

University Graduate Faculty Award To Dr. L. T. Fan

An engineering educator, administrator and researcher with an international reputation has received KSU's 1973 Distinguished Graduate Faculty Award.

He is Dr. L. T. Fan, head of the K-State department of chemical engineering. Fan was the speaker at an April 25 banquet in his honor where he received a \$1,000 prize provided by Standard Oil of Indiana and the K-State Endowment Association.

..Fan contributed the \$1,000 check to the KSU Endowment Assn.

Author of 250 technical papers and three books, Fan was selected for the award by a joint committee of faculty and graduate students. A native of Taiwan, he was graduated from National Taiwan University in 1951 and received an M.S. from KSU in 1954.

He continued his studies at West Virginia University, Morgantown, earning his Ph.D. in 1957 and an M.S. in mathematics in 1958 while working as a research engineer for the U.S. Bureau of Mines.

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Dr. Donald
E. Rathbone

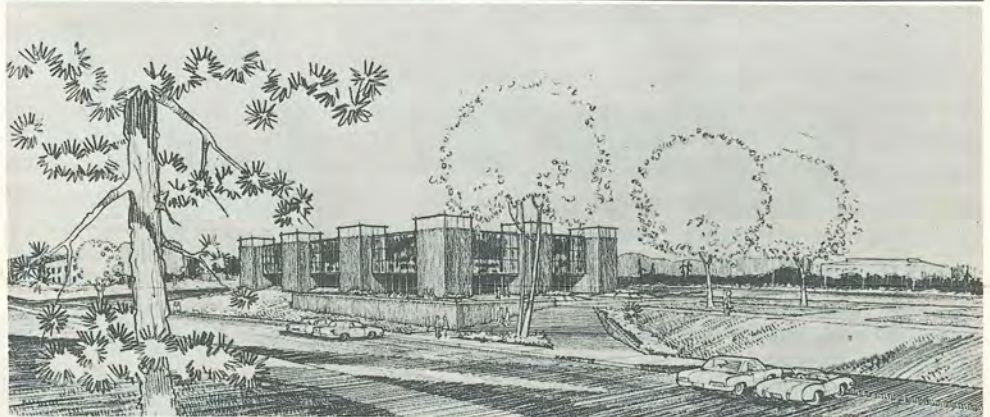


FLASH! Donald E. Rathbone Chosen New Engineering Dean

The new dean of engineering at K-State will be Dr. Donald E. Rathbone, 44, chairman of the department of electrical engineering, University of Idaho, Moscow. He will assume duties later this summer.

Dr. Rathbone succeeds Dr. G. Nevins who resigned effective July 1 to become a fellow of the John B. Pierce Foundation, Yale University, New Haven, Conn.

Look for a fully-detailed report on the selection of the new dean in the next issue of this newsletter.



NEW ENGINEERING BUILDING AT K-STATE—The State Legislature has appropriated \$2.5 million to build the new M. A. Durland Hall, housing the department of chemical and industrial engineering. Construction is expected to begin shortly. Durland Hall, named for the College's dean emeritus who served from 1949 to 1961, will be built at the intersection of Denison Avenue and College Heights, north of Ahearn Fieldhouse.

Ralph Nevins to Yale University As Pierce Foundation Fellow

Dr. Ralph G. Nevins, K-State dean of engineering since 1967 and director of the Institute for Environmental Research since its founding 10 years ago, is leaving KSU July 1 to become a Fellow of the John B. Pierce Foundation at Yale University, New Haven, Conn.

Dean Nevins announced his resignation in a letter to the engineering faculty at K-State in March. At the time of publication of **IMPACT**, a successor had not as yet been announced.

Nevins is to assume duties at the Pierce Foundation July 1 where he will continue his extensive research activities in environmental studies.

He was appointed K-State dean of engineering in September 1967 after a distinguished 10-year tenure as head of the University's department of mechanical engineering. He was the Kansas Power and Light Company Distinguished Professor from 1963 to 1967.

Nevins came to K-State in 1948 following his undergraduate and graduate work at the University of Minnesota. He is the recipient of the James Richards Memorial Award of the American Society of Mechanical Engineers and the Distinguished Service Award of the University of Illinois where he earned his Ph.D.



Dr. Ralph
G. Nevins

He also has received numerous honors and awards from the American Society of Heating, Refrigerating and Air-Conditioning Engineers, the group which sponsored much of his work in environmental research at K-State.

Nevins, 47, and his wife Janet, will be residing in Madison, Conn.

50TH ANNUAL
ENGINEERING OPEN HOUSE
MARCH 29-30, 1974

M. E. Department Research Efforts Boost Kansas

There are a number of interesting research and design projects going on in the department, most of which are of potential benefit to Kansas citizens: things like automatic control of automobiles, air pollution control and measurement, cooling of individuals in high temperature-humidity work environments, and a study of flow patterns inside condenser tubes used in refrigeration and power plants.

Energy conservation is a subject of importance in studies to determine the minimum energy input to systems providing comfortable heating or cooling for humans, to determine minimum maintenance temperature levels during shut-down-and-start-up of industrial drying ovens and determination of optimum temperatures for combination wet-dry power plant cooling towers. The latter study involves water conservation consideration also.

A combination project with agricultural engineering involves fluidic control of farm tractors equipped with hydrostatic transmissions. The object of the study is to maximize engine fuel economy with a minimum of attention from the tractor operator.

Other projects involve finding better ways to drill through rock, improving exhaust fans, reducing emission of feed dryers, improving the design of gear boxes and reducing the destructive vibration of trucks and saw blades.

Better design of room air distribution systems should be the result of a study conducted jointly with the KSU Institute for Environmental Research. This study has resulted in unique design criteria which are applicable to almost all types of air room distribution systems.

