

# IMPACT

Kansas State University College of Engineering

Vol. 23, Number 1 Spring 1988

## AT&T Donates \$970,288 in Computers and Computer Equipment

AT&T has donated \$970,288 in computers and computer equipment to electrical and computer engineering. In making the donation, AT&T officials said, "A business like AT&T depends on a synergy between industry and university research. AT&T fully recognizes the value of working today with tomorrow's leaders. We are very pleased with the quality of work by KSU professors and students and are proud to be associated with it."

AT&T invites a few excellent colleges and universities to submit proposals to become part of the company's computer donations program. This year only 75 schools were asked to submit proposals. K-State's was one of only 46 chosen for the donations program.

## Betty Slemen to Retire From Dean's Office Staff

Betty Slemen, administrative officer in the dean's office, will retire June 30 after 35 years at Kansas State University.

She was honored Saturday, March 26, with a special Steel Ring award for service to engineering. The occasion marked only the third time in the history of Steel Ring the award has been presented. Past recipients are the late KSU President James McCain and Dean Donald E. Rathbone.

Born and educated in LaSalle, Ill., where she attended Brown's Business College, Slemen was a 1980 recipient of the E. Walter Morrison award given by the KSU Foundation to the classified employee who has best exemplified characteristics of hard work, devotion and effort for the university. The same year she was a finalist for KSU Classified Employee of the Year.

She joined K-State in April 1953 in the Engineering Experiment Station, then headed by Leland Hobson. In 1954 she transferred to the Department of Economics and worked there until business administration split with economics and became the Department of Business Administration. She did the groundwork for what later became the College of Business



Betty Slemen

Administration by setting up records for the department. In May 1958 she returned to the Engineering Experiment Station. In February 1959, Dean M. A. Durland asked her to work for him in the dean's office and she has continued there, advancing from clerical positions to her current post as an administrative officer III.

Gardening and both foreign and domestic travel are included in her retirement plans. An active member of the Manhattan Business and Professional Women's Organization, of which she is a past

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## College Establishes a Hall of Fame

The College of Engineering has established a Hall of Fame for outstanding engineering accomplishments, to recognize those graduates and friends who have distinguished themselves in their professional careers.

"I am very excited about the Engineering Hall of Fame," said Dean Don Rathbone. "It will give us the opportunity to recognize more of our outstanding graduates than we've been able to in the past."

Those eligible for this recognition are former engineering students and engineering friends of KSU. The personal achievement may be technical, political or social. A minimum of 15 years professional experience is required.

Awardees will be selected on the basis of national or international recognition. They must evidence leadership in industry, government, education, consulting or contracting, or have made a unique engineering contribution to society through inventions, successful patents, unique designs or other accomplishments. Involvement with the KSU College of Engineering also will be a factor.

Nominations may be made by anyone: peers, alumni, faculty or self. A nomination can be made on the nomination form on page 2. However, unless appropriate supporting data are included, the College will follow up with a direct data solicitation from the nominee. Judgments will be based on the material received and other known information. The initial selection committee will be formed from the Engineering Advisory Council and engineering faculty and chaired by the dean of engineering. Succeeding awardees will be selected by Engineering Hall of Fame members in counsel with the dean of engineering.

■ continued on page 2

■ *continued from page 1*

Membership into the Engineering Hall of Fame will be limited to about two percent of College of Engineering graduates.

The first awardees will be recognized in fall 1988. At the award ceremony, a plaque will be presented and appropriate follow-up

publicity about the event will be made. Pictures of the individuals will be displayed in a prominent location in Durland Hall. Awardees must attend the award ceremony unless they are unable to travel.

Use the form below to make a nomination. Provide as much information as you can. The early success of the Engineering Hall of Fame depends on your response. Support your KSU College of Engineering by helping us identify those who have attained excellence and preeminence through their engineering careers.

Nominating statements must be limited to the space below. Additional supporting documentation, such as a resume, may be attached; otherwise it will be solicited. Make nominations based on the candidate's prominence in industry, government, education, consulting or contracting. Decisions will be made based on the materials received or solicited and knowledge about the candidate.

