Viva Technology is an educational program that promotes an interest in science, technology, engineering and mathematics (STEM) to K-12 grade students, teachers and parents. The program offers a hands-on experience for the students with challenges in design, building and innovation. Viva Technology is part of a larger ton-profit organization called Great Minds in STEM. This organization offers many resources and programs for the recognition and recruitment of Hispanics in STEM fields.

The program involves a parent orientation and the teacher day, which involves our participation and the teacher orientation. Our participation in the program consists of a full school day beginning at 6:30 am with setup and a brief introduction from the program coordinators. Each "college captain" is assigned agroup of 10 students and for the day, we couch the students through three handson activities that include the construction of windmills, catapults, telegraph machines (an electric current with two switches and LEDs), geodesic domes, and a final invention that will help the Earth in the future. Each project compress against other teams for points.

The students learn simple construction with simple components, teamwork and communication skills, as well as how to use creativity to solve problems. Their invention at the end of the day is like a miniature serior design project. They must invent a product, budget their money in buying supplies to construct the protocolar model, create a poster for presentation and them give an oral presentation in front of the rest of the students. During each competition, college students and volunteers from different engineering industries mentor the students through each construction and competition.

The benefits to Theta Tau brothers include intexaction with persons from different engineering companies and a chance to help memor students who will likely choose to continue their education through college with a STEM degree. These students are usually from middle to lower class schools that may not have otherwise been encouraged to continue their education or choose a STEM field in college. We also receive \$100 as the participanting in the program, which we donate to our local chapter. I highly encourage other chapters to get involved in their area.





Pictured top: Gina Chin Fatt, Omega Gamma '12, with the students of Alonzo & Tracy Mourning Senior High School with their completed catapult. Pictured bottom: Omega Gamma Chapter members and other college captains at Dr Michael M. Krop Senior High School.

Update from University of California. Merced Colony of Theta Tau Yale Yuen, University of California, Merced Colony '13, Corresponding Secretary

A year has passed since the University of Califor nia-Merced Colony of Theta Tau was certified. Since then UC Merced's Colony of Theta Tau now has a total of 35 members in the colony.

Over the summer, a few members staved at UC Merced, and our colony participated in intramural basketball. Despite not being the best team out there, we enjoyed the brotherhood and bonding experiences we had with one another. That one intramural basketball team has now transitioned into volleyball and dodgeball teams for our colony.

In spring 2011, we also participated in The Gauntlet. The Gauntlet is an event hosted by the Pilipino American Alliance at the University of California Merced since its inception in 2008 and is based on Friendship Games. All clubs and organizations on campus are invited to participate and compete against each other in five different games--both physical and mental-as well as showing off their club spirit to one another. Through this, clubs compete for either the Gauntlet Trophy and/or the Spirit Trophy. In our debut, we finished in 2nd place!

The UC Merced Colony of Theta Tau is only a year old, and despite being so new, we would love to accomplish much more within the school while teaching the practices of being a professional engineering fraternity as we aim to achieve our next highest goal of being installed as an active chapter.



UC Merced Colony members competed in The Gauntlet

In Memoriam

Dr. Jack C. Brown, Mu '52

De Jack C. Brown died April 26, 2011 at the age of 81, after a series of illnesses. He was a native of Pickens County, born March 14, 1930 in Gordo, Alibama. He was the chreshed son of Clarence Jackson Brown and Vassie Rona Brown; beloved brother of Rauline Brown (Blakeney) and Lillian Brown (Brown); boiling husband of \$8 years to Lou Mayes Brown. He was the father of four; Lois C. Brown (Drucke); Past Grand Regient A. Thomas Brown, Mu '77; David S. Brown; and Dianna G. Brown (Williams).

In 1944, his family moved to Tuscaloosa, and he graduated from Tuscaloosa High School in 1947. He enrolled in the University of Alabama and received a B.S. degree in Civil Engineering in 1952. His other college degrees include a M.S. in Engineering Graphics (Illinois Institute of Technology) in 1959, and a Ph.D. in Education (Texas A&M) in 1972. His dissertation was A Comparative Study Leading to the Creation of a Model for Computer Graphics Instruction in Post-Secondary Schools of Texas. It resulted in the creation of a college course, Fundamentals of Computer Graphics, which was one of the first of a kind in the field in 1972. As an undergraduate, he was a member of Theta Tau, a professional engineering fraternity, and ROTC. He was a member of the ROTC. Pershing Rifles, which was their competitive marksmaship team.

Following graduation, he entered active duty as a second lieutenant in the United States Army. He served from 1952 until 1954, with the 1901st Enginer Aviation Battalion, stationed at Wolters Air Force Base, Texas During that time he was deployed to Labrador and participated in the construction of a radar station. Returning from Labrador, he led a construction team of 41 men in building a 2404-foot Bailey bridge across the Washins River on the east side of Ardmore Air Force Base, OK. After active duty, he remained active with the Army Reserve for 32 years, retiring as a Colonel. He served in a variety of positions with the West Alabrama Retired Officers Association.

