NEWSLETTER



DEPARTMENT OF GENERAL ENGINEERING

University of Illinois - Urbana, Illinois

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GAMMA EPSILON INSTALLS NEW MEMBERS

Gamma Epsilon, the General Engineering Honorary, has just initiated ten new members for the spring of 1966. The following new initiates, all from Illinois, were honored at a banquet at The Town and Country restaurant: HAROLD DIEL, junior, Staunton; JOEL FITZJARRALD, junior, Arthur; LOUIS FRIEDRICH, junior, Skokie; ALTEN GRANDT, junior, Farmington; ARTHUR HILLMAN, junior, Riverdale; GERALD SMITH, junior, Ottawa; WAYNE BOEHLER, senior, Farmersville; DENNIS CALLAGHAN, senior, Naperville; WARREN LAYNG, senior, Rockford; and RAY MILLER, senior, Chicago. After the banquet, President BOB GILES presented each new member with the honorary's certificate of membership. Guest speaker for the evening was Prof. JERRY S. DOBROVOLNY, Head of the Department of General Engineering, who spoke on the "Engineering Manpower Team."

The members of the honorary are very pleased with the support of the department's faculty and the size of the class of new initiates. They feel the honorary is well on its way to becoming an active organization. The total membership of Gamma Epsilon is approximately fifty and the present active members number fifteen.

This is the first year shingles have been given to the new initiates. In the near future a shingle will be mailed to every alumnus of Gamma Epsilon. If you do not receive yours by July 1, write to the General Engineering Department office and someone there will see that one is sent to you.

EDWARD H. SHAFER, G.E. '49, HONORED BY COVER ARTICLE IN PLANT ENGINEERING

The feature article in the December, 1965, issue of Plant Engineering honored EDWARD H. SHAFER, G. E. '49, Manager of Plant Engineering, All-Steel Equipment Inc., Aurora, Illinois. The caption below Mr. SHAFER's picture on the cover reads, "With only a small engineering staff, Mr. SHAFER meets major plant engineering challenges in an efficient, effective manner."

Following graduation, Mr. SHAFER, a native of Illinois, spent a year as an instrument man on railroad construction projects. Then he joined the construction firm of Ragnar Benson, Inc., where he directed work on all types of buildings. In 1956 he went to All-Steel Equipment Inc. as a plant engineer and was subsequently named Manager of Plant Engineering.

Mr. SHAFER was honored for the efficiency and innovation of his operation, accomplished with a staff of only two engineers. The All-Steel Company produces a complete line of office furniture, including blueprint cabinets, desks, chairs, lockers, files, bookcases and lobby furniture. Its plant contains about 883,000 sq. ft. of manufacturing space and 97,000 sq.ft. of office space, accommodating eleven hundred employees.

The article points out that small groups have the same problems as large ones but lack the specialists. Also the small plant engineering group is always in the process of proving that

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it can be of more value to the parent company. The organization of the plant engineering group at All-Steel and a number of its current projects are reviewed in the article.

Professor BOKENKAMP supervised the preparation of a bulletin board display based on the <u>Plant Engineering</u> article. This display was used during Engineering Open House this year. We are proud of the fact that when BOB BOKENKAMP wrote Mr. SHAFER for permission to use the material in the article, he replied, "I do hope that it is helpful in selling the General Engineering degree. This degree certainly provides an excellent foundation for a career in Plant Engineering, a field which has no limitations."

STUDENT AWARDS

At the annual Student-Faculty dinner on April 28, Prof. B.O. LARSON announced the recipients of the H.L. Marcus-L.B. Phillips and the Edward S. Fraser awards for 1966. The Marcus-Phillips award was conferred upon JACK D. BROWN in recognition of his services to I.S.P.E., Gamma Epsilon, Sigma Tau, and I.S.G.E. JACK was vice president of I.S.G.E. for one year. He was also house manager and vice president of his fraternity, and participated in intramural football, basketball, golf, and baseball. At the time of JACK's graduation last February his all-university average was 4.107. JACK is now employed by General Foods Corporation at Battle Creek, Michigan.