(please print)

I nominate \_\_\_\_\_ for the 1988 Class of Awardees to the KSU Engineering Hall of Fame for the following reasons:

## L.C. Paslay Establishes Supplemental Endowed Professorship



LeRoy Paslay

LeRoy C. Paslay, (EE '30, M.S. '34) has established an endowed professorship with a gift of more than \$130,000 to the College of Engineering to provide supplemental salary to an outstanding professor.

"With LeRoy's great insight and awareness, he has built in a salary supplement that increases with time and takes inflation into account," said Dean Donald E. Rathbone. "The supplement will be as meaningful 20 years from now as it is today." Rathbone said he expects to begin the award program in fall 1988.

Paslay and his wife, Aileen, of *Manalapan, Fla.*, have been major donors of engineering scholarship funds and for the Durland Hall engineering building. Its 180-seat lecture hall is named for Paslay in recognition of his many contributions.

Paslay is retired president of Marine Seismic Surveys, Inc., and Marine Geophysical Co. He is a native of Manhattan and a 1930 electrical engineering graduate. He was an assistant professor at K-State while he worked on a master's degree, which he received in 1934.

During the 1930s and '40s, Paslay became principal in a number of companies which developed and distributed marine instruments. His pioneering accomplishments as a developer of the Marine Seismic Streamer, a recording device, earned him the Society of Exploration Geophysicist Medal Award for 1976.

He also has won a number of other awards for engineering accomplishments and for his work with civic groups. For his contributions to the engineering profession and to his alma mater, he received a Distinguished Service Award from the KSU College of Engineering in 1983 and an honorary doctorate in 1986.

Nominee's name \_\_\_\_\_

Living \_\_\_\_\_ Deceased \_\_\_\_\_

Nominee's address \_\_\_\_\_  
(city) (state) (zipcode)

Nominee's telephone number \_\_\_\_\_  
(area code)

Nominated by \_\_\_\_\_

\_\_\_\_\_  
(address)

Nominations and supporting documentation should be mailed to the Hall of Fame Selection Committee, College of Engineering, 146 Durland Hall, Kansas State University, Manhattan, KS 66506, no later than June 17, 1988.

## Three Students Selected as WISE Program Interns

Three K-State engineering students have been selected to spend 10 weeks this summer in Washington, D.C., learning how engineers contribute to public policy decisions on complex technological matters.

Sheila Hayter, 1920 Grandview Drive, Manhattan, Kim Warner, 2720 Barclay Drive, and Deborah Tauscher, 101 W. 34th St., Hays, are three of only 16 third-year engineering students selected in a nationwide competition for the Washington Internships for Students of Engineering (WISE) program. All three are juniors at

K-State. Hayter is majoring in mechanical engineering; Warner and Tauscher are majoring in industrial engineering.

K-State's College of Engineering has had at least one student chosen every year for the last four years for this program in engineering and public policy.

"Considering that more than 250 colleges of engineering are eligible to nominate students for this program, it is an honor to have even one student selected each year and it's fantastic that we had three selected this year," said Donald E.

Rathbone, dean of engineering. "We are very pleased and very proud of our students."

A stipend of \$2,200 plus a travel allowance is provided. The students are under the guidance of a nationally prominent engineering professor and receive college credit for the experience. Students are selected for the program based on evidence of leadership skills and interest in public issues. The 1988 program will be held from May 31 to Aug. 5. WISE is coordinated by the American Society for Engineering Education.

## College Dedicates Minority Center to Hummel

Karen Hummel, who more than doubled the minority student enrollment and increased minority student retention to greater than 90 percent in the College of Engineering, was honored Dec. 11 with the dedication of a room in her name. She left the college in January after directing the Engineering Minority Program since its formation in 1978.

"Engineering students' sentiment toward Karen was demonstrated by their request that (the minority study center in Seaton Hall) be renamed the Karen C. Hummel Minority Engineering Study Center," Dean Donald Rathbone said.

Her successful efforts to enroll Blacks, Hispanics and Native American Indians in K-State's engineering college won recognition in 1984 when she received the university's Presidential Award for Distinguished Service to Minority Education. In addition to recruiting and advising students, Hummel has sought support of private industry to provide minority student scholarships.

