



NEWSLETTER

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DEPARTMENT OF GENERAL ENGINEERING

University of Illinois · Urbana, Illinois

GENERAL ENGINEERING ALUMNI ASSOCIATION — A Letter from your President

You will recall that last fall the General Engineering Alumni Association held its first annual meeting on November 3 and 4. The proceedings were reported in the November, 1967 newsletter. Since that time your officers have been in the process of writing constitution and by-laws and making plans for our program next fall.

At a meeting on March 9, 1968, at Urbana, it was decided that September 27 and 28 would be the dates for our next annual fall meeting. The Fighting Illini will be playing Missouri that Saturday. We are looking forward to a large attendance from the General Engineering Alumni Association. To that end, double rooms have been reserved for that weekend and you should mark your calendar now before you become involved on those dates with some other commitment.

At our March meeting, several areas were explored which we feel that G.E. alumni can become involved in to the benefit of the University, the General Engineering Department, and the communities in which they live. Specifically, these areas are intended to promote the General Engineering curriculum through several activities. One activity we anticipate is a speaker's bureau, organized by communities. This, we hope, will involve all available G.E.'s who would be willing to have themselves listed by one of our alumni in that community and be available to be called upon for talks to the public as requested.

Another area would be to have our alumni who are situated in the vicinity of junior col-

leges work with junior college representatives and encourage the better students to transfer to the General Engineering curriculum. In addition, the Alumni Association may be able to set up and offer several small scholarships to students in this curriculum.

Since we were graduated, the G.E. curriculum has been revised and updated to include a progressive sequence of design courses which are presented with the assistance of outside consultants from industry. These experts actually are Visiting Lecturers when they are on campus. As you might note, one of the major problems encountered in this area is obtaining outstanding professional industrialists willing to participate in this program and having a corporate position such that they can make the time available to contribute to the design sequence.

I feel that this change in our General Engineering curriculum is truly outstanding and offers each student a practical approach to engineering. Therefore, I would like to see the General Engineering Alumni Association participate in these courses, and especially in obtaining practicing designers for the G.E. Department.

We hope, and I believe, that you will want to become an active participant in our growing and education-oriented General Engineering Alumni Association. See you at our meeting next fall.

Beat Missouri!

Jim Gaffney, '59

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PRESIDENCY OF ATEA

Professor JERRY S. DOBROVOLNY, Head of the Department of General Engineering, was elected President of the American Technical Education Association at its Annual Meeting in Cleveland, Ohio on December 4, 1967.

ATEA is a non-profit educational association founded for the purposes of promoting technical education for interested and qualified

youths and adults, recommending standards for technical education, and providing an opportunity for an exchange of ideas in the technical education field. ATEA membership is composed of professionally-minded people who are constantly working to upgrade the prestige and standards in the field of technical education. The annual conventions provide forums for the discussion of current trends and solutions to their problems.

FACULTY FEATURES

Continuing leadership in engineering education requires active participation in many related engineering fields. Typical examples of recent faculty contributions are:

American Association of Junior Colleges

J. S. DOBROVOLNY participated in an A.A.J.C. workshop in Denver from November 1 to 4, acting as consultant in Civil Engineering Technology. This conference was arranged for the North Central Accrediting Region and included representatives from 17 states. He also attended the February annual meeting in Boston.

American Technical Education Association

Professor DOBROVOLNY presented the keynote address at the New England Region meeting in Hartford, Connecticut, in November. Over 300 people were present at the sessions, the group being composed of technical educators in the six New England states.

Summer Science Training Program

Profs. R. W. DALRYMPLE and J. S. DOBROVOLNY attended the Director's Meeting of SSTP in New Orleans, Louisiana. Sponsored by the National Science Foundation, this program is the ninth the University has had with Prof. Dobrovoly as Director.

American Educational Research Association

WALDO MARTIN and WALTER MILLER attended the annual meeting of AERA held in Chicago on February 8-10. The primary objective of attendance was familiarity with recent research in the areas of interaction analysis, supervisory behavior, teacher motivation, and evaluation strategies. Both participants also attended a graduate seminar on classroom interaction.

