

Lawrence Tech U

V.F.

Lawrence

INSTITUTE OF TECHNOLOGY

Magazine



Pursuing happiness: page 1

Spring 1979

Close-up

Pursuing happiness

"Most folks are about as happy as they make up their minds to be."

—Abraham Lincoln

The pursuit of happiness is a God-given right, according to our nation's Declaration of Independence. But, how many of us really go out and seek it?

Some people make their own luck and their own breaks. A primary purpose of a college, like Lawrence Institute of Technology, is to help people fulfill their personal goals, meet their aspirations, and achieve success and happiness as they define it.

This issue of the *LIT Magazine* focuses on several members of the College "family" who have overcome challenges with a cheerful optimism and zest for living that is refreshing.

On page 1, we are introduced to delightful Barbara Bowden, wife of construction engineering department chairman George Bowden. She's a "typical American housewife" except for one hitch—she's challenged the Himalayas—and won!

On page 4, alumnus Jack Korb, president of the Engineering Society of Detroit and senior vice president of a major contracting firm, comments on his energetic

philosophy of living.

On page 7 we discover, through the eyes of construction engineering student, Mary Weber, the trials and triumphs of a woman in a "man's field."

On page 9, we examine a unique LIT program that's helping high school students broaden their career horizons and



On the cover: *Ah, Spring! With the lengthening days, the countryside awakes. Judging by tracks, ol' Procyon lotor is a nightly visitor to the banks of the Rouge River as it meanders through campus. This delightful rendering of the masked bandit is by Tim Buechle, Pinconning freshman. The original pen and ink drawing was for Ass't. Prof. of Architecture Harold Linton's visual communications II class.*

lay a foundation for academic growth.

All four stories, incidentally, were written by Anne Cattermole, LIT's associate in information services and the new associate editor of this magazine. We hope you enjoy this issue. As always, we welcome your comments.

—The Editor

Coming events

April 28 Alumni Dinner Dance, cocktails at 6 p.m., dinner at 7, tickets \$11 per person, LIT dining room. By reservation only. LIT Alumni Association.

April 28, 29 All-campus Open House, 11 a.m. - 5 p.m. Saturday, 12 noon - 5 p.m. Sunday.

May 5 Black Alumni Dinner Dance, cocktails at 6 p.m., dinner at 7, tickets \$12.50 per person, Engineering Society of Detroit. By reservation only. Assoc. of Black Students.

May 21,22 Registration, Day College summer session. Classes begin May 23.

May 30, June 1 Registration, Evening College, summer session. Classes begin June 4.

May 31, June 4, 6 Registration, Associate Programs. Classes begin June 11.

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Notice of non-discriminatory policy as to students

Lawrence Institute of Technology admits students of any race, color, handicap, national and ethnic origin to all the rights, privileges, programs, and activities generally accorded to or made available to students at the College. LIT does not discriminate on the basis of race, sex, color, handicap or national or ethnic origin in administration of its educational policies, admissions policies, scholarship and loan programs and athletic and other College-administered programs.

The statement above is included in this publication to conform to Federal guidelines: it represents no change in the policy of LIT.

*It is neither wealth nor splendor, but tranquility
and occupation, which give happiness.*
—Thomas Jefferson

TREKKING

Housewife takes Himalayan challenge and ends up 'on top'

"I didn't realize how bleak and forbidding it was until I came home and got my pictures developed," is the summary statement of Mrs. Barbara Bowden, an "average American housewife," as she sits talking about her recent 230-mile trek across the Himalayas, as calmly as most women talk about a trip to their local shopping center.

Mrs. Bowden, age 51, a diminutive 90 lb. mother of four, begins reminiscing in her warm kitchen in Milford, and it's hard to imagine her petite frame keeping up with a young hiking group from the American Youth Hostels—all the way across the world-famous range. But keep up she did—and more—she actually outlasted two of the hikers—one of whom is an experienced mountain climber. The oldest of the regular members of the group, Barbara was also the only one to

escape the "Kathmandu colic," a native disorder closely resembling Mexico's "Montezuma's Revenge."

The adventure began for Barbara as a result of an article in the *National Geographic* about Himalayan trekking parties. She and husband George, chairman of the construction engineering department at LIT, had previously crossed the Chilkoot Trail in Alaska, but Barbara had never attempted any hiking on her own.

"I guess I couldn't believe that an ordinary person like me could do such a thing," she states, "but after reading the article I thought it would be interesting to see if a woman of my age could handle it."

The story gave particulars about the various treks available and just a few

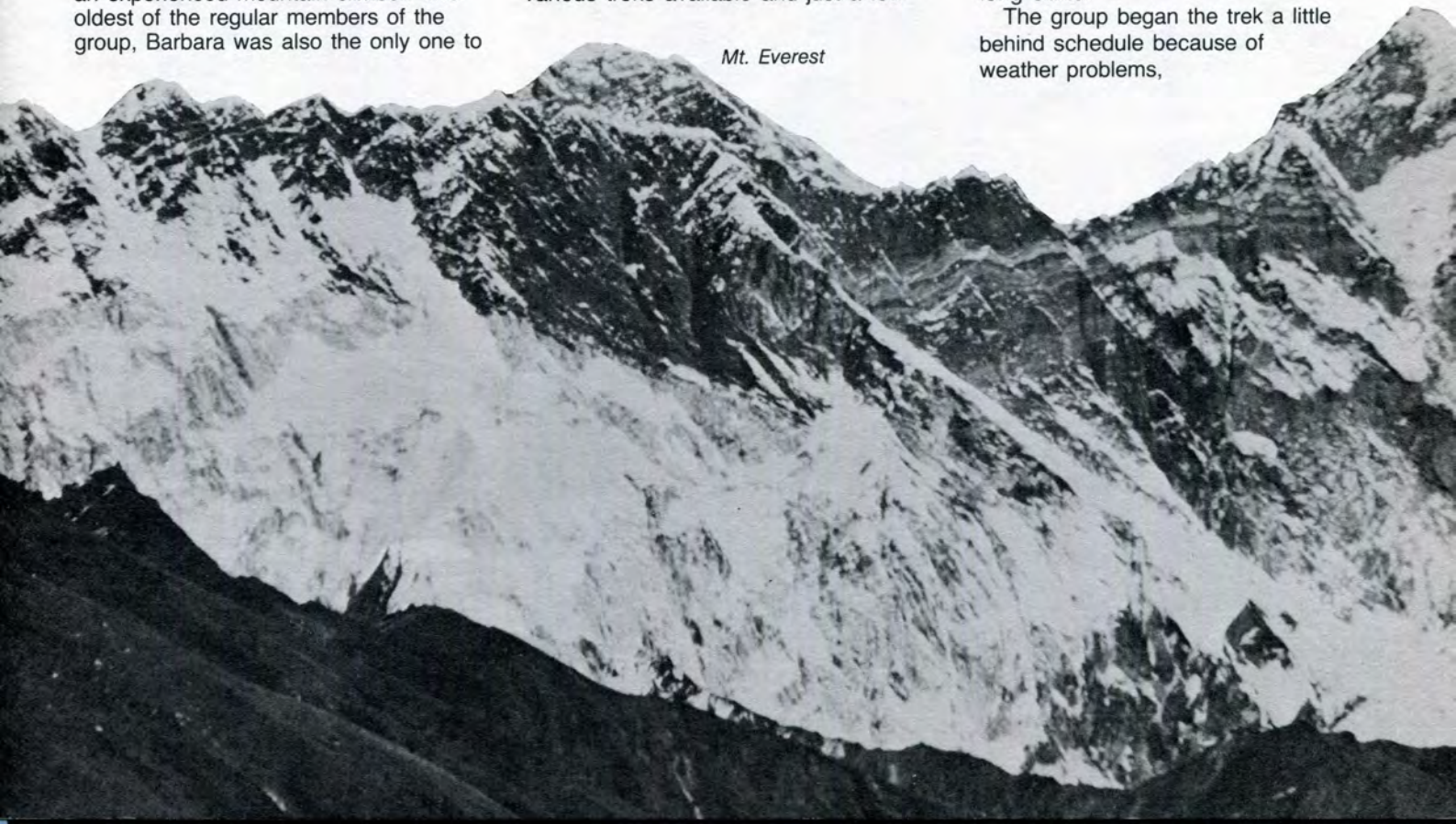
months after it appeared, Barbara had made all the arrangements and was ready to take off on a trip alone which would part her and her husband on their 30th anniversary.

The group was to gather in New York on October 30 and just before leaving Barbara began to have a few misgivings. "I would suddenly say to myself 'Why am I doing this?'—but when the final moment came, I was ready to go and take what lay ahead, no matter what it was."

The first leg of the journey was to India where the 12 people in the group had time for the more traditional type of tourist sightseeing before boarding a local airplane for the trip to Kathmandu, capital of Nepal and the "jumping off point" for the long climb.

The group began the trek a little behind schedule because of weather problems,

Mt. Everest





Barbara Bowden pauses on her 230-mile trek near the village of Pheriche.

though for the most part the temperature was moderate during the early part of the climb. Barbara, like most "westerners" was not aware that the colder climate occurred only at the higher altitudes.

"I truly believed that I would begin the hike and immediately say to myself 'Why am I not back in my nice warm house in Milford?' " Barbara recalls, "but on the first day of the climb when the trail went straight up and I finally reached the top of the incline, I knew I was going to be ok."

One young man had already turned back at this point due to illness, and Barbara believes that her own exceptional endurance was due, not only to the six miles she jogged daily in preparation for the trip, but also to the fact that she had been a vegetarian for about a year.

"The only problems I had during the 20 days of the climb were a continual dull headache from the altitude and an asthma attack one night, even though I had not had asthma for many years. Others suffered from shortness of breath, dizziness, and stomach sickness, including one young man who had decided at the airport in New York that the group would have to drag me along because of my age."

Sherpa guides (local natives) and porters carried the heavy equipment and supplies so each member of the group had only to tote a small pack containing the necessary personal items for that day. Yaks, a local beast of burden closely resembling a buffalo, also accompanied the group and as the altitude increased they bore much of the equipment.

