





LAWRENCE

TECHNOLOGICAL UNIVERSITY



Mr. Chambers Comes From Washington — Meet Charles M. Chambers, Lawrence Tech's fifth president. He comes to campus with a broad background in engineering, scientific research, university and foundation administration, and government affairs. He also loves cars, planes, motorcycles, and sailboats!



Lloyd Reuss Leads Trustees — Lloyd Reuss, retired president of General Motors, has a new University leadership role.



Taking Liberty — Tom Moore, EE'86, leads Chrysler's top secret advanced research and development operation, perfecting ideas that you might not see in your driveway until well after the turn of the century.



First Impressions
— It was built as
an orphanage and
survived two dates with the
wrecking ball before Henry
Ford leased it to Russell
Lawrence. For the classes
of 1933-55, an ivy-covered
building in Highland Park
was "home." Improvising
and "making do" were
common. Yet somehow, a
university grew.



Atlantic Crossing
— It may be old
hat over here but

the European press could hardly contain itself about the novelty of a female automobile company administrator. Ford of Europe's two top car lines are the responsibility of Deborah Dohring Saybolt, ME'78.



A Thirst for Excellence — With resources that range from historic to high tech, Bennie L. Benjamin, CivE'59, has enjoyed a 34 year career leading the department that provides water to 43 percent of the state's people.

A New Star — The hot new designs of architect Victor Saroki, Ar'79, BAr'80, have raised expectations for residential, commercial, and retail design in Michigan.



20 on the Way Up!
— Some 900
new alumni from
the Class of 1993 were welcomed during the June
commencement.



25 Students help small businesses grow, study the development of Woodward Avenue, and aid a historic home of black entertainment. Some new programs and new faces on campus, and more!



Association
News — Alumni
are meeting coast to coast
as well as here on campus.
Catch up on all the latest
plus news about Reunion
Weekend '94 April 16-17.

Alumni Notes — Moves, advancements, and other news from Lawrence Tech and DIT grads near and far.

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On the cover: This ivy covered building on Woodward Avenue in Highland Park was "home" to alumni from 1933 through 1955. This photo from the University Relations Archives is believed to date to about 1947. Photographer unknown.

Notice of nondiscriminatory policy

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He turned down Coach 'Bear' Bryant. He gave up White House dinners, shucking Washington D.C.'s 'velvet glove' for what he calls 'one of the most promising high tech universities in the country.' Meet Lawrence Tech's fifth president, Charles M. Chambers.

t's a tornado!," someone shouted as whooshing and crackling filled the Huntsville, Alabama high school auditorium and municipal music center.

The visiting symphony orchestra stopped playing. Several music patrons were scrambling madly out of the hall as seventeen-year-old Charles Chambers, the stage manager, poked his head out of the sound room door to see what all the hubbub was about.

His answer came quickly. The frightening noise wasn't a tornado. Chambers and a schoolmate had been seeking the elusive radio signal of a night baseball game on a far away Chicago station. They inadvertently piped the hissing and popping of their search out through the auditorium sound system. Some in the audience assumed the worst and fled. For Chambers, it was a lesson learned: technolo-

gy can move people!

Charles MacKay Chambers, who took office July 1 as the fifth president of Lawrence Technological University, has never forgotten how wondrous a force technology can be. And, in the several decades since his infamous high school adventure, Chambers' work in technology as a professor, researcher, and administrator has had a decidedly more positive outcome!

Chambers is the first president in Lawrence Tech's 62year history who was not "home grown" as a founder, alumnus, or long time administrator. Nonetheless, "central casting" probably could not have produced an individual with a resume more befitting a Lawrence Tech leader.

Recounting his own collegiate background of commuting to evening classes and holding jobs while attending college, Chambers, in chats with alumni, has joked, "I'm

about as close to a Lawrence Tech graduate as can be for one who never went to school here!"

It was Chambers' modest beginnings, his inventiveness, willingness to work hard, and demonstrated success in a variety of undertakings that made him stand out in a pack of strong presidential candidates. The University concluded a nationwide search last winter for a successor to Richard E. Marburger, who in 1992 had announced his plans to retire on June 30 last year.

"Dr. Chambers has a tremendous interest and broad background in that special combination of 'theory and practice' type of education for which Lawrence Tech is so well known," says Kurt O. Tech, ME'48, Hon.DBA'80, chair of the trustees' Presidential Selection Committee. "The trustees are confident that he'll provide the inspiration and

Charles in charge

Highlights from the Chambers vita

Education

1959 diploma Huntsville (Ala.) High School

1962 B.S. Physics U of Alabama

1963 M.S. Physics U of Alabama

1964 Ph.D. Physics U of Alabama

1965 Postdoctoral Harvard U. (computer science, mathematics)

1976 J.D. (with honors) George Washington U. (federal and corporate practice)

Postgraduate George Washington U. (economics, management)

Experience

1983-93 President, American Foundation for Biological Sciences, Washington D.C.

1977-83 Vice President, then Acting President, then General Counsel, Council on Postsecondary Accreditation, Washington, D.C.

1972-77 Associate Dean and Professor, Office of Planning and Development, George Washington University 1969-72 Managing Director, University Development Associates, Inc. Washington, D.C.

1965-69 Assistant then Associate Professor of Mathematics, University of Alabama, Tuscaloosa

1964-65 Research Fellow in Physics, Harvard University

1963-64 Research and Teaching Associate in Physics, University of Alabama Research Institute, Huntsville

1962-63 Aerospace Engineer, National Aeronautics and Space Administration, Huntsville

Other

Consultant to Congress, National Science Foundation, American Council on Education, the armed services, and federal agencies; Author of more than 40 articles in scholarly journals

Awards

Fellow of the American Association for the Advancement of Science, 1992; Excellence in Publishing Award, American Society of Association Executives, 1990; National Science Foundation Postdoctoral Fellow, 1964; National Defense Education Act Graduate Fellow, 1962

vision required as the University encounters new opportunities."

Chambers holds both a Ph.D. in physics and a J.D. (See Chambers' vita at left.) He began his career as an aerospace engineer for the National Aeronautics and Space Administration and later served on the faculties of the University of Alabama, Harvard, and George Washington Universities. At GWU he was the dean for some 12,000 commuting and evening students. Later, he became the number two person at the national accrediting agency that itself accredited regional and professional accrediting groups. For the past decade he led a major scientific consortium in Washington D.C. that represented fifty of the largest life science organizations in the country. He and his wife of 32 years, Dr. Barbara Chambers, herself a professor of mathematics, have four adult children.

Chambers was born in Hampton, VA, five months before the attack on Pearl Harbor drew the United States into World War II. His family had deep roots in the east. His mother grew up in the District of Columbia. Her ancestors signed the Declaration of Independence and served in George Washington's army. His paternal grandfather was a cartographer for the Department of Commerce and a descendent of the musical Bach family in Germany. Chambers' father had begun engineering studies at Catholic University in Washington D.C. when the war began but was soon assigned to civilian aeronautical research at Langley Field, VA.

His father's interest in aeronautics dated back to boyhood. In the 1920s he was in a crowd that greeted

Lindbergh returning from his triumphant flight to Paris. Later, as a teenager, the elder Chambers won first prize in a airplane design competition sponsored by the Smithsonian. It led to his position at Langley and a dream come true.

hambers' parents set up housekeeping in Phoebus, a fishing community on a tiny peninsula jutting into Chesapeake Bay. Young Charles, the first of eight brothers and sisters, delighted in wandering the waterfront.

"I was what they called a 'wharf rat,'" he recalls. "As a youngster I learned to repair nets and lobster pots, and sailed around the harbor in working sailboats called 'skipjacks.' I loved the sea and hoped to go to

'We will be reaching out to alumni in more ways, expanding services and inviting greater participation in their University'

— Charles M. Chambers

Annapolis." To supplement the family larder, Chambers would get up at dawn to catch fish and crabs off the shore of the easternmost point in that region — Pheobus was named for the ancient Greek god of the rising sun.

"I still recall the morning coolness and the flat bay — the sun practically leapt as a huge orange orb out of the sea," he smiles.

Chambers hikes the Alps at the Matterhorn, Zermatt, Switzerland, 1990.

'I had wanderlust

and no fence could stop me. . .

I knew where I wanted to go

and I knew that I was

going to get there!'

— Charles M. Chambers

of "being serious about my education" Chambers declined the offer, but ended up attending Alabama on an academic scholarship instead. That Alabama coach he turned down was, by the way, Paul "Bear" Bryant. However, Bryant ended up recruiting Chambers for another important job — tutoring the team in math!

Chambers concentrated on electrical engineering and physics, co-oping and working for the Marshall Space Center in the summer.

The Soviet's Sputnik launch in 1957 had set off a profound awakening across America.

"After a string of failures in the Vanguard program, run by another military agency, President Eisenhower finally gave the Army permission to put fuel in the third stage rockets we'd been testing in Huntsville (we'd been using sand). That meant we could launch a satellite," Chambers recalls. "The Army sent up Explorer I within about 45 days. We had dodged the Soviet bullet but there was a race to be won.

"Eisenhower established the National Aeronautics and

Space Agency as a civilian agency. That was a very perceptive thing for an ex-Army general to do. He was a true soldier in that the last thing he wanted to do as a soldier was to fight. He wanted to avoid the global psychological impact of military domination of space."

In 1961, Chambers came into his co-op job one morning and found all the signs were changed from "Army" to "NASA." The following year, with his B.S. degree in hand,

and married just two weeks after graduation, he took his first full-time job with the agency.

"It was a heady time. President Kennedy made his speech about sending a man to the moon in that decade. The Mercury, Gemini, and Apollo programs began putting men into orbit," remembers Chambers.

"In Huntsville, everything was new, exciting, and cutting edge," he recalls. "The town grew by more than 330,000. It was an environment that may never be duplicated — the mystique of going to the moon, something that had challenged the philosophers, poets and musicians for centuries going back to Biblical times. My life on the bay just sort of faded as I pursued these new interests."

Chambers continued working with the space program while attending graduate school. He earned his master's degree as a night student. He did his Ph.D. dissertation on a NASA project. He had free access to NASA's computers, which were then among the most powerful in the world.

"I had to drive three hours from Tuscaloosa to Huntsville beginning at 4 a.m. to do three Fortran batch jobs in one day," he says.

Chambers' dissertation studied aspects of how the tremendous heat of reentry was transferred to the surface of a space vehicle's nosecone, and involved matching models, theoretical data, and field data. Another project he



Automobiles were scarce and gasoline was rationed during 1942. Young Charles, about age one, was learning the "handson" side of motorcycle maintenance from his father.

In 1954, Chambers' father was recruited to Huntsville, Alabama, by the expatriate German,

Wernher von Braun, who was moving to the Redstone Arsenal there to continue rocket research for the Army.

Huntsville at the time was a small provincial cotton farming community and mill town of 16,000 people. On Saturday mornings, muledrawn wagons of cotton circled the town square headed for auction. A young high school student, Charles was not pleased at being uprooted, but the move to Huntsville would shape the rest of his life.

"Eventually, I acclimated and soon had three paper routes and a new circle of friends," Chambers remembers. "I had a motor scooter, later a motorcycle, and enjoyed learning to fly an old plane with my father and playing in a dance band."

Charles started high school in a gritty mill town near his home, and lettered in basketball and football. Then the district expanded and he was assigned to the new Huntsville High School. He remembers the day his team was introduced to the new head football coach at the University of Alabama. Unexpectedly, the coach told him that there was a place for him on the Alabama team; he'd play behind a junior named LeRoy Jordan (later of Dallas Cowboys fame).

After some discussion with his parents on the subject

worked on as a young engineer was programming a thennovel digital computer to complete pre-launch tests on a liquid fuel rocket. He helped sequence a series of tests that previously took hours, reducing the time to seconds. The progeny of Chambers' work are still used in Shuttle launches today.

Chambers also did all the programming work on the booster ascent the Saturn 1 rockets would take to launch men to the moon. He recalls a meeting led by von Braun after a rocket had blown up after launch.

"Von Braun went around the room asking what the problems were. One by one the teams said they were clean. It came around to the hydraulics area and the chief described the problem and concluded, 'we think we know what went wrong and how to fix it.' Von Braun stood up quietly, walked over to a credenza, and took out champagne and glasses. Turning, he said, 'I want to salute this engineering team. We're here to get answers, not to blame each other, and I think their analysis is a good one.' His response just changed the whole atmosphere and that was the way he led — by encouraging people to learn everything they could from mistakes.

"Another situation that has affected my vision of how things get done is the way we went to the moon. A lot of NASA managers were paranoid about sending a rocket directly to the moon. They wanted to build an orbiting space platform where the astronauts could stop, test, and then either proceed to the moon or come home. This would add five years or more to our program and we felt the Soviets were in the wings. The gutsy call was to go straight to the moon with all the risks involved. The powers that be were finally convinced by von Braun to do just that — assess the risks, try to reduce them to zero, but move ahead."

fter completing his Ph.D., Chambers won a National Science Foundation fellowship. With it, he was recruited to Harvard as a faculty member and did research in elementary particle physics. He was then recruited back to Alabama as a professor with grants from the Army, NSF, and NASA. He helped U of A establish a remote computer operation, among the first in the nation. It put teletypewriter terminals in labs, dormitories, and even the student union.

In 1969, Chambers returned to Washington D.C. as the

research director for a non-profit organization that helped package research capabilities for colleges and universities. By this time, he and Barbara had two youngsters.

Three years later, he was named a dean at George Washington University. He was responsible for developing and delivering associate, baccalaureate, graduate, and even doctoral programs for evening students, mostly federal government workers. Still in his mid-30s, he took the advice of his mentor, then-GWU president Lloyd Elliott,

who reminded him, "Just because you're an expert in one area, don't think you're an expert in all areas."

"I was fortunate to be steered away from that mindset. I thought about developing my education in an executive area."

Chambers settled on law school, laboring five nights a week from 6 to 10 p.m. for four years. He received his J.D. with honors in 1976.

"This was a difficult task, and I'm grateful that Barbara was very supportive," Chambers says. "We had a third child by that time and I was the proverbial absentee father. The law degree helped me become more effective across many educational areas. It provided important mid-career executive training."

Chambers then got more involved professionally in education. He was elected president of the American Association of University Administrators and helped establish its code of professional

First impressions

Charles M. Chambers, president of Lawrence Tech since July, hit the ground running and has had numerous discussions with trustees, alumni, faculty, staff, students, and donors. Here are some of his first impressions on what's ahead for Lawrence Tech.

The campus and facilities:

"Lawrence Tech has a good basic campus with many essentials already in place. We can look at it as a blank canvas to work from and can improve it to meet the continuing needs of students and faculty. Improvements will help keep the University competitive." Ideas? New-generation computer labs and terminals, and enhanced engineering, architecture, and science laboratories. ("There is a continual need to stay current in these areas," Chambers says.); Architecture Building addition; Larger library with electronic and computer enhancements; Student dormitory to house more out-of-state students; Campus/community auditorium; Additional student recreation facilities, perhaps a natatorium and ice rink; Campus beautification with new plantings, walkways.

Faculty and Staff:

Good team in place. The mix of full-time and adjunct faculty with industry experience "is a great asset. Their personal interaction with students is one of Lawrence Tech's fundamental strengths."

Students:

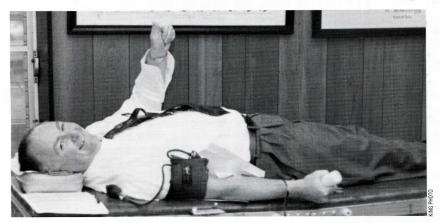
"Highly motivated and accomplished students are our hallmark. With more competition and a decline in the number of high school students to recruit, we will likely see some contraction of baccalaureate enrollments and more graduate and continuing education students." He sees "no reason why Lawrence Tech shouldn't recruit and compete nationally and internationally for good students interested in technological careers."

Alumni:

"We will be reaching out to alumni in more ways, expanding services and inviting greater participation in their University." Chambers anticipates that alumni will have a growing role in identification and recruitment of new students. More services and interaction with alumni outstate and outside Michigan is something he has already begun.

Trustees:

Working with new board chairman, Lloyd Reuss, Chambers sees an infusion of new trustees becoming active. Most of the current trustees will have reached retirement age in the next year. "We're actively recruiting board members from the industries that the University serves. Priority is being given to finding qualified alumni, women, and minorities to serve as trustees." \square *BJA*



It's "thumbs up" as Chambers donates the first pint of blood during the Student Government's Red Cross drive on campus in October. "Giving it his best shot" is just one of the ways he's tried to be a supporter of student activities.



Jumping right into campus activities, Chambers is especially interested in the Hybrid Electric Vehicle Challenge. Here he greets Sen. Carl Levin, D-MI, who came to campus to see the Lawrence Tech entry. Provost Robert W. Ellis is in the background; 1992-93 student team leader Doug Callahan is at right.

responsibility. In the late 1970s Chambers chaired a self study team for the regional accrediting visit to GWU. Eventually, he was recruited to serve in the national office of the Council on Postsecondary Accreditation.

In 1983 a friend nominated him to become president of the American Foundation for Biological Sciences. He was the first non-biologist ever to lead the group. He established a fund raising initiative along the lines of an alumni federation. He raised funds for a \$5 million headquarters

building and a fellowship program for biologists interested in studying national science policy. He also published a leading scientific journal, BioScience, which won annual awards under his leadership.

Chambers was one of two dozen or so science leaders in Washington frequently on call to testify before the Congress, the federal courts, and major scientific organizations. He was often a visitor to the White House for bill signings relating to scientific programs.

Why leave all the glamour of being "inside the belt-

'The fact is that you can become very comfortable in Washington and can succumb to what some call the 'velvet glove," Chambers says. "In 10 years I had done about all I'd set out to do with the Foundation and was ready for new challenges.'

Chambers was nominated for the Lawrence Tech presidency by Charles Neff of the Association of Governing Boards, with which Chambers had been affiliated for a decade or so. Lawrence Tech Chairman Ed Donley. ME'43. and the trustees had enlisted the group in recruiting a new president.

"I was flattered to be considered and to be among a group of people who thought that this University had many good prospects," Chambers says. "The search committee was deliberate in their quest to find someone who not only was a good match but who had a range of experiences that might be useful to Lawrence Tech as it moved ahead. I appreciated the fact that they were looking for

someone who might stretch the University over time. They wanted someone who could appreciate, understand, and relate to everything going on here now but who also had additional experiences that might show how the University can lead in new ways.

"Some of these things are already in place — like the five year plan, which I could really endorse."

Because Chambers had months of accumulated overtime, he was able to spend almost two months on campus between January, when he was appointed, and his official start date on July 1. Over five months of transition, Marburger and Chambers made several trips to Lansing, Washington, and Boston. Before his tenure began, Chambers had met with the Governor and other state and

> local officials; attended Open House and Reunion Weekend, and Engineering Society of Detroit, Economic Club, and other

meetings.

"The thing I've noticed about Charles is that he has an amazing capacity to listen," says his predecessor, Marburger. "As he meets new people he looks for the common ground, the thread on which to build a relationship.'

Lawrence Tech's new president might be described as a Renaissance man. He's studied nine languages, and can speak three fluently. He's circumnavigated

the globe three times. During his professional career he's visited almost every state and some 200 college campuses, an accomplishment he admits is mighty handy in comparing and contrasting academic programs.

