Two graduates chosen for DSA honors

Two graduates received Distinguished Service Awards from the College of Engineering during commencement exercises this spring.

David C. Ayers, chairman and president of Quinton Corp., Quincy, Ill., and Robert Exline, president of Exline, Inc., Selma, were honored for their contributions to their alma mater, to their communities and to the engineering profession.

Ayers received his B.S. degree in 1954 in electrical engineering. Exline is a 1956 graduate in industrial technology.

Ayers operated a TV sales/service business in Hutchinson until 1956. He then became assistant director of development for Collins Radio Co., Cedar Rapids, Ia.

In 1965, Ayers became engineering manager for Gates Radio Co., a subsidiary of the Harris Corporation. He co-founded the Quintron Corporation in 1970. He serves on and is director of a number of boards in Quincy, including CONVOCOM, a public telecommunications complex of which he is a director; and the Quincy Business & Technology Center, of which he is chairman.

Exline entered the family business, Exline, Inc., in 1958 and became president in 1974, two years after the firm celebrated its 100th anniversary. The company specializes in the repair and rebuilding of large stationary engines, compressors and their components.

Exline is a member of the KSU Foundation Board of Trustees and a member and past chairman of the College of Engineering Advisory Council. He has headed numerous community organizations and is also a former member of the board of Molokai Electric Co., Molokai, Hawaii, and former chairman of the associate members' executive committee of the Southern Gas Association.

Downey receives Alumni Fellowship

Joseph L. Downey, vice president of Dow Chemical Co. and chief executive officer of Dow Consumer Products, Inc., was selected as a 1986 Alumni Fellow of Kansas State University.

The Alumni Fellows Program recognizes alumni who have distinguished themselves in their respective careers. The program brings successful alumni back to campus to meet with students and faculty informally and in the classroom.

Downey is a 1959 graduate of KSU in chemical engineering. He joined Dow in 1959 in sales training at company headquarters in Midland, Mich., was transferred to the Cleveland office as a sales representative and returned in Midland in 1964 as product sales manager.

In 1966 he became district sales manager in the St. Louis office and was made product group sales manager for plastics marketing at Midland in 1969.

Downey was named business manager for polyethylene resins in 1972, and in 1974 was appointed director of marketing for the Health and Consumers Products Department of Dow U.S.A. in Indianapolis.

In 1980 Downey became general manager of the Agricultural Products Department. He was named Dow U.S.A. vice president of the department in 1983 and in 1986 became company vice president responsible for the global consumer products business. He assumed his most recent position as CEO of Dow Consumer Products, Inc. in November 1985.

Brad Kramer, assistant professor of industrial engineering, works with pallet assembly system, a gift from Control Data Corp. The system includes two industrial robots and other related components. (Story on pg. 2).
College receives $650,000 in new equipment

The College has received new equipment valued at $650,000, as a result of gifts from Control Data Corp. and Hewlett-Packard.

The gift from Control Data consists of two industrial robots and a pallet assembly system, a modular system that allows for a continuous assembly line operation. The system, valued at about $500,000, has been designated for the Center of Excellence in Computer-Controlled Automation. Because of the quantity of the equipment, it also will be available for teaching and for research in the Department of Industrial Engineering.

The new equipment will be combined with a third robot received last fall to allow for a functioning flexible manufacturing system in the College.

The Hewlett-Packard gift consists of nine PC-compatible Vectra microcomputers for the Department of Mechanical Engineering. The Department of Electrical and Computer Engineering has received two HP 9836 Colorgraphics computers with a shared resource manager, which allows the system to share software with other computers in the network. Also included are a plotter, graphics tablets for entering data on the screen, and a printer. The equipment, valued at $190,000 will be used by faculty and students for integrated circuit design and printed circuit layout.

“We greatly appreciate the gifts from Control Data and Hewlett-Packard,” said Dean of Engineering Donald E. Rathbone. “These companies have been very generous in the past and have continued to help us expand our educational and research programs and keep us in the forefront of technology.”

Jones named director of research institute

Byron Jones, associate professor of mechanical engineering, has been named director of the Institute for Environmental Research. He replaces Frederick H. Rohles, who has retired.

