

NEWSLETTER

Vol. XI, No. 2, Spring, 1969

DEPARTMENT OF GENERAL ENGINEERING

University of Illinois · Urbana, Illinois

STUDENT QUALITY RISING STEADILY

GE STUDENT RECEIVES HONEYWELL AWARD

General Engineering students are proving to be average and above students on the basis of grade-points. Figuring averages for all engineering students, by classes (4) and by departments (11), our freshmen and sophomores each ranked fourth. Juniors and seniors eighth. Consider that Electrical Engineering students are required to have a 3.25 average in the mathematics, physics, computer science, and electrical engineering courses required in the first two years and that Engineering Physics requires a 3.5 average in all courses, exclusive of basic ROTC and physical education, as well as a 3.5 in all mathematics and physics courses prior to registering for advanced physics courses. Averages of these students should be eliminated from the compari-This means the G. E. juniors and seniors rank sixth from the top in the College.

In addition, the G.E. curriculum is attracting students in Engineering Honors Programs. Among 110 Freshman James Scholars enrolled in engineering last fall, 9.7% or 16 were in General Engineering. Of 378 students participating in the College honors program, 9.7% or 34 are G.E.s.

COMPUTER GRAPHICS TO AID G.E.s

Presently part of the honors program, computer graphics will be extended on a trial basis to at least six regular sections of GE 103 (Engineering Graphics, I) next fall. If successful then, expansion to all groups is contemplated for next spring.

In usage, students will write out a set of drawing instructions and turn them in for processing by a digital computer. Then, according to pre-established programs stored in the computer, an x-y plotter will be directed by the computer to produce lines and curves on paper.

Computer graphics has been an effective tool in the honors sections the past two semesters in motivating students to put engineering graphics into practice, complementing the usual workbook (continued on page 2)

PAUL S. LITHERLAND, '70, St. Francisville, Illinois, received the Honeywell award for best junior-year performance in the College of Engineering this year. The award recognizes distinguished individual performance and leadership, unusual scholastic accomplishment, and participation in technical and professional societies, as well as other campus activities. Paul's name and year will be inscribed on a bronze plaque, and he will receive a check for \$200 and engraved sterling silver tray.



In addition to earning a grade-point average of 4.795 at the university, Paul has held positions of leadership in ISGE and Gamma Epsilon, been a member of Engineering Council and Tau Beta Pi, participated in Engineering Open House, and taken an active part on dormitory committees and in intramural sports. Also, he has devoted ten hours a week to free tutoring and held office in the Illinois Disciples Student Foundation of the University Place Christian Church.

FORD FOUNDATION GRANT EXTENDED

The Ford Foundation has extended the time limit for spending the Department's 1966 grant of \$120,000 to 1972. The money is being used for the improvement of engineering design-sequence courses. GE faculty members participating in the project are: B. O. LARSON (Project Coordinator), J. P. HIPSKIND, U. HINDHEDE, A. D. KRUG, E. C. McCLINTOCK, M. SCHEINMAN, H. J. SPRENGEL, and LOUIS WOZNIAK. CHARLES GEBHARDT, a design engineer with the Caterpillar Tractor Co. of Decatur, is a continuing consultant from industry.

New student members initiated into Gamma Epsilon in the fall semester included GEORGE E. CONWAY, '70, of Rock Island; JOHN MULVEY, '69, and BOHDAN T. PRUSKI, '70, both of Chicago.

On December 3, 1968, Eli Lilly and Co., Indianapolis was host to the chapter on its annual field trip. The group learned a great deal about the manufacture and sale of pharmaceuticals.

ENGINEERING OPEN HOUSE AND "SITE" PROGRAMS

The General Engineering Department exhibited progress and vitality in the annual Engineering Open House, March 7 and 8.

G. E. alumni were proudly displayed in large pictures and resumes of diversified professional activities. All alumni are urged to contribute pictures and descriptions for this promotion of the engineering profession.