"The porters left the group and descended the mountains when we got into the higher altitudes because the Sherpas are the only people hardy

enough to withstand the upper ranges. They have tiny villages of a few houses all the way along the trail, but even they move down the mountains when winter sets in, around early December," states Barbara.

Each day, the group hiked about 10 miles, climbing higher and higher into the range. A typical day began at about 6 a.m. when the hikers were awakened by the Sherpas with hot coffee and tea. The Sherpa cook and his helpers had already cleared up and were on their way ahead of the group to begin lunch further up the trail.

"The food prepared by the cook was simple, consisting mainly of eggs, potatoes, Indian flat bread cooked in a frying pan and then thrown in the coals to puff up, fresh vegetables and fruits, and canned meat," Barbara relates. "The Sherpas would buy fresh supplies in the small villages and one of the funniest sights during the trip was the cook's assistant carrying a giant basket, filled with eggs, up the mountain. He never seemed to have trouble balancing, and as far as I know, never broke a single egg."

The group also ate yak which Barbara tried even though she maintained her vegetarian diet through the rest of the trip. "The cook brought a large yak leg and for several days he would just cut off a large piece to prepare for meals. It tasted much like beef, but hanging up with the hair and hoof left on, I didn't find it very appetizing," Barbara laughs.

"We passed through many native villages and monasteries," Barbara recalls, "including one where a local religious pageant was going on. It was hard to imagine that this was the real thing and not just something put on for tourists

because the masks and costumes were so vivid and colorful."

Barbara found the local people, and especially the children of the area, of great interest. "Their faces were so bright and full of life, even though to us they would seem to be living in the worst of conditions. The children had little to keep them occupied and were often badly dressed, but they were always happy and found their own ways to amuse themselves, unlike our children who are always complaining about having nothing to do. It's a sad commentary on our way of life when those who have so little seem to be happier than we are," Barbara comments.

On a more amusing note, however, Barbara remembers her experience bartering with some villagers for souvenir trinkets. "Money meant little to the natives—they could do little with it on the mountains—so they always wanted to trade for items which they could use without having to go into the larger cities. I didn't have much with me but I did find something which they were interested in bargaining for."



A holy man solicits coins in Kathmandu.

At this point, Barbara casts a sideways glance at son Carl, a freshman at Michigan State University and the last to leave the Bowden nest, as he listens to her story. "As the temperatures were beginning to decline, I offered some natives a pair of long underwear which I had borrowed from Carl for the climb and they were happy to sell me some souvenirs for them." Carl had obviously not yet missed the bartered item but seemed not to mind the latest of his mother's antics.

Another reminiscence bordered on the bizarre as Barbara recalls the group's experience at a monastery high in the mountains. "The head priest had a spe-

Happiness is like coke—something you get as a by-product in the process of making something else.

—Aldous Huxley

cial box under lock and key which he agreed to show us," she relates, "and when he opened it we found a scalp and a strangely shaped hand with the middle finger extended far beyond the others. The priest was convinced that he was in possession of the remains of a yeti (the abominable snowman), the strange animal which is reported to wander the upper Himalayas. Unfortunately, though, that was all I ever saw of the beast."

The long hike through "yeti country" finally ended at 18,000 feet, just a few miles from the base camp of Mt. Everest, where Hillary and others began their climbs. By this time, the air was thin and cool and the water in the canteens was perpetually frozen. A fog also enclosed the entire area, making further climbing almost impossible.

"Several of us started for the base camp at the end of the hike but the trail became so treacherous and the fog so thick that my tent-mate and I turned back. I'm glad we did because by nightfall the others had not returned and a Sherpa had to go out and find them."

What was the "high" point of the trip for Barbara? "Possibly" as she puts it, "the time when we stepped into a clearing for the first time and the entire range, including Mt. Everest, was there in front of us. It was breath-taking and I remember thinking to myself, 'This is just like Shangri-La!'"

This Shangri-La, however, was a 230-mile climb over treacherous mountain terrain with only the most primitive of facilities. A "paradise" definitely not for the feeble, weak-hearted, pampered, or petted.

"We were unable to wash our hair for the entire trip and showers were nonexistent, so we were pretty grimy by the end of the journey," Barbara relates, but then quickly adds, "But I enjoyed it."

How did Barbara's family feel about her climb? According to son Carl, all four children, two married daughters and two college-aged boys, were behind her all the way. "We had to eat TV turkey dinners for Thanksgiving but we didn't mind because it was pretty neat to be able to tell my friends that my mother was not at home because she was climbing Mt. Everest, even though it was 'just' the Himalayas," he laughs.

Husband George is quietly proud of his wife's accomplishment and kept a copy of her itinerary and a map of the route in his desk during the entire trip, occasionally checking to see where she should be on that date. He is considering returning with her for another climb, this time without a

group, but he's not sure he could handle it. "I can't keep up with Barbara when we're hiking, so I don't know how I'd do on a 230-mile trip over the Himalayas," he confides. "But, her experience was really something unforgettable and I'm glad she was able to do it once by herself."

What made a 51-year-old housewife leave the security of home and family to "go it alone" to Mt. Everest? Because it was there—as the popular saying goes—or was it more? A sense of accomplish-

Happiness is a habit—cultivate it.

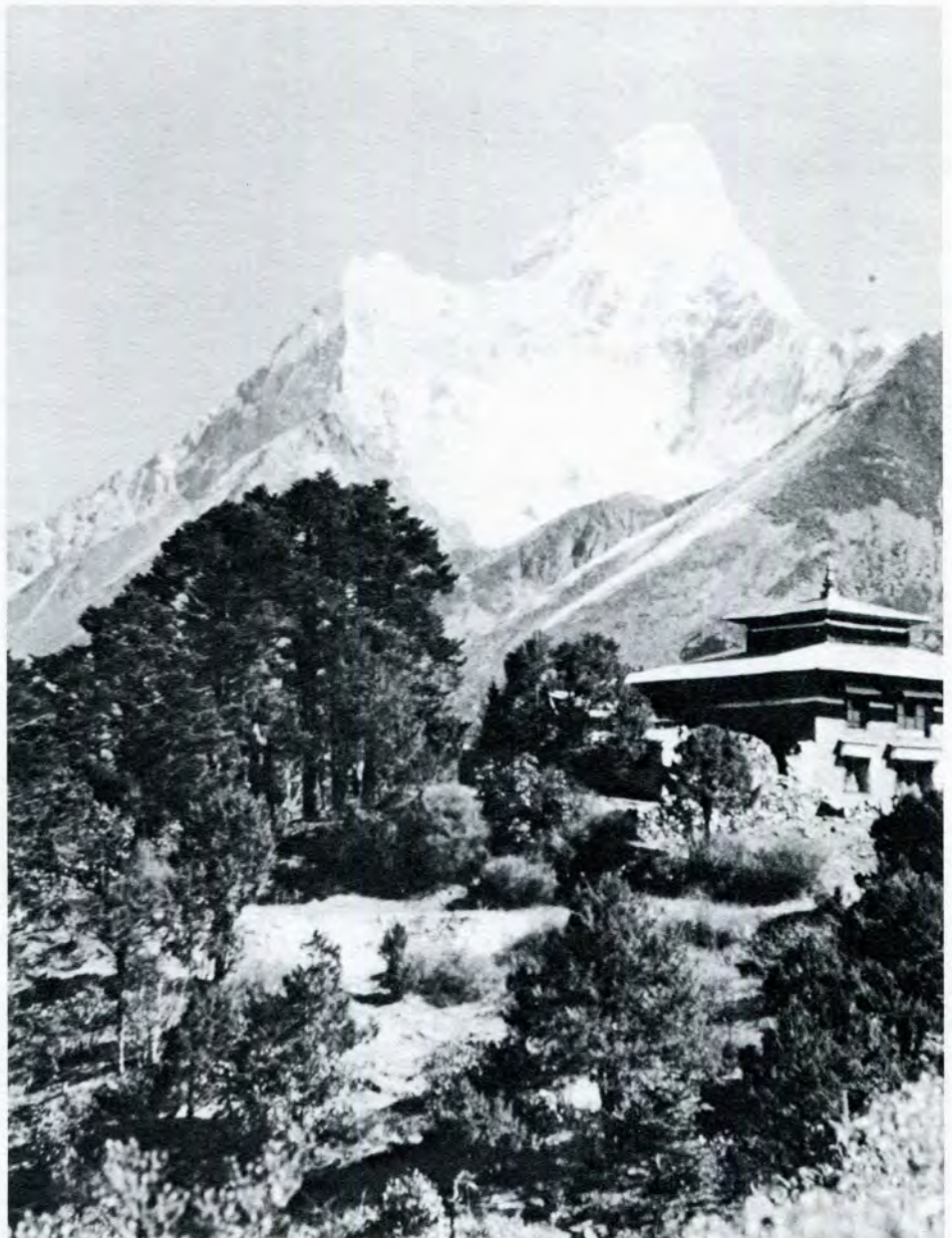
—Elbert Hubbard

ment—a feeling that she can do more than keep house and raise children—or a new belief in herself as a person?

Only Barbara Bowden knows the real answer and she's too busy planning her next adventure to give it much thought. What is it? She's not saying yet, but husband George notes that she's renewed her subscription to *National Geographic*.

□

Photographs by Barbara Bowden



The Thyangboche Monastery, resting in the shadow of picturesque Mt. Ana Dablan, houses the alleged remains of the "yeti."

Building for the future

"An architect might be responsible for the 'birth' of a building but it's the contractor who serves as the midwife," according to Jack Korb, CivE'54, a most remarkable LIT alumnus.

Jack leans back in his chair at the office of Etkin, Johnson & Korb, Inc., contractors in Oak Park, and with only the slightest smile expounds on the immortality of building something which will hopefully outlive you by many years.

"The neatest part of the business is that when I drive around town with my family, they know which buildings 'Dad' built," he relates. "There is a permanence about building things that you don't find in many professions and, at the same time, a chance to become involved with hundreds of people from all over the country."