KSU Graduate Faculty Honor To Dr. Fan, Donates Check

(Continued from Page 1)

Fan joined the faculty in 1958 after being hired by postcard and advanced to department head in 1968. He is a pioneer in applying process modeling and optimization to desalination and biological waste treatment, and his work in optimization theory and control is important to engineers in many fields.

Much of Fan's research has been concerned with technical aspects of practical problems related to the environment.



INSTITUTE STAFF AT 10TH ANNIVERSARY—Associates of the K-State Institute for Environmental Research recently posed for this photo noting 10-year anniversary of I.E.R. with a lecture series to conclude in the fall. Front row (l. to r.)—Arlyn Feyerherm, Paul Miller, Ralph Nevins, Roger Fedde and Naim Azer. Second row—Jason Annis, Ronald Gronwall, Robert Gorton and L. T. Fan. Third row—Richard Christ, Frederick Rohles, John Kipp, Richard Gallagher and Corwin Bennett. Top row—Beatrice Finkelstein, Stephan Konz, Jessie Warden, Chao Chen, C. L. Hwang and J. Cranston Heintzelman.

I.E.R.'s 10th Anniversary Noted With Lecture Series

The K-State Institute for Environmental Research will continue its 10th anniversary lecture series in the fall. The series is coordinated by Dr. Frederick H. Rohles Jr., associate IER director.

On April 6, a consultant from Cincinnati, Ohio, Dr. Austin Henschel, lectured on "Rationale of the Proposed Occupational Health Heat Stress Standard." He is a consultant to the National Institute of Occupational Health and Safety in Cincinnati.

In mid-March Ralph Goldman of the U.S. Army Research Institute at Natick, Mass., gave the first lecture in the series.

Lecturers scheduled for the fall include Robert Sommer, University of California, Davis, and Calvin Taylor, University of Utah, Salt Lake City.

The K-State institute was initiated in 1962 when the American Society of Heating, Refrigerating and Air-Conditioning Engineers transferred its environmental test chamber from Cleveland, Ohio, to K-State. The building was dedicated on November 6, 1963, and initial tests using the KSU-ASHRAE Chamber were begun.

Dr. Ralph G. Nevins, then head of mechanical engineering at K-State, initiated the institute's program and was appointed its director. Rohles was named associate director.

The institute has 23 faculty associates from 13 departments in five different colleges at KSU, according to Nevins. He said "the institute is organized to provide opportunities and facilities for research into man's relation and response to environmental factors."

Since its founding 10 years ago, institute staff and graduate students have conducted more than \$2 million in research activities.

Leland S. Hobson Retires After Successful Career

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Under his administration, the budget for research in engineering at K-State grew from a few thousand dollars to almost a million dollars—more than three-fourths from non-state sources.

Hobson was instrumental in starting the K-State Community Industrial Survey Program, in assisting Kansas industry with technical and managerial problems, in promoting engineering research programs at K-State, and in encouraging Kansas industrial research.

He is a past president of the Kansas Engineering Society and holds its outstanding service award. He also is a fellow and past national director of the Society for Advancement of Management.

His other honorary and professional attainments:

- +National Society for Professional Engineers (NSPE), past national director, past chairman of Young Engineers Committee.

- +NSPE Educational Foundation, past president and trustee.

- +KSU Research Foundation, past director and secretary-treasurer.

- +Phi Kappa Phi, national scholar honorary, past KSU chapter president.

- +Sigma Xi, national research honorary.

- +Sigma Tau, national engineering honorary.

KSU ENGINEERING ALUMNI NEWS SPRING 1973



ATTENDING 5TH ANNUAL ALUMNI SYMPOSIUM March 31 (those graduating through 1940): (Seated, l. to r.)—L. W. Newcomer, CE '23; Prof. Claude Wilson, ME '25; B. T. Stryker, CE '31; Warren Lyttle, EE '33, and Harry Wege, EE '25. Middle row—Blair C. Forbes, ME '34; Prof. Alley Duncan, EE '37; H. M. Low, EE '24; Frank Corwell, EE '39; Prof. Leland S. Hobson, EE '27; and Harold Deters, ChE '38. Top row—Ed Schellenberger, EE '38; Prof. William H. Honstead, ChE '39; Don Christy, AgE '33; H. H. Rector, EE '37; and Harold Harris, EE '37.

ALUMNI NEWS

CLASS NOTES . . .

Frank Edward Moss, EE '13 (302 S. State St., Eureka KS 67045); died March 23.

Charles Frankenhoff, ME '18 (6 Hathaway Rd., Scarsdale NY 10583); campus visitor May 9 with wife; member, Dean's Club and \$/Year² Club; in excellent health; several friends in Manhattan, Kan.

James W. Pryor, ME '22 (2608 Tracy, Kansas City MO 64108); two daughters; he is now in retirement; wife died Dec. 19, 1972; three-week visit to Africa planned for June 1973.

Lester E. Jennings, FS '23 (Box 178, Payson AZ 85541); retired in 1964 after 29 years with Arizona Public Service Co.; married, two children; eight grandchildren; served in Pacific in World War II; civic activities, hunting, fishing, traveling, painting and photography; with late Hank Goudy, '17, developed system of aerial photography for land use study, one-fourth section records system and growth analysis.

Kenneth B. Mudge, EE '27 (4851 N. Sheffield Ave., Milwaukee WI 53217); retired in May 1970 as assistant manager of application engineering at Allen-Bradley Co., Milwaukee; previously with GE; lawn bowler; regular bowler; jogger; hikes in mountains.

Howard J. Winters, EE '28 (Box 831, Independence KS 67301); P.E. in Kansas; retired in 1970 after 35 years with Kansas Gas & Electric in power sales and application engineering; married a year ago; daughter and grandson; certified graphoanalyst, analyzes handwriting, since retiring.