The Institute is one of three of its kind in the world and serves as a center for interdisciplinary research in thermal environmental engineering.

Jones is a 1971 graduate of KSU in mechanical engineering. He holds M.S. and Ph.D. degrees from Oklahoma State University. He joined the KSU faculty in 1978 and had conducted a number of research projects at the Institute.

Jones was a faculty advisor on the recent space suit glove design project, which won first place for K-State in a national student contest sponsored by NASA and the American Society for Engineering Education.

Professor Crary dies

James F. Crary, assistant professor emeritus, died in February at his home in Manhattan.

Mr. Crary was appointed to the faculty in 1947 as an assistant professor in the Department of Applied Mechanics. He joined the Department of Civil Engineering in 1975 and retired in 1983.

He received his B.S. degree in civil engineering from KSU in 1947 and an M.S. in electrical engineering from Oklahoma State University in 1969.

Prof. Crary had worked for the U.S. Army Corps of Engineers on a number of assignments, including Kanopolis Dam. He also had been employed by Wilson & Co., Salina. While at K-State, he taught courses principally in statics and mechanics and materials.

Engineering professors retire

Two engineering professors retired this spring, after a total of 62 years of service to the University.

Robert E. Crank, professor of mechanical engineering and former administrator in the College, was named to the faculty in 1947 after graduating from K-State. He earned an M.S. from KSU in 1950.

Frederick H. Rohles had been director of the College’s Institute for Environmental Research since 1973. He arrived at K-State in 1963 with a joint appointment in psychology and mechanical engineering.

Crank had served as assistant dean and assistant to the dean while at K-State. His teaching effectiveness had earned him awards at the national and regional levels and he was given the “Advisor of the Year” award from the College in 1985.

Rohles has a Ph.D. in psychology from the University of Texas at Austin. He is a retired officer of the U.S. Air Force, where he did research in aviation, engineering psychology and aerospace medicine.

His study of the behavior of primates in the upper atmosphere led to his appointment as supervisor of training for “Ham” and “Enos,” the chimpanzees who preceded man into space in the Project Mercury program.

Rohles is noted for his research at K-State in the areas of thermal comfort, environmental ergonomics and human engineering for the elderly. The Institute which he directed gained an international reputation under his leadership.
Information center located in College

A resource center for information on engineering has established its headquarters in the KSU College of Engineering.

The Mid-America Engineering Guidance Council (MAEGC), set up in 1969 to help students become aware of opportunities in engineering, is the parent organization for the center. MAEGC resources are available to students and to counselors and teachers in high schools, community colleges and technical schools.

Services include speakers, career guidance packets, and access to a library consisting of printed and audiovisual materials on engineering.

Three officers from Dow Chemical Co. were on campus in December to accept awards on behalf of Dow as recipient of the College of Engineering's "Company of the Year" honor.

On hand to receive the awards were Paul F. Oreffice, president and chief executive officer; Joseph L. Downey, a 1959 graduate of KSU in chemical engineering who is vice president of Dow Chemical and chief executive officer of Dow Consumer Products, Inc.; and Larry F. Wright, vice president of the company's Texas operations.

The visitors spent the day lecturing to classes and talking informally with students and faculty. Also participating in the program was Elaine Longino of Dow's professional recruiting division in Texas.
Lectures started

A lecture series featuring topics of interest to engineering students and professionals has been established in the College of Engineering.

The lectures are a project of the Engineering Executive Committee and Tau Beta Pi. Speakers this spring were John C. Hancock, executive vice president of United Telecommunications Corp. and former dean of engineering at Purdue University; and Vicki Nolteia, coordinator of architectural marketing for Howard, Needles, Tammen and Bergendoff, Kansas City.

Amateur radio class the first at K-State

A course devoted to the theory and practice of amateur ("ham") radio, the first of its kind at K-State, was offered this spring by the College of Engineering.

The three-hour course will be taught in the evening to make it accessible to the public as well as to the student community, said Doris Grosh, professor of industrial engineering.

The course is designed to serve those who are eager to become amateur radio operators or to learn enough about radio functioning for a better understanding of modern communication, Grosh said.

