

Impact

Kansas State University

Sunrayce '97: K-State wins in 24th place!

By Mike Dorcey



Solution cruises into Manhattan on Hwy 24.

Winning is everything. But is first the only place that wins?

Not last summer when a KSU engineering solar car team rolled into Colorado Springs, Colo., June 28 at the end of Sunrayce '97.

The facts: Kansas State University's entry, "Solution," finished 24th out of a field of 36 entries at the end of the 1,230-mile, 10-day race.

But the sense of winning came from recognizing that the entry had actually finished—second-best finish ever by a rookie team—and that the lessons learned by the students were first-rate.

Ryan Zahner, then a first-year senior in mechanical engineering, got the project rolling after seeing the Sunrayce cars that stopped over at the KSU Sports Complex in Manhattan in June 1995.

"When I heard about it, I thought, 'There's no way we can build something like that. It's got to be really hard,'" Zahner said. "Then we went out there and saw the cars and figured, 'Ah, it's not that bad.' So we figured we can do it. We just kept plugging at it and finally got it done."

Being new to the Sunrayce event, the KSU team set goals it thought it could achieve and based its success on those standards.

"Our goal was to build a solid car that could finish the race," said Jason Northup, a junior in mechanical engineering who designed the car's steering system, "and we met that goal."

Finishing was, after all, the only real criterion. As Eddie Fowler, professor of electrical engineering and one of the advisors to the team, said, "Unlike in an academic course, there is no partial credit for the race. Either you complete it or you don't." (Continued on page 4)

K-STATE
ENGINEERING

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January 1998

Four join college Hall of Fame

KSU's College of Engineering inducted four graduates into its Hall of Fame during ceremonies Oct. 24.

Those honored were Kenneth K. Gowdy (ME '54, MSME '61), associate dean emeritus of the college; Alan F. Kessler (AgE '69), vice president of engineering and quality at Amana Appliances, a Raytheon company; Warren R. Staley (EE '65), executive vice president and director of Cargill Inc.; and Thomas M. Trent (EE '73), a retired vice president of manufacturing at Micron Technology.

Gowdy came to KSU as a freshman in 1950 and spent most of the rest of his educational and working career at the university except to earn his doctorate at Oklahoma State and serve as head of the department of engineering technology at Texas A&M for five years. He first joined the K-State faculty in 1957 as an assistant to the dean. He was appointed assistant dean in 1965 and head of the engineering technology department in 1975. He returned to KSU in 1984 as the associate dean and a professor of mechanical engineering. He retired in June.

Kessler has been involved in the design, development and production of many new products, including light wave ovens, convection-microwave ovens with computerized controls, high efficiency CFC-free refrigerators and high efficiency furnaces. He holds three patents, is a licensed professional engineer, and holds a master's degree in mechanical engineering from Purdue.

Staley started his 28-year career with Cargill in commodity trading and later moved into the general management area. He has served as president of worldwide feed and livestock, chief of staff and president of North American operations. He is presently an executive vice president and director, president of Latin American operations and president of animal nutrition and meat.

Staley serves as a director of the Minnesota Private College Council and is a member of the Council of Americas and Canada/U.S. Joint Chamber of Commerce Committee on Trade. He is chairman of the Cargill Foundation and the Cargill-KSU Core School Committee.

Trent joined Motorola's semiconductor products division in Phoenix after graduation. There he worked in the semiconductor research and development labs. Subsequent positions included integrated circuit design engineer and design manager at the Mesa, Ariz., facility. While working at Motorola, he earned master's degrees in electrical engineering and business administration from Arizona State.

In July 1980, he began working at Micron Technology as an integrated circuit design engineer, working on the 64K dynamic random access memory chip. Other positions he held at Micron included product engineer, test engineer and various management positions. Before retiring, he served as vice president of manufacturing. He has been the co-inventor on six U.S. patents.



Message from the dean

Welcome to the first issue of the updated look of *Impact*. We have changed the size, format, and publishing schedule of the college of engineering's alumni newsletter in order to better serve our K-State engineering alumni and friends. Issues of *Impact* will come your way in the fall and spring of each year to you keep informed of changes and accomplishments in the college, along with changes and accomplishments in the lives of your fellow K-State engineering graduates.

When you look through the pages of this issue, you'll notice new names among the faculty, along with the departure of others, as well as read about their success stories and those of our students. We take great pride in our achievements in both of these categories and one of our goals is to continually elevate the visibility of the college in the nation and the world. In many ways the quality of an institution is demonstrated by the caliber of its competition. As you look through this issue of *Impact*, you can read about "Solution", our rookie entry into the national solar car race. You can read about the first-place finishes of our teams who took part in the 1997 American Association for Artificial Intelligence Mobile Robot Competition and the 1997 NASA/FAA National General Aviation Design Competition. K-State engineering students went head-to-head and performed exceedingly well against the groups we see as our prime competition—the very best engineering colleges in the country. Indeed, it is our goal to be the best all-around college of engineering in the United States.