O. D. Hunt, EE '30 (1822 Poyntz, Manhattan KS 66502); retired from KSU faculty in 1970; toured Texas to Idaho in 1972; excellent health; 9-18 holes of golf every day, weather permitting; consultant on glare research to Dr. Terwin Bennett, KSU Institute for Environmental Research.

Joe E. Fickel, ME '32 (5440—148th S.E., Bellvue WA 98006); in 36th year with Boeing; graduated with Karl Martinez, '32, who retired from Boeing last year.

Robert J. Rychel, EE '32 (4657 S. Lakewood, Tulsa OK 74135); retired as chief electrical engineer, Tulsa District Corps of Engineers after 32 years service; he and wife, Gay, have four children, stepchild; four grandchildren.



Mr. and Mrs. Charles Frankenhoff

Paul F. Snyder, EE '32 (3213 Delmar Terr., Pueblo CO 81001); died April 25, 1972; survived by wife, Helen; had resided in Elkhart, Kan., in mid-1930's; had been with Southern Colorado Power Co., Pueblo.

Stuart R. Mudge, EE '33, died in his home in San Carlos, Calif., Jan. 2; hired by GE in 1933 as salesman in San Francisco office; had retired in mid-1971; survived by son, Alan, and daughter, Marylee, both living in California.

Marion E. Phillips, CE '33 (9022 Greylock St., Alexandria Va 22308); P.E. in Virginia, New York; retired from FAA after 35 years' service; enjoying second career as staff engineer, Loudoun County Sanitation Authority, Leesburg, Va.; married former Dorothy Shreve, Joplin, MO., in 1934; two children—son and daughter; five grandchildren.

James C. Richards, ChE '34 (Miller Ranch, Emmett KS 66422); nominated for two-year term as president, KSU Alumni Ass'n, retired executive of B.F. Goodrich Co.; in 1962 received K-State Distinguished Service Award in engineering; member, KSU Engineering Advisory Council.

Glenn Mayer Young, EE '35 (4427 Ellenwood, St. Louis MO 63116); died Oct. 11 of cancer; P.E.; retired in 1969 from Westinghouse Electric after 41 years; survivors—wife, Althea Siddens Young, HE '36; daughter, two sons; two grandchildren.

S. R. Wagler, EE '39 (3279 Surrey Dr., Saline MI 48176); vice president and secretary, SICOM Electronics Corp.; marketing manager, MVC Distributing Corp., Livonia, Mich.; appointments were effective Jan. 1; MVC wholly-owned subsidiary of SICOM.

Archie L. Morgan, EE '41 (385 Fairfax St., Denver CO 80220); retired Jan. 31 (ass't deputy assessor) after almost 24 years with City and County of Denver; in real estate part-time.

Art McGovern, ME '42 (6630—30th Ave. N., St. Petersburg FL 33733); senior engineer, Components Mfg. Operations, Engineering-Parts Fabrication, Neutron Devices Dept., GE; circumstances have not directed him back to campus since graduation.

John R. Reed, EE '43 (8504 Magnolia Dr., Lanham MD 20801); completed 30 years' service (combined World War



Must Raise \$30,300 To Complete Funding Of Ward Hall (NE)

Dean R. G. Nevins reports that total contributions to the Ward Hall (Nuclear Engineering) Mortgage Fund had reached \$79,668 as of May 25, 1973. This new total compares with \$52,900 as of Dec. 31, 1972.

Approximately \$30,300 must be raised to meet the \$110,000 goal to pay off the Ward Hall Mortgage Fund. Hopefully, this debt will be paid off in the near future.

Four new members of the \$/Year² Club were reported: David L. Braun, ME '67; William L. Dole, CE '35; Robert C. Reilly, EE '50; and Randy K. White, ME '73.

Exxon USA Foundation matched the gift of Harold L. Siegele, ChE '47, a member of the Engineering Dean's Club at K-State (members contribute \$500 to the College of Engineering within a five-year period). Other K-State engineering alumni matching gifts have come from Caterpillar Tractor, Hercules, Inc., and National Cash Register Foundation.

As a KSU engineering alumnus, you are eligible to join either the Dean's Club (explained above) or the \$/Year² Club (members agree to pay annual dues of \$1 for each year which has elapsed since graduation from K-State).

If you wish, you may also make a contribution designated to the Ward Hall Mortgage Fund. Your participation in giving to the College is solicited and very much needed.

Please send your check or money order (made out to KSU Endowment Assn.) in enclosed envelope to the Dean's Office. Fill out envelope back cover as appropriate.

If you have any questions, please phone (AC 913 53 2-5590) or write the Dean's Office, KSU College of Engineering, Seaton Hall, Manhattan KS 66506.

11 military and civilian) with FAA; assistant divisional chairman, navigational aids and communications; last three years in Washington, D.C.; previously in California 15 years; five children.

Eugene E. Haun, AgE '46 (1012 Lenox Ave., Hutchinson KS 67501); farmed 19 years in Pawnee County; moved to Hutchinson in 1965; design engineer, fluid power division, Cessna; wife, Gladys, English instructor at Hutchinson Juco; son, Randall, junior in EE at KSU; son, Errol, head of piano, University of Guam; son, Duane, computer programmer for Certaineed Plastics Division, McPherson, Kan.

J. W. (Bill) Funk, AgE '47 and '50 (5624 Drury La., Topeka KS 66604); since August 1970, with Division of Water Resources, Kansas Board of Agriculture; teaches city, county planning to legislative commissions concerning flood insurance and flood plain management.

Lonnie J. Robbins, CE '47 (1794 Alta Vista Dr., Vista CA 92083); recently moved to this address.

Prof. Gerald M. Smith, ME '48 and '51 (3838 Worthington, Lincoln NB 68503); head of department of engineering mechanics, NU; has published numerous articles in technical journals and co-authored four textbooks on computers and dynamics; received Watson Research Award of American Concrete Institute in 1953 and 1965.

