



# Impact

## Beam me up!

Better, stronger, cheaper, faster—bridges that is, or more specifically bridge beams and their repair.

This is one focus of research efforts by Robert J. Peterman, associate professor of civil engineering. With funds from the U.S. Department of Transportation, administered by the Kansas Department of Transportation, Peterman tests new materials (better) used to strengthen and repair (stronger) bridge beams rather than replace them (cheaper), with much of the process able to be done on site without closing down roads and tearing bridges out (faster).

"Anything done today that can show a positive effect on the economy is huge," Peterman said. "The state has many bridges in need of repair or upgrading to handle the heavier loads of today's traffic. Instead of tearing these bridges out and building new ones, we're looking at ways of strengthening them on location at one-third the cost."

The repair process currently being tested by Peterman and civil engineering assistant professor Hayder Rasheed, at both the Civil Infrastructures Systems Laboratory (CISL) located on the east side of Manhattan and lab space in the basement of Fiedler Hall, involves applying carbon fiber-reinforced polymers directly to a concrete beam. Each carbon fiber sheet can withstand more than 4,000 pounds of force per inch width, and when glued to a beam, that member can become up to twice as strong.

Another plus is that the fiber sheets, by means of a paint roller and epoxy glue, can be applied to beams still part of an existing structure. Such repairs require only a 24-hour closing of the bridge, a huge difference from reconstruction outages of weeks and months, and some promoters of the process even say it can be driven on immediately.

"It's space-age technology brought down to bridges," Peterman said.

Application of the product, however, is only the first step. The beams must also then be tested for strength and the ability to withstand repeated loads. Enter the Havens Steel Self-Reacting Load Frame, located outdoors at the CISL facility.

Peterman partnered with Havens Steel Company of Kansas City, Mo., in 1999 to co-design and build the \$120,000 full-scale load frame used to test all types of structures, including beams, columns, and joint connections. Adding 22 corporate sponsors along

the way who provided additional equipment and facilities, Peterman spearheaded an effort which brought K-State a unique, large-scale infrastructure testing program that few schools in the country can equal.

The testing frame at CISL can handle structural components up to 52 feet in length and apply up to a half-million pounds of testing pressure. A smaller device in the Fiedler lab can handle beams of 20 feet and apply a quarter-million pounds of pressure.

"Eighty percent of my research is experimental in nature," Peterman said, "while the other members of the structures research team—Rasheed; Hani Melhem, professor; and Asad Esmaily, assistant professor—focus more on the analytical and computational sides. We test products, make recommendations, and present guidelines."

Peterman currently has six ongoing projects—each related to evaluating new materials for more efficient building or repair of bridges. "We're developing guidelines for materials and technology that will be used nationwide," he said.

In addition to his research efforts, Peterman also uses both labs to provide his students with a hands-on grasp of structural design and behavior. He teaches undergraduate courses in reinforced concrete design, prestressed concrete design, concrete bridge design, mechanics and materials, and introduction to structural analysis. At present he supervises six graduate students, three master's degree and three Ph.D.

"I've found the best way to be an effective teacher," Peterman said, "is to bring my research into the classroom and let the students experience for themselves in the laboratory what they're learning about from their textbooks and in class."

Peterman's formal civil engineering education consists of a B.S. from Lafayette College, and an M.S. and Ph.D. from Purdue University. He also spent four years as a pre-stressed concrete design engineer in Indianapolis.

He came to K-State in 1999 and during the past five years has secured more than \$1.5 million in research grants. He serves as secretary of the national prestressing steel committee of the Prestressed Concrete Institute and has received numerous teaching and research awards.

"I love the Midwest," Peterman, originally from the East Coast, said, "and K-State offered me the opportunity to pursue my two career passions of research and teaching."

—by Mary Rankin

# Message from the Dean



The late Alice Fiedler, whom we recently honored with a tribute program, once remarked, "I believe in our students." She went on to say that because of their "dedication," she felt her "investment" in the College of Engineering was "safe and sound," as those same students would one day "make the world a better place."

Alice's trust is well grounded. We do a really good job in the classroom. Our dedicated faculty participate in activities like the LEA/RN program to become the best possible facilitators of learning; they continually look for ways to broaden their research and bring it into the classroom for hands-on teaching experience. Our students respond by excelling.

And not just in the classroom. The center pages of this issue, featuring internships from NASA to Volkswagen to the WISE program and the ongoing successes of three of our teams, broadcast the message loud and clear that not all education takes place within the hallowed halls of academia. From extracurricular opportunity comes additional learning.

Yet these things don't just happen. They require commitment and support, not only from administration and faculty within the college, but an outside advocacy and patronage from our alumni and friends, from industry, and from national labs and programs.

The "bare bones" of our existence come from tuition and state dollars. But in funding our teams; updating our facilities—West Seaton renovation, Minarcini Plaza, the Multicultural Study Room; growing our research efforts—the Havens Steel load frame, forty years of IER; and extending the educational experience through lecture series, exchange programs, and internship opportunities—all activities evidenced in these pages, we are the beneficiary of this outside support. Without the Seaton Society members and other like-minded persons, there is no Fiedler Hall, no solar car team, no CISL.

