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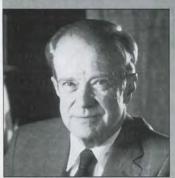


The Real Bridge To The 21st Century
The University's Amazing Founder: Russell Lawrence
Research Cars Among Nation's Best
Alumni Notes, Reunion News, And More!





Bridge to the 21st Century — Highway bridge replacement during the next few years may cost U.S. taxpayers \$50 billion. But pioneering research by a Lawrence Tech professor may result in bridges that won't rust out. They're projected to last a century.



Making Strides — Alumnus
Ed Donley has forgone
retirement, applying his
considerable business skills to a
larger goal — improvements in
American education. Teachers,
school superintendents, governors,
and even U.S. presidents are
listening.



A Real 'Hands-on' Guy! —
Not all Lawrence Tech
graduates choose careers in
the traditional corporate world.
It took a business crisis to move
alumnus Michael Andriaschko into
a career he truly loved.

Maximum Accountability
— Two Lawrence Tech
alumni design accounting
systems that help businesses
focus on success. Their primary
corporate asset? Other Lawrence
Tech alumni!

1 Into Training — Alumnus
Tom Fisher has translated
his love for old trains into
a career that keeps alive the age of
steam.



Planning Ahead — Alumna Beverly Hannah is one of only five African- American women to have founded their own architectural firms. If she has her way, many more will follow.

14 Driven to Win! —
Lawrence Tech's amazing
FutureCar has charged to
an impressive victory in what U.S.
Vice President Al Gore calls the
"most ambitious student vehicle
competition to date."



Formula for Success!—
Sixth of 97 in international competition, Lawrence
Tech's Formula SAE vehicle provides a hands-on entry to automotive careers.

Prologue to a Dream
— With little more than the strength of his ideas, his charisma, and good name, Russell Lawrence founded a

university at the depths of the Great Depression. Explore his life and times and the events that led to his fateful decision in this new biography containing neverbefore published information and photos. First of three parts.



26-Alumnus Jerry
Werner finds niches,
services customers, to assure success



20 On Campus — New degrees, new staffers, new facilities, and a revised master plan are among numerous campus happenings. Explore what's shakin' in Southfield!

48 Alumni Association News — Alumni meetings, reunions, events involve more alumni than ever. Check out activities in nearly a dozen states!

56 AlumniNotes — Moves, advancements, and other news from Lawrence Tech and DIT alumni from near and far.



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On the cover: Dr. Nabil Grace, professor of civil engineering, and students work at Lawrence Tech's recently enlarged Structures Laboratory, currently testing large scale models of an innovative carbon fiber-reinforced concrete bridge. The massive testing apparatus is the largest in Michigan. Bizon photo.

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# B - R - I - D - G - E

### TO THE 21ST CENTURY!

Feds, MDOT, City of Southfield seek to build a new bridge, the innovative design of which is being pioneered

by a Lawrence Tech
civil engineering
professor and student
team. Could their
research result in the
real bridge to the
21st century?

Mounta

Bridges played prominently in the rhetoric of last autumn's presidential race. However, what literally may be the real bridge to the 21st century is poised for construction in Southfield, thanks to the pioneering work of a Lawrence Tech civil engineering professor, Nabil Grace.

The Southfield span based on Grace's design is expected to be the first composite highway bridge in U.S. history, and utilizes carbon fiber instead of steel to reinforce and prestress the surrounding concrete. Steel's weakness in northern and coastal climates is its propensity to corrode on contact with water and salt. When deicing salts, for example, seep through a con-

crete bridge deck and spans, the steel reinforcing bars within expand as they corrode, creating internal pressures of up to 5,000 lbs. per square inch (psi). The surrounding concrete, at 4,000 psi, crumbles to pieces.

While corrosion isn't the only reason bridges "die," researchers say it is a substantially large enough problem to perk up taxpayers facing the \$50 *billion* tab for replacing over 40 percent of the nation's 574,000 highway bridges in the next few years.

Grace's general bridge design is one he adapted from a style used in parking garages — prestressed and precast double-tee concrete panels. He has connected these together with internal and external carbon fiber prestressing strands. A road deck slab poured on-site caps the bridge.

The three-year project costing about \$400,000 to date, is being funded with National Science Foundation grants totalling some \$200,000 and support from several corporations.

Glass fiber and carbon fiber composite materials have heretofore been used only in pedestrian bridges in the United States, although the materials are used in larger bridges overseas, especially in Japan and Germany. The carbon fiber used in Grace's research has to be imported from Japan.

Thile carbon fiber is currently more costly than steel, Grace speculates that the price differentiation may diminish as use increases and production economies drive costs down. "Spans eventually could be fabricated in factories to avoid the expense of on-site shoring and construction forms," he says. "The real savings is in much reduced maintenance costs and a longer structure life — perhaps 100 years." Many of today's bridges are hard pressed to reach the age of 50 before needing replacement.

The proposed Southfield bridge project is a three span replacement bridge over the Rouge River to serve an industrial park near Telegraph



To make bridges safer, the government is funding university research into new generations of materials that are low-cost, low-maintenance, and corrosion-resistant. An example: The first composite highway bridge in U.S. history will be built soon in Southfield, Michigan. Designed at Lawrence Technological University in Michigan, the three-span bridge will be constructed of precast, double-T-shaped panels prestressed with internal carbon-fiber-reinforced plastic or carbon-fiber composite cables.

This year, a bridge deck in Washington, D.C., will be replaced by a system of preformed grids of glassfiber-reinforced plastic, designed at

ENVIDO

Washington's Catholic University. Life expectancy: two to three times that of a conventional deck.

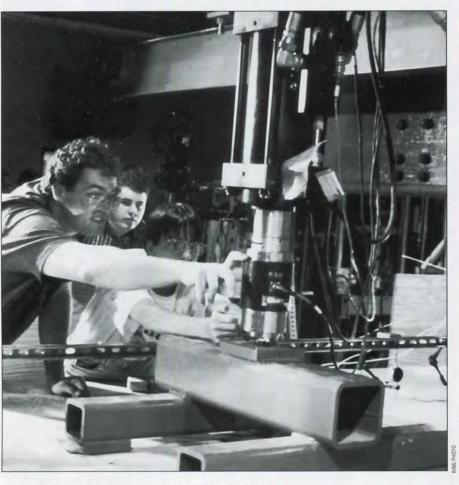
The University of Arizona can enhance the seismic capacity of concrete bridge columns four of five times by binding them in a glass-fiber and resin ribbon; the researchers have also designed carbon-laminate sheets that adhere to building facades for seismic reinforcement. The California Department of Transportation is considering the ribbon for state bridges. And researchers at Brookhaven National Laboratory have formed a consortium to quickly put new infrastructure technologies to use.—Douglas Page

# B · R · I · D · G · E TO THE 21ST CENTURY!

CONTINUED

The deteriorated condition of many of America's highway bridges is evident in this example, a bridge on Grand River Ave. between Novi and Taft Roads in Novi. Over 40 percent of the country's bridges are in need of replacement in the near future, perhaps benefitting from a Lawrence Tech professor's innovative research.





Lining up the actuator prior to the final testing of the third model are student research team members (L to R) Paul Lyons, Dan Budnik, and Mike Ledesma.

and Eight Mile Roads. Each span would be 66 feet long. One bridge would be built using conventional designs and a parallel bridge would incorporate Grace's new design and composite reinforcement. Especially interesting from the research viewpoint is that all vehicles entering the industrial park on the bridge must exit the same way, providing a "controlled situation for each bridge, both monitored over the same time frame," Don Gross, Southfield's director of community development, told *High Performance Composites* magazine. "It's a true benchmarking opportunity for comparative purposes."

ross estimates the project will cost some \$6 million. The city is seeking funds from the Michigan Department of Transportation, Federal Highway Administration, and the corporate community.

"We believe a small investment now could result in revolutionary technology for infrastructure application, and a large return for investors in the long run," Gross says.

Satellites will monitor both bridges over five years, Grace adds, providing civil engineers important data for future designs.

Grace, aided by 20 undergraduate and graduate students, has built four 26' long x 5' wide models to test his theories. Each model has been tested to simulate years of service before finally being loaded to failure. The massive



Prof. Grace (right) confers with his collaborator George Abdul-Sayed, a professor from the University of Windsor, as the two inspect a carbon fiber stirrup drawn from the debris of the third model. The 25'-long span was finally collapsed after the equivalent of 7 million heavy vehicles had passed over it, and after holding up to 135,000 lbs per sq. inch. Reinforced entirely with carbon fiber and glass fiber components, this bridge included carbon fiber stirrups which had to be custom made for the project by Mitsubishi.

structure testing apparatus built on campus to evaluate the spans and recently expanded is the largest such device in Michigan and perhaps the Midwest, Grace says. It has been built with the support of the Great Lakes Fabricators and Erectors Association and others.

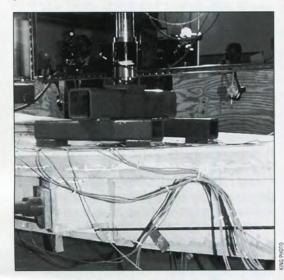
"The use of carbon fiber and this new design are expected to have great potential in significantly improving the nation's bridge systems," Grace says.

Engineers "are as skeptical a group as you can find," says Frederick Navarre, a consulting engineer for Southfield. "They need to see proof for acceptance because the risks are so great."

Apparently, they like what they see. Dozens of leading engineering publications as well as *Popular Science* magazine, CNN television, and other media have been covering the project. Other lab activities include examining composite reinforcement for roadbeds, also, promising equally notable progress in eliminating that related highway nemisis, potholes.

For participating Lawrence Tech students, of course, exposure to applied research such as Grace leads conjures up a different sort of bridge — one that leads to a job and a bright professional future. 

BJA/BPK



Lawrence Tech bridge model #3 deflects mightily just before it's forced to failure. The steel level spanning the top of the photo represents the straight edge where the bridge deck started. Work is continuing on a fourth model.



During a campus fact finding tour, State Sen. Gary Peters (right) discusses Prof. Grace's proposed bridge design incorporating carbon and glass fiber reinforcement instead of steel.



Prof. Nabil Grace's bridge research was a finalist for the Civil Engineering Research Foundation's 1996 Charles A. Pankow Innovative Concepts Award. Four student team members from Grace's Structural Testing Lab traveled to Washington, DC to participate in CERF's International Research Symposium & Technology Showcase. Pictured with Grace (right) are Dan Budnik, Sue Daniel, John Kytasty, and Mike Ledesma. Also attending was Lawrence Tech President Charles Chambers.

# $MAK_{7}$

Education rises on alumnus Ed Donley's tide of excellence

In 1959, Ed Donley, then a 38-year-old vice president at Air Products and Chemicals, aspired to make a difference in education in his community of Emmaus, Pennsylvania.

He ran for school board — and lost big. Some close to Donley say it's the only test he ever failed.

In the next 35 years, Donley became president of his company, leading it to international

> prominence. And when he retired in 1986 with company sales that grew from \$160 million to \$2 billion during his 20 vears as chief, he redirected the same skills to do what he tried in **Emmaus** three decades ago, only on a much larger scale.

From corporate matters to learning styles, from boardrooms to

classrooms,

from ledgers to blackboards, Donley immersed himself in education.

"I have not met anybody more single-minded about improving education," said Lamar Alexander, former U.S. secretary of education.

Donley led his area in developing a businesseducation partnership that got school superintendents and executives cooperating and was recognized by the Clinton and Bush administrations as a model.

He serves on state and national boards that set educational standards for hundreds of thousands of children, that develop tests for millions, that oversee colleges and preschool issues and deal with the latest technology in school reform.

Retirement for Donley brings meetings, conferences, interviews and speaking engagements from New York City to small communities near his home. He preaches reform to teachers, deans, parents, legislators, governor candidates and newspaper executives.

Area, state and national leaders say Donley's ability to build trust and consensus among divergent groups, his kindness, honesty, energy, vision and steady persistence and his penchant for embracing causes and then mobilizing others clearly set him apart from other lay citizens who champion education causes.

"If we had more Ed Donleys, I think we wouldn't be worried about school reform," said Dorothy Gulbenkian Blaney, president of Cedar Crest College.

When Alexander's office unveiled America 2000, which set educational goals that have been built upon by Clinton, Alexander was looking for communities eager to meet the mark.

"He brought Allentown to my attention," Alexander said, referring to the work of Lehigh Valley 2000: A Business Education Partnership. "We couldn't think of a better example of what we hoped communities all over America would

Alexander visited Allentown and former President George Bush followed in April 1992, making a keynote address on education reform.

"He has been a leader, and I salute him for the outstanding job he has done to help improve the way we teach our kids," Bush said.

Most days for Donley, 75, a thin man with a gentle demeanor and frequent smile, begin with a one and one-half mile jog through Muhlenberg College's campus in Allentown's west end where he lives in a large white twostory colonial home with his wife, Inez. He eats a fruit cup, dons a perfectly pressed suit and tie and then heads out for days just as full as when he led what is now one of the top 200 companies in the country.

s Donley sees it, the nation is his classroom and its 42 million children his

"The future of the country depends on having a high quality education system," Donley said, explaining why he is devoting his retirement to schools, rather than long days on the golf course and evenings in the sauna. "It seems clear to me that we can make it better than what it is."



As chairman of the U.S. Chamber of Commerce, in 1987 Ed Donley, ME'43, visited the Reagan White House to discuss trade issues and how to enhance American competitiveness in world markets.

He pointed to a portrait of his 10 grandchildren on a desk in his office at Air Products, which is donated by the company.

"They're going to live in this country," he said, "and I want their lives and the lives of all American children to be as fruitful as possible."

Ask Donley what it takes to succeed, he'll tell you two things: Get a good education. Work hard. His life is an example.

Born in 1921, he grew up in a log cabin on a farm just outside of Detroit with his mother, father and six younger siblings. His family struggled during the Depression.

He toiled alongside his father digging trenches and installing tiles to drain the salty, marshlike soil, a story he often recited to his three children as an example of how he learned to work hard.

As a teenager, Donley had to choose between a job to help the family and a scholarship to Lawrence Technological University. He opted for education, as a way to escape poverty. In his senior year, he went to work for Air Products, then a fledgling company based in Michigan with fewer than a dozen employees. He took classes in the morning, worked in the mid-afternoon and studied at night.

e graduated in 1943 with a bachelor's degree in mechanical engineering and I followed the company when it moved to Tennessee the same year. There, he met Inez.

The company moved to Emmaus in 1946 and to Trexlertown in 1958, while Donley advanced from sales engineer to manager to vice president to president and chief executive officer in 1966. For one year in the mid-1980s, he held perhaps the most prestigious business position in the country, chairman of the U.S. Chamber of Commerce.

Donley advanced because he had faith in his employees and led by example, said Dexter Baker, chairman of Air Products Executive Committee. It was Donley who volunteered Air Products to produce liquid hydrogen for use in rockets, helping the company become the world's leading producer of the chemical and forever changing the country's space program, Baker said.

"He got the very best out of people and he did it in a low-key, supportive, constructive way," Baker said.

Donley's not a whirlwind, but a plodder. He leaves an hour early just to be sure he will arrive on time. He drives a sporty red Ford



Ed Donley meets with local Allentown students, some of the beneficiaries of his efforts to improve education.

Probe and sets the cruise control at 55 or 56 miles per hour.

Donley said his business success resulted from aggressively seeking the best and bright-

"For 40 years, never a year went by that I wasn't on several college and university campuses recruiting the very best people," said Donley, who also served on several college boards of trustees including Carnegie Mellon University, Lawrence Tech, the University of Pennsylvania and Cedar Crest College.

At the same time, he and Inez emphasized education at home.

A Cedar Crest College president told Donley - who believes in school choice and tuition vouchers for private schools - that Allentown public schools offered the best education. So he moved the family from Emmaus.

Donley required his children to write book reports over the summer. He also kept a "cash glass" and the child with the best grades won the \$5 or \$10, said son Tom, 44.

"We knew there were standards we were expected to reach for and attain," said Tom, a graduate of Princeton University and Columbia University law school and president of the York County Chamber of Commerce.

John, 39, recalls television rationing — no more than three hours a week - and mandatory homework after dinner. Vacations always included pilgrimages to bookstores, he said.

"When we went to Cooperstown, NY, to see the Baseball Hall of Fame. I got a book of short stories by W. Somerset Maugham. I'm sure every other kid got a Yankees pennant," said John, a graduate of Harvard University and lawyer in the Chicago area.

In a 1991 letter, John told his parents that the greatest gift they had given their children was the upbringing and emphasis on education.

"These are the things I will always value and that Michele (John's wife) and I will always try to pass on to our children and grandchildren," he wrote.

Donley's ability to build trust and consensus among divergent groups, his kindness, honesty, energy, vision, and steady persistence... clearly set him apart from other lay citizens who champion education causes.

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Ed Donley (right) smiles as then-President George Bush visited Allentown in 1992 to commend progress toward education reform in Pennsylvania, an effort largely advanced with Donley's leadership.

Education is in Donley's blood. Both parents were teachers, as well as two of his grandparents and an aunt.

And Martha, 46, a New Hampshire psychologist with a doctorate from the University of Minnesota, has followed in her father's foot-

steps. She volunteers in her children's school.

Donley still takes his children and grandchildren on visits to the log cabin where he was raised and his old oneroom schoolhouse about a quarter-mile away.

He remembers studying at his desk most of the day and then standing in front of the teacher to recite what he learned. "The interesting thing about one-room schools is that the kids in higher grades are tutors for kids in lower

grades," he said. "Instead of kids sitting in rows listening to the teacher and being forbidden to talk to each other, they worked in teams."

It was a lot like the cooperative learning movement sweeping schools today, he said.

As Donley neared the end of his presidency at Air Products, he became increasingly restless about education. Managers complained that American students did not perform as well as graduates from other countries, he said.

Roger Mullin, former chairman of Mack Trucks and a neighbor of Donley's, remembers when the landmark 1983 report "A Nation at Risk" warned of a "rising tide in mediocrity" in American education.

"He (Donley) just took that in his teeth and decided to do something about that," Mullin recalled.

Air Products for years funneled money toward education. Employees contributed \$10



ENNSYLVANIA POWE GHT PHOTO

million during Donley's tenure as chief executive officer. Donley donated millions to colleges, school districts and the Allentown Public Library.

In the late 1980s, Lehigh Valley business leaders planned to influence local education with their minds, rather than just their pocket-books. In June 1991, the group including students, parents, educators and business and community leaders released a plan, advocating more than 200 changes in area schools and then established committees to make them happen.

"If there's a ring to be kissed in reference to the business education partnership in our area, it would have to be Ed Donley's," said Frank Farrell, executive director of the business-education partnership and retired superintendent of the Catasauqua Area School District.

Pennsylvania's then-Gov. Robert Casey created a similar panel on the state level at Donley's request. He co-chaired Pennsylvania 2000 with Donley. It put one of the state's most powerful Republicans — Donley — alongside one of the most powerful Democrats and further pushed a bi-partisan agenda for education.

"Ed met with every candidate for governor before the primary just to make sure they all knew about Pennsylvania 2000," said Helen Wise, Casey's deputy chief of staff for programs.

Donley also has nurtured a relationship with Clinton's Secretary of Education, Richard Riley. Once at Riley's request, Donley replaced him at a national conference in South Carolina on reducing the high school dropout rate, said Terry Peterson, a chief Riley adviser.

"We really pay attention to what he says," Peterson said.

At a vocational-technical school near Lancaster, about a dozen educators and current and former business leaders met at Donley's request. He had heard through one of his national affiliations that the school was giving students tests to determine if they are ready for the careers they want to pursue.

"It's like a college board (Scholastic Aptitude



He wielded a formidable pair of scissors during his days as student editor of the Tech News in about 1942. As editor and student government president, Donley started a legacy of service to alma mater and education that continues today.

Family is always at the heart of Ed Donley's world as he strives to improve the educational process. He's pictured here with wife, Inez, their three children, their spouses and grandchildren. Of his grandchildren Donley says, "I want their lives and the lives of all American children to be as fruitful as possible. Test) for the work student," said Michael Curley, director of post secondary education at the Willow Street Area Vocational School, the only one in the state using the test.

onley said for years businesses have hired non-college bound students with no firm indicator — such as an SAT — on how they would perform. The new test may be an important program for Pennsylvania's school-to-work committee to study, Donley said. Another connection sealed.

"He has the knack for finding important activities going on both nationally and statewide and affiliates himself with programs that he thinks will benefit us," said state Secretary of Education Donald Carroll Jr. "I think I do that, too, but he seems to be there a day ahead of me."

After visiting the vo-tech, Donley drove an hour to the Harrisburg area where he spoke to the deans of education from more than a dozen Pennsylvania universities, including Penn State, Kutztown, Lehigh and Temple.

"You are the key people," he told the group. "You are the ones who are going to train the teachers who then have to train the people."

Donley's volunteer work has won many awards, most recently a bronze plaque from the Pennsylvania Association of Colleges and Teacher Educators.

"It keeps him alive," Inez said of his work in education.

Donley came down the stairs one recent morning and told Inez he would be home for dinner, then left for a day that would include a meeting at Air Products with Tom Ridge, who would become the next governor.

Donley's got a natural love for learning, Inez said.

He learned how to use a computer after he retired from Air Products. "In the future, computers will be such an intrinsic part of people's lives," he explained.

Some ask when he plans to really retire. If his health is good, he'll keep working, he tells them.

"He wants to live forever," Inez said.

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#### ED DONLEY: A LEGACY OF LEADERSHIP

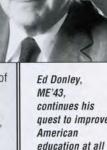
As a student, Edward Donley, ME'43 was elected president of the student government and served as editor of the *Tech News*. These posts heralded a legacy of leadership at Lawrence Tech and elsewhere that continues today.

Donley has been a member of the University corporation since 1971 and was its chairman 1982-93. His professional accomplishments were recognized by the Lawrence Tech Alumni Achievement Award he received in 1959 and by an unprecedented two honorary degrees from alma mater — the Doctor of Industrial Management in 1976 and the Doctor of Engineering in 1987. He was also tapped to present the commencement address each of those years, the only individual who has stood before two graduating classes.

On campus, Lawrence Tech's Edward Donley Computer Center is a tangible reminder of Donley's continuing leadership and support. In 1987, upon his retirement as chairman of Air Products and

Chemicals, Donley and his wife, Inez, made a gift to the University of \$750,000 — the largest personal gift in Lawrence Tech history to that time, and one which was further enhanced by Air Products, which donated an additional \$500,000 in his honor. More recently, he and Inez have personally matched other alumni gifts through challenge grants. For the past four years they have also hosted meetings of the Clearwater, FL area alumni chapter, encouraging other graduates to become more involved.

Among many educational posts he holds, Donley is a board member of the Pennsylvania State Board of Education, National Center on the Educational Quality of the Workforce, Council for Aid to Education, and the Council on Higher Education Accreditation. He is co-chair of Pennsylvania 2000 with Governor Tom Ridge. He chaired the Business-Higher Education Forum of the American Council on Education 1986-88. Donley was honored by the U.S. Chamber of Commerce in July, 1995 for his lifetime commitment to excellence in education. Last October, U.S. Secretary of Education Richard Riley appointed him to the National Assessment Governing Board. Since 1991, Donley has also served as a trustee of American College Testing (ACT). □BJA



levels

# A real 'hands-on' guy!

Dallas alumnus Michael Andriaschko, IM'69, survived a career crash and re-engineered his future, moving from electronics to a field where others can benefit from his 'special touch'

In this era of corporate unstability many in the baby-boom generation are finding themselves out of a job. Michael Andriaschko was one of them.

Two years of job hunting with little to show for it helped him decide that it was time to get some retraining and completely restructure his life and his future. And the best part is that he truly loves what he is doing now — therapeutic massage.

Andriaschko earned a bachelor's degree in industrial management from Lawrence Tech in 1969 and for 17 years enjoyed a successful career in electronics marketing and sales. In

1986, he fulfilled a dream when he organized his own company, Trident Marketing, and struck out on his own as a manufacturer's rep.

"Ever since I was a kid, I always wanted to have my own business," Andriaschko says. "I started with a small stake, and in 18 months I had more than tripled that investment."

The business prospered and he took on a partner.

That's when everything began to fall apart. His partner's involvement in contentious divorce litigation tied up the corporation's finances. Andriaschko tried to work things through, bought his partner out and hung on — but Trident was cash poor and the company didn't make it.

"It was one very expensive lesson in corporate finance," remembers Andriaschko with a sigh.

He tried to re-enter the job market and land another position, but his timing couldn't have been worse.

"Texas was economically depressed and competition in the electronics industry was very intense then," Andriaschko recalls. "There were few companies hiring, and those that had openings bluntly said I was 'over qualified.' I was willing to work for a lower salary than I had before, but they felt that I would not be happy

long term. I understood why they felt that way, but that didn't help me pay my bills."

The rejection led Andriaschko to make a soul-searching re-evaluation of the direction his life was taking. What were his options? What other skills did he have that he could use to develop another source of income?

"I was about eight years old when I first massaged my mother's neck. Everyone said then that I had a certain quality of touch that was exceptional. Ever since, I've enjoyed helping others feel better with massage, but I never thought of massage as something that could become a vocation.

"When I began searching for a way to develop another source of income, my family and friends encouraged me to try to develop that talent. A program at a nearby vocational school could lead to registration and certification, so I signed up."

"As soon as I started going to the classes I began to realize that this was what I needed to be doing. I'd made more money in the electronics industry, but I enjoyed this so much more, and what I was learning to do really helped people physically and mentally."

The stress relieving powers of therapeutic massage are well known in Europe, where Andriaschko was born in 1947 just after World War II. His Ukrainian parents had been conscripted and forced to work in Germany after Hitler invaded their country, but they were strong and their determination and ability to work hard helped them survive the brutal war. It was a powerful lesson on the importance of working hard that made a lasting impression on the young boy.

In 1950 Andriaschko's family immigrated to the U.S. and settled in Hamtramck, where there was a large Ukrainian community. There, in the heart of this openly affectionate environment, where the reassuring touch of hands is often felt, his interest in massage was first nurtured.

According to Andriaschko, therapeutic massage is now taught in universities and practiced in hospitals due to its ability to reduce tension and relieve many stress-induced illnesses. Research has shown that wounds actually heal faster when therapeutic touch is administered. Massage can also reduce fatigue, increase relax-



Not all Lawrence Tech grads wear corporate blue suits! It took a business crisis to direct alumnus Michael Andriaschko into a career he truly loved. Today, he sets his own pace and is literally a "hands-on" guy!

# 'I knew how to network to develop a client base and how to promote a business.'

- Michael Andriaschko, IM'69

ation, and lower blood pressure and heart rate. "Massage isn't just for the rich and famous," Andriaschko declares. "A good one can alleviate stress and boost your energy level. The process, if done properly, may also help the circulatory system, the digestive process, the nervous system and the skeletal muscles."

Ihroughout Europe there are thousands of comfortable and affordable inns and spas where people spend a few restful days taking mineral baths and enjoying rejuvenating full-body massages. In the U.S., top rated spas like Canyon Ranch in Arizona and Massachusetts, or the Golden Door in California, provide such services. The cost for a massage by a registered therapist varies from city to city, and therapist to therapist, with fees ranging from \$35 to \$60 or more for an hour-long massage.

"Eventually," Andriaschko says, "I'd like to have a large massage therapy center here in Dallas with a number of therapists on staff to provide basic services - from back rubs that last from 10 to 20 minutes to total body massages lasting from one to two hours. It will be a place where stressed out people can lie back, relax, close their eyes, take a deep breath, and

let go as the tension fades away.

"A good hour-long massage can be like a very affordable little spa vacation," he adds. "And — if you have a massage on a regular basis, the health benefits can be long lasting."

But was the difficult decision Andriaschko made to completely re-engineer his life and his career a good one? Is he better off now than he was before?

"Definitely," he replies. "The training that I received at Lawrence Tech in industrial man-



agement and the experience I gained working in corporate America helped me get off to a good start," Andriaschko explains. "I knew how to network to develop a client base and how to promote a business.

"I also understood the importance of having high-quality graphics to convey a professional corporate image, so I hired a graphic designer to develop an eye-catching logo for the company I've established. I call it 'Entouch.' The name has a European sound that people seem to respond to and remember.

"My client base and the corporation are growing," he says proudly, "and that gives me more control over my life and my future. Over a four year period my income is now up more than 300 percent. That kind of return on investment is very attractive, but the good feeling that I get when I help someone feel better — that's something you simply can't buy!" \(\simething\) HCB

Networking and promotional skills were among the assets alumnus Michael Andriaschko put to work for himself after leaving the electronics industry for a new career that allowed him to control his own destiny.

# MAXIMUM

# ACCOUNTABILITY!

Two Lawrence Tech grads develop accounting systems that do twice the work in half the time. They say their major corporate asset is a talented programming team of fellow alumni



Alums Jim Kovalsky, seated, and Hans Mills, both MCS'86, are using their skills to develop innovative computerized accounting systems. It sounds too good to be true — a business that designs accounting systems that can do twice as much work in half the time. But that is the kind of successful enterprise that two Lawrence Tech alums, Jim Kovalsky and Hans Mills, are building together.

The entrepreneurial pair, who both earned their math and computer science degrees in 1986, are principals in Accounting Systems, Inc. (ASI), a fast-growing corporation based in Troy that custom designs highly-efficient computerized accounting systems. Their customer base includes a diverse roster of importers, medical suppliers, printing companies, distributors and wholesalers, communication service providers, advertisers, builders, CPAs,

answering services, steel processors, and manufacturers.

Most of their new business is by referral, and their firm is continuously expanding to keep up with demand.

"When business is good," Kovalsky explains," corporations need a computer system that can help them grow to meet the demand. And, when business slows down, they have an even greater need for a system that can help them control costs and operate more efficiently.

"Computer systems that are more than five years old can be turned on — and they will work," he says, "but they are slow and very inefficient. The personal computers of today are literally 500 times faster than they were ten years ago — and growing exponentially. Storage capacity that cost \$20 eight or ten years ago now costs about 30 cents. Equipment purchased two or three years ago is now essentially obsolete.

"Some of the systems we are developing now use pen technology that can read a bar code. One fast stroke accurately enters all the information needed for an order or transaction into the computer system. That's efficient — and improved efficiency has a very positive impact on the bottom line.

"Any business that does a lot of high-volume repetitive billing also needs a computer system that can interact efficiently with the accounting department, the shipping department and every phase of the company," Kovalsky ventures. "But the way some accounting systems are programmed, operators must have a list of codes that sit next to the keyboard. Every time they want to enter data they have to look up the code. That's not very efficient!"

When Kovalsky and Mills design a system for a client they start with an on-site evaluation of every aspect of the company's operations. They seek a clear understanding of what the system requirements are — such as on demand reports, or cost/volume/profit analysis and automatic updating.