"Because there are no formal mathematical or science prerequisites, the technical level is more basic than is usual in engineering classes." The class will not be part of the regular curriculum.

The course covers all of the material necessary for passing the FCC technician/general radio theory test, namely basic electronics, radio wave propagation, antennas, FCC regulations, and Morse codes.

Callers set record

Student callers from the College of Engineering set two all-time records during the spring Telefund. The records were for dollars pledged—$80,291.50—and number of pledges received—2,292.

John Dollar, assistant dean of engineering and faculty advisor for Telefund, said the total amount received would be significantly higher, however, because of matching gift programs. He estimated that 25 percent to 30 percent of the gifts would be matched by companies employing engineering alumni.

Most of the funds will be used for scholarships, with the remainder going for Open House, the Kansas State Engineer magazine and other student activities.

Faculty activities bring recognition

Halliburton Professors

Charles Burton, professor of architectural engineering and construction science; Larry Erickson, professor of chemical engineering; and Gary Johnson, professor of electrical and computer engineering, have been named Halliburton Professors. They are sharing a $15,000 grant, which accompanies the honor.

Burton has been a faculty member since 1970 and won the College's 1985 Hollis Award for excellence in teaching. He is a 1963 graduate of KSU in civil engineering and has an M.S. from the University of Kansas.

Erickson joined the faculty in 1964 after receiving a Ph.D. from K-State. He is a 1960 graduate of KSU in chemical engineering. He has done a considerable amount of research in areas such as fermentation and biological waste treatment and is director of the College's Office of Hazardous Waste Research.

Johnson is widely known for his research in wind energy and is author of numerous publications on the subject. He was named to the faculty in 1966 after receiving a Ph.D. from Oklahoma State University. He earned B.S. and M.S. degrees in electrical engineering from KSU, in 1961 and 1963, respectively.

Hollis Teaching Award

Richard E. Faw, professor of nuclear engineering, was given the College of Engineering's 1986 James L. Hollis Award for excellence in undergraduate teaching.

The award includes a $500 stipend. A color portrait of Faw will be displayed for the coming year in the lobby of Durland Hall.

Faw, who has been on the faculty since 1962, is director of the KSU nuclear reector facility and teaches courses in reactor operation and safety. He has a B.S. in chemical engineering from the University of Cincinnati and a Ph.D. in chemical engineering from the University of Minnesota.

New book

Stephen Konz, professor of industrial engineering, and Elizabeth McCullah, professor of clothing, textiles and interior design, have written Man and the Indoor Environment, along with Prof. Rumbat Wei from Tongji University in Shanghai.

The book was translated into Chinese by Prof. Wei and will be distributed in China for use as a textbook. The text is a modification of a previous book by Konz, Work Design: Industrial Ergonomics, but also contains new material of particular benefit to students in China. See Faculty, p. 8

The old Sigma Tau pyramid got a new resting place in March when it was moved from a site near Seaton Hall to one next to Durland Hall. Taking on the relocation project were members of the student chapter of Associated General Contractors.
The Scholarship Program at Kansas State

Ed. note: This is the first in a series of three articles on establishing a scholarship at Kansas State University.

Changing Times magazine has listed KSU as one of the nation's 50 best educational bargains in terms of academic quality and overall cost. But the cost of college education is rising dramatically—up more than 30 percent at K-State since 1981.

A scholarship often makes the difference between staying in school or dropping out. But there are only enough funds for about half of the students who qualify. With your support, these students can be helped and the University can maintain its position among institutions of higher learning.

Scholarship funds at Kansas State are administered by the KSU Foundation and tailored to the donor's specifications.

If the funds are to be used for engineering scholarships, this must be specified.

Scholarships can either be endowed or expendable. Endowed funds are most popular because the principal is never expended. Investment income earned by the endowment provides the scholarship award. Under recent economic conditions, endowments have returned about 10 percent of their value; a $10,000 endowed fund would provide a $1,000 scholarship each year.

Most expendable scholarships are renewed each year and continue only as long as the donor provides funds. Expendable scholarships are occasionally established with a one-time cash deposit to the KSU Foundation, and awards are made until the fund is exhausted.

