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ROY S. CARVER RECEIVES ILLINI ACHIEVEMENT AWARD

In recognition of his significant contributions to the University and his community, ROY S. CARVER (GE '34), Board Chairman of Carver Industries, Muscatine, Iowa, has been given the Illini Achievement Award for 1974. He has also received the Distinguished Service Award from the University of Iowa and was recently named Man of the Year by the Quint-City Lodge of B'nai B'rith.

Roy Carver's keen sense of timing and awareness of technical and market possibilities have enabled him to realize large returns from small investments. Full in the face of the 1930's depression, he successfully launched the Carver Pump Company on \$100 capital. While working as technical assistant to State of Illinois Purchasing Agents, he had been assigned to evaluate self-priming pumps. He realized that he could design and produce a better pump. A year later he had done just that so well he was able to get a \$140,000 order from the British Purchasing Mission.

When the United States entered World War II, he was told to expand into all possible space because military orders would soon be coming. So from his brother's garage work-bench he moved to an abandoned sauerkraut factory in Muscatine, Iowa, still headquarters for all Carver enterprises.

Always alert for new opportunities, on a post-war European trip Roy saw a unique West German process for hardening sand cores and molds. He placed an order with the firm and began testing, steps which soon resulted in formation of Carver Foundry Products to introduce the new method to the U.S. market.

Two years later, while touring Germany again, he saw and became interested in the products of a new cold-cure process of retreading automobile and truck tires. Greatly impressed, he located the inventor, Bernard A. Nowak, and purchased North American rights for the Bandag procedures. In 1961, after the developer's death, Roy added world rights.

Developed and improved, Bandag cold-bonded retreads became popular with large users of truck, bus, and industrial tires. In six years sales shot from eight to 80 million in 1973. Bandag tread, pre-cured at extremely high pressures, is very dense and resistant to punctures and cuts, with



Roy S. Carver

extremely good traction and long life. Low-temperature on the road bonding, however, avoids damage to tire bodies. Applications are currently being made to automobile, aircraft, and heavy equipment tires.

Recently another Carver enterprise has been started — Heavy Duty Parts, Inc. an organization which will specialize in rebuilding and distributing replacement elements. Most recent departure for Roy is a radical one — Carver Tropical Products, Inc. This group will raise fruit, vegetables, and cattle on a 44-square-mile tract in British Honduras.

Beyond being a diversified industrialist and active in community affairs, Roy is an accomplished linguist and a highly-rated jet pilot. Realizing the business need to know foreign languages, Roy made himself fluent in Spanish, French, and German. He travels regularly to Bandag overseas facilities, often piloting his own plane. He is one of relatively few senior executives to fly actively and hold a first pilot's certificate for jet aircraft.

Carver and his wife Lucille have four sons and he has a daughter from a previous marriage. He serves on the Board of Directors for the First National Bank of Rock Island, Illinois, the University of Iowa Foundation, Augustana College, and the University of Illinois Foundation. Roy is also active in civic and special organizations, and holds membership in the National Aeronautic Association, Aircraft Owners and Pilots Association, BPOE, Muscatine Chamber of Commerce, Illowa Council of Boy Scouts of America, and Geneva Golf and Country Club.



Bernt O. Larson

AWARD ESTABLISHED TO HONOR BERNT O. LARSON

In recognition of his outstanding contributions to the development of integrated engineering design education, the Department of General Engineering is establishing the Bernt O. Larson Project Design Award in General Engineering. The Award will be presented annually to the senior student project design team judged by the faculty as producing the best engineering design during a particular academic year.

Professor Larson has been an inspirational leader to both faculty and students in his pursuit of excellence in engineering design education. He has been a leader in the movement since 1959 when the first committee was organized to develop the integrated design sequence of courses that were subsequently taught beginning in 1961. In the past seven years, student project designs have been submitted for national competition in the James F. Lincoln Arc Welding Foundation Award Program for Progress in Engineering Design. General Engineering student design projects have received awards in this competition six out of the last seven years. Professor Larson was the faculty advisor to four of the six winning teams.

The Bernt O. Larson Award Fund has been established in the U of I Foundation with an initial gift by the faculty of the Department of General Engineering honoring Professor Larson on his retirement in recognition for his almost 37 years of service to the University of Illinois. Others wishing to contribute to this award fund may do so by mailing checks payable to the U of I Foundation Bernt O. Larson Award Fund, 224 Illini Union, Urbana, Illinois 61801. The first award will be presented at the Department of General Engineering Awards Dinner in the spring of 1975.