A wholesale business may need a single entry system for orders that will automatically generate: all of the documents required for shipping; a fax to confirm the order; and an invoice to the customer. When the customer pays the bill, the operator simply enters the amount paid.

According to Kovalsky, ASI clients don't have to be computer wizards. In fact, they don't have to know anything about how the computer works to use it. The only thing they have to know is how to turn it on. If they need a widget, they type in widget and the system finds all of them in the inventory. If they want to check on an order from ABC company, they can type in ABC and the computer program will find the company for them.

The cost of a custom-designed accounting system may be \$10,000 or more. That's a high dollar value compared to commercial accounting packages that sell for \$100 or less, but when the savings that can be realized month after month with a more efficient operation are entered into the equation, Kovalsky claims that an ASI system soon pays for itself.

Kovalsky got his start in the business when he was still a Lawrence Tech student. The founder of ASI, Don Weiss, hired him in 1982. Kovalsky recruited Mills in 1987. Five years later, when Weiss was ready to retire, Kovalsky and Mills formed a partnership and bought the company together. "We work well together," says Kovalsky.
"Technically Hans is a better programmer than I am. He's a better mathematician, and he's better at analysis. He keeps everything organized and flowing logically as he is working."

"Programming is actually part puzzle and part maze," Mills says. "I had to learn how to work in an organized way.

"When I entered Lawrence Tech," he explains, programming was something I'd just do with everything scattered around. Some programmers still do that — it's called spaghetti code. I had to develop a work ethic and learn how to keep it all organized, following all the steps making sure that it all worked at the end."

"Technology and innovation have helped us grow," says Kovalsky, "along with the ability to get good people. When we bought the business in 1992, we had a staff of four. Since then we've expanded three times. We now have 12 programmers on staff, and the first place we go to when we need to hire another programmer is to Lawrence Tech.

"Eleven of the 12 programmers we've hired were trained at Lawrence Tech," he explains, "and they've always been excellent employees. They had the ability to be productive on the very first day, and they know how to get the job done. We know that we can make a promise to a client and rely on them to follow through on it." □*HCB* 



Jim Kovalsky (right) and Hans Mills (both MCS'86) are principals of Accounting Systems, Inc. in Troy. They pause near a wall filled with diplomas of the Lawrence Tech graduates who work for the firm.

# INTO

# TRAINING

OLD WAYS, TRAINS FASCINATE LAWRENCE TECH ALUMNUS

om Fisher, ME'87, can't recall the exact moment he fell in love with trains. He knows they were a part of his life as a youngster. Today, he works on old locomotives at the Henry Ford Museum and Greenfield Village, assuring that new generations experience the shrill blast of a steam whistle and the smile of a train engineer waving from the cab of a passing ironhorse.

"My grandfather worked for the railroad and his farm backed up to the Grand Trunk Line. I could watch trains going by from the back porch," Fisher reminisces during a break in his duties at the museum's train workshop.

Fisher took a job with Greenfield Village shortly after graduating from Lawrence Tech with a degree in mechanical engineering. It was by chance. After volunteering to

restore a steam locomotive in Owosso, he spied an ad in a rail fan magazine for the museum's conservation department.

"I like working on old stuff. I've always been blessed with a mechanical bent. So this is a neat place to work," he says.

The Ford Museum has six locomotives on display inside, but it also has three working steam locomotives and a diesel-electric locomotive that carry passengers from Easter to mid-October on a two-mile loop of track in the Village. As part of his responsibilities, Fisher and other specialists also care for a traction engine, a paddle wheel boat and a stationary steam locomotive.

With the onset of cold weather, Fisher's days are devoted to overhauls. He says when he starts getting into the guts of the machinery he is always amazed how well things were built and put together in the old days.

"They didn't have calculators or computers or CNC lathes, and still they produced things that have proven durable for 100 years," Fisher says. "The biggest area where I see improvement is in metallurgy. They didn't have the quality we do today. Like with old castings, there are gas pockets that make parts susceptible to breakage."



Tom Fisher poses with one of three working steam locomotives kept in prime condition at Henry Ford Museum in Dearborn. Fisher, ME'87, is part of the restoration team that cares for the steamers and an electric-diesel locomotive that carry visitors around a two-mile loop of Greenfield Village from Easter to mid-October. Fisher also keeps a traction engine, a paddlewheel boat, and a stationary steam locomotive working at the Village.

When that happens, it's time to remake the part — one of the biggest challenges of the job. He says that's when his education at Lawrence Tech in machining and design comes in very handy.

"I was able to come into the shop with a background that allowed me to know what machines did, and what and how they were used," Fisher says.

But even Fisher's love of old trains ebbs on the tough

days - the very tough, dirty, and grimy days.

"Recently we had to crawl under some passenger cars for six weeks," he says, reluctantly recalling the experience. "The job started as a job to replace wheel set bearings. Once we got under the cars, however, we found the undercarriages had corroded and rusted. There was a lot of fabrication and welding. This meant, at times, having to shove 150-200 lb. metal plates into place while they were welded on. We did this while working with maybe two and a half feet of clearance."

And what does Fisher do in his off hours? Naturally, he collects trains! His fleet includes 15 or 16 American Flyer toy S-scale locomotives, 50-60 cars, and "a slew of accessories."

"These things deserve more than to sit on a shelf," he says. Fisher and his wife, Lynn, have two young daughters. Right now the kids enjoy dad's habit, but he knows that can change.

"There will be peer pressure in a few more years to do other things," Fisher predicts. "I'm not going to push them. Some kids just gravitate to it."

Right. Some kids fall in love with trains just watching them go by from a back porch.  $\square BPK$ 

# PLANNING AHEA.

Just five African-American women have founded their own architectural firms.

A Lawrence Tech alumna may be on 'divine' fast track

This ironic that churches are among the favorite projects for Beverly K. Hannah, Ar'85, BAr'88 — for Hannah feels she's indeed had some divine guidance in getting her career on the fast track. She's one of only five African-American women who have started their own architecture firms.

"I feel guided by a force greater than myself," Hannah says from her office on the 19th floor of the Fisher Building in Detroit. "I would not say it's been a matter of luck as much as it's been prayer. I just feel I am going where I should go. I feel I can be a positive force in the community. I've often invited school children to visit the office, and I've explained what architects do. I'm trying my best to give something back."

Hannah, 37, is founder and CEO of Hannah, McCrary & Day, Inc., which she started with a partner in 1993 in a smaller office in the Fisher Building. Each put up \$5,000 to launch the firm. Their first project — the \$6 million Friendship Baptist Church on a 14-acre site near Lansing. Since those early days, another Lawrence Tech grad, Roland F. Day, II, BAr'89, is among others who have joined the firm. Another recent change has been an additional new title for Hannah — "mom." She gave birth to a 6 lb., 3.4 ounce little girl, Kendra, Jan. 10.

During the 6-8 months that the firm worked on Friendship Baptist, Hannah and her partners marketed themselves and soon other jobs were coming in. They worked on the NBD Tech Center in Romulus; became the architect of record for OmniCare and will be designing sites in Memphis, Nashville, New Orleans, Philadelphia and Atlanta. They started with renovations to the burned out chapel of Hartford Memorial Baptist Church near the Lodge Fwy. and were soon designing an expansion of classroom space and the fellowship hall. The firm is also renovating a multipurpose classroom and auditorium at the University of Michigan-Ann Arbor. This past year they were asked to collaborate with the distinguished Detroit architecture firm Albert Kahn and Associates for a powertrain testing facility at Chrysler's Tech Center in Auburn Hills.

"It's kind of snowballed," she says.

annah came close to missing her calling in life. The pieces came together when she came to Lawrence Tech after taking almost every drafting class offered at Michigan State. She had started to major in civil engineering at MSU, but found herself attracted to drawing.

"Whenever I could take an elective, I took drafting. I went so far into the drafting program I had other students asking me why I was taking drafting just as an elective. I had always enjoyed it. That got me to thinking," she recalls.

She transferred to Lawrence Tech in 1981. While the 21-yearold Hannah took classes, she worked at Kahn on construction documents used for bids. By the time she was into the Bachelor of Architecture program at Lawrence Tech she was working with computer-aided design and three-dimensional drawings.

"Lawrence Tech prepared me design-wise and in the technical



Alumna Beverly K. Hannah is one of just five African-American women who have launched their own architectura firms. Hannah hopes that her example will assure that many more will follow.

aspects that helped open some doors. I think there are industrial and technical projects that would have been lost without the background I got at Lawrence Tech," she says.

She worked briefly elsewhere after graduation before she decided she "wanted on my own. I had always had a vision I would have my own firm."

"I had parents who instilled in me the value of education, and that if you work hard you can achieve anything you want. My life is unfolding as it should. They always told me to be whatever I wanted to be," Hannah says.

Hannah eagerly steps up to seeking to be a role model for African-American women.

"Ebony magazine did a profile of 10 women architects in August, 1995. From the story, I found out there are 800 minority architects in the country. Of the 800, 80 are female. Of the 80 females, 10 have their own firm. Of those 10, five took up the firm after it was initiated by their father or husband or someone else. That leaves only five who have truly launched their own architecture firm," she outlines.

She adds, "I feel strongly that I will succeed. There is the feeling for me that the strong shoulders of other African-Americans who have come before are allowing me to do what I am doing."

The collaboration with Kahn is going to lead to opportunities to branch into the industrial and automotive market, rare for African-American architecture firms, according to Hannah.

Besides continuing to grow in her firm's mainstay — churches — she is looking into multi-family residential developments in Detroit's empowerment zones, and expanding into entertainment development. The firm also bid to become involved in the Detroit Public Schools \$1.5 billion renovation of schools. She was also recently named to a committee studying potential new uses for the Pontiac Silverdome and serves on the cabinet of the Lawrence Tech Alumni Association's Architecture Chapter.

Hannah's vision of an "ultimate" project to work on would be a hotel/entertainment complex with a multi-use facility in Detroit that could be a catalyst for a lot of activity.

"I see so much growth in the city. Organizations are coming back here for conventions," she says of Detroit. "There are the new stadiums in the planning. I'd like to see a Hannah building go up associated with all of this."  $\square BPK$ 

# Driven to win!



Lawrence Tech FutureCar

charges to an impressive

international victory while

providing irreplaceable

hands-on experience for

participating students

eaving its Big Ten and Michigan rivals in the rear view mirror, Lawrence Technological University's 1996 FutureCar took an impressive second place finish in what U.S. Vice President Al Gore called the "most ambitious student vehicle competition to date." Incorporating concepts that many experts say provide the next leap forward in improved passenger car performance and efficiency, the Lawrence Tech student team won coveted awards for Best Engineering Design, Best Application of Advanced Technology, and Best Development and Application of Advanced Materials.

The FutureCar Challenge is "stimulating our thinking to look beyond conventional

automotive approaches," Gore adds. It "is more than a competition. It is a collaboration that brings together the brightest minds of government, industry, and academia in an effort to 'reinvent' the American automobile."

Special streamlining and lighter components were among Lawrence Tech's winning strategies to reduce drag and increase efficiency of its 1996 FutureCar entry. The result, 65 mpg at highway speeds!

At the 1996 competition June 17-24, the first year of a two year effort, Lawrence Tech edged out the University of Michigan, Ohio State, Michigan Tech, University of Wisconsin-Madison, University of California at Davis, and University of Illinois at Chicago, among others, losing only to Virginia Tech.

Hyades, the name of Lawrence Tech's winning vehicle, is an asterism of five stars representing the head of the constellation Taurus — symbolic of a front runner. The car more than lived up to its name. It was one of just seven cars still running among the field of 12 schools on the last day of the competition. Lawrence Tech's focus? "Reliability and dependability," says team manager Jim Swan. In fact, as Dr. Greg Davis, faculty advisor, notes, Hyades "didn't require service during the entire week of competition!

"We stretched ourselves, went with a very advanced design, and yet we achieved durability. That's the real trick."

Lawrence Tech's car boasts a parallel hybrid powertrain. Starting with a stock 1996 Ford Taurus, during the 1995-96 academic year the student team devised strategies aimed at



Dr. Greg Davis, left, faculty advisor, and student Jim Swan, 1996 team manager, discuss the shielding for high voltage electrical connections in Lawrence Tech's innovative FutureCar. Swan was responsible for coordinating the work of the University's nearly 60-member student team.

increasing vehicular efficiency and reducing weight. Body and interior changes were completed while others on the team worked to snuggle a 43-hp Unique Mobility electric motor and controller and a newly developed Volkswagen 90-hp turbocharged direct-injected diesel engine under the hood, both linked to a modified automatic transmission. A battery pack of 13 Ovonic nickle metal hydride battery modules power the electric motor, power steering, programmable logic controller (PLC), and all 12 volt accessories.

Normally, the electric motor accelerates Hyades from a stop to about 10 mph, at which time the clutch engages, starting the diesel engine. The engine and motor operate simultaneously to provide motive power. The amount of electric motor assist is regulated by the PLC to maximize powertrain efficiency. To improve fuel economy and reduce emissions, the diesel is never allowed to idle. It turns off when the brake pedal is depressed or if the accelerator is released more than five seconds. The result? Virtually no energy consumption at idle!

his hybrid configuration proved so reliable that the day after the 1996 competition, Hyades was the only FutureCar to drive 280 miles cross-country from Dearborn to Chicago for a review by top scientists at



Argonne National Laboratory. Hyades averaged the astonishing equivalent of 65 mpg at an average speed of 65 mph while carrying four people! Upon arrival, it had consumed less than half of the on-board energy, which would have enabled the car to return to Southfield without refueling or recharging.

Tom Mott, student leader of the electric propulsion group says Hyades "was the only car to have an automatic transmission and full power steering. Consumers like to have these luxury options."

Members of the Lawrence Tech FutureCar team pose with top awards following ceremonies concluding the 1996 portion of the two-year FutureCar Challenge. The team took second overall, and took coveted Bes Application of Advanced Technology, Best Application of Advanced Materials, and Best Engineering Design awards.

# riven to win!

### LAWRENCE TECH FUTURE CAR

1996 FORD TAURUS: DIESEL-ELECTRIC PARALLEL HYBRID

Engine: Type: Volkswagen Turbocharged Direct

Injection Diesel

Displacement: 1.9 Liter Power: 90-hp @ 4000 rpm Thermal Efficiency: 43% Cooling System: Water Cooled Curb weight: 3857 lbs.

0-60 mph: 11.5 seconds

Top speed: 112 mph (governed)

**Electric Motor:** Type: Unique Mobility Three Phase, 18 Pole, Permanent Magnet,

Brushless DC with controller

Power: 43-hp Efficiency: 90%

Cooling System: Water Cooled

Transmission: Modified Automatic without torque convertor Fuel Tank: 9 gallons Diesel Fuel = 325 kWH @ 54 lbs. Batteries: Type: Ovonic Nickel Metal Hydride (NiMH) Number of Modules: 13 = 16.25 kWH @ 510 lbs.

Pack Voltage: 194 VDC

Charge Time: Up to 7 hours (Depends on State of Charge)

Range: Hybrid mode: Up to 600 miles Electric mode: 70 miles

\*Based on economical driving habits and good driving conditions.

#### Other Features

Low profile Prismatic mirror system, reduces 'blind spot' and lowers drag. Air suspension lowers vehicle ride height at highway speeds. Electrically powered hydraulic steering system. Low energy high intensity diode running lights. Lightweight tinted safety glass. Low rolling-resistance tires mounted on aluminum rims. Hood and wheel skirts constructed of carbon fiber composite. Aluminum front fenders. Four wheel disc braking system uses aluminum rotors.

2nd Place Overall, Best Engineering Design, Best Use of Advanced Technology, and Best Development and Use of Advanced Materials.

"What impressed me was the ease of driving. All I had to do was steer. It worked and handled great," adds Ivan Menjak, student powertrain team leader.

FutureCars are judged for performance, including acceleration and handling, as well as for consumer acceptance. Lawrence Tech earned its berth among the 12 final competitors on the strength of the student team's written proposal - chosen from among 100 submitted by top engineering colleges across North America.

The FutureCar Challenge is Lawrence Tech's largest student project, annually involving some 60 students representing undergraduate majors in electrical and mechanical engineering, engineering technology, and management, as well as several graduate students pursuing their Master of Automotive Engineering degree.

The FutureCar Challenge was inspired by the Partnership for a New Generation of Vehicles and is sponsored by the U.S. Department of Energy and the U.S. Council for Automotive Research (USCAR), a consortium formed by Ford Motor Co., General Motors Corp. and Chrysler Corp. DOE and USCAR's intent for FutureCar is to showcase industry, government, and academic cooperation. PNGV's goal is to achieve technologies leading to production of mid-sized passenger cars achieving up to 80 mpg while reducing emissions and maintaining all the perfor-



mance, utility, safety, consumer amenities, and affordability of today's sedans.

Lawrence Tech's 1997 FutureCar team looks forward to driving Hyades to the same amazing record of success enjoyed by last year's team.

"The bar rises," says Davis. "We're adding heat and air conditioning." The 1997 competition is in June at the General Motors Technical Center in Warren. □BJA

# Before FutureCar, there was Response I and II

Lawrence Tech's FutureCar is the latest in a series of high-tech vehicles aimed at improving the energy efficiency of the American passenger car while maintaining performance, safety, and consumer comfort. Its predecessor, Response II, was conceived as a sporty two-seater, front-wheel-drive commuter car for the U.S. Department of Energy's 1994 and '95 Hybrid

Electric Vehicle Challenge. From inception to completion, the 12 universities building cars from the ground up had goals to create products that would appeal to the public while providing marked improvements in operating efficiency when compared to traditional production cars.

Lawrence Tech was triumphant. At a special White House ceremony in 1994 commemorating the nation's progress toward energy efficient vehicles, Response II was chosen to be the only university research vehicle displayed! The vehicle took Best Appearance and third overall in the 1994 event which, coincidently, was hosted by Lawrence Tech. For the final competition in California in 1995, modifications and improvements were made to the car's powertrain, front and rear structures, and to the operating strategy. Despite a failure

of the motor controller early on, the car still won Greatest Range award and placed fifth overall.

Response II was preceded by Response I, also an all-new car from the ground up, design of which began in 1992. In the 1993 HEV Challenge, the car won Best Design, Most Manufacturable Vehicle, Excellence in Safety Engineering, and took fifth in dynamic events.

Some 300 Lawrence Tech students have participated in the Hybrid Electric Vehicle projects since 1992. With skills honed in the HEV programs, many of these students, now Lawrence Tech alumni, are employed in industry creating automobiles for tomorrow!  $\Box BJA$ 



Response II



Response I

# FORMULA for success!

## Sixth of 97 in international competition, Lawrence Tech tops all other Michigan universities!



During the morning rain delay Aaron Bresky (far right), student advisor to Lawrence Tech's SAE Formula team, discusses driving strategy with Jeff Kotila (seated in car). Strategy played an important role later in Lawrence Tech's run in the endurance event, which helped Lawrence Tech net an overall sixth place finish in a record field of 97 entries.

awrence Technological University overcame a rain delay and a broken wheel hub to take sixth place at the Society of Automotive Engineers' Formula competition, held May 16-18 at the Pontiac Silverdome. The 1996 competition drew a record 97 entries from universities and colleges from across the United States, Canada, and Mexico.

Lawrence Tech's team of 23 students majoring in electrical, mechanical, or automotive engineering went to the Silverdome with a

brand new, built-from-the-ground-up 90-hp open cockpit racer. The car was designed and built during the past academic year as part of a project assignment required of graduating seniors at Lawrence Tech.

Formula SAE teams can earn up to 1000 possible points during static events — presentation, design and cost — and performance events like skid pad, acceleration, AutoCross, and endurance.

The grueling endurance event was the last challenge faced by the teams. Going into it, Lawrence Tech had netted third in the AutoCross, 22nd in skid pad and 27th in acceleration. Lawrence Tech made its run following a rain delay in the skid pad and acceleration on a wet track. During the last lap of the morning endurance run a wheel hub broke on Lawrence Tech's car.

"I thought we were done," recalls student Paul Semczask, who drove in the acceleration event and in the afternoon run of the endurance event after the hub was fixed. "It came down to Chris Stockman and me — the slower drivers on the team. The car was set up nice, though, and we just went for it."

Semczask and Stockman combined their driving efforts to register times that put the team into seventh place in the endurance event. That finish put the team in sixth overall.

The main objective of the Formula competition is to offer students hands-on experience in engineering and building a car — from concept to reality. Aaron Bresky, EE'94, an advisor to the team and a student in Lawrence Tech's Master of Automotive Engineering program, can attest to the difficulty of the task. As a Lawrence Tech undergrad, he went through the Formula project as a senior two years ago.

"Most of the benefits of Formula are things you can't learn in the classroom, like how to work on a team, and how to make the best use of limited time to finish building an entire car," says Bresky.

Bresky, now an engine systems engineer with Cosworth Intelligent Controls in Dearborn, says he was impressed with the workmanship of Lawrence Tech's 1996 car, which utilizes a simple design. He praised the job done by the team in getting the car ready for the competition, pointed out it took some "juggling" on his part to balance his role as "boss" and team member. He "even pulled four or five all-nighters," something that brought back memories of his undergraduate days. He says the team knew what they had to do going into the competition.

by doing well in a number of the events," Bresky adds. "As long as we stayed in touch with the top half in all the events, we had a chance."

"It was an outstanding car," agrees Jettie Sweeney, Lawrence Tech's team manager and one of only two female captains in the entire history of the SAE competition. Sweeney adds that there was something else she walked away from the experience with. "That's the main thing I'll look back on — how everyone helped each other. Teams loaned tools, expertise. I know we helped out a couple of teams."

Sweeney found some additional happiness in Lawrence Tech's top ten finish — "We beat the University of Michigan. That was important to me!"

In fact, Lawrence Tech was the only Michigan university in the top ten, and beat all other Michigan universities entered, including GMI (76th), Michigan State (28th), Michigan Tech (50th), UM-Ann Arbor (17th), and UM-Dearborn (38th).

Bresky points out another Formula SAE benefit — contacts. He says that one of the student drivers for the endurance event was immediately approached during a change over in drivers by a gentleman from GM. The student got a business card and maybe a lead on a job. \(\square\$BPK\)



# Tim Adams takes Lawrence Tech's car through some practice runs prior to

taking the car out for the auto-cross event. Lawrence Tech took third in

that event.



Heidi Cardon, ME'96, left, discusses strategy prior to the acceleration event as the Lawrence Tech Formula SAE team head. Cardon was one of three female members of the team.

### 1996 FORMULA SAE TOP 20

- 1. University of Texas-Arlington
- 2. Rochester Institute of Technology
- 3. Ecole de Technologie Superieure
- 4. Cornell University
- 5. Virginia Polytechnic Institute and State University
- 6. Lawrence Technological University
- 7. Oregon State University
- 8. Universite de Sherbrooke
- 9. California State Polytechnic University-Pomona
- 10. California State University-Sacramento
- 11. University of Akron
- 12. Ohio State University
- 13. Drexel University
- 14. University of Washington
- 15. Worchester Polytechnic Institute
- 16. Penn State University
- 17. University of Michigan-Ann Arbor
- 18. Auburn University
- 19. University of Missouri-Rolla
- 20. Georgia Institute of Technology

# PROLOGUE TO A DREAM

FIRST OF A THREE PART SERIES

He devoted his energies, his reputation, and even his family savings to launching a university that embraced the opportunities of the new technological era. He was among the first academicians to partner with industry. In the darkest days of the Great Depression, he convinced corporate leaders that investment in people always paid dividends. And, at a time where higher education was largely the province of the wealthy, he argued that

ability, not wealth, should determine who might attend college. Meet the remarkable founder of Lawrence Tech,

Russell Lawrence!



This oil portrait of Lawrence Tech founder Russell Lawrence, based on a photograph, hung for many years in the University's original building in Highland Park.

awrence Technological University was born into a world turned upside down. The transformations in the quality of American life within a matter of months following the 1929 crash of the stock market defied description. Factories were shuttered, farms lay idle, and merchants were closing their doors.

By 1932, nearly 25 percent of the nation's labor force was unemployed. The picture was particularly bleak in Michigan, one of the nation's most industrialized states. Between 1929 and 1932, 225 Michigan banks failed, leaving thousands penniless. Bank "holidays" declared by the governor to calm panicky depositors had just the opposite effect. During the same years, the number of factories operating in Michigan dropped more than 30 percent.

As dean, Russell E. Lawrence designed "every square inch" of the College of Engineering Building, opened in 1927, at what is today the University of Detroit Mercy. Lawrence called the new structure his "dream school" after coping for several years in cramped, makeshift quarters at U of D's original campus on Jefferson Ave. Visitors came from around the world to see how Lawrence augmented classrooms and smaller laboratories with an innovative high bay lab space spanning the entire width of the building, surmounted by skylights, a huge moving crane, and surrounded by offices for faculty who oversaw projects within the lab. His prophecy that enrollment growth would require an addition within three years came true. The building, in this recent photo, remains much as Lawrence planned it 70 years ago.

Detroit's teeming automotive industries saw sales plummet from nearly 4.5 million units in 1929 to just 1.1 million in 1932.<sup>3</sup>

Colleges and universities were suffering too. Students were suddenly without savings to pay tuition. Many dropped out to seek jobs. Collegiate endowments were decimated. Contributions dried up. These problems hit particularly hard at the University of Detroit, which during the 1920s had incurred a large debt developing a handsome new campus at Six Mile and Livernois Rds. Income and investments were in serious decline as creditors sought payment for the new construction.

Over at U of D's new College of Engineering Building, which he had designed, Dean Russell Ellsworth Lawrence watched the university's declining resources with alarm. In a time of program retrenchment he was eager — even driven — to innovate.

As the Great Depression deepened, Lawrence expressed concern that a college education was being denied to many individuals, not because of their ability to succeed, but because of their inability to pay. And more engineers, not fewer, Lawrence argued, were what would cure America's economic ills.

Named to lead U of D's engineering programs in 1921, Lawrence managed program and facility growth that boosted engineering enrollment from just 50 students to 1,270 by 1928. Editors of U of D's 1928 yearbook, dedicated to Lawrence, praised his administration for having led engineering from its origins as a small department in the School of Commerce and Finance to the largest enrollment of any U of D division — making it the fifth largest technical school in the nation.

Neither was Lawrence willing to sacrifice quality for growth. His students were winning numerous intercollegiate academic competitions. The pioneering cooperative program, modeled on the first begun at the University of Cincinnati in 1909, was strengthened and expanded. He oversaw the start of then-novel



evening programs, a 5,000-circulation technical journal, and a new aero engineering program, among the first and soon among the largest in the nation.

In 1930, Lawrence initiated at U of D what he called a "large scale experiment" based on his idea for "democratic" American education. Lawrence believed, and convinced a blue ribbon advisory committee of Michigan's top industrialists to concur, that some of the nation's best potential leaders were factory managers who were kept out of college by finances or job demands. Lawrence's solution? Some 550 foremen in Detroit industrial plants were recruited for a three-year evening certificate program in industrial engineering studies.

"In order to reciprocate with the industrial plants that give university students employment, and complete the cooperative cycle, we are taking the best men from the factories and giving them technical instruction," Russell Lawrence told a *Detroit News* reporter in 1930. "If other universities establish similar courses, the idea of furnishing advanced education to men qualified by brains rather than by financial background will become a reality."

Students paid \$5 per subject.<sup>6</sup> Other costs were borne by the university, employers, and philanthropists. Successful beyond Lawrence's imagination, 850 students had flooded into the industrial certificate program by Sept., 1931.<sup>7</sup>

Unlike many academicians, Russell Lawrence was no stranger to industry.

Russell was born Nov. 4, 1889 in Terre Haute, IN, the second of five children (three daughters and two sons) of Ellsworth and Mary

### PROLOGUE TO A DREAM CONTINUED



Engineering enrollment had jumped from 50 students to as high as 1270 during the 9 years Russell Lawrence had served as dean of engineering at the University of Detroit when this picture was snapped in his campus office in Oct. 1930.

Catherine (Holmes) Lawrence. Ellsworth was a casketmaker and farmer.8

Russell grew up in Terre Haute and graduated from Wiley High School there in 1909. He entered the local university, today Rose-Hulman Institute of Technology, where he earned a Bachelor of Science degree in mechanical engineering in 1913.

Outside the family business, Lawrence's first job after graduation was with the Root Glass Co. of Terre Haute, where he served as general engineer for about eight months. He then struck out on his own, leaving his hometown for a position with General Electric's turbine research department in Lynn, MA.

"My job is secure and steady," he would write his old friend, Dr. Carl Mees, at Rose in 1915. "The only fault is (that) they are strong on the responsibility and short on the coin!"

Lawrence returned to Rose in Sept. 1915 for graduate studies and was awarded a master's degree in mechanical engineering in June, 1916.

In a July 11, 1916 letter of introduction for Lawrence to present to prospective employers, the acting president of Rose commented:

"While here the past year, Mr. Lawrence gave part of his time to the work of instructor in mathematics and physics. As a student, Mr. Lawrence was amply satisfactory in all his work, and-proved himself a faithful, hard-working fellow, and apparently has the faculty of acquiring a grasp of his subject, and coupled with sufficient tenacity of purpose to carry him over difficult points. As an instructor he showed an ability not only to impart information but to exercise discipline and control over his students." 10

awrence returned to General Electric where he spent another year in the standardizing laboratory. In 1917 he began doctoral studies in science at the University of Cincinnati. World War I and the U.S. Army would intervene.

In Feb. 1919, Lawrence, by now married to the former Freida Hoelzgen, wrote another letter to Mees, describing his Army experiences and his new association with the University of Detroit.

"My career in the Army did not get the start of an Officer's Training Camp. I enlisted as a Private in the Meteorological Section, Signal Corps. Our Company was composed of 300 engineers with experience, so you see the competition for the few commissions allowed us was great. I was lucky in having mastered Prof. Peddle's (class in) charts, and on the strength of some charts and slide rules I was advanced step at a time to Sergeant First Class, and saw a good part of the USA at the same time, being put on Detached Service....

After testing anti-aircraft shells at the Bethlehem Proving Grounds, we were called to Washington Headquarters. That was in November (1918). The Company had been scattered all over the United States and some were in France. Those in America were allowed to vote on twelve men in order, according to their opinion of each man's worth. The first three men to get the largest vote were to be commissioned. My work on charts and slide rules at College Station, Texas (Texas A. & M. College) must have made a good impression for I was elected by the Company for a commission. I never received it though, because the Armistice was signed and the war was over. I was called to the Adjutant's office to sign the application when a phone call

came in telling that no more commissions were to be granted. But, I am satisfied a day of world peace means more than a commission, surely.

