

### GENERAL ENGINEERING NEWSLETTER

Department of General Engineering, University of Illinois at Urbana-Champaign

**VOLUME 20: NUMBER 2** 

**SPRING 1978** 







ASST. PROF. HERBERT J. SPRENGEL

#### **OUR RETIRING PROFESSORS**

Professor EDWARD D. EBERT is retiring in August after teaching at the University of Illinois for thirty-two years. He started teaching in 1946 after receiving his discharge from the U.S. Army. Before that, Professor Ebert was an engineer with Bethlehem Steel Company for six years. He worked both with the Fabricated Steel Construction Division in Chicago, Illinois, and Bethlehem, Pennsylvania, and with the Bethlehem-Hingham Shipyard in Hingham, Massachusetts.

Professor Ebert graduated with Honors from the University of Illinois in 1939 with a B.S. degree in Civil Engineering. He was a member of Sigma Tau, Chi Epsilon, and Tau Beta Pi honoraries. After returning to the University of Illinois to teach, professor Ebert completed work on an M.S. degree in Civil Engineering in 1949.

Professor Ebert is a registered professional engineer in Illinois. He is a member of the American Society of Civil Engineers and of the American Society for Engineering Education. He served as editor of the Civil Engineering Bulletin of the Civil Engineering Division of ASEE during 1949–50 and as editor of the Civil Engineering News of the Central Illinois Section of ASCE from 1951 to 1953.

At the UIUC, Professor Ebert has served on many department, college, and university committees. He has been chairman of both Subcommittee "A" and "B" of the University Senate Disciplinary Committee. For six years he was treasurer of the University of Illinois Dads Association. Since 1959 Professor Ebert has been in charge of advising and student records and petitions for the department. He has also been the department advisor for co-op and mining option students. Although he is retiring, Pro-

fessor Ebert will continue some of his administrative duties on a part-time basis.

Professor Ebert was co-author of two workbooks used in graphics courses, and was one of the principal contributors to two publications of the U.S. Office of Education. These were Suggested Two-Year Post High School Curriculum in Civil Engineering Technology and Training Program for Highway Engineering Aides.

Professor Ebert has been a member of the Champaign-Urbana Kiwanis Club for twenty-three years, and has ushered at his church for many years. With retirement, Professor Ebert hopes to do more traveling with his wife, Freda, and to work on several woodworking projects.

Assistant Professor HERBERT J. SPRENGEL retired from the Department of General Engineering in January of this year. He joined the department in September, 1968.

Professor Sprengel received his B.S. in Engineering Physics in 1936 and his M.S. in Physics in 1937, both from the University of Illinois. After graduation, Professor Sprengel spent twenty-five years in industry. His work as Manager of Engineering and Manufacturing for the Continental X-Ray Corp. in Chicago included product and equipment design, production tooling, plant design and layout, and process development. From 1952 to 1968 he served as an engineer in the Medical Systems Department of the General Electric Company in Milwaukee, Wisconsin. While there he was a member of a three-man team challenged to develop an integrated plan for the profitable expansion of the manufacture and sale of X-ray products in Europe through an acquired X-ray manufacturing company in Belgium. Even after joining the university faculty, he twice served as a consultant to the General Electric Company at their plant in Poona, India.

At the university Professor Sprengel taught courses in Engineering Design, bringing to this activity his wealth of experience in industry. One of these courses, G.E. 242, involved guiding teams of General Engineering seniors in the solution of practical design problems for industry. Another, G.E. 104, was the introduction of freshman students to the methodology of engineering design. This latter course was developed and directed by Professor Sprengel. It is an important step in the General Engineering design sequence.

Several undergraduate design projects have resulted in useful product designs in a number of fields. One such project entitled *Improved Braking System for Paraplegic Wheelchairs* was awarded second-place in the James F. Lincoln Arc Welding Student Engineering Design Competition in 1972.

Since his retirement Professor and Mrs. Sprengel have moved to Florida where they plan to make their home.

