IMPACT

newsletter of the kansas state university college of engineering

Vol. 19, Number 3 **Winter 1984-85**

Council would boost research program

Development of research in advanced technology at Kansas State has taken another step with the establishment of a quasi-public research agency in the College of Engineering.

The new "College of Engineering Research Council" will operate as an arm of the KSU Research Foundation in furthering the College's activities by developing cooperative programs with industry.

The research foundation previously had handled only proposals for patenting of inventions and processes developed at K-State and licensing to industry the right to manufacture or use the patented work.

"The Engineering Research Council would involve industries as sponsors of research they would like to have performed," said Dean of Engineering Donald E. Rathbone. A mutually agreeable research plan would be worked out with the faculty member who would be doing the study.

The council would have the power not only to conduct research and development activities but would negotiate donations, grants or contracts as an authorized agent of the KSU Research Foundation.

The College of Engineering already has taken a major step in the development of advanced technology research with the establishment of a computer-controlled automation and manufacturing program. The program, which also involves robotics, qualified for Kansas Department of Economic Development funds because of potential economic benefits for the state. The new research council also is designed to foster research that would be of value to Kansas as well as to the University.

The council would offer certain advantages that aren't possible now, Rathbone said.

"First of all, there would be financial benefits for faculty doing the research. It will also give us flexibility in negotiating contracts with industry. The council would simplify the purchasing of research equipment. And, overall, we hope it will expand the research program in the College of Engineering."

The Council will be administered by the Engineering Experiment Station, under the direction of William H. Johnson. Rathbone will serve as governor.

Glove design project in orbit

A student team at Kansas State has been selected as one of four university teams to design a pair of astronaut gloves in a project sponsored by NASA.

Team members include four students from the College of Engineering and two from the Department of Clothing, Textiles and Interior Design.

"The students will be designing a glove that would be worn by the astronaut outside the space ship," said Stephan Konz, professor of industrial engineering and one of the advisors on the project.

The NASA competition is being administered by the American Society for Engineering Education. A grant of $30,000 has been awarded to K-State for the project. The Massachusetts Institute of Technology, the University of Oklahoma and Worcester Polytechnic Institute also have teams in the competition.

Konz said the team will use material provided by NASA and "whatever material we can develop ourselves" to design an improved glove. A prototype will be built and tested, then sent to

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Engineering faculty members work with students on initial plans for astronaut glove. From left are Stephan Konz, industrial engineering; students Paul Stephens, Nesby Bolden, Jon Held and Carlyn Solomon; and Byron Jones, mechanical engineering.

In keeping with a more computer-oriented program, electrical engineering has become the Department of Electrical and Computer Engineering. Pictured is student, Robert Moss.

Electrical Engineering gets name change

The Department of Electrical Engineering at Kansas State has become the Department of Electrical and Computer Engineering.

"It's a sign of the times," said Dean of Engineering Donald E. Rathbone. "It is indicative of the fact that we have become very computer oriented in our electrical engineering program. The name change is a move to bring the title of the department up to date with what is actually going on in the department."

The department has three options: general, bioengineering and computer engineering. Donald Hummels, head of the department, said the number of students in the computer option has been continually increasing and that the group constitutes what is "without a doubt the largest number of students in our electrical engineering curriculum."

The department is the largest on the KSU campus, with an enrollment of more than 700 students.

The name change is part of a national trend at engineering colleges because of the dominant role of computers in electrical engineering. There are no immediate plans to change the curriculum at K-State, but the possibility will be considered during the coming years, Hummels said.

Durland Hall design an award winner

Durland Hall, the new engineering building, has been recognized by the Kansas Society of Architects for excellence in design.

The "Award of Merit" was given to Horst, Terril and Karst, Architects, Topeka, for its outstanding contribution to good architecture in the planning and erection of Phase II of the building.

Durland Hall, Phase II was dedicated in 1983 as part of a three-staged plan for a modern engineering complex at K-State. A major feature of the building is its three-story atrium lobby, which serves as a connection to the original Durland Hall, completed in 1976.