Experimental results in computers and computer graphics formed an outstanding exhibit. Computer analysis and graphics has become more important in all G.E. courses.

Another unique event of G. E. Open House was the operation of the video-tape equipment. In recent years, this innovation has helped many staff members see, hear, and critically evaluate themselves in the classroom environment, as a concrete aid toward self-improvement in teaching.

All courses in engineering design were displayed, including last year's national award design. The design sequence provides a realistic experience in preparation for professional work.

A colorful view of engineering accomplishments was seen through a comprehensive display of engineering history and technological movies.

For the second year, and as part of the Open House activities, Department members served as hosts to two groups of junior-level high school students and their counselors who indicated an interest in General Engineering. The objective of SITE (Student Introduction to Engineering) was to give guests insights into life both as student engineers and as graduates working in industry.

A popular program featured engineers from industry JOHN RAFFL, Union Carbide Corp., LEON LINDLEY, Sangamo Electric Co., and DOYLE WILHITE, Sunnen Products Co., all alumni, who are to be congratulated and thanked for taking time from their busy schedules to participate in this program. Their efforts are appreciated both by the students and the Department.

Eight outstanding students of the College of Engineering and one faculty member, Prof. GRACE WILSON, were honored on March 8 in a ceremony conducted in the office of Dean DANIEL C. DRUCKER by being named "Knights of St. Patrick." Further recognition will come May 1 with presentation of certificates at the annual honors convocation.

Prof. Wilson has been a G. E. faculty member for 23 years and long a guide to students. Her special prowess as an adviser to the Society of Women Engineers has helped gain this rare honor.

PAUL LITHERLAND, '70, St. Francisville and EARL MOLDOVAN, '70, Salem, both general engineers, were two of the students selected for knighthood.

G.E. CONSTITUENT ALUMNI ASSOCIATION

Founder's Day Celebration

Department students and faculty shared a "birthday cake" February 28. The large decorated cake was furnished by the Alumni Association in celebration of Founder's Day.

Joint Planning Meeting

The executive committee of the G.E. Constituent Alumni Association met with the faculty alumni-relations group of the Department for a spring planning session on April 19.

Annual Fall Meeting

Dad's Day week-end next fall, October 10-11, has been selected for the 1969 annual meeting and advance reservation procedures have been set up. The Friday evening fellowship dinner will be held at the Sheraton Motor Inn, and the business meeting is scheduled for Saturday morning in the general lounge of the Illini Union Building.

Alumni and their wives will eat luncheon together and then attend the Illinois-Northwestern football game. Rooms are being held in the name of the G. E. Alumni Association at both the Redwood Motel, Rantoul 61866, and the Inman Hotel, University Avenue, Champaign 61820. Reservations should be made directly with these establishments, rather than through the Alumni Office.

COMPUTER GRAPHICS (continued)

assignments. While relieving draftsmen from tedious line work, computer graphics will still require traditional knowledge of engineering graphics principles. Also, as computer graphics represents a new trend in industry, this experimental instruction puts the G. E. Department in the forefront of inevitable and profitable developments in engineering and manufacturing practice.

MEMOR LAL

WILLIAM F. BERKOW ASSOCIATE PROFESSOR DEPARTMENT OF GENERAL ENGINEERING

Born January 11, 1919, in Stockholm, Sweden, BILL BERKOW died suddenly on December 13, 1968, at the age of 49. He is survived by his wife MADLYN and two sons, PETER (18 years) and CHARLES Professor Berkow was educated in (14 years). Sweden, receiving his baccalaureate degree from Stockholm College in 1940 and his Master's degree in Business Administration in 1943 from the University of Stockholm. He taught engineering economics at Stockholm Institute of Technology before coming to this country in 1945. Prior to joining the U. of I. Department of General Engineering as Assistant Professor in 1960, Bill had spent fifteen years with American industry in various engineering and management capacities.