Hummel left the College of Engineering in January to accompany her husband, Steve, to San Diego, Calif., where he has accepted a position with NCR. A 1965 K-State graduate in home economics from Valley Center, Hummel taught high school for three years. She was employed for four years in the KSU Division of Continuing Education, working on publications and in conference scheduling. Prior to joining the K-State engineering faculty, Hummel was customer assistance adviser for Kansas Power and Light Co.

## Nuclear Engineering Gets Fellowship From INPO

The Institute of Nuclear Power Operations, Atlanta, Ga., will provide a \$7,500 fellowship to a Kansas State University nuclear engineering graduate student next fall. According to nuclear engineering head N. Dean Eckhoff, the INPO fellowship for 1988-89 will be awarded to a student who plans to join an electric utility company after graduation.

INPO has provided graduate support to a KSU engineering student since 1983, he noted. In addition, INPO has provided up to six new \$1,700 scholarships each year for KSU undergraduate nuclear engineering students. Because the scholarships are renewable, nine KSU engineering students currently are receiving financial assistance for their education from INPO, he said. In addition, there is one honorary INPO scholar now enrolled.

## Telefund Has Record-Setting Year

The KSU Foundation Telefund set records for the ninth consecutive year. The College of Engineering received \$83,285 from 2,293 pledges. In 1987, the College received 81,401 from 2,330 pledges.

The top student caller from throughout the university was Greg Covington, sophomore in engineering, who received 233 pledges in six calling sessions.

## Amoco Award

The Amoco Foundation has awarded a \$6,000 fellowship to Philip Leininger, Haviland, a mechanical engineering graduate student, to continue studies toward a master's degree. Leininger is the second Amoco fellow to be selected from mechanical engineering. He graduated from KSU last May with a bachelor's degree and is studying thermal sciences and energy conservation. He is working on a research project involving the energy use of various buildings at Fort Riley under the direction of professor Byron Jones.

## K-State and KU Offer Joint Civil Engineering Program in Topeka

Kansas State University and the University of Kansas are offering courses in Topeka for engineers who are working on master's degrees in civil engineering.

Classes are at the Capitol Complex Center in Topeka. Robert Snell, K-State coordinator of the program, said the course offers a chance for engineers to get master's degrees in civil engineering without leaving their jobs. Classes are held on week nights and weekends.

Courses are scheduled through the spring semester of 1990. Further information is available from Snell at (913) 532-5862.

## **K-State Bioengineers, Backed by KTEC, Aid Kansas High Tech Move**

The Kansas Technology Enterprise Corporation (KTEC) and a Topeka-based manufacturer are collaborating with K-State bioengineers in a research project aimed at creating high-tech manufacturing jobs in Kansas and replacing imported electronic components with domestically manufactured products.

Stephen Dyer, Richard Gallagher and Ruth Dyer of the department of electrical and computer engineering are redesigning a major part of the electronics and the controls of a therapeutic ultrasound system now manufactured by Physio Technology, Inc., a medical equipment manufacturer. Ultrasound has been used in human medicine since the 1950s to stimulate the healing of soft-tissue injuries, bones and joints and is expected to be

used widely in the expanding field of sports medicine.

Physio contributed \$68,937 and KTEC contributed \$45,885 to the cooperative venture. KTEC finances collaborative research and technology transfer between academic institutions or research organizations and commercial firms. The program is designed to use academic research expertise to address industrial technical needs and potential innovations. KTEC finances up to 40 percent of project costs and the collaborating firm provides the remaining 60 percent of the costs. Since 1983, more than \$1 million has been awarded to the KSU College of Engineering for 20 KTEC and industry-sponsored collaborative research projects.

## **KDHE Exploring Options with Universities**

Representatives from the Kansas Department of Health and Environment were on campus in February exploring possibilities of increasing interactions between the organization and the university.

"The KDHE is talking with all of the Regents universities to determine if working relationships can be increased. These efforts might extend a relationship which could lead to additional joint efforts between K-State and KDHE," said Gale Simons, acting director of K-State's Engineering Experiment Station. Simons said K-State faculty and administrators recently visited KDHE headquarters in Topeka.

Headed by under-secretary Gary Hulett, a group of 12 KDHE officials toured the College of Engineering and visited mechanical, industrial, agricultural, nuclear, chemical, civil and electrical and computer engineering departments. They also visited engineering's Office of Hazardous Waste Research and the Institute for Environmental Research.