Radio commentator Paul Harvey delivered a Landon Lecture on campus this past September. In closing, he told the audience, "Kansas State is a rare lighthouse. Keep that light lit." Narrowing that focus from the university to the College of Engineering, let me propose to you that within the college, administrators will come and go; faculty will come and go. The people committed to this institution their entire lives are you, our alumni and friends. You will support the programs, advise the administration, and maintain the culture and tradition that is K-State engineering. You are the keepers of our flame, and I know you are up to this noble task. For as Alice reminded us, there's a whole world out there counting on it.

*Terry S. King*  
Terry S. King, Dean



## Multicultural Study Room relocates to Fiedler

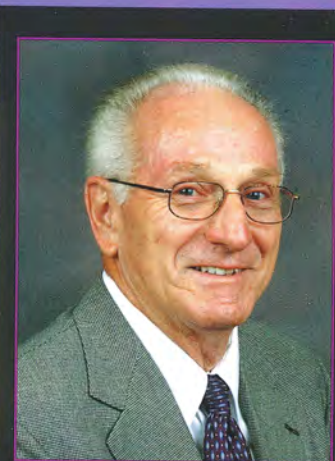
Members of the Multicultural Engineering Program (MEP) Advisory Council were on hand in Fiedler Hall this fall for the opening of the newly relocated Multicultural Study Room previously housed in Seaton Hall. The purpose of the room is to provide a place for underrepresented minorities in engineering—Black, Hispanic, and Native Americans—to study and meet together. Pictured above from left to right: Terry King, dean of the College of Engineering; Ruth Marstall, KDOT, MEP Advisory Council; Thirkell Howard, MEP director; and Charles Paish, FAA, Caressa Foreman, GM, and Benjamin Torres, Exxon Mobil, all members of the MEP Advisory Council.

## Minarcini Plaza—an outdoor gathering spot

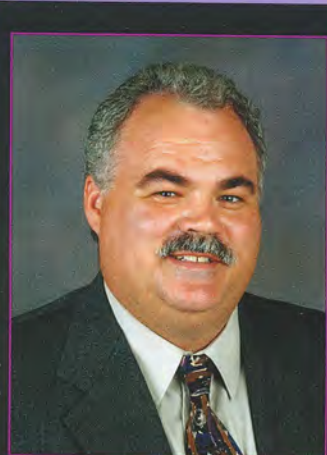
Engineering students enjoy a warm fall day on the newly added furnishings to the Minarcini Plaza, located just outside the south doors of Fiedler Hall. The plaza was named with a gift from Ron and Joanne Minarcini, Marco Island, Fla. Ron earned his B.S. in civil engineering from Kansas State in 1960 and an M.S. in 1961. Having recently retired, he enjoyed a 30-year career in executive management, project management, and engineering on heavy, marine, and industrial construction projects in domestic and international locations.



# 2003 teaching/research awards



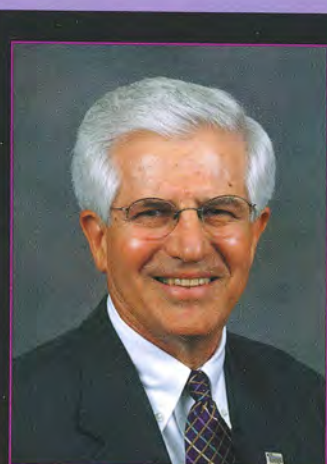
Charles L. Burton, ARE/CNS  
Engineering Advisor  
of the Year



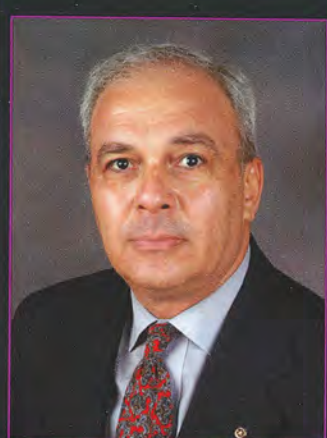
Steven J. Eckels, MNE  
James L. Hollis  
Memorial Award for  
Excellence in  
Undergraduate Teaching



Larry E. Erickson, ChE  
Engineering Research  
Excellence Award



Richard R. Gallagher, EECE  
Robert R. and Lila L. Snell  
Award for Excellence  
in Undergraduate Teaching



Medhat M. Morcos, EECE  
Myers-Alford Memorial  
Teaching Award

# Seaton Society 2003

# Dinner and Dance



From the red carpet entrance, complete with valet parking, to the close of an event-packed evening of dinner, dancing, and award presentations, the 2003 Seaton Society Dinner and Dance was a huge success. Nearly 300 Seaton Society members, and K-State engineering faculty, staff, and students attended the gala held Nov. 8 at the K-State Alumni Center.

Syndicated radio host Bill Miller was master of ceremonies and music was provided by the Vaughn Bolton Orchestra. A surprise visit by Kansas State mascot Willie the Wildcat delighted guests as he arrived in the ballroom midst the strains of "Wabash Cannonball."

Special honorees of the evening were the five new members inducted into the College of Engineering Hall of Fame in recognition of lifetime professional and public service, as well as involvement and support of the college and Kansas State University. This is the most prestigious award bestowed by the college, acknowledging the highest levels of achievement.