Department of Audio-Visual Instruction

DAVID O'BRYANT and A RYE PERLBERG attended the DAVI Convention in March where Dr. Perlberg presented a paper on "The Use of Video Tape Recording and Micro-Teaching Techniques to Improve Instruction on the Higher Education Level." This National Convention of DAVI, a department of the National Education Association, was held in the Astrohall, Houston, Texas.

National Clinic on Technical Education

DOBROVOLNY attended the National Clinic on Technical Education conducted by the U.S. Office of Education, Albuquerque, New Mexico, in March. He made two formal presentations as well as conducting an ATEA Board of Trustees meeting.

Y-14 USA Standards Subcommittee 5

FRED L. SPALDING attended a January meeting in New York to revise 1966 USA Standard on dimensioning and tolerancing of engineering drawings. In April, he also attended the meeting of the editorial advisory board of Standards Engineering, journal of Standards Engineering Society.

Fred expects to attend the ABC Conference on the Unification of Engineering Drawing Practices in Ottawa May 13-17. This Conference represents the national standardizing bodies of The United Kingdom, Canada, and the United States.

Engineering Graphics Division Meeting

The mid-year meeting of the Engineering Graphics Division of the American Society for Engineering Education was held in Tampa, Florida in January. Professor DOBROVOLNY attended.

Technical Education Research Center

With the Executive Directors of the Commissions on Education, meeting jointly with the Directors of the Technical Education Research Center from Cambridge, Massachusetts, Professor DOBROVOLNY conducted several work-sessions. He is one of seven board members of this non-profit, educational corporation organized to conduct research in technical education.

Curriculum Development

Prof. DOBROVOLNY was a member of a consultant group advising the president of the Washington Technical Institute on the development of sound curricula to meet the occupational needs of students in the District of Columbia area.

GAMMA EPSILON

Professor HARRISON STREETER reports that under the leadership of president PAUL WITORT, the Society has had a successful year, highlighted by a field trip to the Caterpillar Tractor Company of Decatur, Illinois. Brass emblems of the Society, suitable for paperweights, are now available and will be sent to any of our alumni members upon request. Soon, plaques containing the names of members initiated each year are expected to adorn the wall near the General Engineering Department's office in the Transportation Building.

In December, six students were selected for membership: JAMES SCHMOHE of Milford, EUGENE DAVID of Maywood, CHARLES STONE of Waukegan, RUSSELL EWERS of Western Springs, TED FIGUS of Chicago, and MARVIN SMOLLAR of Chicago. This spring, two additional members were initiated: DANNY NELSON of Varna and JERRY S. DOBROVOLNY, Head of the Department, who became the first honorary member of Gamma Epsilon.

SENIOR DESIGN PROJECTS

Students in the senior design course, G. E. 242, are working on a number of interesting and imaginative projects.

Previous research by students in G. E. 242 had indicated that wood aggregate Portland cement concrete could be a valuable building material because of its light weight, nailability, resistance to fire, and other features. DAVID PORTER, DONALD BISHOP, and CHARLES MAHAN are continuing this investigation to determine whether the variety of wood used affects the ultimate strength; whether one particular size of wood (chips, sawdust, or shavings) is superior to the others; and whether the use of various chemical treatments and coatings of the wood will significantly increase the strength of the concrete. All other variables will be kept constant. Although their major criterion for success is strength, cost will be a consideration.

Development of an electronic locking system is the project of DAN COMPTON and ROBERT JONES. Their goal is a system which compares favorably with conventional locks in cost and wear but surpasses them in the degree of security and ease of operation. Design of the switching circuit is the real heart of the problem.

MARTIN SALZMAN is continuing a project of previous semesters, the design of a mechanized library. To date, the design calls for a system like that used in automated warehouses. The library books will be cased in small containers which can be picked up and delivered by a mechanized fork-lift under the control of a computer. Salzman's contribution will be to find the different fork-lift systems available for use in a library, the proper containers for the books, suitable racks for holding the lifts, planning a method for delivering the books to the students, and linking the whole system to a computer which is capable of directing the fork-lift and keeping track of the books on the shelves.