Bill's special interest was the improvement of cooperation between education and industry. He wrote numerous articles on the engineering economics of product design and manufacture and produced training films that are still used by industry. His latest work, "Group Decisions in Industry" - a 108-page manual - has recently been printed by the American Society of Tool and Manufacturing Engineers as part of the Manufacturing Practice Refresher Series. Some of his other publications include "Intra-Corporate Communications," "Engineering Economy Studies," "Need for Engineering Influence on Accounting Procedure," and "Progressive Automation of Production."

Professor Berkow knew his subjects well and in his pleasant, quiet, and sure way inspired his students. He was known to all as a friendly and gentle man, deeply devoted in purpose and principle to his profession and his family. He will be remembered by all with deep respect and affection.

FACULTY FEATURES

Activities of Department Head

Prof. JERRY S. DOBROVOLNY was asked by the American Technical Education Association and the U.S. Office of Education to organize the National Clinic on Technical Education program held March 26-28 in St. Louis, Missouri. He has just completed a year-term as President of ATEA.

The symposium organized by Prof. Dobrovolny for AAAS was held in Dallas on the topic "Science as it Relates to Technical Education." Resulting papers will be published in a monograph. The meeting was co-sponsored by the American Technical Education Association, the American Association of Junior Colleges, and the American Association for the Advancement of Science.

Prof. Dobrovolny has been serving as a consultant to the National Industrial Conference Board and the National Advertising Council program for the Technical Manpower Shortage Advisory Committee. Activities of the committee have involved organizing a national campaign to emphasize the need for competently-trained semi-professional engineering technicians. Multi-media distribution of the campaign message, undertaken by the National Advertising Council as a public service activity, will resultin some six million dollars worth of exposure.

Meeting with more than 60 educators in the State of Colorado, February 5, Prof. Dobrovolny was the keynote speaker for a conference of deans and presidents of associate degree programs in engineering technology and four-year teacher-preparatory schools. His talk emphasized specific ways and means of implementing technical manpower preparation, including two-year associate-degree curricula, teacher education, curriculum development, and industry articulation.

ORSANCO Appointment for Pearson

Prof. JOHN E. PEARSON has recently been appointed by the Governor to serve as one of three Illinois Commissioners on the prestigious Ohio River Valley Sanitary Commission (ORSANCO).

ORSANCO's governing body is composed of Commissioners appointed from eight member states located in the Ohio River Valley. The group meets at regular intervals to establish policy matters for the full-time ORSANCO staff.

ORSANCO was organized by interstate compact in 1948 to help clean up the Ohio River and its tributaries. As an indication of success, their program was selected by the American Society of Civil Engineers for the ASCE 1963 Outstanding Achievement Award, citing it as "the most effective large-scale water-pollution abatement program ever undertaken in the Western Hemisphere."

(continued on page 4)

We in General Engineering are happy to hear of John's recognition as a sanitary engineer and wish him our best in this interesting assignment.

ASEE Graphics Meets

Several faculty members participated in the Graphics Division mid-winter meeting of ASEE at Tulane State University, Baton Rouge, Louisiana. Included were: RANDOLPH P. HOELSCHER, PAUL W. STEINBECK, ROBERT P. BORRI, FRED L. SPALDING, DAVID C. O'BRYANT, and MONTE L. PHILLIPS.

Porter to Legal Seminar

Assoc. Professor MAURICE PORTER attended a seminar in January at Berkley, California, sponsored by the Extension Division of the University of California. The subject under discussion was the Legal Aspects of Water Resources.

Borri Speaks on Religion

Assoc. Professor ROBERT P. BORRI was a recent speaker on radio station WILL. His subject was "The University of Illinois Faculty Speaks on Religion."