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ALUMNI NEWS

Dr. Wilbur B. Neel, ME '49 (3103 Nutmeg La., Hutchinson KS 67501); native of Hutchinson; Hutchinson Implement Co.

Lawrence M. Garver, EE '50 (6646 S. Pennsylvania, Littleton CO 80121); electrical field engineer, Westinghouse, Denver; worked in Philippines for short term; P.E. in Colorado; wife, Violet; two married sons, Larry and Steve; two daughters, Susan, 18, and Lisa, 16.

Norman N. Hansen, ME '50 (Rt. 2, Box 612, Apt. 28, Enumclaw WA 98022); completing 17th year at Boeing; lead engineer for mechanical design in visual flight simulation laboratory as senior specialist engineer; recently moved to above address from Mercer Island, Wash.

William K. Woolery, EE '51 (1301 Maus, Wichita KS 67212); recently appointed director of marketing, Kansas Gas & Electric; formerly manager of commercial-industrial marketing.

Richard L. Evans, EE '52 (312—7th St. S., Hopkins MN 55343); district railway sales manager, Texaco; wife, Nancy; children—Mary, 21, Rick, 19, John 16; Mary, Junior at Sioux Falls College; Rick, freshman at University of Minnesota; John, sophomore in high school.

Gerald Houk, ME '52 (540 E. Portage Trail, Apt. 601, Cuyahoga Falls OH 44240); died Dec. 20 in Good Samaritan Hospital, Baltimore, Md., after a three-month illness, terminal cancer; had worked seven years with DOD in Far East (Lyon Assoc. Inc., Baltimore); home offices and residences had been in Okinawa and Japan.

Lloyd E. Maddux, CE '52 (46 Hillcrest, Ponca City OK 74601); formerly chief corrosion engineer for Continental Pipeline and consultant for Williams Bros. Engg., Tulsa; doing business with son Mike as Maddux Engineering Co., Corrosion Consultants; married 27 years; son, Terry; sons strong K-State supporters.

Dr. Ralph O. Turnquist, ME '52 and '61 (1100 Pioneer La., Manhattan KS 66502); associate professor of mechanical engineering, KSU; wife, former Verna Swanson; children—Gary, 5, Amy, 3; Ph.D., Case-Western Reserve '65.

Dr. Donald H. Lenhart, EE '56 (Rt. 2, Box 26, Westmoreland KS 66549); P.E. in Kansas as of January; married, son born Oct. 10, 1971.

R. R. (Bob) Derousseau, NE '61 (9 Blue Rock Ct., Corte Madera CA 94925); transferred from Richland, Wash., by Westinghouse to San Francisco as systems engineering manager, Bechtel Corp., A-E for FFTF Breeder Reactor being built at Richland; married, two daughters.

Dr. Gary L. Johnson, EE '61 and '63 (812 Church, Manhattan KS 66502); P.E. in Kansas as of January 1973.

Maj. Donald L. Gish, NE '63 (2 Cassidy, Nellis AFB NV 89110); active duty in AF; fighter weapons instructor pilot, F-4, 414th Fighter Weapons Squadron; married to former Annie Roberts; four children—Jeff, 9, Michael, 7, Marci, 4, and Christi, 3.

C. Vernon Thorwald, EE '63 (41 Fordham Cr., Pueblo CO 81005); joined San Isa Bel Electric (a rural electric) in August 1971; vice president, engineering, July 1972; attended conference on electrical construction in San Francisco last November; three children—Greg, 7, Krista, 5, and Monica, 1.

Dr. David S. Dodson, NE '64 (1400 Audubon Rd., Lafayette IN 47905); recently completed Ph.D. in computer science at Purdue; associate manager, User Services Group, Purdue University Computing Center; married to former Darla Kirby, fs '63; son, Donald, 2.

Atty. Robert M. Hamlett, ChE '65 (721 Olive St., St. Louis MO 63101); spent six years with Monsanto in engineering and production research; received J.D. from St. Louis University in 1970; in private practice of law with Greenfield, Davidson and Mandelstamm; married to former Barbara Knubley; two daughters—Laurie, 5, Jenny, 2.

Daran P. (Don) Sutaria, IE '65 (78-09—34th Ave., Apt. B-48, Jackson Heights NY 11372); new address; senior industrial engineer, corporate staff, Schaefer Brewing, Brooklyn, N.Y.; completed 'industrial engineer' professional degree from Columbia in 1970; formerly with Pfizer, Wakefern, Squibb; married June 4, 1971; wife, former Faye Creed, graduate of Monticello (Ill.) College and Nassau (N.Y.) College.

Vernon M. Wegerer, EE '65 (2936—9th E., Moline IL 61244); promoted to partner, Kimmel-Jensen-Wegerer-Wray, Engineering Consultants; P.E. in Kansas, Illinois, Iowa; wife, Loma Lynn; three children—Nadine, Jenell, Brian.

J. Randall Goering, EE '66 (3725 S. Wheeling, Tulsa OK 74105); formerly with Cities Service; new position, senior engineer, Furlow & Associates Engineering, electrical consulting engineer; P.E. in Oklahoma; wife, Kathy; children—Leslie, 7, Jeffrey, 5; work involves remote supervisory control and telemetry systems for petroleum.

Dan Mishler, ME '66 (11912 Hornsby St., Austin TX 78753); staff engineer, Office Products Division, IBM; married, three children—Jennifer, 5, Daniel, 2, Rebekah, 8 months.

Rod Nash, ME '67 (607 Fleming, Garden City KS 67846); project engineer with Butler Manufacturing Co., assigned to Oswald Division, Garden City; current projects include application of electronic scale systems to feed handling systems and design work on the feed mixing equipment.