The war at an end, no incentive left in being a soldier, we at once got busy working for our discharges.

I secured the position (at the University of Detroit in 1918) as professor of mechanical engineering (the professor part sounds big, but that is what the dean calls me, so I guess I am an honest-to-God "prof"). I teach thermodynamics, mechanism, machine design, mechanical drawing, heat engines, industrial employment, and visit the factories two afternoons a week. The engineering laboratory is also a part of my work. My salary was increased in the first month's work and I have a good chance of being made assistant dean. I have to study hard; but my training at Rose left a deeper impression than I thought. I am very enthusiastic in the work....1

Lawrence thrived in his new position. After two years as acting dean, in 1921 at age 32 he was promoted to dean of U of D's College of Engineering.12 He also continued work on steam and gas motors and held investigations of steam accessories, boilers, and automotive parts. Among his patents, he developed an improved home heating plant and an automotive engine.

n 1924, based on his accomplishments, Lawrence was elected to the prestigious Philadelphia-based Franklin Institute. In 1926 Lawrence offered the surprising

predictions that by 1946 Detroit would have television and 3-D movies. He envisioned huge shopping centers built on Detroit's outskirts, the widespread use of electricity to cool buildings during the summer, and a five-day work week. Several years before the 1929 stock market crash he advocated a one year wage set asidefund as a cushion against economic downturns.13 To promote U.S manufacturing he advocated a new federal cabinet position secretary of industry.1

He expanded his close ties with industry by developing a reputation as an expert witness in litigation involving engineering problems. He was retained by both General Motors and Packard as a consultant, and was considered an authority on vibration and patent cases. He encouraged the establishment of some of the first student chapters of professional societies on any campus15 and brought in top industry leaders like GM's legendary Charles F. "Boss"

Kettering to meet with students.16

Lawrence convinced the U of D administration that his college, with its burgeoning enrollment, required a home of its own on the new campus on Six Mile Rd. Lawrence completed plans for U of D's new 65,000 sq. ft. engineering building in three days. He planned "every square inch of it," reported U of D's November,

1927 Varsity News as the building opened. Lawrence warned that enrollment would likely require an expansion within three years. An addition was indeed needed, and opened in the fall of 1930.17

ut by the spring of 1932, it was clear that Russell Lawrence's beloved engineering programs would be sharply curtailed. Unable to meet its payroll, and with default looming less than a year in the future,18 U of D among lay faculty. Lawrence also lost a powerful friend and ally in Father John McNichols,

who had championed development of the new campus but who now lay terminally ill. At odds with a new administration, Lawrence decided to resign, as reported in the Detroit Free Press, April 19, 1932:

announced layoffs, particularly U of D's visionary president,

> DEAN LAWRENCE QUITS AT U. OF D. Head of Engineering School to Finish Semester

Dean Russell E. Lawrence, head of the College of Engineering of the University of Detroit, has presented his resignation to the Rev. A. H. Poetker, acting president, it was learned Monday. The resignation is to become effective at the end of the present semester.

"As an economy measure several instructors will be notified that their dismissal becomes effective at the end of the present school year," Father Poetker announced ....

Student protest against the dismissal of faculty members was reported on the campus. No formal action has been taken by the student body, however."

The following day (April 20, 1932) the Free Press reported on more campus reaction:

"My career in the Army

did not get the start of

an Officer's Training

Camp. I enlisted as

a Private in the

Meteorological Section,

Signal Corps."

### PROLOGUE TO A DREAM CONTINUED

Lawrence expressed
concern that a college
education was being
denied to many
individuals, not
because of their
ability to succeed,
but because of their
inability to pay.



World War I and the U.S. Army interrupted Russell Lawrence's doctoral studies at the University of Cincinnati. In 1918, mustered out of the service, Lawrence, pictured with his wife, Frieda, was named professor of mechanical engineering at the University of Detroit. He was named dean in 1921, launching a series of academic innovations and growth during his 11-year tenure that ended in 1932 when he resigned to found what is today Lawrence Technological University.

# U. OF D. STUDENTS PROTEST CHANGES Engineers Want Dean Lawrence Back

With the resignation of Russell E. Lawrence, who has been dean of the University of Detroit's engineering college since 1914 (sic), petitions for his reinstatement to the Rev. Albert H. Poetker, S.J., acting president of the university, began circulating among 900 engineering students Tuesday....

Dean Lawrence's resignation occurred just before the first cut in the faculty was made by Father Poetker, acting in the place of the Rev. John P. McNichols, S.J., former president, who is convalescing... "Because the enrollment has dropped 800 students in the last year and a half we are forced to use such measures to reduce expenses," said Father Poetker....

Regardless of student reaction and protests at U of D, for Russell Lawrence there would be no turning back. As the spring 1932 term wound down, Lawrence had the sad duty to serve as

pallbearer for Father McNichols, who had been ailing for several months prior to his death April 26. Lawrence also continued his teaching and administrative duties, including advising several senior engineering students in the midst of their project to design and raise a massive 85-foot campus flagpole. But by the time the Detroit News reported on May 8 that Lawrence was being honored by the University's Dynamic Club for his "many years of service in promoting the engineering school's growth," he was well along in formulating one of the most ambitious educational plans ever conceived at a time hardly conducive to new enterprise. With little more than the strength of his ideas, his charisma and good name, Lawrence would launch a new university. \(\squab BJA\)

The Lawrence story continues in the next Lawrence Tech Magazine.

#### RUSSELL LAWRENCE AT HOME

#### A DAUGHTER REMEMBERS

Y father had a whole upstairs bedroom filled with radios, loud speakers and dials of various sizes and shapes. He also had long lines of radio aerials strung out on the trees out-

side the house. He was forever tinkering with the radios, and I recall hearing all kinds of weird static and ear-piercing dial tones coming from the room at night as my Dad tried to pick up various stations in those early days of radio. He also had all kinds of motors and engines around and was forever experimenting with them.

He had a serious nature, but I remember him as a happy, laughing daddy who loved to play practical jokes. He had a real zest for life and a strong drive to achieve something worthwhile. He liked airplanes and flew in some of the early

models. He was a friend of Wiley Post, the flier, I believe.

Dad loved the woods and built a home for us in the country on wooded land. I recall going for walks in the woods with him, or watching him while he fished in the river behind our house. At age 3, I fell into the river and would have drowned, but fortunately he jumped in, clothes and all, spotted a little bit of my hair floating downstream, and dragged me out unconscious.

My sister and I loved to sit on his lap at bedtime. He often told us marvelous tales, made up along the way, about a character called Crazy Cat. On summer evenings, we loved to lie out on the upstairs veranda looking up at the sky while

our Dad told us all about the stars.

Daddy taught himself to play the piano, and was quite good at it (in my little girl eyes.) He loved to sing at the top of his lungs, accompanying himself on the

piano. He was also a talented artist, though mostly untrained.

He and my mother were both born and raised in Terre Haute. They were married during World War I, Jan. 1, 1918. Dad was careful to sign up in the Army several days before the wedding, however, for he feared people might think he was a "slacker" who married to avoid the draft. Mother travelled with him during the war to College Station, Texas; Cape May, New Jersey, and elsewhere doing secretarial work. He was about to go overseas when the Armistice was signed."

Louise Lawrence Keightley

(Russell and Frieda Lawrence are survived by two daughters, Freda, born in 1921, and Louise, born in 1924. Mrs. Lawrence died in 1978.) □



Russell Lawrence proudly holds daughter Louise while daughter Fred stands at his side early in 1926. Louise remembers her father as a smiling, happy story teller with a zes for life.

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- 13 "One, Without Funds, Opened a College; the Other, at 25, Made it Hum." Detroit Free Press, Jan. 30, 1955.
- 14 Lawrence, Russell E. "Machine Age." University of Detroit Co-Ord, Apr. 1931.
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- 18 Muller, p. 175.

# Excellence

ALUMNUS JERRY WERNER, CIVE'60, FINDS NICHES, PURSUES QUALITY, SERVICES CUSTOMERS TO ASSURE SUCCESS



oday, at age 59, when many of his contemporaries are slowing down or looking ahead to retirement, alumnus Jerry B.

Werner has never been busier.

Werner has launched three new companies in the last nine years. In 1987 he founded Timber Systems, Inc., a firm that designs and furnishes heavy timber glue laminated structural systems in South Florida and the Caribbean. In 1989, with two partners, he started Omega Engineering Consultants, a "forensic engineering" firm. In the past year he and his partners launched Construction Material Specialities, a distributor which Jerry serves as president and C.E.O.

Werner traces his interest in engineering to a boyhood event in Michigan when he was inducted as an Eagle Scout. His sponsor for the recognition dinner was former Michigan Governor Murray D. Van Wagoner, a civil engineer who had served on the design committee for the Mackinac Bridge.

A dining pavillion in Montego Bay, Jamaica with 67 ft. wide sides shows off the versatility of alumnus Jerry Werner's laminated timber products. By precutting and shaping the components at the manufacturing plant, such structures go up on site like giant Erector sets. "I spent the day in his office in Detroit," recalls Werner. "There was a scale model of the bridge. I was fascinated by it. I was really hooked, and decided to pursue engineering as a career."

"It was my neighbor and fellow alum, Al Bayer, CivE'59, who helped me decide to go to Lawrence," says Werner. "After graduating from Denby High School on Detroit's east side, Al had decided to go. I was still undecided. Finances were a major issue, and rather than go away to school, I decided to commute with Al to the new campus in Southfield."

After graduating from Lawrence Tech in 1960, Werner joined Koppers Co. in Detroit as a structural engineer. Koppers manufactured structural plywood stressed-skin sandwich panels with a polystyrene core, used for housing, refrigerated cold storage buildings, and eventually, clean rooms and gage labs. "One of the most memorable projects we did was to install a large laminar flow clean room in Houston for NASA's Gemini project," Werner recalls.

Werner advanced quickly at Koppers, moving to positions in Atlanta and Pittsburgh before being named manager of architectural sales for the huge manufacturer. In that capacity, he marketed such products as pressure treated lumber, glue laminated wood structures, wood bridges, roofing and waterproofing products, coatings, air conditioning equipment, rigid insulation, and more.

In 1978, after 18 years with Koppers, Werner moved his family (wife Carrol and five children) south to sunny Florida, accepting a position as vice-president of Roof Structures, Inc. For nine years, he managed all sales, estimating, engineering and field support services for the company, a subcontractor of heavy timber structural support systems. During that time he also qualified as a state certified building contractor. He founded his own company, Timber Systems, in 1987.

Today, Werner's first company enjoys a solid reputation in Florida, the Bahamas, the Dominican Republic, the Virgin Islands, Jamaica, and Puerto Rico. The roster of Timber Systems projects includes YMCA's, churches, schools, shopping centers, office complexes, government buildings and private clubs.

A recent project in Culebra, an island off the eastern tip of Puerto Rico, exemplifies the versatility of laminated wood systems.

Construction materials in the islands tend to be expensive, and skilled labor sometimes scarce. "We try to take the guesswork out of construction," Werner says. "By pre-engineering and having our manufacturer, Unit Structures, Inc., precut a system, we create what essentially becomes an Erector set in the field. Our only real limitation is shipping."

Werner remembers the Culebra project fondly. "None of the crew on site had ever installed a heavy timber structure before, so my wife and I spent a week on the island. I worked with the crew, going over the basics. The challenges in the Caribbean are many, and standard equipment and cranes are not always available. We took 20 men to move one beam from the side of a hill into the structure. The crew caught on very quickly, and we were able to get off to a good start."

Werner also serves as the senior consultant to Omega Engineering, a firm that supplies engineering expertise to attorneys, property managers and insurance companies. He advises on cases that involve construction deficiencies, structural failures, accidents and construction-related disputes.

It took Hurricane Andrew to push Omega Engineering into the insurance market. Organized originally to provide engineering support for legal disputes, Werner and his part-



ners suddenly found themselves immersed in damage assessment and reconstruction after the 1992 hurricane, and eventually advising insurers on more than 1,000 separate losses!

"My work with Omega is a natural extension of my education and experience," Werner says. "Quality engineering and quality construction are related, and each element in a building, from the foundation to the roof, affects and reflects the rest of the structure. Understanding these relationships is key to understanding and correcting defects."

Werner started his newest company, Construction Material Specialties, after discovering a new line of concrete sealers, admixtures and corrosion treatments manufactured by Aquron, Inc. of Texas. Initially skeptical about reports of the product's capabilities, Werner was sufficiently impressed by field tests of the products to organize a group of investors and start a distributing company.

Jerry Werner is enamored with a new product called the Aquron System to purge corrosive salts from steel reinforced concrete structures. Here, he conducts waterproofing tests on Fort Myers, FL Hammond Stadium, winter home of the Minnesota Twins.

#### BUILDING ON

### Excellence

CONTINUED

"Here in South Florida, as in other coastal communities, reinforced concrete structures are forever being assaulted by salt from ocean spray and sea air," Werner says. "Soluble chlorides settle on structures and are absorbed into the concrete where they act as catalyses for the corrosion of reinforcing steel. Embedded steel expands as it corrodes, stressing the surrounding concrete and causing spalling. It is an enormous problem, very expensive to repair. Up north, road de-icing salts create similar problems for bridges and parking structures."

erner says that Aquron's most exciting innovation is a corrosion protection system which purges soluble chlorides from existing concrete, then reseals the concrete, preventing further salt intrusion. The system is now being used throughout Florida and elsewhere in the US. Werner has arranged for testing in conjunction with the Florida and Tennessee Departments of Transportation, among others.

How does Werner juggle his time between three companies? "Construction has always been cyclical," he says. "We started Omega partially to counter slow times in the timber business, and we have found that the work load kind of evens out. The Aquron product was just something I couldn't pass up, and have been fortunate to find exceptional people to help me with all three companies. My definition of a good manager is one who can walk out of the office and no one knows he has gone.

"Lawrence Tech taught me much more than engineering," Werner adds. "My professors taught me how to think analytically. Throughout my professional career and my personal life, the problem-solving skills I learned at Lawrence have served me well. They transcend pure engineering, making me a better manager, a better marketer, and a better businessman."

"When I started Timber Systems," Werner says, "I posted seven statements on my office



Modern construction technology staples like cranes were not available for this project on the Carribean island of Culebra, so Jerry Werner, CivE'60, resorted to the old "armstrong" method to muscle his laminated wood beams into position.



Alumnus Jerry Werner, CivE'60, has found plenty of projects to keep him from thinking of retirement in his adopted home state of Florida.

wall to help keep me focused on the major issues. I have shared them with all our people, and they are now a part of our corporate culture. The statements are these:

- 1. Make all decisions as if you owned the company.
- 2. Always have a sense of urgency about your work.
- 3. Quality comes first, not price.
- Treat your customers as you want to be treated.
- 5. Create wealth.
- 6. Have fun doing it.
- 7. Give God the Glory.

So far, I have found that this simple philosophy really works."  $\square$ 

# ON CAMPUS US

# New Lawrence Tech video explains court system to local citizens, students

Many of the 60,000 high school students within Michigan's 11th and 12th Congressional districts, along with civic groups, cable television viewers, and public library patrons have a better opportunity to learn about the work of the federal and state courts because of a new educational videotape from Lawrence Tech.

The 30-minute VHS tapes have been distributed to every public and private high school, many libraries, and some chambers of commerce, in cooperation with the Committee for Citizen Awareness.

The new video features U.S. Supreme Court Associate Justice Ruth Bader Ginsburg and Lawrence Tech President Charles M. Chambers, a member of the Supreme Court Bar. Congressional Representatives Joe Knollenberg and Sander Levin also appear in the editions of the videotape distributed within their respective districts.

"Lawrence Tech's involvement in this public service project came about," said Chambers, "after we learned the disturbing fact that the U.S. has the lowest voter turnout rate in the world. Further, only 20 percent of Americans say they have a good understanding of how our court system works. This

video is designed to help citizens know more about our remarkable democracy."

The tape describes, in easy to understand terms, the importance of the third branch of government and how the federal and state court systems work. Some 300 universities, corporations, and organizations have joined in providing the tapes in communities across the country.

Copies of the tape may also be checked out from the Lawrence Tech library.

Directors of the Committee for Citizen Awareness are John Rhodes, former minority leader of the House of Representatives, Phi Klutznick, former U.S. secretary of commerce, and Andrew Manatos, former U.S. assistant secretary of commerce. 

DBJA

# New coordinator guides Career Services

As a counselor in Lawrence Tech's Admissions Office, Vicki McNiff helped students begin their academic careers. In her new position as placement coordinator in the University's Career Services Office, McNiff is helping students and graduates find jobs.

"My role includes locating employers, and helping set up oncampus recruiting. We'll also hold workshops and seminars for career preparation. Really, we are here to help the students and alumni with all areas of career development."

McNiff reports that Lawrence Tech joined efforts with Michigan Technological University to hold a job fair March 4 at the Barton Manor in Livonia.

McNiff hold's a bachelor's in English from Western Michigan University, and a master's in guidance and counseling from Eastern Michigan. Her credentials include holding a Licensed Professional Counselor certification. She previously worked as a volunteer counselor with Oakland Community College and South Lyon High School. She was also a senior loan counselor at a mortgage firm from 1985-88.

More than 4,000 jobs were posted by Career Services in 1995, the last year for which complete data is available. That's up from



McNiff

the 2,035 posted the previous year. A survey conducted in 1995 showed that 97 percent of Lawrence Tech's 1994 graduates had found employment, up two percent over the previous year. Some 80 percent of Lawrence Tech grads remain in Michigan, mostly working for automobile companies and suppliers, utilities architectural and construction firms, and financial organizations Nationwide, Lawrence Tech grads are also recruited to electronic, defense and other high-tech industries.

Companies interested in postir jobs, or individuals interested in hiring or registering should call 810-204-3140. The Career Services Office is located in Lawrence Tech's Campus Activitic and Affairs Center. 

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### Area code changes — again

Just when you were use to it, Lawrence Tech's 810 area code is changing. Effective May 10 the area code for campus and most of Oakland County will be 248. The main switchboard number remains 204-4000. Individual staffers and faculty may also be dialed direct by using the 204 prefix and their campus extension. Alumni, admissions, financial aid, and advancement calls from outside the local area may be dialed toll free from throughout the U.S. and Canada. That easy-to-remember number is 800-CALL-LTU.

Phone industry officials cite increased use of cell phones, computers, and fax machines as reasons why the new 248 code is needed. □BJA

# New master's in civil engineering launched

The College of Engineering's new master's degree in civil engineering is accepting applicants for the September semester. The new program is being launched with strong support and interest from employers and from undergraduate alumni of the program, says George Kartsounes, dean of engineering.

"The program is targeted to meet the nation's need to rebuild our infrastructure in the year's ahead, using advanced technologies such as carbon fiber-reinforced bridges" adds Alan Prasuhn, civil engineering department chairman.

In addition to core courses, students will be able to meet personal or career goals by selecting from among three options: environmental, transportation, and structural.

For information, visit the Admissions Office, phone toll free 800-CALL-LTU, ext. 1, or inquire via the Internet: Admissions@ltu.edu \(\sigma BJA\)

## Campus master plan being studied

Lawrence Technological University has commissioned two noted architectural firms, Gwathmey Siegel & Associates of New York City and Neumann Smith and Associates, Inc. of Southfield to develop a master plan for improvements and expansion of facilities and grounds on Lawrence Tech's 110-acre campus in Southfield.

The plan will expand on a site study completed in a 1993 reflective practice studio led by Gunnar Birkerts, visiting professor of architecture. Lawrence Tech trustees have asked the two firms to collect information from the campus and surrounding community and analyze current needs with the expectation that academic facilities and landscaping will be enhanced, integrated and expanded in the future.

In recent years, Lawrence Tech has set a number of educational goals related to its mission of offering the most advanced technological education in a context of personal growth and career development for each student.

Possibilities include distance delivery technology, virtual reality classrooms, performing arts arenas, electronic media centers, project, studio and display areas, workshops, and more.

"We are pleased to engage this talented team of architects to assist the University as we examine opportunities to better serve our students, the professions, and the community," said Charles M. Chambers, Lawrence Tech president. "Gwathmey Siegel has an international reputation for innovative architectural designs and has been engaged in a number of major projects at some of the

nation's most prestigious academic and municipal institutions, ranging from the State University of New York and Princeton University to the Guggenheim Museum and the New York Public Library.

"We have enjoyed a past relationship with Neumann Smith in the expansion of our Engineering Research Complex," Chambers added. "We look forward to renewing our association with a firm whose work is highly regarded throughout this area, and are even prouder that many Lawrence Tech graduates, who constitute an astonishing 65 percent of their employees, have contributed to this success!" \(\to BJA\)

### CE chair 'nails' American CE Award

Alan Prasuhn, chairman of
Lawrence Tech's Civil Engineering
Department, has literally traveled
the globe for the cause of recognizing outstanding civil engineering
projects. This past year this has
meant trips to Ireland, Edmonton,
Alaska and San Antonio.

The American Society of Civil Engineers has bestowed the William Wisely American Civil Engineer Award on Prasuhn. The award honors individuals who promote the history, tradition, developments and activities of ASCE. Prasuhn was cited in particular "for serving as an extraordinary ambassador." Prasuhn has represented the ASCE at historic landmark presentations in the United States and abroad.

In Ireland, he presented historical plaques for the Boyne Bridge, the key structure on the Dublin-Belfast rail link and site of the first arge-scale continuous wrought ron girder beams. In Texas, Prasuhn honored the San Antonio Riverwalk and Flood Control System.

The globe-trotting civil engineer has seen many projects, but he has his favorites.

"For its sheer magnitude, the Forth Bridge in Edinburgh,"



Alan Prasuhn, chairman of Lawrence Tech's civil engineering department, shows off the latest addition to his office decor — the William Wisely American Civil Engineer Award, bestowed on Prasuhn by the American Society of Civil Engineers.

Prasuhn says, looking at an artist's rendering of the British railway bridge completed in 1890 that held the world's record for span. "For their location, the Victoria Falls Bridge in Zimbabwe, and the Salginatobel Bridge in Switzerland, also in a very remote area."

Prasuhn's ASCE award is the third earned in recent years. He received the 1995 Outstanding Civil Engineer of Southeastern Michigan Award from the local section of ASCE. Last year, he

received the Outstanding Civil Engineering Alumnus Award from Ohio State, where he earned his undergraduate degree. He earned his master's from the University of Iowa, and his Ph.D.

from the University of Connecticut.

Prasuhn joined Lawrence Tech in 1990, and served recently as interim dean of Lawrence Tech's College of Engineering. 

BPK



### Best of the best

With cakes at the ready, recipients of the 1996 Mary E. and Richard E. Marburger Awards for Excellence in Achievement await a ceremony to honor them. Honorees were (L to R) Scott Schneider, assistant professor of physics, Faculty of the Year; Owen Foli, grounds superintendent, Staff of the Year; and Richard Maslowski, associate dean of engineering, the first recipient of the Administrator of the Year award. Each of the awards includes a \$1,000 stipend funded by the Marburgers so as to encourage growth of a permanent endowment that friends and colleagues of the Marburgers established when Dr. Marburger retired in 1993 as Lawrence Tech's fourth president. (He continues to serve Lawrence Tech as a professor.) The fund was set up to perpetuate and encourage excellence among University personnel. Honorees are nominated by their peers and students, and are selected by a joint committee representing faculty, staff, administrators, and students.

### Computers in physics lab makes science 'connect'

A prime obstacle in getting science across in practical, understandable terms to students is making the lesson vivid and dynamic. Scott Schneider, assistant professor of physics, says computers are playing a bigger role in helping students understand rather than memorize scientific principles.

"This program of conceptual learning, and confronting predictions is gaining a lot of momentum in the physics teaching community," Schneider says.

The key? A piece of computer hardware, a universal lab interface, which permits a computer to be connected to various sensors ultrasonic detectors, force and temperature probes, and a microphone. This equipment at

Lawrence Tech allows students to conduct experiments and chart results in mere minutes, and also store data or transfer it to other computers for later study or reports.

"Before this change, we found a lot of students go through the motions, and do well on tests but miss a lot of the conceptual ideas," says Daniel Mioduszewski, chair of Lawrence Tech's natural sciences department.

"Industry is applying all kinds of uses to sensors," Schneider adds. "This is an introduction to that. If you let the computer do all the drudge work, then we can concentrate in the lab on what's going on. Students can answer 'what does it mean' when they get this result or that result, and they can see it by looking and comparing the readout on the screen.

The improvements were sponsored in part by the National Science Foundation and the Detroit Edison Fund. 

BPK



Dr. Scott Schneider (left) and other physics faculty are incorporating computers into the laboratories to help students better understand and conceptualize scientific principles.

### Welcome mat rolled out for **Pacific Rim students**



Nearly 20 Taiwanese students began master's degrees in information systems at Lawrence Tech during the past academic year and University officials say the students are learning about America along the way. The students also represent the vanguard of growing interest in Lawrence Tech by top students in countries surrounding the Pacific Rim.

The invitation to the Taiwanese students came about because of a 1995 visit to several Pacific Rim nations taken by Charles M. Chambers, president of Lawrence Tech, and Lewis N. Walker, Lawrence Tech provost. Chambers and Walker were accompanied by George Shen, a driving force behind development of the aeronautical industry in Taiwan. Shen helped identify students via the contacts he had in Taiwan's various companies, according to Walker. Kelvin Shih, professor of

Charles Chambers, Lawrence Tech president, (standing,) discusses avenues for cooperative venues with Taiwanese leaders.

electrical engineering, and Khalil Taraman, DIT endowed professor of manufacturing engineering at Lawrence Tech, have also made a number of contacts in the area on behalf of the University.

"Once word got out, we had a fair amount of interest," Walker says. "The Master of Science in Industrial Operations, which is a unique program, is of growing interest."

Walker describes the MSIO as a "hybrid program," which can be customized so certain foundation classes could be taught in Taiwan, coupled with the students spending two summers studying at Lawrence Tech.

This past October, President Chambers returned to the Far East and added China, Korea, and Hong Kong to his itinerary. While there, he met with several presidents of Asian universities to forge understandings that will result in increased academic and industrial cooperation.

"Increasingly, our graduates will find themselves participating in a global economy," Chambers says. "This program is good for the international students but is also good for our own U.S. students who gain much from early exposure to other cultures." \(\sigma BPK\)

### Programs receive additional accreditation

Two academic programs recently received professional accreditation, this in addition to existing institutional accreditation by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools.

Lawrence Tech's College of Management has been accredited by the Association of Collegiate **Business Schools and Programs** (ACBSP).

"We are pleased to know that the quality of our faculty, curricula, facilities, and services meet the

standards of this international association, one of the leading accrediting bodies for business programs," said Louis A. DeGennaro, interim dean, ACBSP has 500 collegiate members in the U.S. and 200 abroad. Of these, only about 175 are accredited by the Association.

Additionally, the Bachelor of Fine Arts in architectural illustration program has been accredited by

the National Association of Schools of Art and Design, said Neville H. Clouten, FRAIA. NASAD also accredits Lawrence Tech's interior architecture program. 

BJA

# Class ring turns up after wait in grass at Pine Knob

Michael Pikelis prized his class ring, given to him in 1993 by his parents after he graduated from Lawrence Tech with a degree in mechanical engineering. He was heartsick when his exuberance at a country music concert caused him to send his ring flying.

"I lost it at Pine Knob on Memorial Day, 1994 at a Brooks and Dunn concert. We were clapping and jumping around, sitting on the hill. The ring just flew off my hand," Pikelis says. "I looked for it. I got a flashlight from a security guard and tried to find it. but as you can imagine there were a lot of people there."

Figuring the ring was gone for good, Pikelis replaced it at a cost of \$500. And, he didn't tell his parents.

Enter Debbie Stamps, secretary in Lawrence Tech's University Relations and Alumni Services Office, and Ed Stephens, supervisor of maintenance and a carpenter at Pine Knob.

A member of the Pine Knob grounds crew found the ring during renovations at the popular outdoor theater more than a year later. Stephens explains that "the hill gets worn down and we fix it up with top soil and sod.

"We had replaced about 6,900 sq. yards of sod and all that was left were two holes on the west end of the hill. The fellows were just about done, getting ready to

finish filling in the last hole when they happened to see the ring," he says. "It's amazing to me. I mean. how many thousands of people had sat at that spot and missed it?

"It was meant for that ring to be found."

Stephens turned into a detective and went about hunting down the owner. He called Lawrence Tech and spoke to Stamps.

"He said he had found this ring. The ring had 'BS' and 'ME' on it and a first name was engraved inside — 'Michael," Stamps recalls. "He thought the last name had the letters 'Tik.' I looked up the records and found a similar last name, called, and Michael said he had lost a ring. In my ten years here we've reunited owners with four lost rings. There is one in my desk that we still haven't found an owner for."

That one is a man's ring with a ruby maroon stone and "CSK" engraved inside. It apparently belonged to a 1972 grad.

A quick trip from Pikelis' place of employment — Wisne Design in Madison Heights - to Pine Knob reunited him with his wayward ring.

"It was a little dirty. I got some jewelry cleaner and it shined back up," Pikelis says. "It feels pretty good to have it back."

He adds, "I'm going to put it some place safe and try and not lose it again." □BPK

and graduate catalogs and more!



Michael Pikelis. ME'93, says he's keeping his first Lawrence Tech class ring in a safe place after it was lost for more than a year at Pine Knob.

## **Professor launches** European color program

Tom Porter, one of Britain's top authorities on color, calls Harold Linton, professor and assistant dean in Lawrence Tech's College of Architecture and Design, "One of the major sources of information for the whole color industry." Linton's expertise has garnered him a one-year assignment at the University of Art and Design-Helsinki, Finland, as it launches Europe's first master's degree in color study.

"This is an extraordinary opportunity," Linton says. "The program was attracting attention from around the world even before it started."

Linton, who left for Finland last July, is a prolific author on the subject of the use of color in architecture and design. His seventh book, "Portfolio Design," was



Linton

released in August by W.W. Norton & Co. His eighth book,

"Architectural Color Theory" is in progess. Linton has also written numerous magazine and newspaper articles. His artwork hangs in a variety of private and institutional collections. \(\sigma BPK\)

# Surf the campus on the Web!

Want to know the latest about campus life and programs? Visit Lawrence Tech's home page on the World Wide Web:

You may also contact campus faculty and staff via their personal e-mail accounts, usually their first http://www.ltu.edu Services to be or last name @ltu.edu For admisadded in the near future include sions information, try the e-mail access to the entire undergraduate composite: Admissions@ltu.edu

### 'Lucky Larry' a 'solid' contender in canoe contest

Civil engineers are usually tested by buildings, roads, or dams when it comes to the use of concrete, but some civil engineering students choose a more unique venue - a canoe!?