Chambers is also a tinkerer. He says the closest things he has to hobbies are flying, sailing, and repairing cars. When first married, he built a sailboat. Nowadays, Chambers enjoys windsurfing but he has yet to try his luck in Michigan waters. He's piloted small planes since he was boy, learning on his father's 1940s vintage Piper Vagabond. Today he rents light planes, mostly for "weekend duffing around," he says.

American car makers can be proud of the life Chambers has coaxed out of their products.

"My wife accuses me of being a pennypincher but I'd rather spend several hours replacing a \$15 waterpump than letting a shop do it for \$200," he laughs. He enjoys troubleshooting, and has no qualms about pulling an engine or replacing brakes or clutches himself. The family's 1970 Maverick was retired in 1987 with 250,000 miles on the odometer. Chambers installed a second engine and two heads in that car, with Barbara helping out on the hoist. His current car is a 1986 Buick Century boasting 140,000 miles.

as a Renaissance man.

"It's just intellectually stimulating for me to analyze something you can't see inside of and try to figure it out well enough so that you don't have to take it apart to know what's wrong," Chambers says. He's good at it. A Lawrence Tech administrator says that Chambers correctly diagnosed a perplexing fanbelt problem while riding as a passenger in the staffer's car!

When Chambers was 16 he came home from school one afternoon and found a pile of lumber and block in the back yard.

is father, gone many nights and weekends doing space work, said, "Build a garage here." He encouraged Charles to visit the library, check out books on architecture and construction, and find out how. Chambers notes with satisfaction that the garage he built is still standing. As a boy, his primary transportation was motorcycles — Cushmans and later, Harleys. He still

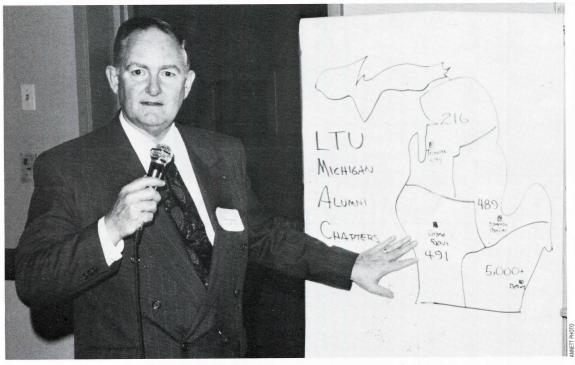
enjoys tooling around on his classic 1972 Honda CB500-4, noting slyly that it winds out at about 120 mph. "It's nimble," he admits.

A Chambers family story recalls the time that Charles, age six, took his four-year-old brother on a tricycle and wagon and set off to visit family friends six miles away. Several miles out, other friends driving by recognized the two towheads pedaling alongside the highway, stopped, and hurriedly returned them home. The boys had been gone five or six hours and the family was frantic.

"I had wanderlust and no fence could stop me," Charles chuckles. "According to my mother, I'd found the right street. I knew where I wanted to go and I knew that I was going to get there!"

Indeed, "knowing where to go and how to get there" mirrors the philosophy of four others who were tremendously successful presidents of Lawrence Tech!

BJA



President Chambers' community outreach has included getting involved in such organizations as SAE, the Engineering Society of Detroit, and the Economic Club of Detroit. In November, he appeared before the Econ Club to introduce Douglas Olesen, president and CEO of Batelle.

Strengthening services and relationships with alumni are important goals of Lawrence Tech's new president. Chambers has already visited nearly 20 alumni groups in cities from the Atlantic to the Pacific. He's also met with alumni in outstate Michigan. Above, he makes a presentation to Grand Rapids area alums.



Attending Washington functions was a way of life for Chambers during his long career "inside the beltway." He's on his way to one of the Clinton-Gore Inaugural events.





A portrait of the Chambers family includes (seated L to R) son Charles, President Chambers, Barbara, and son Carleton. Seated on floor (L to R) are daughters Christina and Catherine, who holds "Biscuit."

THE FAMILY CHAMBERS

amily life is central to the Chambers home in Alexandria, VA. The house has long been a hub of activity as the four Chambers children have grown up among a revolving circle of visiting friends and a menagerie of pets. Some of President Chambers' fondest memories are of family trips to the American Southwest and to Europe, where he, Barbara, and several of the children were among the first to enjoy unrestricted travel into the former Soviet bloc.

Married in 1962, Charles and Barbara Chambers met as college students at UA. Barbara was born in Syracuse and grew up in Chicago, New York City, and Mobile, AL. Her father, a chemical engineer, was transferred to these areas through his sales position with the paper chemicals division of American Cyanamid Co. Long interested in teaching, Barbara earned her Ph.D. in mathematics in 1969. For 15 years she has been a professor at Northern Virginia Community College. She has been a frequent visitor to Lawrence Tech and will join her husband in Southfield at the end of the current academic year.

There are four adult children in the family. Charles, 30, is enamored of nature and life in the outdoors. Visitors to his boyhood room never knew what type of critter might be bunking within! Catherine, 29, married, is a graduate of James Madison University and is with the U.S. Census Bureau. Christina, 24, is a graduate of Catholic University



Charles, Barbara, their son, Carleton, and daughter, Christina pause on the East Berlin side of the Berlin Wall at Checkpoint Charlie in 1990. The Chambers family were among the first to venture into territories that were part of the former Soviet bloc.

and just completed a tour in repertoire as an actress with the Shenandoah Shakespeare Express, performing in this country and overseas. Carleton, 19, lettered in wrestling and was captain of his high school football team. He's also sung professionally. He's a double major in pre-med and voice at the Johns Hopkins University. \square *BJA*

DETROIT AREA EXEC HEADS LAWRENCE TECH TRUSTEES

ongtime automotive industry leader Lloyd E. Reuss has been elected chairman of the Board of Trustees at Lawrence Technological University. Reuss has

served as a trustee of the University since 1978. He succeeds Edward Donley, ME'43, former chairman of Air Products and Chemicals Inc., who led the University's governing board since 1982.

"Mr. Reuss has been tremendously influential in guiding this University as a trustee," says Charles M. Chambers, president of Lawrence Tech.

"I asked him to be even more actively involved as the chairman of my board, to the extent of maintaining an office on the campus, and I look forward to his leadership and counsel as we continue to build on the strengths of this great university."

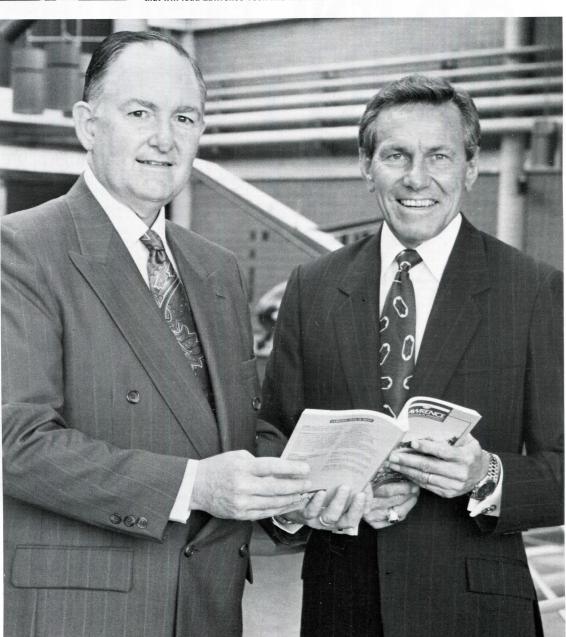
Reuss retired from the presidency of General Motors in January, 1993, after 36 years of service. He is a member of the GM Corporate Advisory Council.

He holds a B.S.M.E. from the University of Missouri-Rolla and is also a graduate of the senior executive program at Massachusetts Institute of Technology. He received the honorary degree, Doctor of Business Administration, from Lawrence Tech in 1991.

Active in education, Reuss also serves as a trustee of Vanderbilt University and the Louisville Presbyterian Theological Seminary, and is on the board of visitors of the Fuqua School of Business at Duke University. His volunteer activities include service as executive dean of the Focus:HOPE Center for Advanced Technologies in Detroit, and chairman of Vision 2000, a national program to increase participation in science and technology careers. \square *BJA*

LEFT: Donley retires as chairman

BELOW: Dr. Chambers (left) and Lloyd Reuss head the team that will lead Lawrence Tech into the future.



hether alumnus Tom Moore really uses the crystal ball that decorates his office doesn't matter. When it comes to Chrysler cars and trucks, Tom *can* predict the future.

Tom heads Chrysler Corporation's top secret advanced research and development operation called Liberty and Technical Affairs. While most automotive manufacturers are working on products two to five years ahead of production, Tom's lead time is double that. He and his staff are perfecting ideas that may not see application until well after the turn of the century.

TAKING LIBERTY



A Lawrence Tech alumnus leads a secret quest for technological breakthroughs to assure the future of what may be the feistiest of Detroit's 'Big Three'

In many ways, Liberty is to Chrysler what Lockheed's fabled "skunk works" was to aerospace innovations in the 1960s. Tom's projects will shape Chrysler's future viability in an increasingly competitive automotive market.

Tom's Texas roots are betrayed by a hint of a drawl. He has a tough time containing his enthusiasm for his work — leaning forward in his swivel chair to emphasize points, drumming a finger on his conference table, and occasionally gesturing with a huge unlit cigar he pulls from a pocket in his suit. (Another dynamic figure who enjoys cigars and who recently retired from Chrysler comes to mind.)

Tom's boyhood dream was to be an automotive engineer. He'd honed his love for cars working with his dad under a shade tree on a beloved 1953 Hudson Hornet.

But, because the nearest four year college was 400 miles away, and money was scarce, he first earned an associate degree at Paris (TX) Junior College. In 1966, he married his high school sweetheart, Patricia, and enrolled in North Texas University while working 60 hours a week fixing diesel engines.

Between home, work, and college, something had to give. It happened to be Tom's grades. Placed on probation, he tried again at Texas Tech. This time he met with success, earning his B.S.M.E. in 1964 and his M.S.M.E. in 1965. But, as Tom tells the story, it still took the failure of a whole car line to get him into the automobile business!

"I still might not have made it had Ford not done something unusual: recruit in Texas," Tom says. "When the Ford Edsel folded, quite a few staff had to be laid off. The Ivy League schools that used to supply Ford with lots of graduates were miffed. They wouldn't let Ford recruit on their campuses. As a result, Ford was making a rare trip south, and I happened to be lucky enough to get an interview."

Tom stayed with Ford for the next 23 years, working mainly on light trucks. Along the way, in 1979 he earned his M.B.A. at Michigan State.

"I tried to do some innovative things at Ford," Tom says, working primarily on steering and transmission systems. "I then moved into advanced design and was exposed to larger pieces of the vehicle — chassis, powertrain," he says.

"The turning point came when I was appointed manager of design analysis. There, while we really didn't have any power or authority, we started tinkering around with some new ideas. This work led to the formal establishment of an advanced activity function in 1983.

"Meanwhile, it dawned on me that electronics would be the field where much of the action would be in the future. Both the design work and the operation of vehicles themselves was being influenced by electronics. We mechanical engineers needed more exposure in that area," Tom relates.



"With the help of Dr. Steve Davis, then-dean of engineering at Lawrence Tech, we set up a special, accelerated degree program at Ford that allowed M.E.'s to earn their Bachelor of Science degree in electrical engineering on site at night, going to campus for the lab work. The program took two years.

"By the second night, all of us knew we needed some math refresher courses before we could go any further. Lawrence Tech added them and we dug in. I'm pleased that by the second term we were busting the grade curve of the day students!"

om earned his B.S.E.E. from Lawrence Tech in 1986. "It was very satisfying knowing we were back up to the level of a fresh graduate in math and science," he smiles.

Tom continued to inno-

vate at Ford. His reputation for fresh ideas caught the attention of Chrysler officials, who finally lured him over in 1989 with a proposal dear to Tom's heart.

"Chrysler wanted to set up an advanced engineering and design capability. They defined a job for me that was exactly what I wanted to do. I couldn't have dreamed up something closer to what I loved in my most active imagination," recalls Tom.

Tom's charge was to set up the new Liberty group and make it work.

"Traditionally, the auto companies had been organized and managed vertically. We call the units 'chimneys.' You had a big vertical organization with one chimney doing chassis, one doing engine, one for body, and so on. No one did vehicles! There was no empowered coordinating office.

"Chrysler changed that. Today, we work from platforms — the large car platform, mid-size platform, minivan platform, and so on — our team loyalty and focus is to the entire vehicle, not just a component."

Liberty's charter, Tom says, is to "search out, create, and apply efficient technologies that assure future world class and lowest cost automotive products."

Tom says Liberty is confronted by five key challenges. "We've got to provide new, practical, customer features; beat the competition; work within government regulations; improve quality; and simplify products for manufacturing," he says. "We're always working to define the common area between what customers, regulators, and shareholders want. Sometimes the common ground between these three is pretty elusive," he chuckles. "But, our job is to provide Chrysler with 'on-the-shelf' technology that meets all these challenges."

Tom describes Liberty as an "iceberg" organization. Only 70 people at the Corporation are assigned to it. However, they're augmented by 500 to 600 more who work for suppliers.

"Chrysler, being what we term a 'lean and agile manufacturer,' has forged a real partnership with our suppliers," Tom says. "Our one to eight staff ratio allows us to leverage resources to best advantage, be flexible, and reward suppliers who come up with ideas. We had 50 to 60 suppliers working on our concept vehicles and they were critical to the cars' success."

While Tom is painfully careful not to reveal what's next for Chrysler, he shares some predictions about megatrends in the auto industry:

- More powertrain efficiencies;
- · Intelligent vehicle navigation systems;
- Breakthrough styling trends; ("Regardless of everything else, styling creates the emotional response in

potential buyers," says Tom.)

Design for "separability."
 ("I'm guessing that the
 car manufacturers will be
 required to be responsible
 for scrapping cars in the
 future. The cars we build
 today end their useful
 lives after the year 2000.
 We'd better be thinking
 about designing them in
 such a way that we can
 sort materials for recycling," Tom warns.

"The big question in all these trends," says Tom, "is: how does the consumer afford all of this?"

Two years ago, Tom and several staffers went to the Indianapolis 500 race-track and got some passes into the pit and garage areas. Legendary race car

driver A.J. Foyt welcomed the team and told them to nose around all they wanted.

"That was all the invitation our people needed to jump in and really start asking questions, snapping photos, and taking measurements," grins Tom.

"A.J. suddenly looked a bit worried and asked me, 'What exactly did you say you did, again?' After I explained, Foyt said, 'Boy, have you got an exciting job!'"

"Can you imagine A.J. Foyt, who defied death every time he was on the track, saying that I've got an exciting job?" Tom laughs heartily.

When asked how it feels to have the future of his company so dependent on the work of his Liberty team, Tom doesn't hesitate,

"I've always thought it was a heck of a lot of fun. The fact is, it is an exciting place to work. We get a lot of results for the investment. If we keep refining what we do — improving, innovating — we'll beat the competition."

BJA

'I've always thought it was a heck of a lot of fun. The fact is, it is an exciting place to work.'

— Tom Moore, EE'86

FIRST IMPRESSIONS

Shots rang out on the fourth floor rifle range. Airplanes were hammered together in the basement. Michigan's first TV signals beamed into space. Nearly 3000 students jammed classrooms and labs, while Henry Ford perfected his assembly line next door. What a place to incubate a university!

'We shape our buildings and they shape us.'

— Winston Churchill

(Right) Judging by the automobiles, this photo of the Highland Park campus was taken before the building was leased by Lawrence Tech.



or some 80 percent of Lawrence Technological University's graduates — nearly three generations — the 100-acre campus in Southfield has always been "home."

Alumni from 1933 through 1955, however, recall a different campus — an ivy-covered building that stood at 15100 Woodward Avenue near the center of downtown Highland Park.

Sadly, that original alma mater is long gone, torn down in the autumn of 1955 by the Ford Motor Company. Ford had leased the building to Lawrence Tech during the entire time it was occupied by the University. Just weeks before the demolition, then-President E. George Lawrence had overseen moving Lawrence Tech to "rural" Southfield Township. The first building on the new campus — today the Engineering Building — had just been finished, conspicuous in a neighborhood that was still largely working farms.



The Lawrence Tech Television Society, made up of students, faculty, and local buffs, met in this third floor lab in 1941.
Robert Fullerton stands at the camera while Clark Quinn holds
a "gigantic" 7-inch picture tube. The fellow at the standards
rack is not identified.





(Above) a hapless freshman endures hazing during this initiation in front of the building in the late 1940s.

(Left) World War II saw the first influx of women students at Lawrence Tech. These early coeds practiced drafting and drawing in preparation for their industrial contributions to the war effort. Lawrence Tech's first female student graduated in 1953.

It wasn't until July 5, 1908 that the building was completed by the St. Francis Home for Orphan Boys. . . .

When the Ford Motor Co. purchased the property in March, 1916, it intended to tear down the building to provide additional factory buildings.

However, because of the need for office space during World War I, the building was spared. It was then known as the Army and Navy Building. Later, the Henry Ford Trade School occupied

the structure...."

Though less than 50 years old when it was razed, Lawrence Tech's Highland Park building had endured several transformations. By the time it welcomed the first Lawrence Tech students in 1932, it had already twice been spared the wrecking ball, undergoing what preservationists today call "adaptive reuse."

The Highland Parker article noted that after the Ford Trade School moved to Dearborn in 1930, "it was the Ford Motor Co's. intention to wreck the building. It stood idle for two years with furniture, lighting, and plumbing fixtures removed."

The birth of a new college during the worst years of the Great Depression offered the gutted structure a third "lease" on life — literally.

On Oct. 27, 1955, the now defunct *Highland Parker* newspaper recounted some of the old building's history as the structure was torn down:

"With the razing of the Lawrence Institute of Technology building . . . an era comes to an end for Highland Park

No definite plans have been set for the future use of the site.

The property . . . was formerly occupied by the H.W. Harding Lumber Co. Then the United Fuel and Supply Co. did business there.



Part of the fourth floor attic of the Highland Park building was home to the then-department of architectural engineering.

Students were dubbed the "cliffdwellers."

Recall 'the great move of '55?'

What do you recall about Lawrence Tech's move to Southfield in 1955? We're seeking anecdotes, photos, and recollections from alumni for the next issue of this magazine.

Did you help finish the new building, carry library books over from Highland Park, jam into a tiny lab, or paint funny faces on the side of a neighbor's cow?

Tell us! Send your memories, humorous or otherwise, to: Editor, Lawrence Tech Magazine. Photos can be returned. □ In 1932, Russell E. Lawrence had just resigned as dean of engineering at the University of Detroit. With support from his family and friends in industry, he founded what was originally called Lawrence Institute of Technology. He needed a site for his new school immediately. Lawrence leased the Highland Park building from Edsel Ford, according to the June 1, 1932 minutes of the Board of Trustees. Rent was to be \$10,000 a year, "with heat provided by the Ford plant adjacent."

"Russell and Henry Ford had a great deal of mutual respect," Mickey McRoberts, Lawrence Tech's first physics instructor, recounted in a 1992 interview.

When Lawrence Tech opened its doors on September 6, 1932, the ivy-covered building gave an instant appearance of permanance and stability — even while, in exchange for tuition, several of the first enrollees scampered to clean, paint, plaster, rewire, and replumb the hulk before classes began!

The Highland Park campus evolved into a model of efficiency. Russell Lawrence, and later his brother, George, named president after Russell's unexpected death from bone cancer in 1934, begged and borrowed to outfit the classrooms and labs. While a modern fire marshal might cringe at the narrow corridors, oiled wood floors, and tightly packed rooms, no space was too small to waste.

