



# GENERAL ENGINEERING NEWSLETTER

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

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Mrs. Bartholomew (left) presents plaque to Professor Wilson.

## GRACE WILSON HONORED

GRACE WILSON, Professor of General Engineering, was honored by the Ladies Auxiliary of the Champaign County Chapter of the Illinois Society of Professional Engineers. The Auxiliary established "The Grace Wilson Award" in recognition of her energetic leadership for many years of the University of Illinois Student Chapter of the Society of Women Engineers. Professor Wilson has maintained unusual student-faculty rapport with coeds off-campus as well as in typical campus functions.

Professor Wilson is a registered architect, and joined the General Engineering Department in 1946.

The Grace Wilson Award, a check for \$50 and a certificate, will be presented annually to an outstanding woman graduating from the College of Engineering, Urbana-Champaign campus. Selection is based on scholarship and involvement in student activities. Karen Sue Gladhill of Gibson City, aeronautical engineering, received this year's award.

Mrs. Charles L. Bartholomew, president of the Auxiliary, presented the plaque to Professor Wilson, and the award to Karen at the National Engineers Week dinner late in February.

## GENERAL ENGINEERING INTERN DESIGN PROGRAM – DESIGN EXPERIENCE AT THE UNDERGRADUATE LEVEL

Much has been happening lately in terms of cooperative design activity between student-faculty teams representing the Department of General Engineering and local, state, and nationally-based industry-design activities. As part of G.E. 242, PROJECT DESIGN, and G.E. 393, SPECIAL PROJECTS, seniors are having opportunities to work with practicing design engineers on problems of current interest in real industrial settings. The intern design program has been a growing activity in the Department, and all senior students are invited to work on projects sponsored by industry.

Dr. ROLAND L. RUHL, G.E. 242 chairman, explains the course philosophy as containing many components, the most important being provision of a synthesizing design experience to complement traditional classroom design instruction. While the course does not cover a fixed program in a classical area of engineering, each project involves applying engineering science and analysis to solve design problems.

No two projects are the same and usually neither students and team members nor sometimes their faculty advisers have had any specific previous experience. Instead, they must draw upon their educational background and research ability to solve the problem. This represents an extremely real-life situation where students must continue learning and filling inevitable gaps in their training on their own.

Fortunately, students work closely not only with their advisers from the Department but also with engineers from industry assigned to the projects. In many respects, experience in working on a project is a valuable "trial run" of what they can expect to face as a new engineer in industry.

Several differences exist between the current intern design program and traditional project design courses. First, the carefully-selected problems are all sponsored by industry and are pressing questions the companies are interested in getting solved. Second, each company has committed both personnel and money to develop the projects with anticipated usable, possibly patentable, results. Thus, company engineers are assigned and financial support is provided for each project.

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## DEPARTMENT HEAD CONTINUES TECHNICAL EDUCATION LEADERSHIP

### SSTP 1973

The University has received a fourteenth successive grant of \$15,908 to support a pre-college Student Science Training Program under Professor JERRY S. DOBROVOLNY's direction. The program has been extremely successful in attracting qualified students to engineering, not only at Illinois, but at other institutions. Working with Jerry in the guidance of the project will be Dr. DAVID C. O'BRYANT and Dr. GORDON C. MARTIN, while other faculty and staff of the Department and College will participate in specific offerings. Normally, about 40 high school students are selected for the six-week session between their junior and senior years.

### President-elect of ISPE

Professor Dobrovoly has been named President-elect of the Illinois Society of Professional Engineers, to take office at the annual June convention. He has long been active in numerous ISPE activities, both at state and local levels. He has served as President of the Champaign County Chapter and for the past two years as a Vice President of the Illinois Society.

### Chairman of Task Force for Higher Board

Finally, Jerry has been appointed task force chairman to develop a master plan for teacher preparation in occupational education. This commission comes from Executive Director, James B. Holderman of the State of Illinois Board of Higher Education. Professor Dobrovoly has had a long and distinguished record in preparing teachers of engineering technology. Further, through his work with the State Advisory Council on Vocational Education and the National Advisory Council on Vocational Education, he will be able to provide the broad perspective necessary for meaningful planning. The task force is to submit its report by June 1, 1973.