Principal balances of endowments are placed in one of two pooled funds—Pooled Fund A or Pooled Fund B. Earnings on each of the pooled funds are calculated periodically and a prorated portion is returned to each fund within the pool.

Pooled Fund A, the "growth" fund, accepts endowments with a minimum of $5,000. One to three percent of the endowment's current earnings are returned to the principal each year, along with the fund's share of Pooled Fund A capital gains. Earnings are distributed quarterly.

Pooled Fund B, the "yield" fund, accepts individual endowments worth $10,000 or more. Funds are pooled and invested in fixed-income securities. Each endowment receives its prorated share of the average rate of return on all securities. Income is distributed monthly and the Foundation retains one percent of the principal balance of each endowment as a management fee.

Scholarships can be funded with cash or a variety of assets. Funds can be established which pay income to the donor during his or her lifetime. The income then would be diverted to scholarships.

CS graduate finds rewarding career as estimator

James W. Rasmussen probably wasn't too surprised when his daughter Kay became chief estimator for the Denver regional office of Robert E. McKee, Inc., general contractors.

Like father, like daughter: James Rasmussen has worked in the construction industry for 30 years, the past six as chief estimator with a construction firm in Wichita.

His daughter's promotion last fall made her one of the first female chief estimators in the nation.

A 1977 KSU graduate in construction science, Kay Rasmussen says she has never regretted going into construction. "My father has worked in construction all his life," she explains. "When I started considering career choices, I knew I really liked math, and construction curricula looked interesting."

Until the past decade, very few construction companies employed any female engineers or estimators. When Kay Rasmussen entered Kansas State's construction science program in 1974, she was the first—and only—female in that program.

Although the construction industry is dominated by men, Kay's father encouraged her in her career pursuit. "I had worked two summers in a soils lab for the Kansas Highway Department. That gave me a good experience working in a traditionally male office," she says. "Because I had no problems there, I don't think my father or mother had any reservations about my career choice."

As chief estimator, Rasmussen is responsible for pricing, analyzing projects, bidding to requirements, and completing overviews of projects.

Kay Rasmussen believes her field experience was invaluable in helping her attain her current position. "My experience in the field was one of the big factors in helping me know what is important in this job," she explains. "You need to be very observant about what is going on, ask questions, and through that, be able to see how things relate to each other."

Rasmussen especially enjoys the competition involved in estimating. "I like scrap ng with the best of them," she says. "When you come out a winner, there isn't any better feeling. To know you came up with the best method and put it all together is very rewarding."

And the thing she dislikes most about her job is losing a bid. "When you put in all those hours and don't get the job, it's very disappointing. It really upsets me when McKee is second or third, I'm a bad loser."

Although there are few women in the construction field, even fewer in estimating, Kay Rasmussen encourages other women to consider careers in the industry. "The construction field is challenging," she says. "If someone is really interested in a dynamic career, construction is a very good way to go."

Kay Rasmussen, a 1977 graduate in construction science, is one of the first female chief estimators in the country.

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Open House
And the winners were... 

Yellow Brick Award for most enthusiastic parade participation: Construction Science
Outstanding Department Award:
Construction Science
1st place Open Class display: Construction Science, “Renovation—Invitation to the Past”
1st place Restricted Class display: Electrical and Computer Engineering, “Power Line Protection”

New scholarship

The W. LeRoy Culbertson Steel Ring Leadership Scholarship has been established at Kansas State by Mrs. Wanda Culbertson and KSU Steel Ring alumni.

Culbertson, a 1939 graduate in mechanical engineering, died in 1980. He had been senior vice president of Phillips Petroleum Co.

Dennis Shields, junior in agricultural engineering from Lindsborg, received the scholarship for 1986. Recipients must be full-time fourth-year students in engineering and exhibit leadership skills through participation in extracurricular activities.

In addition to numerous other honors during his lifetime, Culbertson received the KSU Alumni Association’s University Alumni Medallion in 1970 and the College of Engineering’s Distinguished Service Award that same year. He was chairman of the Engineering Advisory Council and a charter member of the Engineering Dean’s Club.