The building had a good pedigree.

"The architects of the Woodward Avenue building were Messrs Stratton and Baldwin of Detroit," said a May 23, 1939 letter from the St. Francis Home. "The structure . . . was erected by the Vinton Company"

"William B. Stratton was also the architect for the naval armory near Belle Isle, the Women's City Club, and many excellent residences," added Earl Pellerin, in a 1939 note. Pellerin was Lawrence Tech's first professor of architecture and became the program's first dean.

"The building was designed in the English Renaissance style," Pellerin continued. "Its walls and detail are of textured red brick, terra cotta, and limestone. One feature is a triple-arched porch, whose summer shade and protection from showers students enjoyed. Its roof is of brownish red English-type tile."

One future college leader became well acquainted with those roof tiles. Wayne Buell, ChE'36 (who in 1964 would become the third president of Lawrence Tech,) earned

'Great fun!

It's a wonder we didn't

break any windows —

or did we?'

— Jack Shy, ME'43

tuition money as a caretaker, living in a tiny room on the fourth floor. He locked himself out of his room one night and had to slither across the steep, slippery roof from one dormer window to another.

The fourth floor also housed the architectural engineering department, tagged the "cliff dwellers," and a firing range for the rifle club.

"We mounted some large targets for Highland Park policemen," recalled Ford Grant, AeE'35, in a 1982 interview. "The officers all missed by a mile — they explained the city only provided 10 bullets a year to practice with!"

Jack Shy, ME'43, remembered, "After a good snowfall, a few of us would gather on opposite sides of the balconies on the inner 'U' of the building, scoop up snow, and have a snowball fight across the inner courtyard. Great fun! It's a wonder we didn't break any windows — or did we?"

Nathan Mills, ME'36, said that his electrical lab was actually in the Ford plant itself. A walkway connected the Lawrence Tech building to the factory.

"Prof. Joe Votrobeck had found me an assembly job at the Plymouth plant," Mills recalled in a 1982 interview. "I worked the line all day starting at 6 a.m., came to LIT and cleaned up, then went to school from 7 to 10:30 p.m. "Doc (Edwin O.) Graeffe taught world history. A student with a schedule similar to mine once fell asleep in his class." Mills chuckled.

" 'Don't wake him, he's exhausted,' Graeffe told us. With the hours we had, that was for sure!"

Graeffe's booming voice was far from soporific. Several alums remember Graeffe, later the first dean of management, speaking so forcefully that latecomers could hear the lecture they were missing from the lawn!

Jack Laister, AeE'38, remembered his fellow freshmen in 1934 using a boxing ring in the basement. Hazing once erupted into a fight on the front lawn between a freshman and a sophomore. They broke up the fight with the promise to settle it later that day in the ring.

"What the sophomores didn't know was that our fellow was a Golden Gloves champ," Laister said. "I think the sophomore lasted about 45 seconds."

Laister also recalled the basement being cleared soon after for the aerial glider program, except for a locker room and showers. By the mid-1930s Laister and his classmates had one of the nation's most competitive glider programs underway. Several "ships" were built in the basement, as was the postwar "Spirit of Lawrence Tech" airplane

In 1938, a year before its successful public demonstration by RCA, a wondrous new device — television — had its Michigan debut in the building's basement, recalled Clark E. Quinn in a 1982 interview. He said that while the work of the Lawrence Tech Television Society was being duplicated commercially, no other amateurs at the time matched the group's study of TV circuitry, and building of transmitters and receivers.

These were grand adventures on the cutting edge of technology. Somehow, the old structure housed them all. What about those famous ivy covered walls?

The ivy actually predated Lawrence Tech. The nuns who had opened the building as an orphanage brought it from their motherhouse in Kalamazoo. Later, when Ford bought the Highland Park building, the sisters took cuttings to the new St. Francis Home in Detroit.

In the Highland Park building's last years, students joked that the ivy was all

that held the walls up, said Henry Selewonik, IM'57.

"In one of my classes on the third floor, during high winds you'd hear the wall shift a bit," Selewonik said. "The plaster had all cracked. You could almost see the wall deflect."

The men and women from those first 23 years in Highland Park took their hard-won diplomas and became the vanguard of Lawrence Tech-educated leaders in businesses and industries across the globe.

At the height of the Great Depression, when most universities were cloistered from the "real

world" within ivory towers, the gritty building next to an assembly line was the first of many partnerships between Lawrence Tech and industry. The Fords embraced Russell Lawrence's vision for a high quality, accessible college education designed to meet the needs of students and their employers. George Lawrence assured that his brother's dream would be fulfilled. In so doing, he opened

opportunities to thousands who otherwise might not have been able to attend college.

Today, patches of the old circular driveway are all that remain of Lawrence Tech's first campus. A rusty fence encircles the lawn, across which thousands of students once scrambled to catch a streetcar home or grab a bite at the nearby Dakota or Deer Hunt Inn.

The vacant site awaits another visionary, while the University that was born there serves new generations at its current home. \square *BJA*

General Douglas MacArthur spoke at the Highland Park campus in the early 1950s. A large crowd of students, faculty, and dignitaries welcomed MacArthur at the building's portico, under a huge American flag.



'Russell (Lawrence) and Henry Ford had a great deal of mutual respect'

— Mickey McRoberts,

Lawrence Tech's first physics instructor

Ford of Europe's two top selling car lines are the responsibility of

Deborah Dohring Saybolt, ME'78. ATLANTIC CROSSING

Alumna leads Ford of Europe's two top car lines

Deborah has enjoyed a diverse career with the automotive "Big Three" since graduating from Lawrence Tech. An extremely active student who received a four year scholarship and won nearly every academic award worth earning, she first worked three years with Chrysler as a product development engineer. In 1981 she joined General Motors and for the next four years served as senior product design and manufacturing engineer. She then was named

program planning manager for a \$100 million car appearance change program, working with an experimental team that crossed over various design, engineering, and management functions to develop a process for vehicle line program management. Along the

way,

This cutaway illustrates new functional and safety improvements on the Ford Escort XR3i. Deborah's job has assured that she is familiar with each and

every one!

n exciting job with plenty of challenges and opportunities" — that's how Deborah Dohring Saybolt describes her position, speaking from her office at Ford of Europe's research and engineering center outside London.

The 1978 mechanical engineering graduate is responsible for Ford of Europe's top two vehicle lines -Escort/Orion and Fiesta. Nearly one million of the cars are sold annually in a fiercely competitive market that traverses dozens of national boundaries and nearly as many languages. Deborah's job includes managing business strategies and implementing product programs across the manufacturer's multiple divisions.

Deborah earned an M.S.M.E. in thermodynamics and mechanical

design and an M.B.A. from the University of Michigan, and licensure as a Michigan-registered professional engineer.

From 1986-89 she was a GM engineering manager providing general assembly equipment, tooling, assembly documents, and engineering services to six North American car assembly plants. Her efforts led to plant satisfaction rising by 100 percent and a quality recognition award.

Joining Ford in 1989 as program manager for the preand post-1992 F-series, Bronco, and Econoline programs, Deborah worked with engineering, marketing, purchasing, scheduling, and five assembly plants to implement the 1991 model year program. She also developed product plans for the \$25 million features and options upgrade program for 1993-94. She was named to her current position in March, 1992.

"The vehicle line program responsibilities I had for Ford in North America are similar to the core of my job here in Europe," Deborah says. "What's most different is the processes by which work is accomplished and some cultural differences. For example: engineering centers are split between Britain and Germany. I travel frequently. There is extensive use of video and audio conferencing.

"Ford's sales groups cross Europe. There are diverse languages, customs, and market needs," Deborah adds. "Even in English-speaking countries there are different terminologies and expressions to learn."

eborah says that what's most exciting about her Ford of Europe post is that while she has more responsibility, she has fewer resources in terms of personnel and funding. This increases the ramifications of any decision.

"Decisions carry more leverage and there is real opportunity to make a significant impact," Deborah says.

What other differences has she noted between Europe and the U.S.?

"Generally the work groups within Ford of Europe are very close-knit. I was pleasantly surprised as they accepted me with open arms — literally. Who says the British are reserved? — I've been hugged and kissed many times on the job. It took quite some getting used to," Deborah laughs.

Any other culture shock?

"I felt well prepared for overseas service because of the excellent cultural and diversity training I received at Ford," Deborah says. "Probably my colleagues here were more culturally shocked than I as they encountered a woman in a highly responsible position."

British newspaper clips about the very successful 1993 launch Deborah coordinated reveal some reporters' sexist stereotyping. Noting the irony itself, the London Times blurted out that Deborah was "female, attractive, and young" as it reported on the new model rollout. Referring to automobile executives, "It has taken an American to break the British mould," the Times added.

"Women are engineers

too,' I have to say to some," recalls Deborah. "My job here has shattered many traditional images about women which, hopefully, will open up opportunities for others."

'My job here has shattered

many traditional images

about women . . .

— Deborah Dohring Saybolt

Deborah has also diplomatically emphasized in the European press that car line development is a team process. She has downplayed speculation in the press that she was brought in from the U.S. to troubleshoot.

"Ford routinely moves its people between the United States and Europe," she explained to the independent English magazine, *Fast Ford*.

Deborah realizes that she'll be returning to the U.S. at some point and leaving the co-workers she has grown fond of. Meanwhile, she, her husband, Thomas, and son Michael, born in March, are making the most of their residency in Essex.

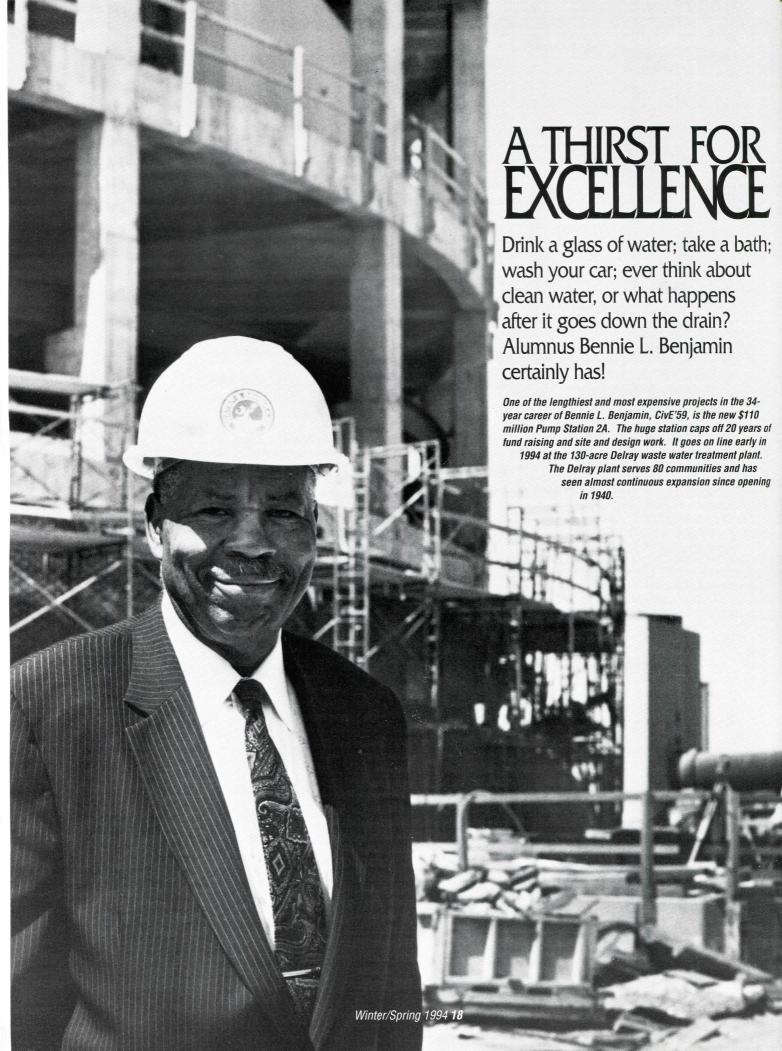
"Being located just outside London is great," Deborah adds, noting the area's many cultural attractions. "My favorite pastime is the theater. I enjoy traveling to the Continent. too. I'd encourage others to live abroad — the professional and personal rewards are irreplaceable!"

BJA



The Ford of Europe Escort XR3i shows off its new facelift. The continental version is different from the vehicle of the same name marketed in the United States.

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alf billion dollar construction projects so complex that they take decades to complete; pipelines 18 feet in diameter; pump stations 140 feet across; 8.000 miles of water supply and waste lines — everything Lawrence Tech alumnus Bennie L. Benjamin has done is big. He's administered a big annual budget: \$452 million;

and led a big team: 3,200 employees.

And, even though he's just retired from a 34-year stint doing work he dearly loves, he's left a legacy of projects that will serve the citizens of Michigan for many generations to come. The retired director of the Detroit Water and Sewerage Department wrapped up his career providing water service to 120 Michigan communities in eight coun-— 43 percent of the state's people! Bennie's department also provides 80 communities with sewage treatment services — some 35 percent of the state's population. It also processes nearly all the industrial and commercial liquid waste in Southeastern Michigan.

Bennie, who earned a civil engineering degree from Lawrence Tech in 1959, leaves behind a self-reliant organization with its own engineers, architects, attorneys, computer operators, chemists, real estate specialists, heavy equipment operators, environmental scientists, carpenters, motor fleet mechanics, nurses, technicians of all

types, and security staff.

Its resources range from the futuristic (the most advanced computers available) to the historic (cast iron water mains dating from the 19th century). What's even more amazing about this huge, complex, perpetually active operation is how intimately familiar Bennie is with

(8)

STREET

(71)

(TYPICAL)

(57)

bridges, airfields, and every aspect of it. pipelines. 'Well, I should be," he smiles. "I spent most of my 34 After being discharged years in the field, building a lot of the facilities we're in 1955, Bennie took advanusing today." Pointing to a side street and a vacant lot as he drives through Detroit, tage of the G.I. Bill to begin attending Lawrence Tech in September. In December, he Bennie names several hidden trunkmarried Rosemary. (Their three sons include Michael, who lines coursing dozens of feet earned his bachelor's degree in business administration below the surface, the from Lawrence Tech in 1981.) region they serve, and Following graduation in 1959, Bennie took a job with where the flow the City of Detroit. He had advanced to senior assistant is going. (41) civil engineer by 1965, when he became a registered professional engineer (PE). He also served in the Army Reserves, receiving the meritorious service medal before retiring as a major

Walking through a construction site, treatment facility, or research lab, Bennie is greeted by laborer and supervisor alike. He knows them and they know him. He mentions where one staffer got his Ph.D.; and reels off names of more than a dozen Lawrence Tech grads who work throughout the department. Bennie's knowledge of operations, his staff and what they do clearly indicate he's a man who has honed the

technique of "management by walking around."

"I preferred being out where the action is instead of trapped at my desk with a bunch of paperwork," Bennie says.

In 1940, at the age of nine. Bennie moved with his family from Queen City, Texas to Michigan. He graduated from Detroit's Northwestern High, then majored in pre-engineering at Highland Park Junior College. Drafted into the Army in 1952 during the Korean War, he was selected for Engineer Officers Candidate School. He spent the next two years in Korea and Japan building roads,

in 1975.

B16

'I spent most of my 34 years

in the field. building a lot of the facilities



we're using today."

- Bennie L. Benjamin, CivE'59

A change in the city charter consolidated

tions of increasing

operations and moved him into the Water and Sewerage Department. There he advanced steadily through posi-Continued on page 24 (Left) The huge Delray plant. If you live in Southeastern Michigan, chances are your water comes from the Detroit Water and Sewerage system. B27 B25 (TYPICAL)



(Above) Portrait of the Architect as a Young Man: Saroki at the Shelter in downtown Detroit.

> Alumnus Victor Saroki's designs for living leave nothing to chance

he September opening of the new Second City comedy club near the Fox Theatre in Detroit showcased more than the talents of new comedians. It also highlights the career of one of the metro area's rising young architects.

brought a touch of European style to retail shops. And he's making a name with homes for the very rich in Oakland

His design for Second City caps his career to date. Working for owner Mike Ilitch, Saroki is giving the club an elaborate stylishness, a mix of dazzling lights, sweeping staircases and a vivid attention to detail. He and his small staff pay attention to every doorknob and handrail, generally choosing a sleek look that evokes a well-made Italian suit. Saroki's office even designs the matchbook covers.

"I want our work to be a public experience," he says. "We want to do fun works. I don't need it to be extremely serious."

So far, the approach works. His commercial buildings are packed with patrons; his roster of clients for houses grows. His awards for architectural merit increase every year.

But Saroki's emphasis on setting a public mood through architecture has prompted criticism. Some tend to view him as a glorified interior decorator. One rival

sniffs that Saroki is a stage setter, theatrical. Indeed, Saroki initially made his living in interior design.

The son of Chaldean immigrants, Saroki was born in Detroit and attended University of Detroit High School. He earned two degrees from Lawrence Technological

'Architecture is not just

concrete and steel

in a space. Is it warm?

It's how people feel

Is it interesting?'

- Victor Saroki

University: a Bachelor of Science in architecture in 1979 and a Bachelor of Architecture in 1980.

Early on, he rejected a career with a big corporation. His firm in Birmingham employs only a half-dozen architects who, like himself, are young, eager and devoted to design work.

Among his first commissions was his design for interiors of the popular Merchant of Vino stores. In what could have been routine grocery stores, Saroki fashioned an updated appearance of an Italian street market. He created a busy look — everything bright and cheery, baskets and shelves overflowing with cheeses, breads and wines.

Then there was

Industry, a hot spot in the burgeoning nightclub district in downtown Pontiac. Saroki gutted the shell of an old theater and packed in a complex array of catwalks, stairways, private bars and dancefloors. He blended common indus-

trial materials like corrugated metal with the trendiest modern light fixtures from Italian catalogs. Like many Saroki projects, Industry's look is hard and metallic, closer to New York chic than a staid Midwestern look.

In another jolting switch in styles, he designed the award-winning Merrill Street townhouses in downtown Birmingham. The job decidedly did not call for a jarring architectural note. Saroki patterned the townhouses after a row of sedate brownstones in Boston. He showed an uncanny ability to update traditional urban houses.

At Second City, Ilitch wanted to take an existing building — the defunct Hughes and Hatcher clothing store — and convert it to a comedy club. Saroki stripped the building down

to its bare frame, then built up from there. He layered in a textured look in which lights, surfaces and the patrons themselves establish a cosmopolitan mood.

All in all, his projects demonstrate a surprising mix of styles and purposes. But the common themes, Saroki

insists, are his attention to detail and the creation of mood.

"Absolutely it's architecture," he says in defense of work. "Architecture is not just concrete and steel. It's the evolution of the whole project. It's how people feel in a space. Is it warm? Is it interesting?" He pauses. He reflects that his best work — including Second City — resembles in some ways a Paris street cafe.