### RESEARCH ON ENERGY USE CONTINUED BY HANNON

Dr. BRUCE M. HANNON, Assistant Professor of General Engineering and Staff Member of the Center for Advanced Computation, is continuing his study of energy use. Already completed is a large matrix model, representing power consumption and employment demands for 400 United States industrial and commercial sectors for 1963.

An additional grant for \$34,100 has been received from the Ford Foundation's Energy Policy Project to apply the above model in testing more than ten specific energy-conserving consumer choices, such as the use of buses for transportation instead of automobiles in urban areas.

## CONRY RECEIVES INSTRUCTIONAL AWARD

THOMAS F. CONRY, Assistant Professor of General Engineering, has been chosen to receive an Undergraduate Instructional Award for the Summer of 1973. The purpose of this Award program at UIUC is to improve instruction at the undergraduate level. Accepted proposals represent innovative approaches to education beyond updating of present courses.

Dr. Conry's proposal was for the development of design systems and casebooks for G.E. 241, Component Design. During this summer he will develop material for the design course to supplement existing texts.



Thomas F. Conry



Harrison Streeter

## STREETER SPEAKS ON PRODUCT LIABILITY

Dr. HARRISON STREETER ventured south of Green Street on campus, away from the protecting influence of engineering surroundings, to lecture in Humanities 199, a class in Law and Society. Harry stressed "Product Liability." Farther afield he also talked to one session of the Engineering Seminar Series of the Peoria Area Continued Technical Education Program.

Late last fall Dr. Streeter read a paper at the Human Factors Society's annual meeting in Los Angeles. There he described the "Influence of Static and Dynamic Displays on Inspection Performance."

## PLECK ATTENDS MEETING, REPORTS RESEARCH

Dr. MICHAEL H. PLECK attended the IEEE "Workshop on Quantized Computer Graphics Systems" held at Argonne National Laboratory November 14-15, 1972. Later in the month, he presented a paper on "Decelerative Cutting of 6061-T9 Aluminum, 65-35 Brass and TPE Copper with Constant Impact Energy" at the Winter Annual Meeting of ASME held at the Statler Hilton, New York City.

## WOZNIAK CONTINUES INDUSTRIAL RESEARCH

Continuing his research for the Woodward Governor Company of Rockford, Dr. LOUIS WOZNIAK has been studying hydro-generating systems and working on development of an electric solenoid type actuator. His activities in power-related fields have also produced interesting student projects. In G.E. 242, Lou advised JEFFREY C. COLLINS ('72) and JOHN M. WARREN ('72) in a project for optimal allocation of natural resources. At the 103 level, Lou has guided TOM TOBIN and other freshmen in the construction of a modern windmill electric generator to provide residential power. A large working model of this aeromotor was displayed at Engineering Open House.

## OUR G.E. SECRETARIAL STAFF

Over the years we have told you about the academic staff and students in the General Engineering Department but said nary a word about the secretarial and clerical staff who have served us so loyally. Mrs. CLARENCE HALE (ETHELMAE) joined the department as secretary in August, 1964. In 1968 she was advanced to administrative clerk with the responsibility of keeping a record of all the funds of the department, both income and expenditures.

With September, 1962, Mrs. JAMES BUTLER (MARI-LYN), a clerk-steno III, came into this department to handle the additional stenographic work that developed from the statewide growth of JETS. She was advanced to secretary in 1966. Her duties now include not only management of the JETS office but also all office work for the NSF Summer Program sponsored by the Department for beginning high school seniors.

Miss PEGGY DeWITT came to the department as a clerk-typist III in September, 1966. She was advanced to the position of secretary in 1970. As such, she is in charge of the typists and assigns the work — running errands, typing, operating the various office machines, and other forms of office work.