Nine alumni were also recognized with Professional Progress Awards, marking significant success and accomplishment midway through their professional careers.

## Hall of Fame Class of 2003



Left to right, Terry Weaver, EE '73, entrepreneur; G.P. "Bud" Peterson, ME '75, '80, provost, Rensselaer Polytechnic Institute; Larry Foulke, NE '60, '61, principal, Naval Nuclear Propulsion Fellowship Program; Robert Davis, IE '69, senior director, Anheuser-Busch-retired; and Carl Nuzman, AgE '53, consultant/hydrologist.



### Professional Progress Award

2003 recipients, left to right, standing, Ray Hrды, EE '84, vice president, DISC; Donald Gemaehlich, EE '83, '84, test director, General Dynamics Decisions Systems; Robert Huizenga, BAE '91, operations manager, Dowell Schlumberger; James Johnson, CNS '84, president/CEO, GE Johnson Construction Company; Jeri Meyer, CE '89, assoc. vice president, Wilson & Company, Inc.; seated, Claire Stroede, ME '96, '98, senior structural engineer, Raytheon Aircraft Company; and Mark Galyardt, IE '85, software startup, Datalink Corporation. Not in attendance, Gregg Bartlett, ChE '84, management, Motorola; and Tieren Zhou, CompSci '90, founder, TechExcel Inc.



Page top, left, Bud and Valerie Peterson take to the dance floor; right, Travis Rogers, sophomore in ChE and Vaughn Bolton Orchestra member, exhibits his talent on the saxophone.



Above, scenes from the evening: students display ballroom dancing skills; Dick and Barb Hayter share a light moment with Kevin and Dianne Honomichl.



Clockwise from left, Dean King congratulates Larry and Laurel Erickson on becoming founding members of the Seaton Society; a surprise visit from Willie the Wildcat enlivens the crowd; engineering student attendees stop at the chocolate fountain for a dessert treat; Rhea Serpan, right, after toasting Dean King, solicits the aid of Larry Foulke, left, in leading the audience in singing the K-State alma mater.



**B**ranching out into new areas of study, living in a different part of the country, gaining professional workplace experience—this was the reality of Andrea Muraco, senior in industrial engineering, and Andrew Newton, senior in electrical engineering, who both spent their summers as research interns.

Muraco received a Langley Aerospace Research Summer Scholarship, which allowed her to intern at the NASA Langley Research Center in Hampton, Va. She was one of fewer than 50 students in the U.S. chosen to intern with NASA.

Last spring, Muraco was approached by David Ben-Arieh, associate professor of industrial and manufacturing systems engineering at K-State. Ben-Arieh was involved in a research project at NASA and encouraged Muraco to apply for an internship. The project, part of the Model Systems Branch, was designed to build reduced-scale air and space experimental vehicles used for advanced flight testing and analysis.

Ben-Arieh served as Muraco's contact throughout the project.

"Although he was in Manhattan during my internship, Dr. Ben-Arieh served as my advisor and outside mentor during the project. It was his project, and I was fortunate to get to join in," Muraco said.

"This was a great opportunity that offered me real world experience," Muraco said. "I enjoyed working with the helpful staff, and just being at NASA was an awesome experience."

The internship wasn't without its difficulties though.

"It was very different from the classroom. Everyone worked independently and that definitely took some getting used to," she said.

While Muraco was at NASA, Newton spent his summer at Cornell University in Ithaca, N.Y. His research at Cornell was part of the National Nanofabrication Users Network (NNUN), a network of five universities that provides users with some of the most sophisticated nanofabrication facilities in the world.

Unlike Muraco, Newton found his internship through K-State's Career and Employment Services. While enrolled in the CES program, he came across NNUN's Research Experience for Undergraduates.

"I had to go through a lengthy application process. From there, I sat back and waited to hear the news...luckily it was good," Newton said.

Newton was one of only 12 students chosen to intern with Cornell's NNUN program. His work focused on a project titled "Ultrasonically Driven Microneedle Arrays." He spent the majority of his summer fabricating microneedles under the supervision of his principle investigator, Professor Amit Lal. With research, microneedles will be potentially painless, minimally invasive needles than can be used for transdermal drug delivery and sampling of organic matter.

"My goal for the summer was to take the process of microneedle fabrication from the initial design to a testable product," said Newton. "I was very fortunate in that I succeeded!"