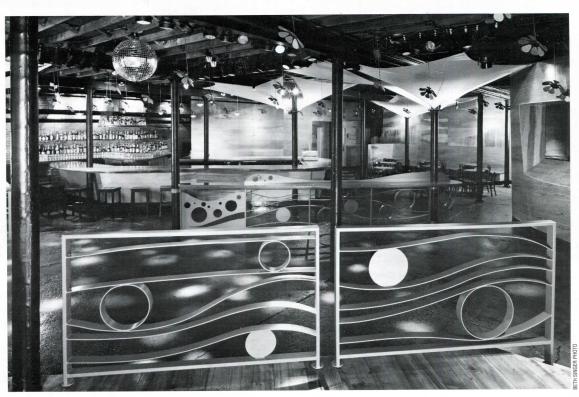
Architecturally, the form may be very simple — a room, some tables and chairs, a deceptively simple backdrop of mirrors and tile floors and colorful awnings. But such buildings serve an important function for the French — and can for us, too, he says. They provide the

says. They provide to

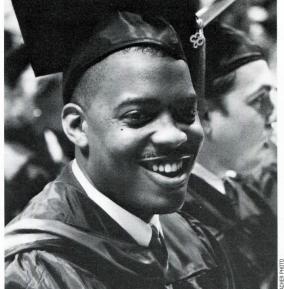
"It's what culture is meant to be," he says.

John Gallagher, Detroit Free Press, Sept. 9, 1993.
Reprinted with permission.

GIMME SHELTER:
The industrial-strength
urban night spot reflects
Saroki's attention to detail:
Everything works, from
Italian lights to custom-made
burnished metal railings.



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1993 Commencement honors graduates, business leaders, retiring president

ome 4,000 family members and guests attended Lawrence Technological University's 61st commencement exercises on Sunday, June 6 at the Michigan State Fairgrounds Coliseum in Detroit. Dr. Richard E. Marburger attended his last Lawrence Tech commencement as president, shaking hands with nearly 900 happy graduates.

The commencement address was presented by

Jack W. Schmidt, who received the honorary degree, Doctor of Engineering. He is director emeritus of powertrain systems at General Motors Corp., marking some 40 years of service with the auto giant. Schmidt is president elect of FISITA, the international federation of automotive engineering societies and immediate past president of the Society of Automotive Engineers-International. Dr. Marburger remarked, "One of our best interactions is with SAE. The Detroit Chapter is headquartered on our campus, which provides many benefits."

Schmidt joined GM as a co-op student in 1950 and has held many of the Corporation's top engineering and management positions. He earned the B.S.M.E. from GMI in 1954 and a master's in science and engineering from Purdue in 1964.

Schmidt was an early and successful advocate of increased quality, reliability, and durability of GM products. His improvements at Detroit Diesel Allison Division led to his appointment as director of product assurance and validation at the Chevrolet-Pontiac-Canada Group in 1984. His honorary citation lauded his foresight:

"In an increasingly competitive global market that has tested American preeminence in automotive design and manufacturing, many of your battles had been won before some believed there was a war."

In his address, Schmidt focused on three major national concerns: "Industrial non-competitiveness, national indebtedness, and moral decay.

"These issues are of vital importance to each and every one of you," he told the graduates, "because if (they) are not addressed, your future and the future of your children are in serious jeopardy."



He emphasized the need for economic strategy, recounting nations and empires that succumbed to internal blight. Urging his listeners to greater awareness and responsibility, he quoted Harry Truman:

" 'The only thing new in the world is the history you haven't read.'

Marburger Schmidt concluded on a

hopeful note by stating his vision for America:

"We want the highest standard of living for our people. We want a country envied by all others for our moral integrity and fiscal soundness. A country whose manufactured products represent the best of the world and are desired by countries around the world.'

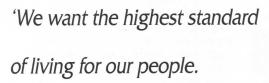
In that spirit of aspiring to excellence, Lawrence Tech also honored three others at the ceremonies:

John P. Cullen, IM'65, president and CEO of St. Joseph Mercy Hospital, Pontiac, received the 1993 Alumni Achievement Award. In presenting Cullen's award, Dr. Marburger said,

"In a region that has seen health care institutions falter and close, Mr. Cullen's leadership has assured that his hospital provides ever growing services to the population







We want a
country envied
by all others
for our moral



integrity and fiscal soundness.'

- Jack W. Schmidt



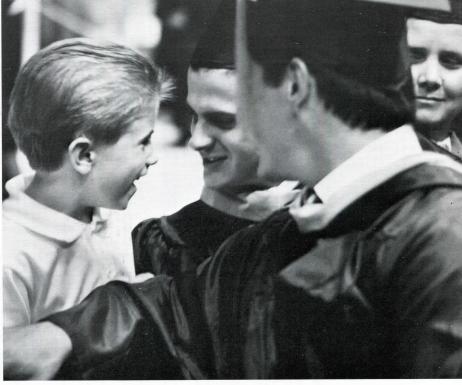
Edgar E. Parks, recently retired chairman and CEO of Albert Kahn Associates, received an honorary Doctor of Architectural Engineering degree. Dr. Marburger described Parks as "a man who has reached one of the pinnacles of leadership in engineering and architecture."

Dr. Richard E. Marburger himself received the honorary degree, Doctor of Engineering. Trustee Ed Donley, ME'43, read from the award,

"While you often asserted that students, alumni, faculty and staff are all colleagues — just on different rungs of the ladder of success, you held that ladder and encouraged many to climb!"

One more time, on June 6, Dr. Marburger helped nearly 900 colleagues take a big step up the ladder. Were these happy climbers? The pictures say it all. \square *TIM*





A Thirst for Excellence

Continued from page 19

responsibility, leading teams of engineers and contractors on projects throughout Southeastern Michigan.

"I was a design engineer on the Oakland/ Macomb intercepter system and all the main trunks from Eight Mile Road to Rochester and Pontiac," Bennie says.

Bennie's advancement coincided with massive population shifts, suburbanization, and the resulting expansion of water and sewer services

'People can get along without gas and electricity for awhile — but water? It's essential.'

- Bennie L. Benjamin, CE"59

farther out from the Detroit city limits.

By 1980, Bennie was general superintendent of all engineering; in 1985 he became deputy director; and in 1992 Detroit Mayor Coleman Young appointed him department director.

Water and sewer services are one of the most successful examples of regional cooperation in Southeastern Michigan, an area that has seen more than its share of community rivalries and "turf wars." The department's activities are reviewed by a board of water commissioners — four from Detroit and one each from Wayne, Oakland, and Macomb counties.

Most projects not funded by federal, state, or local dollars are accomplished by bond sales.

"We're listed class A with Moody and A- on Standard and Poors, so apparently Wall Street feels we're a good risk," says Bennie with a note of satisfaction.

"Five water treatment facilities now serve the region," Bennie relates. Water intake and treatment facilities are at Port Huron, Grosse Ile, and in Detroit at Water Works Park, Springwells, and Northeast. Our water treatment and filtering use the best available technology."

Indeed, keeping up with new technology and constantly evolving environmental standards occupied much of Bennie and his staff's time.

While Bennie heartily agrees with the spirit behind tougher purity standards, he's concerned about the lack of baselines.

"For many substances, there is no broad scientific agreement about what level is harmful," Bennie points out. "Even so, once the standard

is set, we meet it."

A project Bennie is especially proud of is in progress at the department's waste water treatment plant in the Delray section of Detroit. The 130-acre plant serves 80 communities, and has been in almost continuous expansion and improvement since opening in 1940. Today, it is one of the largest treatment facilities in the nation with a capacity to treat some 1,500 million gallons of sewage per day. The new Pump Station 2A will boost capacity by one-third.

Pump Station 2A is a \$110 million project set to become operational early in 1994. The project caps some 20 years of design, property acquisition, branch line construction, and fund seeking. It's a facility that required considerable innovation in engineering and construction.

Bennie has co-authored technical papers about the project in several recent civil engineering journals. On site, over the roar of construction, he points out its caisson: 140 feet in diameter, with walls seven feet thick, and designed to be self-sinking down to bedrock — 80 feet below grade! Sophisticated survey work directed a dragline crane inside the caisson to gingerly excavate around the perimeter, allowing gravity to keep the structure plumb while pulling it into position.

"Prior to construction, the bedrock had to be grouted to seal out artesian water and methane gas," Bennie adds. "Later, soil around the structure was frozen to keep clay from squeezing into the caisson while a concrete shoe was poured at its base.

"We had only four acres on the existing waste water treatment plant site to work with, and the current plant had to keep operating," Bennie adds.

"A 13-foot diameter, 50-year-old main inceptor is buried within six feet of where we poured new foundations. We had to be very careful," he says, shaking his head at the possibility of thousands of gallons of sewage rocketing skyward had the interceptor broken!

Pump Station 2A is a major step toward solving an overflow problem that plagues many early systems like metro Detroit's. Before the 1950s much of the network combined sanitary and stormwater sewers. These systems worked well in dry weather, shunting waste water to the treatment plant. During heavy rains, however, the combination of runoff plus sanitary waste was too much for the treatment plant.

Another huge project underway is the \$134 million computerization and modernization of various control systems throughout the treatment plants, pumping stations, and nearly 8,000 miles of water and waste transmission lines. The department is also undertaking the daunting task of drawing and recording, via computer, myriad "as built" facilities and pipes stretching across eight counties.

"This is critical in a system with portions dating back virtually generations," says Bennie.

"The computer will allow us to update plans more easily, too."

With only a hint of irony, Bennie notes that there is no better indicator of the pulse of the community that what goes into its sewers.

"You'd be amazed at what we find in here," he says, giving examples both amusing and tragic. Fifty-five-gallon drums of toxic waste, bits of radioactive material, and even bodies surface from time to time.

"We've had to call out the Nuclear Regulatory Agency once in awhile to take care of debris we come across. It's usually the result of a hospital handling things improperly."

The department regularly engages in "war games" to hone its emergency response to toxic spills, terrorists, or system failure.

Bennie chuckles when asked whether he would have done anything differently during his long career. Even though his job included delving into politics, heated community rivalries, tough environmental regulations, and such pests as the zebra mussel, he'd do things pretty much the same way, thank you.

One thing that does bother him is how cavalier the average person in southeast Michigan is about water and how many complain about their hills

"The average household pays \$20 per month for water and sewer here," Bennie says. "Our rates are among the lowest of any municipal system in the world. In Boston, the average will be \$300 per month soon. In Houston, my son drinks bottled water. My sister in San Francisco has her water rationed. People think because of the Great Lakes our water should be free, but we've still got to process it, store it, pump it long distances, and treat sewage. Incidentally, after waste water leaves our treatment plant, it goes back into the river cleaner than the water we draw in upstream!"

January 11, 1994 Detroit Free Press article backs up Bennie's assertions about low rates. He says some suburban communities boost water and sewer rates over 300 percent above what they're charged by his department, then use the revenue to underwrite other services.

"I know what we're selling the services for wholesale and what people are charged," Bennie says, stabbing the air with the stem of his pipe for emphasis. "I take my rate book with me when visiting friends in the suburbs in case they ask me to prove it!"

Because of the magnitude of his responsibilities and the fact that his department never shuts down, Bennie's job kept him on call virtually 24 hours a day, 356 days a year. He stayed in touch via beeper and portable phone.

"It goes with the territory," he says. "People can get along without gas and electricity for awhile — but safe water? It's essential."

BJA

Small is big! Students cited for helping small businesses grow

An emphasis on the "small," with "big" results
— that's the impact of a course in small business consulting offered by the College of
Management at Lawrence Technological
University.

Through the class, Lawrence Tech students evaluate and advise small businesses on ways to grow. Both the companies and the students reap big benefits.

"It's the practical experience and real world applications I find helpful," says Kevin Giannini, a senior majoring in business administration. "Working in a group, staying on a schedule, setting goals — it's all positive."

that city.

"We had a very positive experience," Harlton says, adding that the students reviewed marketing, employee relations, and insurance coverage for his eight employee facility.

"Everything the students presented was very appropriate. Among other things, their findings have helped us better communicate to the public our primary mission of providing high quality, loving care for pets. There were immediately useful applications from the plan the students submitted."

Catherine Gase, business development officer with the U.S. Small Business Administration's Michigan District Office, explains that SBI is an outreach to the business

with the students. They've been top notch, and Prof. Condit has a good grasp of what works."

Condit says he seeks out clients with focused problem areas or needs. Recent clients include a dance studio, restaurant chain, daycare center, video store, landscape firm, construction company, and conference vendor, as well as several manufacturers and retailers.

Condit's students recount some of the problems they've grappled with: expense reduction, relocation issues, inventory control, financial advising, personnel difficulties, insurance problems, store layouts, and more.

"We often find that the clients don't have a business plan," student Jackie Rygiel adds.

Lisa Romanowski, another senior majoring

'I'm really happy

with the students.

They've been

top notch.'

- Catherine Gase,
U.S. Small Business Administration

Jackie Rygiel, another senior in business administration, agreed. "No other class I've taken can substitute for the real world experiences offered by this one."

Don Condit, associate professor of management, who teaches the course each term, says each class typically consists of about 20 students. Teams of four students are assigned to "clients" with 15 to 20 small businesses served each year.

Condit's students work within guidelines set by the Small Business Administration, a federal agency dedicated to aiding the growth of small businesses and entrepreneurship. The SBA program that makes colleges and university counseling available to small businesses is called the "Small Business Institute" (SBI). "We receive many leads from SBA, but some

"We receive many leads from SBA, but some small businesses come to us through word-of-mouth," Condit says. "I also uncover leads myself; occasionally alumni who now have their own businesses come to us for help."

One client recently counseled by a Lawrence Tech student team is Bruce Harlton, D.V.M., owner of the Clarkston Animal Medical Center in



Professor Condit (left) consults with students Jacquelyn Rygiel and Lisa Romanowski about their project involving the Clarkston Animal Medical Center.

community. It is also a way to leverage limited federal dollars while providing learning experiences.

"The student teams are able to serve far more clients than just the two or three of us in the office," Gase says. "Also, students are introduced to real business settings and interactions. These students might consider careers in small business."

How is the quality of the work? SBA just announced that Lawrence Tech students won the outstanding undergraduate "case of the year" award for the Michigan district — for the third year in a row.

Gase says Lawrence Tech ranks among the "top five" in the 12 Michigan colleges and universities participating in SBI. "I'm really happy

in business administration, agrees.

"The businesses are often operating in a 'seat of the pants' fashion with no plan, direction, or focus. We try to help them achieve those.

"But, we can't guarantee a fix," Romanowski adds. "The client doesn't have to accept our recommendations nor do they have to divulge proprietary information. Some owners open up to us; some don't.

"What I've gained from the program is an idea of the intricacies of small businesses and the factors that help them survive and grow," Romanowski says. "As you get into it you develop an appreciation of the problems and what works. Whatever I eventually choose as a career, that knowledge will be useful." \(\simega BJA\)

Ford alums gather, raise funds

Lawrence Tech President Charles M. Chambers addressed some 200 graduates employed by Ford Motor Company who gathered October 19 at the Dearborn Inn to initiate a campaign that will raise up to \$100,000 to support their University this year. The group also was encouraged by University Trustee Neil Ressler, executive director. vehicle engineering car product development at Ford; Provost Robert Ellis; and several other University staffers and recent alums. Current students showed Lawrence Tech's 1993 hybrid electric and formula vehicles and answered questions about the 1994 cars. Jeff Van Dorn, EE'69. manager of body electrical/electronic systems, chairs the Ford Campaign. Ford is the largest employer of Lawrence Tech graduates. More than 1,400 alumni work for the auto giant.

Delaware college administrator named vice president

Richard L. Bartrem has been named to the newly created position of vice president for finance and administration at Lawrence Tech. His selection followed a nationwide search that attracted over 200 applicants. He assumed his new position on December 1, according to Charles M. Chambers, president of the University

Previously the vice president for finance and treasurer of Wesley College in Delaware, Bartrem has served as a chief business and financial officer in higher education for eight years. Before becoming an administrator he taught business administration, finance, and accounting at Briar Cliff College in Iowa, while also consulting for the Small Business Development Center there. Bartrem's prior business experience, all in Michigan, includes management positions in accounting, personnel, and retailing, as well as experience in real estate.

Bartrem administers Lawrence Tech's business affairs and cashier's office. campus facilities, the campus bookstore, computer and telecommunications center, university housing, print shop, and contract dining service operations also report directly to him.

"Lawrence Tech has a long history of prudent fiscal management that has allowed us to contain costs and offer excellent academic programs that have been absolutely remarkable values," Chambers said. "Mr. Bartrem will work with me, the provost, and others here on cam-





Pollock (left) meets Bartrem for the first time.

pus to assure that this tradition continues as we examine ways to improve and expand services."

A graduate of Michigan State University with a degree in industrial management, Bartrem earned an M.B.A. from Central Michigan University. He is a member of Sigma lota Epsilon business honor society, the Eastern and National Association of College and University Business Officers, the advisory board of Educational Communication Consortium, Inc., and has been listed in Who's Who in U.S. Executives and Who's Who in Higher Education.

Lawrence Tech's search committee included Jack Armstrong, director, campus facilities; Gary Cocozzoli, director, library; James Hopson, dean, management; Tom Lackey, director, Veraldi Center for Educational Technology; Roy Shelton, chair, engineering technology; and Dr. Maria Vaz, chair, natural sciences. Valerie Masura and Catherine Stanley also aided the effort.

— BJA

Service stressed as Lawrence Tech names director of admissions

Kevin A. Pollock has been named director of admissions at Lawrence Tech.

Pollock assumed his new duties on Oct. 1. His appointment capped a nationwide search to fill the position, according to Charles M. Chambers, Lawrence Tech president.

"As a selective university with a well defined mission, Lawrence Tech seeks to identify students who will find satisfaction and achievement in a competitive and challenging environment," says Chambers. "Mr. Pollock embodies those traits in his own career and is ideally qualified to enhance the University's tradition of excellence and service to business and industry.

Pollock brings eight years of admissions experience to his new post, most recently as acting director of admissions for GMI Engineering and Management Institute in Flint. Prior to that he was GMI's associate director of admissions from 1988 to 1992. He joined GMI in 1985 as the Institute's first recruiter.

Pollock holds undergraduate and graduate degrees from Central Michigan University and has also taught in public and parochial schools.

Lawrence Tech's admissions director search committee was chaired by Ann Liska, registrar, and included Elaine Dowell, dean of students; Karl Greimel, professor of architecture; Deborah Johnson, coordinator of alumni recruitment; and Stan Harris, associate professor of management. Robert Ellis, provost, and Doug Koch, associate provost, were also actively involved.

Alumni placement, co-op help offered; campus job fair Mar. 10

Seeking a job or have one to offer? Lawrence Tech can help. Lawrence Tech's placement services are available to both students and alumni. The office of placement and cooperative education occasionally receives notices of job openings specifically targeted to alumni candidates. In addition, the office can help bring co-op students and employers together. Contact the office for:

- · services to find a job
- · counseling and/or resume critiques
- · mentoring a graduating student
- · listing openings at your company on the Lawrence Tech electronic job board

Humanities chairman named

Harold Hotelling, associate professor of economics, has been named chairman of the department of humanities at Lawrence **Technological**

Hotelling

University. Hotelling's appointment was announced by Richard E. Michel, dean of the College of Arts and Sciences, and is effective June 1, 1994.

Hotelling will succeed Gilder D. Jackson, acting chairman since 1991, who returns to fulltime teaching.

Hotelling teaches economics and Constitutional law. He has four degrees, including a J.D. from the University of North Carolina and a Ph.D. from Duke University. He joined the Lawrence Tech faculty in 1989, and earlier served on the faculties of Oakland University and the University of Kentucky.

"We are certainly pleased to welcome Dr. Hotelling to his new post," says Charles M. Chambers, president of Lawrence Tech. "His department's courses in communications, language and literature, and social sciences form a core for all of Lawrence Tech's programs. A strong preparation in these areas is vital to student success in any career field.