Capt. William A. Wright, NE '68 (310 Waltervliet Ave., White Sands Missile Range NM 88002); received M.S. in public health (radiological hygiene), University of North



PARTICIPATE IN ENGINEERING ALUMNI SYMPOSIUM—Those attending the 5th annual KSU Engineering Alumni Symposium March 31 during Engineering Open House (Class of '41 through and including Class of '55): (Seated: l. to r.)—Ken Hewson, EE '43; Burns Hegler, EE '43; Richard Clarke, EE '49; Don Gerard, CE '48; and Ernest Schmidt, ME '50. Middle row—Don C. Roth, ME '54; E. H. Kittner, ME '50; Prof. G. E. Fairbanks, AgE '41; Al Acker, ME '42; and Kermit Thompson, ME '43. Top row—Prof. L. T. Fan, ChE '54; J. W. Funk, AgE '47; Keller Cordon, AgE '46; Donald Schoof, AgE '51; Robert Leach, EE '50; Earl Seifert, ME '43; and Russell Schoof, AgE '55.

Teddy Hodges Gets \$500 Award For Excellence in Instruction

Dr. Teddy O. Hodges, professor of agricultural engineering at K-State was granted on May 8 the third annual KSU College of Engineering \$500 award for excellence in undergraduate teaching.

The recognition of Hodges, native of Ravenna, Tex., was announced during a College of Engineering faculty meeting by Dr. Paul L. Miller, director of the College's Center for Effective Teaching.

Hodges, a professional engineer who received his education at Texas A & M, Iowa State and Michigan State universities,

was selected after extensive review by a student-faculty advisory committee of the KSU College's teaching center.

Dr. Ralph G. Nevins, K-State Dean of engineering, pointed out that "Dr. Hodges is recognized by faculty and students of the College as a superior teacher and an able researcher."

A color portrait of Hodges and a plaque will be placed in a display case in the lobby of Seaton Hall, main engineering building at K-State. Hodges will get permanent possession of them in May 1974.

Carolina, Chapel Hill, Aug. 21, 1972; now radiation protection officer, White Sands Missile Range.

John A. George, AgE '69 and '70 (Rt. 4, Paola KS 66071); was with EPA in Cincinnati; Dec. 1 became staff agricultural engineer, Permits Branch, Enforcement Division, Region 7, EPA, Kansas City, MO.; wife, former Bonnie Floyd; children—Jennifer, 3, Tammy, 1.

William H. Maxwell, CE '69 (10916 W. 66th St., Apt. 305, Shawnee KS 66203); completed M.S. in sanitary engineering at KSU in March; assistant environmental engineer, Midwest Research Institute, Kansas City, MO.

Dr. Gerald Rick Potts, ME '69 and '70 (1588 Delia Ave., Akron OH 44320); with Firestone Central Research Labs, Akron; son, Gerald Ryan, born Oct. 24; wife, Barbara, B.S. '68.

Lt. Fred L. Curry, EE '70 (1208 N.W. 10th, Oklahoma City OK 73106); 1st Lt., AF; went to Hawaii April 15; telephone and data systems engineer; wife, '68 graduate in chemistry.

Lt. Richard P. Wenger, EE '70 (124-4 Roaming Rd., Minot AFB ND 58701); with 5th Fighter Interceptor Squadron; flies F-106 Delta Dart; wife, former Carolyn Wedman, Daneville, Kan.; son, Patrick, born March 25, 1971.

Richard Mages, EE '71 (8573 Baron Dr., Knoxville TN 37919); married to former Janie Stein, Spearville; son, Richard Jr., five months; engineer with Tennessee Valley Authority.

Richard H. Musgrove, NE '71 (18321 Lost Knife Cr., Gaithersburg MD 20760); irradiation service manager, Columbia Research Corp., Washington, D.C.; responsibilities include research and industrial irradiation service with 3 MeV, 50kw Cockcroft-Walton Accelerator.

David S. Rowe, ME '71 (2170 N.E. Hancock, Portland OR 97212); assistant sales engineer, Westinghouse Industrial Sales; married last June 10 to former Marcia Murphy, Manhattan, Kan.

John E. (Woody) Swain, ME '71 (Luke AFB AZ 85301); completed undergraduate pilot training at Vance AFB, Enid, Okla., Feb. 28; F-4 training at Luke AFB until mid-November.

Willard (Bud) Ransom, ME '72 (606A Franklin, Austin TX 78751); teaching assistant, mechanical engineering,

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Teddy Hodges



On April 9 Hodges, a past state director of the Tri-Valley Chapter of the Kansas Engineering Society, was named one of two recipients of the annual Gamma Sigma Delta Distinguished Faculty Awards for outstanding teaching. Gamma Sigma Delta is the K-State honor society for agriculture.

Hodges has been at K-State since 1970 after receiving his Ph.D. from Michigan State, except for two years, 1964-1966, at Assiut University, Cairo, Egypt. There he developed an agricultural engineering option for the fifth year of that university's mechanical engineering program.

Use 'Design Models' To Better Aesthetics Of Kansas Highways

The nation's highways built in the future should be safer, thanks to studies carried on in the K-State College of Engineering.

For years Dr. Bob Smith, CE '48 and '53, a professor of civil engineering, has been interested in improving the aesthetics of highway design. It gradually dawned on him that a highway that was more pleasing to the motorist's eye and easier and less tiring for the motorist to follow also is safer.

The result has been the development of a new tool which already is having an impact on highway design throughout the nation.

The new "tool" is inexpensive "design models" which a skilled worker—given a road profile and plan—can construct quickly and cheaply.

"One of the big problems in highway design has been that it is extremely difficult for the designer to visualize how his road actually will appear to the motorist once it is built," Smith says. "And even the designer with the rare ability to visualize his road has no good way to convey his 'vision' to others."