I am delighted to be a member of the K-State engineering family and look forward to my continuing work with our outstanding faculty, staff, students, and alumni. It is wonderful to be part of a winning team!

Terry S. King, Dean

College of Engineering salutes its top donors during fiscal year 1997

The following alumni and friends have supported the college through gifts during the past fiscal year (July 1, 1996-June 30, 1997).

Leadership Society donors are those alumni and friends who make gifts of \$1,000 or more annually to programs in the college of engineering. These donors contribute their personal financial support, as well as talents, to making the college a top-notch engineering school.

Dean's Leadership Society -- \$1,000 +

Engineers Club -- \$500 - \$999

We make every attempt to compile an accurate listing of donors. If you feel there is an error, accept our apology and bring it to our attention.

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* Deceased (in FY 1997)



Hall named for Rathbone

Don Rathbone, former dean of engineering, stands beside the sign designating the hall formally named for him Oct. 24. Rathbone oversaw the completion of the hall, the second phase of the Engineering Complex, when he first came to K-State in 1973.

Sunrayce '97: K-State wins in 24th place!

(Continued from page 1)

But finishing was not the only measure of success. This was an educational experience. "This is a total engineering experience," Fowler said. "We're never able to do the whole shooting match in courses."

The "whole shooting match" was to take the product, a solar-powered car, from concept to competition. This included design, finding and buying or building parts and components, assembling the components, testing the vehicle, qualifying and racing it. The qualifying and racing aspects also included organizing the logistics of getting the team, its support personnel, three vehicles and a trailer to the test site in Phoenix, Ariz., in April and in June to the race start at the "Brickyard" at Indianapolis, Ind., and from there to Colorado Springs.

"It's hard to explain to somebody the magnitude of technical and organizational problems these guys faced and solved," said Norm Dillman, also a professor of electrical engineering and an advisor to the team.

Fowler also stressed that one of the more important, often overlooked lessons learned was teamwork. "You can teach things in the classroom, but you never know how something (a team) will work till you test it under stress. We worked really well together."

Team members derived their own lessons from the experience.

"I've learned that to do a complete engineering project like this takes a lot of planning," said Northup. "It took only three or four months to build the car, but the planning and research took at least that long or longer."

And the team members see beyond the race and themselves in this endeavor.

"The race is a chance to test theories and products," Zahner said, referring to not only the team's own work but also to products they purchased for the car. "Everything we do spawns a lot of research and development, even though we're not doing a lot of the direct research."

As it turned out, it was not the technology that created bumps in the road.

"A lot of the science (in the car) is really basic," Zahner said. "But neither students nor professors had ever built a car. So we all learned about applying theory to actual design and construction problems."

One lesson the students learned was not in any of their books, though it may be most valuable in their lives.

"It was two years of thinking about it all the time and one year of thinking and working all the time," Zahner said.

Northup added, "It's not easy to do a major project like this. It takes a lot of time and dedication."

One of the major hurdles and learning experiences for Zahner and his team was financing a project of this size. They eventually needed \$80,000, in cash or in kind, to turn their plans into reality.

The team's first major financial backer was the college itself. Don Rathbone, dean then, saw the solar car team as a good investment.

"I felt this competition would help bring recognition to our excellent engineering program," he said, "and provide some of our students with a very valuable, real-world engineering experience."

Fowler and Dillman easily justified this investment from the lessons learned not only by the team members themselves directly but from those that carry over into the classroom.

The team's success team will become more evident as its members begin their careers.

"I haven't really started looking for a job yet," Zahner said. "But I have had two offers already."

But the Sunrayce story is not over. In June 1999, solar cars will be lining up for another race. And KSU plans to be there.