Four students — Gary Paradoski, Jason Long, Gordon Sible, and Karen Lannan trekked to the just-thawed regions of Michigan Tech in Houghton last April for the annual Concrete Canoe competition, sponsored by the American Society of Civil Engineers. The canoes were judged on aesthetics, design, and group presentation. And oh, yeah, they must pass that ever important buoyancy test before going on to the "fun part" - the races. Racing ability is 40 percent of the final score.

"We used ceramic airballs and entrained air - meaning we used a liquid in the mix that allows air bubbles to form once it's cured," says Paradoski.

"Lucky Larry" is shaped from a mold taken from a racing canoe that was also used for the 1995 entry which took fourth place overall. Lucky Larry, however, was put

on a diet, and was 50 lbs. lighter, tipping the scales at a svelt 115 lbs.

"There are real world applications," Paradoski says. "We had to face a choice of reinforcement. We're dealing with real thin concrete and we wanted to keep the strength up but keep the weight down."

He adds, "It's basically trying to do what the client asks. The client in this case is the competition. We've had to build this project to certain requirements and on schedule."

The faculty advisor to the team was James Diegel, associate professor of civil engineering. □BPK



Prior to heading to the "Great White North" for the 1996 Concrete Canoe competition in Houghton, the Lawrence Tech team posed with their craft. Members included Jason Long, Gary Paradoski, Gordon Sible, and John Kytasty. Also pictured is James Diegel, associate professor of civil engineering and faculty advisor to the team. Not pictured is member Karen Lannan.

### Card catalog heads way of dinosaurs

Lawrence Tech students, faculty and staff are letting their fingers do the walking through a computerized card catalog that helps patrons find more and quicker information among Lawrence Tech's library of 106,000 books, periodical, and microfiche titles.

"This is the first stage, perhaps the most important stage, to automating the library's holdings listing what we have and where it is," says Gary Cocozzoli, director of the library.

Six terminals located in the library offer users unprecedented help in finding research material and information via "Gateway," a Windows-like pulldown menu. Patrons may also access the card catalog through home and office terminals. 

BPK

#### Chambers 'seas' Navy contacts Lawrence Tech President Charles M. Chambers (inset) was among a select group of state leaders recently invited to inspect and cruise aboard the Trident ballistic cruise missile submarine, USS Michigan. In waters off San

Diego, CA, Chambers received a day-long tour and demon stration of the potent vessel's capabilities as well a a stint at the helm. The USS Michigan is 566 feet long, weighs 18,750 tons, and carries 24 missiles and a 157-man crew. One of the ship's commanders. Rear Admiral Paul Sullivan, visited Lawrence Tech students and faculty in November to discuss engineering career opportunities in the Navy.

### 50 years later historic car is home

The "grandfather" of today's innovative student-built hybrid electric, SAE formula, and supermileage vehicles has returned home. The *Hansmobile*, a circa-1946 student project car, was recently donated to Lawrence Tech by Darryl Ziegler. The sporty two-seater was built from the ground up as a hands-on exercise by postwar engineering students.

Conceived to provide design, manufacturing, and testing experiences, the car purposely incorporated a variety of off-the-shelf and custom components and materials.

The original 1000 ccm engine powered the 924 lb. car to a maximum 117 mph, surviving records say. Fuel consumption was 32 mpg at 60 mph. The car continued to serve as a test bed for student projects until about 1961.

The car took its name from Hans Erneman, then-dean of engineering and the project's faculty advisor.

Still fully drivable and now registered with Michigan historic plates, the car has racked up more than 150,000 miles of road use and gone through three engines. Ziegler's father, Don, a former Lawrence Tech lab technician, had acquired the car from the University and drove it regularly until his death in 1990.

According to the Henry Ford Museum, which displayed the Hansmobile in 1975, "the car incorporates some rather sophisticated chassis features for the period, including combination oil, air, and spring independent front suspension, trailing arm rear suspension, and calibrated spring and shock dampening." An interesting original styling feature removed during subsequent "remodelings" was a single, front mounted "cyclops" headlight that turned as the front wheels were steered.

While the car is generally in good condition, an anticipated restoration, subject to fund availability, will include a repaint to the original red color, fabrication of a double elipse-style windshield to match the original, and mechanical detailing. Many components were modified over the years. Alumni or others with recollections or original plans are urged to share them so the vehicle's evolution can be documented. Please send these to Lawrence Tech's Office of University Relations and Alumni Services. 

BJA



Members of Lawrence Tech's Campus Facilities staff unload the student-built Hansmobile, returned to Lawrence Tech half a century after it was conceived as a student project.



# Denso hosts engineering faculty

Akira Kataoka (standing), president of Denso International America, Inc., hosted Lawrence Tech engineering faculty and senior administrators September 26 for a special dinner and tour of Denso's headquarters and technical center in Southfield. Denso is the world's leading independent supplier of automotive components. Few could know Denso better than Kataoka, who has seen the company's North American operations grow from one employee (himself) 30 years ago to some 6,000 associates today, including a number of Lawrence Tech alumni. Company officials said they have openings for additional engineering graduates and would like to consider other areas of cooperation with the University. Speaking on behalf of the University guests, Lawrence Tech President Charles M. Chambers (left), praised Kataoka's leadership and said he looked forward to strengthening the partnership between the two organizations.

# Cranbrook, Zoo, Lawrence Tech collaborate on grad program to energize science education

A \$245,000 grant from the U.S. Department of Education has been awarded to Lawrence Tech in partnership with the Detroit Zoological Institute and the Cranbrook Institute of Science. The grant, from the Fund for Improvement of Postsecondary Education, is financing development of the University's unique Master of Science Education degree which welcomed its first students in Jan. 1997.

Lawrence Tech was among fewer than 100 educational institutions to be awarded such funding — from a field of 2,200 applicants.

"This is a groundbreaking effort to unite a university and two science centers — the Detroit Zoological Institute and Cranbrook — devoted to science education," said James Rodgers, dean of the College of Arts and Sciences.

"Our hope is to play a leadership role in the way children learn science in schools," he said. "By increasing a child's involvement, by promoting a hands-on curriculum, we can generate excitement about science ideas and discovery."

"This is a wonderful collaboration of three institutions that do great things," said Ron Kagan, director of the Detroit Zoological Institute. "We've focused on teacher development in lots of ways because we believe this will make a great impact. By successfully producing programs for the teachers, we are of the greatest help to the teachers and ultimately to their students.

"This represents a milestone,"
Kagan added. "The end result is a
comprehensive, high-level academic program, which indirectly
will affect thousands of school
children."

"It's important that we make strides in science education," said Geoffrey Bass, head of astronomy at Cranbrook. "Lawrence Tech is an institution that is strong in applied science. It's natural to use that strength to branch out. They have a pool of resources to give a first-rate science education program."

Bass said Cranbrook is fully supportive of the program and endorses the goal of the science major program. "Teachers understand the content, but have questions about how to teach it. We deal with this all the time."

A key player in the development of science education and project director is Maria Vaz, associate dean of arts and sciences, and professor of physics. In 1989, Vaz helped launch an outreach program that provides science education workshops for elementary and middle school teachers from throughout the metro area. The aim was to provide instructional help for teachers tapped to teach science but who had no background in science. The program began in 1989 as "Operation Physics," and was joined by "Operation Chemistry" last year.

Vaz explained that the emphasis of hands-on experiments designed to communicate scientific concepts used in the workshops is also being used in the master's program. The M.S.Ed. curriculum is designed to teach the teachers in the same way that they will instruct their own students. Scientific content and teaching methods are taught simultaneously. Equipment used in the master's program, as in Operations Chemistry and Physics, ranges from items easily acquired in a hardware or grocery store to advanced computer technology.

"By talking with the teachers attending the outreach program, we saw the need for the master's program," Vaz said. "We were overjoyed when the Michigan Board of Education approved our master's program. We are the first university approved to offer a program to teachers that didn't already have a college of education."

In January, the program began with the first two of the 14 courses offered: Introductory Seminar, and "Matter, Energy, and Their Changes." Following these are other courses, including several related to biology to be developed in collaboration with the Detroit Zoological Institute, and a course in astronomy to be developed in collaboration with Cranbrook. Courses are offered in the evening and during the summer. The curriculum of the program is aligned with the Michigan Essential Goals and Objectives in Science report, published by the Michigan Department of Education in 1989, and follows National Science Education Standards

recommendations. Joining with Lawrence Tech as a teacher instit tion partner is Aquinas College in Grand Rapids.

Other members of the team which developed the program include: (from Lawrence Tech) Marilyn Rands, associate profess of physics; Richard Michel, profe sor of physics; Anthony Sky, assi tant professor of chemistry, Walt Dean, associate professor of chemistry. Also Kimberly Sneder educational curator of the Detroit Zoological Institute; and Geoffrey Bass, of Cranbrook's department of astronomy and physics. Area teachers were Dale Petzold, of th Southfield Public Schools: Ellen Daniel Jones, science supervisor of Detroit Public Schools; Elizabe Niehaus, retired from South Lyor Schools; and David Bydlowski, s ence coordinator for the Wayne County Regional Educational Service Agency.

For information about the MSI program, call Lawrence Tech's College of Arts and Sciences: 800-204-3500. □BPK

#### Other new degrees added

Besides the new M.S. in science education and M. Civil Engineering expanding career opportunities have led to several other new degree programs at Lawrence Tech.

The popular M.B.A. has been expanded with a new global business major, designed especially for students joining businesses operating in the international arena.

A new Bachelor of Administration degree for students transferring in with community college degrees helps add a valuable management component to their educational background. A new B.S. in technology management degree combines management with engineering or science studies, a boon for students preparing for careers in high techniquistries.

A new B.S. in technical communication will serve students entering this growing profession. A new B.S. in environmental chemistry is also designed to serve this expanding career field.

For more information on these or other programs, visit the Admissions Office in the Buell Building, phone toll free (800) CALL-LTU, ext. 1, or inquire via the Internet: Admissions@ltu.edu  $\square BJA$ 

# 'Outstanding teacher' leads College of Engineering

Lawrence Tech's largest college has a new leader. George T. Kartsounes was appointed dean July 1 of the 2,200-student College of Engineering.

"We were pleased to conclude our two year national search with someone of Dr. Kartsounes' ability and experience," said Charles M. Chambers, president. "His broad background in teaching and academic administration, and his activities in applied research and with industry make him particularly well qualified to lead Lawrence Tech's engineering programs."

Since 1994, Kartsounes had been dean of the School of Engineering, Technology, and Computer Science at Indiana University-Purdue University Fort Wayne. Earlier, he served as professor and head of mechanical engineering at GMI Engineering and Management Institute. He has also been group leader for the Institute of Paper Chemistry, section manager at Argonne National Laboratory, a faculty fellow with NASA, and has held engineering positions with Eaton and Whirlpool Corps.

Kartsounes' appointment is also a homecoming of sorts. From 1974-76 he was an associate professor of mechanical engineering at Lawrence Tech.

"I've looked forward to returning to Lawrence Tech and providing leadership in the continuous improvement of high quality undergraduate and graduate engineering programs consistent with the University's tradition of 'theory and practice,'" Kartsounes said.

A registered professional engineer in Illinois, Kartsounes' holds four degrees, including the Ph.D. in mechanical engineering from Purdue University. He earned an M.S. at the University of Pittsburgh, a B.S. at the University of Illinois, and an A.A. at Morton

(IL) Community College.

In 1988, he received GMI's
"Outstanding Teacher" award. In
addition to his NASA fellowship, he
has won fellowships with Proctor
& Gamble and Westinghouse.
Kartsounes is also a prolific author
and lecturer, and holds three
patents. He is active in the
American Society of Mechanical
Engineers and the American
Society of Engineering Education.

"We greatly appreciate the work of Dr. Alan Prasuhn, who served as interim dean of engineering," Chambers added.

"Dr. James Rodgers, chair of the search committee, and the committee members also deserve thanks for their perseverance."

Lawrence Technological
University's College of Engineering includes departments of civil, electrical, and mechanical engineering, as well as engineering technology. Thirteen associate, baccalaureate, and master's degrees are offered by the College. Over the past decade, Lawrence Tech engineering students have gained increasing national recognition, winning competitions involving some of the most prominent engineering colleges in the country.



Kartsounes

# 'Spirit' in new guide

The "Spirit of Lawrence Tech," a circa-1947 student-built airplane displayed on the Lawrence Tech campus, is featured in the recently published book, "Aircraft Museums and Collections of the World, Volume 8, USA: the Northeastern States." The book is part of a

series written by Bob Ogden, an aircraft historian in Great Britain. It is sold worldwide.

Displayed in the Buell
Management Building at Lawrence
Tech, the "Spirit" is an unusual
pusher-type racing aircraft
designed, built, and flown by
Lawrence Tech students in competitive races in the late 1940s and
early 1950s. The propeller is rear
mounted. The plane was designed

to introduce students to a variety of aircraft manufacturing techniques and materials.

After more than a 30-year absence from campus, the plane, in hundreds of pieces, was donated back to the University in 1984. It was completely rebuilt and restored over the next five years by a team of alumni, student, staff, and other volunteers. \(\sigma BJA\)



PHOTO COURTESY OF GEOR

# New director named to **Continuing Education**



Former Fulbright professor David Cooper is the new director of continuing education and professional development.

David Cooper expects video conferencing, the Internet and computer networking to help Lawrence Tech meet the explosive demand for continuing education and training in business and industry. As the new director of Lawrence Tech's Division of Continuing Education and Professional Development, Cooper plans to use telecommunications delivery systems, along with conventional campus and on-site learning, to help expand Lawrence Tech's longstanding strength in continuing education and remove barriers of time and distance.

Cooper, appointed Jan. 2, served the past two years as director of the United Auto Workers-General Motors Corp. Education Development Counseling Program at the University of Michigan's School of Social Work. Prior to that, he was director of the University of Virginia's regional center in Northern Virginia. He was also the director of the Center for the Study of Labor and Work and an associate professor at Oakland University from 1986-91. Cooper was a Visiting Fulbright Professor at the National Autonomous University of Mexico in 1982-83.

New digital processes of business management will continue to accelerate and automate, adding a new dimension to ordinary business operations, from the acquisition of raw materials to the sales and servicing of finished products, Cooper predicts. This trend applies equally to global economic investment, to services such as banking, and to processes such as planning.

Cooper, who earned a bachelor's degree from the University of Connecticut and a doctorate in education from Rutgers University, cautions that "distance" in distance learning can be a misnomer.

"Distance learning brings customized, self-paced learning directly to the student, at a convenient time and location, whether the student is on the campus, at a plant or office across town, or halfway around the world. For students at dispersed or distant locations, it is almost always less costly, simply because it is more efficient to move information and ideas than to move people," Cooper says.

Distance learning is rapidly becoming the norm, especially for professionals who need to bolster their credentials or keep their

knowledge at the cutting edge of rapidly changing fields, Cooper notes.

"Lawrence Tech has the vision and mission to expand distance learning because of its historical role in supporting adult education and its willingness to embrace new technology and work with new delivery systems," Cooper says.

Cooper is also planning to broaden Lawrence Tech's service to the automobile industry by bringing state-of-the-art delivery systems and content to meet continuing education needs "from every tier of supplier and service provider to the finished product, and from the shop floor to the board room."

Lawrence Tech's Division of Continuing Education and Professional Development designs, develops and delivers non-degree credit programs in engineering, management, architecture, computers, communications skills, and insurance studies. The Division customizes or conducts on-site and on-campus programs for both small companies and Fortune 500 corporations. The need for continuing professional development stems from

advances in technology, quality concerns, stiffer global competition, the opening of new markets, shifts in the workforce, and new consumer values and expectations.

"The Division offers programs that are truly relevant to the objectives and goals of a particular business organization. We're not just teaching people how to read, we're teaching them how to speed read," Cooper says. "We're showing them how to be more productive. That ultimately means profits, bigger and better investments, jobs, and increased market share."

Cooper says distance learning technology would be used to deliver "the traditional programs in Lawrence Tech's fields of greatest strength, including manufacturing, technology, and information technology. We also will explore applying these strategies to other fields, including health, government and education. The primary importance of automobile manufacturing in Southeast Michigan makes it a high priority."

For more information contact Lawrence Tech's Division of Continuing Education and Professional Development at (810) 204-4050. □BPK

## Lawrence Tech prexy hosts Perot

Lawrence Tech President Charles M. Chambers (right), a director of the Economic Club of Detroit. was asked to serve as host during presidential candidate Ross Perot's speech Sept. 9 before the Club. Chambers intro-



duced Perot and also fielded audience questions for the Texas billionaire and founder of EDS and Perot Systems. Segments were aired on CNN and the entire session was seen nationally on C-Span. The Econ Club is considered one of the nation's most prestigious forums for idea exchange. Lawrence Tech students and faculty are frequently invited to the meetings as guests of local companies.

### Lawrence Tech celebrates auto's 100th

even while students are developing cars of the future, Lawrence Tech commemorated the 1996 Centennial of the American Automobile by recognizing the contributions of Lawrence Tech and DIT graduates to the industry.

"AutoRemarkables" is a special exhibit devoted to alumni achievement in the auto industry and elated fields. Prepared by the Alumni Services Office, it opened during Reunion and Open House Neekend '96 and remains on display in the Buell Building Atrium hrough Reunion '97 April 26-27. Among the alumni featured: Lewis Veraldi, ME'68, the "father" of the ord Taurus; William Innes, ME'53, who rose to the number three position at Ford; Al Taubman, who ecognized early how the automooile would change how American's shop; John DeLorean, IE'48, who as head of GM's Pontiac Division nelped create the muscle car; John Petty, ME'65, manager of the General Dynamics team developing nnovative FOX reconnaissance rehicles for the Army; and George Sierant, ME'47, who as a GM engineer designed the modern child safety seat, which 30 years later remains essentially unchanged.

"The Auto: Driving Social Change," is a featured exhibit in the Science Building, first floor corridor. The display examines now the auto has been a force of change in American culture. Paula Stofer, Hu'79, assistant professor of humanities, prepared the display.

Over 25 historic and special interest vehicles participated in Lawrence Tech's first "Cruiseln" during Reunion and Open House Weekend in April. Response was so good that the Alumni Association is repeating the show as an annual Reunion event. The 1997 show is April 26.

CruiseIn "People's Choice" awards were presented to cars in the following categories: Best Original — 1957 Ford Fairlane 500, Walt McCoskey, ME'51; Best Restored — 1957 Chevrolet BelAir, John Lambert, IM'69: Best Kit — 1969 Fiberfab Avenger, Carl Morganti, EE'81, ME'83; and Best

Street — 1970 Ford Mustang, John Yanalunas, Ar'78. Lawrence Tech President Charles M. Chambers awarded the President's Choice award to Harvey Ettinger. EE'66, for his 1940 Nash. □BJA

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# President named to accrediting body

Charles M. Chambers, Lawrence Tech president, has been chosen to serve as a team chair and consultant-evaluator for the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools. NCA provides institutional accreditation to educational institutions in a 19state region that includes Michigan. The consultant evaluators are at the heart of the Commission's accreditation process, which is based on peer review. They comprise the visiting teams and chairs that obtain information upon which an institutional evaluation is based. Evaluations require considerable preparation before the visit, a four-day visit, and written reports to the Commission. Typically, a consultant-evaluator makes one to two institutional visits each year. 

BJA



#### SHINY SIDE UP

Charles Bisel, ArE'66, puts the polish to his 1957 Chevrolet BelAir prior to judging at the Alumni Cruiseln Car Show during Lawrence Tech's Reunion and Open House Weekend. Winners included: Walter McCoskey, ME'51, "Best Original" category, 1957 Ford Fairlane 500; Harvey Ettinger, EE'66, "President's Choice" category, 1940 Nash; John Lambert, IM'69, "Best Restored" category, 1957 Chevy BelAir; John Yanalunas, Ar'78, "Best Street Machine" category, 1970 Mustang; and Carl Morganti, EE'81, ME'83, "Best Kit Car" category, 1969 Fiberfab Avenger. Make plans to enter the 1997 show coming on April 26.

# Video wins big

A Lawrence Tech-produced video ook two national communication awards in competitions pitting the University against many of the nation's leading corporations and organizations as well as professional videographers, television and cable stations, public relations, ad, and communication agencies.

The video, focusing on \_awrence Tech's hybrid electric vehicle successes won the Grand (highest) Award in the 1996 Apex competition, competing against nearly 4,100 entries (including 210 videos) on the basis of editorial content, presentation, and the "ability to achieve overall communications excellence."

The video also won the Crystal Award of Distinction in the 1995 Communicator Awards competition, which recognizes those "whose talent and creativity to communicate through a visual

medium achieves a high level of excellence and serves as a standard of the industry."

The video was produced to showcase student achievement and was a joint project of the offices of University Relations and Audiovisual Services. Charles Chambers, president of the university, had an active role as executive producer.

A new video, "A World Beyond: The Lawrence Tech Advantage" features media coverage of an

even broader range of Lawrence Tech student projects and activities, including Dr. Nabil Grace's composite bridge research featured in this Magazine. To borrow or own your own 8-minute VHS copy to share with interested friends or prospective students, phone 800-CALL-LTU, ext. 4.  $\Box BJA$ 

### Cruising Woodward

Woodward Dream Cruise festivities August 17 included displays of Lawrence Tech's hybrid electric vehicles, the circa 1946 Hansmobile, and architecture projects - all at Birmingham's Shain Park. Thousands of visitors viewed the displays and hundreds stopped by the Lawrence Tech booth seeking information about the cars and academic programs. Cruisers also heard Lawrence Tech "Auto Centennial Minutes" on WOMC-FM. The Woodward Cruise is an annual event attracting up to one million visitors, recalling the 1950s and '60s when the historic boulevard was a car lover's mecca.





# So, where is it?

The task for these freshmen engineering students was to successfully lower an egg down from a tower to a waiting trailer, without cracking it, and then transport the egg across the atrium of the Buell Management Building using a radio-controlled miniature truck. These students got to wondering about the location of their egg. Things worked out well for these students, all from Pat Shamamy's Introduction to Engineering classes. Their egg survived the trip. Others, unfortunately, cracked under the "eggs-treme" pressure of the assignment.

# \$500,000 from Ford Fund helps Lawrence Tech expand learning opportunities

A \$500,000 gift to Lawrence Tech has been received from the Ford Motor Company Fund to expand the university's capabilities in communication technology and distance learning.

"The ability to deliver innovative professional and graduate educational resources in various electronic formats to off-campus locations throughout the world is essential to our continuing service to Ford, its suppliers, and the professional community," says Charles Chambers, Lawrence Tech president. "The future, as Ford and other leading manufacturers demonstrate, will not be defined by geography, but rather by the ability to effectively communicate and operate globally."

The Ford Motor Co. is the largest employer of Lawrence Tech graduates. University records indicate more than 2,100 alumni are Ford employees or retirees. Lawrence Tech's ties to the company date back to the University's founding in 1932, when auto pioneer Henry Ford provided a site within his assembly line complex for Lawrence Tech's first campus. In the years since, many Lawrence Tech alumni have advanced to leadership positions within Ford, and both the company and the Ford Motor Co. Fund have been among Lawrence Tech's most generous corporate supporters. 

BJA



Bob Fearon was just going to teach a couple of classes at Lawrence Tech following his retirement after 30 years with Michigan Bell and AT&T. Today he stays busy as a senior lecturer. Because of his contributions — both at Lawrence Tech and as a corporate architect — he has been recognized with the Presidents Award from the American Institute of Architects-Michigan.

# 'Fun' still motivates architecture professor in 2nd career

Talk to Robert F. Fearon, senior lecturer in architecture, and you get the quick impression he dislikes idle time. As proof, after 30 years in the corporate world, he elected in 1988 to teach full time rather than retire. Successful in getting him to slow down for one night, the American Institute of Architects-Michigan honored Fearon Oct. 5 with the President's Award during a ceremony at the Michigan Historical Museum in Lansing.

Fearon, a practicing architect, made decisions regarding design and construction activities for Michigan Bell and AT&T International until his retirement in 1987. Then a good friend, Karl Greimel, professor and then-dean of architecture at Lawrence Tech. convinced him he "had too much talent" and enlisted Fearon for a part-time faculty position teaching two undergraduate courses in building materials. By the next year, Fearon had immersed himself in teaching, and soon had an administrative hand in the construction systems sequence and

the graduate program. He also took on the job of education coordinator for the Intern Development Program, a necessity for eligibility to sit for the licensing exam.

"I guess it's just in my nature to get involved," Fearon says. "All of us have been given certain talents in this world, and we have an obligation to give those talents back."

While working for Bell and AT&T, Fearon, along with Bob Hastings, national president of AIA, championed the cause of overlooked architects working in commerce and industry. The end result of this effort was "making, at a national level, the traditional architectural profession aware of the role of corporate architects."

Getting involved also got Fearon an assignment on former Gov. William Milliken's Special Commission on Architecture, charged with advising the governor on design, construction and management of state facilities. Fearon is also active as an arbitrator and mediator with the

American Arbitration Association.

In his nine years at Lawrence Tech, Fearon has developed 16 courses, the latest an elective, "Professional Awareness." He says the focus of the course is to show the "tremendous number of other career opportunities for people with architectural training and license."

"The architectural student's entire focus in their undergraduate studies is on design," Fearon says of the course. "Design is certainly a basic tool all architects must have. Unfortunately, there aren't that many opportunities for pure designers. Half of all architects wind up like I did — in a field

where architecture is the main focus of my job but not in the traditional architectural firm setting."

His involvement at Lawrence Tech has also included preparing a feasibility study for campus improvements.

Does he plan on slowing down? "Not while I'm still having fun." He laughs, then adds, "Sometimes I do get myself up to here with too much." As for his teaching style Fearon says he's "tough but fair. I think that is part of getting students ready for the world. They have to recognize that clients are tough. Bosses are tough. Life can be tough and you have to be prepared." 

DBPK



## Learning about one another

Students from Southfield Public Schools met students from Lawrence Tech during the Nov. 12 "Diversity & Democracy: The New Urban Landscape" seminar. This was one of ten special seminars this past semester. The series, organized by John Recchiuti, assistant professor of history and series director, explored the histories and culture of the African-American, Chaldean-American, Japanese-American, Indian-American, Filipino-American, Russian-Jewish Emigre, Hispanic-American, and Arab-American communities. The series was sponsored by the American Association of Colleges and Universities and Lawrence Tech.

# Calculus-educating pioneer gives faculty 'pep talk,' insights for success

The teaching of calculus, long an intimidating separator of those who thrive or fail in the study of technological subjects, was the subject of special scrutiny during the Walker L. Cisler Lecture on campus in October. The elucidator was famed American educator Philip Uri Treisman.

Treisman exudes enthusiasm for teaching calculus. He has spent the last 20 years of his career finding ways to clear the hurdles that keep students from thinking that they cannot grasp advanced math. He pioneered teaching techniques that have allowed minority freshmen at the University of California-Berkeley to excel and graduate with math, science, or engineering majors at unprecedented rates. He's repeated his success at the University of

Treisman explained the philosophy behind his work as the featured speaker of Lawrence Tech's Holley Foundation-supported Cisler Lecture during his presentation, "Culture, Curriculum, and Community: Creating Productive and Nurturing Educational Environments." His audience of educators from throughout the Metro Detroit area included local high school teachers and faculty from Lawrence Tech and other universities. His lecture capped a full day on campus for Treisman, who also informally met with Lawrence Tech math faculty and teachers from the Alliance for Minority Participation prior to the lecture. The College of Arts and Sciences sponsored his visit.

"We know so much more about this than we did four years ago," he said, speaking of how students learn more successfully. "Group study is fine, but it's just one piece of the puzzle. We found you have to also look at the content of the course. We had to also look at

scheduling issues so students could get on the mainstream track."

His success speaks for itself. He reported that six years ago at the University of Texas-Austin there were three black and Hispanic students majoring in math. This year there are 182.

"We forget the extraordinary power that teachers have on the

lives of children," he said. "The enterprise of mathematics and science is not just for industry. Although it is critical to our economy and well being it is more importantly the fabric of democracy that makes this country great and we get the privilege of playing a key role in it."

Treisman had encouraging news that with programs mimicking his

and others — math instruction in the United States is showing signs of a turnaround.

"This is the first year, for K-12 mathematics, where we passed the performance of the early 1970s. So we are at the highest level of national math performance that we've been at in recorded history," he said. "Teachers are getting better at what they do. The gaps between minorities and majorities are decreasing, and this is important for the long-term national health." 

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Uri Treisman, professor of mathematics and director of the Dana Center for Mathematics and Science Education at the University of Texas-Austin, visited Lawrence Tech's campus Oct. 16 to present the second annual Walker Cisler Lecture. Treisman discussed the teaching program he developed as an undergraduate at the University of California-Berkeley, which incorporates supportive group study techniques with problem solving. He later revised the program when he joined the faculty at Texas. His program resulted in more minority students electing math or science majors.



# Prof wins top engineering award

When Lisa Anneberg, associate professor of electrical engineering, speaks to her students about real world applications of textbook theory, she very well knows what she's talking about. After all, she served for four years as a reliability engineer in a General Motors plant. She continues to stay current with new research pertaining to digital electronics. Because of her dedication to teaching, Anneberg has received the coveted Ralph E. Teetor Educational Award from the Society of Automotive Engineers.

The Teetor Award, named for a distinguished inventor, mechanical engineer, and widely acknowledged statesman during the early growth of the auto industry, encourages the extension of acquaintanceships and interchange of information between practicing engineers and educators, according to the SAE.



Anneberg, a member of the faculty since 1991, holds a Ph.D. and master's degree from Wayne State University, and a bachelor's from the University of Michigan. 

□BPK

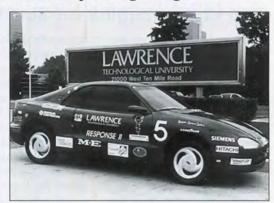
Prof. Lisa Anneberg, right, looks on as students check their computer chip assignments for an advanced digital electronics class. Anneberg received SAE's prestigious 1996 Teetor Educational Award for her dedication to engineering education.

# B RAGGING RIGHTS

Lawrence Tech pride?
You bet! The gridiron or hardwood aren't the only places to build a collegiate reputation, as these 11 exceptional facts from across the years remind us.
Lay some of these feats on your friends!

## From the White House to your garage

In international competition involving 40 schools, Lawrence Tech's 1994 hybrid electric car earned the highest ranking of any Michigan college or university and took third overall. Lawrence Tech's sporty two-seater was the only university research effort featured at a White House presentation that focused on progress toward highly advanced and innovative vehicles. Today's FutureCar project continues this winning tradition!



# Top source of corporate leadership

Standard & Poors ranks Lawrence Tech in the top third of schools nationally that are undergraduate sources of the country's leading executives — those who manage companies with sales or revenue of \$1 million or more! Lawrence Tech is also first among private colleges as a source of recent graduates sought by Southeastern Michigan employers, according to a 1995 survey by the American Society of Employers. The ASE survey cites by frequency those colleges and universities from which area firms actively recruit.