COMPUTER MODEL FOR BEARING BEHAVIOR

Dr. Thomas F. Conry spent this past summer as a NASA/ASEE Summer Faculty Fellow at the Lewis Re-



Barbara C. Johnson '46

BARBARA JOHNSON ADDS MORE LAURELS

BARBARA CRAWFORD JOHNSON (GE '46, Mrs. Robert H.) was honored by the Society of Women Engineers at their annual meeting in June. She was presented their Achievement Award which is the highest tribute given by SWE.

The award recognized significant contributions to engineering by a woman in the field of engineering practice, research, education, or administration. It has been conferred each year since 1952, and consists of membership for life in SWE, Award Pin embodying the emblem of the Society surrounded by a wreath, and a certificate setting forth the award. Mrs. Johnson has worked her entire professional career with the Space Division of Rockwell International in Downey, California. She had the responsibility for mission-related system activities in support of Command and Service Modules. For the past year she has been Manager of Mission Requirements and Integration for the Space Shuttle programs.

In 1968 Mrs. Johnson was appointed System Engineering Manager for mission-related system activities in support of Command and Service Modules. This was the highest position ever held by a woman at the Space Division of Rockwell International. In 1971 she was presented the Medallion of Honor Award by the Mothers Association on the Urbana-Champaign campus. This award was in recognition of her outstanding achievements in her professional career as an engineer combined with her role as a homemaker. In 1974 Mrs. Johnson was one of three recipients of the Gamma Epsilon Distinguished Alumni Award.

search Center and Case Western Reserve University in Cleveland, Ohio. His summer project was to describe the dynamic behavior of very high speed roller bearings for application in high speed gas turbine engines and to write a computer program to numerically solve the resulting differential equations. After this phase of the project is completed, the theoretical results will be compared with experimental data.

As engine speeds go higher and higher, it becomes more necessary to predict the dynamic behavior of machines before expensive hardware is built and long testing programs commenced.



MINING OPTION REVISION

Development of a revised undergraduate program in the mining option in General Engineering has been recently announced. The first fall meeting of ISGE on September 18 was devoted entirely to the subject of careers in the coal industry in Illinois.

Amax Coal Company provided light refreshments for about fifty students and staff who met in the Illini Union Building to hear young engineers from the coal industry talk about their jobs. Steve Gartshore, Staff Engineer for Consolidation Coal Company (Du Quoin, Ill.) showed some outstanding slides of mining projects and problems and fielded numerous questions from an interested audience. Larry Harton and Fred Von Kennel (Amax Coal Company, Indianapolis, IN) also showed slides and discussed the great demand for engineers in the coal industry.

Professor George R. Eadie announced plans to take interested engineering students on a field trip to visit both surface and underground coal mines in southern Illinois. A bus has been chartered to make the trip October 26. Field trip participants will have an opportunity to see coal mined underground, on the surface, and to observe coal being upgraded in a coal preparation plant before it is shipped to the consumer.

UNDERGRADS IN INDUSTRY DURING SUMMER

NATURAL GAS PIPELINE CO.

DIANE ZIELINSKI was employed as a student engineer for the Natural Gas Pipeline Company of America, which transmits gas from Texas and surrounding regions to the Chicago area, and sells it to various distribution companies (e.g., Illinois Power, Northern Illinois Gas) along the way.

UNION CARBIDE CORP.

TOM TOBIN was employed in Tonawanda, N.Y., by the Linde Division of Union Carbide Corporation. This proved to be an excellent opportunity for him to find out what a large corporation is like and to talk with professional personnel who have been with the company for many years.

Tom's responsibility within the Wastewater Treatment Group was data reduction of a pilot plant study. He believes that the experience has broadened his outlook on the specific courses currently being studied. Tom is a junior from Park Forest.

INTERNATIONAL HARVESTER

MARIANNE ANDRASEK spent her summer at a drafting board with International Harvester's Research Center at Hinsdale. Chiefly she did detail work, but occasionally design. After that job she has decided that drafting is not for her, so now she is seriously considering pursuing a MBA degree. Marianne, president of ISGE and past editor of TECHNOGRAPH, is a senior from Oak Lawn.

CYNTHIA HODANICK had her first contact with industry when she worked this summer at International Harvester's Hinsdale Center. She felt that the experience on the drafting board provided an excellent opportunity for her to see the progression of an idea begun by a designer move through development stages culminating in an experimental model built in the shop. She has glimpsed the engineer's role in the real world.