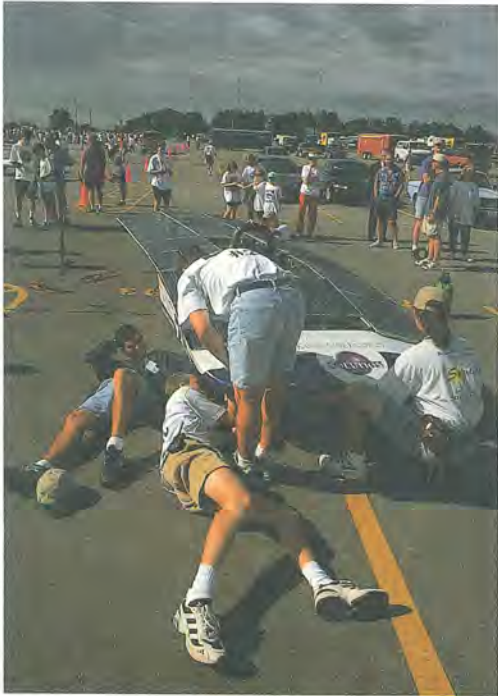
"The solar car competition gives our students a wonderful engineering experience," said Terry King, the new dean of engineering. "Our participation also tells our students, alumni and all Kansans that K-State engineering is competitive with the very best engineering schools."

The team will need financial support, but is not letting that be the criterion for its product yet.

"We're trying not to base our decisions on money," said Northup, who is managing the '99 entry. "We're planning for the best car we can and hope the money comes."

Nor is the college basing its decision to sponsor the team on dollars and cents.

"We will determine if we get our money's worth from the project not by the final rankings but by what our students gain in the entire experience," King said.



KSU team checks car before leaving Manhattan on the next leg June 25.

"This is a total engineering experience. We're never able to do the whole shooting match in courses."

Eddie Fowler,
team advisor

Slick Willie shuts down competition big time

By Mike Dorcey

K-State computer sciences and information students are leaping to ever higher standards in programming robots.

Their entry, "Slick Willie," took first-place honors in events at the Mobile Robot Competition and Exhibition during the annual conference of the American Association for Artificial Intelligence (AAAI) last summer.

Rather than resembling a sleek, Olympic high jumper, though, Willie is more apt to remind one of a three-foot-tall, canister-type vacuum cleaner sporting a K-State Power Cat logo.

But Willie is no mindless windbag. He's downright "intelligent" with a 120-megahertz, Pentium processor equipped with 128 megabytes of memory and driven by a "ruggedized" hard drive. The robot is also outfitted with 32 sonar locators and a color camera.

The AAAI robotics contest is geared to solving the real-life tasks asked of a commercial robot, said David Gustafson, the robotics team coach and a professor of computing and information sciences.

"This was a new contest this year, 'Find the remote,'" Gustafson said. "It was something practical, in a simulated house. It required the robots to find and retrieve a variety of unlike objects."

One of which was a TV remote control.

This is no mean feat. Willie has an arm on one side that works like a forklift and the color camera on the other. Willie uses the camera and his sonar detectors to navigate between and within rooms to find objects. But, once he finds an object he is looking for, he has to rotate to position the arm over the item.

Willie succeeded in doing this four times within 10 minutes. The other teams quit.

"He had to identify objects, which isn't easy," Gustafson said. "That's why the other teams dropped out. They couldn't identify objects. The guy who came up with the event thought no one would pick up more than one object. He was amazed."

KSU students learn to program robots as part of two software engineering project courses where they tackle such tasks as maze following, office delivery and office navigation using sonar to navigate, recognizing objects blocking paths, and detecting and analyzing movement.

According to Gustafson, in the future there will be many situations in which robots will work where humans cannot.

"Today's software engineering students will be the people creating that artificial intelligence," he said. And K-State engineering is helping prepare those students.

Gustafson said K-State students are successful in competition because they write good,

robust code. "The artificial intelligence software has to be written so that when something happens, the program gets back to another section of code that tells it what to do next," he said.

And he has no problem explaining how the KSU team develops robust code.

"We have a different attitude," he said. "Other teams look for a clever solution. We look at it as an engineering task. Some people have the attitude, 'Give me seven hours and I can write a program to do that.' Well, no you can't. People come there and think they can come up with some clever idea. That's not engineering. You have to have robust software." The engineering approach not only made

Gustafson's students strong competitors, but gave them confidence in their ability to solve problems.

"People (on other teams) complained that we were so nonchalant about it," he said. "'You want us to do that? OK.' And we did it."

Gustafson's team will need new blood for the 1998 robotics contest in Madison, Wis. None of the four students who participated in 1997 will be back, but Gustafson believes he will have a team and is making plans to enter.

"The task now is to optimize the robot—make it go faster, make it more accurate," Gustafson said. "There may be different objects. Each year the challenge bar is raised a bit higher."

Kansas team flies high in aviation design contest

By Beth Bohn

A team of students and faculty members from three Kansas universities landed in first place in the 1997 NASA/FAA National General Aviation Design Competition at the Experimental Aircraft Association's annual convention and fly-in at Oshkosh, Wis., Aug. 1.