The lobby also will connect the present buildings to Phase III of the project, planned for 1990.

A recent $1 million fund-raising campaign provided for teaching/research equipment and for a number of "extras" that would not have been possible otherwise, according to KSU Dean of Engineering Donald E. Rathbone.

"We worked closely with the architects in designing a building that would be aesthetically pleasing as well as functional," Rathbone said. "We are pleased that the Kansas Society of Architects saw fit to recognize the merits of our new facility."

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Dean of the College
Dr. Donald E. Rathbone
Director, Engineering Experiment Station
Dr. William H. Johnson
Impact Editor
Carolee Stark

Scholarships

Three engineering students have been awarded $1,000 each in scholarships from the Boeing Company.

They are Boyd R. Lear, junior in mechanical engineering from Garden City; Deborah Sprick, junior in industrial engineering from Junction City; and Bobby Velasquez, junior in electrical engineering from Abilene.

Academic achievement and personal characteristics are among the criteria for selection of scholarship winners.

David Seiler, senior in agricultural engineering from Colwich, has been chosen as K-State's recipient of a Ralston Purina Senior Scholarship Award.

One scholarship, in the amount of $750, is awarded to each Land Grant college.

Todd L. Thurston, senior in agricultural engineering from Melvern, has received a $500 scholarship from Hesston Corporation in Hesston.

Glove project, from p. 1

NASA, along with a final report due in May 1985.

The design judged best will be announced in June 1985. The winners will be invited to view a future launch of the space shuttle.

NASA has said that with the advent of the space shuttle and plans for a permanent space station there will be an increase in extravehicular activities.

According to NASA, "Since the efficiency of the suited astronaut is heavily dependent on use of the hands to perform tasks, we have identified space suit glove technology as an area needing innovative concepts for future development."

As the project progresses, team members and their advisors will be meeting with NASA officials at the Ames Research Center near Palo Alto, Calif., and at the Johnson Space Center in Houston, Tex., to discuss design criteria.

Students making up the design team are Nesby Bolden, graduate student in industrial engineering from Wichita; Jon Held, graduate student in mechanical engineering from Manhattan; Carlyn Solomon, senior in industrial engineering, Rush Center; Paul Stephens, senior in mechanical engineering from Wichita; and Kim Ellis and Janice Huck from clothing, textiles and interior design.

Faculty advisors, besides Konz, are George Eggeman and Byron Jones, mechanical engineering, and Elizabeth McCullough, clothing, textiles and interior design.

New research projects in Engineering

College of Engineering faculty members have received funding this year for a number of research projects. They include a total of $107,000 in grants for a study on the control of tractor engines and a $99,000 grant to electrical engineers for continued research on intrusion-detection systems.

Garth Thompson, mechanical engineering, and Mark Schrock and Stanley Clark, agricultural engineering, are conducting the tractor study, entitled "Computer Control of Tractor Engines and Continuously Variable Transmissions." The project is being funded by the Kansas Department of Economic Development, Caterpillar Tractor Co. and Funk Manufacturing Co.

Michael Lucas and Donald Lenhert, electrical engineering, are doing hardware evaluation, analog-to-digital conversion techniques and test development for Sandia National Laboratories, in connection with their research on intrusion-detection systems.

The National Science Foundation has awarded a total of $185,000 in esearch funds to chemical engineering. Grants went to the following:

- Richard Akins, equipment grant for this project, "Research Instrumentation for Heat Transfer by Natural Convection."
- Larry Erickson and Larry Glasgow, "Transport Phenomena Associated with Gas-Liquid Dispersions in Tower Fermentors Containing Viscous Media."

ames Koelliker, civil engineering, uses neutron probe as part of a field study to evaluate potential for groundwater recharge in western Kansas.

Larry Glasgow, chemical engineering, uses Laser-Dopler velocimeter to study effects of physiochemical environment upon particle size distribution in coagulation.