The other three members of the clerical staff are all clerk-typists III. Miss PATRICIA K. STONER joined us in June, 1972, Mrs. RAY WEAVER (JANET) in January, 1973, and Mrs. ROBERT BIEHL (KATHY) returned to the department in October, 1972. Mrs. Biehl had worked with us from April, 1970, to February, 1971.

These six women comprise the secretarial and clerical staff of the General Engineering Department. A fine, capable, hardworking staff it is, too.

## TRUST FUND

Recently our Department established an investment fund, the earnings from which will presently provide for only a segment of our ongoing scholarships and awards to undergraduates. Alumni and friends are encouraged to assist the Department through their gifts. Please send your donations to the General Engineering Trust Fund, University Foundation, 224 Illini Union, Urbana, Illinois, 61801.

INTERN DESIGN — Continued from page 1 . . .

Currently, the Department has completed or is engaged in approximately 20 investigations. Sponsors include Clark Equipment, Mark Twain Marine, Beloit Corp., FMC, Industrial Nucleonics, Woodward Governor, Northern Illinois Water, USI Chemicals, Eli Lilly, Revere Copper and Brass, Chrysler, Ford, Universal Bleacher and IBM. Results of such joint efforts are evident in the quality of the final projects, displaying as Dr. Ruhl notes, "enthusiasm and professional pride on the part of the students." Further evidence is the four national design awards in the Lincoln Foundation Design Competition for Undergraduates won by General Engineering students in the last five years.

Other direct benefits to the University and to the State as a public service component of the University's mission are evident. First, such activities provide an effective link between engineering education and engineering design activity. Considerable interest exists in industry to become involved in a productive way with design education, as evidenced by comments at the *First Conference on Engineering Design Education in Undergraduate Study* held by the Department two summers ago. Over 50 design leaders and engineering administrators from within the state and from as far away as New York and California came to discuss innovations in and contributions to engineering design education. So successful was that conference that a second such meeting is planned for this spring.

Another gain worth noting is the chance for the University to provide leadership in highly technical areas for which many regional companies in the State have no specialized personnel or other ready access.

Recent design of a control system to control automatically the stern drive-angle of inboard-outboard watercraft, preventing propeller "cavitation" during high-speed turning maneuvers, is a case in point. This work was done for Mark Twain Marine, West Frankfort, Illinois. Important is the fact that advanced students in General Engineering have an adequate system-dynamics background to solve such a problem, while Mark Twain does not have enough of this type of work to justify a full-time engineer adequately trained in control theory.

Results include both help for the company in its effort to produce a safer boat, and a real-life design experience for the students, complete with "on-the-lake" testing. Other recent efforts in technical public service include three projects with USI Chemicals and Revere Copper and Brass Co. to help these Illinois-based plants reduce manufacturing noise levels to comply with requirements of the OSHA (Occupational Safety and Health Act).

## STUDENT ACHIEVEMENTS



Ben J. Sliwinski



Thomas W. Tobin



Diane De Marco

### GENERAL ENGINEERING SCORES TWO FIRSTS IN OPEN HOUSE DISPLAYS

The 1973 Engineering Open House contest for student projects brought double success for General Engineering. Two displays were given first prizes in their respective categories.

The first display was built by THOMAS W. TOBIN, a freshman, and explored the feasibility of building a more efficient device to harness wind for generating electric power. The investigation was begun as a group design in the fall semester G.E. 103, and Tom is continuing the work this spring as a special individual problem. The model is a Savonius wing rotor and was entered in the category 'Engineering in Today's Society'. This is Tom's second round at a first prize. In high school science fair he injected green dye in eggs to win for hatching green chicks.

In the category 'Research,' BEN J. SLIWINSKI, a junior, presented a simulation for fear and aggressive behavior of two individuals constrained to move rectilinearly. The simulation was implemented on the Department's EAI 580 analog computer. Ben programmed the computer and gave the individuals decision-making capability by using digital logic elements. The project originated as a special problem in G.E. 221. Ben is gifted with rather astute engineering perception in the area of dynamics. He is presently considering more advanced studies and simulations of train-braking systems, traffic control, and ball lightning.