The winning Kansas team, which included four faculty members and seven students from Kansas State's College of Engineering's Department of Mechanical and Nuclear engineering, also had members from the University of Kansas and Wichita State University.

Byron Jones, professor and head of the department of mechanical and nuclear engineering at the time, served as the lead faculty adviser for the college of engineering students involved in the project.

"Being able to work effectively as a member of a team is essential for today's engineer," Jones said. "We are always looking for opportunities where students can develop this ability. This design competition provides an excellent experience for the students—and winning sure makes it fun."

The all-Kansas team design was a four-passenger kit plane for the pilot with limited resources.

The design, named "Adagio," claims many features—payload, cruise velocity, range, rate of climb, handling qualities and take-off and landing field lengths—that are comparable to the Cessna 172R. But the cost of the students' kit plane is only \$75,000, about half the cost of the Cessna.

Team members also said the aircraft could be built in about 200 hours because of the design's use of preassembled and prefabricated materials. A typical kit plane requires about 1,500 hours of building time, according to the team.

The review panel of government, industry and university general aviation experts praised the Kansas design for its "outstanding technical effort, as well as its practicality, direct and innovative attack on cost issues and for its aesthetics."

The panel also praised the Kansas team's focus on making plane ownership and opera-

tion more affordable.

"The students put a considerable effort into assessing the cost versus performance issue in the design. It appears this effort paid off," Jones said.

The contest, in its third year, is sponsored by the National Aeronautics Space Administration and the Federal Aviation Administration and is coordinated by the Virginia Space Grant Consortium. The Kansas team took top honors in the 1995 contest and was second in 1996.

The Kansas team continued its winning ways Dec. 9 when it won first place in a



This Kansas design won first in August contest.

national design competition, "Design it, build it, fly it," and collected a \$10,000 grant award.

Twenty-seven students from Kansas State University helped the Kansas Design Team soar to this latest achievement.

The contest, a first-of-its-kind competition, was sponsored by NASA, the Federal Aviation Administration and the Experimental Aircraft Association (EAA).

The Kansas Design Team will use the grant to build two radio-controlled models of a four-passenger, single-engine aircraft featuring the new FJX-2 small turbofan engine. The team will fly one of its models at the EAA's annual convention and fly-in at Oshkosh, Wis., in August 1998.

The team also includes members from the University of Kansas, Wichita State University and Pittsburg State University.

1937

Clyde McCauley Jr. (EE) retired to Westborough, Mass., in April after living 35 years in Wayland. He has worked for Century Electric public service in northern Illinois, Duke Power, AUS-SIG. Co., Western Electric, Goodyear, Philco, Burroughs, Sylvania, Collins Radio, Microwave Association and eight years in real estate after retirement.

1938

Lorin E. Oberhelman (EE), Independence, Mo., was a member of the KSU amateur radio club in 1937 when it obtained the WYQQQ license. He obtained a license for WYGBY in 1932 and is still an active amateur. He credits his interest in radio for leading him into a successful career in engineering for the Nofsinger Co. and Amoco Oil Co. He is an active member of the Retired Engineers of the M.S.P.E. in Kansas City, Mo.

1940

Fred F. Townsend (CE), Camarillo, Calif., has been retired for 27 years. He moved into a retirement community four years ago where he is taking it easy at age 87 with his wife, Dolores.

1950

H. Edwin (Jim) Crow (CE), Austin, Texas, says that he has retired four times but is employed again, this time by the Morganti Group, the general contractor for the new Austin International Airport.

1951

Robert S. Lawton (EE), Pennsauken, N.J., was recently inducted into the Space Technology Hall of Fame for his role as prime contractor program manager in the Advanced Communications Technology Satellite Program from 1984 to 1989 when he retired from RCA Corp.

1954

Gerald R. Gumm (CE '54), Dodge City, Kan., has retired from Broce Construction Co. after 32 years of service.

1955

John A. Weese (ME) received one of nine Texas A&M University System Regents Professor Service Awards initiated this fall. At the end of the spring semester, he concluded 11 years as head of the engineering technology department and assumed a new position as engineering accreditation coordinator for the dean of engineering and as a professor of mechanical engineering. He and his wife, Betty (Dietrich) (HEC '56), live in Bryan, Texas.

1957

Harvey F. Groening (ChE), Lawrence, Kan., retired April 1 after 38+ years with FMC Corp. Most of the service was in Lawrence (amongst the Jayhawks!), plus several years in California with FMC and another company. Plans are to remain in Lawrence for the time being.

1958

Francis Grillot Jr. (ChE), Genoa, Ill., retired in June from A.O. Smith Harvestore Products Inc. as vice president of international marketing.