- L. T. Fan and R. F. Nassar (Statistics), "Semifluidized Bed Filtration of Potable and Waste Water."
- Larry Glasgow, "Characterization of Aggregate Breakage with Laser-Dopler Velocimetry."
- John R. Schlup, "Control of Swelling and Syneresis in Inorganic Gels Using Colloidal Phenomena."

The Kansas Electric Utilities Research Program has awarded a total of $123,000 in grants for the following studies:

- Kenneth Schultis, nuclear engineering, "A Program for the Economic Evaluation of Spare Components for Kansas Electric Utilities."
- Frank Tillman, industrial engineering, "Long-Term, Mid-Term and Short-Term Fuel Scheduling for Kansas Electric Utilities."
- Robert Gorton, mechanical engineering, "Production and Validation of Design Guides for Floor Heating/Storage Systems in the Kansas Geographic Area."

Projects in nuclear engineering include "Diffusion Flame Studies of Chemical and Physical Mechanisms of Soot Formation from Aromatic and Substituted Aromatic Fuels," J. R. Merklin and C. M. Sorensen (Physics), funded by the U. S. Department of Energy; and "Beta/Gamma Dosimetry and Beta Spectroscopy," Gale Simons, sponsored by Battelle Pacific Northwest Laboratories.

Bob L. Smith, civil engineering, is working on a joint project with the University of Kansas entitled "Traffic Assistance Services for Kansas." Sponsor is the Kansas Department of Transportation.

Also in civil engineering, the USDA Soil Conservation Service is sponsoring research by James Koelliker on improving water conservation methods in western Kansas for optimum efficiency of crop production.

Eddie Fowler, electrical engineering, has received a grant from the Southeastern Center for Electrical Engineering to do a computer network simulation model, and Walter Walawender, chemical engineering, will be doing a technical evaluation of a moving bed gasifier, with funds from Buck Rogers, Inc.

Engineering welcomes new faculty

The College of Engineering has eight new faculty members.

Albert J. Heber has joined the Department of Agricultural Engineering as an assistant professor and will be teaching structure and environmental design courses. Heber also has research expertise in farm electrical load management. He earned B.S. and M.S. degrees from South Dakota State University and has a Ph.D from the University of Nebraska.

Albert N. Lin is a new assistant professor of civil engineering. He is teaching structural engineering classes and concrete labs. Lin's research area is structures. He received a bachelor's degree from the University of Missouri, plus a master's and a Ph.D degree from the California Institute of Technology.

Dasarahalli V. Satish Chandra, John Devore and Brian J. Harms have joined the Department of Electrical and Computer Engineering. Chandra, an assistant professor, is teaching computer engineering, and laboratory classes in computer logic and microcomputers. He received a bachelor's degree from Bangalore University, India, an M.S. from the Indian Institute of Science and an M.S. and Ph.D from Auburn University.

Devore, an assistant professor, is teaching classes in computer control and in design and a digital systems lab. His research specialization is image signal processing and signal analysis. He earned his B.S, M.S. and Ph.D degrees from Kansas State.

Harms, an instructor, is in charge of the electrical engineering labs for students enrolled in the College's honors program. He is also teaching computer engineering. Harms received B.S. degrees in nuclear and in electrical engineering from K-State. He also earned a master's from KSU and is currently working on a Ph. D. in communications.

Frederick J. Hoppe has joined the Department of Engineering Technology. Hoppe, an associate professor, is teaching machine design and a mechanical design lab. Hoppe received a bachelor's degree from the University of Washington and a master's from the University of Missouri.

Liang Wey Chang and Prakash Krishnaswami are assistant professors in the Department of Mechanical Engineering. Chang received B.S. and M.S. degrees from Cheng Kung University, Taiwan, and a Ph.D. from Purdue University. Chang will be teaching control, mechanic systems, and computer application courses. His field of research is automatic controls.