Dr. LOUIS WOZNIAK was adviser for both projects and is very pleased with the outcome. Lou contends that no matter what project or which student, his advising will score a winner. However, he does admit that Ben and Tom's initiative and talent may have helped a little. Professor Wozniak has been negotiating with both winners for a portion of each one's thirty-dollar take. This special allocation is intended to finance a 'liquid refreshment-powered rectilinear encounter'.

### G.E. COED is "CO-OPING"

DIANE De MARCO, '75, from Morrison, is a co-op student with NASA Flight Research Center at Edwards Air Force Base, California. Diane worked there last fall in the acoustics department on a project concerned with determining the effect of aileron materials and angles on noise produced by several types of aircraft engines.

Data were recorded on tape and run through a computer. Diane put the resulting information on graphs. After careful briefing by the supervisor as to the purpose of the graphs, she was then expected to help analyze and compare the curves. This project is part of the government's Short-Takeoff and Landing Program aimed at reducing to established standards acoustic pollution from planes.

Diane learned quite a bit about noise theory. She enjoyed this work as a learning experience but does not care to continue it for any length of time. In June, she will go back to the Flight Research Center for eight weeks. She can go to the same project, but prefers to broaden her experience by going into simulation work. In this project, a computer is used to provide data on flying conditions for use in designing new planes or training pilots to fly special test missions without personal hazards.

Next fall, Diane will come back to the University but will return to the Research Center in January, 1974, for the spring and summer. In the fall of 1974, she will start her last college year, receiving her degree in June, 1975.

On the basis of her experience, Diane considers the co-op program a beneficial learning and training activity for any engineering student, male or female.

### STUDENT NOTES

Two coeds from the G.E. department, ADRIENNE F. HODANICK, '74, from Chicago, and DIANE M. DeMARCO, '75, Morrison, were among the princess candidates for Queen of St. Pat's Ball. Unfortunately, neither won.

## SENIOR PROJECT TO BE PRESENTED AND PUBLISHED

A G.E. 242 project dealing with optimal allocation of fossil fuel resources among selected industries has recently been accepted for publication and presentation this coming June by the Summer Computer Simulation Conference. The project was suggested to JEFFREY C. COLLINS and JOHN WARREN by Dr. LOU WOZNIAK and was completed in June, 1972.

During his free time from driving his plush van to California, Florida, and Colorado, Jeff has been busy preparing the manuscript for publication. He has also been accepted for graduate school at Berkeley and plans to matriculate in September assuming he can make it back in time from a planned trip to Europe.

John Warren accepted an engineering position with the Lamp Construction Co. in Elgin, Illinois, for whom he has worked in previous summers. Both Jeff and Lou plan to visit Montreal for the conference.

## G.E. 103 NOW DESIGN-ORIENTED

Starting last fall, students taking G.E. 103 found that once a week for the full semester they were not involved in graphics but rather engineering design with an appropriately specialized instructor. Projects were varied in content, depending upon both instructor and student interests. Typical were an automatic grape-picker, feasibility of a self-contained electrical system using waste-water in tall buildings, ocean tides as possible sources of energy. Some projects were investigated by teams, others by individuals.

Questionnaires filled out by the students indicated that they felt that the course gave them a better idea of what engineering is all about. They also thought the experience would be useful in their future college and professional work. The experiment is, of course, being continued in this spring semester.

## ISGE NEWS

In February, Mrs. Pauline Chapman, Director of the Engineering Placement Office, was guest speaker. She spoke on "The Do's and Don'ts of Interviewing," and discussed sign-up procedures, how to prepare for a campus employment session or plant visit, and what kind of questions to expect. Finally, she answered specific student questions. Her discussion was a great help in preparing seniors for their interviews, and she also assisted those who wished to interview for summer jobs.