1959

Foster R. Needels (EE), Montgomery, Texas, recently retired after spending 28 years as a senior transit systems engineer with a number of employers. Most recently, he and his wife, Donna, lived for a year in Kuala Lumpur, Malaysia, where he was working for DeLeuw, Cather, International on the driverless transit system being installed there. They are currently at home in April Sound, a lake community north of Houston, which is within 100 miles of 12 of their 14 grandchildren.

1960

Ray Wells (ME) recently retired from Motorola



after working there 22 years in R&D of electronic materials. Ray and his wife, Pat, have moved to Fountain Hills, Ariz., where he has been busy landscaping their new home. They have two children and two grandchildren (in Utah and New Mexico). He plans some part-time consulting and traveling.

1962

Correction

In the spring 1997 issue of IMPACT, Robert L. Bennett's (ME) city of residence was incorrect. It is Louisville, Ky.

1963

Ashok R. Bendre (MSChE), Northbrook, Ill., is president and founder of Shakti Inc., incorporated in Illinois in early 1996. Shakti assists clients in the United States and overseas in technology transfer, engineering design, marketing and commercialization of new technologies in specialty chemicals, waste treatment and biotechnology. His wife, Seema, works for the Fertility Centers of Illinois in Glenview and manages the laboratory. His daughter, Rupali, is a graduate student in education and his son, Anup, is finishing his second year of medical school, both at the University of Illinois, Chicago.

1966

Van Chang (CE), Topeka, Kan., retired from the Kansas Department of Transportation on Sept. 8. He was the operations engineer with KDOT's Bureau of Materials and Research.

1969

Alan F. Kessler (AgE), Cedar Rapids, Iowa, was recently given the additional duties of vice president of quality assurance at Amana, a division of Raytheon Appliances. He is now vice president of engineering and quality. He reports that in August he completed his fifth backpacking trip of more than 50 miles in four years with his son, this time across the Rocky Mountain National Park. Previously, they have made two trips to Alaska and one each to Canada and the Appalachian Trail.

David A. Martin (ChE) has retired from Monsanto Chemical after 28 years. He and his wife, Linda, are building a home in Angel Fire, N.M.

1971

Richard W. Hammond (IE), Newton, Iowa, became vice president, logistics, Maytag Appliances, Oct. 1. He has been with Maytag since 1989 and was previously vice president, materials. In May, he was promoted to the rank of brigadier general in the U.S. Army Reserve. He is the deputy commander of the 416th Engineer Command, Darien, Ill. He and his wife, Janice, have three grown children.

1974

Joe P. Holland (NE, MSNE '77) and his wife, Nancy (Cooper) (AgE '76), have moved to Redlands, Calif., where Joe has taken a new job as senior program manager for Kelly Space and Technology. The company is building a commercial orbital launch system, called Eclipse, which Joe admits is "a bit afiel from nuclear engineering but fun."

1977

Jack G. Byers (CE, MSCE '78), Arvada, Colo., was recently appointed assistant state engineer for Colorado. His responsibilities include dam safety, dam design and construction review, geology and geotechnical investigations, hydrologic and ground water modeling, hydrographic records and stream flow measurements, water well construction rules and regulations, emergency response, and special studies.

Chuck Jones (MSCE), Denver, and his wife, Gayle (Naegele) (BIOL '72), have moved back to Colorado from California. He is the DoD program manager for Woodward-Clyde Consultants; she runs a research lab for the University of Colorado Medical Center.

1979

Bruce A. Loeppke (ArE) recently moved to Sarasota, Fla., with his wife, Cathy, to accept a senior mechanical project engineer position with Smith Seckman Reid Inc. SSR is a Nashville-based consulting engineering firm that does a predominant amount of mechanical/electrical engineering in the healthcare industry, but also provides consulting for clients in the industrial, commercial, sports arena, and civil/environmental markets.

1980

N.K. Anand (MSME), College Station, Texas, has been elected a fellow of the American Society of Mechanical Engineers International. He is an associate professor of mechanical engineering at Texas A&M University, where his research interests include computational heat transfer, HVAC and energy, real-time simulation of thermofluid systems and aerosols.

Lyle J. Cain (EE) has been selected to be included in the 1998-1999 edition of *Who's Who in Science and Engineering*. He is an electrical engineer who custom designs electronic test equipment for AlliedSignal in Kansas City, Mo.

Nadale Bosse (IE), Hinsdale, Ill., has been promoted to vice president of business operations at Ameritech's Small Business Service Division.