'We also thank Prof. Jackson for a job well done," Chambers adds. "Since joining Lawrence Tech in 1967 he has served in several important administrative positions here in addition to his tenure as one of our most popular teachers. We are grateful for his continued involvement."

Hotelling served in the U.S. Navy from 1968-70. His professional memberships include the American Economic Association, Academy of Legal Studies in Business, and the Southern Economic Association.

BJA

 information about co-op programs in engineering and engineering technology. A campus job fair is set for Thursday, Mar. 10 from 3 p.m. to 7 p.m. in the Don Ridler Field House. Jacquelyn Ciupak, director of the office, says "alums are welcome" and "bring plenty of resumes."

While Lawrence Tech's placement office, like placement offices elsewhere, can't guarantee a job, "our goal is to help 100 percent of the graduating students and alumni achieve placement," Ciupak savs.

Ciupak also says alumni can do a great service reminding their personnel offices or others doing hiring in their organization to consider Lawrence Tech students or alumni.

"It's also extremely helpful for alumni to tell us of job openings in their organizations that might be of interest to alumni and current students. We normally have a pool of fine candidates," Ciupak adds.



For additional information about job placement or cooperative education, phone (800) CALL-LTU, ext. 3140.

BJA



New dias

Lawrence Tech's Division of Continuing Education and Professional Development recently put out the shingle in front of their new home in the Engineering

Building, (Left to right) Gary Kecskes, director of the division; Karen Todd and Phyllis DeWan, stand ready at the reception area to welcome visitors. The new location provides an additional 450 square feet over the old office located in the Buell Management Building. Kecskes said that "over the last four years the physical space demands of the division have increased." He said the new space "provides about 50 percent more room, and increases visibility, essential to serving the growing needs of constituents.

Kelly Gillespie (left) and Brian Folkert (right), student assistants, work on a brochure for one of the division's many programs in the new graphic design area, which was formerly part of the president's office.





Brenda Badger, a student counselor, reviews two drawings done by the same little boy she counseled last summer in flood ravaged Jerseyville, IL, near St. Louis, MO. Badger, recruited by the American Red Cross, says some of the children showed signs of recovering from the emotional stress of the flood experience, while other children expressed the desire to be invisible.

Lawrence Tech counselor helps flood victims

Whenever she hears news of floods, student counselor Brenda Badger thinks back to the children she advised during last summer's devastating flooding of America's midsection.

"When it rained even a sprinkle, everyone, especially the kids, became so afraid it was going to start again," Badger recalls.

Badger was one of eight counselors from across the U.S. recruited by the American Red Cross to go to flood ravaged areas to counsel residents.

Badger worked 18 hours a day in temperatures averaging 98 degrees at a service center in Jerseyville, IL, near St. Louis, MO.

She also journeyed to homes — one visit required a 30 minute drive followed by a 20 minute boat trip.

In the center, Badger worked a lot with children. She coaxed them into drawing for her. Using crayons and pencils, Badger says the children revealed "a view of what actually was going on inside them."

An element that cropped up repeatedly in the drawings was the desire to be invisible.

"They expressed it in different ways," she says. "One girl drew an elaborate picture on a chalkboard, but then covered it over with chalk. It was as if she didn't want you to know she had been there.

"The children were moving in the right direction when I left. They were slowly coming to a position where they could deal with the flood memories better. It will take time. But I could tell they were on the right road."

"I was always surprised by the generosity

shown by people who had so little to give," says Badger. "You knew they didn't have anything, but they'd offer coffee or a cold drink — maybe cookies.

"What I admired in the people, especially the older people, was their human spirit." \square WPK

Concrete canoe, bridge competitions

Brain cells and arm muscles got a good workout as Lawrence Tech civil engineering students assembled a bridge and paddled a concrete canoe while pitted against the clock. The events were part of the regional conference of the American Society of Civil Engineers, hosted by Lawrence Tech last April.

Using measurements taken from a racing cance, the Lawrence Tech Team — Dan Kaufman, Darlene Ottolini, Dan Iseler, John Iseler, John Bessette, Paul Micallef, Phil McGuire, Bob Higley, John Kabel, Randy Beard, Andrea Naples, Jodi Ratliff, Ron Dupuis, and Tony Cicchetti — built a computer- designed 260 lb. concrete cance. The cance, affectionately nicknamed "Shamu," finished third. The best news is that it didn't sink!

Says Kaufman, who used AutoCAD to draw the plans, "When we first tested it there was too much weight in front. It sat in the water, then all of a sudden the front started down, and it went in like a missile. We put more Styrofoam in front, and everything was fine!"

The concrete canoe competition drew teams from the University of Michigan, Michigan State, Michigan Tech, and the University of Akron. Joining in the steel bridge competition was Ohio Northern University.

The order of the top finishers was the same in both contests; MSU, Michigan, and Lawrence Tech. \square *WPK*



Fireside chat

Brendan Gill, 79, (above, right) recently brought a lifetime of experiences writing for the New Yorker magazine to Lawrence Technological University. Gill, on campus for an ArchiLECTURE presentation Dec. 2, charmed students during a visit to the Presidents Conference Center with his opinions on the New Yorker, architecture, and architects. Gill has been with the magazine for nearly six decades, and has served as drama and movie critic, columnist, short story author, and poet. He has also written 15 books, including a biography of American architect Frank Lloyd Wright.

'Best' professor teaches lessons for today from yesterday

Gordon Bugbee grew up in Detroit savoring the city's architecture of the bustling post-World War II era. Today, he draws on that experience, along with personal photos from around the world, to instill in young architecture students at Lawrence Tech how new designs can come from old.

Bugbee, a longtime resident of Corktown, Detroit's oldest neighborhood, was recently chosen Teacher of the Year at Lawrence Tech. He joined the faculty full time in 1983 after teaching part time since 1978.

An assistant professor of architecture, Bugbee earned degrees from Harvard. He began his professional career in 1963 in Kalamazoo. Among his credits are the architectural specifications on the Pontiac Silverdome and a book about the Domino's complex near Ann Arbor.

He also served for ten years as a consultant to the Michigan State Housing Development Authority. He served as an architecture consultant on a number of projects, including Kirk in the Hills, an extolled church in Bloomfield Hills, and Clement Kern Gardens, a housing complex in Corktown.

Bugbee's love of buildings was kindled by

his father, a patent attorney who traveled through the Far East and recorded his trips on film. During his college years, his summers were spent working for a Detroit area architectural firm drawing full size detailing of Gothic window supports, and traveling to historic locations in France, Germany, Egypt, Greece, Jordan and Syria.

Using his vast collection of slides, Bugbee conveys his love of architecture and culture to freshmen and juniors at Lawrence Tech. His message is also practical.

"The students have to look around the world. They must learn to look at each structure in terms of how it relates to others," Bugbee says. "When students look at the history of architecture they get a sequential idea of what's behind an architectural style. They'll understand what made it happen."

Bugbee's passion for history is behind his latest endeavor — a history of the sidewheeler boats that cruised Lake Erie from the late 1800s to about 1950.

Bugbee is the fourth recipient of the Teacher of the Year award, initiated to recognize and encourage educational excellence. He received a \$1,000 prize from the Richard E. and Mary E.

Marburger Fund for Excellence, established to honor the Marburger's commitment to educational achievement. The award is funded by the Marburgers and friends.

Marburgers and friends.



Bugbee



Dean Maslowski with photo donated by alum Sam Pirrone, EE'80.

Search committee to fill top academic post

Lawrence Technological University's chief academic officer, Robert W. Ellis, provost since 1989, announced plans last September to return to teaching and professional activities in engineering by September of 1994. A nation-wide search has begun to identify a successor, according to Lawrence Tech President Charles Chambers.

Applicants and nominees are being screened by a committee of faculty, alumni and administrators, in a manner similar to last year's presidential search.

Ellis had told Lawrence Tech's faculty of his plans over a year ago, but agreed to stay on through the University's transition to a semester calendar and the beginning of Chambers' presidential term, which began July 1.

"We have made progress on many of the important aspects of the semester transition much faster than I anticipated," Ellis says. "I also have great confidence in Dr. Chamber's grasp of the University's needs and the great prospects we have. My return to teaching next September allows Dr. Chambers to establish a stable administration at an early date."

Chambers notes that "the University has witnessed great progress, change, and redirection during the 10 years that Dr. Ellis has so ably served Lawrence Tech."

Ellis' tenure includes five years as dean of the College of Engineering, from 1984 to 1989. "I'm proud of the role I was able to play and the leader-ship I was permitted to give during this watershed period in the history of Lawrence Tech," says Ellis. "I enjoyed the challenges, especially when there was something new to build."

"Vigorous, strong academic programs are the very heart of the University," Chambers notes. "Dr. Ellis was the first person to serve as Lawrence Tech's chief academic officer. He did much to establish and articulate the University's goals and progress during his tenure and build an organizational form that allows Lawrence Tech to best help students prepare for success."

Ellis

A professional engineer licensed in Michigan, Florida, and Minnesota, Ellis is a past state president and past Detroit Chapter president of the Michigan Society of Professional Engineers, one of the nation's largest state engineering organizations. Michigan's 1987 Engineer of the Year, he is a Fellow of the Engineering Society of Detroit. He holds three degrees, including the Ph.D. in engineering from the Virginia Polytechnic Institute.

BJA

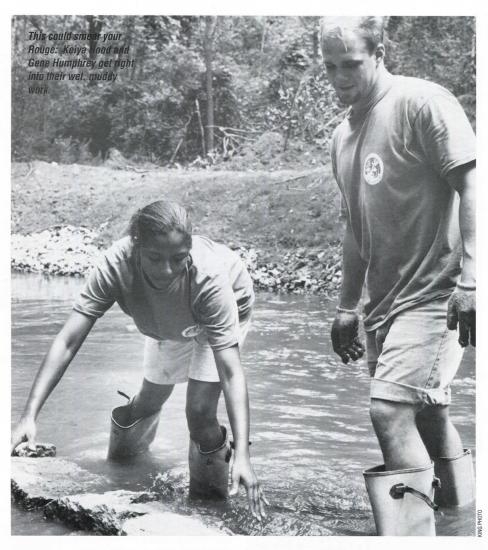
EE grad donates rare space photo

Sam Pirrone, EE'80, has donated an unusual photograph taken from the shuttle Columbia on its June 5-14 1991 mission.

The photo shows Michigan and the Great Lakes region and is unique because the area involved can only be photographed if the shuttle is flown at a 39 degree inclination. Normally, a 28 degree orbit is achieved on most missions and this photograph would have been impossible to obtain. The photo is autographed by four of the seven members of the crew of the mission.

In a letter accompanying the photo, Pirrone said, "I want this photo to express in some unique way my appreciation for the degree I received in 1980. My degree has enabled me to do many things I would never have been involved with otherwise, such as working in the Tracking and Communications Division for Lockheed onsite at the Johnson Space Center and other pursuits. Also, I thought this photo might be an inspiration to other students presently at Lawrence Tech, as an example of what engineers working together can achieve."

— Richard S. Maslowski, associate dean of engineering



Mosquitos, mud, heat — elements of great summer vacation

Keiya Hood, a Lawrence Tech sophomore and civil engineering major, and Gene Humphrey, a senior majoring in architecture, spent their three months of summer vacation in muck, breaking and stacking concrete, and swatting bloodthirsty mosquitos in the Rouge River.

Believe or not, even with the stifling muggy heat, Hood and Humphrey considered the experience "fun"

"I enjoyed this — not necessarily hauling concrete around, but working with the environment and producing something positive," says Humphrey.

What Humphrey, Hood, and five Michigan State students "enjoyed" was wading in the water to build a wing-wall to deflect the flow of the Rouge, wielding sledge hammers, and clearing a pathway along the north bank.

The students were supervised by personnel from Southfield Parks and Recreation's forestry and environmental division, which oversees the Rouge River Habitat Improvement Project.

The 1993 phase included stabilization of the river banks to prevent erosion, and narrowing a stretch of the river in the area of Telegraph and Civic Center Drive to establish habitats for game fish.

"It made me feel good to be part of this," Hood says.

Hood wants to specialize in environmental engineering, and Humphrey would like to design parks for the national park service.

WPK

Fastener research contributes to R&D

Lawrence Tech's own fastener research center (FRC) has been contributing to research and development through fastener tool testing for the manufacturing industry since 1986. Housed in the Campus Affairs and Activities Center-East, the FRC performs independent testing services for fastener tool manufacturers and suppliers.

Customers include such manufacturers as Stanley, Allen Bradley Tool, Ingersoll Rand, Sanyo, Black & Decker, Bosch and others. Each seeks independent certification of capability and performance for their line of industrial manufacturing fastener tools.

Certification is essential to classification and rating of a tool and provides meaningful data which helps buyers make informed purchase decisions.

Under the direction of Harold Josephs, professor of mechanical engineering, the FRC has kept up with changing standards as requirements have evolved. The center began using Ford's Power Tool Certification Program as a

guideline for its testing. Now, International Standards Organization's criteria and methods of data presentation (ISO 5393 & 6544) provide the basis for testing and analysis.

Lawrence's FRC is the only independent testing facility of its type in the country and is exclusively specified by Ford.

Lawrence Tech engineering students, employed by the center, perform and monitor the testing and are responsible for compilation and presentation of the data. They operate the center's test fixtures that measure tool torque control, durability, torque reaction force and rpm.

Brian Whitfield, Tech News

Engineering students Mark Crokovski and Mark Momola set up a right angle pneumatic fastener tool for torque capability testing on the Fastener Research Center's newest capability fixture. Not pictured is John Knittel, the third fastener research center team member.



Lawrence Tech cars crack top ten in 3 events

Besides picking up diplomas, teams of Lawrence Tech engineering students picked up a fifth place finish in the Hybrid Electric Vehicle (HEV) Challenge, eighth in the Society of Automotive Engineers Mini-Baja Midwest competition, and ninth in the SAE Super Mileage event as the 1993 academic year wound down in June.

Lawrence Tech's \$41,880 HEV car (see back cover) won the SAE Design Excellence in Engineering Safety award, and top awards for engineering design and most manufacturable

vehicle. During the most grueling test — a range event from Ford's Dearborn proving grounds to the Michigan International Speedway in Brooklyn — Lawrence Tech's car, which tipped the scales at more than 3,000 lbs., logged 176.9 miles and placed seventh.

"The car's biggest problem — it was heavy. Weight is so crucial. It's hard to accelerate that much mass, and get the most from the batteries," says HEV faculty advisor Charles Schwartz, who also noted that the 1994 model eliminates many of these shortcomings.

"This was clearly one of the most complex student projects ever undertaken by Lawrence Tech," Schwartz says. "The 1993 team performed magnificently. They deserve tremendous credit for the effort they put forth."

Another car, Lawrence Tech's four-wheel drive vehicle, chalked up impressive wins going into endurance events at the Mini-Baja Midwest competition near Dayton, OH. The Lawrence Tech car won first place awards for appearance and serviceability, a second in hill climb, and third place awards in both acceleration and top speed. However, a delay caused by a broken axle brought the car's final ranking down. Sixty-five cars from universities across North America participated in this year's Midwest competition.

A third car, Lawrence Tech's entry in the Super Mileage competition, squeezed out 453 miles per gallon during the range event, held in Marshall. The car was powered by a modified Briggs and Stratton two-horsepower engine. The six-member team also put in a lot of work perfecting a composite aerodynamic body shell. Eighteen teams from across North America participated in the event.

All of the competitions offer experiences for students in solving the variety of complex problems engineers face in practice. \square *WPK*





800 phone service, new area code for campus

Alumni and other friends conducting long distance business with Lawrence Tech may now use the University's new toll free number, 1-800-CALL-LTU (225-5588).

"We're inaugurating this service with the hope that alumni, prospective students, and others will find it easier and more convenient to access opportunities here at Lawrence Tech," says Charles M. Chambers, president. "1-800-CALL-LTU can be dialed from anywhere in the U.S. or Canada, and callers will be connected directly with the main switchboard."

Lawrence Tech's regular switchboard number is also now served by a newly created 810 area code that services Southfield, most of Oakland County, and six additional Michigan counties east, west, and north of campus. Ameritech assigned the new code to these areas because the supply of phone numbers within the boundaries of the former area code was depleted due to increased use of cellular phones, fax machines, and computers.

Lawrence Tech's main number is now (810) 356-0200. □ *BJA*



Good work!

Valerie Mierzwa (center) holds a plaque naming her "Team Scholar of the Year." Mierzwa was honored at a luncheon for all students in the Team Scholar workshops. She earned the highest GPA in the program. Also congratulating Mierzwa was Brenda Badger (far left), counselor in the Student Affairs Office and initiator of the program, and Dr. Charles Chambers (right), president of Lawrence Tech. The team scholar program brings promising students together in special cluster classes, where they work with each other. Workshops before and after classes with student facilitators give the scholars a jump on their studies.



Fullerton

'Mom' named first staffer of the year

Marilyn Fullerton's job in the Lawrence Tech Registrar's Office began in 1978 as a means to a paycheck, but after 15 years the job has provided more than money.

It has given Fullerton many memories and friends.

"I enjoy helping the students. I cry at every commencement," she says.

Fullerton was named the 1993 Employee of the Year at Lawrence Tech. She received a \$1,000 award from the Richard E. and Mary E. Marburger Fund for Excellence.

"This award goes to the Registrar's Office, not just me. Everybody says how helpful I am, but I can only be helpful because of their backing and support," Fullerton says, referring to her colleagues.

At any Lawrence Tech function there is a chance Fullerton will be there, helping with whatever needs to be done. A registrar's assistant, she handles a number of tasks, including coordinating new student orientation with the Student Affairs Office; helping students with registration; working on student files; and supervising part-time employees in the office. For students, there is always a sympathetic ear waiting for them in the Registrar's Office. But Fullerton, even with her ever ready smile and easily provoked laugh, is no softy.

"I used to be told I was too much of a 'mom' to the students," Fullerton says. "That's my way — if they need help I try my best. We can't always give them their way, though."

Her commitment to education began in the early 1970s as a teacher's aide at Beechview

Elementary School in the Farmington Hills school district.

"Some of the students from my elementary school days came in here and were surprised to find me. They'd tell me how 'mean' I was," she says, laughing. "I used to make them hold my hand. That was their punishment. They'd walk around the playground holding my hand, and everybody would know they were in trouble."

Fullerton is still ready to hold a hand, or just spend some time talking to help a student out. But she is also ready to do the same for any of the staff at Lawrence Tech. She is still "Mom."

The Employee Recognition Committee of the staff senate recognized four other finalists: Chantal Gonzales, of the Veraldi Center; John Grden, of the Edward Donley Computer Center; David Reinhart, of the EDCC; and Lee Keshishian, of mechanical engineering.

WPK

Students draw plans for museum to preserve aging 'Black Eden'

Idlewild, Michigan once showcased young upand-coming black musicians — B.B. King, Sarah Vaughn, Louis Armstrong, Aretha Franklin — and was once a recreational haven for blacks.

Once.

Today the town that once symbolized racial freedom struggles to survive.

Now a team of 21 architecture students is working with the area's residents and officials to design and build a museum that will capture the history of Idlewild. Someday visitors — and tourist dollars — may find their way back to the town. Idlewild is about halfway between Grand Rapids and Traverse City.

"If nothing is done to remind people of what happened here, this town may truly become a ghost town," says Karl Greimel, professor of architecture at Lawrence Tech and faculty advisor to the student team.