Being the senior vice president of a major contracting firm, however, was not something Jack set his sights on many years ago.

"It just sort of happened," he relates. "It seems like one day I was enrolled in the Lawrence Institute of Technology civil engineering program and the next, Alex Etkin had announced my appointment as vice president and manager of construction operations."

Jack chose civil engineering because, as he puts it,

"I wanted to do something outdoors to combine my technical background with physical activity. I didn't really give much thought to careers as a youngster. Like many of my peers, my dream as a kid was to be a pilot and all my spare time was spent reading about World War II flyers, current aviation of the Thirties, and making model planes by the dozens."

Planes still adorn Jack's office, the tiny models placed carefully next to the model cranes, bulldozers, and tractors which symbolize both the dreams and daily world of the "grown-up" Jack Korb.

Jack did, in fact, come close to realizing his boyhood ambition after his stint in the Navy as an aerial gunner and crew chief on a twin engine bomber during WWII.

"When my time was up, I gave some

thought to staying on and becoming a pilot, but back then everyone was leaving the service for civilian life and it seemed proper to follow the tide. I didn't seem to know what I really wanted but I felt that aeronautical engineering would be my direction."

So Jack left the armed forces and after a brief stint as an "aero" major he began the long haul toward his civil engineering degree, studying at night and working during the day in the construction trade. In 1954 he was awarded his B.S. in civil engineering at LIT, taking with him a series of memories which sharply outline the problems of a man trying to improve himself and raise a family at the same time.

"I can remember the many long cold work days on a construction site followed by the sleepy evenings in the warm classrooms," he recalls. "Fortunately we had forgiving instructors then because of the large classes and tight schedules."



Korb's (2nd from L) student activities included serving as evening school government V.P.

"One particular instance of my crowded schedule really sticks in my mind," he recalls. "I was late for the final exam in Bill Menzel's class on water supply and sewage. When I finally arrived he told me to have a seat but that I couldn't take the test. When it was over he asked the class if I should be allowed the privilege to take the exam and when they voted 'yes' he decided that it would be an oral test. Everyone in the class fired questions at me. I guess I'm the only student in the history of LIT to be given a final by the instructor and the whole class."

Jack joined A. J. Etkin Construction Co.

in 1960, where his first major assignment was Lafayette Towers, two 22-story structures totaling 630,000 square feet. He has worked on literally hundreds of developments since, including the Honeywell office building in Southfield, the Temple Beth El, the Northfield Hilton, the Southfield Sheraton, Metro Airport's Host International Hotel, and the Center for Creative Studies. But, he still has his "favorite" projects.

"The building that I 'like' best both architecturally and structurally is the United Airlines Terminal at Metro but my favorite because of fond memories and great friendships has to be the Pontchartrain Hotel. It was a challenging structure and a fun job with normal construction problems. But, from the first caisson to the grand opening, I met more people on that job than on any other—friends I've kept through the years."

However, with all this expertise and the scope of the projects he has worked on, Jack still sees some discrimination against contractors in the professional world.

"Some architectural and engineering firms still think of contractors as 'those guys' on the sites with concrete on their boots, pushing a wheelbarrow from here to there. They fail to see the professionals in most construction companies even though our technical staffs are made up of graduate engineers, many of whom are registered. Our own firm has five registered professional engineers and fourteen graduate engineers working here and it really rubs me to hear us talked of as 'only contractors.'"

"We have a great responsibility because with our construction know-how we really have the final say on how a development will look," he goes on. "We have to take the design, put it together and make it work. If the workers have had a bad night or personal problems you may get a building of poor quality, so we have to continually keep both our quality and production standards up and sometimes meet impossible time schedules while doing it."

Jack elaborates further on his pride of profession, "There isn't a better team in any industry; we're a fraternity of mavericks—we don't reflect the grey suit and tie image, preferring to maintain our individuality and distinctive styles. We appeal to the old team spirit and get done what other professions would deem impossible, just because we all pull together."

His own standing in the contracting industry and the community is wide

You have to believe in happiness, or happiness never comes.

—Douglas Malloch



Jack Korb (R) discusses the parking structure his firm is building at Detroit's Renaissance Center with Joe Warren, the site superintendent.

The happiness and unhappiness of the rational social animal depends not on what he feels, but on what he does.

—Marcus Aurelius

reaching. He is currently the president of the Engineering Society of Detroit, is a past president and present chairman of the Detroit City Planning Commission, a member of the State Construction Safety Standards Commission, and a past president of the Michigan chapter of the American Concrete Institute. In addition, he is a member of the LIT Presidents Club, the Detroit area council of the Boy Scouts of America, and an instructor with the Blizzard Ski School staff. He is also serving on the Manpower and Training committee for the Associated General Contractors of America, Detroit Chapter, so it is little wonder he was awarded the LIT alumni achievement award in 1973.

His continual hard work and unselfish sacrifices for others once led Detroit Councilman Nicholas Hood to comment to Jack after a long campaign for Carl Levin, "How do you find time for all this?" Jack's answer is typical of his entire view on life, work, and play. "I find time!"

Extensive activities and years of work experience have also given Jack a remarkable range of personal expertise on the construction industry and the impact of current events on its future.

"Change, both in the nation's economy and in the general lifestyle, is a big factor in the growth of the building industry," he notes. "When things change, new facilities are created and old ones have to be rebuilt. That causes our business to grow. For instance, the Environmental Protection Agency (EPA) tightened their regulations on waste treatment plants so federal funds were suddenly available for massive renovation and new projects. Consequently, our work increased. When the automotive industry went into small car production, the facilities had to be changed and again the construction industry was there!"

"Business has been great for the last one and one-half to two years and hopefully will remain so for the coming decade," he goes on. "We have been restrained by major energy considerations which affect even the production of our basic building material, steel, but on the whole, as long as we can maintain our project time schedules and expedite

'The neatest part of the business is that when I drive around town with my family, they know which buildings "Dad" built.'

needed materials and equipment, I'm not worried about our future."

He does, however, have a pet peeve when it comes to certain types of projects he sees as a taxpayer.

"Government-sponsored developments—they're the real problems," he comments. "There are just too many bosses and no one seems to be able to make a decision; nor do they worry about wasted time or money—after all it's not theirs. In turn the contractor is blamed for added costs and extended time schedules for something that was *not* of his doing."

"The 'red tape' of governmental bureaucracies should be, and are, of major concern to all citizens. Maybe the 'Headlee Amendment' will catch up to the Federal Government."

Jack sees the future not only as a time of constructive and financial success for the industry but also is optimistic about the social changes taking place within the construction trades themselves. When asked about women in the industry he commented:

"It's long overdue—way overdue. I've been teaching estimating for Women in Construction (WIC) and these women are enthusiastic about everything. Let's face it, most men are chauvinistic—completely. They still think that a woman's place is in the home—but with wider vision so is a man's. Either one should be able to hold two jobs and help their partner."

Jack's optimism and easy going style can easily camouflage the "hustle" which has always keynoted his life. His "I can do it if you give me a chance" attitude



has really put him where he is today, though he would have you believe "it just happened." Perhaps his own words as he was named project manager for his first big development best sum it up.

"When Alex (Etkin) told me I was going to direct the job, I said 'O.K., sounds great,' to which he (Alex) commented 'Doesn't it scare you that I'm putting you on this job?' I thought about it for a moment and then said 'Well, does it scare you that you're putting me down there with your money?' That was the last time he asked me that!" □

Success is getting what you want; happiness is wanting what you get.

—Charles F. Kettering

Cradles, kids, and construction crews

Engineering student pioneers in a formerly 'male profession'

"I want to get out there with the 'guys' as a supervisor inspecting high buildings, working closely with actual construction," says Mary Weber of Southfield as she prepares to become one of the first women to enter what was once considered a "man's world"—construction engineering.

Ms. Weber, an exceptional 30-year-old divorced mother of two boys and a student at Lawrence Institute of Technology, will soon become one of the first of two women in the nation to graduate from an accredited construction engineering program. And, she and fellow graduate Marina Banchero-Shumate, also at LIT, will be entering the job market as contractors begin to feel the effects of a new federal regulation on female construction workers. Currently, 3.1 percent of all field workers at the construction site on a federally-funded project must be women. That total goes to 6.9 percent in 1980.

"Special treatment," however, is not something Ms. Weber wants or expects to get, as the path toward her degree has not been an easy one.

"I've already had one employer tell me in an interview that he doesn't hire women or minorities. He said he has one woman working for him but she was having a very difficult time because—of course—she was a woman, so I realized that no one was going to give me a free ride."

For over two years, Ms. Weber has juggled time schedules, homework, classes, housework, and time with her sons, Niklos, 9 and Matthew, 7 while maintaining a 3.0 average in her LIT classes. She also has found time to serve as vice-president of the College's student chapter of the American Society of General Contractors.



Construction engineering student Mary Weber and her sons, Niklos and Matthew, arrive for an evening of homework and study.

Her son, Niklos, is a "gifted" child, having been tested at the genius level, and much of her time is also spent encouraging him and his brother in their own schooling. She feels strongly about concentrating on her role as mother, even while attending college full-time, herself.

"I never do homework when they're at home. If I can't finish by the time they come back from school, I do it the next day. I feel that I shouldn't take away the time I spend with them for anything else," she states.

"Occasionally," she confides, "if I have a big test, I will study for a short time

while they amuse themselves. They both understand that if Mom is sitting at the table with her books, they don't talk to me."

This semester she has an evening class, making it necessary for the boys to accompany her to LIT.

"They sit in the cafeteria. They have special books which they only bring to LIT and we have specific rules about what they can and can't do."

"They even go to the bathroom separately because once I came back early from class and found them both missing. I was a little upset because I

It's pretty hard to tell what does bring happiness; poverty and wealth have both failed.
—Kim Hubbard



couldn't just walk into the men's room and say 'Hey are you guys in there,' so now one of them is always required to be at the table where I left them."

Being a pioneer in a career field is nothing new for Ms. Weber. She was also the only woman in the engineering program at Oakland University, when she began her studies some ten years ago.