1981

Jack F. Higginbotham (NE, MSNE '83, Ph.D. '87), Corvallis, Ore., has received the 1997 Loyd Carter Award for outstanding and inspirational teaching from the Oregon State University College of Engineering.

1982

Patrick E. Hays (CE), Roeland Park, Kan., has recently accepted a new position at HDR Engineering Inc. in Kansas City, Mo. He will be leading the highway bridge engineering staff in the Kansas City office. Pat also passed the NCEES Structural Engineering exam in October and is now a licensed structural engineer in Illinois. Pat is married to Andrea (Roundy) (IntDe '83) and is the father of two future Wildcats, Erin, 10 and Kaitlin, 8.

Allecia Remington Collier (ChE) and her husband Randy, Austin, Texas, announce the birth of their third child, Jack Remington, June 25. He joins big sisters Casey, 8, and Rita, 4.

Paul Strecker (IE) and his wife, Sheila (Vierthaler) (ElmEd '84), announce the birth of their second child, Brandon Michael. Paul is comptroller and chief finance officer for Intermodal Marketing Inc., Kansas City. Sheila teaches second grade at Olathe Public Schools.

Art K. Umble (CE), Elkhart, Ind., received his Ph.D. in civil engineering from the University of Notre Dame in August. He is now the manager of water and waste water operations for the city of Elkhart.

Mark Wendland (ArE), Topeka, and his wife, Judy, announce the birth of their second child, Jarrett Thomas, on July 3. He has an older brother, Christian, who is 7.

1983

Brian K. Sullivan (ME) and his wife, Ann, Fullerton, Calif., announce the birth of their first child, Sean Brian, July 1. Brian is a policy consultant with ARCO in Los Angeles.

1984

Danny Minks (ME) and his wife, JoBeth (Johnson) (DT '83), Phoenix, Ariz., announce the birth of their second child, Danny Grant, Sept. 25, 1996. His sister, Emily, is four. Dan is a principal staff engineer with Motorola in Scottsdale.

Tony Thomas (ChE), Kobe, Japan, was promoted to technical and quality manager at the Goodyear Tire and Rubber Co. tire factory in Bangkok, Thailand, before he relocated to Japan in September.

1985

Sonja (Smith) Burris (IE), Lexington, S.C., joined Michelin North America in October 1996 as an industrial engineer at the Lexington plant. Her husband, Mark, is a quality technician for Select Comfort of South Carolina.

Curtis Cobb (ME), Puyallup, Wash., recently accepted a position at PRECOR USA as a project manager for commercial fitness equipment. He is also pursuing an MSME at the University of Washington.

George "Ed" E. Sherman (CnS), Brookline, N.H., has retired from active duty with the Army as a lieutenant colonel and joined Cabletron Systems SPECTRUM Consulting as a program manager for software development for Telco accounts (AT&T, U.S. West and Qualcomm).

1986

Earl Holle (ChE) and his wife, Lori, had a new baby girl, Kristin Joy, on March 5, who joins her brother, Brandon, who is 3. Earl continues to work with Conoco (11 years now) and transferred back to Denver about a year ago as director of reliability and maintenance.

1987

Frank A. Fieldson (ME), Fort Walton Beach, Fla., was recently promoted to regional director of engineering, unmanned aerial vehicle (UAV) programs, Sverdrup Corp. He led the design team that developed the Navy's primary reconnaissance UAV, the ARANT. Frank has run three marathons and is training for the Ironman Triathlon held annually in Hawaii. He is married to the former Debbie Cromer and has two sons, Patrick and Bryan.

Brian Jordan (IE), Burbank, Calif., recently married Ilka Westphal in Carmel. He is currently a senior manufacturing engineer with ITT Aerospace Controls in Valencia.

Kirk J. Duncan (EECE) Kansas City, Kan., has almost finished remodeling his 50-year-old "New Orleans" style home. He said that in May he "graduated with an MS in engineering management from (gasp) KU. In August I will celebrate 14 year of marriage to my lovely wife, Lisa (IntDe '87)."

1988

Estell Lopez (EECE), Issaquah, Wash., married Shirley Botts on Feb. 15. He is a hardware design engineer for Zetec, a manufacturer of electronic instrumentation equipment for the nondestructive testing industry.

Chris Reedy (EECE), Shawnee, Kan., recently joined the law firm of Webrmund Colantuono, LLC, in Overland Park, practicing employment law and commercial litigation and products liability. Chris is licensed to practice law in Kansas and Missouri. Prior to entering law practice, he was an avionics product line manager with AlliedSignal-Bendix/King.

1989

Scott Gardner (IE) has recently been promoted to manager of manufacturing engineering at the Toro Company, New Century, Kan. Toro makes golf

course maintenance and debris recycling equipment at this facility.