The town was developed in 1912 by a group of white businessmen as a resort for the black community. Stores, businesses, hotels, and cabins sprang up by the early 1920s. The resort's golden age was in the mid-1920s through the 1930s when various music clubs opened. Black professionals and celebrities — including pioneer heart surgeon Dr. Daniel Hale Williams and prizefighter Joe Louis — came from throughout the Midwest to Idlewild.

"When you stand in Idlewild and look around at nature's beauty, breathe the fresh air, and note the freedom from prejudice, ostracism, and hatred, you can feel yourself truly an American citizen," Dr. Thomas Burton, an Ohio physician, was quoted in a sales brochure.

Then came the 1964 Civil Rights Act, which took down barriers to blacks, allowing them to

patronize formerly all-white resorts. Idlewild's northern Michigan location became a liability as blacks from Detroit, Chicago and other Midwest locations chose to integrate resort areas closer to major cities. By the mid-1960s, Idlewild, which in its heyday would be jammed with 20,000 visitors, became "dirt poor," according to a 1966 *Grand Rapids Press* story. Idlewild and surrounding Lake County are among the state's poorest communities. Idlewild now has just 300 permanent residents.

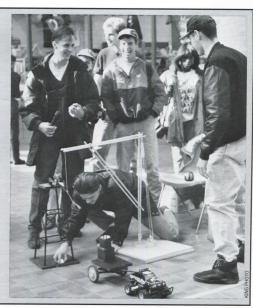
"We need something to inspire our young people that things were not always like this," says Mabel Williams, an Idlewild resident since 1972 and project director of Lake County Meals and Human Services. "This used to be a bustling place."

Greimel recently took 15 students on a tour of Idlewild and Lake County. He says this project offers students a practical real-world experience, and "a remarkable opportunity to understand how culture and social influences can shape a town." The project also benefits the community, he says.

"There are no signs indicating this town is on the state historical registry, but it is," Greimel says. "The residents have been too caught up in struggling to make a living. They have no focus or means to promote their sense of history."

Learning this lesson doesn't eggs-actly crack 'em up

Learning engineering is sometimes easy, and other times it can be over easy as these students in Prof. Pat Shamamy's "Introduction to Engineering" class recently learned. This group's project was to move an egg from the tower (left) to the trailer being hauled by the radio-controlled truck. Unfortunately, the egg went splat. The good news is that it worked during the graded portion.





Several members of the Lawrence Tech team readied for battle at the Rube Goldberg competition. The 1993 team finished fourth.

Team claims fourth in 'screwy' Goldberg contest

A Lawrence Tech student team "battled" their way to a fourth place finish at the sixth annual National Rube Goldberg Machine Contest at Purdue University last spring. The contest honors the San Francisco cartoonist who in the early 1900s drew humorous and complicated machines that performed simple tasks in very roundabout fashion.

The assignment had to include a minimum of 20 steps, the goal being to screw in a light bulb. Judges looked for ingenuity and took points off for human intervention. Students from six universities took part in the event, which brings into play principles of physics, hydraulics, aerodynamics, and electronics.

Lawrence Tech's machine had a Desert Storm theme: planes taking off, rockets going up, tanks slamming into switches, and a bazooka man shooting a marble that triggers the last string of switches.

"It ran just as we planned," says Justin Wiseman, a spokesman for the group of 20 Lawrence Tech students who built the machine.

"We wanted to win, but it's more of an opportunity for everybody to get together and have fun building it."

Students Rob Mathews and David Pickens designed Lawrence Tech's machine. Hofstra University took first with an Addams Family entry.

WPK

Prof notes Russia's 'split personality'

Lawrence Tech management professor Ernie Maier says he gets mixed signals about Russia's ongoing economic troubles. Maier says that while Russia is depicted as struggling with its economy, he saw thriving street corner private enterprise during a recent two-week visit to the country.

to the country.

Maier and Rick Whiteley, also a professor of management, journeyed to Russia to conduct market research for a Trenton businessman interested in opening a cash and carry wholesale food warehouse operation in Moscow.



Maier

Backing the project was the Reforma Foundation, a collection of reformists headed by Stanislav Shatalin, the former economic advisor to Mikhail Gorbachev.

Maier and Whiteley, along with a computer specialist with a local insurance firm, visited shopping sites and interviewed merchants and customers.

Maier calls Russia "a very complicated market," offering Russian consumers a dizzying variety of products, with prices controlled by interests within and outside the country. Maier reports a type of "flea market mentality," with citizens buying and trading items to earn additional income. Many transactions were done in currencies besides the ruble, Maier says.

Among the surprises were open-air vendors' markets, where merchants simply set up shop

in a field. Such markets offered selection and negotiable prices.

"Each merchant apparently understood exceptionally well the concept of supply and demand, and their pricing was just above the price that would allow them to sell out quickly. They're holding out for that little extra profit," Maier says.

"Russians, after dumping rubles into other currencies, were also buying at 'dollar stores' equivalent to anything you can find here," Maier says. The "dollar stores" sold a variety of food and consumer products, but at higher prices than at vendors' markets and "state stores."

Maier explains that "state stores" offered low prices but limited quantity, and are inconvenient since each sells only a single item such as meat or bread.

Maier says the proposed food wholesale operation would compete between the extremes — the state store at the bottom and the dollar store at the top. However, on his return to Lawrence Tech he now wonders if there is a need for such an enterprise.

"There was more food there than anybody had led me to believe."

He was asked about the mood in the country at the street level.

"It depends. Young people had a positive attitude because they were participating in the economic changes," he says. "Older people, who had followed the idea of 'saving your rubles,' were hurt by the change.

"The Russian people have the same desires as people anywhere — doing better for themselves and for their families. I have hope for Russia because of the entrepreneurs."

WPK



Gonna feel good this summer

Taking a quick moment out of their busy work schedule, (left to right) Dave Darragh, Steve Brickner, and Ron Gallesero show off their work on a new central air conditioning system being installed in the Engineering Building. The old system, parts of which dated back to the building's opening in 1955, was removed more than a year ago when the roof was replaced. It pays to shop around — Detroit Edison presented Lawrence Tech with an "incentive check" as a reward for choosing an energy-efficient chiller for the system. Those in the know promise cool air for next summer — finally!

Long-time professor named technology chair

Roy C. Shelton has been named chairman of the department of engineering technology at Lawrence Tech. The appointment was announced by Joseph B. Olivieri, dean of engineering.

Shelton joined the Lawrence Tech faculty in 1979 and was an associate professor of electrical engineering. The department of engineering technology enrolls some 550 students and offers a Bachelor of Science degree program in engineering technology and associate programs in construction, electrical, industrial/manufacturing, and mechanical engineering technologies.

Shelton succeeds Robert D. Chute, who is retiring this year after 20 years of teaching and administration at Lawrence Tech.

"Prof. Shelton is one of our most effective teachers," says Robert W. Ellis, Lawrence Tech provost. "Students find him to be a wonderful



Shelton

mentor with a tremendous amount of enthusiasm for education. His broad industrial experience has been extremely important to the 'theory and practice' orientation of this University.

"In his new role Prof. Shelton is

even more effective in helping students understand the application of theory to the real world of work."

Shelton was named "Black Educator of the Year" in 1990 by the U.S. Peace Corps. He advises several student professional organizations and aided the formation of Lawrence Tech's chapter of the National Society of Black

Engineers.

Shelton holds degrees from the University of Toledo. He is the former acting deputy director of the Detroit Cable Commission and has held a variety of management, engineering, and research and development positions with engineering, electronic, and computer firms. He taught previously at Rochester (NY) Institute of Technology and GMI.

Shelton attends the Straight Gate Church in Detroit with his wife and children and is an elder and head of the church catechism department.

"Youth are an important part of our ministry," says Bishop Andrew Merritt, pastor of the church. "Youth represent our future. I'm pleased to see Elder Shelton's service to young people recognized and expanded through his new position at Lawrence Technological University."

BJA

Lawrence Tech, Focus: HOPE team up in training program

Lawrence Technological University is developing course work for an innovative Focus:HOPE educational program that couples practical onthe-job experience with academic studies to offer low-income adults an unprecedented opportunity to pursue college degrees and careers in technology.

The program is powered by the Coalition for New Manufacturing Education, a collaboration of Focus:HOPE, six universities, and six major companies — Chrysler, Cincinnati Milacron, Detroit Diesel, Ford, and General Motors. Lloyd Reuss, retired GM president and chairman of Lawrence Tech's Board of Trustees, serves as executive dean of the coalition. A \$15 million National Science Foundation grant has helped launch the program, to be housed in the Center for Advance Technology (CAT.) More than \$75 million has been invested in the CAT from government, industry and foundation sources.

The 250,000 sq. ft. CAT, a converted former Ford factory, was dedicated at a grand opening Nov. 8. The center, located on Oakman Blvd. in Detroit, houses classrooms and six "power towers," areas filled with computer-controlled machining equipment that the initial group of 32 students will use to manufacture parts for automobile manufacturers and other industries. Students in the program, whose average age is 23, will be graduates from Focus:HOPE's Machinist Training Institute.

"The students will be working as interns in the center, and, at the same time, learning very sophisticated manufacturing techniques," says Dr. Charles M. Chambers, president of Lawrence Tech. "This program will take these young men and women past the point of being just skilled workers, and will put them on the

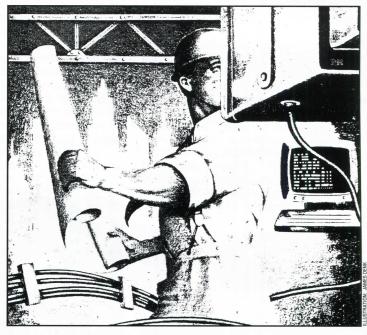
Disadvantaged workers will get renewed hope and learn marketable skills in the Center for Advanced Technology in Detroit.

path to engineering and technology careers."

Lawrence Tech is developing educational materials to be incorporated into the program. This is the assignment given to Dr. Joseph Oliveri, dean of Lawrence Tech's College of Engineering; Dr. Khalil S. Taraman, DIT professor of manufacturing engi-

neering; Lydia Lazurenko, senior lecturer in mechanical engineering; and Dr. Laura Lisiecki, assistant professor of mechanical engineering. Students will learn through actual production involving advanced technologies; case studies developed with industry; mentorship by engineering educators and practicing engineers; and self-study.

"It's a wonderful idea," Olivieri says. "This is an opportunity to give young people additional education that they would not have otherwise gotten. They will get the chance to do very well for themselves."



Once they complete the program at the CAT, students can elect to attend Lawrence Tech and earn four-year degrees in manufacturing technology. Chambers says that Father William T. Cunningham, executive director of Focus:HOPE and guiding force behind the concept of the CAT program, "hopes that eventually some of these students go all the way to graduate school and make careers in manufacturing and technology."

"We're helping turn people's lives around," says Chambers. \(\sigma WPK\)

Small business watches health care battle closely

Going into the 1990s, the small business sector of the economy was supposed to experience explosive growth, according to many business experts. Now the question is whether health care reform will significantly impact that growth, says Don Reimer, IM'62, a lecturer in management at Lawrence Tech and president of the Small Business Strategy Group in Southfield.

Since President Clinton introduced his health care reform plan, there is probably no hotter topic among small business owners.

"In smaller companies, obtaining health insurance at competitive rates now is tough," Reimer says.

Small companies, through affiliations with trade associations and chambers of commerce, have begun to address high health insurance costs. One contention with lawmakers is over talk of mandating health insurance to cover all employees.

"Small owner/managers have to economize somehow if they have to cover all workers, including part-timers. They'll economize by reducing their work force," says Reimer.

The prospect of increased health care costs plus a hike in the small business tax (part of Michigan's education finance reform), have small business cringing instead of growing,

Reimer adds. At a time when big business has downsized to economize, the prospect of layoffs in the small business sector makes Reimer ask,

"Where are the jobs going to be created?"
One place might be among franchise owners, he says, but even that sector is affected.

"The industry is scared. People are wondering whether or not to open new outlets, or wait out the health reform talk," says Roger Biernat, Jr., MCS'87, who recently opened a Pizza Chef Gourmet in Rochester Hills. "I hope lawmakers realize the timing is bad. They need to decide on health care reform so we can go on. Everyone is in a holding pattern."

His Rochester Hills pizza eatery employs 10 workers, most part-time.

"Health care won't prevent me from looking for new opportunities, but it is making me more cautious," Biernat says.

Being a small business owner is no longer a "seat of your pants" proposition, according to Biernat and Reimer.

"The classic entrepreneur was a 'reactor.' Today, the businesses that planned, organized, and positioned themselves to take advantage of the current market have done well," Reimer says.

With health care reform in mind, Reimer says, "The biggest challenge in business, in general, is dealing with uncertainty."

WPK

New graduate degrees on the way

Four new master's level programs are starting up — one each in the Colleges of Architecture and Design and Engineering, and two in the College of Management.

Dean of Management James Hopson said a Master of Science in accounting and taxation, and a master's in industrial operations will be launched in the fall of 1994. Each is a focused

program giving professionals specialized skills in their fields. They augment the existing M.B.A. program, which is broader in its approach. Certain core courses such as Human Resource Management are common to all three, but students will be able to concentrate on manufacturing and accounting issues in the respective new degrees.

The master's in industrial operations is slated to begin as an on-site program in cooperation with Ford Motor Company's Rouge plant. The program was designed to meet the needs of managers in a variety of automotive, supplier, and other manufacturing concerns facing a highly competitive market.

The Master of Architecture program has been under way in the College of Architecture and Design since spring term, 1993.

A professional degree program, it builds on the Bachelor of Architecture program but carries the student further into a specialized area of design and theory. Students combine studio work with study of management and social issues in an interdisciplinary way. The program develops leadership as well as professional skills in its graduates.

The College of Engineering will offer a focused Master of Automotive Engineering. Recently approved by the trustees, the program is expected to begin enrollment in fall, 1994. Like the master's in industrial operations and the Master of Engineering in manufacturing systems, the degree will offer professionals in a particular sector of manufacturing a specialized curriculum that strengthens their skills as leaders in their field. \square *TIM*

New hand drops anchor on campus

Lou (Louise) Salmon sees her new job at Lawrence Tech as "the start of a new life."

She became executive assistant to Dr. Charles Chambers, president of Lawrence Tech, March 1, following the retirement of Rosemary Hodges.

Salmon worked for the past ten years as manager of meetings and membership for the American Institute for Biological Sciences, a consortium of 50 scientific societies in Washington, D.C., which was directed by Chambers. She was responsible for running an annual convention of several thousand participants on university campuses, in hotels, and convention centers.

Coming to Lawrence Tech was not an easy decision.

"It meant leaving my home for the past 25 years, my four children — now young adults — good friends, and even my cat, but I decided that this was the time for me to start a new life," Salmon says. "I wanted to head out in a new direction . . . try my wings."

The job reunites Salmon with Chambers, her former boss who took the reins as Lawrence Tech's president last July.

Salmon brings with her a determination that survived even last summer's flooding in the Midwest, which threatened the AIBS annual meeting at Iowa State University in Ames.



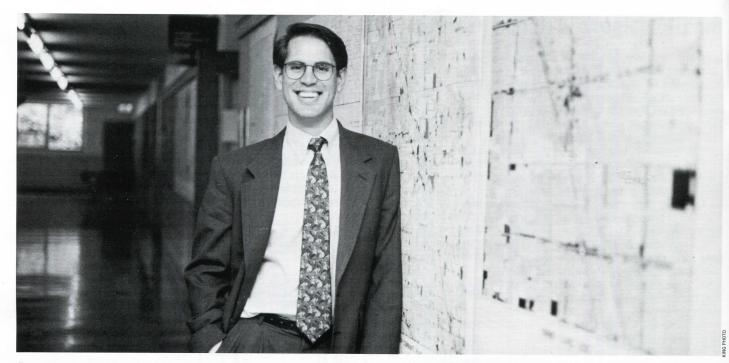
Salmon

"We had to put the whole meeting together twice — with only two weeks to do it the second time and half the campus buildings flooded," she recalls. "It worked out and was perhaps a better

meeting than the one we had spent two years planning."

An alumna of Smith College, Salmon has a consuming interest in history, not unexpected given her own background. She was born in Shanghai, China. Her father, a Navy officer, was at Pearl Harbor during the Japanese attack on the American Fleet (his car was strafed); her grandfather, Bill Stanley, chief of naval operations in the 1930s, served as ambassador to the former Soviet Union; her parents were married in what became the official residence of the U.S. vice president; and her home in Virginia is on the site of one of George Washington's farms.

"Lawrence Tech has such a marvelous reputation in Michigan," Salmon says. "The people are wonderful, very caring and conscientious. I feel very lucky to be here, to write a new chapter in my life." \square WPK



Dave Downey, a senior architecture student, has just finished a pilot intern program with the Oakland County Planning Division, and is the liaison between a team of county personnel and Lawrence Tech students working on a Woodward Avenue revitalization project.

Lawrence Tech students document Woodward Avenue development

Work has begun on the largest study of Woodward Avenue through southern Oakland County by Lawrence Technological University architectural urban planning seniors. This review, being done for the Oakland County planning division, will serve as a springboard for revitalization of Woodward from Eight Mile Road to 15 Mile Road, according to sources close to the project.

"This is a big project. We wanted to reach out and tap as many resources as we could," says Charlotte Burckhardt, an associate planner with the county's planning division. "Lawrence Tech was a logical place to start."

"This is such a large project, requiring so many hours, there's no way the county could do the whole thing with their staff," says Bob Champlin, professor of architecture and urban planning at Lawrence Tech.

"This is the biggest project the county planning office has ever undertaken," Burckhardt adds.

Russell Lewis, an associate planner and architect with the county and also a lecturer at Lawrence Tech, championed the idea of using the urban planning classes to do the surveys and perspectives.

"The advantage of this arrangement goes to the county because of the added manpower," Lewis says. "A lot will be gained from using the students in terms of information, inventory, and analysis. New ideas might come out of their involvement, too." Champlin oversees the students' work, along with Professor James Abernethy and Keith Michelson, lecturer. Champlin notes that while the county benefits from the thorough data the student studies will generate, the students gain real-world experience.

One of the prominent goals of the Lawrence Tech study, which will be completed in May, is to galvanize the communities involved — Berkley, Birmingham, Ferndale, Huntington Woods, Pleasant Ridge, and Royal Oak — into "a cooperative effort to improve the overall visual, economic and functional character of Woodward Avenue," according to the planning division.

The students' work over the academic year will be supervised by a 15-member technical team comprising personnel from the planning division. Architects, landscape architects, planners, economists, economic developers, and grant coordinators work with a liaison for the county executive's office, advised by the Woodward Avenue Steering Committee, made up of representatives from the six cities.

"Our goal is a revitalization: economic, social, political, and physical," adds Champlin. "This will make Woodward Avenue what it was always supposed to be — a lively, interesting strip for shopping and entertainment."

Champlin says more than 100 Lawrence Tech students will document the history of Woodward through the six cities, and do a survey "to establish the perception of the commercial strip" along the seven-mile long study area. In the second term, students will inventory the stores and store types, existing buildings, open space, parking lots, and sidewalks.

"Woodward moves people between Detroit and Pontiac, but it's not supposed to be a nonstop trip," Champlin says. "People should want to stop — to be entertained, meet, dance, buy things, or enjoy events."