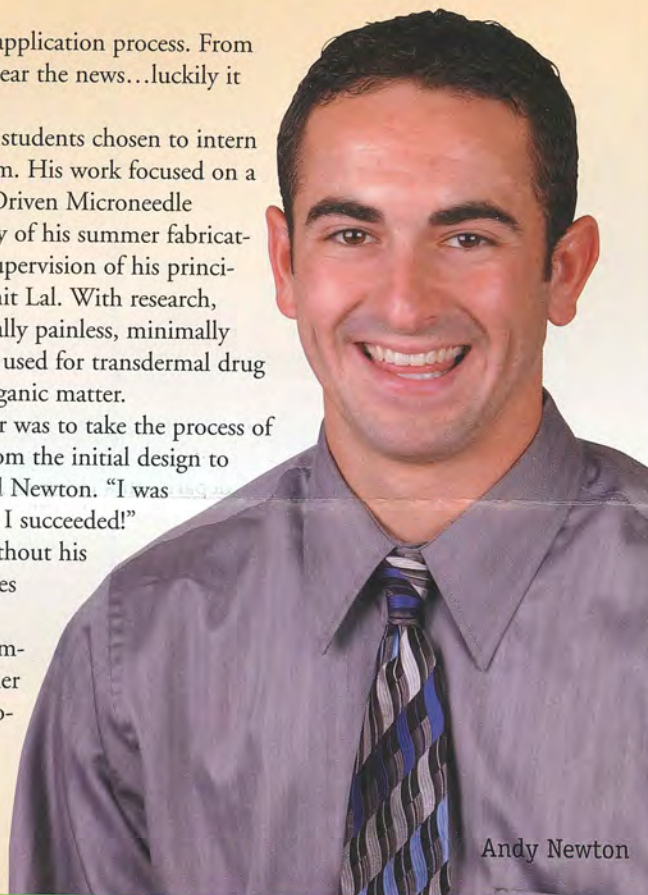
Newton wasn't without his fair share of obstacles either.

"Learning to communicate with other researchers and professors that didn't

*continued on page 6*



Andrea Muraco



Andy Newton



Laura Beth Bienhoff

**A**nd now the number is 34—more than the College of Engineering claim to fame in the competitive and prestigious Washington State WISE program.

Each summer 14 to 16 outstanding engineering students spend 10 weeks in Washington, D.C., learning about technological issues and developing a research paper for publication. Interns are expected to go beyond simple lectures, talking with individuals who are experts in the field.

This year's students from Kansas State were Laura Beth Bienhoff, senior in industrial engineering, and Julie Quackenbush, senior in industrial engineering. Bienhoff is a member of the American Nuclear Society and wrote her research paper, "Workforce: The Government's Role." Quackenbush is a member of the Professional Engineers, took on the topic, "Protecting America: The Role of the Professional Engineer in the Development and Implementation of Critical Infrastructure."

While not a nuclear engineering major, Bienhoff has a background in science, and after her experience this summer is "applying engineering knowledge to the nuclear industry and safety."

"It turns out my topic," she said, "has been a common theme for a decade. There are established programs for recruiting students, and recommendations primarily consisted of suggestions from the Department of Energy programs to entice students to apply."

"Homeland security is a topic of interest to everyone," she said. "When engineers pledge the Engineer's Creed, they are sworn to securing infrastructure to protect the public from terrorism. The implementation theories that all types of engineering students need to focus more on security."

Her experiences also served as a catalyst for her graduate research and future career goals.

"I was able to gain a new view of career paths in public service," she said, "and a great for learning about engineering in the private sector, but they rarely come from government agencies or other civil service organizations."

"I was able to gain membership in the National Society of Professional Engineers have become a goal, while developing my own research. I learned IE techniques to internalize and apply to my own work."

"I earned my master's degree in engineering, and I find life in the nation's capital."

And how did two young women find life in the nation's capital?

"I understand now why people who visit Washington, D.C., don't want to catch 'Potomac Fever' and stay there forever," Quackenbush said.

"One day the interns visited the Transportation Security Administration where we spoke with a representative."

*continued on page 6*

# What I did

## Education outside the classroom

### Pulling into the winner's circle

Competing May 29–June 1 at the 2003 American Society of Agricultural Engineers International Quarter-Scale Tractor Student Design Competition in Moline, Ill., the 18-member Powercat Pullers team from K-State outscored 29 other teams to capture first place.

2003 Powercat Pullers team members: Jim Kopriva, John Kattenburg, Patrick Haberman, Ryan Zecha, Jason Seeger, and Nathan Oleen, seniors, BAE; Will Hasty, Derek Sandmann, Justin Sommerfeld, Joshua Morton, and Benjamin Hesse, seniors, ATM; Sean Tolle, junior, BAE; Christopher Beetch and Ross Rieschick, juniors, ATM; Jace Chipperfield, Kyle Riebel, Amy Good, and Andrew Sigle, sophomores, BAE. Team driver for performance category: Kelli Simmelink, senior, IMSE; faculty advisor: Mark Schrock.



### Strong performance

Members of the Kansas State University aero design team competed in the 2003 American Society of Mechanical Engineers Automotive Engineers Aero Design West competition, June 1–3 in Denver, Colo. The K-State team took eighth place competing against teams from the United States, Canada, Brazil, and Mexico.



any other school in nation. That is K-State's  
 number of participants in the past 19 years in  
 gton Internships for Students of Engineering, or

g students from across the country are selected to  
 ow government officials deal with complex tech-  
 n on an engineering topic related to a public policy  
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 pics selected.

ra Beth Bienhoff, senior in chemical engineer-  
 engineering. Bienhoff was sponsored by the  
 paper on "The Future of the Nuclear  
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said she had always been interested in nuclear  
 seriously considering" applying her chemical  
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ryone right now," Quackenbush said. "When  
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 students learn in college