To obtain a better idea of what they were doing, highway designers have relied on a variety of aids—profiles, cross sections,

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RECENT GRADS PARTICIPATE IN SYMPOSIUM—Those attending on March 31 the 5th annual KSU Engineering Alumni Symposium (Class of '56 to Class of '70): (Seated: l. to r.)—Larry L. Jones, EE '60; Robert McMillen, EE '60; Van Chang, CE '66; Prof. Donald Lenhart, EE '56; and Ron Bestwick, AgE '64. Standing—Paul L. Miller, ME '57 and '61; Jim Jaax, ME '65 and '67; Prof. Larry Erickson, ChE '60 and '64; Allen Hahn, ME '70; Larry Thompson, CE '66; and J. R. Robertson, EE '60.

K-State Educator-Investigator Only Engineer on Action Panel

Kansas' own contribution to the Major Appliance Consumer Action Panel (MACAP) is K-State's Dr. Jason Annis, assistant professor of mechanical engineering.

Sponsored by three nationwide major appliance trade organizations, three-year-old MACAP is a pioneer in industry-initiated efforts to upgrade consumer relations.

Panel members are chosen for their leadership and knowledge in consumer interest segments of such fields as journalism, law, home equipment, finance, and engineering.

"They must be acceptable both to industry and the consumer advocates," Dr. Annis noted.

Prior to his January, 1972, appointment, Annis worked with universities, Consumers Union, and several government agencies including the Federal Trade Commission.

The seven-member panel operates independently of the industry. Its role is to provide a direct and productive channel of

communication between the consumer with a major appliance complaint and the manufacturer.

Jason
Annis



"Each company has a person who is our contact, such as a vice president for consumer affairs," Annis explained. "So we don't have to contend with the usual red tape of getting through to the right person."

In the beginning, the concept of an industry-sponsored ombudsman like MACAP

ALUMNI NEWS

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University of Texas; seeking M.S. in biomedical engineering.

Jun Ren Wang, NE '72 (2155 Lanai Ave., No. 23, San Jose CA 95122); nuclear engineer, GE, Nuclear Energy Division, atomic power equipment department; wife, former Theresa Wan.

Gary A. Sieverin, ME '73 (1813 Del Norte, Loveland CO 80537); summer work with National Park Service, Denver Service Center; reports Aug. 27 for active AF duty; assigned to weather officer training, University of Utah, Salt Lake City.

K-STATE ENGINEERING ALUMNI ACTIVITIES REPORT

As important as money is . . . money isn't everything. We'd like to know how you are. We'd like to know some news about you for the next issue of KSU Engineering Alumni Newsletter when we'll continue running news items of KSU engineering alumni. Children? Occupation? New address? New position? Married? Business, Educational or Military Promotion? Travel? (If not news about yourself, news about other KSU engineering alumni.)

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Your Name: Dept. Class of

Address: Zip:

Mail to: Mr. Tom Gerdis, KSU Engineering Experiment Station, Seaton Hall, Manhattan, KS 66506.

Dr. Jason C. Annis Kansas' Contribution To Appliance Panel

(Continued from Page 3)

was viewed with a skeptical eye by most consumer advocates, Dr. Annis noted.

Annis stressed that MACAP's decisions are based on more considerations than merely the black and white provisions of the manufacturer's warranty.

"If they just wanted someone to interpret the warranty, they could get five lawyers to do it. At MACAP we go into the implications of the warranty. We base our judgments on the moral and ethical responsibilities of the company."

One of MACAP's proposals is to eliminate "the legalese in warranties."

Pleased with MACAP's past and future impact in the consumer's interest, Annis is proud to have made his contributions.

Two specific examples of the Kansas State University faculty member's input into MACAP:

"I've been able to convince the panelists that many of the problems we see in our reviews are due to basic design problems," he explained. "Before I joined the panel, they thought principally in terms of defects in materials or workmanship.

"Also, being from Kansas I'm more skeptical when the question is service charges. Most of the other panel members are from the East Coast and they can accept high repair costs easier."

3-D Models Are Helpful In Designing Safe Roads

(Continued from Page 3)

peg models, sketchboards, artist sketches, models, and even computer perspectives—trying to improve the final product.

Of these by far the most valuable were the models, which are three-dimensional and look very realistic, often coming complete with color, landscaping, and even surrounding buildings. But because they were expensive to build, they were used primarily for display purposes or for consultations with local authorities and public groups.

And the models had a further drawback—even though the model was made to scale, it didn't look the same to the designer as it appeared to the motorist on the road.

The problem, explains Smith, is that the display model was so "flat" that it was difficult for the designer, even with a model at hand, to visualize the road as it would appear to the motorist.

Smith and others working on the problem at KSU became intrigued with what kind of corrections might be needed to make their models seem "correct" visually.

After extensive experimentation, much of it by Ronald C. Holmes, who completed work on a graduate degree in engineering last summer, it was determined that where models were constructed on a scale of one



INVESTED INTO DEAN'S CLUB—Dean R. G. Nevins (l.) (1967 to 1973) installed two KSU emeritus deans of engineering as honorary members of the College's Dean's Club (alumni and friends who contribute \$500 or more to College within five years) March 31 at the 6th annual Open House Awards Banquet. Mrs. Roy Seaton received the plaque posthumously presented to her late husband who was dean from 1920 to 1949. Dean Emeritus M. A. Durland (1949 to 1961), 76 years young, was on hand to receive his wall plaque.

New C. C. Tate NAA Laboratory Set Up, Headed by Dr. Eckhoff

The C. C. Tate Activation Analysis Laboratory has been established in Ward Hall (Nuclear Engineering) at K-State through a \$23,000 gift to the College of Engineering.

The multi-disciplinary research center was funded by Mrs. C. C. Tate, Bartlesville, Okla., to honor the memory of her late husband, a 1927 electrical and mechanical engineering graduate who went on to become vice president of refining for the Phillips Petroleum Company in Bartlesville.