The National Society of Professional Engineers honored him posthumously with its Distinguished Service Award for Professional Engineers in Industry.

Contributions to the scholarship can be sent to the KSU Foundation, Hollis House, 1408 Denison, Manhattan, KS 66502.

Fellowships awarded

Two engineering students received prestigious fellowships this spring.

Rodney Fox, graduate student in chemical engineering from Wichita, won a NATO Postdoctoral Fellowship in Science. He will use the accompanying $20,000 stipend for 12 months of study at the National Center for Scientific Research in Nancy, France.

David D. Niemann, senior in mechanical engineering from Newton, has been awarded a $6,000 fellowship from Phi Kappa Phi. He plans to continue his studies in mechanical engineering at K-State.

Fox received B.S. and M.S. degrees in chemical engineering from KSU in 1984 and 1985, respectively, and is currently working on a Ph.D. He had previously received grants for study at the Federal Institute of Technology in Zurich, Switzerland, and at Gustavus Liebig University in West Germany.
Here's the news from engineering alumni

Walter E. Hanson (CE '39) has been elected an Honorary Member of the American Society of Civil Engineers, in recognition of his contributions to his profession, including public service, private practice, writing, lecturing and teaching. Hanson served 30 years as chairman of the board of Hanson Engineers, Inc., which he founded in 1954. He is also internationally known and frequent guest lecturer, is active in 15 professional and technical engineering societies and has held numerous offices at the local, state and national levels.

Lester I. Miller (ChE '40), Troy, Mich., retired in April from E. I. DuPont deNeumours & Co. after 45 years of service. He is currently a research associate in the Troy Laboratory of Finishes and Fabricated Products Division.

Charles A. Powers (CE '49) is senior project manager for DeLuew Cather International on a technical assistance project with the Ministry of Works in Lilongwe, Malawi. He previously worked for five years in Costa Rica as a consultant on a World Bank project. Powers said he hopes to return to K-State for his 40th reunion in 1989.

Willis R. Barrett (ChE '50) is president of Duraco Products, Inc., Streamwood, Ill. The company manufactures and markets decorative plastic planterware for homes and offices.

Donald R. Chesnut (EE '50), former vice president of avionics and weapons systems integration at Boeing Military Airplane Co., Wichita, has been named executive vice president of Boeing Vertol Co. At Vertol, Chesnut will be working primarily with the company's two new business programs, LHX and V-22. Chesnut joined Boeing after graduating from KSU. He has held a number of key positions in the company's missile and space activities and is president of the Boeing Corp., a construction subsidiary. He is a member of the College of Engineering Advisory Council and received a Distinguished Service Award from the College in 1985.

Walter R. Weck (EE '51) has retired from the Electro-Motive Division of General Motors Corp. after 35 years of service and is enjoying "the good life" in Cape Coral, Fla.

Charles R. Engle (ME '53) is professor of law at George Mason University School of Law and also teaches patent law to examiners in the U.S. Patent Office. He retired in 1980 from the General Motors Patent Section, where he was a patent attorney and in charge of the Washington, D.C., office.

Roscoe B. Earp (ChE '58) is product development manager for Bias Earthmover & Truck Tires at Goodyear Tire & Rubber Co., Topeka.

Gilbert F. Selsor (EE '58) has been elected president and chairman of the board of ICT Manufacturing, Inc. (formerly Carlson Manufacturing and Hydraulics), Wichita.

Lawrence M. Garvin (IE '60, B.A. '61) has been elected regional vice president of the American Society of Safety Engineers (ASSE) and is also president of the Greater Chicago chapter of ASSE.

Terry D. Enright (ME '72) is president of Terwil Energy, Inc., Denver, Colo. The company, which Enright founded in 1983, is involved in oil and gas operations in central and eastern Kansas and the Denver Basin. Enright also works on a consulting basis with other oil and gas independents.

See Alumni, p. 8

Deaths

Harvey S. German (CE '29, M.S. '30), Dec. 6, 1985, in San Antonio, Tex. Mr. German retired from Commonwealth Natural Gas, Richmond, Va., in 1960. He was a member of the Masonic Order, Drumright, Okla.