On the 24th of March, ISGE challenged the GE faculty to a bowling match. Both groups met at the Arrowhead Lanes for the confrontation, with the faculty hoping to continue their winning streak. The final score showed ISGE squeaking by, however, in a hotly-contested 31 to 30 decision. The faculty will just have to wait until next year!

Also in the line of athletics, ISGE is preparing to participate in an all-Engineering basketball tournament to begin early in April. The group is also planning a faculty-ISGE softball game and picnic.

## KNIGHTS OF ST. PAT

Three students in General Engineering were named Knights of St. Pat in recognition of services to the college and the community. Those so honored were ROBERT B. BURNS, Jr., '73, from Carmi; ROBERT J. NOVARIA, '73, of Green Bay, Wisconsin; and KARL J. SCHAULIN, '73, Gardner. All three have maintained better than 4.0 all-university standing, with Novaria having very close to a 5.0 grade-point.

Burns was chosen for service to and leadership in his dormitory unit. In addition, Bob found time to serve as a high school mathematics tutor for Volunteer Illini Projects and chairman of the engineering tutoring program sponsored by Gamma Epsilon this year.

Bob Novaria's activities included Illinois Society of General Engineers, the student chapter of Illinois Society of Professional Engineers, Gamma Epsilon, and his social fraternity.

Participation and leadership in his dormitory, social fraternity, the U. of I. Chorus, Gamma Epsilon, Illinois Society of General Engineers, Engineering Council, and the College Educational Affairs Committee led to Karl Schaulin's selection.

## GAMMA EPSILON

Ten new members were inducted into Gamma Epsilon last fall. The group, all Illinois residents, included DAVID A. BECK, '73, Barrington, JOHN C. DANNENFELDT, '74, of Rockford, MARK R. FELDMAN, '74, from Danville, LARRY I. GOLDEN, '73, of Niles, HAROLD D. HARZ, '74, Park Ridge, MICHAEL E. KERR, '73, Urbana, NEAL C. NEALIS, '73, from Dwight, DENNIS G. SADOWSKI, '73, Chicago, KARL J. SCHAULIN, '73, of Gardner, and JAMES W. SMITH, '73, from Glenwood.

This year the members of Gamma Epsilon have undertaken a service project in which they work with a class of students at Urbana Junior High School. Mr. Robert Hesler, Urbana instructor, has his students working on the design of a hypothetical residential community, covering all aspects of its planning, layout, and construction. Gamma Epsilon members serve as consultants and advisers, working several hours a week directly with the class. The benefits and enthusiasm generated by this relationship have been both mutual and substantial.

ROBERT B. BURNS, Jr., '73, from Carmi, and KATHRYN A. DAVIS, '74, of Avon, have served the honorary as president and secretary-treasurer, respectively, for this year.



Jim Marconnet (left) and Stan Avramidis discuss the planetary gear set.

### MARCONNET STEPS FROM SENIOR PROJECT TO EMPLOYMENT

An industry-sponsored senior design project has led directly to employment by that company of one of the student team members. The Link-Belt Chain Division of FMC Corporation, Indianapolis, needed a planetary gear set for an unusually rugged application. During the Fall 1972 semester JAMES E. MARCONNET, Tonica, PAUL D. CAPONI, Oglesby, and SAM L. ANDERSON, Mount Vernon, accepted the project under the direction of Stan A. Avramidis, Director of the Technical Center for FMC. Dr. L. DANIEL METZ served as faculty adviser.

The team set out to design and analyze a planetary gear set under the specifications of small overall system size, relatively high transmitted loads, and high operational speed. The project included putting together a mathematical model of the gear set to simulate and analyze various proposed designs.

The transmitted and dynamic loads on the gears were modeled, permitting calculations of other design parameters, i.e., bearing loads, tooth stresses, carrier pin size. Several alternate solutions meeting the basic design criteria were generated and analyzed with the aid of the computerized model. The FMC Corporation then selected one design, built a prototype, and subjected it to testing.

Upon graduation in February, Jim Marconnet went to work immediately at the FMC Technical Center. His letters indicate he is learning much, is very busy, and is really enjoying industry.