#### ABOUT THE FACULTY

Professor THOMAS F. CONRY worked at Sargent & Lundy, Engineers, in Chicago as a staff consultant this past summer. In September Tom attended the ASME Design Engineering Technical Conference in Chicago. He is serving as secretary of the ASME Design Engineering Division this year and is in the third year of a five-year term on the Division Executive Committee. In October Tom, in collaboration with Professor C. CUSANO in M.E., presented a paper on "The Transmissibility of Porous Journal Bearings" at the ASME-ASLE Joint Lubrication Conference in Kansas City.

Dr. WAYNE J. DAVIS received in January, 1978, a grant from the National Science Foundation to sponsor his research during the next year. This research attempts to apply the decomposition theories of mathematical programming to model the decision-making in a resource allocating organization. In particular, the research attempts to establish a structure for the decision-making at each level of the organization. Associated with the above, the utility of various types of information toward the coordination of the decision-making in the organization will be investigated. This research will also lead to new models for modular design approach in engineering. At the same time new decomposition models for the mathematical programming problem, including nonlinear and integer programming problems, may be developed.

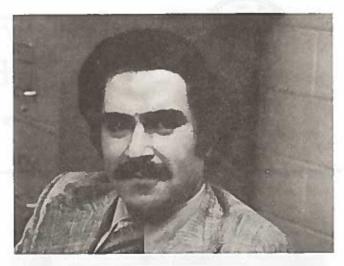
Dr. RODNEY HUGELMAN is continuing his research on fluidic feedback sensors for industry. In addition, he is conducting research on fluidically controlled and driven pumps.

Mr. J. RASTEGAR of General Engineering and Professor NORMAN R. MILLER of Mechanical and Industrial Engineering recently received a research grant from the University Research Board. Their study is aimed at developing an accurate method of predicting injury to the human upper extremities in an arbitrary loading situation. An analytical model of the arm is to be developed which considers the complex joint stiffness properties. The joint properties are to be determined experimentally, and the bone models will be tested for accuracy. The muscle forces are to be added to the model at a later stage.

Special fixtures are being developed which can be used to determine the joint stiffness characteristics. Once completed, the experimental system will be used to determine the complex load-displacement characteristics of the articulating joints. In the initial phase of the study, elbow, knee, and ankle joints will be tested.

#### PLEASE! PLEASE!

Alumni, please notify the Department of General Engineering or the Alumni Association whenever you change your address. Trying to keep track of you alumni we ask the post office for an address correction for each Newsletter not delivered. Those address corrections cost 25 cents each. Please help us economize by keeping us informed of your correct address. Many thanks to those few who do.



MR. OSMAN COSKUNOGLU

Mr. OSMAN COSKUNOGLU joined the faculty as a Lecturer in General Engineering in 1978.

Mr. Coskunoglu received his B.S. (1970) and M.S. (1972) in Civil Engineering from the Middle East Technical University in Ankara, Turkey. In 1973 he came to the United States and in 1974 started to study for a Ph.D. degree in Operations Research at the School of Industrial and Systems Engineering of Georgia Institute of Technology Georgia Tech. Presently he is completing his dissertation.

Mr. Coskunoglu's principal area of interest is applied mathematical programming. His master's thesis was on the application of Linear Programming to the Airline Scheduling problem. Before coming to this country he worked for the Scientific and Technical Research Council of Turkey as a researcher on a project funded by the Turkish Electricity Authority. This project was concerned with scheduling the power investments of the Authority. While working for the Council Mr. Coskunoglu initiated research on the economics of pollution control policies over a time horizon. A dynamic model was developed that would incorporate the two conflicting objectives, namely, pollution abatement and production increase.