MICHAEL HALL and JOEL HERNING have teamed up to design the frame for a motor grader having the capabilities of the Caterpillar No.16. This project developed from the fatigue failure of the present frame when the machine was used for light grading at high speeds, heavy grading in adverse soil conditions, and heavy ripping--heavier work than was anticipated for the present design. In solving this problem, the men will consider the various possible methods by which the work of the grader can be accomplished, evaluate possible vehicle designs to accommodate the grading blade, determine the maximum loads and load cycles on the vehicle frame, and design the frame to withstand the required loads, keeping in mind economics and manufacturing facilities available at Caterpillar's Decatur plant.

A project of timely interest is that of JAMES BOU LA. He is designing an ocean-current meter to operate at less than 100 fathoms with an accuracy of ± 0.1 knots and $\pm 10^\circ$ direction, which can be built for under \$100. At present, his design calls for a plastic sphere enclosing the data-recording camera and a solenoid-clock combination for triggering, timing, lights, and exposure.

PAUL WITORT's project is the economic production of hydraulic cylinders by a producer of heavy earth-moving equipment. The company manufactures 25,000 hydraulic cylinders of thirty different types per year for use on their machines. At present, the cylinders are manufactured in small lots to meet the immediate demand for a particular type--a costly procedure because of the time lost in changing the tooling setup for a shift in cylinder size. Witort is designing a machine layout for processing the component parts and developing a computer program to facilitate the calculation of economic manufacturing lot sizes for each. This will involve assembling time-study, cost-analysis, and machine-process data, plus constructing a mathematical model of the operations to be used with the computer.

The team of TERRY BEQUETTE, EUGENE DAVID and RUSSELL EWERS is designing a structure to replace existing supports for a 16-inch cast iron sewer pipe to be placed across a stream 100 feet wide. The pipe must be maintained in continuous service and the supporting structure must not interfere with the stream flow. Two types of bridges, suspension and arch, will be designed and then compared as to cost, appearance, and ease of construction.

RALPH BRADLEY's project of determining the life expectancy and wear rate of powdered-metal bearings developed out of his work experience at the A. B. Dick Co. of Chicago. The company is a large producer of office duplicating products and machines and is presently very interested in the possibility of building maintenance-free equipment, i.e., machines which require no maintenance for ten years or 50,000 hours of operation, whichever comes first.

To determine the feasibility and cost of producing such a machine, the company must be able to predict the life expectancy of the various components used. Presently no information seems to be available on wear rate and life of powdered-metal bearings. Bradley's problem is to decide exactly what type of test should be run, what factors should be varied, and then to design the testing equipment. To do so, he must determine the bearing-wall thickness, bearing-length, operating temperature, loads, shaft material, shaft finish, shaft protective coating, shaft speed, and clearances.

GARY FARISS and BURR LOGEMAN are concerned with the design of an auto- (continued next page)

SENIOR DESIGN PROJECTS (Cont'd)

mobile which paraplegics can drive on highways. The goal is to develop a procedure for modifying a standard vehicle so that the paraplegic can stay in his wheelchair both to enter and operate the auto. The present concept is that of a modified delivery van on which electrically-operated double doors and lift would be installed on both the side and the rear. A smooth floor would be added several inches above the original one, allowing the wheelchair footrests to clear the front wheel-well enclosure so the driver is placed as far forward as possible. A mechanism for electric operation of the lifts and of both the side and rear doors plus a clamping device to stabilize the wheelchair in the driving position must be designed and a usable steering and acceleration control provided.

Along this same line, LELAND MEINHART and MARVIN SMOLLAR are redesigning the standard portable wheelchair to provide greater mobility and comfort for the occupant. The team proposes to develop a gearing to be contained within the wheel; an engageable holding mechanism, perhaps a ratchet device, which can be used while moving; a form of shielding around the wheel with a braking potential built in; a handrail which will permit easier application of motive force; and shock absorbers to be added to the frame.

ANNUAL AWARDS DINNER

The annual Student - Faculty Spring Banquet was held May 7 in recognition of outstanding students in the Department.

Dean W. L. EVERITT of the College of Engineering, who is retiring in September, spoke on the subject "Why We Talk Too Much."