." direction to new avenues for  
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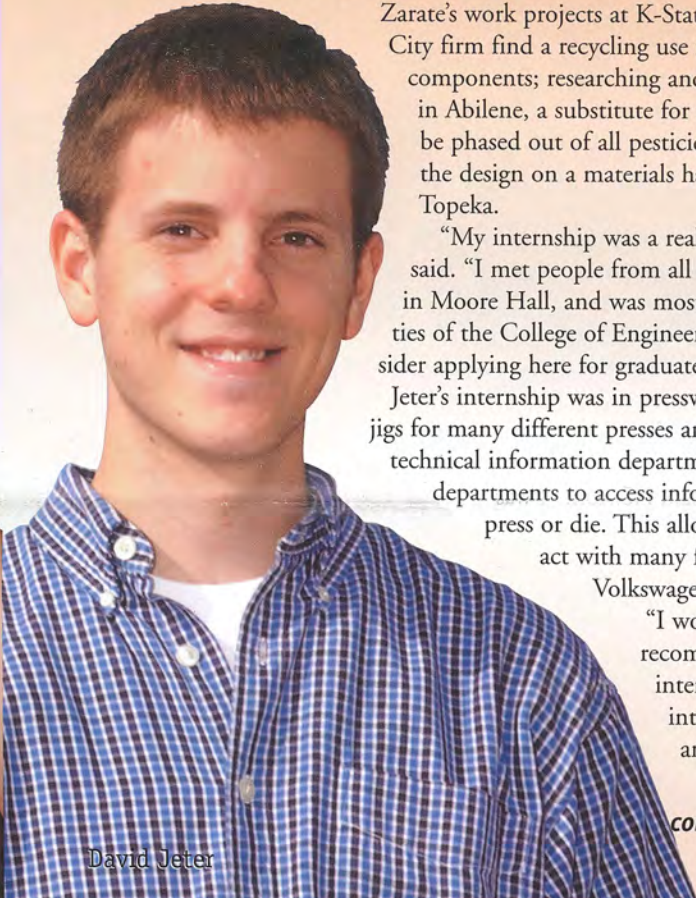
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Julie Quackenbush



David Jeter



Rogelio Zarate

**R**

ogelio Zarate was not the only international student at Kansas State University this summer. But he was the first and only student to be employed by the university as a part of the International Association for the Exchange of Students for Technical Experience, IAESTE. And during that same time period, David Jeter, senior in mechanical engineering, became the first K-Stater to participate in an international internship as part of the same program.

Founded in 1948 at the Imperial College in London, England, the International Association for the Exchange of Students for Technical Experience has grown to become a global organization with more than 80 member countries. Each year 30,000 top engineering and science students worldwide apply for the work-based internship program.

Zarate arrived in Kansas in mid-June and spent five weeks working out of the northeast regional office of the Mid-America Manufacturing Technology Center, housed at the K-State College of Engineering Advanced Manufacturing Institute. Jeter left for Wolsburg, Germany, four days after finals ended in the spring and returned from his 12-week internship with Volkswagen two days before the start of the fall semester.

Listing Leon Guanajuato, a city of 1.2 million in central Mexico, as his hometown, Zarate attends school there at Tec of Monterrey and will graduate in December 2003 with a degree in industrial engineering systems. At Tec, he serves as president of FEITESM Leon, a position equivalent to that of K-State student body president. Though he had been to the U.S. before as a tourist, this was his first time in Kansas and his first time at an American university.

"I wanted to come for two reasons," he said, "to practice my English and to work on a real enterprise and not just a school project."

Jeter had the choice of two internships in Germany—Volkswagen or Endress and Hauser. The latter choice would have been English-speaking. "Since one of my reasons for working in Germany was to improve my German," he said, "I decided for Volkswagen. At first the language was a struggle as I didn't know the technical words for all the machinery I was dealing with, but

I soon became accustomed to the new vocabulary."

Zarate's work projects at K-State included helping a Junction City firm find a recycling use for by-products of sheet rock components; researching and recommending, for a mill in Abilene, a substitute for methyl bromide that must be phased out of all pesticides by 2005; and improving the design on a materials handling cart for a firm in Topeka.

"My internship was a really good experience," Zarate said. "I met people from all over the world while living in Moore Hall, and was most impressed with the facilities of the College of Engineering. I would seriously consider applying here for graduate school some day."

Jeter's internship was in presswork where he built dies and jigs for many different presses and developed a system in the technical information department to be used by other departments to access information about each press or die. This allowed him to interact with many facets of the Volkswagen plant.

"I would definitely recommend an international internship to anyone," he

continued on  
 page 6

# last summer outside the classroom

## Force lifts SkyCat

h pulled off a top-10 finish in the 2003 Society of  
 e 6-8.  
 42 other engineering, aviation, and technology schools  
 razil, Australia, and Puerto Rico. In May, the K-State  
 m competed with the same radio-controlled plane,  
 SkyCat, in Dayton, Ohio, and finished third out of 39  
 teams in Aero Design East.

2003 aero design team members (all seniors in  
 ME): Jeremiah Jorgensen, Jesse Hale, Chris Schott,  
 Robert Caplinger, Ben Mitchell, Tyler Headrick,  
 Roji Philip, and Brian Seaholm. Faculty advisor:  
 Terry Beck.