DAVID A. BURGE received the Fraser award on the basis of his fine academic record and his activities. At the end of last semester DAVE had an all-university average of 4.8782. His activities included service to his campus church in several capacities, membership in Tau Beta Pi, student chapter of I.S.P.E., I.S.G.E., and Gamma Epsilon. In addition DAVE was vice president of I.S.G.E. for two semesters and treasurer of Gamma Epsilon for one term.

GRADUATING SENIORS

By June 19 thirty-six students will have completed work for a Bachelor of Science degree in General Engineering this school year. Seventeen finished Of the their studies in February. nineteen who graduate in June, two are coeds, KAY LESTER and LOIS BACKER RO-BERTS. KAY plans to enter the field of technical writing. She has received offers from several companies but, at the last word, had made no decision. LOIS will stay in Champaign-Urbana until her husband receives his Master's degree in Architecture in August. expects to work in a local engineering office in the meantime and to find permanent employment in the community where her husband locates.

G.E. 242 DESIGN PROJECTS

Students registered in G.E. 242 this spring are working on several interesting projects in design. NORMAN HUNT and DAVID KOCH are developing a sensing device for automatic retrieval of books, delivery to check-out desk, and return to shelves for a very large library.

LOIS ROBERTS and LOUIS HECHT are designing a circular runway for an airport. The runway is planned for use by light aircraft and is expected to reduce or eliminate the "stacking" of planes over the airport. General Motors Corporation is reported to be testing a runway of similar shape.

CARL JASKE is interested in the use of wood aggregate in concrete. He proposes to investigate the use of such concrete in engineering design.

As the result of ROBERT ZUMSTEIN's job with the Illinois State Highway Department last summer, he and MICHAEL YOSHIMURA are studying a traffic system to cross and/or enter a 4-lane highway at a presently dangerous intersection and railroad crossing. The problem includes a nearby school, a factory, the factory-access road, railroad siding for the factory, and a 4-lane highway.

DESIGN PROJECTS (Cont'd.)

FRED JACOBS and DANNY MCCLINTOCK are planning facilities for a yacht club which has 25 members. The club owns land with 120 ft. of shore by 140 ft. deep. A pier; a crane for moving masts and ballast; a combination mast house, sail loft, and locker room; two heads; and equipment for moving craft from the water to parking spaces on the lot must be provided at low cost for the successful operation of the club.

Project of RICHARD BROSIG, JAMES CORBETT, and FRANK LINDBERG is the design of an automatic drilling and tapping station along a conveyor belt which carries two thousand steel blocks an hour.

KAY LESTER and GERALD DOUGHERTY are concerned with the design of a locking device for the landing gear of an airplane.

KNIGHTS OF ST. PAT

The G. E. Department was again represented among the eleven students selected to receive the Sword of St. Pat this year. KAY LESTER from Lewiston and ROBERT A. GILES, JR., of Marion, both graduating seniors this June, were so honored. In addition, Asst. Prof. DAVID R. OPPERMAN, Assistant Dean of the College of Engineering, and formerly on the General Engineering faculty, was made an honorary faculty Knight of St. Pat; Prof. R. A. JEWETT of General Engineering was selected for this honor a year ago.

FACULTY GOINGS ON -- MOSTLY

Through the winter the Department faculty has continued its strong, steady influence in engineering education developmental activities by conference attendance, committee work, and professional society participation. Led by our Department Head, JERRY DOBROVOLNY, below are some of those who have been figuratively "carrying the coals to Newcastle."

In October JERRY participated in the Midyear Meeting of the Engineering Graphics Division of the American Society for Engineering Education, accompanied by ROBERT W. BOKENKAMP and DAVID C. O'BRYANT of the Department. During the two-day conference held at Michigan State University, JERRY presided at discussion sessions on Course Content, Numerical Control, and Graphic Solutions.

BERNT LARSON spoke to a group of interested Urbana High School seniors in December on the merits of an engineering education in general, and the values to be gained by attendance at the G.E. Department's Summer Institute.