The E. S. Fraser Award for scholarship was presented to ALLEN F. GRANDT, Jr. Mr. Grandt graduated in February and is now a graduate student in Theoretical and Applied Mechanics.

Prof. B. O. LARSON presented the Marcus-Phillips Award in recognition of superior scholarship, outstanding character, and extensive participation in activities. The two recipients, PAUL WITORT and MARVIN SMOLLAR are both seniors graduating in June.

The Randolph P. Hoelscher Award was established this year and presented to an outstanding student in the junior class. This award honors Prof. HOELSCHER, who served the University for forty-one years, ten of them as head of the G.E. Department, before retiring in September, 1959. He was a devoted teacher, administrator, and designer, exemplifying the attributes that should characterize all engineers. This award was presented to STUART E. WILKENING for exceptional scholarship and leadership.

ENGINEERING OPEN HOUSE — SPECIAL GUEST PROGRAM

As part of the Centennial Year activities, Engineering Open House was held March 8 and 9. In an effort to have less of a carnival atmosphere and to present a more realistic picture of the engineer as a student and a potential professional, the committee developed the Special Guest Program.

Each high school was asked to recommend one junior or senior interested in engineering who would be a good representative of the school. These students were invited to the campus March 7 as weekend guests of the Engineering College.

Completed questionnaires revealed interests and guests were then assigned to appropriate departments. Hosts were provided to take the high school students on tours of the engineering campus, to answer questions about university living, and to accompany them for Under-Secretary ROBERT WOOD's talk on technical problems of urban development. They also attended a dinner meeting at which Dean EVERITT led a discussion on the engineering approach to society's problems.

This Department's guests were welcomed by Prof. DOBROVOLNY and met G.E. grads JAMES HENSON, '63, Caterpillar Tractor Co., Peoria, and JACK BROWN, '66, General Foods, Battle Creek, who discussed engineering problems encountered in industry and the advantages of a general engineering education. Prof. R. W. DALRYMPLE outlined the G.E. curricula and material covered in courses.

Guests were divided into small groups and taken to visit design courses and a class in the history of engineering. They also had an opportunity to question Mr. Henson and Mr. Brown. At the close of the morning they were asked to give their reactions and suggestions for improving the program and then spent the day visiting the other Open House exhibits.

Displays for the design courses were planned by students in the Department. HERBERT LINNE and KENNETH VEASMAN exhibited several gear trains, including an automatic differential, for G.E. 221. The G.E. 231 display, prepared by MAX KELLEY, showed the collapse of the Ohio River's Silver Bridge. STEVE WEISS presented an example of stress analysis of a steel section under varied loading for G.E. 232. PAUL LITHERLAND presented various types of design projects, using a tree house as an example for G.E. 241. BURR LOGEMAN's G.E. 242 display emphasized a current design project--automobile controls for use by a paraplegic. A model was set up on an oscilloscope to represent effect of the control. This display attracted considerable interest. NOEL POTTS was in charge of the graphics display: Air brushes, descriptive geometry problems, design of a camera part, and so forth.

KNIGHTS OF ST. PAT

The Department of General Engineering tied for second place with the much larger Civil Engineering Department in the number of seniors named as Knights at the St. Pat's Ball. Among fifteen students honored for their outstanding leadership were three G.E.'s: ROBERT JONES of Ridgway, MARVIN SMOLLAR of Chicago, and PAUL WITORT of Libertyville.

Bob Jones came to the University of Illinois from Southern Illinois University in September of 1964. A member of ISGE, he has served on the Profile Committee of the Engineering Council, the Student Senate Subcommittee on Educational Affairs, the Student-Faculty Liaison Committee of the College, as Vice President of Engineering Council, and Editor of Technograph.

Marvin Smollar is president of Engineering Council, chairman of the committee preparing a freshman orientation booklet to be published through the Engineering Council, chairman of the Teacher Excellence Award Committee, chairman of the Committee of Society Presidents on establishing more effective communication between students and faculty on the engineering campus. He is also a member of ISGE for the third year, is serving his second year on the Student-Faculty Liaison Committee, was a member of that group's study committee to introduce pass-fail to the engineering campus, is a member of the current student-faculty committee to study the five-year engineering and liberal arts program. He was on the modernizing committee for Engineering Open House which suggested the special guest program. Marvin holds an Illinois State Scholarship, is a member of Gamma Epsilon, and received a "100 Banquet" senior award.