Cynthia found that the people with whom she worked were friendly and willing to answer her many questions about the company as well as about her assignments. Cynthia is a junior from Western Springs.

PROCTER & GAMBLE

GREG KONNEKER worked for Procter & Gamble in their Summer Engineering Management Program at their Chicago plant. He was assistant mechanical manager in the Packing of Synthetic Granules Department, learning the duties of the manager as well as working on two different engineering projects within the department. Greg emphasizes the excellence of this summer program, giving both the company and the future engineer the opportunity to look at what each has to offer the other. Greg, president of Gamma Epsilon, is a senior from Carlinville.

WOODWARD GOVERNOR COMPANY

JON HENDERSON worked in the Corporate Engineering Department of Woodward Governor Company in Rockford. He worked directly under Professor LOUIS WOZNIAK, consultant, on performing digital simulations of hydroelectric turbine transients. He developed an improved data reduction system for the turbine characteristics. Jon is a junior from Olympia Fields.

NATIONAL RECOGNITION FOR SENIOR DESIGN PROJECTS

General Engineering 242, Project Design, is the capstone course in the design sequence in the Department of General Engineering. It provides an opportunity for the student to work with fellow classmates under the guidance and direction of departmental faculty, consultants from other departments, and industry representatives. It is also an opportunity for the student to apply his educational experience to the development and synthesis of engineering design. General Engineering 242 attempts to provide for the student the greatest degree of latitude in the selection of projects and to allow him to proceed in as independent and creative a fashion as possible.

The Department of General Engineering entered GE 242 undergraduate design projects in the James F. Lincoln Arc Welding Foundation Contest, for the past seven years.

Projects are judged and winners determined on the basis of the following criteria: originality, feasibility, engineering competence, and results achieved or expected in product performance or cost.

I. In 1968, a project entitled "Design of a Vehicle For Expressway Operation For a Quadriplegic" by Gary Fariss and Burr Logeman was awarded a second-place and shared a prize award of \$1,000.

II. In 1970, a project entitled "High Speed Mass Transportation From O'Hare Field to Midway Airport" by Andris Maneks, and James Harris won a second-place award in the structures division and shared a prize of \$1,000.

III. In 1971, a project "Elastic Springback in Rolled Sections Cold Formed in a Die" by John A. Turner, Ronald Rutger and Charles Fellman won a fourth-place award and shared \$250.

IV. In 1972, a project entitled "Improved Braking System for Paraplegic Wheelchairs" by James J. D'Orazio, Scott L. Jeffrey and David K.C. Robbins won a second-place award in the manufactured products division and shared a prize of \$1,000.

V. In 1973, a project entitled "Bridge Replacement for a Deteriorated Sewer Line Crossing" by W. Peter Siems won a fourth-place award in the structures division and shared \$250.

VI. In 1974, a project entitled "Design of a 50-ton Guyless Derrick" by Kathryn A. Davis, Andrew M. Stefanik and Marvin C. Wildenradt won the first-place award in the structures division, with a prize of \$1,000.



50-TON
GUYLESS
DERRICK

DESIGN OF A 50-TON GUYLESS DERRICK

Project Team: Kathryn A. Davis, Andrew M. Stefanik, and Marvin C. Wildenradt/Fall 1973

Sponsor: Chicago Bridge and Iron Company, Oak Brook, Illinois

Advisors: Bernt O. Larson and Morris Scheinman, General Engineering

This project involves the design of a 50-ton guyless derrick utilizing modified existing component parts of other derricks. The proposed structure is unique in size, configuration, and load capacity. The derrick is to be 270 feet high and support a 90 foot boom. The upper 60 feet of the tower, which supports the boom, is cantilevered from the guyed point of the tower. A swivel at the foot of the boom and top of the mast permit the boom and rigging to rotate 360° about the center of the structure.

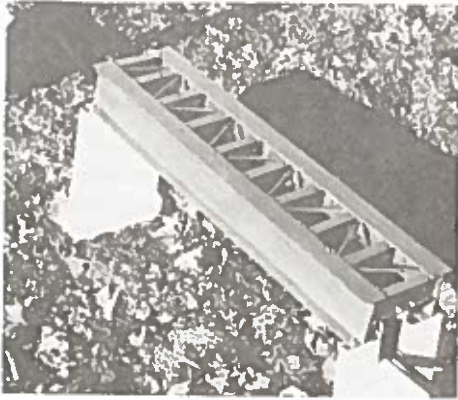
The design procedure involved the determination of structure geometry, derrick analysis and recommendations for modification of members to accommodate increased loadings. Evaluations of alternate solutions and revisions that might be considered in the design of future rigs are included. This project won first place in 1974.