"I would like to see a situation where faculty, graduate students and senior undergraduates from Kansas Regents universities could participate in cooperative research projects with KDHE," Hulett said. "To this end, KDHE will be contacting the other Regents institutions about similar visits and projects."

"This is a positive step toward increasing cooperation between business, education and government," said Dean of Engineering Donald E. Rathbone. "We need to encourage these groups to work more closely together. Such cooperation will be beneficial to the long-range economic development of the state of Kansas by making all three areas more efficient."

Simons said a working agreement also could result in research projects which would benefit both K-State and the KDHE. Among possible areas of mutual interest are research in air and water quality, hazardous waste, computer networking, database management and analysis; health and nutrition; AIDS; aging; and radon measurement and reduction.

## **Electronics Chairman on Campus for Address**

The founder and chairman of the board of an internationally known electronics company delivered a Tau Beta Pi Distinguished Lecture last semester.

The speaker was Joseph Keithley, of Keithley Instruments, Inc., in Cleveland, Ohio. Keithley Instruments manufactures electronic test and measuring instruments sold throughout the world. Keithley founded the company in 1946. A graduate of the Massachusetts Institute of Technology, he earned his master's degree in electrical engineering in 1938. Following graduation, he joined Bell Telephone Laboratories in New York.

Before starting his company, Keithley was a scientist at the U.S. Naval Ordnance Laboratory in Washington, D.C., where he worked on underwater mine firing devices. For his work, he earned the Navy's "Distinguished Civilian Service Award."

## **Three KSU Engineering Faculty Share \$15,000 in Awards**

Three engineering faculty members recently were selected to receive the Halliburton and Black and Veatch professorships which amount to \$15,000 in awards.

Charles Burton, a professor of architectural engineering and construction science, and Larry Erickson, a professor of chemical engineering, were named Halliburton Professors for 1987-1988 and each received \$5,000 from the Halliburton Foundation of Dallas, Texas.

Kenneth Shultis, a professor of nuclear engineering, is the 1988 recipient of the Black and Veatch Professorship, which includes an award of \$5,000.

College officials said the awards were made on the basis of outstanding teaching, research and professional service. The funds may be used for faculty development, attendance at seminars and conferences, professional travel and for membership in engineering associations.

# Open House 1988

## Open House Awards

Yellow Brick—Architectural engineering  
 Best Department—Architectural engineering  
 Best Open Class Display—Nuclear engineering  
 Best Limited Class Display—Construction science



Boeing executive Don Thomas, left, demonstrates a voice-controlled robot in industrial engineering as Ray Hightower, far right, and others look on.



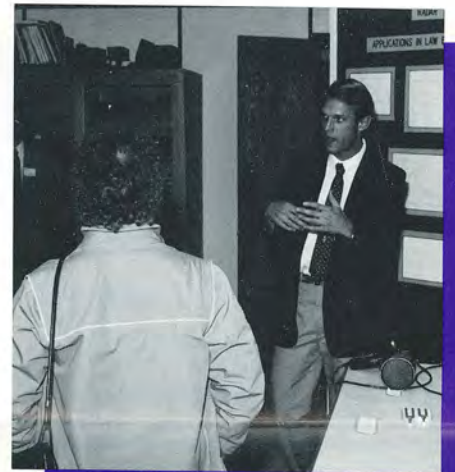
Two architectural engineering majors ruled over Open House: Raphael "Ray" Yunk, Ellsworth, Kan., was St. Pat and Mary Hazell, Omaha, Neb., was St. Patricia.



Dean Don Rathbone wields the scissors to cut the ribbon kicking off Open House festivities.



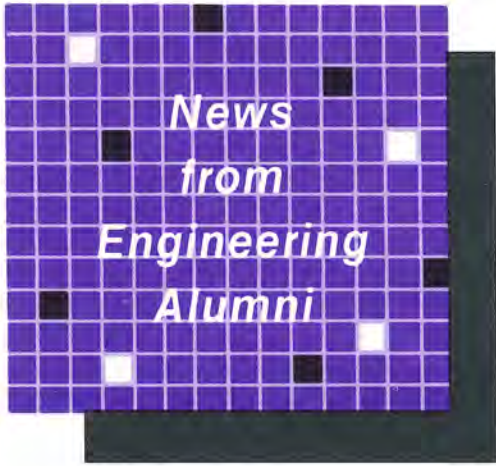
Architectural engineering



Electrical and computer engineering



Mechanical engineering



## News from Engineering Alumni

**L. J. Owsley (EE '30)** has been retired since 1971 from Westinghouse. He is living in Surfside Beach, S.C., an area with more than 40 golf courses. He still plays regularly. He and his wife have been married more than 52 years, have three sons, a daughter, and grandchildren.