### G.E. STUDENT SENATOR

JAMES W. REDLICH, '74, from Champaign, was elected undergraduate student member of the University's Urbana-Champaign Senate from Unit D of the College of Engineering. He defeated another G.E. student, Lawrence R. Kienzler, '74, of Springfield, and Philip S. Abrahams, '75, Skokie.

### G.E. STUDENT EXTOLS BIO-ENGINEERING OPTION

As a curriculum, General Engineering has flexibility as one of its chief assets. A graduating senior, JOSEPH J. SARMIENTO, Olympia Fields, is very enthusiastic about this characteristic. In fact, he is so happy about the advantages of combining engineering and the biological sciences that he is eager to encourage other students to follow the same path.

Until now, bio-engineering has not been set up as a formal undergraduate curriculum. Hence, Joe feels that General Engineering offers an excellent approach, especially when the prospective student is unsure which aspect of engineering he wishes to combine with biology or medicine. First and foremost, General Engineering provides a solid foundation in the engineering sciences and, second, allows the student to take life sciences as a secondary field. Joe recommends Biology 110-111 sequence since this is highly competitive and provides a very thorough background in the biological sciences.

Joe has found now that he wants even more extensive study, so he is earning dual degrees in both biology and engineering through the combined Engineering-LAS program. In addition, he has been accepted for medical school this fall.

This is the most challenging option for the bio-engineer to continue his studies in medical school, for which engineering is excellent preparation. The entrance requirements are extremely tough, however, and the selection process quite unpredictable. A cumulative grade-point average between 4.4 and 4.6, medical college aptitude test scores in the 80th percentile or above, and a wide range of student activities starting from the freshman year, though, will usually give a reasonable chance for admission. Joe emphasizes that the medical schools consider the work of *all four years* rather than just the last 60 hours as do most graduate programs.

Another option opened to a bio-engineer is research. Joe would advise that each student select his own special interest by the senior year, because concentration of effort will be necessary for graduate studies. Specialization is unavoidable, too, because most biological systems of any significance are extremely complex. For example, if the student decides to investigate and describe the function of the mammalian liver in any great detail, he must be an expert in control theory. This is true because the liver is a highly complex feedback system with multiple variables.

### "PROJECT PEORIA" EXPANDS

The Engineering Seminar Series offered to the technical professions in Peoria this winter has proved such an overwhelming success that a similar program will be available during '73-'74 in Springfield.

Prof. BERNT O. LARSON has announced the topics for the six seminars in Springfield:

1. Management systems
2. Management styles
3. Pollution and power systems for the future
4. Legal liability — OSHA
5. Transportation systems
6. New materials for construction and industry

For additional information contact—

J.C. Metzger, Regional Director  
 Division of University Extension  
 403 Iles Park Place  
 Springfield, Illinois 62718

### SECOND DECADE OF LIFE MEMBERS

Last spring our NEWSLETTER carried the names of "pioneer" life members graduated during the 20's. Below are the names of General Engineers who were in school during the second decade of the department's history, the 30's, and who are life members of the Alumni Association. Congratulations!

- |     |                        |                          |
|-----|------------------------|--------------------------|
| '31 | Henry D. Camino        | Pompano Beach, Florida   |
| '31 | Stanley T. Radenz      | San Diego, California    |
| '31 | Harold B. Wishart      | Pittsburgh, Pennsylvania |
| '32 | Abraham S. Harlib      | Chicago, Illinois        |
| '32 | Joseph L. Tourtelst    | River Forest, Illinois   |
| '35 | Oliver C. Parmely      | Bellaire, Texas          |
| '38 | Robert W. Dalrymple    | Denver, Colorado         |
| '38 | Eugene H. Pitsch       | Des Moines, Iowa         |
| '39 | Robert E. Johnson, Jr. | Park Ridge, Illinois     |
| '39 | George S. Trees        | Oak Brook, Illinois      |

### PLEASE! WHERE ARE THESE WANDERING ALUMNI NOW?

Help is needed to supply present whereabouts and mailing addresses for some of your friends and classmates. Last fall's NEWSLETTER sent them was returned marked "no known forwarding address."