VEHICLE FOR EXPRESSWAY OPERATION BY A QUADRIPLEGIC

Project Team: G.B. Fariss and B.W. Logeman/Spring 1968

Advisor: M. Scheinman, General Engineering

The project laid the basis for the development of a personal self-operated vehicle for a severely handicapped individual. Electrohydraulic servo systems, operated by a single lever, provide steering brake and throttle control. Entry and exit of an electrically powered wheelchair and its occupant is provided. This project was awarded second place in 1968.



A balsawood model, shown above, about 3 feet long and 5 inches deep, served as a part of the final report from Pete Siems' design project.

BRIDGE REPLACEMENT FOR A DETERIORATED SEWER LINE CROSSING

Project Team: W. Peter Siems/ Fall, 1972
 Advisor: Bernt O. Larson, General Engineering

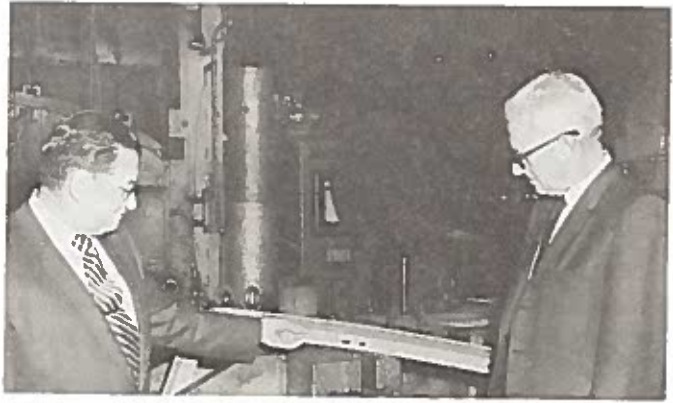
This project required the evaluation and design of an economical replacement for a deteriorated sewer line crossing. Erection of the replacement structure must be accomplished without disturbing the existing 16" cast iron bell-and-spigot sewer line, its influent, or existing piers. Technical, economic, and aesthetic design criteria were developed and used to evaluate a truss bridge, beam bridge, suspension bridge, plate girder bridge, and an arched bridge. Results of a loading analysis indicated a Beam Bridge was the most economically desirable solution.

Besides meeting all of the technical design criteria which were established, provisions were made for the new all-welded bridge to be shop-fabricated. Upon arrival at the site, the welded unit would be lowered onto newly constructed concrete end abutments. Exact vertical positioning of the pipe would be accomplished by tightening adjustable hangers; thus, the pipe could be uniformly lifted from the crumbling structure without leaking sewage and contaminating the stream. After using a transit to check the pipe's vertical position at each of its new supports, the old bridge and its eroded piers would be demolished. This project won fourth place in 1973.

ELASTIC SPRINGBACK IN ROLLED SECTIONS COLD FORMED IN A DIE

Project Team: Charles W. Fellman, Ronald Rutger, John A. Turner/Spring 1971
 Advisors: Charles Gebhardt, Caterpillar Tractor Co.: O. Sidebottom, Theoretical and Applied Mechanics; M. Scheinman, General Engineering

The conventional "trial and error" procedure in die design for the cold bending of rolled shapes is replaced by a compact, efficient computer program which determines the actual die radius needed to attain the desired cold formed shape. This project was awarded fourth place in 1971.



Charles Gebhardt (left), Staff Engineer and Paul Benner (right), Chief Engineer, Decatur Plant Caterpillar Tractor Co., discussing problems involved in cold-forming curved structured shapes.

HIGH SPEED MASS TRANSPORTATION SYSTEM FROM O'HARE FIELD TO MIDWAY AIRPORT IN CHICAGO, ILLINOIS

Project Team: Andris Maneks and James Harris/Fall 1969
 Advisors: Bernt O. Larson, General Engineering; Edward Fraser, Chicago Bridge & Iron Works

A feasibility and economic study was made of a high-speed mass transportation system to transfer passengers and baggage between O'Hare Field and Midway Airport. This system would make it possible to reduce substantially flight operations at crowded O'Hare Field and place Midway Airport back in service. It became apparent during the study that a new mode of transportation would be required. As a result of the study, a Gravity-Vacuum Underground Transit system was found to be economically feasible and that High Speed Gravity Transportation Systems would help alleviate the mass transportation crisis that faces our large cities. This project won second place in 1970.