## CATalyst shines in solar race

K-State's solar car team finished in eighth place in the American Solar Car Challenge, July 13-23, with their entry CATalyst. The 10-day, 2,300-mile race was run from Chicago to California along historic Route 66. CATalyst was featured in the *Chicago Tribune*, *Kansas City Star*, and *Sports Illustrated* and also on CNN, WGN, and the BBC.

2003 solar car team members: Jason Hughes, Ben Morrill, Jay Nightingale, seniors, ME; Michael Blouin, Steven Bouzianis, Michael Bozeman, seniors, EE; Silpan Patel, Chris Weber, seniors, CompE.; John Aschenbrenner, senior, Mgmt.; John Howat, Francis Noonan, juniors, ME; Junius Penny, junior, EE; Craig Buckley, junior, CompE; Brad Larson, junior, CompSci; Matt Honas, Matthew Dickson, sophomores, ME; Christina Borhani, sophomore, EE; Matt Smith, sophomore, CompSci; Matt Allison, freshman, EE; John Blessing, grad student, EE; Scott Hammack, grad student, ME. Faculty advisor: Ruth Miller.

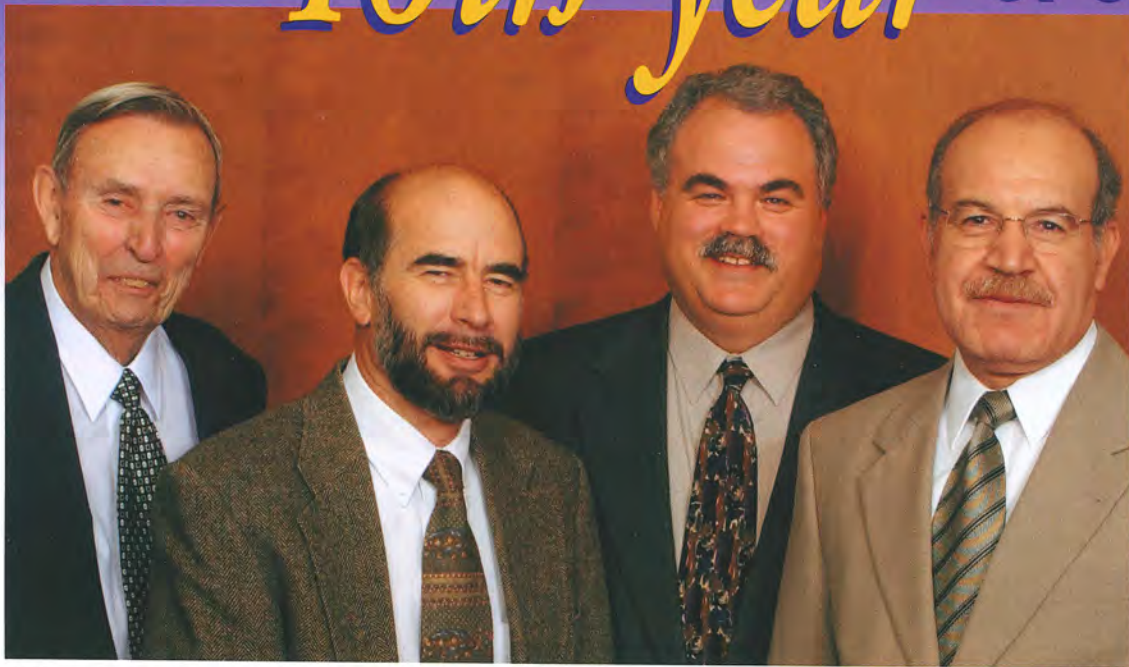


# IER celebrates 40th year of operation

The 40th anniversary of the Institute for Environmental Research (IER) was celebrated June 28 at Union Station in Kansas City, Mo. The event was a part of the 2003 Annual Meeting of ASHRAE—the American Society of Heating, Refrigerating, and Air-Conditioning Engineers.

The institute was established as a part of the College of Engineering on the K-State campus in 1963 following the gift of an environmental chamber from ASHRAE. Today it occupies 6,500 square feet of laboratory and office space, including eight computer-controlled environmental chambers able to simulate any indoor thermal conditions.

In attendance at the luncheon were three former directors of the institute: Frederick Rohles (1973-1986), emeritus professor, departments of mechanical engineering and psychology; Byron Jones (1986-1993), director of the Engineering Experiment Station and associate dean for research and graduate programs; and Mohammed Hosni (1993-2001), professor and head of the mechanical and nuclear engineering department.



K-State Institute of Environmental Research directors, past and present, left to right: Frederick Rohles, Bryon Jones, Steve Eckles, and Mo Hosni.

“We know as much, in my humble opinion, about thermal comfort as anybody in the world,” Rohles said.

IER opened under the initial guidance of the late Ralph Nevins, then department head of mechanical and nuclear engineering, followed by Rohles, Jones, and Hosni, and today is headed by Steven Eckles, associate professor of mechanical engineering, and co-directed by Elizabeth McCullough, professor of apparel, textiles, and interior design.