Krishnaswami received a B.S. degree from the Indian Institute of Technology, an M.S. from New York State University and a Ph.D. from the University of Iowa. His areas of research expertise are computer-aided mechanical design, optimal design, and dynamics.

Albert J. Heber

Albert N. Lin

D.V. Satish Chandra

John Devore

Brian J. Harms

Frederick J. Hoppe

L. W. Chang

Prakash Krishnaswami

L.T. Fan, left, and Walter Walawender have worked together on a number of research projects involving fluidized-bed gasification.

Patent issued

L. T. Fan and Walter Walawender were issued patents recently for an invention resulting from their research.

The two chemical engineering professors developed a "fluidized-bed" gasification process through which low-BTU gas is produced using a variety of materials.

The invention is patented under the title, "Pyrolytic Conversion of Carbonaceous Solids to Fuel Gas in Quartz Sand Fluidized Beds."

The solids include municipal garbage, animal manure and agricultural residues. Sewage sludge from treatment plants, as well as shredded rubber tires and ground coal mixed with other materials also can be used in the gasification process.

This is Fan's sixth invention to be patented, and Walawender's first.

Here's news from Engineering alumni

Arthur C. Willis (ChE '39) is a project engineer for Hughes Helicopters, Inc., Culver City, Calif.

Duane Chapman, P.E. (ME '49), has joined Crafton, Tull, Spann & Yoe, Architects & Engineers, Rogers, Ark. Chapman will head the mechanical and electrical engineering department. The company is the second largest architect/engineering firm in the state.

Bill E. Hiefner, P.E. (EE '50), retired in 1982 from the Houston plant of ARMCO, Inc., after 30 years of service. He is now staff electrical engineer at Rice University.

Jack Swafford (EE '51) has been promoted to chief engineer, electronics engineering, at Allied-Bendix Aerospace, Kansas City Division. Swafford manages the engineering departments for purchased components and electronics assemblies. His company is a prime contractor for the Department of Energy's weapons production complex.

Loyd M. Hodson (EE '52) received the 1984 Mason LaZelle Memorial Award, presented annually by the Alaska Rural Electrical Cooperatives for distinguished service to the REA program in Alaska. Hodson is general manager of Alaska Village Electric Cooperative, Inc., which serves 48 communities from Kodiak Island traversing close to 2,000 miles to St. Lawrence Island due south of Siberia. He joined the cooperative in 1970.

Dick Ramsey (CE '53), Orlando, Fla., is environmental staff engineer at Howard Needles Tammen & Bergendoff.

August J. Dornbusch Jr. (AgE '59), Bismark, N.D., was promoted to state conservationist for the USDA Soil Conservation Service in North Dakota. He administers soil and water conservation programs for the agency.

George A. Carson, Ph.D., CIH (CE '61), is chairman of the American Conference of Governmental Industrial Hygienists. Carson has spent 22 years as a commissioned officer with the U.S. Public Health Service. He received his doctorate from the University of Minnesota in 1972 and is currently an industrial hygiene engineer with the Public Health Service in Kansas City.

Gary Edwards (CE '63) has been promoted to vice president, North American marketing, at Conoco, Inc., Houston, Tex. Prior to his election as vice president, Edwards was general manager for North American marketing operations. He joined Conoco after graduating from K-State.

Gary Edwards

Loyd Hodson

Thomas Callen

De Lon Sargent

DeLon D. Sargent (CE '63) has been named manager of program control for Parsons Brinckerhoff Construction Services, Inc. in McLean, Va. Sargent was formerly a vice president for a Philadelphia engineering firm and was director of project control on the Philadelphia Center City Commuter Rail Connection. He is a veteran of the U.S. Navy Civil Engineer Corps and has an M.S. in civil engineering from Georgia Institute of Technology.

Robert Crangle (NE '66) has been named the first director of the Illinois Institute of Technology Center for Research in Industrial Strategy and Policy. The center is part of the School of Business Administration of the Institute. The Center, located in Chicago, is investigating the factors that will likely influence industry in the future. Crangle is former senior vice president at Harbridge House, Inc., a management consulting firm. He is a graduate of Harvard Law School.