At Georgia Institute of Technology Mr. Coskunoglu worked on a research project funded by the Office of Water Resources Research, now Office of Water Research and Technology, and co-authored the final report which appeared as a U. S. Government Publication: Integrative Procedures for Coordinated Urban Land and Water Management: A Systems Analysis. The research addressed the need for operational procedures that planners can use in formulating an action program from the full range of courses of action applicable to urban land and water resources management, particularly in considering the interactions between land and water.

His interest in the water resources area continued after completion of the project and, as part of his Ph.D. dissertation, Mr. Coskunoglu developed a large scale nonlinear matematical model for the optimal management of surface and ground water resources. In the rest of the dissertation he developed theoretical and computational procedures to solve the model efficiently by exploiting its special structure.

Mr. Coskunoglu is a member of the Operations Research Society of America and The Institute of Management Science.

Of the 58 persons who graduated in General Engineering during the year of 1972, 37 responded to the survey conducted five years later by the College of Engineering. The average monthly salary reported for General Engineers is \$1,507 with a low salary of \$1,000 and a high of \$2,000. Several members are in business for themselves. One is pursuing a career in the Army and another one a career in the Navy. One person has a M.D. degree and is completing his residency. At least one has a Ph.D. in Engineering. We know of others who have earned advanced degrees. However, they did not respond to the survey. We appreciate the effort on the part of those who have responded to the survey and we urge that in the future you please respond because it is of importance to us to see how our graduates are doing.

The ten-year follow-up study of the 1967 graduates is not complete but early indications are that of this particular class, fifty percent obtained their M.B.A., two earned Master's degrees in a technical field, one a Ph.D. in a technical field, and one a law degree. This would indicate that something like seventy percent of the 1967 graduates earned advanced degrees. Preliminary results show that the average monthly salary is \$2,250 with a high of \$4,583.

#### **GAMMA EPSILON NEWS**

Officers of Gamma Epsilon for 1977-78 were: president, DAVID WEST MC CUNE, '78, from New Lenox; vice president, RICHARD W. FREWERT, '78, of Western Springs; secretary, CHARLES H. MOTTIER, III, '78, Springfield; treasurer, SUE ELLEN KLECKNER, '79, of Arlington Heights; and director, JAMES W. ACHENBACH, '78, from Collinsville.

On November 3, 1977, members of Gamma Epsilon toured the Mobil Oil Company Refinery in Joliet, Illinois. The tour included a talk about the refinery in general, a trip through the installation, and lunch at a nearby restaurant.

The annual fall banquet was held on November 15 at the Levis Center. Mr. W. A. CHITTENDEN, '50, from Sargent & Lundy, Engineers, spoke on the subject "Cabbages and Kings." Seven people were initiated into Gamma Epsilon. They were: BARBARA LYNN EDSTROM, '79, from Springfield; PAUL VINCENT FIOCCA, '79, of Mt. Prospect; MARTIN EDWARD LUNKES, '78, Niles, Illinois; RAYMOND T. MADDEN, '79, of Forest Park; SILVANA A. MEDINA, '80, from Joliet; JEFFREY DEAN TAYLOR, '80, of Chicago; and TIMOTHY E. WIGGERS, '80, from Chicago.

Activities for the spring included a field trip to the General Motors Foundry in Danville, Illinois, and the annual canoe trip at Turkey Run in Indiana.

#### JETS AND MITE SUMMER PROGRAMS

The Mite (Minority Introduction To Engineering) two-week summer program will be held from June 25 to July 8, 1978. The Jets (Junior Engineering Technical Society) two-week summer program will be July 9 to July 21, 1978. Both programs are for students between their junior and senior years in high school who want to find out about engineering.

This academic year several General Engineering students at UIUC have received recognition for their work. Last fall's Newsletter carried news of the Fourth Award won by each of two teams for their entries in the Student Engineering Design Competition which is sponsored by the James F. Lincoln Arc Welding Foundation every year.