Engineering Instruction Improvement

Based upon experience gained through the Department's video-taping and micro-teaching experimental program, Instructor DAVID C. O'BRYANT has made several presentations. For the March Regional Institute on Effective Teaching for Engineering Teachers at the University of Wisconsin, a paper, "The Use of Video-Taping and Micro-Teaching Techniques to Improve Engineering Instruction," was given. The same presentation was made for the second annual North Central Section ASEE Effective Teaching Institute and the third annual meeting of the North Central Section of the ASEE at the University of Windsor in April.

History of Science and Technology Symposium

"Decreasing the Time Lag Between the Basic Discovery and Its Commercial Development" was the title of a paper presented by Prof. ROBERT P. BORRI at the University of Oklahoma Symposium and Combined Midwest Junto on the History of Science and Technology.

Staff Changes

DAVID REYES-GUERRA, on leave of absence from the Department, resigned January 14 to continue as National Executive Director of JETS (Junior Engineering Technical Society) and as a guidance director for ECPD (Engineers' Council for Professional Development). Dave will continue to be located in New York City and we wish him continued success.

1969's graduating class is one of the largest since the Department awarded its first bachelor degrees in 1923. Nineteen received degrees in February and 30 expect to do so in June to make a total of 49. More will undoubtedly finish in August but their number is not now available. This group is surpassed in size only by the classes of 1950, with 63 graduates, and 1963, with 52 graduates. In June, the total number of general engineering graduates will reach 1,014.

ILLINOIS SOCIETY OF GENERAL ENGINEERS

The society is completing a successful year of interesting and timely programs emphasizing the career opportunities available to G.E. grads in engineering and related areas.

As in the past, culmination of the year's activities was the annual spring student-faculty picnic. There students had an opportunity to avenge the thorough trouncing received in softball at the hands of the faculty last spring. Judging from interest and enthusiasm shown by those attending, future outings are anticipated.

Retiring officers are: DAVID WHITE, President; JAMES LOCKE, Vice President; WILLIAM MASON, Secretary; HERB LINNE, Treasurer; RICHARD HOFF-MAN and PAUL LITHERLAND, Engr. Council Rep's.

Interested alumni may support the Society by (1) providing leads for G. E. student summer employment, and (2) offering to speak on topics of interest to students at one of the regular meetings. Please address correspondence to MONTE L. PHILLIPS, ISGE Faculty Adviser, 217 Transportation Bldg., University of Illinois, Urbana 61801.

JUNIOR ENGINEERING TECHNICAL SOCIETY

The first annual Mid-America JETS Exposition and Conference (MAJEC) was held at St. Louis University on April 24-26.

Oriented toward high school students having a definite interest in engineering and applied science, and a demonstrated ability to pursue a college education, MAJEC is an exposition of technical and engineering projects and papers developed by the students. Ratings are made on applicability and economic feasibility of the scientific principle involved. Projects demonstrate ingenuity, originality, and individuality of the chapter members and foster technical competition.

Twelve states surrounding Illinois were represented at the exposition and tours of local industries were on the agenda.

G.E. SUMMER PROGRAMS

Several specialized educational opportunities will be offered by the Department this summer, with Prof. JERRY S. DOBROVOLNY as Director.

Technology Institute

A ninth NSF summer institute grant has been received for training and upgrading of technical institute and junior college educators. Options will be offered in Electronics Technology and in Machine Design Technology.

Six-Week Science Training School

A six-week NSF-JETS Student Science Training Program (pre-college) is designed to familiarize selected students with past achievements, current research and practice, and future needs in science and engineering. This program is designed for high school students entering their senior year and emphasis will be placed on the need for science and mathematics as a background for successful careers in engineering.

Two-Week Summer Sessions

DAVID C. O'BRYANT, State Director of the Junior Engineering Technical Society and G. E. Instructor, is organizing two-week programs for Illinois to be held at Urbana, the Chicago campus, and Bradley University. Sponsored by JETS and the College of Engineering, the purpose of this program is to present a clear picture of engineering as a profession and expose the students to actual intellectual challenges in diverse subject-matter as presented at the college level.