1990

Kevin Hamel (EECE) and his wife, Julie, announce the birth of their first child, Morgan Nicole, April 30. Kevin is a department manager for Procter & Gamble in Jackson, Tenn., where they also live.

Patrick Hessini (IE) and his wife, Diane, Ponca City, Okla., announce the birth of a daughter, Christine, July 3. She has a brother, Andre Patrick, age 2. Their father is the director of engineering for Conoco's transportation department.

Jack Messer (CE) and his wife, Lori, Manhattan, Kan., announce the birth of their second child, Kathryn Grace, June 30. She joins her brother Joseph, 11, and sister Sara, 2.

James "Rusty" Moll (ET) has accepted a position as a recruiter in the engineering group in the corporate office for Spencer Reed Group, a national technical and executive search firm based in Overland Park, Kan.

1991

Angela Deatruck (IE) married Kerry Hunter of Memphis, Tenn. Angela works for Federal Express as a senior engineer for ground operations in Memphis.

Bret A. English (ME), Topeka, Kan., is working as an engineer for the Kansas Department of Transportation. He recently received his P.E. license. He reports that he and his wife, Lisa (Waddell) (ElmEd '92), have a 3-year-old daughter and a 2-year-old son—and little time for sleep!

Terry Hon (EECE) has accepted a new position as senior RF engineer at Samsung Telecommunications in Richardson, Texas. Terry and his wife, Michelle, and son, Tyler, 5, live in Wylie.

Shane Lutz (ArE) and his wife, Kelly (Reynolds) (ElmEd '91), Olathe, Kan., announce the birth of their second daughter, Sydney Erin, March 9. Shane is a consulting project manager at Henderson Engineers, Lenexa.

John P. Mosimann (EECE), Shawnee, Kan., recently returned from a brief assignment in Pakistan on a power plant start-up. He is with Black & Veatch, Overland Park.

Ron Siebert (CnS), Vail, Colo., has accepted the position of engineering project manager with Eagle River Water and Sanitation District there.

Philip Silvius (ME), Kearney, Neb., recently received recognition as the 1997 Outstanding Young Professional Engineer for the state of Nebraska. The Nebraska Society of Professional Engineers presents the award to one of its members each year. He was also elected president of the society's Nebraska mid-state chapter for the upcoming year. He obtained his Nebraska professional engineer registration in 1996.

Joel S. Sommer (EECE) and his wife, Tricia (Dryden) (BA '92), Phoenix, Ariz., announce the birth of their son, Jacob Matthew, on May 19. Joel is a senior project engineer with Honeywell, BCASD, in Glendale.

Simeon O. Terry (IE), Corinth, Texas, has accepted the position of project manager with S.S.P. Consulting in Dallas. He provides technical consultation in construction management to clients in Texas, Oklahoma, Louisiana, Minnesota and Washington. He worked the last six years with United Homecraft as a regional operations manager.

1992

Shannon Beeson (ME), Costa Mesa, Calif., was promoted to ATV project engineer June 1 from product support specialist with Kawasaki Motors Corp., U.S.A., in Irvine.

Samuel M. Moka (CE) continues to work as a civil design engineer with BG Consultants in Manhattan, Kan. He became a registered professional engineer in Kansas in July.

1994

Dan Sixbury (CnS), Colby, Kan., recently married Jodii Lookhart of Manhattan. Dan is a systems/database administrator for Informix Software, and Jodii is a travel agent.

1996

Jenny [Odgers] Ewy (ChE) and Greg Ewy (EE) were married June 14. The couple lives in Oklahoma City. Jenny works for International Environmental as a quality engineer and Greg works for the Air Force as a secure networks engineer.

Anthony Jaime (CE) is an engineer-in-training with Bibb and Associates, an architectural and engineering consulting firm in Overland Park, Kan., where he designs steel frames and structures for commercial construction projects.

Deaths

1972

Ralph C. Lindsey Jr. (ME), Atchison, Kan., died Oct. 26, 1995, from injuries suffered in a two-vehicle accident. He was a self-employed consulting engineer. He had been an engineer for Southwestern Bell Telephone Co., Hydro Tool, Hoss & Brown Co. and Kiene & Bradley. He is survived by his wife, Jane, and three daughters, a son and two grandchildren.

What's new with you?

We'd like to know—and so would your former classmates. 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* at one of the addresses below.

Want classmates to contact you? Check the appropriate box below and we will include either your address, phone number or e-mail address with your news. You must indicate by checking a box that you want this information printed. Also, because of space limitations in the newsletter, please select only one for publication.