In November SHARON STEFANIK, '78, of Arlington Heights, was named recipient of the Lincoln Academy Educational Achievement Award for the Urbana campus of the University of Illinois. This award is given to a graduating senior whose accomplishments set him or her apart in some positive way from the average recipient of the bachelor's degree. Earning high grades is not primarily a determining factor in the selection although it may be used as one of the several measures of achievement. The Educational Achievement Award includes presentation by the governor of the Order of Lincoln medallion and a check of \$100 before the Annual Education Achievement Convocation in the House of Representatives. Only one such award is made on the campus of each four-year college in the state.

Also in November, Elmendorf World Citizenship Awards were presented to two General Engineering students: CHARLES H. MOTTIER, III, '78, of Springfield, and JOHN W. DAY, '79, Nashville. These awards were established in 1974 with a gift of \$10,000 from Armin Elmendorf, a UI engineering alumnus. They are given each year to a junior and a senior engineering student for the purpose of introducing the students to persons, organizations, and industrial groups which have a bearing on the responsibility of the engineer as a citizen in the area of world affairs. Each award of \$1000 is to be used to meet the expenses of the student during two weeks of travel, study, and interviews with policy makers such as congressmen, United Nations members, or specialists in world affairs.

#### I.S.G.E. ACTIVITIES

Officers elected for 1978 by the Illinois Society of General Engineers include president, ROSEMARIE OREHEK, '79, from North Riverside; vice president, RANDY DEMPKE, '79, of Western Springs; treasurer, TODD GREEN, '79, Evergreen Park; secretary, JANE REYNOLDS, '80, Flossmoor; Engineering Council representatives, ALAN CROFT, '79, from Wilmette, and DAN MANKIVSKY, '79, of Downers Grove.

At the March 30 meeting, a representative from the graduate studies program in Business Administration discussed the qualifications and procedure for entering the UIUC M.B.A. program and described the courses required for such a degree.

April is a busy month for I.S.G.E. April 1 the students challenged the faculty to a volleyball game. It was interesting to see who the April Fools were.

On April 12 the first noon-time Forum was held. It featured a faculty member speaking on his field of research. Every one was invited to bring a sack lunch to this informal get-together. Hopefully, this will become a regular monthly activity. The annual picnic is planned for April 22.

The new officers are off to a good start this spring, and plans are being made for a fall semester full of activities.

#### HELP! HELP!

Are you alumni interested in making the G.E. Alumni Association an active, viable organization again? What type of programs would you want? How often and at what season of the year would you like to meet? Send us your thoughts on the matter.

Another thing, what do you want to read in the General Engineering Newsletter? Do you want more or less

news of alumni, students, student activities, faculty, and general department activities? Have you any thoughts about your profession which might help the men and women now in college? The *Newsletter* goes to all alumni, faculty, and junior and senior students in General Engineering. Your suggestions will be most welcome.



# COME ON JOIN US PAY ONCE JOIN TWO

## GEA<sup>2</sup>

#### THE U OF I ALUMNI ASSOCIATION

MEMBERSHIP IN THE U OF I ALUMNI ASSOCIATION
AUTOMATICALLY MAKES YOU A MEMBER OF OUR
GE DEPARTMENT ALUMNI ASSOCIATION. A PORTION
OF YOUR DUES IS PAID TO OUR GROUP AND HELPS
SPONSOR NEWSLETTERS AND OTHER PROJECTS.

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Make your check payable to the Uni	versity of Illinois Alui	mni Association.
Single Membership (One Year) Single Life Membership Single Life Membership Installment Plan	\$150.00	Family Membership (One Year) \$10.00 Family Life Membership \$175.00 Family Life Membership Installment Plan
\$10.00 down		\$10.00 down
Yearly payments of \$35, \$35, \$35 & \$35		Yearly payments of \$45, \$45, \$40 & \$40
NAME	E III III III II	CLASS YEAR
ADDRESS	CITY	STATE & ZIP
SPOUSE'S NAME (If Illini)		COLLEGE & CLASS YEAR

(Please send completed forms to Alumni Association, 227 Illini Union, Urbana, Illinois 61801)

#### **ALUMNI NEWS**

ROGER W. HOVLAND, '28, retired from the Commonwealth Edison Company of Chicago in 1972 and is now living in California. While in the university he was a member of Phi Alpha Lambda and Phalanx. Now he is president of the Edison Annuitants of Southern California, member of the Congress of History of San Diego County, senior member of IEEE, and a registered professional engineer.

