THE H.L. MARCUS - L.B. PHILLIPS AWARD

In the last issue of the newsletter, we told of the establishment of Edward S. Fraser award. Now, we also happy to announce the H. L. Marcus-L. B. Phillips Award, to be given to an outstanding senior in General Engineering in recognition of scholarship, char-The donors of acter and activities. this award are Michael Phillips, G. E. '63 and Judith Ann Phillips, his wife. Besides being rather unique in that the award has been established by so recent a graduate, another feature relates to dedication of the award. H. L. Marcus and L. B. Phillips are the fathers, respectively, of Mrs. Michael Phillips and Michael Phillips. In setting up the gift, Michael Phillips stated:

"This award is given in honor of the above two fathers, who, like other fathers, have been the inspiration and the motivation of their sons and daughters throughout their college years. It is with gratitute that both my wife and I share in honoring two greatmen ... our fathers."

All graduating seniors in a given year with all university averages of 3.5 or better are eligible to be considered for the award. Fifty per cent of the rating is to be based on extra curricular activities, 10% on activities outside the direct university community, 10% on professional organizations, 20% according to a rating of each candidate by his fellow graduating seniors, and 10% according to appraisal of the students from faculty rating sheets.

The award will be presented each spring, and will consist of from \$75 to \$100 in cash plus an individual wall plaque. A permanent plaque will be mounted in the Transportation Building next to the Fraser Award Plaque.

We believe gifts such as these provide a worthwhile incentive to students and are certain to have, as an ultimate result, a betterment of engineering education. We again remind all alumni that gifts of this type or simple donations can be made through the University Foundation.

SCHOLARSHIPS

We are constantly attempting to come up with ideas to help build our student enrollment in the G. E. Department. idea with merit is to provide scholarships for promising students, either entering freshmen or those who have compiled a good scholastic record in the early stages of their careers. What we have in mind is the establishment of a General Engineering Scholarship Fund. To our way of thinking, there could be no better way for an individual or a company to better the cause of General Engineering than to contribute to such a fund. Besides being tax deductible, such a contribution is a good public relations item. These last mentioned advantages are certainly secondary, but are part of the whole picture. Any questions, comments or donations (!) should be directed to:

> Professor Jerry S. Dobrovolny Head, Dept. of General Engineering Room 117, T.B. University of Illinois Urbana, Illinois

Meanwhile, our Gamma Epsilon honorary has concocted the idea of writing a script and producing a movie describing General Engineering, showing prospective students what we are, our philosophy toward educating our students, and just what a student can expect while here, and when seeking a job. The movie would be shown primarily at high School "College Day" programs, where representatives from the University visit high schools and ex-

plain the various types of educational opportunities at the University of Illinois. There are other good uses to which the movie could be put. We are equipped with script writers, actors, technicians, several directors, and, in fact, plenty of everything except financing. Here is another possibility for those persons or companies seeking worthwhile objects for contributions.

INTRODUCING NEW STAFF MEMBERS

Paul E. Karlstrom

The number of legal beagles in the department has now risen to three. Paul E. Karlstrom, a Champaign attorney, now teaches one section of Engineering Law. Paul is a native of Peoria, Illinois, moved to Rankin, Illinois at an early age, and graduated from high school in that town. In 1950, he received his Bachelor of Law Degree from the University of Illinois. He is an accomplished musician and earned his way through school by running his own orchestra. Presently, he devotes most of his spare time to his family. Paul and his wife, Doris, have three boys, Ronald, Scott, and Kirk. All of the boys are in scouting and Paul is active in this work as a scout father. Music is still one of Paul's main interests, and he professes to be an average dub in golf and bowling.

Monte L. Phillips

We are pleased to welcome Monte L. Phillips, who comes to us from the staff of Ohio Northern University. Previously, he taught at the University of North Dakota where he earned a B.S. and M.S. in Civil Engineering. Monte intends to study for a Ph.D. in soils here at the University. He has attended summer institutes at Oklahoma State University, and the University of New Mexico under grants from the National Science Foundation. Monte and his wife, Niomi, are

both from North Dakota, and may have some complaint about our lack of invigorating cold weather. Their daughter, Terri is a year and a half old charmer. Monte would hunt, fish and play handball if he had any spare time. He has already proven himself a valuable member of the department bowling team.

Professor V. P. Borecky

With us for the year is a distinguished Visiting Professor, V.P. Borecky, originally from Prague, Czeckoslovakia, and now Associate Professor at the University of Toronto. To list the background of this gentleman would occupy several pages. He holds degrees from the Technological University of Prague, Faculte des Sciences of Caen, France, and the University of Toronto, including a Ph.D. from the latter. He has had many years of experience in the aircraft industry, was a self-employed consulting engineer for a number of years, and was employed as assistant director of research for the Swiss National Welding Institute.

Pat, as he prefers to be called, now has two textbooks in preparation, dealing with projective and descriptive-geometry. He is the author of innumerable articles on the subject, and has presented papers at several meetings and conferences in Canada and the United States.

Professor Borecky argues that engineering graphics has lost prestige because it has not kept pace with the advances made in other areas of engineering and science. This need not have been the case, since exploration of many higher concepts of engineering graphics still remains to be done. As an example, he cites the potential of projective geometry as a contributor to engineering design by computor. While here at Illinois, Pat plans to complete

his textbooks and, with the assistance of various members of the G. E. Department, to delve further into the higher techniques of engineering graphics. He believes the end result will be a renewed interest by both students and graduate engineers in the study of engineering graphics and its application to all manner of problems.