Warren R. McDaniel (ME '43), Naperville, Ill., Dec. 20, 1985. Mr. McDaniel had retired from Natural Gas Pipeline Company of America after 35 years of service.

Thomas R. Shaw (EE '75), Wichita, Nov. 19, 1985, in an auto accident.

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, professional or other activities, whether you've retired, or any reminiscences you'd like to share. Use this form below or write to: IMPACT Editor, College of Engineering, Durland Hall, Kansas State University, Manhattan, KS 66506.

NAME __________________________ CLASS OF ________ MAJOR __________________________

ADDRESS __________________________

NEWS FOR IMPACT

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Return to: IMPACT Editor, College of Engineering, Durland Hall, Kansas State University, Manhattan, KS 66506.
Alumni from p. 7

George P. "Bud" Peterson (ME ’75, M.S. ’80) has received a Ph.D. degree from Texas A&M and has accepted a position there as assistant professor of mechanical engineering.

Mott Birzer (AgE, Bus.Adm. ’77) is a mechanical project engineer at the Farmland Industries Agricultural Chemical Plant in St. Joseph, Mo. He is working on an MBA through Northwest Missouri State University.

Kent A. Martens (ME ’79) went to work for Marley Cooling Tower Co. in Kansas City after graduation and recently transferred to Los Angeles to be a sales engineer for the company.

Kevin J. Reilly (CS ’79) has been designated a Certified Cost Engineer by the American Association of Cost Engineers. He is a cost engineering specialist with Virginia Power, Richmond, Va.

Debra Royse (ChE ’79) has been named the 1986 Illinois Society of Professional Engineers’ “Young Engineer of the Year,” the first woman to receive the award. Royse is currently Joliet chapter president and state scholarship chairman for ISPE.

Stevin H. Gehke (ChE ’80) has accepted a position as assistant professor of chemical engineering at the University of Cincinnati. He received an M.S. from the University of Minnesota and is completing a Ph.D. degree there.

Kevin A. Rohner (CE ’80, P.E.) has joined George Butler Associates, Inc., an architectural, engineering and planning firm, as a civil engineer in the firm’s home office in Lenexa. He formerly was assistant city engineer in Enid, Okla., and also had worked for Burns & McDonnell in Kansas City. Rohner is pursuing an M.S. degree in civil engineering at the University of Missouri, Columbia.

Jim Brewer (ChE ’81) is now a photo engineer (CMOS wafer fabrication) with Motorola, Austin, Tex., after spending 2½ years there as a diffusion engineer. He has applied for a patent on a process he developed for Motorola.

Kelly R. Jones (EET ’82) is site engineering manager for Cray Research, Inc. at Conoco Oil, Ponca City, Okla. He formerly was senior computer engineer for Seismograph Service Corp., Tulsa.

Craig A. Cattelino (ME ’83), Overland Park, has accepted a research assistantship at Purdue University, where he will pursue a master’s degree in mechanical engineering.

Dean L. Hisbert (ArchE ’83) has been named “Outstanding Engineer in Training” by the Topeka chapter of the Kansas Engineering Society.

Todd Bednar (CS ’84) is civil discipline engineer for Daniel Construction Co. at the Shearon Harris Nuclear Power Project at New Hill, N.C., near Raleigh.

Faculty from p. 4

Black and Veatch Award

J. Kenneth Shults, professor of nuclear engineering, has been selected as Black and Veatch Distinguished Professor, the third time he has received the award.

Shults also has been recognized previously for contributions to teaching and to the engineering profession. He has done extensive research in the field of energy. He is a 1964 graduate of the University of Toronto and holds M.S. and Ph.D. degrees from the University of Michigan.

Dow Award

Steven R. Eckhoff, professor of agricultural engineering, has won the Dow Chemical “Outstanding Young Faculty” award from the Midwest Section of the American Society of Engineering Education. A faculty member since 1983, Eckhoff is a 1975 graduate of Illinois Wesleyan University and has M.S. and Ph.D. degrees from Purdue University.