Lewis admits there is "an ambience and spirit" to Woodward. The street became infamous in the late 1950s and 1960s for drag races and landmarks like Ted's Drive-in at Woodward and Square Lake Rd. He says that the Lawrence Tech study "will be folded into the county project."

He also says it will be "two years before the county comes up with a long-range improvement program."

"By the end of our study we want to leave a sense that Woodward is going to really be something special," Champlin says. "It has its own uniqueness. It's not going to imitate a mall or a small town — it's going to be something that people will want to experience."

Each year, Lawrence Tech's sequence of urban planning classes has tackled design assignments ranging from creating a whole new town on the Ssese Islands in Uganda to refurbishing a commercial strip along McNichols in northern Detroit.

WPK



1993-94 Alumni board elected

The 1993-94 officers and directors of the Lawrence Tech Alumni Association include, L to R: (front row) Eric Lewis, EE'76, treasurer; and Ron Stofer, CE'76, president. (Second row) Mark Bill, ME'75, director; Ed Coles, BA'83, director; Tom Cunningham, Ch'78, Ma'79, director; Roger Avie, IM'68, director; Chuck Koury, Ma'73, director; and Walt McCoskey, ME'51, director. (Back row) Judy Milosic, Ma'76, director; and Laura Slenzak, MCS'84, EE'85, recording secretary. Not pictured are Diane Lowry, ME'86, vice president; Dennis O'Connell, IM'70, corresponding secretary; David Iskra, ME'90, director; Roger Shtogrin, IM'61, director; and Sharon Rubino, MCS'85, director.



Alumni directories a big hit

Sales of Lawrence Tech's 1993 *Alumni Directory,* the

University's first, were well beyond expectations, with 2,656 deluxe hard cover and 702 soft cover editions purchased by graduates.

"We were pleasantly surprised by the interest in the book," said Charles Chambers, Lawrence Tech president. "Clearly, alumni are interested in staying in contact with each other."

The 380-page volume lists graduates alphabetically, by state and city, and by class. Home and work addresses, phone numbers, and names of spouses and children were included if alumni desired. The information was collected through two mailed surveys followed up with a phone call. Both Lawrence Tech and Detroit Institute of Technology grads were included.

Harris Publishing, White Plains, NY, one of the nation's leading directory publishers, produced the directories for the Alumni Services Office. As this magazine went to press, a few copies were still available from Harris.

For information, dial toll-free, (800) 877-6554.

Because of the frequency of alumni moves and advancements, it is likely that Lawrence Tech will adopt the cycle many other colleges and universities follow, offering a revised directory about every four years.

BJA

Bylaws give DIT grads full privileges

The Lawrence Tech Alumni Association directors amended the organization's bylaws in January, adding a new mission statement and extending privileges to non-graduating alumni and to Detroit Institute of Technology alumni.

The mission statement asserts that the Association exists to develop relationships with former students; to foster associations with business, the public, and government; and to enhance the relationship between students and faculty.

Membership in the Association was expanded to include any individual who has completed at least one course at the University. Formerly, membership required that the alumnus had completed at least half of the hourly requirements for a degree. In addition, alumni of the Detroit Institute of Technology, which Lawrence Tech assimilated after that institution closed in 1981, were extended full membership privileges, including voting rights and the right to run for and hold office in the Lawrence Tech Alumni Association.

According to Association president Ron Stofer, CE'76, the Association is also considering additional amendments to enhance creation of constituent chapters in various academic disciplines and in other geographic areas.

Yearbook clearance!

A trove of past Lawrence Tech yearbooks has been discovered. You can purchase copies at the bargain price of just \$4 each. Copies are available for most grad years but quantities of each edition vary and for most years are very limited. (No yearbooks were published in 1944, '45, '90, '91, '92, or '93.)

The books are in new or good used condition — you'll be sent the best copy available at the time your order is received. Once this supply of yearbooks is depleted, your chance to own a piece of the past is, er, history! Makes a great gift. Order yours today!

Please send me a yearbook for the following year(s): I enclose a check made payable to "Lawrence Technological University" in the amount of \$4 for each book ordered. Send book(s) to:		
Name		
Street		
City/St/Zip		
Daytime phone ()		

Mail form and check to: Lawrence Tech Alumni Services, 21000 W. Ten Mile Rd., Southfield, MI

48075-1058. Questions? Phone (800) CALL-LTU, ext. 2200. Price includes shipping and handling.

Reunion Memories

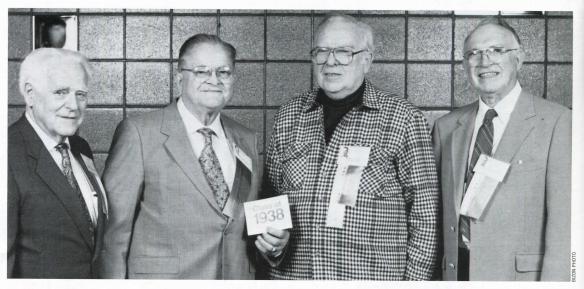
Lawrence Technological University's 1993 Reunion and Open House Weekend in April attracted thousands of alumni and friends back to campus for fun and festivities. The 1994 Reunion Weekend, April 16 and 17, promises to be more popular than ever! Make plans to attend today! For information, phone the Alumni Services Office (800) CALL-

LTU (225-5588), ext. 2200. Watch for your invitation and listing of events in the mail!

(Right) Class of 1938: (L to R) James Bonnington, ME; Michael Trygar, ChE; William Dowlding, ChE, IE; and Jack Laister, AeE.

(Below) Class of 1933: Edmund Dombrowski, MS







(Below) Class of 1943: (Front Row L to R) Murdo Morrison, AE; Edward Donley, ME; Edward Boyer, ME; N. Emmett Webb, EE; and Robert Dika, ME. (Second Row L to R) Ernest Peterkin, EE; John Fawcett, ME; Raymond Moy, ChE; George Canvasser, ME; Russell Hallman, ME; Gordon Banerian, ME; and Jack Stone, EE. (Third Row L to R) William Stevenson, DIT'ME; Charles Henstock, ME; Theodore Gelemey, DIT'ME; Angelo Tata, ME; and William Coatsworth, ME. (Back Row L to R) Steve Slaby, ME; Jack Shy, ME; Ralph Stephenson, ME; Thomas Shearer, EE; and Ralph Hahn, EE. (William Crump, ME, inset)



OLIOHA MOZIS

(Above) Class of 1978: Catherine Stanley, Hu

(Left) Class of 1958: (L to R) Gerald Peck, ME; Nicholas DeMarco, CivE; Coda Edwards, ME; and Larry Hogan, ME.







(Left) From the Class of 1983: Kim Meissner, CE

(Left) Class of 1973: (L to R) James Shamaly, ME; E. Timothy Pawl, ME; Douglas Livermore, ME; Charles Koury, Ma; Fred Daris, ME; and Peter Prevas, EE.

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Class of 1948: (Front Row L to R) M. Victor Bower, EE; Edward Bockstahler, ME: Albert Damiani, ME; and Bernard Appelblatt, IE. (Second Row L to R) Edmund Sulikowski, ChE; Melvin Rutkowski, ME; James Carey, ME; Kurt Tech, ME; Richard Heater, ME; and Harry Rakowicz, ME. (Back Row L to R) James Neumann, ME; Walter Hartung, ME; Ralph Michelson, EE; Arthur Burr, ME; Chester Kus, ME; and Leon Koziorowski, IE.

Catch a Class Act! Reunion '94 is April 16, 17

Mark your calendars! The 1994 reunion weekend is set for April 16 and 17, with a gala dinner-dance on Saturday evening highlighted by remarks from Lawrence **Tech President Charles** M. Chambers. Alum Vic Favot. BA'84 will entertain with his band, the Coachmen. Watch for your official invitation in February. All classes ending in "4" and "9" celebrate anniversaries!

The 1994 Reunion co-chairs have selected the Southfield Residence Inn as the official host hotel. Special rates will be available to alums. Phone the Alumni Services Office: (810) 356-0200, ext. 2200, or toll-free, 1-800-CALL-LTU, for advance information or for help in contacting classmates.

Chambers crosses USA 'from sea to shining sea' to meet alumni

From the Atlantic to the Pacific, alumni meetings in 12 states have been taking place this fall and winter and will continue into 1994, giving grads the opportunity to meet Charles Chambers, Lawrence Tech's new president.

"One of the things I wanted to do early on was to meet with alumni first hand and gain their perceptions about their alma mater and what has been particularly successful for them," says Chambers, who became Lawrence Tech's president on July 1, 1993. "While about 13,000 graduates live within a hundred miles or so of campus, there are hundreds of graduates in outstate areas and in other states. We need to help them get to know each other better and feel more a part of the campus family."

Chambers and Bruce Annett, director of university relations and alumni services, hosted meetings in Grand Rapids and the Saginaw/Bay City area late in 1993. Late in January they journeyed to Raleigh, NC; Fort Lauderdale and Belleair, FL, and Atlanta, GA. In Belleair, a luncheon was generously hosted by Ed Donley, ME'43 and his wife, Inez.

Early in February, Chambers and Annett met with alumni in Houston and Dallas, TX; Phoenix/Tempe AZ; and San Diego, Santa Monica, and San Francisco, CA. Additional visits will be scheduled to Chicago, Cincinnati, Cleveland, and Indianapolis in the near future.

"The meetings are helping alumni network with each other socially and professionally, and learn what's new on campus," Chambers adds. "We encourage each group to consider forming a local chapter that will meet on a regular basis. I'm planning to return on about an annual basis to host a local event and help keep alumni informed."

Additional alumni helping with arrangements for local meetings were Ray Moy, ChE'43, and Robert Alan Black, Ar'66, Atlanta; James Storfer, IM'70, Houston; Kevin Miesel, EE'84, Raleigh; Jerry Werner, CivE'60, and George Lounsbery, ME'51, Fort Lauderdale; and Tony Spadafore, IST'56, Phoenix.

For more information on forming an alumni chapter or hosting a meeting in your area, phone the Alumni Services Office toll-free at (800) CALL-LTU, (225-5588), ext. 2200.

GRAND RAPIDS AREA (not pictured) alumni met Oct. 28. The group included: Bruce, IM'77, and Joan Baker; Glenna Berkenpas, Ar'86; Bill, ChE'53, and Ruth Lomas; Dr. Lyle Reibling, Ma'75; John, ME'48, and Elinore Walstrum; and Christine Uecker, BA'86



CLEARWATER/BELLEAIR, FL AREA alumni met Jan. 23 at the Belleair Country Club as guests of Edward, ME'43, and Inez Donley. Attending were Ronald Bell, IM'72; Joyce Brewer; Mary Kennedy; James, IE'49, and Mary Jane Campoli; D. James, ChE'42, and Margaret Crawford; Donald, Ar'50, and Loretta Date; George, Ar'74, and Jean DeFrain; Thomas Pawlyn, EE'90; William Schultz, CE'81; Greg Scott, BA'82; Robert, ME'54, and Elinor Vandenberg; Clarence, ME'73, and Mrs. Vellner; Duane, DIT'65, and Carol Young; and George, ME'39, and Margaret Young. RIGHT: Hosting the gathering were Inez and Ed (ME'43) Donley, shown with President Chambers (left). Ed recently



retired as chairman of Lawrence Tech's governing board but remains a member of the corporation.



RALEIGH, NC AREA alumni met Jan. 21 at the Fox & Hound in Cary, and included Wendell Bestrom, ME'57; Kevin, EE'84, and Brenda Miesel; Larry, IM'63, and Nancy Miller; Thomas Schwartz, EE'91, and Marilyn Gervais; and Dave, ME'57, and JoAnne Wilson.



FORT LAUDERDALE, FL AREA alumni met Jan. 22 at the Marriott Harbor Beach Hotel. Attendees were Charles, EE'52 and Miriam Huckins; George, ME'51, and Lu Lounsbery; Michael March, ME'86; and Jerry, CivE'60, and Carol Werner.



BAY CITY/SAGINAW AREA alumni meeting Nov. 2 with President Chambers and Bruce Annett, director of alumni services, included Kenneth, Ar'87, and Dawn Neigh; Fred Porter, ChE'41; David, Ar'80, and Jill Horschig; David Sepesi, ME'70; James, MCS'86, and Sheri Kovalsky; Maurice Gates, EE'89, and Kimberly Horne.



ATLANTA, GA AREA alumni met Jan. 24 at the Dunwoody Ramada Inn and included Robert Alan Black, Ar'66; John Currie, EE'64; Frank Lamia, Ar'79; Ray, ChE'43, and Edith Moy; Charles Petross, IM'66; Frank Pudysz, Jr., Ar'79; Roger, CivE'61, and Joan Sackett; Bill, ME'70, and Pat Schlichter; Brian Slowik, ME'81; and Clyde Whitmore, IE'48.



HOUSTON, TX AREA alumni met Feb. 2 at the trendy La Colombe d'Or restaurant. The group included Steve Bober, IM'71; Tom Herbel, IM'83; Michael, ME'84 and Anne Marie Horbaniuk; Russell Kudela, CE'89; Thaddeus Kudela, Ar'81; William Rey, EE'85; Randy Robbins, EE'79; David Selfridge, ME'81; Edward Skaggs, IM'71; Robert, IM'77, and Maureen Stagg; James Storfer, IM'70; Greg, IM'72, and Jean Waleke; and Edward, EE'82, and Linda Wolyniec.



PHOENIX/TEMPE, AZ AREA alums met Feb. 4 at the rustic Monti's La Casa Viejo restaurant. Among the attendees were Harold Bell, ChE'50; Ed, ChE'37, and Melva Boettner; Paul, EE'54, and Margaret Boudreau; Nick, CivE'58, and June DeMarco; Ralph, EE'43, and Estelle Hahn; George Malcolm, IM'61; Mike Medici, Ar'79, BAr'80; Karl, BA'89, and Jody Moffit; Kent Schiete, ME'88; Tony Spadafore, IT'56; and James, CivE'49, and Gladys Timm.



DALLAS/IRVING, TX AREA alums met Feb. 3 at the Four Seasons Resort. Attending were John Carney, ChE'52; William Rey, EE'85; Kenneth, IM'67, and Diane Segel; Richard, IM'80, and Rebecca Szelc; and Hollis, ME'43, and Adyllis Wise.



SAN DIEGO, CA AREA alums met Feb. 5 at the quaint Inn at Rancho Santa Fe. The group included Frank Biehl, CivE'62; Jean Cook, ArE'55; Anthony DeMaggio, AeE'36, ME'38; Andy Freeburn, EE'83; Gerald, CivE'55, and Betty Lonergan; M. Cyrus Moaveni, EE'79; Tom, IM'72, and Honoria Montroy; Harold Muir, ME'47; Thomas Walker, ArE'55; and Richard Williams, EE'64.



SANTA MONICA/LOS ANGELES, CA AREA alumni met Feb. 6 at the newly opened Shutters on the Beach hotel. Present were Edmund Arbas, Ar'50; Arnold, CE'82, and Judy Collins, and their son, Jeffrey, currently a student at Lawrence Tech; Susan Field, ME'80, and Dennis Skupinski; David, ME'61, and Constance Frayer; Brian Pearson, ME'87; Andrew Prokopow, ME'61; John Ruedisueli, CE'84; and Michael Weingarden, EE'87.



SAN FRANCISCO, CA AREA grads gathered Feb. 9 at the landmark Westin St. Francis hotel. In attendance were Keith, EE'88, and Paige Burton; John Flood, ME'46; Carl, EE'59, and Andrea Jacobi; Ron, IM'63, and Anita Linden; Murdo, ArE'43, and Judy Morrison; Stan Pence, IM'71; and Lee Van De Kerchove, Ar'73.

Alumni welcome Chambers; bid farewell to Marburger

The 1993 Alumni Reunion April 17 featured plenty of the usual reminiscing, but it also marked the finale of the 16 year leadership of Richard Marburger as president of Lawrence Tech. During the dinner, Marburger (who would officially retire June 30) and his wife, Mary, were made lifelong members of the Alumni Association.

'The best way of thanking you is to give you a way of sharing our pride as alumni'

— Ron Stofer, CE'76 President, Lawrence Tech Alumni Association

"The best way of thanking you is to give you a way of sharing our pride as alumni — pride you've been instrumental in building," said Ron Stofer, CE'76, president of Lawrence Tech's Alumni Association.

Besides guiding the physical growth of the University's buildings and computer system, Stofer said Marburger was honored for "all you've done here that has strengthened the quality of the University and increased the worth and value of the Lawrence Tech degree."

Chester Kus, ME'48, looked back on



President Marburger (right) prepares to pass the torch to Dr. Chambers.

Lawrence Tech's past and present in acknowledging Marburger and his successor, Charles M. Chambers.

"When we graduated, Lawrence Tech was a school rich in competent, dedicated faculty, who knew how to teach. The facilities were a little less than adequate," Kus said. "When you look around now you see a school that has the facilities that are needed. You also have the same type of dedicated faculty. Lawrence Tech has evolved into a very fine school.

"It is a good example of how dreams become reality. The dream was begun by the Lawrences, furthered by President Buell, continued by President Marburger and, I'm sure, will continue under President Chambers."

"The thing that makes Lawrence Tech a miracle is its focused approach," Marburger said. "Lawrence Tech gets a grip on people."

Chambers stated some of his intentions as Lawrence Tech's fifth president.

"I pledge to you that the wonderful things this man (Marburger) has done will be my bible," he said. "I see these four Colleges of this University as the four leaves of a clover. To an old Irishman like me you know what a four-leaf clover means.

"We need to realize this University and the approach that it takes represents a real model for what science and engineering education can be in this country," Chambers said.

Chambers said at the outset of his speech, "The thing that really attracted me to this university, and which President Marburger gave to you, is the quality of stability. Stability in higher education, given all the crosscurrents that exist, translates into strength." \square WPK

Alumni group insurance explored

Lawrence Tech alumni who have demonstrated experience in providing group life, group medical, or other group insurance services are invited to register so that you can be contacted as the University explores offering alumni services in these areas. The Alumni Services Office is collecting names, addresses, and phone numbers of alumni active in this field so that a request to bid can be distributed at a later date. To register, send the above requested information to: Lawrence Tech Alumni Services, 21000 W. Ten Mile Rd., Southfield, MI 48075-1058.

It's a tie! (well, almost)

Vincent Kaye, EE'35, (left) and Frank Streberger, Cert'34, shared the honors as the oldest alumni in attendance at the 1993 Reunion Dinner-Dance. Vice President Diane Lowry, ME'86, and President Ron Stofer, CE'76, did the honors and presented gifts.



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

1933-59

William P. Graetz, ME'37, has reestablished contact after several years. He writes to ask, "whatever happened to Prof. Bushyager and Glen D. Angle? We used Angle's Engine Dynamics and Crankshaft Design' as our textbook and I still have my autographed copy. On a number of occasions, after night classes, we would by chance board the same Woodward Ave. trolley toward downtown Detroit. The conversation with him was a pleasure (but) I would have to cut it short to make the connection with the Joy Road crosstown line!" (Ed. note: photos of both Profs. Bushyager and Angle stopped being run in the yearbook during the WWII era, but this does not necessarily mean they weren't still teaching. Readers, do you know what happened to these

John (Jack) W. Laister, AeE'38, has received the 1993 Michael C. Murphy Service Award from the WWII Combat Glider Pilots Association. Jack, who lives in Apple Valley, CA, received the award for his leadership in design, development, and production of cargo gliders during the war. The award was presented at the group's national convention in Louisville, KY, which allowed Jack the opportunity to return to campus for a visit "since he was in the neighborhood."