IMPROVED BRAKING SYSTEM FOR PARAPLEGIC WHEELCHAIRS

Project Team: James J. D'Orazio, Scott L. Jeffrey and David K.C. Robbins/Spring 1972
 Advisors: Herbert J. Sprengle and John P. Hipkind, General Engineering

During the past five years G.E. 104, Design Methodology, has been taught as an introduction to the methodology of project design, emphasizing teamwork, creative problem-solving by group brain storming techniques, and effective communication of research development results through both written and oral reports. The class is divided into teams of three students each to carry out the final design from selected project proposals.

Working together on such a team D'Orazio, Jeffrey and Robbins developed an improved braking system for paraplegic wheelchairs. With the cooperation of the University Rehabilitation Center, their braking system was installed on a conventional wheelchair and thoroughly tested. What is unusual in this case is that these three students were freshmen when they sent in their entry. This project won second place in 1972.

JETS SUMMER PROGRAMS

Three Junior Engineering Technical Society (JETS) summer programs were conducted on the Urbana Campus. The regular two week JETS program hosted 48 participants, including seven girls. The six-week program included 22 boys and four girls. Both of these programs were very well received by all the participants, with the majority indicating that they were considering an engineering career.

The first MITE (Minority Introduction to Engineering) program was held for two weeks this summer. The program is one of ten programs across the country which was patterned after the Inner-City Engineering Orientation Program which has been held on our campus since 1969. The Illinois MITE program was funded by I.B.M., and had 12 participants, including 3 girls.

In addition to directing these three programs, several members of the Department of General Engineering were involved in the programs. They were Professors J.S. Dobrovolny, G.E. Martin, L.D. Metz, D.C. O'Bryant, and M.H. Pleck.

SUMMER PRE-COLLEGE SIX-WEEKS' PROGRAM

Did you ever wonder whatever became of previous participants?? This fall there are nine members on the UIUC campus who attended the six-week program in the summer of 1973, one from Pennsylvania and all the rest from Illinois: Dave Bradley from Carthage; Bryan Demaree from Rushville; Paul Garcy from Shiremanstown, Pa.; Therese Hendricks from Chicago; Bob Linka from LaGrange; Ron Rugel from Edwardsville; Jim Sarmiento from Olympia Fields; George Sullivan from Lansing; Tom Williams from Chicago.

G.E. CO-EDS

The co-ed enrollment throughout the entire College of Engineering now stands at 226, of which 196 are undergrads and 30 are grads.

This count is just about double that of 1973-74 year.

We especially welcome these freshmen co-eds in our own Department of General Engineering: BETH E. ANDERSON, Palatine; GAYLE A. DALUGA, Riverdale; JUDITH B. DOLHOP, Joliet; SHARON C. EWELL, East St. Louis; ELAINE M. FINNEY, St. Joseph; KAREN M. FITZGERALD, Pleasant Plains; DENA L. GILL, Bone Gap; DANA J. HALCOMB, Mahomet; JULIA G. KEHRLE, Buffalo Grove; RENEE G. LARSON, Joliet; VICKI L. LEONARDI, Aurora; PATRICIA A. McGUIRE, Oak Park; KAREN A. MOELLER, South Elgin; KERI A. MORIN, Ashland; KATHLEEN L. OFFIL, South Holland; ELLEN S. PABST, Bellwood; MARIAN F. PLECKI, Chicago; SANDRA D. SHERROD, East St. Louis; JANE A. SMITH, Farmer City; SHARON M. STEFANIK, Arlington Heights; TERI J. TAMMARO, Chicago; PAULETTE A. TRAYNOR, Rockford; MARIE A. WIRSING, Cissna Park; VERA E. ZIEGLER, Winfield.

FEATURING OUR G.E. FAMILIES

BIRTHS

A daughter, Jennifer, was born in March, 1972, to Ronald and Jeanine Rutger. (Ron is GE '71.)

A son, Jeffrey Todd, was born in September, 1973, to Dennis and Kristine Lane. (Dennis is GE '72.) Their first child, Tom, is five, with the two birthdays only three days apart.

Jayson Michael was born in January, 1974, and adopted by Mr. and Mrs. Rodney J. Baudino. (Rod is GE '71.)

A daughter, Sharon Dyane, was born in April, 1974, to Thomas and Linda Lord. (Tom is GE '67.) The name Dyane comes down from her maternal grandmother.