**Walt Cronin (EE '38)** was recently inducted into the G.E. Aircraft Engines Propulsion Hall of Fame in Cincinnati, Ohio. The G.E. Aircraft Engines Propulsion Hall of Fame was established to recognize and commemorate individual contributions of lasting and widespread significance to the company's aircraft engine business and, thereby, to aviation in general.

**Wilmer L. Dague (EE '43)** retired in 1982 and is living in Bayonett Point, Fla.

**Raymond E. Stokely (ME '44)**, Rockford, Ill., is a columnist for "The Senior News," a monthly newspaper with a circulation of 45,000. He also has had several devotionals published in the Methodist monthly publication, "The Upper Room."

**Leo Shapiro (ME '46)** joined Textron Marine Systems, New Orleans, La., as director, program planning and control, following retirement from Rockwell International. He married the former Janet Kovac of Yorba Linda, Calif., on Sept. 5, 1987.

**L. Ben Patterson (ChE '47)** retired from his post as vice president, production, of Hawkeye Chemical Co. in fall 1985. With his wife, Jean, he has been an Ambassador for Friendship to New Zealand in September 1986, to Austria in September 1987, and exchange director to Japan in March 1988.

**Linton E. Ward (CE '48)** retired from his post of director, port facilities, for Conrail Corp. He is living in Strafford, Pa.

**Walter L. Olson (AgE '49)** writes that he is enjoying his "work" as assistant to Tom Neal, city engineer in Junction City, Kan.

**L. Dean Strowig (CE '50)** retired in February 1988 from his post as district engineer for the Kansas Department of Health and Environment (KDHE). His career included 25 years with KDHE, two

years in private practice and 10 years with Wilson and Co. He and his wife, Barbara, are living in Salina.

**Ray L. Thompson (EE '50)** retired as a development engineer from IBM after more than 37 years. He has been asked to return to work part time. He lives in Austin, Texas.

**Frederic K. Wrigley (ChE '50)** retired July 1, 1987 from his post as project manager for Westinghouse Idaho Nuclear Co. He is living in Idaho Falls.

**Clifford W. Heckathorn (CE '51)** retired as assistant chief, bureau of materials and research, from the Kansas Department of Transportation, Topeka, Kan., on Dec. 1, 1987, after more than 39 years service.

**Richard L. Evans (EE '52)** retired from Texaco, Inc., after 34 years in the marketing department. He is living in Houston.

**Donald E. Kershner, PE/CPE (EE '55)** is the staff facilities engineer for the 83rd Army Reserve Command, Columbus, Ohio. A registered professional engineer in Massachusetts, he was recently certified as a plant engineer.

**Emil W. Beckman (CE '59)** has been retired since Dec. 31, 1976, and is living in Lincoln, Neb.

**James Lansing (IE '59)** has been promoted to Safety/Product Assurance Manager for NASA at the J.F. Kennedy Space Center Space Station in Florida. He writes that he is "definitely not retired yet—having too much fun."

**Gerald T. Oppliger (ME '59)** is executive vice president for Lockheed Space Operations Co., at Kennedy Space Center in Florida. The company processes and launches the U.S. Space Shuttle.

**Jay S. Huebner (EE '61)** has been named a Fulbright Scholar for 1988 and will spend the winter and spring conducting research on electronic activity on membrane surfaces at Osnabrueck University in West Germany. He is a professor of natural

sciences and director of the Center for Membrane Physics at the University of North Florida. He has a Ph.D. in physics from the University of California, Riverside.

**P.G. "Phil" Barger (AgE '63)** is relocating from Detroit to Camanche, Iowa, as president of Compliment Vans, a specialty automotive van conversion company. He is accessing new vehicle product concepts and product developments.