The Tate laboratory is situated in the addition to Ward Hall at K-State, the recently-dedicated building of the University's nationally-recognized department of nuclear engineering.

"We are pleased that Mrs. Tate chose to honor the memory of her late husband in this appropriate manner. The Tate Laboratory will serve as an outstanding center for multi-disciplinary research at

this University," said Dr. Ralph G. Nevins, K-State dean of engineering, in announcing the establishment of the laboratory.

Dr. N. Dean Eckhoff, associate professor in the department of nuclear engineering, is director of the laboratory.



C. C.
Tate

inch equals 50 feet or less, the terrain did, indeed, look "natural."

Further studies revealed that when the scale had to be reduced—as for instance when one inch had to equal 100 feet, that the vertical scale appeared in correct proportions when it was magnified five times. That is, when the horizontal scale was one inch equals 100 feet, the vertical scale should be five inches equal 100 feet.

As the distance the inch represented increased, so did one need to exaggerate the vertical scale. On a horizontal scale of one inch equals 400 feet, the vertical scale needs to be ten times that, or one inch vertically equals 40 feet.

Having solved the problem of scale, Smith started experimenting with building models cheaply and quickly.

Eckhoff explained that "neutron activation analysis is a very sensitive analytical technique which is essentially non-destructive. Activation analysis is being applied in diagnostic medicine, plant improvement studies, nutrition, geology, toxicology and environmental protection—providing broad services to the campus."

Tate received the KSU Distinguished Service Award in engineering in 1962. He served for several years on the K-State College of Engineering Advisory Council.

Tate retired in January 1970 as a vice president and director of Phillips Petroleum. He passed away about a year later.

He joined Phillips in 1932 as a refinery engineer. In 1949, he became manager of the refining department. Ten years later, he was elected a vice president and placed in charge of manufacturing facilities. In January 1965 he was elected a director of the company.

O. H. Well Attended, William C. Exline Gets Service Award

The 49th annual K-State Engineering Open House included a myriad of activities attended by some 7,000 persons. The overall response to the weekend was very enthusiastic.

Dennis Anderson, Manhattan, Kan., and Karen Schumacher, Salina, Kan., reigned over the two-day event. St. Patrick is the engineers' patron saint and St. Patricia is his lady.

In the competition for student display and exhibit honors, the Steel Ring departmental award went to nuclear engineering. Steel Ring is a select honorary of seniors in engineering at K-State which annually conducts Engineering Open House.

Faculty Adviser John E. Kipp has announced that the 50th annual open house set for next spring has been scheduled for the weekend of March 29-30. The sixth annual Engineering Alumni Symposium is tentatively scheduled for Saturday morning of the same weekend.

An entry from the department of mechanical engineering, "Fluidically Programmed Poppottle Caliope," earned the top prize for individual exhibits.



William C.
Exline

Saturday's activities included a morning event, "The Great Mad Race," a mousetrap applications design contest for high school students. There were 60 entries in the contest attended by several hundred persons. Several sizeable engineering scholarships to K-State were awarded to winners.

The fifth annual KSU Engineering Alumni Symposium was in session Saturday morning. Some 150 alumni and friends of K-State engineering attended. Jim Jaax, a K-State mechanical engineering alumnus working for NASA in Houston, described his participation in the joint manned space docking effort between the U.S. and the Soviet Union.

The Wichita native, an aerospace technologist working in environmental control on the docking module, indicated "both sides are very eager to talk and work together."

The docking module will be used about July 1, 1975, at Cape Kennedy, Fla., when an Apollo spacecraft and a Soviet Soyuz craft will be launched within seven hours of



TOP DEPARTMENT DISPLAY AT ENGINEERING OPEN HOUSE—The overall entry of students in the K-State department of nuclear engineering won the annual Steel Ring trophy for outstanding exhibits at the 1973 Engineering Open House. Mark O. Sanford (r.) accepted the trophy from Open House Chairman Doug Hoopes.

Environment, Energy Are Topics For August Teachers' Workshop

Environmental and energy crises facing the nation will be given a midwestern perspective in a summer workshop for teachers planned by K-State's department of nuclear engineering and division of biology.

each other. Jaax pointed out that "the docking will last two days and involve four complete transfers during that period."

Dr. Ralph G. Nevins, KSU dean of engineering, spoke to an informal luncheon at noon Saturday. He cited developments and contributions of the various departments, institutes and other organizations and bodies associated with the College of Engineering.

At the sixth annual Engineering Open House Awards Banquet Saturday evening, William C. Exline, P.E., chairman of the board and president of Exline, Inc., Salina, Kan., received the 1973 Distinguished board and president of Exline, Inc., Salina, Kan., received the 1973 Distinguished Service Award in engineering. It was presented by Dr. James A. McCain, KSU president.

Two KSU emeritus engineering deans were made honorary members of the Engineering Dean's Club and awarded beautiful wall plaques signifying their membership. These were presented to M. A. Durland, and posthumously to Roy Seaton. Mrs. Seaton, who resides in Manhattan, Kan., received the plaque at the banquet.

Some 11 seniors in engineering at K-State were inducted into the Knights of St. Patrick. Three students were named at the 1972 Open House.

The "Crisis in Power: Perspectives" workshop, Aug. 6-10, will present a comprehensive outlook on costs and benefits of electrical power generation to a group of area junior college and junior and senior high school instructors.



Dr. J. Kenneth
Shultis

"We will present information, materials, and background to enable teachers selected to be prepared to discuss in their classrooms the many aspects of the present electrical power energy crisis," said Dr. J. Kenneth Shultis, assistant professor of nuclear engineering and director of the workshop.

Thirty teachers in various disciplines will be selected for the workshop. Each participant will be given \$100 for expenses and receive two hours of graduate credit for successfully completing the course. K-State was awarded a \$9,855 contract to conduct the one-week session.