William R. Klassen (CE '68) has been named chief of the National Transportation Safety Board's Kansas City field office. Klassen joined the Board in 1978 as a highway safety specialist in the Kansas City office. Prior to that he was regional safety engineer for the Federal Highway Administration. He received a master of engineering degree from Texas A&M in 1973

John C. Nye (AgE '68) is new head of the Department of Agricultural Engineering at Louisiana State University. Prior to his appointment, he was chief of the agricultural permit team of the Environmental Protection Agency in Chicago. He has M.S and Ph.D. degrees from Purdue University.

Don Caywood (ME '69) has started his own company, MicroPower Business Solutions, in Kirkwood, Mo. The firm sells computers and tailor-made software to small businesses in St. Louis.

Thomas E. Callen (ME '70) has been promoted to project engineer at Pratt & Whitney in West Palm Beach, Fla. He is responsible for engine performance analysis.

Dennis Dillman (NE '78, ME '79) is with McDonnell-Douglas Corp. in Houston, helping to train space shuttle astronauts and flight controllers in payload operations and deployment. Dillman completed an M.S. in mechanical engineering at the University of Missouri-Rolla in 1983.

Gary D. Rodvelt (NE '79) has worked for Halliburton Services since graduation and is now district engineer in Pampa, Tex.

What's happening with you?

We'd like to know, and so would your former classmates. Please take a few moments to jot down any job changes, professional or other activities, or any reminiscences you'd like to share. Send to Impact editor, College of Engineering, Durland Hall, Kansas State University, Manhattan, KS 66506.

Wilson Tripp with his 100-year-old cylindrical slide rule.

'Rolling pin' not a common rule

Picture a 41-foot slide rule, those of you who remember when the ruler-size devices were in common use for solving math problems before the age of calculators.

The 41-foot version isn't really that long. It's a 100-year-old cylindrical affair that looks like a rolling pin with one handle. It has an outer cylinder with a spiral of numbers that would stretch 41 feet, 8 inches, if unrolled.

The device is owned by Wilson Tripp, professor emeritus of mechanical engineering.

The retired professor, who calls himself a "numbers person," spends part of each day in his old office, creating mathematical puzzles and coming up with answers to engineering problems such as how much force it would take to tear down the Walls of Jericho.

The slide rule now in his possession was passed on to him by a distant relative whose father purchased it new in the 1870s. The outer cylinder slides back and forth or rotates over the "rolling pin." Both sections have numbers and symbols for solving math problems, and much more precisely than the more modern version, according to Tripp.

"To make an error of 1 in 200 parts, one would have to make a mistake of 1 1/10 inches" when moving the two sections together to solve for an answer, he said. The most sophisticated modern slide rule would allow about two-one-hundredths of an inch to avoid such an error.

The antique slide rule was used by its original owner, William Eckart, in all of his work. A notable engineer of his time, Eckart designed the first locomotive built in California and collected data on machinery for mining the Comstock Lode, using "the finest instruments procurable," according to a memoir published by the American Society of Civil Engineers.

Eckart also supervised the design and construction of some of the largest mining operations in the country, including the Ontario Mine and Anaconda copper mines.

Tripp uses the antique slide rule more or less as a toy, relying most often on a calculator for solving his math and engineering puzzles.

"I have a regular slide rule that I sometimes take with me on vacation," he said. "It's easy to pack and there aren't any batteries to worry about. You're supposed to be free of those things when you're on vacation. Besides, I can visualize some of the problems better with a slide rule." And, he added, "I do a lot of rounding off in my head."

Tripp's interest in math and in his antique calculating instrument has led him to delve into the history of the slide rule, which he discovered was developed in the 1600's.

William Robert Eckart, the original owner of Tripp's 19th Century slide rule, suspended it from the ceiling by a chain and pulley and counterbalanced it with a weight so that he could pull the instrument up and down, making it easier to use.