After 40 years with Bethlehem Steel Corporation ROBERT B. STAMPFLE, '37, is retiring from Senior Metallurgical Engineer on Railroad Products. He will continue to reside in Bethlehem, Pennsylvania, and will spend more time fishing, hunting, and building furniture.

JACK ELLWOOD STEELE, '46, received his M.D. degree in June, 1950, from Northwestern University Medical School and an M.S. in Systems Engineering from Wright State University, Dayton, Ohio, last December. His thesis topic was "Bionic Design of Intelligent Systems." Jack is Medical Director of the Drug Dependency Treatment Unit, Dayton Mental Health Center. He writes, "In spite of a career in medicine, my addiction to engineering is incurable." Jack is a collector of computers, his largest a Univac 70 and his smallest a Commodore Pet. Jill, his daughter is a junior in Materials Engineering at Wright State.

MYRON J. BERNARD, '56, is a Vice President of Sachs Electric Company, one of the ten largest electrical contracting firms in the United States. As such he has participated in numerous types of projects and has been solely responsible for the design and construction of some multi-million dollar installations.

Last May JOHN L. NIEBRZYDOSKI, '56, received his M.A. in Business Administration from Webster College, St. Louis. Since October, 1976, he has been Director of Engineering and Research for ACF Industries, Inc., Carter Carburetor Division. John has been with Carter Carburetor since 1958. His work includes visits to UIUC to recruit engineers and to address the student section of SAE and travel in Europe, Australia, and Japan. John and his wife have three children, Paula, Christine, and David who are 13, 11, and 9 years old respectively.

HAROLD R. TROUT, '60, has been Commodity Sales Manager for Loeb, Rhodes, Hornblower & Company of San Francisco for the last three years.

HERBERT J. SINGER, '63, is a patent lawyer with the firm of Silverman, Cass & Singer, Ltd., of Chicago. He started clerking with this firm the summer he graduated from UIUC. In 1966 he received his J.D. degree from Loyola University. On January 1, 1978, Singer became a member of the firm and its name was changed to the above. He and his wife, Rochelle, '65, have two children, Corrine, 6 years old, and Robert, 4.

In May, 1966, RONALD J. HARRIS, '64, received his M.B.A. degree from Lynchburg College, Virginia. Last February 16 Harris was promoted to a position as senior planning analyst with Babcock & Wilcox Company in Barberton, Ohio. He is concerned with the marketing of fossil-power generation facilities and equipment. Since 1973 he has been a registered professional engineer. The Harrises have two children, a boy in first grade and a girl in kindergarten.

After 12 years at Teletype Corporation in Skokie, most recently as Planning Engineer in the Engineering Services

organization, ROBERT D. LEONARD, Jr., '64, has been promoted to Engineering Staff Specialist at A. T. & T. Headquarters in Basking Ridge, N.J. He is responsible for various projects in Transmission and Maintenance Engineering, primarily testing of data terminals. He and his wife, Janet, have three children: James, 6 years old, John, 3 years, and Anne, one year.

MICHAEL EDWARD HORA, '66, was awarded an M.B.A. by Loyola University in 1972. He was elected to the position of Principal in the broad line management consulting firm of A. T. Kearney. As such, Michael directs Kearney's Plant Engineering and Maintenance Management consulting practice, a primary segment of the manufacturing services provided by Kearney. He and his wife, Mary Ann, have four children.

THOMAS PRICKETT, '66, was awarded the National Water Well Association's 1977 science award. This award is presented to association members who make outstanding contributions in the field of groundwater technology during the preceding year. He was cited for major contributions in digital modeling and acquifer hydraulics.