# A leader in smart manufacturing

In one of the most prominent and demanding national competitions ever sponsored by General Motors and the Association of Collegiate Schools of Architecture, a Lawrence Tech team in 1987 took first among 60 top universities in designing a highly advanced Factory of the Future. Their proposed four million sq. ft. plant featured a host of innovations that promote efficiency, flexibility, and expandability. Manufacturing experts praised the effort, which has been a source of continuing study by architects and others. Said one, "These students have proven they know exactly what needs to be done!"



# Engineered to be the best

Lawrence Technological University provides the largest number of undergraduate engineers graduating from all colleges and universities in the three county Detroit Metropolitan area. And, with an eye on quality, Lawrence Tech was the first university in Michigan to require graduating students to take the Professional Engineers Exam.

# Major number crunching

More than a decade ago, a Detroit newspaper hailed Lawrence Tech as "one of the most 'computerized colleges' in Michigan." The University was a pioneer in providing campus-wide mainframe computer accessibility and universal electronic mail privileges.
Today, all students enjoy free
computer accounts on the
University's system as well as
Internet access. Hundreds of PCs
and high-powered work stations
are available on campus, along
with dial-up links from home or
office computers via modem. Visit
Lawrence Tech on the World Wide
Web: http://www.ltu.edu

## Open, Ssese me

More than 300 architecture students and faculty have been involved in a multi-billion dollar project to develop a new showcase community for 133,000 residents and a resort on the Ssese Islands of Uganda's Lake Victoria. The huge undertaking has attracted worldwide attention and a consortium of American and Ugandan companies.

# BRAGGING RIGHTS

# Look, up in the sky

At the dawn of commercial aviation, few schools could top the achievements of Lawrence Tech's student aeronautic teams. In competitions involving dozens of college and university glider teams from across the nation, Lawrence Tech won so often that by the late 1930s the national championship trophy was permanently retired and awarded to the University! It remains on display today in Lawrence Tech's trophy hall.



### New life on the Avenue

Woodward Avenue, perhaps
Michigan's best known highway, is
prepped for new life thanks to an
exhaustive two year study completed by Lawrence Tech
architecture students last year.
Research and proposals were
solicited for the fabled route by the
Oakland County Planning
Department. Student ideas for
a seven community stretch of the
road from the Detroit border north
to Birmingham aim at easing congestion and improving land use,
buildings, and landscaping.

### Been there, done that

Some of the nation's best college basketball was played by plucky Lawrence Tech teams of the 1940s and '50s. In 1951, Lawrence Tech became the smallest college, in terms of enrollment, to ever play in the NIT. Lawrence Tech also represented Michigan in the National Association of Intercollegiate Basketball (NAIB) tournaments in 1942, '43, '48, '49, '52, and '54. Lawrence Tech hoopsters sold out such venues

as Detroit's old Olympia Stadium and State Fair Coliseum.
Intercollegiate basketball was phased out in 1965 to concentrate on academic excellence, but today's students still compete in a variety of intramural and club sports.



# The original channel surfers

A full year before the country's first successful public demonstration of television by RCA in 1938, the first TV signals in Michigan were being beamed by the Lawrence Tech Television Society (LTTS) from the basement of the University's original building. No other independent groups of the era were matching the pioneering advances of the LTTS in the study of TV circuitry or the building of television transmitters and receivers.



# Popular with architects

Lawrence Technological University attracts more architectural students than any other school in the Midwest and is larger than all other Michigan programs combined. It is among the largest programs in the entire nation.

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I take special pleasure in honoring members of the Lifetime Giving Societies listed here. Lawrence Tech salutes your commitment to excellence, your belief in the potential of education, and your faith in the future of our youth. Your gifts are a living tribute to humanity, and cumulatively have changed many lives.

# Charles M. Chambers

Charles M. Chambers

Mrs. M. Ann Adams-Triplett

President, Lawrence Technological University

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"To give away money is an easy matter and in any man's power. But to decide to whom, how much and when, and for what purpose and how, is neither in every man's power – nor an easy matter. Hence, such excellence is rare, praiseworthy and noble." Aristotle

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Conrad W. Koski, BSIM'67 Donald W. Kosnik, BSBA'79 Hal J. & Susan Koss Sheila Kovalsky Richard C. Kowalske, BSME'61 Jerome V. Krinock Edward F. Kristofik Jr., BSME'58 Arnold M. Krueger Peter J. Kuchta, BSME'77 Richard P. Kughn Robert R. Kuhnert, BSIE'52 Mr. & Mrs. Harold A. Kuypers, BSME'57 William R. Kuziak Jr., BSME'65 Lawrence J. Lacey, BSIM'71, BSEE'68 William LaGosh, BCvE'48 Roy G. LaGrant, BSEE'56, BME'42 Lee & Julie Lahr Glenn & Emma Laing, BSIM'74 Louis J. Lambert. BSME'58. Richard F. Larkins, BChE'50 Cornell J. Lazar, BSIE'52 Mr. & Mrs. H. C. Lazarus Zack & Modelle Lee Zackulyn Lee Robert W. & Audrey C. Lemon. BSME'49 Lawrence A. Lenski, BSIM'70 Eric A. Lewis, BSEE'76 Mrs. Phyllis Lewis Andrew G. Lim, BSEE'66 Harold Linton Harry H. Lipton, BME'34 John A. Lisiecki, BSEE'82 Mr. & Mrs. Kenneth M. Livingston, BArE'65 David J. Logan, BSEE'59 Rosendo Lomas, BSME'56 William J. Lomas, BChE'53 Mr. & Mrs. George N. Lounsbery, BSME'51 Sam Lovalenti, BSEE'51 Lowell P. Loweke, BSME'69 H. Douglas Lowrey, BME'41 Robert N. Lund, BSIE'50, BSME'50 Robert F. Luppino, BSIM'67 William R. Lynch, BSIM'70 Robert B. Lytle Jr. Dr. George W. Mach George D. MacMunn, BSEE'54 Joseph Maiuri, BSME'60 William E. Makuch, BSIE'50 George & Kate Malcolm, BSIM'61 Ralph E. Malv. ARCT'58 Denis J. Manduzzi, BSME'73 Mr. & Mrs. Robert Mandy, BSEE'45 Grace Marce Frank E. & Mary Ann Marcum, DIT BSME'72, MBA'92, BSBA'87 Gretchen N. Maricak, BAr'77, BSAr'76

David G. Markus, BSMa'72 Joseph J. Markus, BSIM'68 Linda C. Marsh, BSIM'75 Robert M. Martin, BSME'76 Christopher & Sharon Martinez, BSBA'84, AET'84 John A. Martino, BSIM'73 Mr. & Mrs. Etienne F. Masalskis Marcia A. Maskey Richard S. Maslowski Thomas & Christine Masson Frances F. Maund Alex Mayorchalk, BSME'53 John A. Mayott, BAeE'52 Peter E. McAlpine Peter Y. McAlpine, BME'36 \*James L. McCally, BSME'66 Mr. & Mrs. Calvin H. McClellan, BSME'50 Henry L. McColl, BSME'58 Caroline M. McCollom Mr. & Mrs. Walter F. McCoskey, Susan C. McCraven, BSCE'82 Mr. & Mrs. Francis F. McFall, AMT'66, \*James J. McMahon, BSEE'62 Carol McMann Robert Mead, P.E., ARCT'57 Mr. & Mrs. Terry L. Measel, BArE'61 Mr. & Mrs. Theodore Mecke Jr. Bernard J. & Lucy G. Merritt Michael J. Merscher Robert F. Mettler, BSME'49, BSIE'53 Samuel E. Michael, BSEE'76 Ralph W. Michelson, BSEE'48 Mr. & Mrs. Theodore Milek, BSME'51 Alan R. Miller, BSME'59 Mr. & Mrs. David Miller David T. Mills, BSEE'70 Michael & Emma Minasian, BCvE'52 Gretchen Minnhaar, BArE'59 Elizabeth Mitchell Philip & Shirley Mohan Mr. & Mrs. Leslie Mollon, BSME'56 Thomas M. Montroy, BSIM'72 John W. Moody, BSIM'75 Ronald D. Moore Thomas S. Moore, BSEE'86 Raymond C. Morawski, BSME'66 M.J. & Virginia Morell David C. Morrison, BSME'60 Murdo D. Morrison, BArE'43 Movses & Ann Movsesian, BChE'53 Joseph E. Muccioli, BEE'46 Marvin & Carol Muckenfuss, BSIM'68 Barbara Mueller, BSBA'78 Larry G. & Carol Mumford W. Thomas Munsell Dr. & Mrs. Richard A. Murie

Harlan Houghtby, BME'44

Charles A. & Jackie Murray, BSIM'70 Erwin Mutnick Mr. & Mrs. Gary P. Mutnick Mr. & Mrs. Albert F. Myers Ada W. Mylenek Mark L. & Patricia F. Nagel, BCvE'49 Thomas J. Nashlen, BSAr'68 Donald H. Nelson, BME'44 J. Richard Newman, BIE'40 Glenn E. Noble, BCvE'59 Russell R. Noble, BSEE'48 Ed & Pat Noga, BSME'75, BSAr'75 \*William & Barbara Noll, BSBA'88 Elaine T. Noring J. Howard Nudell, BSAr'71 Mr. & Mrs. Jerome F. Obdziejewski, BSIM'69 James R. Obranovic, BSIM'63 Dennis R. O'Connell, BSIM'70 Thomas F. & Patricia O'Connor, BArE'64 Timothy C. O'Connor, BSME'71 Estelle D. Ofenstein Richard Ogletree, BSEE'75 Dr. Joseph B. Olivieri Mr. & Mrs. Calvin F. Opperthauser, BSEE'51 Harry H. Oyafuso, BSEE'61 Anthony R. Ozog, BSIM'76 Mr. & Mrs. William B. Palmer Edward S. Papelian Marion Parker Raymond L. Parker, BSME'74 Louis M. Paull, BSIM'71 \*Mrs. Dolores Pawlak William K. Pence, BSEE'52 Mae Peroni Raymond T. Perring Michael J. Perrone, BSEE'51 James A. Pershon, BSEE'63 Charles H. Petross, BSIM'66 O. L. Pfaffmann Edith B. Phillips G. Donald Pierce, BSME'48 Thaddeus Pietrykowski, BSME'48 Edward Pietrzak, BSME'71 Mr. & Mrs. Bruce R. Polkinghorne, BSME'50 Gloria Pool Victoria Popovich Alan & Mona Prasuhn Edmund T. Pratt Jr. Alvin R. Prevost, BArE'51 Robert R. Rabe, BSEE'85 Rosemary Racchi Roy Radakovich, BSIM'72, BSME'68 Dale H. Raffler, BSME'61 Dr. Srikant Raghavan

Ronald L. Rainson, BSIM'69, BSEE'66

Marilyn V. Rands Donald W. Rasinen, BSBA'50 Charles A. Rasko, BSME'77 Mr. & Mrs. Gerald W. Rein, BSEE'73 Bodo A. Reinholz, BSIM'69 Edward II & Vicki Repik, BSMa'75 Gloria Rivkin Philip Rizzo Jr., BCvE'62 Gary D. Roberts, BSAr'80 Gary & Shirley Robertson Richard A. Robertson, BSIM'70 David S. Robinson, BSIM'72 Richard & Lucille Rocco, BSME'52 Betty Rogers Alexander Ross, BSME'44 Douglas W. Rouse, BSME'66 Paul S. Rulon, BSME'75 Melvin T. Rutkowski, BSME'48 James P. Ryan, BArE'66 Thomas E. Ryszka, BSME'78 Roger M. Sackett, BCvE'61 Harry Sakjas Sr., BSIM'74 John J. Sammut, BSEE'88, BSBA'88 Mr. & Mrs. Raymond P. Sands Leo E. Sanker, BSME'49 Louis J. Santioni, AIST'69 Joseph F. Savin Betty E. Scanlon Wilford J. Schaldenbrand, BSME'59, BSEE'67 Jenne Schiemann R. Kent Schiete, BSME'88 Earle V. Schirmer, BME'43 Robert J. Schlaff, BSIM'62 Mr. & Mrs. Abbott K. Schlain Charles W. Schwartz, BChE'48 Ralph F. Schwedt, BSEE'65 Dale Noel Scrace, BSAr'70 John Sebu, BSIM'68 Mrs. Vinod Sehgal Henry J. Selewonik, BSIM'57 Mark S. Sellers, BSBA'79 Ray W. Sevakis, BSME'53 Steven K. Shapiro, BSMa'82 Richard C. Sharp, BSME'53 Charles T. Shedd, AET'64 William J. Sheehy Mr. & Mrs. William T. Sheppard, BCvE'54 Huston E. Sherrill, BSEE'72 Wayne S. Shintaku, BSEE'79 David W. Sickels, BSIM'76 Harry A. Siegel, BSBA'77 Mr. & Mrs. Lynn M. Silkworth, BAr'76, BSAr'76 Mrs. William R. Slattery Kenneth G. Slotkowski, AET'63 \*Arthur F. Smith, BAr'81, BSAr'78 Mr. & Mrs. Donald James Smith, BSEE'55

Edward R. Smith, AIST'66 Lawson K. Smith Stanley W. Snider Steve Sobak, BSME'49 Robert S. Solgan, BSME'56 Katherine Sorenson Chris J. Spaseff, BSME'56 M. Pete Spinner Nicholas F. Stanil & Patricia J. Borton, Gary P. & Barbara C. Staniszewski, BSME'75, BSMa'77 James B. & Catherine M. Stanley, BSMa'76, BSHu'78 Austin & Betty Stanzel, BChE'50 Richard J. Stark, BSME'54 Alphretta Starks Louis J. Steigerwald James M. Steimel, BSIM'76 James P. Stewart, BSIM'67 Esther Stiner Paula Stofer, BSHu'79 Jack Stone, BEE'43 James A. Stone, BSIM'74 Fred J. Strozeski, BSIM'76, AET'68 Robert M. Stuart, BSEE'53 Larry E. Sundgren, BSEE'61 Michael J. & Cindy L. Sweeney, BSME'78 Ray & Elizabeth Swindler, BSME'58 Emil V. Szlaga, BSME'58 Irene Tamagne Mr. & Mrs. Angelo Tata, BME'43 Eugene A. Tauriainen, BSEE'68 Elvin & Irene Taylor, BME'45 Philip W. Taylor, BSEE'61 James Tierney \*Jon D. Tincher, BSEE'59 Tony & Lois Tomac, BSME'51 Michael J. Tomkins, BSPh'78 Mr. & Mrs. Lynn A. Townsend \*James V. Tracy, BSME'60 LaVerne A. Tratechaud, BSME'66 David C. Travis, BSIE'60 Mr. & Mrs. Thad S. Treciak, BSIM'72 Mr. & Mrs. James O. Trew Mr. & Mrs. Stanley L. Trybus Jeanette Twiss Michael P. Ugorcak Jr., BAr'76, BSBA'76, BSAr'74 Mr. & Mrs. Raymond L. Urban, BME'35 Robert H. Van Allen, BSEE'49 Gary L. & Eleanor Vance, DIT BSMa'58 Henry Vanderzee Jr., BSIM'69 Jeffery W. Van Dorn, BSEE'69 George Van Norman, BSEE'49 Thomas J. Varga, BSEE'55 Drs. Nuno & Maria Vaz Clarence I. Vellner, BSME'73

Frank A. Veraldi, BSME'49

Mr. & Mrs. M. L. Vermeulen, BSEE'60

Richard P. Visger, BCvE'58 Herbert C. von Rusten, BSME'63 Shirley Voytek Charles Vranian, BSME'49 Gregory W. Waleke, BSIM'72 Gary E. Walker, BSEE'68 David A. Ware, BSBA'78 Robert W. Watson, BSIM'73 Kevin E. Webb, BSEE'78 N. Emmett Webb, BSEE'43 John W. Weber Mr. & Mrs. James B. Webster III, BSME'79 Harrie P. Westphal, BSEE'76 Mrs. Helen Wexel Floyd J. White, BSME'60 Paul D. Wicker, BSCE'78 Thomas A. Wieszkowiak, BSIE'62 James Wiggins, BSME'71 Mr. & Mrs. Gerald A. Wilk, BSME'63 Robert E. Williams, BSME'53 Mr. & Mrs. Jesse J. Willis James T. Wilson, BSME'49 Thomas S. Wilson Jr., MBA'91, BSIM'80 Allan J. & Michele J. Winkeljohn, BSMa'72 Edward J. Wloszek Jr., BAr'80, BSAr'78 Wesley & Janet Wojtowicz, BChE'37 Mark R. Wolosiewicz, BSIM'77 Ronald A. Wonboy, BSBA'75 Ivan D. Woodhull Jr., BSME'60 Clifford N. Wright, BArE'41 Timothy L. Wright, BSME'85 Hurst E.J. Wulf, BSME'41 Wilma Yee Robert D. Young, BSEE'78 Alan D. Zahm, BSCh'73 Ronald W. Zahm, BSMa'75 Frederic L. Zeisler Peter J. Zerga, BSIM'76 Peter E. Zervos, BArE'61 Nandor J. Zimmersmann Robert F. Zokas Andrew Zywotko, BChE'44

\* Indicates new cumulative club member or level from Jan. 1, 1995 to Dec. 31, 1996.

This report reflects cumulative gifts to Lawrence Tech through December 31, 1996. If you note an omission or incorrect listing, please contact Lawrence Tech's Office of Institutional Advancement, or phone (810) 204-2300 so we may correct our records.

## Reunion set for April 26-27

C'mon home! Lawrence Tech's annual Reunion and Open House Weekend is April 26 & 27, featuring the all-class dinner-dance, alumni car show, hundreds of student displays, and more!

The Alumni Reception Center is open all weekend in M217 of the Buell Management Building. Stop in for free coffee and snacks and for door prize registration. The Southfield Marriott is serving as host hotel and offers lodging discounts to attendees.

While alumni from all class years are welcomed, 1997's honored classes are 1937, 1942, 1947, 1952, 1957, 1962, 1967, 1972, 1977, 1982, 1987, and 1992, says the Reunion Committee. Class pictures will be taken and mementoes will be distributed at the Reunion Dinner April 26. On Sunday, April 27, the Class of 1947 will be inducted into the Jubilee Society during a special brunch welcoming alumni who graduated 50 or more years ago.

Watch your mail for schedules. □BJA

# Glider model alights after nearly 60 years



After nearly 60 years and a series of cross country moves, this hand-crafted model of Lawrence Tech's famous *Yankee Doodle* glider was donated to the University recently by its original builder, Guy E. Williams, AeE'42. With a wingspan of appx. 16 inches, it is about 1/34th the size of its full-scale counterpart.

Williams, who also worked on the full-size glider with Jack Laister, Randy Chapman, (both AeE'38,) and others, built the model in about 1939. In 1942 he joined Laister, Chapman, and other students, alumni, and faculty at Laister-Kauffmann Aircraft in St. Louis to build training gliders for the Army Air Corps based on the Yankee Doodle design, as well as huge, top secret cargo gliders the firm developed for an expected

invasion of Japan (see Lawrence Tech Magazine, Winter/Spring 1995). There, the model sat on Chapman's and Laister's desks. Tragically, Chapman was killed in a 1945 wartime accident in the Yankee Doodle.

During a 1967 reunion in Los Angeles, Williams was presented with the model by Laister and it resided with Williams at his Worthington, MN home ever since. It is finished with the same paint with which the original Yankee Doodle was painted. "My best memories of life at LIT were working on the gliders and acting as ground crew for all the glider meets we went to," recalls Williams, who retired from custom cabinet manufacturing in 1981.

# **Expanded alumni directory coming**

Lawrence Tech's new Alumni Directory, slated for 1998 release, will be more user-friendly and contain more information than ever, says Bruce Annett, director of university relations and alumni services.

"In addition to up-to-date alumni address and job information, and a listing of spouse and children, we're adding fax numbers, e-mail addresses, and a new career networking section listing alumni by occupational headings," Annett says. "Additional degrees and institutions attended are also being added."

In response to many requests, a roster of lost and known deceased alumni is another addition.

The Bernard C. Harris
Publishing Co. has been selected
to produce Lawrence Tech's new
Alumni Directory. The White
Plains, NY, publisher also printed
the University's first directory,
issued in 1993.

"Harris has published directories for most of the nation's largest and most prominent universities,"
Annett says. "We found their pricing to be very competitive. The company's professional approach and accuracy was also cited by many alumni when the directory was last produced."

Price of the hard- or soft-cover books has been held to the 1993 rates — \$49.99 and \$46.99 respectively. The directory will also be available for the first time in a special CD-ROM edition.

"Most universities publish their directories at five-year intervals," Annett says. "It's time to update. Some 25 percent of our graduates provide address and other changes to the Alumni Services Office each year."

To assure that the latest and most up-to-date information is included, all Lawrence Tech and Detroit Institute of Technology graduates will be surveyed during the year to update their personal information. Ordering information will be provided at the same time.

# China calls former Association president

Mark Bill, ME'75, is manager of new product development for Ford Motor Co.'s expanding operations in China. Mark, elected president of the Lawrence Tech Alumni Association in June 1995, had to step down from the post the following December due to his overseas assignment but he has remained an active and involved alum, and even sent an alumni fund appeal from China to his Ford colleagues stateside. Mark was married just prior to leaving to Cheryl Bell, who has joined him in China.



Former Association President Mark Bill, ME'75, is manager of new product development for Ford in China.

# **Grad is Young Architect of Year**

"I just latched on to it as a kid," says D. Brooke Smith, Ar'80, BAr'82, vice president of the Detroit architectural firm Kessler Associates, Inc., referring to his career choice as an architect. "When I was 10 or 12-years-old, I had two interests. One was art. The other was building things. One particular day, when I was full of wisdom apparently, I put the two together and thought about being an architect. I had heard of Frank Lloyd Wright, but had no real idea what an architect did. One thing led to another and here

That early wisdom is paying dividends for Smith, 38, who was named the 1996 Young Architect of the Year by the American Institute of Architects-Detroit. He was also elected treasurer for the 900-member organization for professional architects after concluding a three-year term as a director.

"I want to think I was chosen not because of some pretty photos

of buildings I worked on, but instead because of my contributions to the profession," Smith

He is worthy on both counts. While at the 20-person Kessler firm, Smith has worked on the nearly completed Delta College planetarium; Delphi's world headquarters in Troy, which will be completed shortly; the Wayne County Medical Examiner's Office; and the master plan expansion for the Center for Creative Studies in Detroit. After hours, he has been active with the AIA, chairing its 1995 Hudson Task Force. He's also chaired the Michigan Council for the Arts & Cultural Affairs Equity Grant Program, and served as a judge for the Michigan Architectural Foundation High School Design Competition.

Smith acknowledges the spotlight associated with a tag like Young Architect of the Year but admits, "I'm trying to play it down." "Architecture is not about individual accomplishments," he

says. "I've been lucky to work for one of the leading firms in the area."

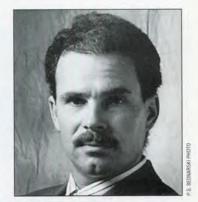
Prior to Kessler, Smith worked for Rossetti Associates, where he played a role in the design of the Palace of Auburn Hills; Neumann-Smith & Associates: and Smith, Hinchman & Grylls, where he assisted on plans for the new Veteran's Hospital in Detroit.

"After I graduated from Lawrence Tech. I wanted to focus on working for Detroit's leading firms. I thought they would afford me the experience and exposure other firms could not provide. It's been a good investment," Smith says.

Smith, among his duties as senior designer and project manager, is now in the position of hiring architects. He remembers, though, being on the other side of the desk and just starting in the profession.

"Students coming out of school are impatient and want more responsibility than they are prepared to handle. I know I was that way too when I got out," Smith says. "There is so much they don't know, and don't realize it."

Smith's early choice in life, and his serious dedication to architecture, has taken him far early in his career. His seriousness is also something he developed early.



Smith

"My fondest memories from Lawrence Tech deal with the people I met. There were a lot of accomplished individuals," he says. "Some instructors had a profound impact on me. I took my education seriously. I wanted to get as much out of the program as possible. I wasn't there to play."

Smith is the father of two daughters, one an infant. While learning to adjust to a baby in the house again. Smith still finds time for extracurricular activities to promote architecture.

"It's not so much an urge but a sense of obligation to do something for the community and profession," Smith says. "I like the interaction. People are very appreciative of the energy and time I donate. I receive a great deal of gratification from that." \(\sigma BPK\)



# 'Ring' of distinction

Irina Yuzbasheva (left) a senior majoring in math and computer science, was the first winner of the Lawrence Tech Alumni Association's distinguished new graduate award — a Josten's 10 kt. gold signet ring with a retail value of \$325. She's pictured receiving her prize from Eric Lewis, EE'76, Association president. The Alumni Association hopes to make the ring, presented to recognize an outstanding new graduate, an annual event at the Student Government Awards Banquet each spring.



ALUMNI WINDSOR TOUR The historic Hiram Walker distillery in Windsor was the site of a March tour by Alumni Association members. Among the visitors were Roger Avie, IM'68; Dave Ashland, EE'61; Sue Littles; Tom Cunningham, Ch'78, Ma'79; Eric Lewis, EE'76; Chuck Hill, BA'94; and host Laura Slenzak, MCS'84, EE'85. At front left is tour guide Laura Hastings.

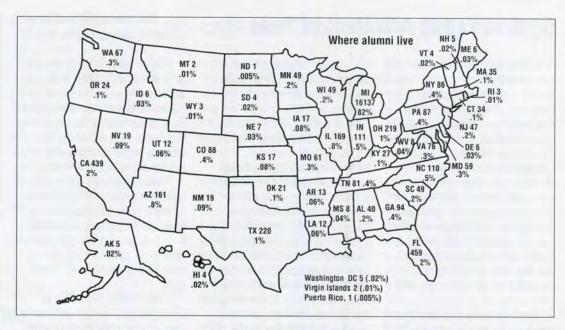
### Alumni meet coast to coast!

Shared Lawrence Tech experiences are bringing together a growing number of alumni in the west. southeast, and midwest states as well as outstate Michigan! The meetings are being championed by Lawrence Tech President Charles Chambers and the Alumni Association to expand programs among the growing number of graduates residing outside southeastern Michigan.

Meetings have included visits and updates by Chambers and Bruce Annett, director of alumni services. Several alumni groups are also meeting independently. Atlanta area grads are gathering occasionally for informal luncheons. In Tampa, FL, alumnus Bill Schultz, CE'81, has for four years hosted "Alumni Nights" with local grads cheering the Detroit Red Wings when they're in town. The latest was at Tampa's new Ice Palace Feb. 17.

"Alumni reside in all areas of the country where there are high tech industries or construction," says Chambers. "Local alumni meetings are a wonderful way for alumni to network and enjoy the fellowship of shared experiences. We encourage graduates to meet and can provide rosters and office support to help. We have found that as alumni continue to relocate throughout the nation and are new to a community, it's a real advantage to be able to link up with a local group of fellow alumni for anything from social interaction to exchanging advice on businesses, merchants, and the best local school districts."

FORT MYERS AREA alumni met Feb. 25 at the Radisson Inn Sanibel Gateway: Donald Barrow, ME'48; M. Victor, EE'48, and Marjori Bower: Theodore Hayman, ChE'49. IE'53; Charles Gorman, ArE'64; George. ME'52, and Lula Lounsbery; Thomas, IT'61, and Loraine Phillips.



The Atlanta, GA chapter, founded by Ray Moy, ChE'43, is the oldest regional chapter outside of Detroit. The Atlanta Chapter elects officers and hosts local events.

and is heavily involved in student recruitment. The group even funds a special scholarship for a Georgia student to attend Lawrence Tech.

For information on meeting or establishing a chapter in your area, phone the Alumni Services Office toll-free, 800-CALL-LTU, ext. 4. □ BJA



ATLANTA AREA alumni meeting Feb. 23 at the Holiday Inn (Dunwoody) included Robert Bowden, BA'77: John Currie, EE'64: Frank Lamia, Ar'76. BAr'80; David Miller, Ar'95; and Ray, ChE'43. and Edie Mov.





CLEARWATER AREA alumni met Feb. 24 at the Belleview Mido Resort Hotel: Alphonse, ME'57, and Mildred Andrzejak; Wilbur Butler, EE'59; James, IE'49, BA'50, and Mary Jane Campoli; D. James, ChE'42, and Margaret Crawford; Donald, ArE'49, and Loretta Date: Ted. ArE'50, and Julie Daubresse; Frank Fisch, ME'82; Kevin, BAr'82. Ar'81, and Mary Henika; Bob, EE'75, and Adele Luva: Albert Olson, ME'57, and JoAnne Bushman: Arthur, EE'53, and Ruth Payne: V. William, EE'49. and Blanca Pennanen; and Duane, DIT'65, and Carol Young. The luncheon was again underwritten with generous support of hosts Ed. ME'43. and Inez Donley.



RALEIGH/DURHAM AREA alumni met Feb. 26 at the Raleigh Marriott Crabtree Valley: James Carey, ME'48, and Inez Morene; Richard Melling, ME'91, and Karen Herdich; Tom, IM'72, and Honoria Montroy; Harry, BA'50, and Edna Robertson; and Tom Schwartz, EE'91.



CARLSBAD/SAN DIEGO AREA alumni met Feb. 10 at Andersen's Inn: Stan Anderson, IS'71; Dick Coapman, EE'61; Larry Dano, EE'85: Anthony DeMaggio, AeE'36, ME'38; Andy Freeburn, EE'83; Jack Laister, AeE'38: Dennis MacPetrie, IM'71; Harold Muir, ME'47; Roger Porte, IM'70; Samuel, ME'43, and Sue Schugar; and Richard Williams, EE'64.



11 at the Waterfront Hilton Resort: Jean Cook, ArE'55; Michael Kourtakis, ME'86; Arthur, ChE'53, and Phoebe Litheredge; Alan, ME'59, and Mollie Miller; Rich Nadolski, EE'85: Thomas, ME'63, and Irene Tuttle: and Tom Walker, ArE'55.

BEACH AREA alumni met Feb.

HOUSTON AREA alumni met Feb. 15 at the Four Seasons Hotel: Joe, ArE'56, and Jean Fleshner; Vern, CivE'62, and Betty Gary; Bruce, ME'50, and Charma Polkinghorne; and Greg, IM'72, and Jean Waleke.