According to Eckart's son, who gave the slide rule to Tripp, the elder Eckart was in constant correspondence with William Rankine, for whom the Rankine Scale is named.

As a result of this association with the Scottish engineer, the younger Eckart was given the name, William Rankine Eckart.

Smith House alumni want your help

The Smith House at K-State has a rich tradition of providing academically talented students with more than just a place to live.

Smith House closed in 1983-84 because of a financial crisis, but was able to open again in the fall of 1984. More than half of its occupants are enrolled in engineering.

David Boyd, K-State engineering alumnus and former Smith House resident, along with other alumni, wants to keep the house open and running. He is asking engineering alumni to help support the Smith House with their financial contributions.

Nearly $45,000 has already been raised for renovations. Furniture and equipment also have been donated.

Smith House is open to students with at least a "B" average. Occupants pay $700 a semester, plus an insurance fee. The students are required to spend six hours a week working in the kitchen or cleaning.

"The Smith House is more than just a place to live," Boyd said. "Smith Scholars also are provided with unique cultural opportunities, social programs and vocational planning."

In Dean of Engineering Donald E. Rathbone's opinion, "Smith House provides an additional kind of living experience at K-State that I feel is very beneficial."

Alumni wishing to make contributions may send their checks to the Kansas State University Foundation, Hollis House, Kansas State University, Manhattan, KS 66506.

Deaths

James W. Crooks Jr. (EE '46), a Space Age pioneer who was credited with the development of the Atlas rocket that helped carry John Glenn into outer space, died Sept. 12, 1983.

Mr. Crooks had worked for General Dynamics Electronic Division in Kearny Mesa, Calif., for nearly 40 years. Since the 1950s he had talked about the possibilities of putting a man into space and advocated development of the space program.

Much of his time was spent on the Atlas missile, which he repeatedly said was necessary for launching a man into space.

He was a designer of the Reuben H. Fleet Space Theater and the "starball"

Cont'd. p. 7

(Deaths, from p. 6)

concept, which allows viewing of the solar system from any point. The concept has been adopted by space museums throughout the world.

He also was co-inventor of the Azusa tracking equipment, which was used on virtually every ballistic missile launch from 1954 to 1970.

While at K-State, Mr. Crooks worked as a research assistant on a secret airborne radar ranging circuit project and as a lab assistant in an Army specialized training program.

John H. Moehlman (EE '36) died Oct. 14. Mr. Moehlman was a longtime grocer whose store at Ninth and Poyntz in Manhattan was a popular gathering place for junior high and high school students. He later operated a Halloween pumpkin stand on Poyntz and became known locally as the Pumpkin Man.

A memorial fund has been established through the KSU Foundation.

Merle Shilling (CE '40) died in October. He was founder in 1965 of Shilling-Aubel Asphalt Co. in Manhattan and was responsible for much of the street and highway work here.

Mr. Shilling earlier had been employed by Brown & Brown Construction Co., Salina, and Panhandle Eastern Pipeline Co.

Ray Barger (AgE '50), Greenwood, Miss., died April 1, after suffering a heart attack. Mr. Barger was president of Barger Equipment Co., an agricultural equipment dealership, and of Big D, which deals in irrigation equipment.

Harold W. Gabrielson (ME '56) died in May.

Faculty Honors

L. T. Fan, professor and head of chemical engineering, has been designated a "KSU Distinguished Professor" by action of the Kansas Board of Regents. Fan was one of three K-State processors to receive the honor.

Fan has been at KSU for 26 years and has headed the chemical engineering department since 1968. He has advanced chemical engineering science of multi-phase processes through research in areas such as fluidized beds, semifluidization, fuzzy set theory of mathematics, reaction engineering and systems engineering.

He holds six patents and is author of four books and more than 600 journal articles. He also has done consulting work and has lectured throughout the world.