Paul Witort played intramural baseball, water polo, and volleyball; he received the "All-Intramural Award" in football and basketball. Spring, 1967, Paul was student coordinator for the YMCA campus lecturer program, was a member of several Illini Union committees, served as 1966 chairman and 1967 major chairman of both the Block 'I' flashcard section and the Speakers Program, was personnel manager in 1966-67, and received the "Outstanding Chairman" award for 1967. Paul served in the student senate for two years and was chairman of the District Council. He worked on the Technograph in 1966 and has been on Engineering Council. A member of ISGE, he served as ISPE vice president this year, and has participated in the James Scholar Program for four years. Paul is a member of Phi Eta Sigma, Gamma Epsilon (President, 1967-68), Sigma Tau (Vice President, 1967; President, 1968; chairman of the Tutor and Advisor Program for this year), and Tau Beta Pi (1967). He received the "100 Banquet" senior award. Paul has also been active in the Interfraternity Council and the affairs of his fraternity.

FEBRUARY GRADUATES

Seventeen men completed their studies for a Bachelor of Science degree in General Engineering last February. Of these, three were graduated with highest honors: ALTEN FREDERICK GRANDT, Jr. of Farmington, PHILLIP MARK KASIK of Glenn Ellyn, and JAMES STUART SCHMOHE of Milford. All three were elected to Sigma Tau and Tau Beta Pi, the all-engineering honoraries. Al Grandt and Phil Kasik were members of Phi Eta Sigma, the all-university honorary for freshman men, and of the General Engineering honorary, Gamma Epsilon. They also found time for extra-curricular activities, particularly Phil Kasik, who served as president of ISGE, vice president of Tau Beta Pi, was a member of ISPE, and played in both the Concert and Marching bands of the University.

After graduation, Al Grandt entered the University of Illinois Graduate School for a master's degree in Theoretical and Applied Mechanics. Phil Kasik is a teaching assistant at the University of California, Berkeley, while he works toward a master's degree in structural mechanics. Jim Schmohe is working for Sundstrand Aviation Corporation in Rockford. All of the other General Engineering graduates of the February class have either found challenging positions or are attending graduate school.

STUDENT-FACULTY DIALOGUE

In January a luncheon program was organized whereby 16 small groups of students met with three or four faculty members. The purpose of the luncheons was to bring to the attention of the students the wide range of opportunities for graduates of General Engineering and some of the options available in General Engineering. The program has been highly successful and well-received by both faculty and students; its continuance is planned in future sessions.

RECENT DEPARTMENTAL DESIGN ACTIVITIES

Prof. ERNESTO BLANCO from Tufts University was here April 1-4 as a consultant to our design courses. He showed us what is being done at Tufts in regard to introducing design at the freshman level. Prof. Blanco was here in connection with the Department's Ford Foundation Grant. Other recent visiting lecturers in connection with the design courses were CHARLES F. GEBHARDT, Design Engineer from the Caterpillar Tractor Company and KENNETH B. MOBERG of Illinois Bell Telephone Company's Chicago office. Mr. Gebhardt presented students with design problems, while Mr. Moberg's field of interest was engineering cost analysis and computer applications.

Students in the design courses took a field trip to the Peoria Caterpillar Tractor plant and proving grounds on April 30th.

NEW PUBLICATIONS

The Department of General Engineering takes pride in announcing three new publications this year by its staff members:

Natural Environmental Radioactivity from Radon 222, by JOHN E. PEARSON, has been published by the Public Health Service, U.S. Department of Health, Education, and Welfare in the Environmental Health Series on Radiological Health.

RONALD J. PLACEK's book, Technical Mathematics with Calculus, was published in January by Prentice-Hall, Inc., Englewood Cliffs, N. J.

Graphics for Engineers, by HOELSCHER, SPRINGER, and DOBROVOLNY, is nearing completion and will be distributed in July by John Wiley and Sons, Inc., New York.