The institute is a multidisciplinary research center for the study of the human response to all aspects of the thermal environment includ-

ing clothing, automobile air conditioning, ceiling fans, heat stress, and hypothermia in the elderly. IER has conducted contract research for numerous agencies, among them the National Science Foundation, National Institute of Occupational Health and Safety, Federal Emergency Management Administration, U.S. Army, U.S. Air Force, as well as many large and small private companies.

## A matter of security

Issues of homeland security were at the forefront when Ruth A. David, president and CEO of ANSER—Advancing National Strategies and Enabling Results, delivered the second address of the Eyestone Distinguished Lecture Series, sponsored by the College of Engineering May 15 in Fiedler Hall Auditorium.



Ruth A. David

“Our strategic challenge is to secure our nation against unconventional threats without bankrupting our economy or disrupting our society,” David said. “Sustainable solutions [against terrorism] will be embedded into the fabric of our daily lives with benefits that extend beyond the homeland security mission.”

David earned a B.S. in electrical engineering from Wichita State University, and both an M.S. and Ph.D. in electrical engineering from Stanford University. She began her professional career at Sandia National Laboratories where she became director of advanced information technologies. From 1995 through 1998, she was deputy director for science and technology at the Central Intelligence Agency. Upon her departure, David was awarded the CIA’s Distinguished Intelligence Medal, the CIA Director’s Award, and the National Reconnaissance Officer’s Award for Distinguished Service, among other citations.



## Progress on West Seaton project

Department heads Jim Koelliker, biological and agricultural engineering (left), and Dave Fritchen, architectural engineering and construction science (right), check over blueprints of the planned renovation of West Seaton Hall. More than \$1.3 million of the \$1.7 million to be raised has been committed to the project, which is to be completed by fall 2004. The renovated space will include laboratories, classrooms, and offices, providing state-of-the-art facilities for more than 1300 engineering students.

## What I did last summer

continued from pages 4 and 5

speaking English as a first language was tough, and learning about nanotechnology is kind of mind blowing at first,” said Newton. “And on average, I spent about 15 hours a day in the laboratory, so having essentially no summer was very tough, but I wouldn’t have given it up for anything.”

After their experiences, both Muraco and Newton would recommend internships to future engineering students.

“Internships really help to make you marketable when looking for a job. It’s really important to get involved so you stand out from everyone else in the job market,” Muraco said.

“This internship taught me so much about myself, and the concepts of research, development, and design,” Newton said. “Not only does an internship look great on a resume, but it truly is a great way to see what you know and how much more you can learn.”

—by Neely Holland

gentleman who analyzed the voice box recorders from the planes used in the Sept. 11, 2001, attack. That evening, we dined in a posh restaurant and saw the evening performance of ‘Chicago’—just another exciting day.”

“I think I’m better suited for a more suburban living situation,” Bienhoff said. “There was no hopping in a car, even if we’d had one, to drive to Walmart or the grocery store like I’m used to. But public transportation is a good convenience to have as well, and I often walked by the White House on my way to meetings.

“For me, the real excitement was interacting with a group of such intelligent, motivated people. I am quite confident the WISE interns I worked with this summer are going to be very influential to the engineering world in the future.”

To view the papers of Laura Bienhoff and Julie Quackenbush in their entirety, along with all papers written by the last seven groups of interns, visit the WISE program Web site at [www.wise-intern.org](http://www.wise-intern.org).

—by Mary Rankin

said. “I think I learned the most about the German work ethic, which is quite different from America. About twenty years ago, the 30-hour work week was instated at Volkswagen and also in its 58 years of production, it has never had layoffs.

“Of course, I was glad to come home,” he added. “Some things you just can’t find in Germany—like a good steak or Cheez-its.”

“Participating in the IAESTE program was certainly a positive experience for both the College of Engineering and Kansas State,” said Richard Hayter, associate dean of engineering for external affairs. “We were able to have a top-notch engineering student from another culture bring both diversity and a taste of international expertise to our college, while at the same time offer one of our students a positive learning experience in another culture as well.”

—by Mary Rankin

# Alumni News

## 1957

**Ralph Webb** (ME) has retired as professor emeritus of mechanical engineering after 25 years of service at Penn State University. His career focus was on enhanced heat transfer and he holds eight U.S. patents.

## 1964

**M. Ataur Rahman** (CE) is an executive director for a not-for-profit, religious, educational organization in the Chicago area. 69 Nicoll Way, Glenn Ellyn, IL, 60137.

## 1971

**Robert L. Fuqua** (ME) retired from the National Security Agency. Fuqua was the dean of the Center for Cryptology at the NSA's National Cryptologic School. 4505 Linthicum Rd., Dayton, MD, 21036.

## 1982

**Jim Dice** (CE) is a U.S. Air Force lieutenant colonel. He is currently commander of the 6th Operations Support Squadron, MacDill Air Force Base, Tampa, Fla. [jdice@tampabay.rr.com](mailto:jdice@tampabay.rr.com)

## 1986

**Jeffrey S. Cross** (CHE) is a senior researcher at Fujitsu Laboratories, Ltd. in Atsugi, Japan. Cross is also a visiting associate professor at Tokyo Institute of Technology in the metallurgy and ceramics science department.