A devoted scholar, Professor Borecky, also firmly believes in physical exercise. He is a tennis player of no mean ability, and uses what free hours he can find for outdoor life of one type or another. He speaks six languages fluently and can read several more.

Since last fall, seven men have been added to our staff as part-time assistants. All of these gentlemen are pursuing advanced degrees of one type or another. Albert F. Puttlitz, found his way here from New York (N.Y. State Ag. & Tech., Instr., Rochester, Inst. of Technology, Syracuse University, IBM Federal Systems Division) via Michigan (Michigan College of Mining and Technology). He has earned three degrees on the way and is now studying for a Ph.D. in TAM.

Two budding barristers, both G. E. graduates, are Champ W. Davis, '63, and Dennis Schlemmer, '61. These boys have not been able to find legal angles on protractors but are earning law degrees while teaching part time.

The MBA program has attracted two men who also manage to find time both to study and to teach. They are Edward C. Wahl, '63 and Norman H. Smith '60, both products of our G. E. Department. To complete the list, John Schlafer and Jerry C. Swalley are both graduate students in Mechanical Engineering, seeking M. S. degrees, and teaching drawing.

NEWS FROM ALUMNI

Our feeling of security has increased

with word from Randal Smith, 61' MBA'63, that he is in the army. After working for Pittsburgh Plate Glass Company in Cumberland, Md., for six weeks, Randal made a temporary change in employment and now is an Ordnance Officer at Fort Lee, Va. He will soon transfer to Letter-Kenny Army Depot, Chambersburg, Pa. He is one of our outstanding graduates of recent years, and taught part time in the department while earning his M.B.A.

<u>Donald L. Alesch</u>, '59 now has the position of Contract Administrator with ITT-Kellogg.

Stan Felderman,'57 was married recently, but that is the extent of our information on the big event.

A newspaper article describing the crash landing of a Delta-Dagger Jet intercepter last August listed the pilot as Lt. Thomas Walker. Tom, class of 1960, apparently came through unscathed.

We appreciated a letter from Myron J. Bernard, '56, presently a project engineer for Sach's Electric Corporation St. Louis. He has participated in a wide variety of electrical installation jobs in connection with commercial and industrial construction. His words of advice to graduating engineers are especially meaningful because they come from a person acutally working in industry and not from a college professor conducting classes. In Myron's words, "Perhaps one of the most important facts the college graduate should realize is that the college or university acknowledges his successful completion of a prescribed course of fact manipulation. The young neophyte should venture forth being aware of how unlimited his future is, but at the present, how utterly useless and unproductive he is to his new employer due to his complete lack of experience." Myron also has some comments on the lack of practical approach to problem solving

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in the last semester courses of engineering curricula. We have made progress in our G. E. design sequence along these lines (see elsewhere in this newsletter) and find this is representative of the best current thinking on the subject among educators teaching design. One need only bear in mind the definition of "engineer" in order to justify this approach.

NEW MEMBERS IN HONORARY

Gamma Epsilon, the honorary fraternity for General Engineering students, initiated 5 new members in a ceremony and banquet last May. In recognition of their scholarship, leadership, and extra-curricular activities, the following students were admitted to membership:

Warren Broll, Chicago, Illinois
Ron Hausch, Chicago, Illinois
Joy Lovelace, Carbondale, Illinois
Constance Mayer, McHenry, Illinois
Carl Roegner, Decatur, Illinois

Officers for the year are Carl Roegner President, and Ron Hausch, Secretary - Treasurer.

Did you know that the University of Illinois was the nations leader in numbers of engineering degrees awarded for the year 1961-62? (Figures for 1962-63 should show a comparable situation.) A total of 669 baccalaureate degrees, 327 M. S. degrees, and 94 doctorates were granted.

Last year the College of Engineering was involved in 439 separate research projects. Of these 131 were supported by University funds and 308 were sponsored by outside sources.

THE "NEW LOOK" IN DESIGN COURSES

Engineering educators are in general agreement as to the goals of engineering education. The student should be given a sound background of fundamentals, an opportunity to pursue technical electives according to his needs and desires and a liberal exposure to socio-humanistic courses. In the process he should develop the attributes of initiative, resourcefulness, independent thinking, and the ability to continue study on his own. The real problem is in determining by what means these goals can be accomplished. A trend appears to be starting toward courses for upperclassmen that permit them to attack practical problems on their own. In the G. E. department this is exemplified by G. E. 242, the senior design course. The students, having had three previous semesters of basic design, are permitted to work on design projects of their own choosing. Invariably, problems are encountered which have no answer in the previous experience of the students, and they must resort to whatever sources of information are available to dig out the answers. Last spring some of the projects undertaken were:

Water Supply Distribution System
for a Small Community
Packaging of Aluminum Shingles
Automatic Foot Scraper and Cleaner
Portable Log Splitter
Automated Device for Measuring,
Weighing, Stamping and Charging
for Mailing of Parcel Post
Packages
Device to Feed Coupons into Empty
Soap Cartons

Judging from the enthusiasm of students and staff alike, this course is proving to be both popular and effective. People from industry who have heard the course described are also giving it nods of approval.