He began his teaching career with the University of Alahama as an instructor for the College of Engineering in 1953 and remained with them until his retriement in 1988, During that time he taught several districtions and architectural graphics. Engineering courses included mechanical drawing, rechnical sketching, and Mongeon descriptive geometry. He taught two architectural graphics dissess for Interior Design majors. He progressed in stature to the position of Professor and was a Department Head for several



years. He was recognized with several awards, most notably receiving the Outstanding Commitment to Teaching Award by the University of Alabama National Alumni Association in 1984.

He was involved in the Engineering Design Graphics Division of the American Society of Engineering Educators. He served as Director of Liaison for three years before being chosen as the Vice Chairman, and later, as the Chairman. He attended numerous meetings during his 25 year association with them and was recognized as their ad hoc Chaplain. He was awarded the Distinguished Service Award of Engineering Design-Graphics Division of ASEE in 2001.

A devout Christian, he served in leadership positions at every church where he was a member. He used his teaching skills as a Sunday School teacher and sang in the choir.

ALPHA University of Minnesota Donald Harold Olson Class of 1952, Roll No. 594

GAMMA Colorado School of Mines Franklin Dale Coffman Class of 1961, Roll No. 924 Louis Edward Gaspar Class of 1945, Roll No. 651

EPSILON University of California, Berkeley Perry Edward Byerly Class of 1948, Roll No. 625 Paul Iver Eimon Class of 1951, Roll No. 702

ZETA University of Kansas Myron Keith Bernitz Class of 1960, Roll No. 618 Lloyd Fenton Christianson Class of 1935, Roll No. 340 Robert George Kunkle Class of 1947, Roll No. 493

THETA Columbia University Clark I. Fellers Class of 1941, Roll No. 287 Alan David Pasternak Class of 1956, Roll No. 577

IOTA Missouri Univ. of Science & Technology John Edward Jadwick Class of 1950. Roll No. 584

LAMBDA University of Utah Vincent Edwin Clayton Class of 1946, Roll No. 535 MU
University of Alabama
Carl Adams
Class of 1938, Roll No. 211
George William Douglas
Class of 1957, Roll No. 662
Harold Robert Kibby
Class of 1943, Roll No. 333
William Edward Lear
Class of 1942, Roll No. 306
Thomas B. Simpson
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NU Carnegie Mellon University Arthur Edward Steele Class of 1942, Roll No. 352

XI University of Wisconsin James Bernard Geshay Class of 1948, Roll No. 59

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Walter Watson Harper
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William Sumper Johnson
Class of 1942, Roll No. 270.
Duard C. Linn
Class of 1950, Roll No. 406

SIGMA The Ohio State University Lewis Coulter Hullinger Class of 1947, Roll No. 275 William Lynn Nungesser Class of 1940, Roll No. 215 TAU Syracuse University Peter Cheng Class of 2009, Roll No. 979

UPSILON University of Arkansas George Robert Tait Class of 1950, Roll No. 369

PHI Purdue University Joseph Gabor Nagy Class of 1968, Roll No. 401

CHI University of Arizona Thomas William McCurnin Class of 1954, Roll No. 452

PSI Montana Tech Charles Oscar Grimes Class of 1950, Roll No. 223

OMEGA South Dakota School of Mines & Technology Mark Edward Behrens Class of 1984, Roll No. 869

GAMMA BETA
The George Washington University
John Richard Blomberg
Class of 1956, Roll No. 832
Richard Eugene Koester
Class of 1950 Roll No. 208
Burr Latta
Class of 1949, Roll No. 197
Richard William Rumke
Class of 1957, Roll No. 349

KAPPA BETA Mississippi State University Casey Cameron Dunagan Class of 2002, Roll No. 555 Theta Tau

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UPCOMING NATIONAL CONVENTION IN BOSTON

The Boston Pops Fireworks Spectacular receives over 500,000 visitors from around the world while another 7,000,000 tune in nationally to view the event live on TV. In 2012, Theta Tau will be hosting its National Convention in Boston July 5-8, and brothers are invited to extend their Boston visit to enjoy the fireworks.

It is difficult to capture the excitement of attending a Theta Tau National Convention, where national officers and chapter delegates convene to legislate, and brothers celebrate the fraternity's accomplishments, chapter successes, and individuals who



exemplify our mission and purpose. The National Convention is a unique opportunity to reunite with brothers and network with national and local volunteers, alumni and student members. It reminds us of the importance of our brotherhood and reignites our desire to helo Theta Tau grow.

The Theta Tau 2012 National Convention is packed with opportunities to share insights, develop stronger skills, build brotherhood, and drive the business of our fraternity. For more information, visit http://www.thetatau.org/convention2012. Event registration is open now.

Boston highlights

Experience the excitement of the city at Hyatt Regency Boston. Tour the Freedom Trail, shop at Faneuil Hall, visit museums, or catch a game at Fenway Park--it's all just minutes from our hotel, located in the center of Boston's downtown. A very special \$80/night lodging rate is available for our attendees. Hotel rooms for July 4th are filling quickly. Make your hotel reservation today at https://resweb.passkey.com/go/thetatau.