Engineering was a natural choice, she says, because her father, Walter Wisti, an engineering professor at Michigan Tech, was in the Army Corps of Engineers for many years.

Her early schooling, however, was soon cut short by marriage and the beginnings of a new family, and a career in engineering became a past dream. But, the reality of divorce brought back that dream several years later as Ms. Weber found herself cast as family head, mother, bread-winner, and homemaker. She knew that she had to earn a living for herself and soon took a long hard look at her future.

"I realized about that time that I had to find a field that interested me so I decided that it was time to go back to school. I chose LIT because it offered

'I realized that no one was going to give me a free ride.'

construction engineering. The idea of being on a work site, directly involved with the actual building, really appealed to me," she remembers.

She enrolled in LIT, one of only three schools in the nation with a construction engineering program accredited by the Engineers Council for Professional Development (ECPD), in September of 1976 and has continued full-time since then. She will be graduating in June, giving her and Ms. Banchero-Shumate the distinction of being the first women to graduate from LIT's construction engineering program.

Both of her boys are very proud of their mother's accomplishment and always ask how she did on her tests.

"We talk over school together at night and I tell them how my classes went and they tell me about their day. Niklos likes to read my textbooks but he has never helped me with my homework," she says with a grin.

Niklos has taken engineering tests which Ms. Weber's father uses in his classes. "He loves to go through reference books to find the answers and thinks all types of research is exciting. I don't think he wants to become an engineer though, but children are always changing their minds about career plans so you never can tell," she comments.

After graduation, Ms. Weber, unlike her fellow classmate, does not want to work in an office situation, preferring to become a "hard hat" engineer on the "front lines." A summer job gave her a chance to test out her interest in really "working with the guys" and also a taste of what it's like to be one of only a few women in a man's world.

"I was employed by the State Highway Department to work as a surveyor," she recalls. "My PE (professional engineer) didn't know what to do with me so he put me in an office situation. After a few days I asked him to put me in the field and he finally found someone who was willing to take me on his crew. We sort of stood off from each other for a while but after a few weeks we were just like a regular crew. There were the same demands on me as on the men."

As the traditional female roles fall by the wayside and more and more careers become filled with graduates, women are beginning to turn, in increasing numbers, to such fields as construction engineering. Last September, for example, 83 women were enrolled in the mechanical, electrical, and construction engineering programs at LIT, compared to only 22 in the fall of 1975.

According to Professor George Bowden, chairman of the construction engineering program at LIT, the opportunities are great for women in any of these fields.

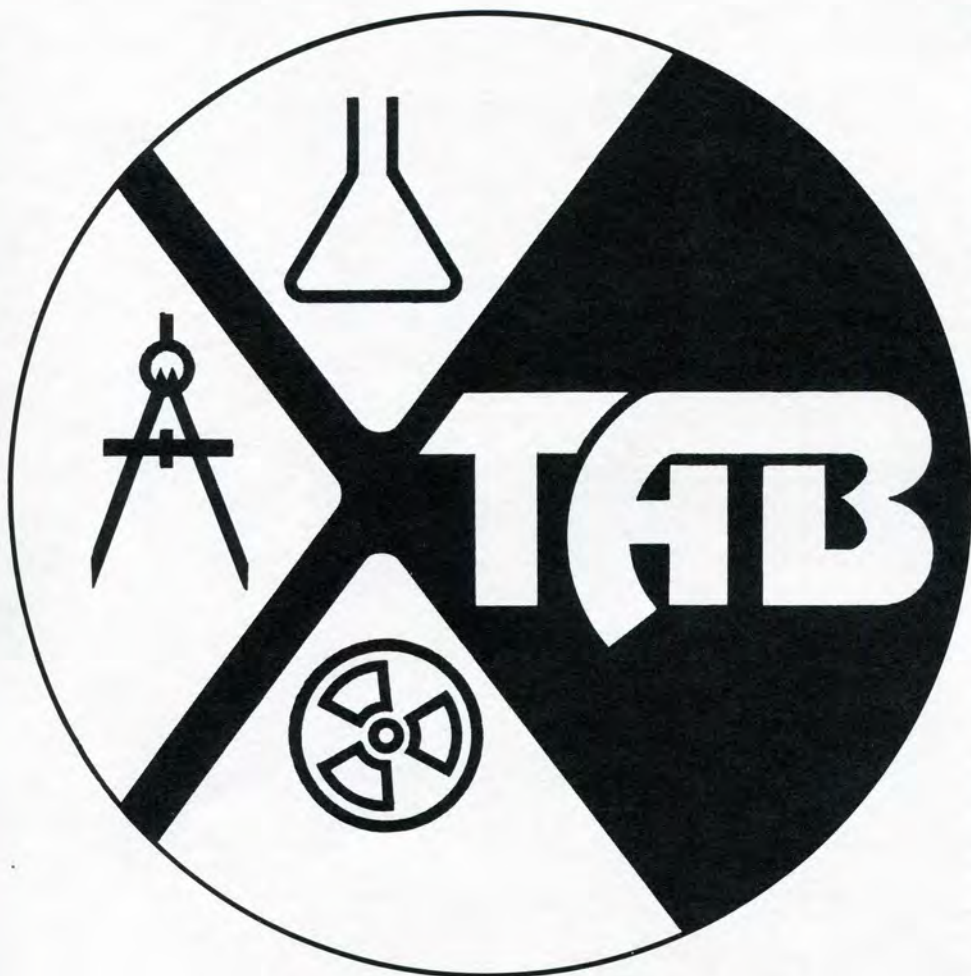
"The wave of the future definitely points to more and more women in increasingly more responsible roles in the industry," he says. "They will have to prove themselves, like anyone else, but it won't be long before the male workers become comfortable with women on work sites and the term 'man's world' no longer has any meaning." □

There is no duty we so underrate as the duty of being happy.

—Robert Lewis Stevenson

TAB Clubs offer 'real world' insights

Innovative LIT program helps city youths prepare for success



An enlarged version of the TAB Club badge proudly worn by members.

What would prompt an inner-city student to suddenly begin taking harder classes, worrying about his or her grades, and preparing for a career that just ten years ago might have only been open to "white males" from the best backgrounds? According to Dr. Oliver Coleman, special project administrator at Lawrence Institute of Technology, it just might be because of a whole new concept in career information programs.

Coleman is the catalyst and organizer of the LIT-sponsored Technical and Business Club (TAB) program, a venture which is taking business and industry into Detroit High Schools as never before. The major purpose of TAB is to fill a void in the career experience which students gain in their high school years and to increase the number of students graduating from colleges with business and technical degrees.

"Business and industry are crying out for minority and female employees in the business, technical, and scientific fields, but because of past discrimination, students are not entering these professions," Coleman contends. "The models have not been there for minority and women students and, even today, 48 percent of the blacks in colleges and universities are training themselves for professions with questionable job placement. If this trend continues we will soon have the largest group of underemployed professional blacks in the history of the country."

Unlike some high school organizations, the planning and recruitment for TAB Clubs is carried on by the students themselves, with the administration and staff sponsors playing only a secondary role. This concept of peer group leadership has made students eager to join—And it seems to keep working.

"Students are arriving for TAB meetings at 7:15 in the morning and some of them don't even have classes until 11:00," Coleman notes. "A TAB pin is a symbol of prestige and students are beginning to raise their own grades to meet the criteria for membership."

A student must be continuously enrolled in math and science courses to qualify for membership. A minimum grade point average of 2.5 is also required, but deserving students with lower grades may be accepted with recommendations from the high school staff.

Business and industry are involved in the clubs in more than a passive sense. More than a dozen major companies and organizations are contributing to the pro-

Every little while we see this heading in the newspapers: "The Secret of Happiness." There is no such secret.

—E. W. Howe

gram either financially or with summer job opportunities. Among these are New Detroit, Inc., General Motors, Chrysler, Rockwell, Eaton, Burroughs, Federal-Mogul, Borg-Warner, Michigan Consolidated Gas, BASF Wyandotte, Allied Chemical, and Michigan Wisconsin Pipeline Co.

TAB Clubs provide "hands-on" experience and a knowledge of the work world through field trips, guest speakers, a co-op program, and the Summer Career Institute held each year at LIT.

The Summer Institute is designed to "train" the young leaders who will be running the TAB Clubs during the upcoming school year. The students are involved for seven weeks, four hours a day, spending three days in the field and two days on campus each week. Those eligible are paid during their training through CETA



Oliver Coleman, organizer of the TAB Club.

TAB Club 'veterans' praise its positive influence

Only a few short years ago, Alice D. Simpson had no other career dreams than to become a computer programmer and perhaps, someday, a computer analyst. Today, thanks to TAB clubs, she is enrolled in the electrical engineering program at LIT, preparing herself for entry into a field she knew little about through most of her high school years.

Alice was president of the first TAB club at Cass Technical High School in Detroit, and she truly believes that it had a profound effect on her entire career outlook.

"I knew that I didn't want to be a computer programmer for the rest of my life because it didn't seem to be enough of a challenge but I really didn't know what else I wanted to get into. After joining TAB, I began to find out about other careers and one day, as I was looking through some pamphlets from Burroughs, I realized that it was possible for me to go into engineering."

Alice talked to Dr. Oliver Coleman and within a few weeks was looking forward to entering LIT in the electrical engineering program. Did it bother her that few women and, especially, few black women were entering the field?

"On the contrary, that gave it special appeal for me because I guess I'm a fighter and I would say to any guy in my classes, 'I have as much right as you to be here.' Engineering is going to give me a way to express myself and I know that no one has any right to stop me from entering any field I choose."

Alice has a sister currently attending the University of Detroit who is studying communications and who has changed her major course of study several times in the past few years. She attended Cass Tech also, but, because she is older than Alice, she did not have the benefit of the TAB club.

"I think the TAB club would have helped her," Alice confides. "She has changed from accounting, to architecture, to communications and it bothers me that she might not be able to get a job when she graduates. Maybe if she could have been introduced to other fields, she might have been able to come to some other career decisions."