Can you do something for us—and them? Put us in touch again? Last known address

- |                    |     |                         |
|--------------------|-----|-------------------------|
| Arthur G. Blomberg | '68 | APO Seattle, Washington |
| John D. Cochran    | '70 | Morton, Illinois        |
| Donald D. Doherty  | '61 | Reston, Virginia        |
| Peter F. Koch      | '55 | Wilmette, Illinois      |
| James P. Krakora   | '70 | Chicago, Illinois       |
| Robert N. Merrill  | '58 | Chappaqua, New York     |
| Samuel G. Schwab   | '47 | Forestville, Maryland   |
| Harold R. Trout    | '60 | Cypress, California     |

A word of thanks to those who sent in the new addresses for five of the alumni listed as missing in the fall NEWSLETTER. That's a third of the job done! Let's now find a trail for all the rest!

### TWO-WEEK SUMMER PROGRAMS

(JETS) Junior Engineering Technical Society will again conduct their 13th Annual two-week summer program at Urbana, June 24—July 7, 1973. The curriculum enrolls students between their junior and senior years in high school who would like to explore the study of engineering.

The fifth Inner-City Engineering Orientation Program will also be held on the Urbana campus from July 8—July 21, 1973. This conference strives to acquaint black high school students with opportunities for minority groups in engineering. The past four programs have been most successful, with a high percentage of the participants enrolling and succeeding in colleges of engineering.

Both programs are directed by Professor D. C. O'BRYANT.

### ALUMNI NEWS

'39 ERNEST P. REKLIS retired in February upon completion of 30 years with the U.S. government. At retirement, he was plant engineer for the supersonic wind tunnels laboratory, Aberdeen Proving Grounds, Maryland.

'41 DONALD L. FAULL is vice president, Construction Division of American Standard, with offices in Phoenix, Arizona. Don is in charge of all construction of military, FHA, HUD, joint-venture, and high-rise projects for 10 Western and South-Western States.

'48 ARTHUR L. VINEYARD is management consultant for George S. May International, with home office in Park Ridge, Illinois.

'51 JAMES H. CHAPPE is a test safety officer for the Manned Spacecraft Center, NASA, in Houston. He enjoys the systems work in the space program and still finds time to do occasional consulting for industry.

'52 RALPH E. RECKA is marketing manager, Industrial Equipment Division, Westinghouse Electric Corporation. Ralph is located in Sykesville, Maryland.

'54 LEAVITT A. PETERSON is located in Pittsburgh, Pennsylvania, where he serves as director, applied research, for the Bessemer and Lake Erie Railroad Co. With two other railroad executives, he is co-author of a paper "Measurement and Analysis of Wheel-Rail Forces" which won the ASME Rail Transportation Award in November, 1972.

'57 WILBUR L. KNUTSON works as project engineer for Stubbs, Overbeck and Associates in Houston, Texas.

'58 PAUL W. LANDGREN, after receiving his MBA degree in 1962, was employed by the Chicago office of Arthur Anderson & Company, international public accounting firm. Paul is in the consulting division, specializing in computer systems. In 1969, he transferred to the company's Tokyo office, and in 1972 was taken into partnership. He plans to return to the United States later this year.

# ALUMNI NEWS

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'59 GERALD B. PODLIN received his Master of Education degree from the University of Illinois in 1963. He is now manager of Systems Support for the Admiral Corporation in Chicago.

'61 GEORGE C. SHER is regional sales manager for Litton Datalog, working in Studio City, California.

'61 RANDAL M. SMITH has risen to assistant superintendent, Plate Tank and Float Department, for PPG Industries, Inc., in Cumberland, Maryland. Randal and his wife have two children, Julie and Eric.

'63 CHARLES H. THOMAS earned his J.D. from DePaul University in 1970, and is now patent attorney for the Nuclear Chicago Corporation, subsidiary of G.D. Searle & Company.