NEW COURSES APPROVED FOR FALL

"Engineering Aspects of Contemporary Society," has been approved by the College and will be taught regularly by Prof. ROBERT A. JEWETT starting this fall. Content will be surveys of 20th Century engineering developments and applications of present - day engineering potential to selected major problems of our society. Problems presently considered include auto-rail and other new modes of transportation, producing expanded supplies of food and water to meet world needs, decreasing or controlling air and water pollution, and improvement or understanding of mass-communications media. A trial run has been taught this semester by Prof. Jewett with ten students enrolled.

"Optimization in Engineering Design," A. D. KRUG, Instructor, currently being offered as a special problems course, will also be given in the fall. Using case studies, the course will consider optimization and its relationship to de-

sign analysis. Methods considered are Fibonacci search, Partan, Linear, Stochastic and dynamic programming.

A third addition, "Techniques and Applications in Engineering Design Analysis," currently taught by Prof. LOUIS WOZNIAK on a trial basis, will again be offered next fall. Basic timedomain techniques to evaluate the performance of engineering devices are used in this course. The approach is oriented to analog and digital computers, with emphasis on systems simulation.

G.E.s IN COLLEGE ACTIVITIES

General Engineering Students are again serving the College of Engineering student body actively. This year, STUART WILKENING, '69, Cissna Park, has led Engineering Council as president with JAMES W. DAVIS, '69, Bloomington, assisting him as vice president. President of I. S. P. E. for 1968-69 has been EARL MOLDOVAN, '70, Salem.

SENIOR DESIGN PROJECTS

Students in G. E. 242 have chosen to work on an interesting assortment of projects. Following are examples of projects undertaken during the last two semesters...in chronological order.

Marine Soil-Measuring Device

Last fall, JOHN ROGERS, JACK SHALLOW, GORDON TOOLEY and BOB FINKE designed a measuring device to determine the size and weight of a deep-sea installation to be supported on sea-floor sediment at 15,000-foot depths. This semester, SAM SMALL, ANDREW KRAGACOS, and PAUL LITHERLAND are continuing the work and will revise and complete the design of test equipment to be hydraulically operated.

Root-Locus Plotter

JOEL JACKMAN and HOWARD MYLES worked on a root-locus plotter, an analog device, which, when used with primary roots of parametrical differential equations, is capable of graphically depicting the remaining roots. Applications include examining operations of feedback control systems for mechanical and electrical devices.

Ten-Spindle Seamer Drive

Continental Can Co. suggested designing a ten-spindle seamer drive. Based on a variable-speed transmission, and production of 1,000 to 1,400 cans per minute, the solution required a transmission, two horizontal drive bearings, and the WR² of the seaming head and chuck table. JOHN DONINGER and CRAIG ARENDS undertook this project. (continued on page 6)

75-Ton Capacity Truck

RON MORRISON and ROGER WILLIAMS modified an existing design of a 35-ton capacity truck to a 75-ton model for heavy construction use. Wheel design, frame components, cost, strength, weight, and performance all were considered.

Congo Sewage-Treatment Plant

ROGER REEVES, EDWARD BARTZ, KEN FALCON, and CHARLES STONE designed a sewage treatment plant for a projected university in the Congo. They investigated predicted quantities for treatment, availability of land, labor, and building materials; local climate and topography; and location in terms of discharge of treated affluent to the Congo River.

Mass-Media Curriculum Facility

ROBERT WITHROW and STUART MOTEW have devised cost estimates for constructing and equipping a complete instructional communications station, including radio and television broadcasting, news room, video-taping facilities, and classrooms in which all facets of broadcasting can be taught.

Job-Printing Shop

DANIEL NEWMANN designed a high-capacity production layout for his father. Dan selected new equipment to be combined with existing machines, planned their placement for efficient production, designed fireproof and secure storage areas, and developed a system for control of orders.