ILLINOIS SOCIETY OF GENERAL ENGINEERS

The group is completing a successful year of interesting and timely programs emphasizing the opportunities available to G.E. graduates in engineering sales and management. We were fortunate to have attracted extremely capable speakers for the programs, including past G.E. graduates MARVIN MRNKA, '60, of Powers Regulator Company and JOHN RAFFL, '63, of Union Carbide Corporation.

Culmination of this year's activities will be an annual spring student-faculty picnic, scheduled for Sunday, May 12, weather permitting. The students will then attempt to redeem themselves at softball, having suffered humiliating defeat at the hands of the faculty during the annual bowling tournament last December.

Taking over leadership responsibilities for the 1968-69 year are: DAVID WHITE, President; JAMES LOCKE, Vice President; WILLIAM MASON, Secretary; HERB LINNE, Treasurer; RICHARD HOFFMAN and PAUL LITHERLAND, Engineering Council representatives. The ideas and enthusiasm expressed by this group in accepting their respective positions point toward a continuing increase in interest among G. E. students in their society's goals and activities.

Retiring officers are: JOEL FITZJARRALD, President; DANIEL COMPTON, Vice President; ROBERT WITHROW, Secretary; STEVE WEISS, Treasurer; and STUART WILKENING, Engr. Council Representative.

In addition to the regular monthly meetings, the following activities and projects are being considered for the coming year: Summer job placement program, G.E. freshman orientation program; high school and junior college visitations; selected tours and field trips; and money-making projects to finance activities.

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 pertaining to these topics to:

MONTE L. PHILLIPS
ISGE Faculty Adviser
217 Transportation Building
University of Illinois
Urbana, Illinois 61801

RADIANT FOLIAGE

The Department of General Engineering has been awarded a research grant by the National Science Foundation for further investigation of release of the radioactive gas, radon-222, from plants. Principal investigator for the study will be Professor JOHN E. PEARSON, who has been conducting research in this area for a number of years.

A series of measurements in the vicinity of the University of Illinois campus indicated that the release of radon-222 from the soil is uniform. However, John, working with Dr. RICHARD DEDOLPH of Argonne National Laboratory, developed the hypothesis that the leaves of plants should release the radioactive gas, developed in the soil, also. Tests proved this assumption to be accurate.

The new research study is planned to acquire more information about the nature of this release. Such information is of importance to explain the exposure of life on the earth's surface to naturally-occurring radioactivity.

As a gas, radon-222, also has a potential for use as a natural tracer material in the study of vertical diffusivity of the atmosphere. Rates of vertical diffusion are of importance in all air pollution problems. Under conditions of favorable, or high, vertical diffusivity, polluting materials released near the earth's surface are mixed and diluted to great elevations and concentrations are low. Under low vertical diffusivity conditions, mixing is inhibited and air pollution near the surface can become unpleasant. Under such conditions, the release of polluting materials should be stopped or delayed until more favorable conditions return. Other possibilities include the use of abatement equipment under unfavorable conditions or a change of process: For example, a switch from coal to gas fuel. Many approaches are going to be required to bring the air pollution problem under control, and better knowledge of the atmosphere's capacity as a sewer is a part of the information needed.

A L U M N I

N O T E S

DONALD L. ALESCH, '59, has accepted a new position as Manager, Government Contract Administration, Bell & Howell Company, Chicago.

G. R. "DOC" AVERY, '41, MBA '56, University of Chicago, is now co-owner and manager, Detroit Downtown Travelodge, Detroit, Michigan. He reports that there is nothing like being one's own boss in "top management." Daughter Kathleen recently graduated from Illinois. Father graduated in M. E. in 1917, has retired as Chairman of the Board of Acme Steel Company, and resides in Sun City, Arizona.

ALVIN J. BLAKE, '42, Ph.B. '47, Northwestern University, reports recently leaving the position of Corporate Vice President of Cavitron Corporation and General Manager of its Cleveland Division to join the J. B. Carroll Division of the Dashew Business Machines, Inc., Chicago, as Vice President and General Manager. He was cited for outstanding technical achievement and service to science and community, and was presented the '66 award of the Chicago Technical Societies Council.