PHOENIX AREA alumni met Feb. 13 at the Pointe Hilton at Squaw Peak: Michael John Baker, Ar'88, CE'92, and Debby Molina; Graham Barton, DIT'53; Jack, ArE'50, and Julia Beckman; Harold, ChE'50, and Sally Bell; Nicholas, CivE'58, and June DeMarco; Richard Exler, ME'58; Ralph, EE'43, and Estelle Hahn; William, EE'41, and Dorothy Howard; Mel, ME'51, and Ruth Huebner; Scott, IM'70, and Mary Ries; James, CivE'49, and Ruth Timm; and Debbie Weisberg, Ar'84. The meeting was hosted by Tony, IT'56, and Jeanette Spadafore.

DALLAS AREA alumni met Feb. 14 at the Doubletree Hotel at Park West: Michael, IM'69, and Anne Andriaschko; Lawrence, Ch'81, Ma'81, and Ragheda Halcomb; William, ME'56, and Barbara Kanon; Bill Rey, EE'85; and Brian, EE'87, and Andrea Roth.



SAN FRANCISCO AREA alums meeting Feb. 12 at

the Westin St. Francis are Vincent Chan, IM'74;

and Gregory Kongeal, Ch'80.

CHICAGO AREA alumni met April 3 at the Chicago O'Hare Marriott: Keith Baker, IM'68; Pascal de Hesselle, BA'95, and Jennifer Scott; Daniel, EE'73, and Eleonore Franczk; Sandra, Ch'84, and Paul Knight; Peter Kosanovich, IM'75; John Madsen, Ar'84; and Walter, IM'66, and Shirley Skinner.





INDIANAPOLIS AREA alumni met May 1 at the Airport Holiday Inn: Anthony, Te'93, and Peggy Lynn Adrian; Michael, BA'75, and Edith Cousins; David House, EE'86; John, IM'72, and Kathy Meservy; Carl Ortolf, EE'52; and Dennis Page, ArE'65.

CLEVELAND AREA alumni met May 2 at the Sheraton Airport Hotel: Adolph, EE'34, and Mary Weidle Lovoff; Philip, IM'80, and Vesna Printiss; Charles Rasko, ME'77; and Daniel VanLuvender, Ar'91



#### Here are some older photos that missed the last magazine:



GRAND RAPIDS AREA alumni met Nov. 3, 1995 at the Holiday Inn Crowne Plaza: Chris, ME'89, and Marlene Mularoni; Tom, CivE'66, and Arlene Chettleburgh; Jim, EE'88, and Jane (Bailey) Gresehover, BA'86; Mark, ME'86, and Liz Holland; Jan Knibbe, MT'54; Charles, ChE'48, and Ruth Schwartz; Richard, ME'54, and Pauline Stark; and Christine Uecker, BA'86. TRAVERSE CITY AREA alumni met Oct. 29, 1995 at Mullaly's Studio & Gallery in Elk Rapids: Roy, IE'57, and Marian Barrett; William, IE'49, and Katherine Cook; Fred, ArE'49, and Pat Ely; Vernon, BA'84, and Tina LaLone; Douglas M. Thornton, ME'50; and Richard, BA'51, and Nedra Wagar. Thanks to Bill, ME'53, and Barbara Mullaly for graciously hosting the meeting at their beautiful art gallery — Bill's birthday yet!



BAY CITY/SAGINAW alumni met Nov. 10, 1995 at the Montague Inn: Roy, AeE'49, and Doris Heady; Doug, CE'89, and Pam Stevens; Fred Porter, ChE'41 (not pictured); Roy LaGrant, ME'42, EE'56, and Carolyn Davis; and Reginald, ET'92, and Monica Wilson.



FLORIDA ALUMNI SEE RED WINGS Alumnus Bill Schultz, CE'81, has organized Red Wing/Tampa Bay hockey outings in Tampa for several winters. This is the 1996 group. A Feb. 1997 outing inaugurated the new Ice Palace.



# Architecture alums form chapter

The Lawrence Tech Alumni Association has sanctioned a new Architecture Chapter which is dedicated to meeting the special interests of the University's architecture, interior architecture, and architectural illustration alumni.

The charter cabinet has been busy over the past year determining areas of interest and involvement. An architecture alumni recognition program, campus displays which introduce students to successful alumni, and increased communication between alumni and the College of Architecture and Design have been among the group's goals.

The 1996-97 Architecture Cabinet includes: Benedetto Tiseo, AIA, Ar'78 (chair), Wayne G. Sieloff, AIA, Ar'90, BAr'92, (vice chair); Steven G. Farrelly, AIA, Ar'88, BAr'89 (secretary/treasurer); Frederick F. Butters, AIA, Ar'83, BAr'84; Alan H. Cobb, AIA, Ar'76; Beverly Hannah-Jones, Ar'85, BAr'88; Charles K. Loomis, AIA, ArE'62; Leslie Lynch, IA'85; and John N. Miller, Ar'77, BAr'78. Serving as ex-officio representatives are George Straugh, Ar'80, BAr'81, director/liaison to the Alumni Association; Neville H. Clouten, FRAIA, dean; Nancy McCurdy Fearon, assistant to the dean; and Bruce Annett, director of alumni services.

The cabinet meets monthly, rotating sites at various metro area architecture offices in order to encourage alumni participation at meetings. For more information, phone Alumni Services 800-CALL-LTU, ext. 4. \(\topBJA\)

## Seek candidates for 1997-98 alumni board

Nominations and candidates for the Alumni Association Board of Directors are being sought. If you can make the Board's monthly meetings in Southfield or if you are interested in a non-elective committee position, the Association encourages you to step forward!

Ballots for Lawrence Tech
Alumni Association director positions will be printed in late April and mailed by May 1, say Roger
Avie and George Straugh, directors and co-chairs of the
Association's Election Committee.
Election results are announced at the annual business meeting June
10 at the Presidents Conference
Center on campus. Any graduate of Lawrence Tech or Detroit

Institute of Technology is eligible for elective positions, according to the Association's Bylaws.

The 1996-97 Board includes Eric A. Lewis, EE'76, president; Suzanne M. Pouch, Hu'86, vice president; Walter McCoskey, ME'51, treasurer; Carol L. Brooks, EE'93, secretary; David D. Iskra, ME'90; Charles A. Koury, Ma'73; Roger F. Shtogrin, IM'61; Laura Slenzak, MCS'84, EE'85; Roger E. Avie, IM'68; Edwin L. Coles, BA'83; Robert W. Haberstroh, IM'76; George Straugh, Ar'80, BAr'81; David G. Ashland, EE'61; and Thomas B. Buhler, IM'73.

"Directors normally serve three year terms," says Avie, "and they may run for re-election. A third of the board is up for election each year. This year, we also have several unexpired terms to fill. Officers are elected annually by the Board."

# Association broadens membership classes

The Alumni Association has amended its ByLaws to open Association benefits to all graduates of Lawrence Tech and Detroit Institute of Technology, as well as all non-graduating students who attended Lawrence Tech at least one semester. Faculty, staff, donors, and friends may also now be appointed associate members of the Association.

"Our goal is to be more inclusive than exclusive," says Association President Eric Lewis, EE'76. "The Association has always supported increased interaction between members of the University family and support for Lawrence Tech. Clearly, one needn't be a graduate to embrace those goals."

The Association, founded in 1938, offers a range of activities and events in the Detroit area, the annual reunion, and is encouraging regional chapters in other locations (see related stories this issue).

Membership cards and a benefits packet are being mailed in the near future. □BJA

# Work of architecture alumni displayed

What does one do with a Lawrence Tech architecture degree?
Answers are being provided in an exciting new series of displays in the Architecture Auditorium Lobby which feature alumni and their work. The series was initiated through efforts of the Architecture Chapter of the Lawrence Tech Alumni Association and will change monthly. Leslie Lynch, IA'85, is coordinating the project. □BJA

# Alums visit Chrysler Tech Center

One of the events kicking off the 1996 Reunion Weekend was an informative tour of Chrysler Corporation's acclaimed technical center and headquarters in Auburn Hills. Interest was so high that two tours were offered, arranged by Chrysler staffers Roger Shtogrin, IM'61, and Charles Koury, Ma'73, both of whom are directors and former presidents of the Alumni Association.



## 1996 Michigan Alumni Tour Attendees



SAGINAW/BAY CITY AREA alumni meeting in Oct. at the Sheraton Inn-Fashion Square: Michael Grimes, IST'79; Al Harmon, ME'46; John, ME'51, and Dolores Meyer; Fred Porter, ChE'41; and Robbie Williams, CE'50.

TRAVERSE CITY AREA alumni meeting in Oct. at the Waterfront Inn: Roy, IE'57, and Marian Barrett; Fred Ely, ArE'49; Janice Norman, BA'82; and Richard Wagar, BA'51.



# Alumni from across the United States returned for Reunion '96!



CLASS OF 1941: (L to R) Hurst Wulf, ME; and Frank James, REUNION '97

April 26-27

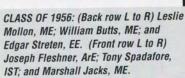
Watch for details!



CLASS OF 1946: (L to R) Joseph Muccioli, EE; John Flood, ME; Al Harmon, ME; and Ralph Schwarz, ME.



CLASS OF 1951: (Back row L to R) Theodore Milek, ME; Donald Bush, IE; and Joseph Gietzen, ME. (Front row L to R) Howard Weber, ME; Robert Tilley, EE; and Walter McCoskey, ME.





CLASS OF 1976: (L to R) Eric Lewis, EE; Tom Hartwig, EE; and Steve Gadzinski, EE.



CLASS OF 1961: (Back row L to R) William Foster, EE; Richard Lipinski, EE; and Roger Shtogrin, IM. (Front row L to R) Al Lopez, ArE; Terry Measel, ArE; Henry Langlois, ME; and Jerry Stangis, IM.







# ALUMNI NOTES

AlumniNotes include news from alumni, their families and friends, Michigan newspapers and corporate press releases. Use the form in this section to share news about you!

#### 1933-1949

Ralph J. Stephenson, ME'43, was honored by the Michigan Society of Professional Engineers with the organization's Fellow Membership, Life Membership, and the Steinman Award. The Steinman Award is the highest honor given annually by MSPE to an engineer who has made outstanding contributions to his profession, the public welfare and to citizens of Michigan. Ralph is a consulting engineer in Mt. Pleasant and since 1952 has been involved in construction projects totaling several billion dollars.

Ralph L. Schwarz, ME'46, of Ormond Beach, FL, has received the Civic League of the Halifax Area's highest award for community service. Ralph moved to the area in 1959 to start Florida Production Engineering Co.. which built large machines to manufacture automobiles, and introduced the first non-metal wheel covers in the industry. He sold the firm in 1987. An Alumni Achievement Award honoree, Ralph has served many community groups, was chairman of the Halifax Medical Center board, and has been especially active on behalf of senior citizens. He was recognized for "a life of dedicated service to the community," the Daytona Beach Sunday News Journal reported.



Frank S. Marra, ME'49, will be inducted into the Plastics Hall of Fame by the Plastics Academy during the International Plastics Exposition in Chicago in June. The Academy says Frank is best known for his work as CEO of D-M-E Co., of Madison Heights which he established as the world's largest manufacturer and distributor of

pre-engineered, standard mold components for the plastics injection molding industry. The firm has operations throughout North and South America. Europe, and the Far East. He became senior vice president of Fairchild Industries which acquired D-M-I and its successor in 1981. Named a distinguished member of the Society of Plastics Engineers in 1980, he received their international award for business management in 1988. He also received the 1986 distinguished service award from the Society of the Plastics Industry. He was instrumental in creating the Plastics Engineering Center at Ferris State University and received a Doctor of Science, honoris causa, from Ferris in 1986. The Bloomfield Hills resident received Lawrence Tech's Alumni Achievement Award in 1966. He is a consultant on international technology exchange.

Relying on information provided during the reunion, two 1949 graduates were mistakenly reported in a recent Magazine as being deceased. We are pleased to correctly report that Alexander R. Andre, ME'49, and Bruce Brewin, EE'49, are alive. They're quite happy about it, too.

#### 1950-1959

Ronald L. Denecour, ChE'50, Ph.D., operates Denecour Associates, Inc., scientific and engineering consultants in Mission Viejo, CA.

Eugene Kaczmar, IE'50, ran for Oakland County Commissioner in the 24th district in the 1996 elections.

Martin S. Paul, EE'50, ran for the St. Clair County Commission in District 6 in the 1996 elections.

Josh Barnes, CE'51, PE, is CEO of LexaLite International Corp., president of the Business Activities Corp., and mayor of the City of Charlevoix.

Joseph P. Gietzen, ME'51, is retired from Large Car RWD Development, Ford Motor Co. after 35 years of service.

**Ted Hysen,** ME'55, is vice president, sales, with the Automotive Division of Deemstop, Inc. in Toledo. He recently visited campus to recruit some new hands for his firm.

Joseph L. Fleshner, ArE'56, is an architect with P+D Companies Inc. of The Woodlands, TX, and also has an advertising specialities company.

#### 1960-1969

Allan G. Fiegehen, EE'60, is president and C.O.O. of Cubix Corp., in Carson City, NV. Cubix provides microcomputer platforms for computer network communication systems. It has offices in several states as well as Scotland.

Floyd White, ME'60, is president of St. Claire Inc., a technical communications company in Farmington Hills.

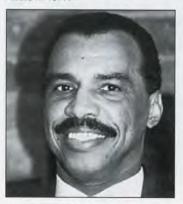
An exhibit of drawings that **Agostino Zago**, ArE'60, did in Venice was recently exhibited at OK Harris Gallery in New York City, where Tino resides with his wife, Dolores.

Gerald Durkin, BT'61, retired as Garden City building inspector in Dec., 1996 after a 12-year career with the city. He was involved in the city's major housing developments.

**David L. Frayer,** ME'61, is an associate of Frayer Business Associates, Agoura, CA. The firm provides tax, accounting, and project management services.

Vern Gary, CivE'62, PE, is a consulting engineer with CH&A Corp., Kingswood, TX.

William Sinclair, CivE'64, St. Joseph city manager, was recently honored by the city commissioners for his 30 years of service to St. Joseph. He also received a plaque at the International City/County Management Association's 80th annual conference in Chicago. Earlier, Bill was city manager of Rochester. He has also held civil engineering positions for Detroit and Birmingham. He has been active on many boards, including the Michigan Municipal League, and the Southwest Michigan Regional Airport. He received Lawrence Tech's Alumni Achievement Award in 1977.



John G. Petty, ME'65, has been named director of the FOX vehicle program for General Dynamics Land Systems. He

joined the predecessor firm to GDLS in 1973 and most recently had been manager of the FOX program. He is also a Lawrence Tech trustee and recently completed a term as president of ESD, the Engineering Society.

Harold R. Varner, ArE'65, FAIA, president and COO of Sims-Varner and Associates in Detroit, was awarded the American Institute of Architects-Michigan's 1996 Robert Hastings Award for improving the quality of the urban environment. Varner served 15 years as a member of Michigan's Boards of Architects and Engineers. For several of those years, he was chair of each board. He was also instrumental in forming state requirements for the Intern Development Program developed to upgrade architectural training. He is a member of New Detroit Inc. and serves on the task force on Detroit Public School Vocational/Technical Centers. His firm's many projects include the expansion of the Cobo Convention and Exhibition Center.

In November, Conrad Koski, IM'67. CPA, was named president and CEO of First of Michigan (FOM), a Detroitbased brokerage house with 500 employees. He has served the firm in a variety of administrative posts over 23 years, and most recently was vice president and treasurer. He is also president of Cranbrook Funds, a \$500 million money market fund. A member of the American and Michigan CPA organizations, Koski serves the executive board of the Old Newsboy's Goodfellow Fund of Detroit and is also past president. He is a member of the Hundred Club of Detroit, Goodsports Foundation, Notre Dame (HS) Council, Polish Genealogical Society, American Polish Cultural Center, and Lawrence Tech Presidents Club.

Gerald Genrich, Sr., Ar'67, was judge for a unique art show of student art in Iron County Museum Cultural Center in Caspian. Gerald is senior vice president, architectural department manager at Henningson, Durham and Richardson, Inc., an architectural firm located in Dallas, TX.

Kenneth C. Segel, IM'67, is vice president, West Central Region, of the Schindler Elevator Corporation in Dallas. TX.

#### 0 N

Dennis J. Dureno, EE'68, CPIM, CIRM, CPM, is president of Dureno & Associates in Homewood, IL. They have recently expanded their international management consulting business.



Roy Radakovich, ME'68, IM'72, chief program engineer, advanced vehicle technology, product development for Ford Motor Co. (see Lawrence Tech Magazine, Winter/Spring 1995), has been elected to a three year term as director of SAE International. Among many other SAE posts he has held, Radakovich served as 1993 chair of the Detroit Section. That year, the Section won SAE's coveted Gold Award for Excellence.

#### 1970-1979

Mike Bauslaugh, ArE'70, is manager of the engineering systems group for Fruehauf Trailer Corp. in Fort Madison. IA where he transferred in 1990.

Charles W. Davis, EE'70, is section manager, quality engineering at Nissan Motor Manufacturing. Chuck is also very active in SAE. He is on the sections board as chairman of the Section/Student Relations Committee. He and his wife, Judy, reside in Brentwood, TN.

John Hermann, EE'70, application engineering manager for Texaco Lubricants Co., has been elected president of the Society of Tribologists and Lubrication Engineers (STLE). He was inaugurated May 21. John began his career with Texaco in Detroit in 1971 and has advanced through a number of engineering and management posts. He is responsible for securing approval of Texaco synthetic and mineral lubricants, as well as Texaco coolants, for use in original equipment manufacturer's products. This includes product recommendation, team selling, coordination of field testing, and serving as liaison with Texaco's fuels and lubri-

cants technology department. He is based in Mt. Laurel, NJ and resides in Yardley, PA.

Ken Hojnacki, ME'70, is vice president, engineering for Lamb Technicon, a division of Western Atlas Inc. in Warren.

Frank Noggle, ME'70, updates us on his activities after retirement in May, 1991. He returned to work at Ford's for "two of the best years of his career." He and his wife of 40 years and his family share good health. They spend their time in Rochester and Charlevoix, where they are active in the Coast Guard Auxiliary.

Walter J. Pociask, Jr., IM'70, as been appointed manager of operations at Detroit's Marine Pollution Control. He is a board member of the Liquid Industrial Control Association and served three terms as its president. He is also a member of the Grosse Ile Twp. Natural Resources Committee and chairs the Roads Committee.

Dale N. Scrace, Ar'70, is owner of Dale N. Scrace Associates, Architects, a general construction/construct management firm. Dale has also been a councilman for over 7 years for the City of Grosse Pointe.

Michael Staffelbach, EE'70, is operations manager for TRW Automotive Steering and Suspension Systems, Rack and Pinion Division, in Greensboro. NC.

Robert J. Hubbard, Ar'71, RA, has been named an associate by Albert Kahn Associates, Inc. and is a senior staff architect.

Chester P. Mienaltowski, ME'71, is proud to mention that his twin sons, Andy and Mike, both 4.0 students at Waterford Mott High School, attended the 26th annual Summer Science Institute at Lawrence Tech. They won awards in math, computer science and physics.

Paul V. Rivetto, Ar'71, AIA, has joined Plante & Moran Cresa, LLP in Southfield as an architectural construction consultant.

Ronald Stanley, IM'71, has been appointed brand manager for the S-series pickup at General Motors.

James D. Wiggins, ME'71, is the president and CEO of SchraderBridgeport International, Inc. Jim was formerly CEO of Bridge Products, which merged in April, 1996 with Schrader Inc. The new firm is headquartered in Northbrook, IL and continues as a global supplier of highly engineered fluid systems, wheel care products, and pneumatic accessories. The company has manufacturing and distribution sites in seven countries and markets products in 120 countries.

Guy C. Wilson, II, ME'71, has been promoted to vice president of engineering for Nissan Motor Manufacturing Corp., U.S.A. in Smyrna, TN. He previously worked for Chrysler.

David H. Wulff, Ar'71, became an associate in the firm of Ludwig Spiessl, Architect, of Lakeland, FL in the fall of 1994. He previously was managing architect for the city of Rochester, NY for 12 years. David was awarded the 1994 Tucker Design Award from the Building Stone Institute for the restoration of the Triphammer Forge in Rochester. This project was featured in the April/May/June 1994 issue of Building Stone Magazine.

Joseph Alexander, Ar'73, has taken up sculpting, sketching, and painting. based on his love and knowledge of architecture. Featured in an article in the Sterling Heights Source/Advisor newspaper, Joseph and his paintings were displayed during Jan. 1995 at the Sterling Heights City Hall. His paintings also have been displayed at the Detroit Institute of Arts rental gallery, Sasper Gallery in East Lansing, Bregas Gallery in Detroit and Lembic Fine Arts Ltd. in New York City. He also broadcasts on local cable in Oakland County.



William Bracken, ME'73, has been appointed vice president-technical operations of the Automotive Equipment Group for Mitsubishi Electronics America, Inc. in Plymouth.

Thomas B. Buhler, IM'73, has joined NIST/Michigan Manufacturing Technology Center in Ann Arbor as account manager. Tom is a director of the Lawrence Tech Alumni Association.

Peter Dobrzeniecki, IM'73, is the finance director for the City of Eastpointe.

James M. Shamaly, ME'73, of Mount Clemens, has joined Douglas & Lomason Co. in Farmington Hills as a project engineer.

William J. Trubilowicz, ME'73, is project leader for the Work Control Center at the Big Rock Nuclear Power Plant near Charlevoix. He has been operations manager of the plant since 1990. He also holds a senior reactor operators license from the U.S. Regulatory Commission.

Ken Czapski, Ar'74, BAr'77, AIA, has joined U.P. Engineers & Architects, Inc., as an architect and project manager in Marguette.

Roger P. Snyder, Ar'74, AIA, has joined BEI Associates, Inc., as project director. He is a director of the Detroit AIA chapter and is also a lecturer in architecture at Lawrence Tech.

James Vigne, Ar'74, is an associate of Ellis/Naeyaert/Genheimer Associates, Inc. Troy-based architects, engineers and planners. He has concentrated most of his career in the design of HVAC, fire protection, plumbing, and piping design. He is a former member of the Orion Twp. Planning Commission.

Duane Buck, Ma'75, Ph'75, received his Ph.D. in computer science from Ohio State University in June, 1993. Duane teaches at Otterbein College in Westerville, OH as assistant professor and received a National Science Foundation grant for a "parallel processing computation server" project.

George Hayden, IM'75, BA'88, is a district sales manager for Cadillac Motor Car Division of General Motors in Irving, TX.



Alan H. Cobb, Ar'76, AIA, has been promoted to director of architectural design at Albert Kahn Associates, Inc., a 315-person firm founded in 1895 by legendary architect Albert Kahn. Alan joined the firm in 1976. He is a director of both AIA-Michigan and AIA-Detroit and chairs AIA-Michigan's government affairs committee. He is also a cabinet member of the Architecture Chapter, Lawrence Tech Alumni Association.

Scott A. Wortman, Ar'76, BAr'77, has joined the Perini Building Co. - Central U.S. Division in Southfield as project manager. He is project manager for the Detroit Symphony Orchestra Hall project and formerly worked for Taubman Company and Borders, Inc.

Terry Goodbalian, BA'77, CPA, has been named director of finance for the Detroit Medical Center's northwest region. He was formerly controller of DMC's Hutzel Hospital.

Harry Peck, Ar'77, was elected vice-president (professional) of the Metropolitan Detroit Chapter of the Construction Specifications Institute for fiscal year 1996.

Timothy French, BA'78, is general manager of Troy-based Sidney Krandall and Sons, Jewelers.

Steven D. Hillier, Ar'78, was promoted to facility program leader at Ellis/ Naeyaert/Genheimer Associates in Troy. John Palazzolo, CE'78, is president of Bravo Building and has joined with Bill Scalabrino of Woodlake homes to coordinate the development of the Forest View subdivision in Sterling Heights. The project will eventually include 350 homes.

Michael J. Sweeney, ME'78, PE, has been serving the Farmington Hills Planning Commission. He is a supervisor of Ford's Electronic Fuel Handling Division, Rawsonville Plant.

Benedetto Tiseo, Ar'78, owner of Tiseo & Associates, Inc. has merged with Redstone Architects. The new firm is Redstone + Tiseo Architects and is located in Southfield. Tiseo is president. He has also served as a lecturer in architecture at Lawrence Tech since 1980 and chairs the Architecture Alumni Chapter of the Lawrence Tech Alumni Association.

David Rzepka, CE'79 has been promoted to division area manager at Perini Building Co. - Central U.S. Division in Southfield. He is responsible for project delivery systems, safety and loss control, cost control, and equal employment. Previously, he was project superintendent for the 500-bed replacement VA Medical Center in Detroit.

Jack C. Wong Ar'78, BAr'79, is an architect with McNulty Briskman Heath in Alameda, CA.



Timothy Mahoney, Ar'79, BAr'81, of West Bloomfield, has been promoted to director of interior architecture at Hobbs + Black Architects in Ann Arbor.

Michael M. Meinhardt, Ar'79, BAr'81. AIA of Birmingham, has joined the Oakwood Healthcare System in Dearborn as project manager for architecture and construction services. Previous corporate facilities experience includes the Detroit Medical Center and Chrysler Corp.

#### 1980-1989

John E. Enkeman, Jr., Ar'80, is chief of architectural development at Albert Kahn Associates, Inc. in Detroit. His clients have included Nissan Motor. Whirlpool, and Kellogg Co.

Matthew W. Gielow, Ar'80, AIA, has joined the firm of Kenneth Neumann/ Joel Smith and Associates in Southfield as project architect.

Major Patrick E. Mullen, Ar'80, has been promoted to the position of staff engineer, Headquarters Michigan Air National Guard. He advises senior management on statewide engineering issues. He is a plans reviewer for the Bureau of Construction Code, State of Michigan.

Peter S. Palka, EE'80, doctor of osteopathic medicine, has received the U.S. Armed Forces Humanitarian Service Medal for his contributions treating the civilians in war torn Rwanda. He is a major in the Air Force Reserves and has served at Chicago Children's Memorial Hospital. He has also been an assistant professor at the Northwestern University Medical School.

Madonna L. Prusac, Ar'80, BAr'81, AIA is project manager at THA Architects & Engineers (formerly Tomblinson Harburn Associates Architects & Engineers, Inc.) of Flint.

Ronald P. Wesley, CE'80, is director of engineering and housing for the U.S. Army Tank Automotive Command at Selfridge Air National Guard Base. Ronald earned a masters degree in 1994 from Embry-Riddle Aeronautical University and was married in 1995.

Kenneth W. Davey, EE'81, is senior manager, Digital RF Access Technology, Wireless Systems, at Northern Telecom, Inc. in Richardson, TX.

Larry T. Jordan, Ar'81, is pastor of the Southfield-based Family Victory Fellowship Church. "I spent 15 years building buildings. I think it is about time to build families." Jordan told the West Bloomfield Eccentric about his shift in careers. "I love architecture. I miss architecture. But I enjoy the ministry more."

Diane Lammers, Ar'81, IIDA, was named principal at Harley Ellington Design in Southfield.

David Masko, Ar'81, BAr'83, AIA, has rejoined Kenneth Neumann/Joel Smith and Associates, architectural, planning and interior design firm in Southfield. He is a project designer.

Beth Moceri, BA'81, has joined the Schoolcraft College marketing and development office as coordinator of fund raising and special events.

Leigh Gaither, ME'82 is vice president of Elevator Concepts Ltd in Taylor.

Randy Hatchard, Ar'82, AIA, as been named a vice president at the newly formed Dominick Tringali Associates, in Bloomfield Hills.

Frank Kern III, IM'82, is president and COO of Southfield-based Maxitrol. which manufactures gas regulators, valves, and related products. The 450employee firm has plants in Michigan and affiliates in Texas and Germany. The company celebrated its 50th anniversary in 1996. In Sept., he was appointed a director of Citizens Bank in Colon where his firm has a manufacturing facility. He is also a director of Citizens Bank in Royal Oak.

Ronald J. Lindow, Ar'82, CE'90, has been promoted to specifications specialist at Ellis/Naeyaert/Genheimer Associates, Inc. in Troy.

Brian W. McKenna, BA'82, was appointed director of GM mid-size truck and passenger car programs by American Axle & Manufacturing in Detroit.

James Spears, Hu'82, was married in July, 1997 to Kelley Cook.

Paul R. Urbanek, BAr'82, AIA, is principal at Harley Ellington Design in Southfield.

#### ALUMNI NOTES

Brian Bagnick, Ar'83, BAr'84, is senior associate at Hobbs + Black Associates in Ann Arbor. His responsibilities include the facilitation of day-to-day operations, including job layout and production, as well as construction administration and coordination.

Michelle Brandt, MCS'83, has a current job title of M.O.M. (Matriarch of Operations Management). Her responsibilities include chauffeur, chef, gardener, maid, referee, nanny, coach, counselor, and teacher for her children Patrick, Laura, and Steven. Her husband, Joseph, EE'82, works for the National Radio Astronomy Observatory.

Frederick F. Butters, AIA, Ar'83, BAr'84, has been admitted to practice law before the U.S. Supreme Court. He previously had been admitted to practice before all Michigan courts as well as U.S. district, appeals, and claims courts. He holds a Doctor of Jurisprudence from Wayne State and is senior associate with Federlein and Keranen, PC, law firm in Bloomfield Hills. He serves on the Architecture Chapter of the Lawrence Tech Alumni Association.

Daniel J. Gellings, Ar'83, participated in a new corporate-wide leadership development program of SSOE architects and engineers in Troy.

Howard I. Garon, ME'83, is a special lecturer in mechanical engineering at Chiang Mai, Thailand. He formerly was an engineer design and development engineer at Chrysler.

Joseph Gulawsky, BA'83, is director of operations at MascoTech Marketing Services. He previously served as marketing manager and will continue to manage the company's marketing activities.

Karyl, Ma'83, and David Heiden, EE'91, have built a new home near Ortonville. Karyl is a project leader for Perot Systems. The couple have two sons.

Alice (Selewonik) Kristian, IA'83, married Don Kristian in Nov. 1995. She is an interior designer with Ford & Earl Associates. Alice and her father, Henry, IM'57, are both former directors of the Alumni Association.

Damon K. Leverett, Ar'83, RA, AIA, is an associate and manager, architectural design for Albert Kahn Associates, Inc. in Detroit.

Karen Jean Mitchell, CE'83, EE'86, and Michael J. Carter, were married on June 3, 1995. Karen is a product design engineer at Ford Motor Co.

Ann Ording, CE'83, PE, is a civil engineer at PRC Environmental Management, Inc. in San Francisco, CA.

Laura M. (Vogel) Slenzak, MCS83, EE'84, is a patent attorney for Rockwell International in Troy. She handled intellectual property counseling and prosecution for Rockwell Automotive and is active in several legal organizations. She and her husband also are the proud parents of a son. She is a director and former secretary of the Alumni Association.