MARRIAGES

McCLELLAN – BARTZ

ALLAN T. BARTZ (GE '73) married the former Gail McClellan (UIUC '72) in June, 1974. General Engineering alums were plentiful in the wedding party: EDWARD A. BARTZ, Jr. (GE Feb. '69, brother and best man) Itasca, Illinois; DAVID A. BECK (GE Dec. '73) Durham, N.C.; and DOUGLAS A. FRISKE (GE '72) Coral Gables, Fla. Gail hailed from Mt. Prospect, was a member of Kappa Kappa Gamma Sorority, and earned her degree in LAS.

SCHMOLDT – GAINES

JAMES W. GAINES ('75) married the former KATHLEEN C. SCHMOLDT ('75) early in September. These two General Engineering students decided to put their heads together to test out the hypothesis that two can live more cheaply than one (GE 288 might attend to this).

Both students are in the Air Force and will become commissioned second lieutenants upon graduation from the University. Beware, Uncle Sam, as there will soon be two Lt. Gaines' to keep up with!!!

FUCHS – PHELAN

TERRY PHELAN (GE '72) married the former NANCY FUCHS (UIUC '73 Architecture) during August, the ceremony taking place in the bride's hometown of Farmersville, Illinois. Both the bride and the groom are in graduate school in Urbana, Nancy working for her MS in Architecture and Terry working for his MS in ME in the field of Thermal Systems.

GAVENDA – BRODNICK

DONALD E. BRODNICK (GE '74) married the former MARY ANN GAVENDA early in August. The wedding took place in Steger, Illinois, where the bride had been raised. Don is now pursuing graduate studies in bioengineering, and Mary Ann is working as the secretary for the Twin City Bible Church, Urbana.

HOLECEK CONVERTS HOBBY INTO BUSINESS

Bruce Holecek, General Engineering Class of 1971, was recently elected President of Tower Hobbies, Inc. Located in Champaign, Tower Hobbies Inc. is the largest mail order company of radio-controlled model airplanes in the United States.

After graduating in 1971, Holecek entered the Graduate School in Business Administration at the U of I. While in his first year of graduate studies, he decided to combine his hobby and his desire to be in business for himself.

Starting with \$800 in savings, Holecek placed his first mail order ad in a model airplane magazine and purchased an extremely limited inventory. The results were disastrous.

The \$20 ad failed to bring in any orders. Only 12 people responded to the ad, and those were only requests for more information. Feeling quite dejected, Holecek's first reaction was to call it quits and use the inventory for his own use.

Fortunately, a Board of Directors meeting was held to examine the situation. Holecek related the disappointing results to his father, Frank Holecek, (Mechanical Engineering, Class of 1944, U of I, and now President of a Chicago-based manufacturing firm), and his brother, Mark Holecek (then a senior in high school and now a General Engineering student, Class of 1975).

A new game plan was conceived. Bruce would handle the advertising and promotion of the business from Champaign, and Mark would process the orders and make shipments from Chicago.

Success!!! Their first order was received. And so began Tower Hobbies. Not exactly a General Motors yet, but it was a start! Advertising was increased, a price list printed, and gradually the orders became larger and more frequent.

Sales for the first year were less than \$5,000 and no real profit was realized. Confident and optimistic, Holecek saw no reason why 1972 couldn't bring in at least \$20,000 in sales.

Full operations were moved to Holecek's townhouse basement in Champaign. With three employees, Holecek, his wife, and his brother, Tower Hobbies grew and expanded at an unbelievable rate.

At the present time, Tower Hobbies has 22 full-time employees, their own I.B.M. System 3 computer, toll-free phones for customer convenience, and has over 20,000 active customers. Sales for 1974 should exceed the \$2 million mark.

Bruce Holecek claims no magic formula to success. Rather, he believes that hard work, sound advice, and the burning desire to succeed are the necessary ingredients. He claims that the logical thinking and the disciplined ability to solve problems that he learned in engineering are his greatest advantages against his competitors.

ALUMNI NEWS

'25 CLAIRE W. GOODMAN, living in Tucson, Arizona, plans to attend Homecoming next fall to celebrate his 50th class reunion.

'34 JOSEPH M. FIKE, after nine years employment by a steel company, became a consulting engineer for Mobil Oil Company, in which capacity he continued for 31 years. Upon retirement he has moved to Interlochen, Michigan, where he is currently taking courses in electronics "just to keep his mind alert." He notes that very few of his 1934 classmates write in any news because they are probably all retired by now.