Captain JOHN R. WEIBEL, '66, received an M.A. degree in Management and Supervision from Central Michigan University last June. He is now assigned to Wright-Patterson AFB as a tactical electronic warfare systems manufacturing manager in a unit of the Air Force Systems Command.

LOTHAR R. SCHROEDER, '67, is Assistant Professor of Psychology at Moravian College in Bethlehem, Pennsylvania.

JOHN E. GILSTER, Jr., '69, is happy to be back in Champaign as Assistant Professor of Finance at the University of Illinois. John received an M.B.A. from Harvard in 1971 and a Ph.D. in Finance from the University of Michigan in 1977.

An enthusiastic supporter of the Collinsville High School basketball team, ROGER ALLEN REEVES, '69, expects the team to win the state championship this year. Besides being a basketball enthusiast, he is Data Base Administrator for National Steel Corp. in Granite City. In October a "beautiful baby girl, Jennifer Lynn," joined Roger, 7 years old, and Brian, 4, in the family of Roger, Sr., and his wife, Debbie, '69.

WILLIAM F. YOUNG, '70, earned an M.B.A. at the University of Illinois in 1974 and is now a marketing representative for the Data Processing Division of IBM in Chicago.

On January 1, 1978, DANNY L. NELSON, '71, joined Consoer, Townsend and Associates, Ltd., in Chicago as Project Engineer. He will be working with solid waste there. Since receiving his undergraduate degree, Dan received his M.S. in Environmental Engineering from UIUC in 1973, worked two years at the U.S. Army Construction Engineering Research Laboratory, and was employed the last four years at Dailey and Associates in Champaign. He and his wife, Kathie, have a two-year old son, Eric.

GREGORY P. BOYSEN, '73, has just recently accepted the position of City Engineer for Buffalo Grove.

At Christmas time MICHAEL F. PURCELL, '73, wrote that things were going well for him. He has had two promotions, first to Senior Systems Analyst and then to Systems Supervisor.

PAUL NEWHAGEN, '73, left Chemlex/Raychem in August, 1977, and is now employed as International Pro-

duct Sales Coordinator by Fairchild Semiconductor in California. His new job provides an opportunity to travel through Europe and the Far East. Paul is still single and slowly working away at a finance-oriented M.B.A. Skiing and backpacking in the hills near his home in Cupertino fill his spare time.

On June 1, 1977, MARK E. WUTHRICH, '73, changed from the position of design engineer at Caterpillar Tractor Company's Basic Engine Plant to that of test engineer with the Engine Components and Performance test group at the company's Technical Center. In this new position Mark's main responsibility is testing new turbochargers for performance and reliability. Last December, Mark, his wife, and two-year old Marti Jean welcomed a baby boy, Luke Edward, into the family.

THOMAS H. KUSEK, '74, is a civil engineer with the Chicago District of the U.S. Army Corps of Engineers. On March 6, 1977, he was severly injured in an airplane crash. When Tom wrote in December he expected to return to work in January. He was planning to get his Professional Engineer License and possibly an M.B.A. degree.

DAVID MIME SAVILLE, '74, is employed as an electrical engineer by Sverdrup & Parcel and Associates in St. Louis. On October 29 he married Jerri Strowl, a reporter for the St. Louis Post-Dispatch. They bought a four-family apartment, remodeled it, and moved into it in January.

January 10, 1978, marked the induction of ELBERT EUGENE WILLIAMS, Jr., '74, into the Illinois Tool Works Patent Society, based on the issuance of his first two patents this year. He is a project engineer for Buildex Division of Illinois Tool Works. Williams has 'been working on a concrete fastening system that is revolutionizing the construction market in fastening to concrete.' He has just settled into his own townhouse.

GREGORY P. KONNEKER, '75, is in Merrie Olde England studying at the University of Bradford for an M.B.A. The program is only one year long but attempts to cover as much material as the usual two-year program. Greg reports the English weather is as bad as it is reputed to be — five or six days of rain or fog per week.