David L. Tratt, ME'83, was chosen by the board of directors at SSOE architects and engineers in Troy to participate in a new corporate-wide leadership development program.

Dominick Tringali, Ar'83, BAr'84, AIA, has opened his own architecture firm, Dominick Tringali Associates, in Bloomfield Hills. He previously was a partner at Lubin/Tringali Associates. His firm specializes in luxury custom homes and residential development. Crain's Detroit Business named Dominick to its "Top 40 under 40" roster during the fall, 1996, recognizing influential professionals under 40 years of age.

David R. Colwander, Ar'84, is a senior associate with Fusco, Shaffer & Pappas Inc. of Southfield.

Jill Coverdill, BA'84, has joined Plante and Moran LLP in Traverse City. She works with both the audit and tax department practice staff.

Douglas DelGrosso, ME'84, is vice president of operations of Lear Corp., GM Division. He was inducted into the Automotive Hall of Fame at its awards night in Oct. 1995.

David Lavender, Ar'84, has joined the architectural firm of John Hilberry & Associates Inc. as senior associate architect. His primary responsibility is project delivery, staff development and marketing.

George A. Mileskiy, Ch'84, is director of environment at Johnson Controls Inc. in Plymouth. His responsibilities include all environment and health safety affairs for the Automotive Systems Group and for the Plastics Technology Group with over 100 sites worldwide.

**David L. Robar**, Ar'84, BAr'85, has been named a principal at Design Collective Inc. in Cleveland, OH.

Raymond M. Williams, ME'84, PE, is senior mechanical engineer for Albert Kahn Associates, Inc., and is in Kahn's special projects focus group.

Mark Wojcik, BA'84, CPA, is a registered representative for Mariner Financial Services of Livonia. He also has a radio program on WCAR-AM radio in Detroit.

Jeff Ziegelbaur, Ar'84, has been named vice president at the newly formed Dominick Tringali Associates in Bloomfield Hills.

Tammis Donaldson, Ar'85, BAr'92, has opened the firm Ekocite Architecture in Rochester. The practice centers on commercial, residential and rehabilitation of historical projects.

David Lavender, Ar'85, is senior associate architect at John Hilberry & Associates Inc. in Detroit.

Thomas R. McAdoo, Ar'85, AIA, is an associate with Albert Kahn Associates, Inc. He works in the architecture development department and is a registered architect in Ohio.

Mark K. Perkoski, CE'85, MBA'95, has been promoted to associate at the firm of Orchard, Hiltz & McCliment Inc., consulting engineers in Livonia.

**Kenneth S. Towers**, EE'85, is manager, Advanced Engineering Braking Systems -Americas for AlliedSignal Inc.

Kevin Akey, Ar'86, and Frank Zychowski, Ar'86, BAr'88, were featured in the *Birmingham-Bloomfield Eccentric* for their innovative transformations of older residential properties into new and exciting homes. Their firm, AZD Associates Inc. is based in Birmingham. **Brian J. Bidwell,** DT'86, BA'92, is employed at J.D. Cramer Electronics. In September, 1995, Brian and Wendy S. Morse were married.

John R. Clement, Ar'86, BAr'88, AIA, is an associate of Albert Kahn Associates, Inc. and is in the architectural development department.

Sandra A. Lyon, Ar'86, has been promoted to facility program leader at Ellis/Naeyaert/Genheimer Associates, Inc. in Troy.

Steven M. Schweiger, ME'86, is engineering manager, seat integrated belts safety restraint systems at AlliedSignal.

Jon E. Shackelford, ME'86, has joined the firm of Howard and Howard Attorneys, P.C., as attorney. He received his law degree in 1990 from Wayne State University. He specializes in intellectual property law.

Christine L. Uecker, BA'86, has received her Master of Management from Aquinas College in Grand Rapids.

Richard A. Williams, MCS'86, is a computer specialist for Defense Finance and Accounting Service in Indianapolis.

Robert H. Case, Ar'87, BAr'90, has joined the firm of William A. Kibbe & Associates, Inc. in Saginaw as a senior project architect.

James J. Crawley, IM'87, is account executive at Gentex Corp. in Zeeland, MI. He is responsible for sales of automatic-dimming rearview mirrors for General Motors luxury cars.

**Lenore Gollob-White**, BA'87, and her husband, Roy, have a new addition to their family, a baby boy named Deryk.

David J. Kasper, EE'87, is assigned to the division staff of the Hughes Aircraft Co. of California. He was granted a fellowship from Hughes and received an MEE in 1991 from the University of Southern California.

Douglas R. Kopel, Ar'87, is a project manager for BEI Associates, Inc., a Detroit-based architectural and engineering firm. He was previously project manager with Hughes Aircraft Co.

#### ALUMNINOTES

William Leaske, BA'87, MT'87, is account manager in the sales department of Ogihara America Corp. in Howell.

Daniel Mooney, Ar'87, BAr'93, has passed the National Council of Architectural Registration Board Exam. He is an associate and project architect at Hobbs + Black in Ann Arbor.

Kenneth J. Neigh, Ar'87, BAr'90, has joined the firm of William A. Kibbe & Associates, Inc. in Saginaw as a senior project architect.

Mark G. Nikita, AIA, Ar'87, BAr'89, is president of the multi disciplinary design firm Archive DS he founded in 1987 in Detroit. The firm's motto? "Reestablishing Urban America." The firm is involved in residential and other projects in several urban areas, including Detroit and San Francisco. He was recently profiled in the Detroit News and Free Press for his innovative views on re-invigorating life and commerce downtown.

Craig Stumpf, ME'87, was one of two people named 1996 winners of General Motor's highest technical prize, the "Boss" Kettering Award. He was honored for his design of a new chassis part that improves vehicle safety. Craig is part of the automaker's small-car vehicle staff and works at the GM Milford test facility.

Aydin H. Erhan, Ar'88, BAr'91, has joined the staff of Kenneth Neumann/ Joel Smith and Associates, Inc. in Southfield as a project architect.

Tracy K. Ewasuk, EE'88, is a design engineer for Ford of Europe. Tracy and Daniel Kohls were married in June, 1994.

Michael G. Schneider, MCS'88, ME'89, married Jodi Lynn McFadden in Sept., 1995. Michael is employed by Variation Systems Analysis, Inc. in St. Clair Shores as dimensional management engineer. Michael's father, George, DT'73, is interim chair, Division of Corporate Credit and Cooperative Education, and a professor in engineering technology here at Lawrence Tech.

Christine A. Strbik, ME'88, and Thomas L. Marion, ME'91, were married in Sept., 1995. Christine is employed by AlliedSignal Safety Restraint Systems in Sterling Heights, and Thomas is employed by Applied Grinding Technologies in Wixom.

Patricia Baker, BA'89, has been promoted to account executive at the CPA firm of Follmer, Rudzewicz, & Co., P.C. in Farmington Hills.

Robert L. Brown, BA'89, of Dearborn Heights ran in the 16 District of the Michigan House in 1996 election.

Janice M. (Grant) Baum, Ar'89, BAr'93, married Allen R. Baum on May 13, 1995.

**Michael Madrid**, Ar'89, married Sandy Niederman in June of 1995. Michael is employed by Chauney Group.

**Graham Harris**, BA'89, MBA'93, is employed at Ford Motor Co. as area manager in the Windsor Engine Plant.

Matthew Kunath, Ar'89, AIA, was promoted to architect at BEI Associates, Inc. architectural and engineering firm in Detroit.

Cindy A. Leiendecker, BA'89 was married to Kevin O'Connor in Dec., 1995.

David O'Shea, Ar'89, BAr'91, has passed the Michigan examination to become a registered architect. Michael will become a member of the American Institute of Architects. He is employed by TMP in Bloomfield Hills.

**Steven Solecki**, ME'89 was married to Wendy Bowers in May, 1996. Steven is employed by Ford Motor Co. as a research engineer.

**Frank D. Taylor**, BA'89, MBA'93, is employed at Ford Motor Co. as new programs manager, Essex Engine Plant.

Susan Zimanski, BT'89, is president of the South Oakland affiliate of Habitat for Humanity. The three-year-old group has built new homes in Ferndale and Southfield and in Oct. moved and rehabbed another Southfield residence. Susan owns Home Builders Services, Inc. The company counsels owners and professional builders about planning, permit, finance, and construction.

#### 1990 - 1996

George Ananich, BAr'90, AIA, is project manager at THA Architects & Engineers (formerly Tomblinson Harburn Associates Architects & Engineers, Inc.) of Flint.

Michael Baker, Ar'90, BAr'91, has passed the Michigan examination to become a registered architect. Michael will become a member of the American Institute of Architects. He is employed by TMP in Bloomfield Hills.

Kenneth T. Kasper, EE'90, is an electrical engineer in the Overseas Operations Group of Ford Motor Co.

**Keith D. Kosik**, Ar'90, BAr'91, is project architect at Toshach, Sobczak, Spence, Forsythe Architects Inc. in Saginaw.

**Kevin G. Mierzwa**, EE'90, has joined the law firm of Dykema Gosset PLLC in Bloomfield Hills.

**H. John Miller**, ME'90, is manager, advanced restraint systems performance, at AlliedSignal.

**Glenn Morgan**, MCS'90, is senior business analyst for Valassis Communications.

Wayne G. Sieloff, AIA, Ar'90, BAr'92, is heading a new group called the "Spirit of Trenton," a volunteer organization helping to bring business and consumers to the downriver community. A Trenton city councilman who is also an architect with Ghafari Associates, Inc., Sieloff was recently profiled in the Lincoln Park News. He helped found the organization, he explained, because he "realized that there are some things that couldn't or shouldn't be done through city government." Sieloff also serves on the cabinet of the Architecture Chapter of the Alumni Association.

James W. Darnall, EE'91 was married in Oct., 1994 to Kristin Damian. James is employed at Roush Industries in Livonia.

Christopher Hook, MT'91, Te'93, has been promoted manager of the Jervis B. Webb Co. facility in Mt. Vernon, OH. Elizabeth Nyquist, IA'91, has re-joined the staff at Kenneth Neumann/Joel Smith and Associates, Inc. as an interior designer.

Hunter Price, BA'91, and Brenda Kenney were married in Aug., 1995. Hunter is a computer programmer at Michigan State University.

**Brian W. Quinn,** EE'91, and Susan Delonnay were married in Sept., 1994. Brian is employed by Roush Industries.

Michael S. Shumaker, EE'91, and Sherrill LaBerge were married in June, 1994.

**Kevin A. Walkowicz**, ME'91 and Tracy Dykoski were married in Oct., 1994. Kevin is employed by General Motors as a fuel systems engineer.

**Dennis M. DeMara**, Ar'92, married Monica A. Sevenski in July, 1995. Dennis is employed by Lantz, Boggio Architects PC of Englewood, CO.

Eric Krieger, EE'92, was appointed to the board of trustees for the Novi Public Library in April, 1996. Eric is an electrical engineer at Ford Motor Co.

**Kevin Marshall**, Ar'92, BAr'94 and **Chantell Payer**, Ar'94 were married in Oct., 1994.

Ellen Mays, BA'92, is employed as a sales consultant with Homes Inc. of Hartland. She is a state licensed real estate salesperson and builder.

Steven D. Welch, MBA'92, was named 1996 Corporate Buyer of the Year by the Michigan Minority Business Development Council. As a senior buyer for Blue Cross and Blue Shield of Michigan, he oversaw some \$13 million in minority contracts during 1996. He is also an instructor at the Detroit College of Business and received his undergrad degree at Wayne State.

Carol Brooks, EE'93, is employed by Johnson Controls in Troy, as an applications engineer. Carol also serves on the Lawrence Tech Alumni Association's Board of Directors as secretary.

**John W. Carney**, MCS'93, is system engineer for D.O.C. Optics.

#### A L U M N I N O T E S

Cheryl H. Dietrich, ME'93 was married in Aug., 1995 to David J. Hajciar. Cheryl is employed by Cadillac Luxury Car Division in Flint.

John Dittmar, ME'93, was named employee of the month at OMEGA Productive Services, Inc. in Rochester Hills for his leadership and involvement in major projects.

Darryl English, BA'93, and his wife Jeanna lead a company called EXPOSE (Early Preparation for Scholastic Endowment). Their Westland-based firm assists in financial aid searches, career planning, tutoring, and resume writing.

Ronald Hocking, MBA'93, is the budget director for the City of Westland. Ron returned to Michigan from Fort Lauderdale, FL where he was finance administrator.

Shawn T. Lameau, ME'93, is application engineer at ISI Robotics in Royal Paul Lemley, ET'93, was appointed by Giffels Associates in Southfield to their business development staff.

Karen M. Mrozek, BA'93, married David J. Kowalczyk in Jan., 1995. Karen is employed by Ford Motor Co. in central accounting services.

William M. Roy, Ar'93, BAr'94, married Sarah Hicks in Sept., 1995. He is an architect with Anthony Belluschi Architects, Ltd. in Chicago, IL.

Craig A. Weise, Ar'93, has joined Flad & Associates, an architectural, engineering and interior design firm in Madison, WI.

Matthew G. Yager, EE'93, was married to Renee Matic in Aug., 1996. Matthew is employed as an automotive engineer at Ford Motor Co.

Sonja Sue Barteck, Ar'94, and Eric Jon Anderson were married in May, 1995. The couple reside in Los Angeles, CA. Sam Chirco, ME'94, has been appointed chief engineer for Cold Forming Technology Inc.

Michael Krygier, ME'94, is employed as a mechanical inspector at Detroit Testing Laboratory, Inc. in Warren.

Joseph R. Rickle, CivE'94, has completed the basic engineer equipment operators course for the U.S. Marine Corps.

**Kevin Burns**, Ar'95, married Stacey Grant on in Sept., 1996. Kevin is employed as an architectural designer in Harbor Springs.

Derek C. Corrin, Ar'95, and Shelley R. Cosby, IA'95, were married in July, 1996. Derek is employed by Kent-Moore as a facilities planner and Shelley is employed at Hepplewhite's Fine Interiors as an interior designer.

Greg Lewis, Phy/CS'95, has been accepted into the medical physics program at Wayne State University and has accepted a full-time computer-related position at William Beaumont Hospital.

Scott M. Paddy, ME'95, married Heather Kester in Aug., 1995. Scott is a process engineer for FitzSimons Manufacturing.

Susan A. Daniel, CivE'96, has joined Orchard, Hiltz & McCliment, Inc. in Livonia as a design engineer.

News for Alumni Notes		
Use the space below to tell us about you or yo mail it to the Alumni Services Office, or use e-Tell us about honors, promotions, marriages, a	mail via the Internet STAMPS@LTU.EDU	☐ New address?
Name		
Name Street City	State	Zip

Use the e-mail address above or mail to:

Director of University Relations and Alumni Services Lawrence Technological University 21000 W. Ten Mile Rd., Southfield, MI 48075-1058

# DIT ALUMNI NOTES TES

#### 1930-1939

John G. Anderson, ME'35, retired in 1994 as a reporter for the Sanilac County Jeffersonian. An auto industry engineer following graduation until 1968, he then taught at Macomb Community College until 1978, when he moved to Lexington and began yet another new career as a reporter.

#### 1940-1949

Angelo LaFranca, Phar'44, ran for the supervisor post in Washington Township in the 1996 elections. Mr. LaFranca is a retired pharmacist.

Carl H. Adams, Phar'47, was honored in July by Manhood Inc., a Detroit organization aimed at helping boys become men. His many community involvements include being past president of the Wayne County Pharmacy Association.

Jule Dean, Phar'48, is still working in his field in his early 80s, serving as a relief man for drugstores in North Branch and Brown City.

#### 1950-1959

James E. Thebert, ME'50, along with his wife, Virginia, resides in Colorado Springs, CO. He is a retired mechanical engineer.

**Don Tubbs**, BA'50, is owner of Tubbs Brothers Inc. in Sandusky since 1954.

Gerald Groat, Jr., BA'51, was appointed chief of the Division for Screening and District Courts in the Wayne County Prosecutor's Office.

John F. Curtis, ME'55, is retired and lives in Lincoln, IL. For the last eight years prior to retirement in 1984, John worked at Fermi II and the Clinton Power Plant in IL as a systems completion engineer.

Richard S. Wintrode, BA'56, is a principal of Ernst & Young LLP in Chicago. He had earlier served the Internal Revenue Service for 36 years and was former Chicago District director. The Naperville, IL resident advises clients on IRS procedures as well as tax exam, collection, and penalty matters.

**Daniel L. Waldman**, DIT'58, has an accounting and tax service in Farmington Hills.

John F. Wurster, BA'59, is a staff executive for Chrysler Corp.

#### 1960-1969

Victor P. Hannawi, CE'61, is a safety and compliance specialist for Chrysler Corp.

**Robert R. Hillock**, AuE'61, is manager, quality & product engineering, Chrysler Corp.

Thomas L. Calkins, ME'64, is a retired manager, supplier quality assurance, Chrysler Corp.

Carl C. Mathes, BA'64, is an advertising budget specialist-finance for Chrysler Corp.

Bernard L. Van Antwerp, BA'64, is manager for product improvement for Chrysler Corp., Jeep Engineering.

Michael E. Brooks, BA'65, is manager of AP Parts Northern Tube Division in Pinconning. The Au Gres resident served as general campaign chairman of Bay County's \$1.5 million United Way campaign.

Michael F. Padovani, DIT'65, is a technical service representative for Church & Dwight Co., Inc. in Houston, TX.

Daniel R. Fioritto, BA'66, is supervisor, corporate accounting consolidation, Chrysler Corp.

Casimer R. Klapec, ME'66, is national fleet service manager for Chrysler Corp.

Eugene J. VonSteeg, ME'66, is a regulatory planner for Chrysler Corp.

**Ronald Barnett**, BA'68, is a financial analyst for Chrysler Corp.

Edward J. Lesniak, Jr., Ch'68, is a purchasing agent for Chrysler Corp.

**Lawrence Sieczkowski**, Ma'68, is a senior business analyst for Chrysler Corp.

**Dennis C. Malecki**, ME'69, is the minivan product planning executive for Chrysler Corp.

#### 1970-1979

Robert Conroy, BA'70, retired early from Vio of America and now is an adjunct faculty member at Macomb and Oakland Community Colleges. He also has a published novel titled, 1901.

David J. Hesse, BA'70, is employed at Chrysler Jeep/Truck Engineering in the truck program management department.

**Bernard P. Bedard**, BA'72, is manager, supplier continuous improvement at Chrysler Corp.

Richard J. Granke, Ch'72, is senior environmental engineer and health and safety supervisor at Chrysler Corp. Richard is also a member of the Royal Oak board of Education and the Michigan PTA Board of Managers-Education Commission.

Edward J. Byrne, BA'73, is manager, financial control-powertrain at Chrysler Corn

**Joseph J. Dapsi**, ME'73, is supervisor, special projects at Chrysler Corp.

**Robert D. Maples**, BA'73, is a claim supervisor at Chrysler Corp.

Samuel Shamir, ME'73, is a senior engineer at Chrysler Corp.

Russell Barthelmeh, BA'74, has been appointed to the Utica City Council. He is a buyer of interior trim parts for Ford Motor Co.

Michael J. Bertakis, BA'74, is owner and president of the family-owned Bertakis Development Co. in Roseville.

Winfred L. Didlake, Jr., IM'74, is an operation manager at Chrysler Corp.

**Glenn R. Marshall**, BA'74 is a production control manager at Chrysler Corp.

Thomas Raymus, BA'74, ran for Macomb County Board of Commissioners in the 23rd District in the 1996 elections.

Melvin D. Lee, BA'77, is a senior internal auditor at Chrysler Corp.

James A. McLuckie, BA'77 is a product change specialist for Chrysler Corp.

Shirley Schwartz, Ma'78, of Warren, is a research scientist for General Motors. The former DIT instructor was inducted in Oct., 1996 into the Michigan Women's Hall of Fame. Among many automotive patents, Schwartz developed GM's automatic oil change indicator.

Varender K. Chopra, ME'79, is a reliability specialist-LCP at Chrysler Corp.

Kenneth J. Riuet, ME'79, is in purchasing - special vehicle programs at Chrysler Corp.

#### 1980-1981

**Reza Aayani**, ME'81, is an engineer for Chrysler Corp.

**John D. Callaway, Jr.,** BA'81, is a manufacturing facilitator for Chrysler Corp.

#### WELCOME DIT ALUMS!

Please welcome the following individuals to the growing roster of DIT alumni who now enjoy full membership privileges through the Lawrence Tech Alumni Association. If you know DIT grads who may not realize that their transcripts and programs are now sustained at Lawrence Tech, encourage them to contact Lawrence Tech Alumni Services, 800-CALL-LTU, EXT. 4.

Reza Aayani, BSME'81 Nicola M. Antakli, BSHu'60 Hon. Dennis W. Archer Ronald Barnett, BSBA'68 Russell J. Barthelmeh, BSBA'74 Bruce Barton, BCvE'52 Graham Barton, DIT'53 Bernard P. Bedard, BSBA'72 Joseph D. Bernat, BChE'39 Michael J. Bertakis, BSBA'74 Gerald Bielicki, BSBA'74 Howard H. Bloom, BSME'50 Edward J. Byrne, BSBA'73 Thomas L. Calkins, BSME'64 John D. Callaway, Jr., BSBA'81 Robert Cartwright, BSBA'43 Varender K. Chopra, BSME'79 William A. Coleman, Jr., BSBA'74 Robert Conroy, BSBA'70 Joseph J. Dapsi, BSME'73 Winfred L. Didlake, Jr., BSIM'74 John D. Douglas, II, BSBA'68 Hussein B. Elzein, BSME'81 Alex Etkin, BSAr'40 Daniel R. Fioritto, BSBA'66 Gary J. Frey, BSEE'69 Richard J. Granke, BSCh'72 Victor P. Hannawi, BCvE'61 David J. Hesse, BSBA'70 Robert R. Hillock, BSIM'62 Charles R. Infantino, BSBA'74 Nirmal Kumar B. Jadeja, BCvE'74 Ramesh P. Jethwa, BSEE'84 Casimer R. Klapec, BSME'66 Bernard Koss, BSBA'75

Leonard J. Kulaszewicz, BSBA'74 Angelo LaFranca, Phar'44 Melvin D. Lee, BSBA'77 Edward J. Lesniak, Jr., BSCh'68 John G. Locklin, BAeE'45 George MacDonald, BME'40 Dennis C. Malecki, BSME'69 John M. Manzo, PolSc'71 William T. Markavich, DIT'79 Glenn R. Marshall, BSBA'74 Richard L. Marshall, BSBA'61 Carl C. Mathes, BSBA'64 J. Stranton McGroarty, BSME'76 James A. McLuckie, BSBA'77 Ghaus Mohammad, BCvE'74 Gokul B. Panchal, BSEE'71 Kenneth J. Rivet, BSME'79 Jack A. Robinson, DIT'52 Alfred A. Rocheleau, BSME'61 Norman Roden, BSBA'72 Ola M. Ross, DIT'74 Sam Ross, BSME'44 Michael Sekulich, BSBA'66 Samuel Shamir, BSME'73 Lawrence R. Sieczkowski, BSMa'68 K. P. Sogoian, BSME'46 Melvin Swovick, BSCh'74 Philip J. Thigpen, BSME'70

Bernard L. Van Antwerp, BSBA'64 Eugene J. VonSteeg, BSME'66 Daniel L. Waldman, DIT'58 Effie Jean Weathers, DIT'74 John F. Wurster, BSBA'59

Don Tubbs, BSBA'50

Paul Tucker, BCvE'71

# IN MEMORIAM A

Information in this section is provided by family and friends of the deceased as well as newspaper accounts. Please provide as much information as possible, including date of death and any Lawrence Tech-connected survivors and their graduation dates. If sending a newspaper clipping, please include the date and name of the paper.

#### 1933-1939

P. James Carolin, ArE'33, of Royal Oak, Jan. 3, 1996. Mr. Carolin was owner of P. James Carolin Co. and is survived by his wife Alice and five children.

John P. Hackett, AeE'33, Sept. 18, 1996. He was 87. He taught in the Detroit Public Schools for 40 years and founded the popular Goodfellows Game that pitted Detroit Catholic schools against public schools. He coached at Lawrence Tech and later at Wayne State, but is perhaps best known for a stream of records he established as the longtime football coach at Detroit Catholic Central. During WWII, he was head production engineer for Navy Research in Washington, DC. He is survived by his wife, Josephine, and two sons.

Ford Grant, AeE'35, of Santa Rosa, CA, Oct. 10, 1994. Mr. Grant was retired from Lockheed Corp. and is survived by his wife, Elizabeth, and three children.

William S. Shade, EE'35, ME'36, of Sun City, AZ, Feb. 22, 1996. Mr. Shade was retired as chief engineer from General Motors. He is survived by a son, William.

George E. Frater, EE'36, of Las Cruces, NM, April 16, 1995. Mr. Frater was retired as contract manager from Burroughs Corp. He is survived by his wife Ingeborg, and son William.

A.J. Saulino, ChE'36, of New Baltimore, Nov. 8, 1994. Mr. Saulino is survived by his wife, Helen.

Raymond J. Shillum, MeE'36, of Dearborn, April 15, 1996. He was awarded Lawrence Tech's Alumni Achievement Award in 1952.

Jack M. Tarnow, ChE'36 of Coconut Creek, FL.

Bernard J. Reckman, ME'38, of Thousand Oaks, CA, July 2, 1996. Mr. Reckman is survived by his wife, Eleanor, and five children.

#### 1940-1949

William L. McGinnis, AeE'40, of Naples, FL, July 13, 1993. Mr. McGinnis was retired as staff director from Ford Motor Co. He was awarded Lawrence Tech's Alumni Achievement Award in 1968.

William H. Bishop, ChE'41, of Roscommon. Mr. Bishop was retired as manager at ANR Pipeline Co. He is survived by five children.

Robert L. Davis, ME'41, EE'51, of Royal Oak, Oct. 20, 1996. Mr. Davis was retired from Chrysler Corp. as a budget analyst. He is survived by his wife, Clarissa, and one daughter.

Frederick Hilton, EE'41, of Apopka, FL June 24, 1993. Mr. Hilton was retired from Motorola, Inc. and is survived by his wife, Julia.

George E. "Bud" Adams, ME'42, of Green Valley, AZ, Dec. 15, 1995. Mr. Adams was retired from Ford Motor Co. and is survived by his wife, Lois, and three children.

Emmett J. Horton, AeE'42, Jan. 31, 1996. Mr. Horton had retired in 1984 as director of the North American Research Liaison Office for Ford of Europe where he was responsible for working with university, government, and other laboratories whose information could be useful to Ford worldwide. He was earlier director of new powertrain concepts research and directed programs on ceramic gas turbines, Stirling engines, hybrid electric vehicles, graphite composite vehicles and more. He managed Ford's rotary engine program, was product development manager for industrial and turbine engines, and was chief engineer for the Engine and Foundry division. He also directed the design and development of Ford's successful Indianapolis and LeMans racing engines. An active alumnus and member of the Presidents Club, in 1975, Mr. Horton chaired Lawrence Tech's first annual fund campaign. In 1954, he received one of the University's first Alumni Achievement Awards. Mr. Horton is survived by three children and his wife, Virginia, who writes, "Emmett always felt deep loyalty to Lawrence Tech for the education he received."

Harry G. Lienau, ME'42, of Huntsville, AL, April 23, 1994. Mr. Lienau is survived by wife, Adeline and two children. **Theron E. Neir**, ME'42, of Plymouth, April 7, 1996. Mr. Neir was retired from General Motors and is survived by wife, Nellie.

Russell F. Stem, ME'42, of Birmingham, Oct. 18, 1996. Mr. Stem was retired from Smith, Hinchman & Grylls Associates and is survived by his wife, Jean, and two children.

Warren G. Bopp, ME'43, of Farmington Hills, July 8, 1996. Mr. Bopp was a retired engineer from Eaton Corp. and is survived by his wife Marthajean, and four children.

Perry A. Glenn, ChE'43, of Desert Hot Springs, CA, May 23, 1994. Mr. Glenn was retired from Western Gear Corp. and is survived by his wife, Elizabeth, and six children.

Wesley C. Herkimer, BA'43, of Clawson, Oct. 20, 1995.

Ernest W. Peterkin, EE'43, of Camp Springs, MD, Jan. 6, 1995. Mr. Peterkin had retired as an electronics engineer with the Naval Research Laboratory. He served in the Navy during WWII and was a captain in the Reserves. He spent the last decade of his professional career as a project manager for the Navy's solar radiation measuring satellites. Mr. Peterkin was also a highly respected consultant and author on U.S. military history. He received the Army's Meritorious Service Medal for work training the recreated Commander-in-Chief's Guard of the 3rd U.S. Infantry (The Old Guard), a component of the ceremonial troops in Washington. He provided counsel to the Smithsonian Institution, the Navy, and NOAA, and he was cofounder, in 1950, of the North-South Skirmish Association. He was Lawrence Tech's Alumni Achievement Award honoree in 1978 for his work forecasting solar flares which often disrupt communications. Mr. Peterkin is survived by his wife, Betty, and three children.

William A. Rosso, ME'43, of Birmingham, Sept. 7, 1995. Mr. Rosso was senior vice president for Rosso Development Co. and is survived by his wife, Marjorie and two children.

Edward W. Schroder, AeE'43, of Livonia, July 11, 1993.

J. Eric Webb, EE'43, of Fenton. Mr. Webb was retired from Ford Motor Co. and is survived by his wife, Gertrude, and two children.

W. Owen Kline, ME'44, of Sun City Center, FL, Dec. 12, 1994. Mr. Kline is survived by his wife, Dorothy and two children.

Albert Rosenthal, ChE'44, MD, of Oak Park, July 10, 1996. Dr. Rosenthal was a obstetrician/gynecologist who practiced out of Grace Hospital. He is survived by his wife, Rhoda, and a daughter.

Ervine L. Rakestraw, ME'45, of Baton Rouge, LA, Aug. 1994. Mr. Rakestraw is survived by his wife, Edna and two children.

Charles H. Havill, Jr., ME'47, of Birmingham, Oct. 13, 1995. Mr. Havill was retired general manager at Reintel Industries and is survived by his wife, Jane, and three children.

Albert E. Nash, IE'48, ME'49, of Salem, SC, Feb. 24, 1995. Mr. Nash was retired from UOP Process Division, and is survived by his wife, Lois, and two sons. Mr. Nash was a 1971 Alumni Achievement Award honoree and he and his wife were members of the E. George Lawrence Circle.

Harry T. Rakowicz, ME'48, of Grosse Pointe Shores, on Jan. 25, 1995. Mr. Rakowicz was a retired engineer for General Motors and is survived by two children.