Starved Rock Marina

Improvement and staged expansion of Starved Rock Marina was DOUGLAS OETTING's project. His plans for development in yearly stages begin with expansion of existing boat docks; future projects include a club house, swimming pool, motel, boat storage, repair shops, display rooms, and country store. JAMES LISTON and JOHN PHILLIPS assisted on the project.

Dairy Facilities

ROBERT SHOOK and ROLAND WOLF have redesigned the Illinois Valley Dairy in Streator to improve efficiency of the plant. Using new and existing equipment, they hope to increase customer service and product quality, reduce labor required, and provide for easy and economical expansion.

Cylinder-Block Stress Analysis

As a result of a summer job with Sundstrand Aviation Company, RONALD WALTERS undertook the mathematical stress analysis of a cylinder block for a jet accessory drive unit. The project consisted of solving for various constant and cylic loadings and allowable stresses. This, in turn, required a study of the drive itself to define various forces applied to the block.

Oil Filter Properties

ARDELL NEASE's project developed from summer work at Champion Laboratories in West Salem. His task was to determine a mathematical relationship between the life and efficiency, as well as other performance criteria, and the properties of the filter paper used in automotive full-flow oil filters.

Undersea Coring Device

GEORGE M. BURKETS is designing a deep-water soil-sampling device which can be operated from smaller ships than can present equipment, with less time required to retrieve core sections.

High-Rise Sewage System for Pets

JAY BOGG and DOUGLAS MEDLEY are developing sanitary facilities for use by small animals in high-rise and other urban apartment buildings or private housing. Operational feasibility, market demand, manufacture and installation costs, and preliminary promotion are being considered.

Green Street Pedestrian Crossing

A timely investigation by JOHN FUNK, LESLIE PAPERNER, and THADDEUS FIGUS is the location and aesthetic-economic design of an attractive, convenient over or underpass for intersections to be used by campus pedestrians at Green Street.

Community-Center Land Development

Two teams are concerned with best uses and structural locations for a 400-acre shopping and medical complex between Mattoon and Charleston. Involved are plans for a 200-unit motel, office buildings, residence apartments, a 200-bed hospital, shopping center, and service stations. The problem is complicated by nearby airport runways and highways. Group members are CHARLES ORANGE, DAVID WHITE, MAX KELLEY, TERRY ESSINGTON, WARD CRAMER, ROBERT DOMBROWSKI, GARY SCHWERDTFEGER, and JAMES DAVIS.

Photographic Print Dryer

For the amateur photographer, GARY ALLIE and JOHN SERSON are attempting to produce a low-cost but efficient drying unit. Features sought are small size, ease of manufacture and operation, fast cycling, and ability to produce either highgloss or matte finishes.

(continued on page 7)

Cylinders for High-Pressure Piping

GERALD D. PINE is deriving equations for the economical design of chemical reactor-vessel connecting units. These require two-layer open-end cylinders of materials such as tungsten carbide in a steel jacket. Gerald is writing a computer program to generate characteristic dimensionless curves telling the designer whether his proposed materials are suitable for pressures involved.

Improved Bumpers for Automobiles

A horizontal shock-absorbing unit which will be stronger yet more flexible, offering greater protection for sheet metal outside and occupants inside, is being explored by STUART WILKENING, PATRICK BURKE, and PHILLIP LAMB. They are seeking a compact, eye-appealing assembly which will fit with present-car designs at lowest cost.

Air-Terminal Passenger-Loading Facilities

LARRY ODGERS and RONALD WAGHORN are investigating possibilities of supplementary installations, both ticketing and ramp, for O'Hare Field use with 747 jumbo jets.

Poultry-Production Environment

LeROY BASHA and KARL THORNBOUGH are studying climatic and other controls for most efficient raising and handling of laying chickens. Design potential and economic feasibility are being emphasized in the recommendations.

Computer Geometry for Construction

JOHN HUGHES is exploring computer-simulation and graphic display of building geometry as an approach to planning and installation of mechanical facilities. The problem was suggested by Prof. CURTIS PEDERSEN of Mechanical Engineering. When completed, John's subroutines will be combined with other computer programs for optimal design of ventilation systems.