**John R. Hollenbeck** (CE) accepted a position as director with Bookman-Edmonston Engineering. He will lead the water resources business in Southern California. Hollenbeck, his wife, Monica, and stepdaughter, Lia, live in Simi Valley, Calif. [J-r-h@pacbell.net](mailto:J-r-h@pacbell.net)

## 1988

**Rosemary Seiwald** (ARE) started her own design firm, RJS Electrical Design, LLC and will be attending law school at the University of Tulsa. [rseiwald@earthlink.net](mailto:rseiwald@earthlink.net)

## 1990

**Wendy E. (Wittmer) Cain** (ARE) was promoted to vice president of Smith Seckman Reid, Inc. in Houston, Texas.

**Kristin Campbell** (IE) and husband, Dennis, announce the birth of their son, Jack, born Feb. 17, 2003. He joins his two sisters, Claire and Julia. (563) 847-1957

## 1991

**Sushil Dwyer** (BAE) is working as an analysis engineer in Peoria, Ill. Dwyer previously worked for John Deere in Moline, Ill. [sushildwyer@sbeglobal.net](mailto:sushildwyer@sbeglobal.net)

**Kyle Murdock** (EE) and wife, Sharon, announce the arrival of their second son, Joshua Jon, born on Dec. 19, 2002. Kyle continues as a network consulting engineer for Cisco Systems. [kmurdock@cisco.com](mailto:kmurdock@cisco.com)

**Lori Vander Linden VanderLeest** (CE) and her husband, Rob, announce the arrival of their first daughter, Megan Ann, born April 30, 2003.

## 1994

**Brad Eisenbarth** (IE) and wife, **Amy (Hoppner) Eisenbarth** (IE, '95), announce the birth of their son, Wyatt Matthew, born May 20, 2003. He joins a sister, Megan.

**Saleh Mohammed Karsou** (ME) is currently working at Ford Motor Company as a reliability engineer. Karsou would love to catch up with former classmates. [salehkarsou@yahoo.com](mailto:salehkarsou@yahoo.com)

## 1995

**Jonas T. McBride** (ARE) was promoted to vice president of Smith Seckman Reid, Inc. in Houston, Texas.

## 2000

**William Thomas Keehn II** (ME) announces the birth of a daughter, Violet Lauren, born Oct. 18, 2002. 22144 Karlov Ave., Richton Park, IL, 60471

## Deaths

### 1942

**Glenn O. Schwab** (AGE) died March 12, 2003. Schwab was professor emeritus of agricultural engineering at Ohio State University and was recognized worldwide as an expert in soil and water conservation drainage. He is survived by his wife, Edith, two sons, one daughter, and two grandchildren.

### 1962

**Don F. Paddleford** (NE) died Oct. 24, 2002. He is survived by his wife, Marie.

# Keep Connected

Take a few minutes to jot down job changes, births, deaths, professional or other activities, your retirement, or remembrances you'd like to share. Send your news to *Impact* by mail, e-mail, or fax, as listed below.

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Alice Fiedler

## A tribute to K-State's sweetheart

Thank you, Alice, thank you. This was the prevailing theme as the late Alice Fiedler was honored with a tribute in Fiedler Hall Auditorium Nov. 7. She and her late husband George, a 1926 K-State graduate in electrical engineering, are Kansas State University's largest benefactors to date, having contributed more than \$7.5 million. Included in these gifts was \$5.3 million, given by Alice in George's memory, towards the construction and completion of Fiedler Hall and Library, part of the College of Engineering Complex. Alice, who passed away on July 1, 2003, had

last visited Kansas State at the dedication of Fiedler Hall in September 2000.

Dean Terry King served as master of ceremonies for the tribute with additional comments by dean emeritus, Don Rathbone; emeritus professor, Ken Gowdy; and K-State President Jon Wefald. Father James Roth, Bushton, Kan., a family friend and one-time pastor to the Fiedlers, gave the invocation, reminding the nearly 100 in attendance that Alice Fiedler had three great loves—her church and her God, her husband George, and Kansas State University.

## Be a mentor

K-State graduates interested in becoming a volunteer mentor to current students are invited to do so through K-State's Career and Employment Services Wildcat Mentor Network. The program connects students with alumni willing to offer advice and information on internships, job opportunities, resumes, interviewing skills, and relocation.

The Mentor Network is accessible online to students registered with Career and Employment Services. It is password protected so the mentor contact information is provided only to registered K-State alumni and students. Mentors may indicate their preferred method of contact (e-mail, business phone, etc.) and which advising areas they are interested in. They may also control the number of students they will work with each month.

To sign up to be a Wildcat Mentor, go to [http://www.ksu.edu/ces/mentor\\_form.htm](http://www.ksu.edu/ces/mentor_form.htm), or contact Marcia Schuley, Career and Employment Services, at [mrss@ksu.edu](mailto:mrss@ksu.edu) or 785-532-1685, for further information.



# Impact

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# 2003 College of Engineering Advisory Council



New to the College of Engineering Advisory Council (1-1): Marc Ramsdale, Walter Robinson, Alan Sylvestre, and Susan Tholstrup. Joining other council members, the group met Nov. 7 at the K-State Alumni Center in conjunction with Seaton Society weekend activities.

- Arnold A. Allernang**  
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