Kenneth L. Wharff, ME'48, CivE'50, of Houston, TX, Sept. 1985. Mr. Wharff was vice president of Roof Engineering Inc. and is survived by his wife, Katherine, son, **Donald**, IM'71 and a daughter. Mr. Wharff was a Founder's Society member.

Harvey Charbonneau, IE'49, of Ocala, FL, Dec. 8, 1995. Mr. Charbonneau was a retired professor at GMI and is survived by his wife, Margaret, and two children.

Emil J. Dika, EE'49, of West Branch, June 12, 1995. Mr. Dika was retired from General Motors and is survived by his wife, Joyce, and five children.

Robert L. Kennedy, ArE'49, of Tucson, AZ, Jan. 20, 1995. Mr. Kennedy was retired from General Motors, Argonaut Division and is survived by his wife Joan, and three children.

Bruce A. Lyon, IE'49, of Hampton, VA, Aug. 27, 1995. Mr. Lyon was a retired industrial engineer at Newport News Shipbuilding and is survived by his wife, Kathleen, and a daughter. **Donald A. Person**, ME'49, of Royal Oak, June 21, 1996. Mr. Person was retired from Ford Motor Co.

Gilbert D. Pierron, ME'49, from Hendersonville, NC, Sept. 10, 1995. Mr. Pierron is survived by his wife, Lois, and five children.

Vence J. Rembowicz, ME'49, of Redford, Oct. 23, 1995. Mr. Rembowicz was a retired engineer from Ford Motor Co. and is survived by three children.

Edward J. Rozniecki, ME'49, of St. Clair Shores. Mr. Rozniecki was a fire suppression consultant at U.S. Tank & Auto Command and is survived by wife, Joan, and three children.

#### 1950-1959

**Alvah Blodgett**, ChE'50, of Dunedin, FL, on Sept. 20, 1995. Mr. Blodgett is survived by his wife, Marie.

William Bushor, EE'50, of Maitland, FL, Mr. Bushor was retired from the Museum of Holography and is survived by his wife, Lee, and three children.

Veral E. Christensen, EE'50, of Vancouver, WA. Mr. Christensen was a retired engineering manager at Floating Point Systems and is survived by his wife, Eileen, and eight children.

Robert J. Crepin, EE'50, of Brush Prairie, WA, Aug. 22, 1996. Mr. Crepin is survived by his wife, Dorothy, and three children.

Frank A. Dimijian, ME'50, of North Hollywood, CA. Mr. Dimijian was a retired chassis designer for Chrysler Corp. and is survived by his wife, Sadie.

**Leo A. Habas,** ME'50, of Sacramento, CA, Mar., 1994. Mr. Habas is survived by four sons.

Thomas M. Howell, ME'50, of Farmington Hills, June 12, 1995. Mr. Howell was retired from Ford Motor Co. and is survived by his wife, Carol, and three children.

Richard E. Noe, ME'50, of York, PA, Jan. 24, 1995. He is survived by his wife, Ann.

**Dallas Schnabel**, EE'50, of San Jose, CA, June 9, 1996. Mr. Schnabel was a retired electrician at Lockheed, and is survived by his wife, Jane, and three children.

Robert I. Schoof, CivE'50, of Palos Verda, CA. Mr. Schoof was retired as assistant program manager at TRW, Inc. and is survived by his wife Kay.

John R. Vogt, ChE'50, of Avon Lake, OH, May 1996.

Peter Antonich, CivE'51, of Hernando, FL, May 5, 1994. Mr. Antonich was a retired project engineer at Parsons Brinekeroff. After retirement he worked part-time for U.S. EPA registration as a radon inspector. He is survived by his wife, Nancy, and two sons.

Thomas H. Cannon, BA'51, of St. Clair Shores.

Victor R. Cramer, ArE'51, CivE'52, of Livonia. Mr. Cramer was a retired architect from Smith, Hinchman, & Grylls Associates and is survived by his wife Betty and two children.

Joseph A. Donovan, EE'51, of Dearborn, June 1989. Mr. Donovan was employed by Ford Motor Co.

William C. Tarkington, BA'51, of Canton, Nov. 9, 1995. Mr. Tarkington is survived by his wife, Ilene.

**Eugene A. Borowiec,** CivE'52, of Farmingdale, NY, in 1994.

Walter J. Foglia, ME'52, of Livonia, Nov. 19, 1996. Mr. Foglia was retired from Ford Motor Co. and is survived by his wife, Doris, and two daughters.

Gilbert M. Gatchell, ME'52, of Bloomfield Hills, Dec. 27, 1994. Mr. Gatchell was owner and president of Gatchell & Associates and is survived by his wife, Dorothy, and three children.

Ralph K. O'Connor, ME'52, of Fern Park, FL, Jan. 11, 1994. Mr. O'Connor is survived by his wife, Betty.

John W. Peszlen, EE'52, of Columbus, OH. Mr. Peszlen was retired from Rockwell International. He is survived by his wife, Beatrice, and two children.

Robert T. Scott, IE'52, of Sun City Center, FL. Mr. Scott is survived by his wife, Betty.

Francis W. Shoop, EE'52, of Livonia, Dec. 7, 1996. Mr. Shoop was a retired electrical engineer for Michigan Bell and is survived by his wife, Eunice, and five children. Kenneth L. Terry, ArE'52, of Eastpointe, July 24, 1995. Mr. Terry was retired from Terry-Dziodosy Associates where he was self-employed. He is survived by his wife, Anna, and four children.

Earl Dedoe, IE'53, of Prescott Valley, AZ. Mr. Dedoe is survived by his wife, Helen.

Frederick May, IE'53, of Saginaw. Mr. May was employed by General Motors Corp.

Patrick R. Moore, EE'53, of Sterling Heights. Mr. Moore was a retired test designer/engineer for the U.S. Government. He is survived by his wife, Marjorie, and three children.

Paul M. Jocham, IE'54, of Bloomfield. Mr. Jocham was retired from Ford Motor Co. and is survived by his wife Ann, and three children.

Russel G. Pichert, MT'54, of Fraser. Mr. Pochert was a retired senior project engineer at Chrysler Corp. and is survived by his wife, Geraldine, and two children.

Richard Schlitters, ME'54, of Bloomfield Hills, Nov., 18, 1995. Mr. Schlitters was owner and president of Screw Machine Tool Co. and is survived by his wife, Jeanne, and four children.

Aloysius J. Tasiemski, ET'54, of Sterling Heights, in 1994. Mr. Tasiemski was retired from Chrysler Corp. and is survived by his wife, Virginia, and two children.

Jerome J. Cislo, ME'55, of Dearborn Heights, in 1994. Mr. Cislo was employed by Detroit Edison Co. and is survived by his wife, Anita, and two daughters.

Sam DeSantis, BT'55, of Shelby Township, Feb. 10, 1992.

Arthur Jankowski, IM'55, of Warren. Mr. Jankowski was a retired office manager at Cooper Tire and Rubber Co. and is survived by his wife, Rose, and four children.

Conrad Kaspers, ME'55, of Taylor, April 19, 1995. Mr. Kaspers was retired from Ford Motor Co. David A. Pickett, ME'55, of Roseville, Oct. 19, 1994. Mr. Pickett was a retired engineer from AlliedSignal and is survived by his wife, Ormaine, and a son.

Kenneth Driver, ME'56, of Port Austin, Mar. 1, 1996. Mr. Driver was a retired licensed professional engineer and is survived by his wife, Ruth, and three children.

Bruce G. Peuterbaugh, IE'56, of Clinton Township, Aug. 5, 1995. Mr. Peuterbaugh was president and owner of J.P. Tool, Inc. and is survived by his wife, Nancy, and six children.

Milton D. Hydel, CivE'57, of Dearborn. Mr. Hydel was employed by the U.S. Corps of Engineers and is survived by his wife, Wanda.

David L. Kranker, ME'57, of Grosse Pointe Shores. Mr. Kranker was founder, president & CEO of Omni International Corp. in Imlay City. Mr. Kranker is survived by his wife Stevi, and two sons.

William A. Yartz, ME'57, of Indianapolis, IN. Mr. Yartz was a retired resident engineer for Ford Motor Co.

M. Reed Clarke, CivE'58, of Northville. Mr. Clarke was a retired senior engineer for Ford Motor Co. and is survived by his wife, Jane.

William Forman, RACT'58, of Sterling Heights.

Homer W. Mainier, MT'58, of North Port, FL, on Sept. 19, 1995. Mr. Mainier was employed by General Motors Corp. as a senior experimental test engineer and is survived by his wife, Margaret.

Ronald E. Seybert, MT'58, of Port Huron, in 1992. Mr. Seybert was employed by General Motors Corp.

Carl F. Shelton, MT'59, of Farmington Hills, May 29, 1996. Mr. Shelton was the retired president of State Fabricators Inc. in Farmington Hills and is survived by his wife, Beverly, and two sons.

#### IN MEMORIAM

#### 1960-1969

Myles F. Armour, MT'60, of Three Rivers. Mr. Armour was a retired senior special test engineer for General Motors Corp. and is survived by his wife, Phyllis.

James L. Boeberitz, EE'60, of Troy, Sept., 1994. Mr. Boeberitz was manager of management information at Chrysler Corp. and is survived by his wife, Sue, and two children. He was a Lawrence Tech STARS volunteer, and help recruit high school students for the University.

Louis C. Gensley, EE'60, of Northville. Mr. Gensley was retired from Detroit Edison and is survived by his wife, Dolores.

Frank M. Mazeiko, CivE'60, of Northville, Oct. 18, 1996. Mr. Mazeiko was retired from Bechtel Group, Inc.

James R. Greenshields, ME'61, of Plymouth, Nov. 24, 1996. Mr. Greenshields was a retired foreman at Ford Motor Co. and is survived by his wife, Frieda, and nine children.

Roger J. Schmitt, ME'61, EE'62, of Marysville, on Dec. 6, 1996. Mr. Schmitt is survived by his brother Walter.

Robert E. Stoner, ET'60, of Ormond Beach, FL, June 2, 1995. Mr. Stoner was retired from General Electric and is survived by his wife, Elizabeth and three children.

William L. Surbrook, IM'60, of Newton, PA, Mar. 13, 1995. Mr. Surbrook was a exterior business unit manager for General Motors Corp. and is survived by his wife Mary, and two children.

Richard David Black, MT'61, of Willow Springs, MO, April 21, 1996. Mr. Black was a tool and die maker and is survived by his wife, Vivian.

Alan J. Mattal, BT'61, of Rogers Township, Mar. 31, 1996. Mr. Mattal was retired from Western Digital and is survived by his wife, Olga.

George N. McCulloch, ME'61, of Farmington Hills, June 17, 1996. Mr. McCulloch was retired supervisor at Ford Motor Co., and is survived by his wife, Patricia, and two daughters.

Michael J. Ruane, Jr., IM'61, of Livonia. Mr. Ruane was a financial analyst for Ford Motor Co. Joseph G. Wolf, ArE'61, of Farmington Hills, Dec. 1, 1996. Mr. Wolf was an architect and owner of Joseph G. Wolf Associates. He is survived by his wife, Roberta, and two children.

David Cook, Jr., ET'62, of Detroit, July 29, 1996. Mr. Cook was employed by Michigan Bell, and is survived by his wife, Ethyl.

Richard E. Cross, Hon'62, Aug. 11, 1996. Mr. Cross, 85, was formerly senior partner at the law firm of Cross, Wrock, Miller & Vieson. He was chairman and CEO of American Motors Corp. 1963-66. He served on the Detroit City Council and chaired Detroit's Commission on Community Relations 1958-62. He chaired the United Negro College Fund in Michigan for 20 years and was a founder of the Hundred Club which helps widows and orphans of police and fire fighters who lost their lives in the line of duty. Mr. Cross is survived by two daughters and a son.

Oscar A. Danielian, ME'62, of Mount Clemens, Dec. 22, 1994.

Carl E. Dirkes, IE'62, of Grosse Pointe Shores, May 22, 1995. Mr. Dirkes was owner of Dirkes Industries and Marine Supply and is survived by his mother and a sister.

Ronald A. Hamel, ET'62, of Livonia. Mr. Hamel was employed by Rouge Steel Co.

Edward L. Miles, ET'62, of Mount Clemens. Mr. Miles was retired from Detroit Edison, and is survived by his wife, Catherine, and six children.

C. Stephen Nolan, ME'62, of Madison Heights, April 2, 1994.

Jon C. Winger, ME'62, of Louiseville, KY. Mr. Winger was a self-employed patent attorney.

E. Charles Cagnon, ME'63, of Redford, July 1995. Mr. Cagnon was a retired product design engineer for Ford Motor Co. and is survived by his wife, Mary.

Norman F. Carney, MT'63, of Royal Oak, June 1, 1996. Mr. Carney was a retired senior project engineer at Cargill-Detroit Corp. and is survived by his wife, Mary, and five children.

Byron P. Cole, IM'63 of Union Lake, Sept. 14, 1994. David C. Hammond, IE'63, ME'65, of Howell, Mar. 13, 1996. Mr. Hammond was a retired senior safety engineer at Ford Motor Co. and is survived by his wife Mary, and four children.

Josef F. Schraner, ME'63, of Farmington Hills, Oct. 20, 1994. Mr. Schraner was a retired product engineering supervisor at General Motors Corp. and is survived by his wife, Edith, and three children.

Vincent J. Styrna, IM'63, of Orchard Lake. Mr. Styrna was a national district manager for General Motors Corp. and is survived by his wife, Colleen, and two children.

Ward W. Wiers, MT'63, of Ray, June 14, 1996. Mr. Wiers was retired from General Motors and is survived by his wife. Mary, and four children.

William A. Bleher, EE'64, of Barton City, July 28, 1996. Mr. Bleher was retired from Chrysler Corp. and is survived by his wife, Ellen, and three daughters.

Keith A. Foster, IST'64, of Shelby, OH, Feb. 18, 1995. Mr. Foster was employed by Columbus Electric Manufacturing and is survived by his wife, Peggy, and two children.

Tillman C. Barrer, Jr., IM'65, of Utica, Feb. 23, 1995. Mr. Barrer was a general supervisor for American Axle and is survived by his wife, Sharon, and four children.

Frank G. Moulds, MT'65, of Kewadin, in 1995. Mr. Moulds was a retired project engineer for Diamond Automation and is survived by his wife Marie, and two children.

James A. Thomas, EE'65, of Plymouth, June 17, 1996. Mr. Thomas retired from Burroughs Corp. in 1987 where he was director of quality assurance. He is survived by his wife, Nancy, and four daughters.

James Gudobba, MT'66, of Gladwin. Mr. Gudobba was assistant staff engineer for General Motors.

**Calvin R. Kline**, IST'66, of Livonia. Mr. Kline is survived by his wife, Fay, and two children.

Thomas B. Sullivan, IM'66, of Grosse Ile, Jan. 18, 1996. Mr. Sullivan was senior editor for Chek-Chart Publications. Cornell Candea, ME'67, of Clawson, Nov. 11, 1994. Mr. Candea was a development engineer for Chrysler Corp.

Arthur C. Eckner, Ar'68, of Huntington Beach, CA, Jan. 11, 1994. Mr. Eckner was a partner in the firm McLarand, Vasquez & Partners, Inc. and is survived by his wife, Geri, and two children.

Carl M. Kaniowski, BT'68, of Livonia, Jan. 14, 1996. Mr. Kaniowski was retired from Michigan Consolidated Gas Co. and is survived by his wife Darlene.

Harvey J. Mattoon, MT'68, of Clarkston.

Lawrence A. Stein, EE'68, of Farmington Hills, June 1995. Mr. Stein was director, electrical engineering at Giffels Associates, and is survived by his wife Sharon and three children.

F. Andrew Farrell, IM'69, of Dearborn. Mr. Farrell was employed at General Motors and is survived by two children.

#### 1970-1979

John A. "Pete" Bauman, IM'70, of Dollar Bay, Jan. 7, 1996. Mr. Bauman was a professor at Michigan Tech. University and is survived by his wife, Helen, and four children.

**Glenn R. Smith**, IM'70, of Shelby Township.

Patrick J. Gniewek, IM'71, of Canton, Aug. 24, 1994. Mr. Gniewek was employed at Ford Motor Credit Co. and is survived by his wife, Christine, and three children.

**Thomas W. Kurmas**, Ar'71, of Oakland Twp. Mr. Kurmas was owner of Thomas Kurmas & Associates and is survived by his wife, Carol, and three daughters.

Michael A. Stackpoole, IM'71, of Fremont, CA, August, 1996. Mr. Stackpoole was owner of Electronic Data Management, Inc. and is survived by his wife, Linda, and two children.

Charles B. Vaughn, Jr., IM'71, of Burnet, TX, Nov. 15, 1987.

Kenneth Kirsch, ET'72, of Shelby Township, Dec. 28, 1996. Mr. Kirsch was employed at Raytheon Corp. and was retired from Chrysler Corp. He is survived by his wife, Linda, and two children. Roger H. Scoble, IM'72, of Farmington Hills, April 1, 1995, survived by his wife, Nancy.

**Deacon Oliver J. Sova**, IM'72, of Colorado Springs, CO, June 1, 1995. Mr. Sova was employed at CEA Technologies and is survived by his wife, Sally, and five children.

Harry L. Buckingham, ME'73, of Howell, June 20, 1996. Mr. Buckingham was a manager at General Motors and is survived by his wife Cheryl, and two children.

Richard E. Hatcher, CE'74, of Warren Sept. 29, 1996. Mr. Hatcher was president and co-owner of Overland Construction Co. in Madison Heights and is survived by his wife, Ellen, and five children.

Thomas A. Jones, IST'75, of Mount Clemens.

**Gregory R. McEwen**, CE'75, of Highland. Mr. McEwen was a facilities engineer at National Steel Corp. and is survived by his wife, Susan.

Ryszard (Richard) P. Pouch, Ma'78, of Royal Oak, July 23, 1995. Mr. Pouch was a senior performance engineer for Ameritech. Mr. Pouch was an active alumni volunteer, working with his wife, Suzanne, Hu'86, who is a director of the Alumni Association. For several years, his band was featured at the reunion, most recently in 1995. He is survived by his wife and two children.

Alex Manoogian, Hon'79, founder of the Masco Corp. and highly respected humanitarian, July 10, 1996. A skilled machinist, Mr. Manoogian launched Masco in 1929 as a supplier of automotive components. In 1954 Masco introduced the single lever Delta faucet and was soon a leader in the home improvement industry. Mr. Manoogian was well known for leadership within the Armenian community and for his charitable, religious, cultural, and educational service. He was 95.

Brian L. O'Neil, IM'79, of Bloomfield Hills.

#### 1980-1989

Linda Lewis, CE'81, of Sterling Heights, Oct., 1995. Ms. Lewis was president of Lewis Construction Assoc. Inc. and is survived by two children.

John S. Jaksim, Ch'83, of Livonia. Mr. Jaksim was a development chemist for BASF and is survived by his wife, Mercy, and four children. Dale A. Sorensen, EE'83, of Dearborn, Nov. 20, 1995. Mr. Sorensen was a reliability engineer for Ford Motor Co.

Robert A. Parker, Ph'84, of Royal Oak, April 24, 1996. Mr. Parker was an engineer for General Motors Corp., Truck & Coach Division, and is survived by two children.

John G. Piccinini, CE'85, of Sterling Heights, April 3, 1996. Mr. Piccinini was a construction supervisor of Walbridge-Aldinger Construction Co. and is survived by his wife, Frances, and two children.

David R. Schroeder, MT'85, of Sterling Heights, Jan. 20, 1994. Mr. Schroeder was an automotive body designer for General Motors Truck & Bus Division and is survived by three children.

John V. Kean, III, BA'87, of Inkster, Aug. 24, 1994. Mr. Kean was employed by the U.S. Department of Defense and is survived by his mother.

Paul Strozeski, EE'87, of Canton, April 14, 1996. Mr. Strozeski was a project engineer, Ford Motor Co. and is survived by his father.

Paul J. Voytovich, ME'88, of Livonia, Feb., 1996. Mr. Voytovich was a project engineer for Chrysler Corp.

Richard R. Wesenberg, BA'88, of Madison Heights, Sept., 1994. Mr. Wesenberg was a quality control consultant for General Motors Corp., and is survived by his wife, Ruth.

#### 1990-1996

Edward A. Schulte, EE'90, of Ann Arbor, Feb. 21, 1996. Mr. Schulte was employed by A.V.L.-North America and previously for Ford Motor Co. for sixteen years. He is survived by his wife, Heather, and two children.

**Kevin J. Smith**, ME'90, of Warren, May 1992. Mr. Smith was a manufacturing engineer for Ford Motor Co. and is survived by his wife, Renee.

Ellen M. Altesleben, BA'95, of Dearborn, July 5, 1996, from a scuba diving accident. Miss Altesleben is survived by her mother, Diane.

# Service of Ben F. Bregi, ME'37 spanned six decades

"Aspire to leadership," Ben F. Bregi, Lawrence Tech's 1966 commencement speaker, urged his audience. "Pick a good spouse, look neat, do what is asked and more, make friends, be humble, put it in writing, be a salesman, speak up, make decisions, and last but not least, be sure the company makes a profit."

For Mr. Bregi, it was a credo that worked. It was his summary for success — one he demonstrated daily in a lifetime of action and deed.

Mr. Bregi, a Lawrence Tech alumnus whose leadership and inventive skills led to 52 patents and international acclaim in the machine tool industry, died Nov. 16, 1995 at age 82. An energetic counselor and booster of the University, Mr. Bregi's involvement with Lawrence Tech spanned six decades, beginning in 1932 when he enrolled as one of the first students, received one of the first scholarships, and in 1937 graduated first in his class with a B.S. in mechanical engineering. That same year, he helped found the Lawrence Tech Alumni Association, serving as one of its first directors and treasurer.

A Wisconsin native, he began working at age 10 to help support his family and widowed mother. After graduating from high school, Mr. Bregi came to Detroit and a job with a gear tool manufacturer, working full-time during the day while he attended Lawrence Tech at night. He soon joined National Broach and Machine Tool Co., beginning a 42-year career there and eventually advancing to president. When that firm was purchased by Lear Siegler Inc., he was named additionally to the posts of divisional vice president, president of National Twist Drill and Tool Co., and president of Precision Gear and Machine Co. in Great Britain.

Mr. Bregi was a Charter Fellow of the Society of Manufacturing Engineers, and a Fellow of the Engineering Society of Detroit. In 1963, he received the Gold Medal from the American Society of Tool and Manufacturing



Ben F. Bregi, ME'37

Engineers for outstanding service through published literature. He served as a director of Doppler Gear and DeVlieg Machine Co. He was a prolific author and lectured worldwide on advancements in his industry. His first patent was for inventing the first rotary gear shaving cutter. He also held many leadership positions at St. Paul's Evangelical Lutheran Church of Grosse Pte. Farms.

Mr. Bregi's professional achievements led to his being awarded Lawrence Tech's first Alumni Achievement Award in 1952. In 1987 he received an unprecedented second award for lifetime service. He served as a trustee from 1967 to 1990 and as a member of the university corporation from 1980 until his death. In 1966, he became the first alumnus to give the commencement address, and received the Doctor of Engineering, honoris causa.

"It was not just the length of devotion and service to alma mater by Ben Bregi that is without precedent, it was the quality," said Charles M. Chambers, Lawrence Tech president. "The mission of this institution and the lives of each of us who knew him were enriched by Mr. Bregi's unflagging enthusiasm and support."

"Ben just loved Lawrence
Tech," said his wife of 57 years,
Marion. The couple met during
Mr. Bregi's student days and married the year after he graduated.
"It was a very important part of so
much of our life together and it
remains so for me."

In addition to Mrs. Bregi, survivors include a son and daughter.  $\square BJA$ 

# Former AD, long-time leader of student programs dies

His no-nonsense brush cut, sixfoot five-inch height, and sturdy frame gave him a formidable presence for those occasions where he had to dispense student discipline. Most students discovered, however, that there was a heart of gold beneath Lew Moon's gruff exterior.

Lewis F. Moon, who touched the live's of thousands of students during his 26 years of service to Lawrence Tech prior to retiring in 1989, died Oct. 15, 1996 after a long illness. He was 75. Mr. Moon served variously as a coach, athletic director, director of high school relations, and director of counseling and student activities during his long tenure. As student activities director during one peak period in the 1980s, he oversaw some 50 intramural sport teams involving 40 percent of the entire student body! One of his happiest dreams, fulfilled in 1987, was the opening of the Don Ridler Field House.

"The students at Lawrence Tech are participants, not spectators," Mr. Moon told a reporter at the time. At the field house's dedication he said that "perhaps the biggest contribution this building is making is to improve campus life, building camaraderie and spirit among students."

Mr. Moon's own stellar sports career - and his life - almost ended in 1944 during World War II when, as an Army Ranger in France, he was hit by hundreds of pieces of shrapnel from an exploding 88mm artillery piece. His back was broken in four places. Paralyzed from the waist down, he faced months of painful therapy. Miraculously and slowly, he regained the use of his legs.

Before the war, Mr. Moon had been a star at Albion (MI) High, named All Conference and All State in football and basketball. He accepted a berth with the St. Louis Cardinals farm team before entering Albion College in 1941



In a 1989 photo, Lew Moon (center) pauses during some basketball with (left) Maurice Gates. EE'89, and Greg Branch, EE'91.

and the Army a year later. After recovering from his wounds and doggedly training to regain his strength, he returned to Albion College in 1945, and was named three years to the MIAA all-star basketball team, and most valuable player in the league for 1948. After graduating from Albion, he began a highly successful career in high school coaching and earned his master's degree in counseling and guidance from the University of Michigan in 1959. He joined Lawrence Tech in 1963.

Mr. Moon told a reporter in 1988 that his war injuries taught him the meaning of patience.

"Somebody had patience with me. Therefore, I tried to treat kids with respect as much as I could." In another interview Mr. Moon said, "I've got something to get up in the morning for - working with a good group of students."

Mr. Moon's survivors include his wife of 46 years, June, a son and two daughters. \(\sigma BJA\)

## Ron Stofer, CE'76, alumni president

Ronald L. Stofer, CE'76, died April 7, 1995 after a long battle with cancer. It was a fight that his family and countless friends had been rooting for him to win. Mr. Stofer had served as president of the Alumni Association since 1992 and had earlier been the Association's vice president 1988-92, and a director from 1986. He was the fire chief at General Dynamic's Tank Automotive Command complex in Warren.

"Ron's dedication to the Alumni Association was exceeded only by his pride in the University," said Judy Milosic, Ma'76, who preceded Mr. Stofer as president of the Association. "We could always depend on his leadership abilities. During his illness, his strength was an inspiration to all the board members who worked with him."

"Ron's contributions and service to Lawrence Tech were a real labor of love," added Lawrence Tech President Charles Chambers. "The entire University community lost a wonderful colleague and great friend. He was a hands-on leader, and never afraid to jump in and help with whatever needed to

Mr. Stofer, with his background in construction engineering, became a fire prevention specialist at the huge armored vehicle manufacturing complex where he worked. Earlier in his career he evaluated structures and their safety readiness for insurance companies.

In 1982, Mr. Stofer was named to the Michigan State Arson Commission, which works to prevent arson and suggests appropriate arson-related legislation.

During the summer prior to his passing, Mr. Stofer and his wife, Paula, Hu'79, assistant professor of humanities at Lawrence Tech, enjoyed crisscrossing the Upper Peninsula gathering information on mining town boarding houses for Paula's Ph.D. dissertation. (See the Winter/Spring 1995 Magazine.) He was a collector of antique tools and fire tools.

In recognition of his service to alma mater, the Board of Trustees posthumously presented Mr. Stofer with the Alumni Achievement Award.

In addition to Paula, Mr. Stofer is survived by a son and daughter.  $\Box BJA$ 



Ronald L. Stofer, CE'76



University Relations and Alumni Services 21000 West Ten Mile Road Southfield, MI 48075-1058

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### THE BACK PAGE

# Architects-in-training capture essence of Mustang Museum

#### Students recreate culture of pony cars

obody thinks much about it anymore, but in its day it was considered the defining monument to the automobile, to Henry Ford, to Dearborn and to industry.

One has to admit, that's a pretty big load to carry.

Tom Nashlen, though, can't think of a better place to build a shrine to an American icon, a place to idolize the car that helped define performance vehicles in the latter half of the century — the Mustang.

The original building in question was constructed for the Chicago World's Fair in 1933. The 12-story, gear-shaped Ford Rotunda was designed by noted Detroit architect Albert Kahn.

With the country deep in the throes of the Depression, figure it took all of Henry Ford's reputation to evoke the spirit of the fair's slogan, "A Century of Progress," to a public that was quite probably questioning whether any progress had been made in the still-young century.

Overwhelming public interest

— not to mention quite a bit of
excitement from septuagenarian

Henry Ford — decided the fate of the building.

The huge edifice was moved to Dearborn and reconstructed on the land directly across the street from the then-World Headquarters on Schaefer and Rotunda. It opened to the public in 1936 as an automotive museum and a visitor's structure for the Rouge plant.

The stately old building burned down in 1962, never to be rebuilt.

Enter Tom Nashlen. And his students.

Nashlen, the chairman of Lawrence Technological University's department of architecture and an associate professor of architecture, is coordinating the efforts of 64 Lawrence Tech architecture students in an effort to design The Mustang Experience, the national museum that will highlight the car introduced at the 1964 World's Fair in New York.

Some 25 sites around the country are vying to be chosen as the coveted site, but from Nashlen's point of view, could any other spot be as meaningful?



Not that Nashlen plans to reconstruct the Rotunda. No, he wants his students to design something entirely new for the Mustang. And besides, it gets the senior architecture students excited about what they're doing.

"My own interest in cars aside, the young people of today are enthusiastic about cars, too," he added. "And what better way to combine the enthusiasm of young people with architecture?"

Nashlen handed the students the design project with the blessing of John Coletti, manager of special vehicle engineering and car product development at Ford Motor Co. and one of a fourmember executive committee overseeing the development of the Mustang museum.

"In the next 12-16 months we want to define what it might look like so we can start to get the

(CONTINUED INSIDE BACK COVER)

Jeremy Doornbos (left), an architecture student at Lawrence Tech, shows his model for a proposed National Mustang Experience Museum at a meeting of the Mustang Museum Board. Doornbos and eight other Lawrence Tech students presented and defended their designs to the board, including (center, pointing) John Coletti. Coletti. manager of special vehicle engineering at Ford Motor Co. and one of a four-member executive committee overseeing museum development, asked Tom Nashlen, chairman of Lawrence Tech's department of architecture and an associate professor of architecture, to allow students to develop plans for the building. Their drawings and models are being used to kindle investor interest to help secure the \$30 million funding needed for the 100,000 sq. ft. facility, as well as enthusiasm among the 540 Mustang clubs nationwide.