Keeping Natural-Gas Line Instruments Open

JOHN GILSTER is seeking a solution to a real problem of the Laclede Gas Co-- removal of heavy petroleum hydro-carbons at distribution stations to avoid clogging. Though economy is also a consideration, technical effectiveness is primary.

Navy Diesel-Generator

JOHN McKINNEY's project is production organization to facilitate processing and delivery of multiple 150-kilowatt diesel-generator sets to meet Navy specifications. New components were added to basic units and inspected to ascertain their operating effectiveness.

CLARENCE D. BEATTY, '56, is in the field of disposal of solid wastes with Camp, Dresser, and McKee, a "Yankee" consulting firm of Boston.

JESSE W. BOEHLER, '67, MBA '69, has accepted a position as Value - Planning Analyst for Butler Manufacturing Co., Kansas City, Missouri.

ROBERT P. BOVEE, '51, MBA '56 Northwestern, is a vice president for marketing and sales with Rockford Brass Works in Rockford, Illinois.

TERRY L. BRADLEY, '67, M.S. '68 M.I.T., has a baby boy named MICHAEL RONALD, born in June, 1968. Terry is a member of the technical staff of Bell Telephone Labs. in Naperville, Illinois.

RICHARD M. BROSIG,'66, an assistant engineer with Johnson and Johnson, Chicago, has one daughter and is expecting a new arrival soon. The Brosigs' new home was built mainly by Richard.

DAVID A. BURGE, '66, wife CAROLYN, and son DOUG have moved to Louisville, Kentucky, where Dave is attending law school at night. He is handling patent interests for the Home Laundry Products Division of General Electric Company.

DENNIS J. CALLAGHAN, '67, MBA '69, has taken the position of Manufacturing Engineering Management Trainee with the Northrop Corporation in Hawthorne, California.

DANIEL J. COMPTON, '68, a graduate engineer with Allen-Bradley Company in Milwaukee, Wisc., married the former BEVERLY HILGERT in September, 1968. Beverly is also an Illinois graduate.

JOHN J. CRISEL, '66, MBA '68 Butler University, is employed as Personnel Representative in the Antibiotics Production and Development Division of Eli Lilly and Company. He resides in Indianapolis, Indiana.

RICHARD E. DOLAN, '47, is employed as a sales engineer with Texaco, Inc., Rockford, Illinois.

GARY FARISS, '68, is finishing a training course for customer engineers with Control Data Corporation. He will be assigned to Denver and anticipates lots of skiing which he and his wife enjoy very much.

STANLEY R. FELDERMAN, '57, MBA '62 Northwestern, has the position of Sales Manager, Eastern Region, Informatics, Inc. in Chicago. Stan is responsible for sales and technical support of proprietary software products.

CALVIN H. FITCH, '64, MBA '67, is Management Science Specialist for General Dynamics, Convair Division of San Diego, California.

(continued on page 8)

ALUMNI NOTES

RONALD J. HARRIS, '64, M.S. '66, is working with structural design problems in the Nuclear Power Generation Department of Babcock and Wilcox in Lynchburg, Virginia. Ronald is married to the former KATHERINE KJELLBERG, '65 U. of I.

MICHAEL E. HORA, '66, reports a son born in March, 1968. Michael is Superintendent of Maintenance, Midland-Ross Corp. in Cicero, Illinois.

PHILLIP M. KASIK, '68, M.Eng. '69 University of California, was married last December to MARY ERB of La Jolla, Calif. Phillip is a teaching assistant at the Univ. of California where he is completing his degree in Structural Mechanics.

DALE KEMPF, '58, has the position of Senior Development Engineer with FMC Corporation, Santa Clara, California. Dale reports a son, DAVID DALE, born in February.