GEORGE G. DEWEY, '76, has joined Buildex Division of Illinois Tool Works. He is working with E. E. Williams, Jr., '74, on concrete fastener products and drive tools. In the time that George has been there he has made several important improvements and contributions to the tool designs.

ROBERT P. GOMBAS, '76, is Product Specialist with the Pandiut Corporation in Tinley Park.

MARIANNE ANDRASEK GOREN, '76, is an Account Executive for Management Recruiters in King of Prussia, Pennsylvania.

On August 13, 1977, RAYMOND M. GUERIN, '76, married Deborah S. Johnson. Mrs. Guerin is a 1976 graduate of Northern Illinois. Ray is employed as a project engineer by General Foods Corporation.

PAUL R. HARMS, '76, is Site Engineer and Salesman for Harms Grain Equipment, Crystal Lake.

JOSEPH M. RACANSKY, '76, is Loss Prevention Engineer for Factory Mutual Engineering in Rolling Meadows.

Last fall THOMAS W. TOBIN, '76, a patent engineer with Linde Division, Union Carbide, passed the U.S. Patent

and Trademark Bar Exam. This allows him to practice as a Patent Agent before the U.S. Patent Office. Tom continues to attend night law school at the Pace University School of Law, and is now in his second year of a four-year curriculum.

ROBERT DAVID WATSON, '76, completed work on an M.S. in Nuclear Engineering at the University of Wisconsin last December. Bob is continuing at Wisconsin to earn a Ph.D. in Nuclear Engineering with a minor in Engineering Mechanics. His thesis topic is "Structural Aspects of Tokamak Fusion Reactors." For recreation, Bob is playing in the University Bands and participating in the Madison Lacrosse Club.

ROBERT J. WEIBEL, '76, and his wife stopped by the department last October. At that time he was working for Westinghouse Electric Company at Guantanamo Bay, Cuba, after completing one tour of duty for the firm in Taiwan. However, Bob expected the company to send them back to Taiwan soon.

DARRYL E. AWE, '77, is employed in the Wichita, Kansas, sales office of the Trane Company's Commercial Air Conditioning Division. Before receiving this assignment, Darryl completed the six-month Trane graduate engineering training program.

MICHAEL D. BRUNETTO, '77, is a project engineer for St. Louis Ship.

JAMES H. CHRISTENSEN, '77, is a junior engineer at Caterpillar Tractor Company. He is presently enrolled in their one-year long technical training program where he is "exposed to all aspects of the business besides having assignments in six different design, test, and research departments." Upon completion of the program in May he will be placed in a permanent position.

RICHARD K. DZIOPEK, '77, has legally changed his name to RICHARD K. CANNON. Friends and former classmates please note.

On June 4, 1977, JAMES RICHARD JOHNSTONE, II, '77, and Mary Lee Walker were married. Johnstone is employed as associate design engineer by the FMC Corporation in Hoopeston.

MARK TOSHIO OKUMA, '77, is employed as a Sales Engineer in Michigan by the Mobil Oil Company.

JEFFREY M. OLSON, '77, a sales representative for Aluminum Company of America, writes, "After spending two months in a training program, I was located in the Grand Rapids Sales Office. Most of my dealings are with vendors to the Automotive Market. Would be happy to hear from any of my friends if they would be in this area." Jeff found the best part of the training program to be the ten days spent at three of the company's rolling mills.

Last fall WILLIAM LEE PELLUM, '77, who is employed by De Laval, changed jobs within the company. He is now an analytic engineer rather than a research engineer, largely because of his exposure to matrix structural analysis and finite element analysis in his General Engineering

MARK JAMES WESTWOOD, '77, is a sales engineer in the Dayton, Ohio, sales office of the Trane Company's Commercial Air Conditioning Division. Mark received this assignment after completing the company's six-month graduate engineering training program.