JESSE WAYNE BOEHLER, '67, Research Assistant in the University of Illinois Graduate School of Business Administration, expects to receive his MBA degree in 1969.

TERRY LEE BRADLEY, '67, reports that he is a member of the technical staff, Bell Telephone Laboratories at Naperville. He is currently attending M.I.T. full-time in M. E., under Bell's campus training program.

WARREN J. BROLL, '63, MBA '65, Northwestern University, is now Assistant Manager, Southern Area, Boise Cascade Container Division, in West Memphis, Arkansas.

JAMES E. BRUBAKER, '56, reports from Pittsburgh, Pennsylvania, where he is a Supervisor of Mechanism Development, Westinghouse Bettis Atomic Power Lab. Jim has been busy in the reactor design field and has received a patent for the design of a basic fuel-mechanism module. James and his wife Phyllis, U. of I. '56 in Education, have three boys and a girl as their family.

DAVID W. CLARK, '55, M.S. in Civil Engineering '56, is Vice President of Hurst-Rosche Engineers, Inc., Frankfort, Kentucky.

H. EUGENE DIEHL, '67, has been with Illinois Bell Telephone at Rockford as an engineer. He reported to active duty as an Army 2nd Lieutenant in January at Aberdeen Proving Ground, Maryland.

ARTHUR G. DIXON, '24, relinquished the presidency of the Modine Manufacturing Co., Racine, Wisconsin, in 1963. Arthur has been Vice Chairman of the Board of Directors since that time.

From a wealth of experience, he reports the beneficial aspects of the general engineering broad curriculum coverage. His wife, son and daughter are all University of Illinois alumni as well.

JERRY M. ETTINGER, '62, has accepted a new position as Manager of the Graphics Programming Advanced Analysis of IBM at Kingston, New York.

WALTER W. FASTER, '55, has recently been promoted to the position of Marketing Manager of Grocery Products Division of General Mills, Inc. of Minneapolis. His responsibility is for the sales and marketing of baking-mix package goods.

STANLEY R. FELDERMAN, '57, MBA '62, Northwestern University, has recently joined Informatics, Inc., a Los Angeles-based computer programming company. Stanley is opening a Chicago sales office for Informatics. He was formerly with the IBM Company for nearly six years.

JAMES F. GAFFNEY, '59, is Chief Industrial Engineer of Warner Electric Brake and Clutch Co. of South Beloit. He is also our first President of the General Engineering Alumni Association.

EMORY J. GEORGE, '62, M.S. '67 Stanford, is a manufacturing engineer with Hewlett-Packard Corporation of Palo Alto, California.

WILLIAM J. GILDHAUS, '25, retired on April 1, 1967. He was formerly with the United Electric Coal Companies of Chicago.

EDWARD C. GLOPPEN, '56, recently assumed a new position as Chief Engineer for Midwest Concrete Products Co. of Franklin Park, Illinois. Since graduation, Ed has served two years in the U. S. Army, and has spent ten years in the concrete industry in sales production and management positions. He is married and has two children.

CHARLES F. HEDBLUM, Jr., '64, reports from South Pasadena, Calif. that he enjoys receiving the G.E. Newsletter. He is engaged in designing flowmeters and tachometers for aerospace applications at Microdot, Inc. He reports assisting the formation of a new corporation called Ultravision, Ltd. This group is engaged in designing an improved inflight motion picture system.

ARTHUR B. HILLMAN, '67, is serving as a 2nd Lieutenant in the United States Army. He is a Battalion Adjutant in the 82nd Airborne Div.

WALLY H. HOLM, '58, anticipates leaving Las Cruces for Roswell, New Mexico, in the near future. He is Vice President of Hydro-Tech, Inc., Las Cruces, N. M. Wally is also Vice President and member of the board of a new company called Biosystems, Inc., which proposes to deal in sewage disposal and sanitation.

THOMAS K. HULL, '47, retired after 40 years with Joseph T. Ryerson & Son, Chicago, on May 1, 1967. He states that he would like to keep up with trigonometry and would welcome any suggestions on where he might find part-time work involving that talent.