'38 EUGENE H. PIETSCH, Sr., and his wife Dorothy, celebrated their 30th wedding anniversary this fall. They have three sons and three daughters, with a combined total of 14 grandchildren. The family is scattered from the Midwest to Hawaii and Texas. Eugene lives in Bolingbrook, Illinois, and works as a project engineer for the Philadelphia-based H.L. Yoh Company.

'38 ROBERT W. DALRYMPLE was a career officer in the army, then taught several years during the sixties in our department. He has just become the Chairman, Department of Civil and Environmental Engineering Technology, at the Metropolitan State College in Denver. Bob has three grandchildren, the youngest being born early this year. His son George is a mechanical engineering student at the University of Colorado, Boulder.

'50 S. DEAN ALBRECHT, president and manager of Albrecht Well Drilling, Inc., of Ohio, Illinois, points out that his son Harold is a sophomore in General Engineering. How about that?

'51 RICHARD W. OSBORNE is manager, Applications and Reliability Engineering, for the RCA plant in Marion, Indiana. The Marion plant is the largest television tube plant in the world. Production has just begun on the new precision in-line tube with the integral cemented yoke in position so that installation in a receiver is nearly as simple as a black and white tube.

'53 JULIUS D. HOLMQUIST is self-employed as a real estate broker in Sacramento, California.

'54 LEAVITT A. PETERSON has been appointed by the Department of Transportation to the position of Chief, Rail Systems Division, Federal Railroad Administration. This division is responsible for FRA's conventional railroad research activities, including safety and improved freight and tract research. Leavitt had previously been the director of applied research for the Bessemer & Lake Erie Railroad.

'56 ALVIN SAMUELS has been associated with the petroleum industry ever since graduation. Working at the New Orleans branch office of Ironite Products Company, Al has become vice-president and manager, Technical Services.

'56 MYRON J. BERNARD has become vice-president for special projects for the Sachs Electric Company in St. Louis.

'57 DOYLE WILHITE still works in the St. Louis area, but now has a new position in a new company. He is director of marketing and planning for the Western Waterproofing Company, Inc. Doyle is now back in engineering related work following 10 years in the pharmaceutical business and management consulting field. He is also acting general manager for Sealants, Inc., a contractor supply company specializing in waterproofing products. His company has 28 branch offices from Florida to Minnesota to California.

'58 JAMES O. SINDT is owner and operator of Park Ridge Stationers, Inc. The Sindts have three children, Jill, 5; Paul, 2½; and Tara, 9 months.

'60 JULIUS E. MONGE has been promoted to manager marketing services for the International Harvester Company, Construction

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Equipment Division, in Melrose Park. Marketing services comprise advertizing, sales promotion, manpower development, product planning, market planning and sales engineering. Julius and his wife Rose Ellen live with their three children in Lake Bluff.

'61 RANDAL M. SMITH was transferred a year ago to the Kokomo, Indiana, plant of PPG Industries. Randal is Manager, Material Control, and has the responsibility for production control, purchasing, labor pool, storeroom, and receiving. He says that anything that is wrong is *his* fault!!

'62 RALPH T. HOCKING is acting chairman, accounting and finance department, at the Shippensburg (PA) State College. He received his DBA from Kent State University in 1972.

'62 GRESHAM T. BREBACH, Jr., after earning his MBA in 1964 at UIUC, went to work for Arthur Anderson & Company, Chicago. His responsibilities deal with large computer systems and software development. Gresh and Judy live in Barrington with their four children, Greg, 9; Beth, 7; Mandy, 5; and Mark age 3.

'64 WILLIAM R. EVANS is data systems sales consultant with the Motorola Communications and Electric, Inc., located in Schaumburg, Illinois.

'65 ROGER A. LARSON is maintenance and engineering manager for Exxon Chemical Company in Pottsville, Pennsylvania. Previously, Roger had worked with General Foods Corporation for seven and a half years. He earned his MBA from Northwestern University in 1971.

'66 CARL E. JASKE has become the associate manager of structural materials section for Battelle Laboratories, Columbus, Ohio. Carl has primary responsibilities for the research on the high-temperature, low-cycle, fatigue behavior of metallic materials used in structural components for nuclear reactors, industrial processing equipment, gas turbines, and aerospace vehicles. He is an active member of the ASME Boiler and Pressure Vessel Committee's subgroup on Fatigue Strength, and working group on Creep Fatigue. He has recently become a registered professional engineer in the state of Ohio.

'67 THOMAS F. LORD earned his MBA from night school at Northwestern University in June, 1974, and is working as engineering manager of construction budget for Illinois Bell Telephone Company in Chicago.