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COLLEGE BRIEFS

College awards DSA to two

The KSU College of Engineering honored two alumni David Smoot and Robert Thorn, with Distinguished Service Awards during spring commencement exercises in May.

Smoot is owner of Smoot Co. in Kansas City, Kan. He earned a degree in mechanical engineering from K-State in 1949.

Thorn is managing partner of Finney and Turnipseed, Topeka. Thorn earned a civil engineering degree from K-State in 1950.

Riblett gets Hollis award

The college of engineering honored Carl Riblett with its James Hollis Excellence in Undergraduate Teaching Award during spring commencement ceremonies in May. The award recognizes outstanding teaching, research work and advising during the academic year.

A member of the K-State faculty since 1989, Riblett is an associate professor of architectural engineering and construction science.

Bio-ag prof Clark named young engineer of the year

Gary Clark, professor of biological and agricultural engineering, was named Young Engineer of the Year by the Society for Engineering in Agricultural, Food and Biological Systems in October.

Mortar Board honors outstanding engineering advisors for '96-'97

The KSU chapter of Mortar Board National College Senior Honor Society recognized four college of engineering faculty among the 27 KSU faculty members and advisers honored at a reception Oct. 20.

Honored were Prasanta Kalita, assistant professor of biological and agricultural engineering; Ruth Dyer, professor of electrical and computer engineering; Tom Roberts, assistant

dean; and Jerome Lavelle, assistant professor of industrial engineering.

NE student receives Rotary International scholarship

Chris Hansen, a KSU senior in nuclear engineering, has been awarded a Rotary Ambassadorial scholarship from Rotary International. The scholarship provides up to \$22,000 for study abroad.

Hansen, who graduates in May 1998 with a minor in economics, will study economics in the master's program at the University of the Witwatersrand in Johannesburg, South Africa. He said studying in South Africa would give him a chance to blend his two academic interests.

Bio-Ag junior one of two K-State Udall scholars for 1997

Kevin Stamm, junior in biological and agricultural engineering, was one of two KSU students to receive the \$5,000 Udall Scholarship. He is among 55 winners of the congressional scholarships this year.

Stamm wants to pursue a career in environmental engineering and is considering attending graduate school following his graduation from K-State.

The scholarships are awarded by the Udall Scholarship Foundation to outstanding college sophomores or juniors who intend to pursue careers related to the environment or Native American health care or tribal public policy.

KSU AIChE chapter one of best

For the third year in a row, the KSU chapter of the American Institute of Chemical Engineers received an Outstanding Chapter Award, one of 15 recognized for faculty and student participation, quality and quantity of chapter meetings and chapter involvement in local, regional and national events.

Dwyer, Kelkar get NSF CAREER development awards

Two K-State College of Engineering faculty members were awarded the prestigious Faculty Early Career Development Award by the National Science Foundation.

Matthew Dwyer, a computer and information scientist, and Atul G. Kelkar, an assistant professor of mechanical engineering, received the honors in June.

The NSF CAREER award is designed to enable faculty members with four years of experience or less to establish their own research and education programs.

Dyer's research will address the engineering design problems associated with creating concurrent software programs. Total funding for the project is expected to be \$200,500.



Dwyer

His will be an integrated program of research to develop techniques for building and validating concurrent software. He will devise software components that aid the rapid construction of software programs designed to handle parallel scientific computing problems in particular. He also will devise automated techniques to help software developers determine if their programs work as expected.

Dwyer joined the KSU faculty as assistant professor in 1995. He earned his undergraduate degree in electrical engineering in 1985 from the University of Rochester, a master's degree in computer science in 1989 from the University of Massachusetts at Boston and a doctorate in computer science from the University of Massachusetts at Amherst in 1995.

Kelkar's award will provide \$210,000 over four years for an ambitious project on robust control of passive and nonpassive aerospace systems that combines research and education.



Kelkar

The research involves designing controllers that are able to deliver required stability and performance in the presence of unforeseen changes. They will be used on subsonic and supersonic aircraft and for attitude control and large angle maneuvering of multibody, flexible space structures.

Kelkar joined the KSU faculty in January 1996. He received his bachelor's degree from the University of Poona in 1984 and both his master's and doctoral degrees from Old Dominion University in 1990 and 1993, respectively.

"Their size and the fact that fewer than one out of 10 applicants receive them indicates the prestige of these awards," said Terry King, dean of engineering. "In winning this award, Matt Dwyer and Atul Kelkar have demonstrated initiative and creativity, as well as scientific competency, that make them an asset in both our classrooms and our labs."

College of Engineering
Kansas State University
146 Rathbone Hall
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