Alice Simpson

Alice is attending LIT on scholarships from Ford Motor Company and the National Fund for Minority Engineering Students, which she learned about through the TAB club. She also hopes to work through the summer for some local company so she can learn first-hand what it is like to be an engineer in today's world.

"Even today, some of the men I meet don't know what an electrical engineer is, and I think that's a shame," Alice notes. "If I can do anything to help students following me learn more about these fields, I really would like to. Students need this kind of help because if they don't get it, we're still going to have overcrowded fields and college graduates who can't find jobs. That shouldn't be happening."

Happiness and misery consist in a progression towards better or worse; it does not matter how high up or low down you are; it depends not on this, but on the direction in which you are tending.

—Samuel Butler

funds.

All students are given the basic information necessary for success as they pursue their chosen careers. Interviewing techniques, grooming, scholarship opportunities, and financial aid available to college-bound students are all reviewed during the two on-campus days while the three "outside" days of the weekly Institute schedule are spent viewing companies on a first-hand basis through field trips. The success of this program is evidenced by the undaunted enthusiasm displayed during last summer's public transportation strike.

"Students were riding their bicycles all the way from the inner-city to the LIT campus in Southfield," Coleman notes, "just so they wouldn't miss a single day."

TAB Clubs are open to any student, although the particular emphasis is on

minorities and women. The mix of black and white and female members closely follows the balance of the high school itself, with approximately 80 percent black participation and an equal number of men and women. The average size chapter in each of the 14 schools participating is 30 members.

The program is expanding in scope as more high schools begin their own chapters. The success of the project is probably best measured in the first class to graduate since its inception two years ago. In June '78, 35 TAB members graduated from Detroit high schools and all of them enrolled in a business or technical college—six coming to LIT.

Other school districts have approached Coleman to start a TAB program in their schools but, for now, the workload allows LIT to include only the Detroit Public Schools. In the future, the possibilities of

Vis nunquam tristis esse? Recte vive!

—Isidorus

expanding do exist, because Coleman sees the program as a possible solution to many of the industries' problems in the area of minority hiring as well as a tool for ending job discrimination.

"Companies say they cannot find qualified minority and woman employees so they cannot meet government quotas for hiring. We intend to assure that the companies involved have a pipeline supply so that they can always get a well qualified and educated person to satisfy their needs," Coleman notes.

Coleman will be doing follow-up work on all the TAB members as they advance through college and begin to look for work. He hopes to place many of the students back into the supporting organizations, making the entire program profitable, not only to the TAB members, but also, in the long run, to the companies themselves. □

Another, slightly different TAB story, is told by LIT mechanical engineering student Larry Woodson.

As president of the first TAB club at Southeastern High School, Larry helped to organize what is now a more than 40 person chapter. The club, however, didn't change his ideas on what career he would choose but rather made him more sure about his earlier decision.

"As long as I can remember," he relates, "I wanted to be a mechanical engineer but the TAB club made me want to study it even more."

The activities, field trips, and guest speakers did give Larry a chance to find out about other careers and he's glad he had the chance to think about them.

"Now I'm sure this is where I belong. I got a taste of other jobs, but none appealed to me as much as mechanical engineering. I learned more about the field and the more I learned, the more I knew I would fit. When I would go to the meetings, it was just like I was already an engineer, I knew so much about it."

The middle son in a family of eleven children, Larry also needed TAB clubs to help find financing for his education. Through the help of Dr. Coleman, Larry was given grants from the National Fund for Minority Engineering Students as well as other financial aid. In addition, TAB put him in touch with Rockwell International where he worked last summer in the mechanical devices division. His enthusiasm for this job is evident as he talks about his experiences.

"I worked with one of the operating engineers testing all kinds of mechanical devices for automobiles. I couldn't believe the hours of research and testing that went into each part of the project, but by the end of the summer, I really knew what being an engineer was all about."

Larry and a fellow female TAB club member were chosen for the Rockwell jobs during a guest appearance by one of the company's representatives at Southeastern High School. Both expect to be going back to Rockwell each summer until they graduate.

"The president of the company took us out to dinner after the summer and told us, 'I'm not going to ask you, I'm telling you—you're coming back to Rockwell next summer.'"

For Larry, who became interested in his career choice because of his father's interest in drawing and his own love of chemistry and physics, the TAB clubs still had a lot to offer.

"I don't know where I'd be today if it weren't for TAB," he states. "It's probably the best thing that's ever happened to me." □



Larry Woodson

Features

When basketball was king

During the 1950's and early 1960's, LIT was an undisputed national leader in basketball competition

Part one of a two-part series

As the era of Dwight Eisenhower's U.S. presidency drew to a close, at LIT the Men's Glee Club was one of the biggest organizations—crewcuts, waterfalls, and the homecoming dance were “in” for campus trend-setters—ground was broken for a new LIT architectural building—and LIT's basketball team led the nation in team scoring.

The Blue Devils were untouchable in the year 1960-61, breaking the 100 point mark nine times and averaging 97.2 points per game. Ending the season with a win-loss record of 21-5, they also broke nine previous scoring records.

Co-captains John Bradley and Clayton “Cap” Pethers both captured the College scoring record, John helping Cap to overtake his own mark just a few weeks after John broke the record set in 1952-53 by LIT star Werner Killians. The *Tech News* reported the incident, capturing the intense excitement that surrounded Hackett Field House in Highland Park during those “sports glory” years.

Said the *News* reporter, “John was instrumental in helping his team-mate and very close personal friend Cap Pethers break his own (Bradley's) scoring record (53).”

“It was in the afternoon, prior to the Northwood College game, that Bradley told me, ‘Tonight is Cap Pether's night.’

This statement bewildered me.

“That evening, prior to the second half tipoff, Bradley asked me how many points Pethers had. I told him that the big fella, 6' 6", was well over 60 percent of his shots and had 23 points. Cap continued to play a marvelous game throughout the second half. With about 50

As coach and later, athletic director, the late Don Ridler, (below, in a 1950's publicity photo) is credited with organizing the powerhouse teams of the era.



seconds remaining in the game, Pethers had piled up 52 points. Northwood intercepted a Blue Devil pass and broke fast down the court.”

“Bradley yelled to the big fellow to play ‘sleeper’—stay under the basket because the two points are lost. The Northwood player shot and missed. Bradley came off the boards with the ball and heaved a long pass down court to lonesome Pethers who dunked it for his 54th point and a new Blue Devil individual scorer's record.”

There were 14 players on that winning '60-'61 team: Tom Blizinski, John Bradley, Dick Carlson, Spencer Hammons, John Hirzel, Ron Nosek, Clayton Pethers, Marvin Shelton, Bill Smetanka, Fred Tinsley, Clarence Tobias, Fred Wasen, and Gerald Wnuk. The coach was George Verdonckt and the athletic director, Don Ridler. Most have families of their own now, some with sons playing basketball as their fathers did before them.

John Bradley is still Michigan's third all-time leading college basketball scorer, ahead of such greats as Cazzie Russell, Dave DeBusschere, and Rudy Tomjanovich. He was named an All-American during his LIT years, and averaged 32.5 points per game in the '60-'61 season.

John was drafted by the Pistons after leaving LIT in 1962, and played several exhibition games before being cut by the club in the final days before the season. He played semi-professional ball throughout the Midwest before leaving the sport and going to work for Firestone Tire and Rubber Co., where he is now a salesman.

When contacted recently, John had many fond memories of his years at LIT,



LIT's nearly invincible 1960-61 team included (standing L to R) Ron Nosek, Fred Wasen, Fred Tinsley, Dick Carlson, (kneeling) Coach George Verdonckt, John Bradley, and "Cap" Pethers. The College led

the nation in team scoring that year. Bradley was the nation's top scorer, averaging 32.5 points per game.

which he remembers at a time when, "You could stand on the corner of Eight Mile Road and see all the way to the College."—no longer possible in these days of the giant Southfield office and professional buildings.

John came to LIT from Highland Park High School, after turning down offers from schools like UCLA and Western Michigan. "I used to catch a bus down Eight Mile," he recalls, "and then thumb a ride from the corner down to

school." He left the College in 1962.

Co-captain Cap Pethers left LIT during the '61 season and is currently working for the U.S. Post Office in Northville where he attended high school. His loss to the team was mourned by the '61 "L" Book:

"After winning three of their first four games, losing only to the highly rated DePaul, LIT students and fans were dismayed by the news that "Cap" Pethers had withdrawn from the team and from school."

Basketball ended at LIT shortly after John and Cap left, as the lack of adequate practice and game facilities and expensive field house rental costs became problems for College administrators concerned with having working students subsidize a basketball program.

When LIT's long-planned student activities center becomes a reality, it is likely that passionate cries of "Go Blue Devils!" will again bring crowds to their feet. Until then, the static excitement of cheering throngs and athletic victories waits. □



Dean of Arts and Science wears many hats

**'It's all fun'
Zaven Margosian
says, leading
LIT's newest
school**

Fourth in a series on LIT's deans

A small brass plaque on the wall of LIT's Dean of the School of Arts and Science office reads to "Dean Zaven Margosian: In appreciation for meritorious service as an educator, counselor, administrator, and friend. Presented by his students in 1976."

The plaque attests to the warm regard that many of Dean Margosian's students have for him. They sense he is honestly concerned for their welfare.

"I enjoy the interaction with students," Margosian says with typically modest understatement. "It's what attracted me to teaching."

The attraction was so strong that in 1971 he left a successful career at the

Bendix Research Labs to teach full-time. He had first caught the teaching "bug" as a part-time mathematics faculty member at the old Detroit Research Institute. Beginning in 1966, at the night school at LIT, he taught math and electrical engineering. In 1971 he was named a full-time professor in mathematics at LIT and was then named department chairman in 1972 and dean of the School of Arts and Science in 1973.

"Our School, which was formed in 1967, has an interesting configuration," he relates. "We have the largest faculty, the largest number of courses and the fewest graduates of any LIT School. That's because we are both a 'service' school providing instruction in math, science, and the humanities to all 4,860 LIT students as well as a school offering degrees in physics, humanities, chemistry, math and math/computer science."