'68 ARNOLD B. BANDSTRA, Jr., completed his MS in Environmental Engineering this spring after four years of part-time study and part-time working at Daily and Associates, Champaign. Army has become a partner in Jerry Lacy and Associates, Kankakee, where he will have the responsibility for all of the water and sewage work.

'68 PHILLIP M. KASIK completed four years in the Navy working for the AEC's division of naval reactors, under Admiral Rickover. He now works for MPR Associates, which is a small consulting firm working principally on projects involving nuclear power and computer technology. Phil adds his thanks for all the encouragement in the Department to take the EIT exam. He is planning to take the PE exam in Virginia this fall and is pleased to have the EIT safely under his belt beforehand.

'68 STEVEN J. STADNICK received his PhD degree in Theoretical and Applied Mechanics this past June, and is now a staff engineer with Hughes Aircraft in El Segundo, California.

'70 SAMUEL C. HOPWOOD completed his MBA at the Urbana campus in 1973 and works as an engineer for The Texas Pipe Line Company in Wichita Falls, Texas. Sam taught both graphics and engineering economics while working towards his degree. Sam and Donna have two children, Scott, 6; and LeAndra, 3.

'70 HERBERT W. LINNE has completed his four years in Naval

aviation, and is now back in Illinois, and looking around for an engineering job. Herb was on sea duty in the Mediterranean theater this past year. Herb and Joyce have a three-year-old daughter Suzanne.

'70 EARL S. MOLDOVAN has become a registered professional engineer, and is active at the state level, serving as the chairman for the Young Engineers Committee of ISPE. He is a partner in the recently formed consulting office of Keefauver, Hillengonds, Moldovan Engineers, Inc., in Washington, Illinois.

'70 BRUCE A. YORK is a project engineer for the Carpenter Rigging and Contracting Corporation in Syracuse, N.Y.

'70 JEFFERY M. MORRIS received his JD degree in 1973 from Washington University in St. Louis. Jeff is now an attorney with Merriam, Marshall, Shapiro, and Klose law firm, specializing in patent, trademark and antitrust cases.

'71 RODNEY J. BAUDINO has been transferred to the Madisonville, Kentucky, plant of York Division, Borg-Warner Corporation. This new plant manufactures residential furnaces and split-system air conditioning units.

'71 RONALD R. RUTGER went directly from graduation to Viet Nam, and is now a civil engineer with the Corps of Engineers in their Peoria office.

'72 TERENCE R. PHELAN graduated in February, 1972 and spent three months on active duty in the army at Ft. Eustis, Virginia. He now holds a commission as lieutenant in the reserves. Going to work for Illinois Tool Works, Terry participated in their training program before taking up duties with the ITW International Division. Here his responsibilities included collecting information and writing reports for use by ITW's foreign subsidiaries. This fall Terry has begun his master's degree studies.

'72 LOUIS J. MANCINI has completed his qualifying exams in operations research for a PhD at Stanford University. His thesis deals with nonlinear programming and its applications to engineering design.

'72 RICHARD A. FORBES is working for the Illinois EPA while pursuing studies for a MS in Thermal and Environmental Engineering.

'72 JEFFREY C. COLLINS earned a MS in CE at University of California, Berkeley, this past August. His studies centered around ocean-coastal engineering. He is an associate engineer with the Exxon Chemical Company in the Los Angeles area.

'72 KENNETH F. VEASMAN works in the capacity of a project mechanical engineer with Holabird and Root, Architects and Engineers, in Chicago. His responsibilities are with heating, ventilation, and air conditioning design for telephone, hospital, and office buildings. Ken points out that he enjoys his work, is still single and happy!

'72 STEVEN L. SWEARINGEN earned a MS in Environmental Engineering from the Urbana campus in February 1973. Now he is an assistant project engineer with the firm of Roy F. Weston, Inc., in Wilmette. Steve has worked on a variety of projects, and found this advantageous experience dealing with different types of process and handling equipment employed in industry.

'72 JOE F. PEDERSON completed his Electrical Technology work at Urbana, and then his EdD in December, 1973, from the University of Kentucky. He has now moved up from his teaching work to become associate dean for occupational education at Skagit Valley College in Mt. Vernon, Washington.

'73 DAVID A. FENGEL joined the Midland Coal Company, Trivoli, Illinois, a year ago as a mining engineer responsible for EPA water and air pollution compliance. This summer he was promoted to production supervisor.