**Herbert Whitney (CE '63)** is president of Citgo Pipeline Co., Tulsa, Okla., and general manager of international supply and transportation for Citgo Petroleum Corp. He also serves on the executive committee of the Association of Oil Pipelines.

**Ronald E. Adams (AgE '64)** is an engineering and manufacturing consultant for food, beverage and pharmaceutical industries with Digital Equipment Corp., in Elk Grove Village, Ill.

**Lionel R. Whitmer, P.E., (ME '68, M.S. '74, Ph.D. '80)** recently became a member of R&D with Boeing Military Airplane Co. in Wichita, Kan., as a senior specialist engineer. He received a Regional Award of Merit from ASHRAE last year, plus a Presidential Award of Excellence as past-president of the Wichita ASHRAE chapter. He has just completed a three-year term as vice-chairman of energy management for Region IX of ASHRAE.

**John C. Mein (EE '75)** is district sales manager covering Utah and Colorado for IDT, manufacturing company in Santa Clara, Calif. He was St. Pat in 1975.

**Danny H. Rogers (AgE '76, CE '77)** has finished all requirements for his Ph.D. in agricultural engineering at Oklahoma State University. He has returned to Manhattan to work for extension agricultural engineering after having been assigned to the northwest area office in Colby, Kan.

**Jack Byers (CE '76, M.S. '77)** has been promoted to assistant project manager for the U.S. Bureau of Reclamation in Bismarck, N.D. He and his wife Cynthia, both avid K-State fans, recently had their fourth child, David. Their family also includes Cathryn, 6, Timothy, 5, and Rebecca, 4.

**Daniel J. Olberding (ME '78, M.S. '80)** is one of three Rockwell International employees in 1988 to receive the highest honor the company confers: Engineer of the Year. Olberding is a member of the technical staff of the Missile Systems Division and lives in Lawrenceville, Ga., a suburb of Atlanta. He joined the division in 1985. He previously worked as a consultant under contract to the Space Transportation Systems Division in Downey, Calif. He was responsible for structural dynamic analysis of the fully integrated space shuttle vehicle and its payloads. Presently he is responsible for the mechanical analysis and testing of ground-based and airborne missile systems.

**Thomas E. Gates, P.E. (CE '79, '81)** was selected by the Outstanding Young Men of America program to be included in its 1987 edition. He also was recently elected to a two-year term on the Richland, Wash., city council. For the past five and a half years he has been serving on the physical planning commission and is completing his fourth term as chairman.

**Neil K. Norman, P.E. (EE '79)** is director of operations for Wheatland Electric Coop, Inc., in charge of engineering plans, studies, etc. He supervises line and station construction and maintenance and oversees day-to-day operations for the distribution cooperative.

**Larry W. Stoss (EE '82)** was selected as 1987 outstanding engineer-in-training for the state of Kansas by the Kansas Engineering Society. Stoss is an electrical designer/engineer with the engineering consulting firm of Bucher, Willis & Ratliff, Salina, Kan.

**Bret Andrews (ME '83)** is plant engineer for Ralston Purina Co., Grocery Products (Division, at the Flagstaff, Ariz. plant.

**Brian K. Bednar (EET '83)** worked for Delco Electronics from May 1983 to July 1987. He's now working in Dallas as a sales engineer for Sargans Western, a division of Schlumberger Industries.

**Elaine (Gorton) Kaifes (ME '83)** earned her MBA from Rockhurst College, Kansas City, Mo., and is working as a project engineer for Kansas City Power & Light Co.

**Todd Bednar (CS '84)** is now an office engineer with McDevitt & Street Co., Cary, N.C. His current project is Weston One, a five-story, \$20 million office building.

**Robert Gray Wald (EE '86)** is pursuing a master's degree in computer engineering at the University of Colorado, Boulder. He is working as a research assistant for the National Science Foundation's newly-established center for opto-electronic computing systems. He writes that he is "doing extremely interesting research in optical artificial intelligence and optical neurocomputer applications for space subsystem autonomous control."

**Jim Wesley (MET '86)** was selected as project engineer by Transportation Mfg. Corp., a subsidiary of Greyhound Corp., to design the first plastic dashboard for the Greyhound/MCI Intercity Coach, which went into production Feb. 1.