If Dean Margosian's orderly office held every hat he wears at LIT, he'd almost not have room for a desk—in addition to being dean and math department chairman, he is scheduling coordinator for all LIT baccalaureate students,



he directs the College's Summer Science Institute, supervises the Detroit Metropolitan High School Mathematics Club, is campus representative for the North Central Association of Colleges and Schools, is College Entrance Examination Board representative and teaches one senior level class each day and evening term. He is also chairman of LIT's academic standing committee and is a member of the curriculum study committee.

Leading LIT's youngest School, which graduated its first students in 1971, Dean Margosian and his faculty sponsor several outreach programs in the community to

highlight the School's identity.

The Detroit Metropolitan High School Mathematics Club attracts several hundred students from throughout southeastern Michigan to a monthly program of prominent guest lecturers and special programs like a popular computer battleship competition. The Club is sponsored by faculty members Larry McCollister, James Nanny, Michael Merscher, and Thomas Lackey. The humanities department sponsors a high school writing contest under the direction of Victor Angelescu.

The Summer Science Institute, now in its eleventh year, brings a number of outstanding high school juniors to campus for a six-week academic exploration of math, science, engineering and technology. Margosian says the program is always oversubscribed.

"We don't offer these programs as a hard sell for LIT," he stresses. "Lots of SSI grads go on to colleges like Harvard, Yale or MIT, as well as here."

"Our primary goal is to help those students learn more about possible career fields so that when they do enter college, here or elsewhere, they know they've made the best possible choice."

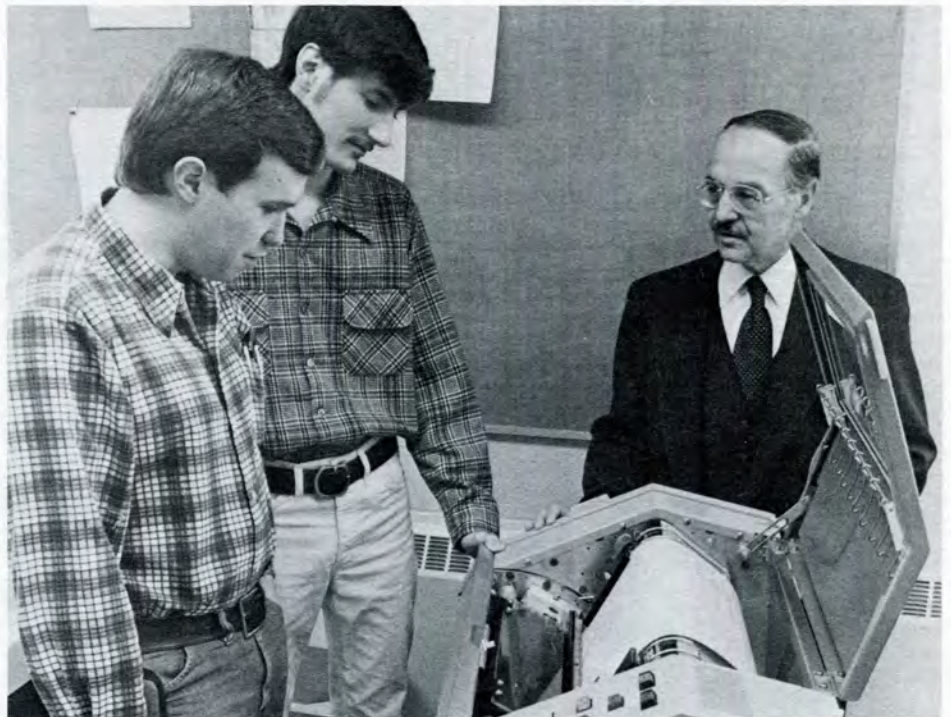
Why do students study math, chemistry, physics, or the humanities at LIT?

"I think generally because of the personalized instruction," says Margosian. "In fact, a couple of Saturdays ago I was working with a student in the computer center and asked him, 'Where else could you go and get personalized instruction from the dean at 8 p.m. on a weekend?' " he chuckled. "Also, the 'real world' background of the faculty seems appreciated. I think that students are better motivated when a faculty member can speak from first hand experiences," Margosian added. "That's why when we're hiring faculty, we examine industrial qualifications in addition to their academic credentials. To the extent possible, we want them to have 'practiced what they've preached.' "

Margosian grew up in Highland Park, the son of a shoemaker. An early interest in mathematics led him to pursue a degree in engineering—he received a B.S. degree in engineering mathematics from the University of Michigan and his master's degree in modern control theory from the same institution.

He joined Bendix Corporation after receiving his undergraduate degree and worked for the firm in the area of applied mathematics and computer simulation. While at Bendix he was co-inventor of an adaptive speed control system—a device that regulates a vehicle speed by measur-

'I think that students are better motivated when faculty can speak from first hand experiences.'



ing (by radar) the speed and distance of a vehicle ahead.

"The highest compliment a mathematician can receive from engineers who test a system based on theoretical math models is to hear 'there were no surprises,' " he smiles, "meaning the physical system indeed reacted as the mathematical model predicted. There were 'no surprises' with that particular device."

In addition to College duties, Margosian serves on the Board of Education at the AGBU Alex Manoogian School.

Active in his church, the Armenian Congregational Church of Southfield, he has served as treasurer, trustee, and chairman of its board of trustees. He also serves on the Armenian Heritage Committee.

For two years he was a member of the Executive Council and clerk of the Armenian Evangelical Union of North America—the national association of

Armenian Protestant churches. He was moderator during the constitutional convention and merger of the eastern and western divisions of the group.

He and his wife, Gladys, have two daughters and two sons. Their sons attend school in North Farmington. One daughter is an LIT junior in the School of Management and the other is a freshman mechanical engineering student at the College.

"It's all interesting—it's all fun," Margosian says in assessing his work at LIT. "I find the easy accessibility of the administration a plus factor—I needn't spend time seeking an answer from 18 different groups."

It also means he can spend more time with students, and that suits Dean Zaven Margosian just fine. □

On-campus

Dean Davis named 1979 'Engineer of the Year'

Dr. Stephen R. Davis, dean of the School of Engineering at Lawrence Institute of Technology, has been chosen Michigan Engineer for 1979.

The prestigious award is given annually to the outstanding engineer who has made significant contributions to his profession. The recipient is chosen by a committee comprised of members of the Affiliate Council of the Engineering Society of Detroit. Davis was honored at a banquet on February 21 at ESD.

As dean of engineering at LIT since 1973, Davis has created a vigorous educational climate by using his industrial

experience to modify the College's curricula to meet career requirements of industry. LIT's School of Engineering offers baccalaureate degrees in construction, electrical, and mechanical engineering.

Under his leadership, the School has received accreditation from the Engineers Council for Professional Development. This professional recognition also led to the establishment of the Michigan Eta Chapter of Tau Beta Pi, engineering honor society.

Davis has initiated and supported student and faculty affiliation with other pro-



Dean Davis (center) was presented his award by Roland Rosslip, chairman of the ESD Affiliate Council. Mrs. Davis is at right.

'Bringing purpose to progress'

Remarks presented by Dr. Stephen R. Davis upon his installation as 1979 "Michigan Engineer of the Year," by the Affiliate Council of ESD.

Engineering has had a massive influence on modern society and will continue that influence over the coming decades. From the criticisms and attacks on technology during the 60's, a new technology has evolved incorporating or facilitating the values of democracy, compassion and humanity.

Engineering is transforming the old technologies along new directions toward new

forms of progress. This movement strives to put men before machines, people before government, practice before theory, smallness before bigness, organic materials before synthetics, craftsmanship before expertise, and quality before quantity. New technology is designed, not so much as to dominate nature, but to mesh with it. We no longer ask—"Can we do it?" but "Should we do it?"

Engineers are taking new leading roles in education, industry, commerce, government, transportation, banking, and many other areas of society. *Ethics and integrity* are increasingly becoming measures of an engineer's professionalism. The engineer is more than a component of a large organization since he or she serves

society as an individual acting as a link among technology, economics, organization and politics. Engineers blend plans and politics, needs and desires, machines and people. Engineers are designers, organizers and *doers*—concerning themselves with human organizations and institutions; ethics and efficiency; wisdom and leadership. They are not just interested in cost or plans but the final results, so that human factors do not defeat their technical accomplishments. The fulfillment of valid, rational human needs in a viable economic way is becoming as much a concern as profit.

The development of new social attitudes toward technology has brought about a turning point in engineering. Hosts of technological opportunities, which were excluded a few years ago for reasons of cost or the preferences of society, suddenly are open for re-evaluation. Typical examples are coal gasification, high-speed mass transportation, alternate fuels, and new materials. Thus, from the standpoint of the engineer previously restrained by narrow economic criteria, new ground rules which everyone *must* meet broaden the opportunities and enhance the importance of the engineer's role. Engineers are no longer content to sit in the office or laboratory designing new devices without considering existing social norms and cultures.

Engineers have a natural tendency to apply technology to the development of products and services that contribute to the improvement of our standard of living. The needs of domestic and social programs are now being met with the help of the engineering profession. Solutions to complex problems have been developed and, with the aid of computer technology, high quality services are now available to the masses. The field of medicine, for example, with the help of engineering, is now disseminating surgical techniques as well as diagnostic information in this manner.

fessional societies and has developed an impressive program of guest speakers for the College.

Recognized for his expertise in industrial energy conservation and utilization, Dr. Davis lectures nationally and is a consultant for the U.S. Army Tank Automotive Command, U.S. Departments of Energy and Defense, Argonne National Laboratory, Forging Industry Association, Du Pont and Westinghouse Electric. Active in many professional organizations, he is chairman of the State of Michigan Joint Commission on Energy for the Michigan Society of Professional Engi-

neers and the Michigan Association of the Professions, chairman of the Michigan Conference of Engineering Deans and former chairman of the Council for Industry Education Committee of the American Society of Engineering Education. He was elected to the College of Fellows of ESD in 1977.