FRED SPALDING's many friends will be pleased to hear that he is progressing nicely and is nearing his old self after suffering a heart attack in early March. He has been up and around at home for several weeks. FRED, always an energetic traveler, was in Chicago last November with BOB BOKENKAMP to attend the Annual American Standards Association's Y-14 Sectional Committee Meeting. Earlier, in October, he had been at the University of Wisconsin's Engineering Institute twice, presenting papers titled, "Position and Form Tolerancing" and "How to Use Form Tolerances" before delegates to conferences sponsored by that institution.

ED EBERT was re-elected to a fifth term as treasurer of the University of Illinois Dads Association last October. He attended a College Day Program at Carl Schurz High School, Chicago, and gave them "the word," also in October. He continues to hold forth as chairman of the University's Subcommittee A on Undergraduate Student Discipline.

Still pursuing the elusive trail of the First American Rail Beam, ROBERT JEWETT reported his latest research progress at the Society for the History of Technology annual meeting in San Francisco, California, during the Christmas Holidays. BOB has also been elected president, Champaign County Chapter, Illinois Society of Professional Engineers. JERRY DOBROVOLNY is a past president of that body and DAVE O'BRYANT

FACULTY (Cont'd.)

is serving a second year as its treasurer. You probably saw all three if you attended the annual ISPE convention at Decatur the last weekend in April.

ENGINEERING OPEN HOUSE

The 1966 Engineering Open House at the U. of I. proved to be extremely fruitful for the Department of General Engineering. More than 3250 visitors braved the rain and cool weather to view G. E. exhibits on March 11 and 12, 1966.

A high point for this department occurred when RICHARD M. WETZEL won the first place award with his G. E. 242 Project Design "Instrument for Direct Determination of Non-Linear Strain" entered in category #3 -- Exhibit best representing University research in a given area or field of engineering at the U. of I.

Displays and exhibits were prepared by the students and faculty to portray course content for most department offerings. The Junior Student Chairman was TERRY BRADLEY.

G.E.'s STRONG IN LILLY COMPANY

Since 1963 five graduates of the G. E. curriculum have joined one organization, Eli Lilly and Company, Pharmaceuticals and Biologicals, Indianapolis, Indiana.

In February, 1963, SAM L. LEEPER joined the company as a member of the systems development area.

SAM was moved to personnel and recently became a Personnel Representative in Elanco Products Company, a division of Eli Lilly.

He graciously helped in the preparations of this article by providing information about four of his colleagues. JERRY SNIVELY, '62, joined Lilly at the same time as SAM but spent two years on leave for military service. After his

recent return he became a member of the Industrial Engineering Division.

Other recent graduates joining Eli Lilly and their Industrial Engineering Division include DOUGLAS A. BEHMER, '64, JOHN A. REDIN, '65, and JOHN J. CRISEL, '66.

The Department of General Engineering and their alumni are proud when our graduates create such favorable impressions that companies come back for more.

FROM GENERAL ENGINEERING TO THE BENCH

Many General Engineering graduates study law and a number of them go on to practice law. ROGER H. LITTLE, '50, is Associate Circuit Judge of Champaign County. Judge LITTLE obtained his LLB in 1953, and practiced law in Springfield, Illinois, until 1959 when he returned to Champaign County to serve as Assistant States Attorney for about a year. After law practice in the City of Champaign, he was elected to the position of Judge in 1962. Under the new Illinois law, he is to stand for retention in November.

ROGER has jurisdiction over all types of cases but he considers, primarily, probate matters, adoptions, mental competency hearings, hearings regarding local improvements, and some criminal and domestic cases. He has a special interest in and concern for the problems of young people.

ROGER LITTLE and family live in Champaign. His extra duties include service on the boards of the University YMCA and the Mental Health Association, and on the Boy Scout Council.

Judge LITTLE remembers especially the help of Professor SPRINGER, his advisor, and the assistance he received in planning his pre-law subjects. While he does not practice engineering, he believes that the thought processes he learned are valuable; his slide rule is in the top drawer of his desk ready for frequent use, and his engineering background is helpful in conducting drainage and other local improvement hearings.