## Deaths

**Sheldon Batchelder Storer (EE '25)** died March 6, 1988. From 1937 to 1946 he was managing engineer of the Trumbull Electric Manufacturing Co. In 1946 he left to become owner and operator of Sheldon Storer and Associates Manufacturer's Agents in Cincinnati until his retirement in 1987. He was a member of the National Society of Professional Engineers, the Institute of Electrical and Electronic Engineers and the U.S. Institute of Theatre Technology. He also was a member and past president of the Engineering Society of Cincinnati.

**Ralph J. Wahrenbrock (ME '41)** died Oct. 7, 1987 in Sun City, Ariz. He was born in Enterprise, Kan., and moved to Arizona in 1976 from Michigan. He had been an automotive engineer with Ethyl Corp. for 35 years before his retirement. He was a World War II U.S. Navy veteran.

**Samuel Joseph Meltzer (ME '43)** died April 26, 1987.

**Robert Louis Mason (M.S., ME '51)** died March 29, 1987. He retired as a professor of mechanical engineering at Texas Tech University on Sept. 7, 1984, having taught there for 44 years. As a "professor emeritus" he continued teaching on a part-time basis in mechanical engineering technology through spring 1986. He had served in the U.S. Navy Reserve 1944-1946 and continued in the Reserves.

## What's New With You?

We'd like to know—and so would your former classmates. Please take a few minutes to jot down any job changes, marriages, new babies, professional or other activities, whether you've retired, or any reminiscences you'd like to share. Send along a recent photo if you have one. Use this form or write to: IMPACT Editor, College of Engineering, Durland Hall, Kansas State University, Manhattan, KS. 66506.

Name \_\_\_\_\_

Class of \_\_\_\_\_

Major \_\_\_\_\_

Address \_\_\_\_\_

News for IMPACT \_\_\_\_\_

Return to IMPACT Editor, College of Engineering, Durland Hall, Kansas State University, Manhattan, KS. 66506.

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president and "Woman of the Year," she will be in charge of publications for the 1989 state convention which will meet in Manhattan. In addition she plans to work more with the Manhattan Humane Society.

"For a while, I want to do nothing but just spend a nice, relaxed summer," Slemen said.

A retirement dinner to honor Slemen is scheduled for June 8. To make reservations, contact Maureen Lockhart at (913) 532-5590.

## **Engineering Students Design Equipment for Companies**

Seniors studying engineering technology prepare for "life after college" by designing equipment to solve real problems of industrial businesses throughout Kansas and surrounding states.

Completion of the mechanical design laboratory is a requirement for earning a degree in mechanical engineering technology, said class instructor Frederick J. Hoppe. Some of the designs from fall semester were a substation telephone

switch for AT&T Technology Systems and a high speed disc harrow for Balderson, Inc.

Companies propose projects they consider important, achievable and ones they would implement if a reasonable solution surfaced, Hoppe said. The students draw upon the knowledge learned in previous courses, learn to work as a team and get an introduction to how they will function on the job after graduation.

## **KSU Team Says Reduced Office Lighting Means Computer-Ease**

"Turn the lights down low" is not a romantic suggestion when it comes from computer lighting engineers at K-State. It's a matter of making people work more comfortably in the office world of the future.

"We've spent the past fifty years," said industrial engineer and ergonomist Stephan Konz, "learning how to light offices and brighten work areas so people could read printed material. It's going to take us at least a decade to make people aware that offices with computers are different than other offices." Konz and

graduate student Robert Yearout have been evaluating common office lighting environments and designing modifications so people can work more easily at video display terminals.

Predictions are that by 1990 about 25 percent of office employees will work at computers for some part of their day. They will either work refreshed and alert all day or complain of headaches, neck and back problems, and eye strain. Konz and Yearout are working to improve those environments so people will work refreshed.

A grant from IBM established the Lighting Research Laboratory in industrial engineering. There Yearout tested the comfort and work accuracy of volunteers using several combinations of direct and indirect lighting. Participants ranged in age from 18 to 61. They reported being most comfortable when the light of the work area was reduced and a task light shone on the document from which they typed. The lower lighting was more comfortable, but there was no difference in typing errors from regular lighting, Konz said.



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Dean of the College  
Donald E. Rathbone  
Acting Director, Engineering Experiment Station  
Gale Simons