Dr. Davis earned his B.S.M.E. from Drexel University, his M.S.M.E. from the University of Delaware, and his Ph.D. in Mechanical Engineering from the University of Illinois. He resides in Belleville with his wife, Fay, and their two sons. □

The world about us is undergoing enormous change. Recent events in the midwest make us acutely aware of the fact that our well-being is dependent upon the well-being of others. Engineers are becoming more involved in the political and economic decision-making process. They have been called upon to help solve the complex energy problem by discovering alternative energy sources as well as helping society transcend its false visions of abundant natural resources by initiating procedures for energy conservation.

Unlike the *developing nations*, which are interested *only* in resource development, we, as a *developed nation*, are concerned with the development of new sources of energy *consistent* with *environmental regulations*. This ecology requirement, as well as efficiency improvement, often requires replacing, modifying or developing expensive equipment.

Those of you in the *automotive industry* are well aware of the tremendous cost associated with the design and development of the new systems required to meet

the environmental and fuel efficiency regulations. Being personally involved in industrial conservation, I have witnessed tremendous changes within the industrial complex which have resulted in the substantial reduction of energy usage, using today's technology, with minimal capital expenditure and no loss in productivity.

The engineer is seeking values beyond technology, purposes beyond affluence, visions of the good life beyond national prosperity. The re-emergence of human values over purely technological values may be the cornerstone of the last decades of the 20th Century. As we seek new visions of the new uses of technology in its proper perspective, we shall seek a more humane society.

We dream that in the future our society will have both knowledge and compassion; both machines and ecological wholeness; both technology and new humanity. *The engineer will be leading society to commit itself to the attainment of the greatest fulfillment for its members by bringing purpose to progress.* □



Dr. Davis was nominated and introduced by Dr. Wayne H. Buell, LIT chairman.



Governor to speak at graduation

Governor William G. Milliken will take some time from his busy state schedule to be the featured speaker at the LIT Commencement on Sunday, June 3.

Milliken has the second-longest tenure as governor in Michigan history, having served in the capacity since 1969. He assumed the governor's duties after the resignation of then-Governor George Romney, having served as Romney's lieutenant governor for four years. He was elected to four-year terms in 1970, 1974, and 1978.

A graduate of Yale University, Milliken has also served two two-year terms in the State Senate where he was majority floor leader during his second term.

In 1978 he was selected as the most influential governor in the nation by his fellow governors, when they were asked by *U.S. News & World Report*. □

Student is winner

Michael J. McNamara has taken first place in this year's student paper contest sponsored by the Southeast Michigan branch of the American Society of Civil Engineers.

McNamara, a construction engineering student won the first place prize for his article on the topic "Engineering—Transition from Technical to Management." Last year, another of his papers was awarded third place in the same contest. □

Disney research not Mickey Mouse, director tells Tau Beta Pi audience

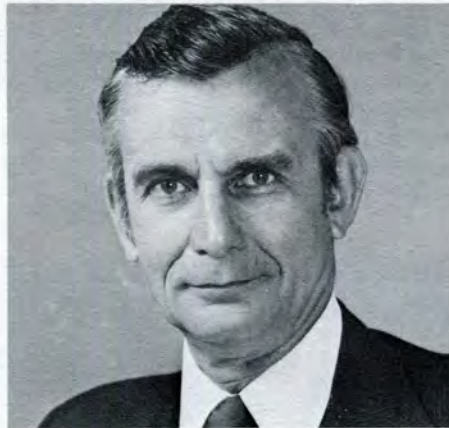
What has fibre glass "wrought iron," a "treehouse" made from concrete, steel, modular hotel rooms which fit into a frame like drawers in a bureau, and ten acres of basements to store things like Mickey Mouse ears and Donald Duck beaks? The answer, of course, is Disney World—a world of fantasy and facade brought to life by Harvey "Tom" Jones, a member of the Disney World Board of Directors, during his recent speech to LIT's Michigan Eta chapter of Tau Beta Pi.

Jones, who is also director of the Reedy Creek Utilities Company which designs, builds, and operates the ten advanced utilities systems in the park, began his talk at the Engineering Society of Detroit with a slide presentation on the facility itself. The early beginnings of Disney World compared with the current, unbelievable development, graphically illustrated Walt Disney's drive to be in the forefront of technology.

Disney's favorite term was always "off the drawing boards of industry" and many of the prototypes currently in use in his Florida park are built from designs which industry was hesitant to tackle on a large scale.

The garbage disposal system, for example, was designed by a company in Sweden but had never been accepted as a viable method by the world-at-large. Disney World took the idea, built the system, worked out the kinks, and now has a solid waste system which is praised by park visitors and the industry alike for its efficiency and speed. Garbage is deposited at many points throughout the park and is immediately sucked by vacuum at 60 miles an hour to a central gathering point outside. From there it can be effectively removed without a single truck intruding inside the gates.

The monorail system was also a Disney prototype, as are many of the developments going on today, leading NBC commentator David Brinkley to remark that the Disney people are the "only people who seem to get anything done." Solar energy, a computer-controlled electrical system, and a sanitary system which seeks to conserve the environment are just a few of the on-going projects which keep the Disney industry



Jones

in the forefront of modern technological advances.

Park visitors can attest to the authen-

ticity of the Disney exhibits, but few know that they are the world's largest user of fibre glass facades. Many of the seemingly real building materials are in reality examples of Disney's ingenuity in using man-made substitutes. And, no one can help but be astounded by the life-like figures throughout the park who speak to visitors through the use of another Disney technique, animatronics.

Another development, however, is now underway in Disney World which will complete a dream of Walt Disney's for many years before his death. The Environmental Prototype City of Tomorrow (EPCOT) is expected to begin construction in 1979 and Jones spent much of his speech explaining the complex, in depth, to his audience.

EPCOT, known as Walt Disney's greatest dream, will in fact be two separate developments, Future World and World Showcase. The purpose of the entire complex, according to Jones, will be to provide a forum for further prototype experiments to find new ways to solve future problems as well as to bring people together from all over the world to communicate with each other. □



Metric Center has new campus home

The Metropolitan Detroit Metric Council has moved to new larger quarters in the LIT Library. On hand for the dedication of the new resource center were (foreground L to R) Robert Williams, ME'53, chairman of the MDMC; Barry ZeVan, WJBK-TV; Roseanne Cerra, WDIV-TV; and Jerry Hodak, WXYZ-TV. The latter three received appreciation awards for including Celsius temperatures in their weather reports.



Contractors charter student chapter

Robert W. Pence (center) accepts congratulations from the national chairman of high education for the Association of General Contractors O.L. Pfaffmann, as he is presented with LIT's student chapter charter. Pence, a construction engineering student, is the first president of the College's AGC chapter. George Bowden (right), is chairman of LIT's construction engineering department and AGC faculty advisor.

Other officers are Mary Weber, vice president; Alan DeMarco, secretary; Marina Banchemo-Shumate, treasurer; and William Saliba, evening student liaison. The LIT AGC chapter was officially chartered during special ceremonies at the Engineering Society of Detroit in January.

No Clark Kents, enterprising students promote the 'American Way'

What do superman and a new Lawrence Institute of Technology student club have in common? Well—only one might be able to leap tall buildings at a single bound, but both are fighters for "the American way."

Students in Free Enterprise (SIFE) is an organization of LIT business and industrial management students who feel that the American economic system is the best in the world and that we will all be better off if we work to maintain and strengthen it. According to Tim Jeffrey, of Livonia, president of SIFE:

"The purpose of the organization is to promote the free enterprise system at a time when the trend is moving toward more and more government control. It is our belief that by starting at the grass roots level and informing Americans of all ages, we can begin a movement to stop government from tying the hands of business with increasing regulation. After all, free enterprise helped America to become the great nation it is."

Ernie Maier, associate professor of management, is the Club's faculty sponsor. □

Faculty and staff notes

Floyd W. Bunt, director of high school relations, has received special commendation for his 22 years of service as a member of the Birmingham Fire Squad. BFS aids the Birmingham Fire Department by providing volunteer support functions.

Engineering Dean Stephen R. Davis, and Dr. John D. Hromi and Dr. Hans J. Bajaria, associate professors of mechanical engineering, took part in a Society of Automotive Engineers Risk Analysis Symposium at Detroit Cobo Hall, February 28.

Dr. Hromi presented a paper on the "fundamentals of risk analysis" while Dr. Bajaria spoke on "risk analysis in maintainable design." Dean Davis was co-chairman of the symposium.

Dr. John D. Hromi, associate professor of mechanical engineering, has been named "Man of the Year," Greater Detroit Section, by the American Society for Quality Control. Dr. Hromi, national treasurer of the ASQC, was presented the award at the Engineering Society of Detroit's Gold Award Dinner on February 21. The ASQC has 30,000 members throughout the United States.

Gary A. Joppich, Ch'78, of Brighton has been named an admissions counselor.

A former diesel production engineer at General Motors, Joppich has also held positions at OCC and Ann Arbor Computer Corporation. According to Stan Harris, LIT director of admissions, Joppich will be responsible at LIT for counseling prospective students on college programs and admission requirements.

Joppich is a member of the Engineering Society of Detroit and is on the board of directors of Mill Valley Investments.

Ernie Maier and R. Bruce McAfee, associate professors of management, have received word from McGraw Hill that their book, *Cases in Selling*, has been accepted for publication and will be available in April. Also published will be a separate 150-page instructors manual.

Prof. Maier says the text is a casebook of 45 hypothetical sales or marketing situations, and is geared for use by colleges and industries who prepare sales personnel.

Providing example case solutions in the instructors manual were 20 corporations from across the nation—including Chrysler, Chevron, Gulf and Western, General Electric, ITT, and Borg-Warner.

Busy writers Prof. Maier and McAfee are also attending the April national conference of the Association for Business Simulation and Experiential Learning in New Orleans. Maier will present a paper entitled, "The use of cases with role plays in a research methods course," and McAfee will present a paper entitled, "Using a case as the basis for a modified debate."

Dr. Richard E. Marburger, president, and Dr. Richard E. Michel, dean of Associate Studies are both serving on the program committee for an Energy Information Forum and Workshop for Educators.