CARL E. JASKE, '66, M. S. '67, is now a research engineer with the Battelle Memorial Inst. of Columbus, Ohio. Carl reports that Donna, his wife, B. S. in A. A. E., '67, is employed at the Columbus Division, North American Rockwell Corp. where she is in the aerodynamics department.

PAUL C. JONES, '50, is president of his own company, Paul Jones Enterprises, Inc. Paul reports that he is currently readying his Lotus-Ford for a full racing season. He is driver, engineer, and owner of his own cars.

DALE J. MAIBAUM, '59, is now Supervisor of Assembly Tool Engineering for General Electric Company at Evendale, Ohio.

WILLIAM MCGONAGIL, '50, MBA '66, University of Chicago. Bill received his MBA degree through the Executive Management Program and was recently appointed General Manager of the Wallingford, Connecticut plant of Joseph T. Ryerson & Son.

JULIUS E. MONGE, '60, was promoted to Manager, Hough Product Sales, International Harvester Co. in September, 1967. Hough Division manufactures heavy construction equipment. Julius reports a wife, two boys and a girl.

RONALD W. MYTTY, '65, is employed as a Mechanical Engineer, Bethlehem Steel Corp., Seattle Washington. The Myttys' first baby is a boy.

ROBERT A. PAVELICK, '64, has started Management Training Program, Illinois Bell Telephone Company, where he has been employed in the Outside Plant Engineering Department.

JON L. PEACY, '58, M. S. '67, is a Sanitary Engineer with the Illinois Bureau of Air Pollution Control at Springfield.

MICHAEL R. PHILLIPS, '63, is White Concrete Manager of the American Cement Corp., Riverside Division at Los Angeles.

JOSEPH A. PLOMIN, '57, reports a new position as District Sales Representative (midwest) for the Anchor Packing Co. The Plomins' new son in January, 1968, brings the total to four boys and two girls.

EDWARD J. F. REGAN, '47 is President of Anaconda Astrodata Company, a wholly-owned subsidiary of the Anaconda Wire and Cable Co., at Anaheim, California.

LOIS (BACKER) ROBERTS, '66, is a Junior Mechanical Engineer with Henry Adams, Inc., Consulting Engineers, at Baltimore, where she designs heating and air-conditioning systems for large office buildings, schools, etc. Lois is looking forward to becoming a licensed P. E. and going into business with her architect husband, Louis, '65, M. Arch. '66.

EDWARD L. SABOURIN, '65, would like to hear through the newsletter about the doings of his classmates. Ed is working with the Installation and Service Engineering Department of the General Electric Company and specifically is working on U. S. Steel's new 84" hot strip mill installation at Gary, Indiana.

JAMES R. SACHTSCHALE, '64, M.S. '66, reports on the desirable living in the San Francisco area where he is doing research on lubricants for the Chevron Research Company, a division of Standard Oil of California.

THOMAS S. SNOW, '65, received a promotion from Plant Engineer to Packing and Loading Superintendent, the second in 1967 and fourth since joining the U. S. Gypsum Company as Engineering Assistant in February, 1965.

RICHARD W. SWANBORG, '52, holds the position of Sales Manager for the Bearing Division of Rex Chainbelt Company.

FRANK J. TOMECEK, '64, is presently an IBM marketing representative working with 40 small manufacturing companies to help them convert from manual to automated forms of accounting and manufacturing control. Frank previously served two years in the Marine Corps at Quantico, Va. where he was assigned to a data-processing unit. He is married, has two children, and lives in LaGrange, Illinois.

DONALD E. WILKINSON, '64, in his third year of law school, has been participating in the federal defender program with a firm of attorneys on a part-time basis. Donald also holds a full-time job as design engineer at the International Harvester Research Center in Hindsdale, where he works on a variety of products.

MICHAEL N. S. YOSHIMURA, '67, is enrolled in the MBA program at the University of Southern California while working as Project Officer with the United States Air Force.

GEORGE G. YOUNGSTROM, '37, has a new position as Sales Engineer for Biersach and Niedermeyer of Milwaukee, Wisconsin. George retired in August, 1967, after 31 years in outside sales for U.S. Steel Supply Division, U.S. Steel Corp.