K-State faculty in nuclear engineering and biology will lecture during the workshop.

NEWSWORTHY NOTES

Two K-State engineering faculty members—Dr. Cecil H. Best, associate dean of engineering, and Dr. Frank A. Tillman, professor and head of industrial engineering—are listed in the 1973 volume of Outstanding Educators of America.

A 10-member team of K-State agricultural engineering seniors has won the 1972-1973 design competition of the American Society of Agricultural Engineers mid-central section. The team leaders—Jerry L. Ostermann and Bob Matousek.

Two K-State electrical engineering seniors—Tom Trent and Wayne Unruh—won the \$100 top prize in the 22nd annual John A. Costelow student writing competition of the Kansas City section, Institute of Electrical and Electronics Engineers.

Dr. John O. Mingle, K-State professor of nuclear engineering and director of the Institute for Computational Research in Engineering, is the new president of the Tri-Valley Chapter, Kansas Engineering Society.

Dr. Corwin E. Bennett, professor of industrial engineering, has been elected president of the North Kansas Chapter of the Illuminating Engineers Society.

Larry D. Miller, K-State senior, has won first place in the Student Mid-Continent Paper Competition of the American Society of Civil Engineers.

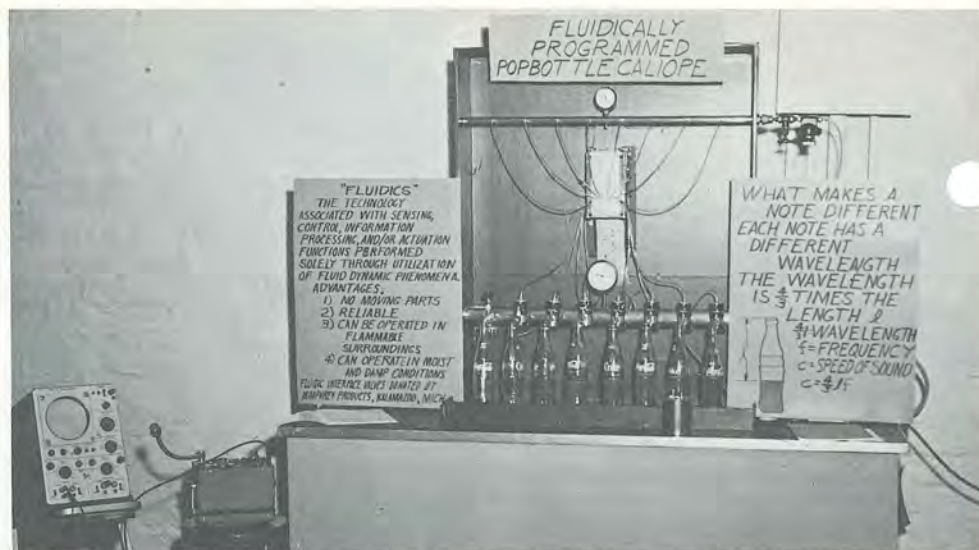
Bob Matousek, for the second straight year, has won the mid-central writing competition of the mid-central section, American Society of Agricultural Engineers.

Mark Schrock, native of Hazelton, Kan., has joined the Extension agricultural engineering staff at K-State to conduct and plan programs dealing with farm power and machinery.

The ninth annual K-State-Kansas Engineering Society Engineering and Science Summer Institutes for 100 of Kansas' brightest mathematics and science students are set for June 10-15 and June 17-22. Cost for each participant will be \$40.

A seminar coordinated by Prof. Jacob J. Smaltz of industrial engineering, on "Occupational Safety and Health in Manufacturing," was held March 14-15 at K-State for members of industrial management responsible for plant layout, manufacturing processes, and plant working conditions.

A gift of 28 troy ounces of precious thick film materials valued at \$2,750 to the K-State Solid State Engineering Laboratory has been announced by Dr. Wellington W. Koepsel and Dr. Michael S. P. Lucas of the department of electrical engineering.



TOP INDIVIDUAL DISPLAY AT OPEN HOUSE—A fluidically programmed popbottle caliope, developed by students in K-State's department of mechanical engineering, was judged the top individual display at the 49th annual K-State Engineering Open House March 30-31.

Leland S. Hobson Retires After Successful Career

Prof. Leland S. Hobson of K-State's department of mechanical engineering retired from teaching in May knowing he has accomplished his goal—reaching students in a classroom.

Hobson, who was appointed to the KSU engineering faculty 27 years ago, has his own technique for running a class.

"I require formal presentations of problems and material assigned," Hobson explained. "It gives each student a better understanding of the assignment. Besides, students won't go to sleep listening to students, but they will listening to a lecturer."

Hobson, a native of Kingman, has been rated in the top one-third of K-State instructors by KSU engineering students in their teacher evaluations the last four years.

"I'm especially proud of being rated high by my students," he said. "It shows students are interested and like my teaching procedures."

In 1968, Hobson retired from administrative duties as director of the KSU Engineering Experiment Station in accordance with the state's mandatory age 65 retirement policy. He was retained on the faculty as a full professor until he reached the teaching mandatory age 70 retirement.

He was graduated from K-State in 1927 and accepted a position with General Electric where he served until 1946 when he joined the K-State faculty.

At GE, he was a management researcher in the executive department. Prior to that

A concrete canoe entry from K-State took part in a special concrete canoe race April 28 in Indianapolis sponsored by the Purdue student chapter of the American Society of Civil Engineers.



Prof.
Hobson

he worked as assistant superintendent, Philadelphia Works; managing engineer, Power Circuit Breaker Division; and manager, High Voltage Air Breaker Research and Development.

He joined the K-State faculty as professor of industrial engineering and was named assistant director of the KSU Engineering Experiment Station in 1947.

Professor Hobson became associate director in 1951 and director in 1961.

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