Robert Gorton, mechanical engineering, has ben named chairman of the program committees for the American Society of Heating, Refrigerating and Air-Conditioning Society's semi-annual meetings in Chicago and Hawaii.

John C. Lindholm, engineering technology, has been re-elected to a second two-year term as vice president of Region VII of the American Society of Mechanical Engineering.

Also growing old

IMPACT has another name to add to the list of Kansas companies 100 years old or older that are operated by KSU engineering graduates.

Ros Cofran (ME '49) has been with Western Foundry & Machine Works, Inc. in Topeka since 1957. The company was founded by the Cofran family in 1876.

Two others, Great Western Manufacturing Co., Inc., Leavenworth, operated by Jim Schroeder (EE '62), and Exline, Inc., Salina, run by Bob Exline (Ind. Tech. '56), are also more than a century old.

Start making plans for Open House

"Engineering: Bringing Technology Home" is the theme for 1985 Engineers' Open House. The event is scheduled for March 29-30, in conjunction with all-University Open House. Engineering displays will be open from 5:30 to 9 p.m. Friday, March 29, and from 9 a.m. to 4 p.m. Saturday, March 30.

The College of Engineering is planning an alumni luncheon for noon Saturday at the University Ramada Inn. A social hour will begin at 5 p.m. at the Ramada, followed by the Open House Awards Banquet at 6:30 p.m. in the K-State Ballroom. A barbershop quartet will entertain.

Please fill out the form below if you plan to attend any of these events. Reservations should be in by Monday, March 25. We hope to see you at Open House.

PLEASE RETURN THIS FORM TO:

Donald E. Rathbone
Dean of Engineering
146 Durland Hall
Kansas State University
Manhattan, KS 66506

ENGINEERS' OPEN HOUSE
ALUMNI RESERVATION FORM
Please make checks payable to the KSU Foundation

( ) I plan to attend the Engineering Alumni Luncheon on Saturday, March 30, 1985, and have enclosed my check for ____ tickets ($5.00 per person). (Contributors to scholarship funds and other funds and activities administered through the Dean's Office are invited guests of the College of Engineering.)

( ) I plan to attend the Engineers' Open House Awards Banquet on Saturday, March 30, 1985, and have enclosed my check for _____ tickets. ($7.60 per person)

( ) I will attend the social hour at the Ramada Inn. Please reserve _____ places for me.

NAME _____

ADDRESS _____

PHONE _____ DATE _____

Directory to help track alumni

If you have had little or no success in tracing the whereabouts of your freshman roommate—last seen in Pago Pago, or was it Topeka?—relax. Help is on the way.

The College of Engineering has entered into a contract for publication of a comprehensive alumni directory scheduled for release in Winter 1986. The publication has been planned as a reference volume for alumni who wish to know where their former classmates are and what they are doing now.

The directory will be divided into four sections. The first part will contain pictures and information on the school, followed by an alphabetical section with individual listings on each alum.

Entries will include name, class year, degree, and professional information such as job title, firm name, address and telephone number, as well as home address and phone.

The third section will list alumni by class, and the last index will list alumni geographically by city, state and foreign country.

All of the information in the directory will be researched and compiled by Harris Publishing Company. The updated information will be obtained through questionnaires sent to alumni in Summer 1985 and will be followed up by telephone verification in Fall 1985.

The project will be undertaken at no cost to the College, said Dean of Engineering Donald E. Rathbone. The Harris Company will finance the operation through the sale of directories to alumni.

"The College will not benefit financially from the directory, but we will derive substantial benefit from the completely updated alumni records," Rathbone said.

Alumni may order a directory when their information is verified by phone. Only KSU College of Engineering alumns will be able to purchase a copy.

"Only if alumni provide the necessary information will the directory be a success," Rathbone said.

S-SCARY? *Not these three. They're good witches. Secretaries Christy Schroller, Vickie Anderson and Arlene Sherwood, from left, joined others in the Department of Electrical and Computer Engineering in a Halloween dress-up day.*

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