JAMES P. KLINE, '63, MBA '67 Xavier, is developing new ideas and material for use in Ford's automatic transmissions. He is located at the Livonia, Michigan Ford plant and has a two-year old son, DAVID PAUL.

MILTON C. KONICEK, '61, J.D. '68 University of Wisconsin, is a lawyer for Fulton, Lloyd and Konicek of Burlington, Wisconsin.

WILFORD C. LAHMAN, '29, Chairman of the Board and Treasurer of Frantz Manufacturing Company, Sterling, Illinois, is presently on the advisory committee of the Executive Development Seminars at Northern Illinois University at Dekalb.

ROGER A. LARSON, '65, is working on an MBA at Northwestern University's evening division. He holds the position of Process Engineer with Kool-Aid Division of General Foods Corp., Chicago. Married to the former ANN LEMAN, LAS '65, the Larsons' have a daughter, born in March, 1968.

WILLIAM M. LITTMANN, '60, holds the position of Manager, York Sales Department of Clow Corp. in Chicago, Illinois.

BURR W. LOGEMAN, '68, is a field engineer for Schlumberger Wells Services in Woodward, Okla.

CONSTANCE MAYER, '63, is working as a field cost engineer for Bechtel Corporation in the Los Angeles area.

MYRON G. ODELL, '66, MBA '68, is on military leave from Arthur Andersen and Co. of Chicago. He is presently at Fort George G. Meade, Md.

MICHAEL PHILLIPS, '63, is in technical sales with American Cement Corporation, San Francisco. His first son was born in December. Michael says he also has two adorable girls.

EUGENE PIETSCH, '38, M.S. '39 Kansas State, is Project Engineer with Daverman Associates, of Grand Rapids, Michigan. Eugene has two sons in service; one badly wounded while serving in the Army in Vietnam, the other serving in the Coast Guard. He reports seven grandchildren.

JOSEPH C. PUGLIESE, '50, is in engineering sales with J. W. Peters and Sons, Inc. of Burlington, Wisconsin.

RAYMOND C. PURL, '37, M.F.A. '52 Yale, holds the position of Executive Vice President of the Nippon Unicar Company, Limited in Tokyo, Japan.

MICHAEL E. SHERMAN, '63, reports that he is enjoying his work in the Plant Engineering Dept. of Ford Motor Company, Utica, Michigan. He is married to the former JUDY BUSH, '62 U of I, and has two sons. The Shermans' have moved into a new home that Mike subcontracted himself.

R. CRAIG SMITH, '65, was released from the Army after 32-months in Germany. He is now with Honeywell, Inc. in Denver, Colorado.

MARVIN SMOLLAR, '68, is a civilian engineer trainee with the U. S. Navy in Washington, D. C. Marvin is attending the Georgetown University Law Center's evening classes and reports enjoying receiving the $\underline{G.E.}$ Newsletter.

HERBERT T. WICKENDEN, '47, is the Manager of Strategic Planning for Goodyear Tire and Rubber Company, Akron, Ohio. This spring is attending Carnegie-Mellon's advanced management program for executives.

DONALD E. WILKINSON, '64, in his last year of law school, is employed by International Harvester in the Patent Law Department. The Wilkinsons reside in Hillside, Illinois and have one son, DONALD, III.

JAMES J. WILLETT, '66, is an industrial engineer with Aerosol Techniques, Inc. of Danville, Illinois. He has a new boy born last October.

ROBERT A. ZAKES, '64, a Captain in the U.S. Army, will be discharged soon. His work has been the Logistic Doctrine, Systems and Readiness Agency, a think task for the Logistics Command.

CHESTER E. ZAWADZKI, '50, is President, Cost Reduction, Inc. in Pittsburg, Pennsylvania. He organized his engineering consulting firm to reduce utility costs in industry.

DECEASED

RICHARD C. ANDERSON, '54, November 10, 1968.

CURTIS L. BOARDMAN, '20, March 11, 1967.