'64 JAMES R. SACHTSCHALE moved from San Francisco to the Los Angeles area about a year ago to work for AESI. This is a small company (about 45 highly-talented employees under 30 average age) involved in automotive emission research and control. Jim is project manager for the many contracts of his company with the Environmental Protection Agency.

'65 PETER F. HAYS has been transferred by Owens-Corning Fiberglas to their Toledo office where he has become a sales engineer.

'67 DENNIS J. CALLAGHAN received his MBA in 1969, and went to work with Theodore Barry & Associates in Philadelphia. He has recently been promoted to Senior Associate (Management Consultant) and transferred to the southern California area. Presently, he is in charge of consulting studies involving industrial engineering techniques applied to planning production, warehouse, and office facilities.

'67 ROBERT M. SULLIVAN earned his MS from the University of Michigan in 1971. He is employed as a R & D engineer with the Gulf General Atomic Corporation in La Jolla, California. He married Barbara Hanley (Zoology '67) in 1968, and they have a two-year-old son Brian.

'69 GARY R. ALLIE completed his MBA in 1971 and is now working as an engineer for Inland Steel Company in East Chicago, Indiana. He is responsible for calculating costs of new capital projects and for preparing formal documents for presentation to the company board of directors requesting authorization to spend these capital funds.

'69 LEROY C. BASHA served as navigator, USAF, during two combat tours in Southeast Asia. During this time he received 20 Air Medals and a Distinguished Flying Cross. He is now attending pilot training at Moody AFB, Georgia, with rank of Captain.

'69 JOHN F. FUNK is a field applications engineer for the Westinghouse Air Brake Company, Construction and Mining Equipment Group, in Peoria.

'70 RICHARD B. HOFFMAN is presently in his last semester of law school. He is working with the Chicago Firm of Horton, Davis, McCaleb & Lucas, Attorneys specializing in patents, trademarks, and copyrights.

'70 PAUL S. LITHERLAND is serving in the Civil Engineer Corps, U.S. Navy, as officer in charge of maintenance and repair for Great Lakes Naval Hospital. In June, 1972, Paul was married to Christine Natale of Rockford (MS Library Science, '71).

'70 DENNIS L. POLHILL worked for the City Engineer in Urbana, and has now moved to Cumberland, Maryland, where he is Public Works Engineer.

'71 DANIEL T. GALLAGHER completed his MS in Environmental Engineering last October, and is currently a consulting engineer with Alden E. Stilson and Associates in Columbus, Ohio.

'71 JOHN A. TURNER has been working for the E.P.A. (Environmental Protection Agency) in Springfield for about a year now. John and Karen also announce the birth of a daughter, Kelley Anne, in April, 1972.

'72 MICHAEL J. RIZZO worked on a G.E. 242 project sponsored by Industrial Nucleonics, and then joined that company upon graduation. Now Mike has moved to the Hinsdale office and finds time to drop by the C-U campus during business trips downstate.

'72 ALLEN P. SCHWARTZBERG married Francine Leventhal immediately after graduation, and then began working for the General Electric Company in San Jose, California, in the fall.

'72 DOUGLAS A. FRISKE married Marian P. Dudley (Advertising '71) shortly after graduation. He is now a half-time research assistant studying towards his MS at the Rosentiel School of Marine and Atmospheric Science, University of Miami, Florida.

'72 DAVID J. MITCHELL is working as a mechanical engineer for the U.S. Army Foreign Science and Technology Center in Charlottesville, Virginia. Dave began his work in September, 1972, and says that it is very interesting and challenging.

'72 RICHARD N. TANNER has been working as a field engineer for the Square D Electric Company in Shreveport, Louisiana.

'72 JEFFREY F. VOELZ is a test engineer in the engine laboratory of the International Harvester Truck Division in Fort Wayne, Indiana. He is involved in test and development work on several new high-displacement/power gas truck engines. This work is necessitated by the EPA and Federal emission regulations imposed upon heavy-duty truck classifications.