The conference is being held at the University of Michigan on April 21. It is designed to provide an understanding of the availability of energy resources and the current status of energy research. It will also discuss the advantages and disadvantages of the various energy options.

Judith Weiner, lecturer in humanities, presented a paper entitled "A Touch of Reality" at the Purdue University Fourth Annual Conference on Film, held March 21-24. □

Alumni Association News



Have Bus; will travel. The Alumni Association's March 4 Hockey Safari was a complete sellout. A full bus load of LIT fans journeyed to Olympia Stadium and enjoyed the competition between the Red Wings and Boston. Among the alumni, guests, senior class members, and staff who made the trip were: Bruce Annett, Jim and Nancy

Battle, Duane Etzel, Gilder Jackson, Chuck Koury, Don Lamb, Roman Maziak, Dennis O'Connell, Tom Sarulaitis, Nick Sarzynski, Roger Shtogrin, and Karl Whitston.

If you're an LIT graduate, you can get in the next picture by joining your LIT Alumni Association. Phone (313) 356-5051 for details.

Alumni dinner-dance April 28

The LIT Alumni Association's gala dinner-dance is set for April 28, says Henry Selewonik, IM'57, an Association director and chairman of the Board's activity committee.

The popular annual event, to be held in the LIT Dining Room, will feature a cash bar at 6 p.m., dinner at 7, a short program and four hours of "big band" dancing. Cost is only \$11 per person.

A brief special tribute will be made to the Class of '54, the 25-year class, and each anniversary class member present will be recognized with a memento. Graduates of all other classes, past and present faculty, the Senior Class, and guests are urged to attend.

A special added attraction will be scores of special student exhibits and demonstrations on display for Open House '79. Open House hours are Saturday, April 28, from 11 a.m. to 5 p.m. and Sunday, noon to 5 p.m.

Serving on the 1979 dinner-dance committee are: Richard Darbyshire, ME'54 & EE'61; Francis Bell, ME'54; Sam Radulovich, EE'55; Sam Heal, EE'54; Henry LaMotte, EE'54; and Jack Korb, CivE'54.

Directors elected

Robert E. Heintz, ME'51 & EE'61, Henry Kovalsky, ME'62, and Henry Selewonik, IM'57, have been elected directors of the LIT Alumni Association, vote tallies certified January 9 announce.

The special election, accomplished by mailed ballots to the general membership, filled three board vacancies created by action of the membership last summer, when the board was increased from 12 to 15 directors.

Robert Heintz is a balance engineer for General Motors Corporation, Henry Kovalsky is a principal development engineer for Ford Motor Company, and Henry Selewonik is an engineer for Fisher Body Division of General Motors Corporation.

The 1979 regular elections are set for June and the winners will be announced at the Association's annual business meeting (to be held at a site and date to be determined). The Alumni Association Board of Directors meets the second Tuesday of each month at 8 p.m. in the Alumni Relations Office on campus.



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Alumni Notes

Send news! Send Alumni Notes to the LIT Magazine, 21000 West Ten Mile Road, Southfield, MI 48075. Moving? Please include your new address.

Seven initiated

Four alumni were named eminent engineers by LIT's Tau Beta Pi chapter during initiation ceremonies in December. **Nathaniel Carr**, IE'58; **Henry B. Horltdt**, IE'55; **Ronald L. Ranson**, IE'66 and IM'69; **Jesse W. Richards**, ME'52 were all given the special honor by the student chapter of the national engineering honor society.

Also honored at the Tau Beta Pi installation were **Douglas R. Livermore**, ME'73; **Paul A. Meesseman**, EE'71; and **Thomas J. Rozek**, EE'77. All three were given alumni awards and named honorary members of the society.

1933-49

Gordon Banerian, ME'43, was recently invited to the Soviet Union to discuss aerodynamic research in the United States. Gordon is known as one of the nation's top nuclear and aerospace scientists.

As head of noise research at NASA, Gordon has done much work on aircraft noise abatement and its impact on airport planning and aircraft operations. He received an M.S. from Wayne State and Ph.D. from the University of California and was the recipient of an honorary doctorate from LIT in 1967. Gordon was also awarded an alumni achievement award in 1963.

James A. Campoli, IE'49 & BA'50, is quality control manager at Extracorporeal Medical Systems in Pinellas Park, FL. This firm manufactures kidney dialysis machines.

Jim, who coached the LIT fencing team for 10 years, is still active in the sport and won the southeast sectional sabre championship in 1978.

He has been appointed the Tampa-St. Petersburg area coordinating chairman for the United States Olympic Committee Telethon to be held April 21. This telethon is to raise money for the 1980 Summer and Winter Olympic athletes, to pay for their expenses in participating in the games.

1950-59

Martin S. Paul, EE'50, has been appointed to the Casco Township planning commission. Martin, a five-year resident of the southeast Michigan township, is employed by the Ford Motor Company in Dearborn.

1960-69

Conrad S. Niezur, ArE'64, has been appointed president of Viking Contracting Company, Inc., a Detroit-based industrial general contractor.

Conrad joined Viking in 1967, following a four year employment period with Chrysler Realty Corp. He resides with his wife and three children in Shelby Township.

Carl M. Romack, ME'68, has been appointed to the Westwood Board of Education in Inkster. He is an engineering supervisor for Detroit-Diesel Allison Division of General Motors and has been a testing technician for Ford Motor Company.

Ernest E. Wise, MT'68, has been appointed manager of Ford Motor Company's Dearborn engine plant, moving up from his position as assistant manager of the company's Livonia transmission plant.

Ernest joined Ford in 1952 as a quality control clerk in the Tank Division and has held several positions of increasing responsibility since then. He and his wife, Ada, reside in Milford.

Norman R. Hughes, Ar'69, was a candidate for the 8th District seat in the U.S. House of Representatives. Norman is the president of a home-building and construction management firm in Metamora. He has done post-graduate work at U. of M. and E.M.U. and has studied law at the University of Detroit.

1970-79

Larry W. Bowman, ME'71, has been named "Engineer of the Year" for the Automotive Operations Division of Rockwell International.

Larry received his M.B.A. from Wayne State University in 1974 and joined Rockwell in 1977. As a senior project engineer, he is currently responsible for the activities of the applied mechanics group at Rockwell in Troy.

Terry L. Bunt, IM'71, has been named manager of Community National Bank's Pontiac branch—the bank's second largest branch. He has also been named a bank officer. Terry resides in Orchard Lake and is the son of Floyd W. Bunt, LIT's director of high school relations.

Glenn M. Shuder, Ar'72, has been named an associate in Straub, Van Dine, Dziurman/Architects of Sterling Heights. He and his wife, Rosemary, reside in East Detroit.

James J. Timmerman, IM'72, has joined the staff of Protection Mutual Insurance Company as a district engineer for Protection's Detroit area office.

Protection Mutual, based in Park Ridge, IL, is a leading underwriter of industrial and commercial risks and is a member of the Factory Mutual System.

Henry G. Federlein, EE'73, was a candidate for the Saginaw Township Board in the November election. Henry is a sales engineer with Sperry Vickers, a division of Sperry Rand.

Denis J. Manduzzi, ME'73, has been promoted to unit supervisor in the driveline development engineering department of Ford

Motor Company. He was formerly a gear design engineer in the axle engineering department, and resides in Sterling Heights.

Dennis Dimoff, Ar'75, BAr'76, staff architect for the University of Michigan Medical Center, has been appointed to a three-year term on the planning commission of Brighton Township.

Robert W. Patyk, Ar'75, married the former Esther Ann Kampratt on November 24 in Monroe. Robert is employed as an assistant architectural engineer for the City of Detroit. He and his new wife are residing in Detroit.

Nancy J. Lovaas, Ar'76 and BAr'78, heard wedding bells on November 25 as she married former LIT student, Jeffrey Boggio. Nancy and her husband are residing in Detroit.

Patricia A. McLaughlin, IM'77, has been appointed center manager of the new Twelve Oaks Mall in Novi. She will be responsible for administrative and operational activities.

Patricia has been associated with the managing partners of the Taubman Company, Inc., for five years. She most recently served as assistant manager of Taubman's Lakeforest Mall in Maryland.

A 1.3 million square foot mall, Twelve Oaks contains four major department stores and, ultimately, 165 specialty merchants.

Michael E. Foote, EE'78, was commissioned as a Navy Ensign in December after completion of Aviation Officer Candidate School. This 13-week course at the Naval Air Station in Pensacola, FL is designed to prepare candidates for their future duties as commissioned officers and is also basic training for entering primary flight school.

He joined the Navy in July, 1978.

Gregory E. Tysowski, Ar'78, has been named campus architect for the University of Michigan-Flint. His duties will include assisting in the architectural, engineering, and interior design work of the riverfront campus. Gregory will also coordinate the work of outside architects, engineers, interior designers, and contractors and will assist in the restoration and renovation of the older campus buildings.

In memoriam

Peter Nation, IT'54, of Detroit, November 10, 1978. Employed by Motorama Engineering Co. of Dearborn Heights. Member, Masonic Composite Lodge No. 499. Survived by his wife, Virginia Ellen and one stepson.

William Agy, IE'55, of Moore, OK, April 3, 1973.

Gerald Kotlier, ME'57 and EE'60, of Warren, summer, 1978. Employed by Hewlett-Packard Co. Member of LIT Presidents Club.

Nelson R. Brown, ET'62, of East Detroit, February 25, 1978. Survived by his wife, Margaret.

Lawrence

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Sno' place like LIT!

Yes, yes, we *know* it's Spring and outside the robins are bob-bob-bobbing along. But, it was only a few weeks ago that the campus looked like this and students were celebrating their annual snow festival.

Good weather eventually put an end to the festivities. But, before the sunshine melted the fun, there were exciting tug-of-wars, snow rallies, and pizza eating contests.

Rumor has it that the festival ended

with an Alka Seltzer "fizzoff"—and the last we saw of the winners they were tired and bloating and heading off into the sunset singing a tuneful rendition of "Oh what a relief—burp, burp—it is!"

C'mon Spring!