Clifford N. Wright, ArE'41, and his Bloomfield Hills architectural firm are gaining some national exposure from Pella Windows. Pella selected Wright's designs for its national designer series brochure and television spots.

Robert Dika, ME'43; John Fawcett, ME'43; and N. Emmett Webb. EE'43, have volunteered to serve as liaisons for their class. Classmates can contact them as additional purveyors of Alumni notes and assistance in setting up classwide events.

Richard Darbyshire, ME'54, EE'61, and his family of engineers were featured in articles appearing in the Oakland (Pontiac) Press and (Royal Oak) Daily Tribune. Seven of his eleven children are engineers, just like their father! Among them are Robert, ME'80; Edward, ME'84; David, ME'87, and Leonard, ME'87. Son Rick is currently a Lawrence Tech student. Gretchen Minnhaar, ArE'59, of Grand Rapids, who heads her own architectural firm in that city, spoke on "art in architecture" at Ferris State University in Jan., 1993. One of the faculty coordinators of the event was Diane Nagelkirk, Ar'82, BAr'84, an assistant professor of architecture at Ferris State.

a registered professional engineer in seven states and a registered professional surveyor in Michigan and Ohio. He has some 25 years of environmental and civil engineering experience.

Frank Kosciolek, IM'64, of Warren, PA, has been named executive director of corporate quality for the Loranger Manufacturing Corp. in that city. He left Ford after 24 years to join the custom manufacturer of plastic electro/mechanical components. His firm recently added a third division — in Hungary.

James Neisch, EE'65, of Grosse Pointe has been named director, intelligent vehicle highway systems planning, for Rockwell International Corp.



Harold R. Varner, Ar'65, AIA, architect with Sims-Varner & Associates, Detroit

recently ran for the City of Detroit Charter Commission.

1960-69

Dr. Jerry Nogy, IM'60, IE'66, is the chief information officer in the division of graduate studies, research, and economic development for the University of Toledo. He is responsible for day-to-day operations of the departments of computer and telephone services. He also oversees all voice, data. and video communication networks at UT. A major project is the implementation of UT's phone-in and on-line registration. Jerry received his Ph.D. in college and university administration in 1992 from Michigan State University

Tino Zago, ArE'60, recently had an exhibition of paintings at the Rubiner Gallery in West Bloomfield. The show featured his series of paintings, "Primavera" — inspired by light bouncing off water. His loft studio is in New York City and he and his wife also try to spend part of each year in Venice and Nova Scotia.

August "Sonny" Lang, IM'62, lives in Hillsboro, OR, where he is a manufacturer's rep for metals, plastics, and rubber products. He also teaches navigation courses part-time at Portland State University. He writes that he'd enjoy hearing from former classmates

Don Reimer, IM'62, has seen the company he founded, the Small Business Strategy Group, named runner-up for the "minority business advocate of the year." award. The announcement was made by the Minority Business Development Agency of the U.S. Department of Commerce. Don is also an adjunct professor of management at his alma mater. He lives in West Bloomfield.

Roy Seelbinder, BT'62, is chairman of the Masonry Institute of Michigan. He is president of Seelbinder Construction in Troy and resides in Lake Orion.

Ronald G. Hughes, CivE'64, PE, PS, has joined Progressive Architecture Engineering Planning in Brighton as the eastern region manager. His firm is a 126-employee full service architectural, engineering, and planning company based in Grand Rapids. Ron is



Golden memories: Four young freshmen became best friends some 57 years ago and through all of life's triumphs and trials, they've remained so ever since. (L to R) are Fred Strauss, ME'42; Bob Militzer, ME'42; Frank Hoernschemeyer, AeE'42; and Charles Henstock. ME'43.

A golden friendship

In today's busy, mobile society, friendships that can survive 10 years of moving, professional advancement, childrearing, community involvements and the rest are fairly uncommon. Rare indeed are friendships that span 57 years — but such is the case for four Lawrence Tech alumni who met as freshmen in September, 1937!

Frank Hoernschemeyer, AeE'42, Robert Militzer, ME'42, Frederick Strauss, ME'42, and Charles Henstock, ME'43 are proof that it takes more than a world war and nearly sixty years of post-college living to break up a good circle of pals.

"After graduating we went our separate ways," says Bob Militzer. "The service, war production, engineering assignments, relocations, marriages (our wives come from three different states), children, grandchildren, and retirement. Through all these years all four couples have remained the closest of friends. Anniversaries, birthdays, picnics, golf, boating, card playing, theater, vacationing, and dining out together have been among the many pastimes we have collectively enjoyed."

In 1987, the four wives decided to surprise their mates by commemorating the 50th anniversary of their husbands' meeting. A big cake prepared for that luncheon carried the message, "Lawrence Tech, 1937-87."

"That was a very happy occasion," Bob adds.

Bob says that the four couples still meet regularly and the most frequent topics of discussion are the "good old days at LIT and the new activities at LTU."

"I remember some great profs — Bushyager, Graeffe, Smith, Boothroyd, Brewington, Buell, Price, Byerlay, Hendrickson," Bob says. "Times were so tough I used to pay my \$75 per semester tuition off at \$5 per week. Miss Dooley, the registrar, always had a smile for me every Monday when I made my payment!

"I just thought you'd be interested in what attending Lawrence Tech has meant to all of us," says Bob. "We are all very proud of our ties to Lawrence Tech, and we continue to watch with keen interest as our alma mater takes its place among the leading educational institutions in the world." \square *BJA*

Charles Bisel, ArE'66, is director of physical planning and construction for the Providence Medical Center. The hospital's medical center in Novi, designed by Albert Kahn Associates, recently won a Masonry Institute of Michigan honor award.

Howard Droz, ArE'66, is Smith Hinchman & Grylls architectural representative on the \$230 million Veterans Administration replacement hospital project in Detroit. He is also a director and secretary/treasurer of the Masonry Institute of Michigan.

Robert Yurk, Ar'66, RA, AIA, has joined the staff of Ghafari Associates/MacKenzie, Knuth and Klein Division in Flint. He is a project manager.

Thomas E. Hansz, Ar'68, AIA, director of programming and planning with Burt Hill Kosar Rittleman Associates in Butler, PA, has been named adjunct assistant professor at Carnegie Mellon University and will oversee the fourth year design studios in the department of architecture.



Roy Radakovich, ME'68, IM'72, of Trenton, manager of vehicle systems design

and development for electric vehicles at Ford Motor Co., is the 1993-94 chairman of the Society of Automotive Engineers Detroit Section. Roy has been involved in a variety of programs at Ford, including design and development responsibilities for body, chassis, and electrical systems. He recently worked on product planning for the new Lincoln Town Car.

David Ross, BT'68, BA'75, has been named public works director for Oakland County. His department is one of the county's largest departments, with 200 employees and responsibility for maintenance and upkeep of 50 buildings, along with construction of new buildings such as the 140,000 sq. ft. expansion of the county courthouse in Pontiac.

Gary Lowell, ME'69, and his sign company, Worthington Wood Work Ltd., were profiled recently in *Crain's Detroit Business*. His company's distinctive wood, stone, and brick signs are being used at a variety of municipal, commercial, and residential sites throughout the region. One show-piece is the \$40,000 Belle Isle entrance sign which the firm helped build before the first running of the Detroit Grand Prix there. Gary's firm is in Southfield.

Leo Salvaggio, Ar'69, of Grosse Pointe Farms, is 1993-95 president of the 300-member Grosse Pointe Artists Association. He was also the featured artist at the Association's 34th annual fall festival. He owns a development company, a construction company, and a 15-acre industrial park in Oxford. His work has been exhibited at such venues as the Detroit Institute of Arts and the Toledo Museum of Art. He and his wife, Katina, have spent three years restoring their home, a 100vear-old farmhouse.

1970-79

Dale W. Hurttgam, Ar'71, RA, has been named chief architect of Ellis/Naeyaert/Genheimer Associates, Inc, a Troy engineering, architectural, and planning firm. He has been associated with the firm, which has offices in Michigan and North Carolina, since 1973.

Huston E. Sherrill, EE'72, of Glenco, MO, has been named corporate vice president, human resources for Huls Corp. of Piscataway, NJ. He is responsible for directing all business relating to benefits/compensation, employee relations, management development, and organizational planning worldwide. The company has three business units manufacturing or importing specialized chemicals, plastics, coatings, and specialized processing materials. The firm is also one of the world's largest producers of silicon wafers, a base material for microchips.

Paul S. Allmacher, IM'73, has been appointed national account sales manager for Champion Motor Coach, Inc. in Imlay City. His responsibilities include inititating and managing sales of medium-duty buses, particularly the fleet market. He is also the liaison between Champion's accounts and its engineering and manufacturing divisions.

Larry Darling, BT'73, has been named an instructor in the department of industrial technology at Eastern Michigan University in Ypsilanti. The Saline resident was also profiled in the Ypsilanti Press for winning first place, amateur division, in the World Championship of Wildfowl Carving, which recently took place in Ocean City, MD. The Press says Larry started carving just four years ago and has a wall full of prize ribbons in his basement workshop, where he has carved some 350-400 wildfowl.

Ralph Stoy, Ar'73, is president of Delcor Contruction Co., a Milford-

based company with diverse construction-related expertise. The firm can handle both "plan and spec" and "design and build" projects, according to a recent profile that appeared in the *Novi* and *Milford News*. The firm, currently rehabilitating the 303-unit Englewood Terrace in Chicago, a 22-story residential complex, presently has \$20 million in construction under contract, according to the papers.

James R. Wangler, IM'74, of St. Louis, MO, has been named Midwest regional sales manager for Combined Transport Systems, Inc., headquartered in Munster, IN. He is responsible for sales of barge transportation and terminal services.

Hugh Kerschbaum, IM'75, has been named executive manager, manufacturing systems group, for Modern Engineering in Warren. He's responsibile for Modern's manufacturing engineering and program management resources. He was formerly with General Motors Corp.

lan Schonsheck, BT'75, CE'79, PE, is owner of Schonsheck, Inc., in Wixom, a full service design/build general contractor with 30 employees. Profiled recently in the *Brighton Argus*, lan was quoted as saying "our goal is to promote growth but we emphasize the quality." In 1991 lan was a finalist for the "entrepreneur of the year" award sponsored by Ernst & Young, Inc. and Merrill Lynch. His firm's biggest project to date is the \$6.5 million Pure-Pak Inc. headquarters in New Hudson

Lawrence L. Riley, Ar'75, has been named a partner and corporate officer of Wigen, Tincknell, Meyer & Associates, Inc. in Saginaw. He's responsible for administration of all construction projects for the 24-person architectural and engineering firm.

Alan Cobb, Ar'76, AIA, assistant chief of architectural design at Albert Kahn Associates, Inc., in Detroit, represented his firm as it received the 1992 honor award from the Masonry Institute of Michigan. MIM cited the firm's work on the Providence Medical Center in Novi.



Alex F. Ivanikiw, Ar'76, BAr'79, RA, AIA, has been promoted to general manager/chief

operating officer and director of the Argos Group, a wholly-owned subidiary of Barton Malow Co. in Southfield. Alex's firm provides clients in Southeastern Michigan with management, planning, design, and construction services.

Dean Rooks, Ar'76, of Conklin, north of Grand Rapids, was profiled in the Ottawa Advance recently as an "environmentally conscious earth-friendly architect." He says his organic style is influenced by Eastern thought and the prairie style. His own home in Chester Twp. is a good example of his work, featuring many roof overhangs, high ceilings, structural panels, and plenty of light. One of his major commissions is the Japanese-style cabins and shower houses at a Girl Scout camp in Greenville.

Kenneth Mehl, ME'76, is a Westland city council member and chairman of the 25th annual Westland Festival.

Robert S. Dehne, Ar'77, RA, has joined the staff of Community Design Inc. in Traverse City, where he designs and manages project work of healthcare facilities.

David Spala, Ar'77, AIA, of Architecture/Artistry/Interiors/Inc. was project architect for the Dennos Museum Center of Northwestern Michigan College in Traverse City. The 39,000 sq. ft. regional cultural center and auditorium received a 1992 honor award from the Masonry Institute of Michigan.

Steven E. Board, Ar'78, has joined Barton-Malow Company's Argos Group as director, project development. He was formerly executive vice president for Corporate Business Interiors, Inc. Steven is a planning commissioner for Independence Township and is a certified plan examiner. Argos is headquartered in Southfield.

John S. Barker, Ar'79, BAr'81, is vice president of Hobbs & Black Associates Inc. in Ann Arbor, architects, planners, and interior designers. He is the senior member of the firm's healthcare division, currently managing projects at William Beaumont, Foote, and Oakwood Hospitals.

James Leonard, BA'79, has formed JJL Partners and Leonard Capital Management, Inc. According to *Crain's Detroit Business*, James' niche will be "fairly aggressive" stocks of Midwest companies — particularly small to medium-sized Michigan firms. He was formerly director of research at the Detroit brokerage, First of Michigan, Inc.

Thomas O'Brien, Ar'79, CE'84, RA, AlA, has joined a Houghton Lake firm now called Riebschleger and O'Brien Architects. Tom was with Wah Yee Associates prior to forming the partnership.

Neil D. Paolella, BA'79, CPA, has been named vice president of special projects in Kelly Services corporate development department. He is responsible for researching the Troy-based firm's capabilities to serve the changing needs of customers.

Edward Seidl, BA'79, of Lathrup Village, has been named director, planning and financial analyses for Diversey Corp.'s cleaning systems division. He is responsible for developing the division's long range strategic plan, appraising its financial results, and developing sales and operations plans. Diversy is a Livonia-based developer, manufacturer, and marketer of cleaning, sanitizing, water management and surface treatment products and systems with customers in the food, institutional, metal, and industrial markets. It has some 200,000 clients nationwide



Gary W. Van Wagnen, BA'79, has joined the St. Louis, MO office of Price Waterhouse

as a partner in the management consulting services practice, central region. He has more than 13 years of experience in reengineering/business process redesign and package/custom information systems design, as well as implementation management consulting. He also has experience in the food and consumer products industry with several Fortune 500 clients.

1980-89

David M. Horschig, Ar'80, is a product market specialist, construction marketing, for Dow Corning Corp. His wife, Jill, three sons and he reside in Midland.

John Kozich, BA'80, of Ferndale is the manager of Credit Union ONE's branch in Sterling Heights.

Stanford Ovshinsky, HonDS'80, was named the 1993 Corporate Detroiter of the Year by Corporate Detroit magazine. Corporate Detroit notes that Stan invented a field of physics, proving that amorphous materials made good semiconductors and could be useful in electronics. Stan heads a Detroit area firm, Energy Conversion Devices. One of ECD's subsidiaries has made headlines with its nickel-metal hydride battery - called one of the 100 greatest scientific achievements of 1992 by Popular Science magazine

Dennis C. Schlitt, CE'80, has joined the electrical engineering department of Giffels Hoyem Basso, Inc., an architectural and engineering firm in Troy.

W. Bernard White, CE'80, is president of White Construction Co., Inc. in Detroit. His 15-employee firm is a general contractor and construction manager for commercial work. He was cited recently as a small business: minorities "all-star" by Crain's Detroit Business.

Leon F. Darga, CE'81, of Plymouth has been promoted to senior manager, management consulting, for the big six accounting firm of Deloitte & Touche. Leon serves clients in the construction industry, providing project management, litigation support, and operations expertise.

Gail D. Laurinec, Ar'81, BAr'92, has been named project architect at Campbell/Manix Associates, Inc., a Southfield design firm. Gail has 15 years of experience in all phases of architectural practice and previously worked for Contract Interiors and Lindhout Associates

Robert C. Look, Jr., IM'82, recently helped charter a new chapter of Alpha Sigma Phi fraternity at Central Michigan University.

Benjamin C. Monacelli, Ar'82, AIA, has been promoted to senior architect at BEI Associates, Inc., architects and engineers in Detroit.



David A Reece, Ar'82, RA, AIA, has been named a senior architectural group leader at

Ellis/Naeyaert/Genheimer Associates, Inc. in Troy. He has been with the firm since 1982 and has worked on projects for Michigan Bell, Upjohn, and Parke-Davis.

Marke Drane, Ar'83, director of design for the Bloomfield Hills architectural firm of T. Rogvoy Associates, Inc., has been named a shareholder of the firm.

Gary S. Rawsky, ME'83, formerly with the *Detroit Free Press* and General Dynamics, writes that he has moved to Daytona Beach, FL.



David L. Tratt, ME'83, PE, of Grand Blanc, has been promoted to senior associate with

SSOE, Inc., a full service engineering architectural firm with offices

in four states. Dave is part of SSOE's Flint office and was instrumental in developing the firm's total quality management program.

Linda Funk-Guysens, BA'85, is an accountant with Schreiber & Co. She is president of the Royal Oak area Business and Professional Women organization.

Sarah Haselschwardt, Ar'85, BAr'86, RA, is a design architect for Kingscott & Associates who has worked on school projects in Holt, Boyne City, Traverse City, Grand Rapids, Hamilton, Colon, and Rochester. She heads the project design team for a new middle school being built in her home town area of Dexter.

Tocco, Inc., of Boaz, AL has named **Donald Hubchik**, ME'85, as district sales manager for Canada. He is based in Michigan. The firm manufactures induction heating equipment for automotive, aerospace, and other industries.

Brian McPhee, EE'85, has been named account manager for Troy-based Rockwell International's Seat Adjusting Systems. He is responsible for development and support of customers in North America.

Frank G. Nehr, Jr., CE'85, of Waterford, executive vice president of Davis Iron Works, Inc., is the 1993-94 president of the Great Lakes Fabricators and Erectors Association Sandra K. Schultz, DP'85, BA'89, works for Strategic Staffing Solutions. She wed David Stonik in Sept. The couple resides in Westland.

Linda Steiger, IM'85, is the director of business development and planning for St. Joseph Mercy Hospital of Macomb. She is developing business plans as well as physician and ambulatory strategies and market research.

Frank Zychowski, Ar'86, BAr'88, and Kevin Akey, Ar'86, are co-founders of AZD Associates of Birmingham, which has a growing reputation for fresh, contemporary residential design. The duo was featured recently in *Corporate Detroit* magazine. Much of their practice is devoted to lakefront residences — some up to 12,000 sq. ft.

Mark C. Brown, ME'86, a product engineer with Ford, recently served as a judge for the 1993 Michigan's "leading edge technologies awards" recognizing innovation and growth.

Gayle L. Landrum, Hu'86, has joined the Southfield law firm of Maddin, Hauser, Wartell, Roth, Heller and Presses, P.C. as an associate. She is concentrating her practice on litigation and legal malpractice defense. She received her law degree from Wayne State University in 1989.

David Saint-Onge, CE'86, has been named vice president and

principal associate for Sundberg, Carlson and Associates, Inc. in Marquette. He was also named a director of the firm. He and his wife, Kristine, have one son.

Parke J. Brown, EE'87, and Patricia Ann Dirolf were married recently. Parke is a project engineer at Westinghouse in Albany, NY. His late father was a member of the corporation at Lawrence Tech.

Timothy F. Lichtenwald, Ar'84, BAr'85; Kenneth J. Neigh, Ar'87, BAr'89; and Robert H. Case, Ar'87, BAr'90 are architects with Wigen, Tincknell, Meyer & Associates, Inc., architects and planners in Saginaw. All three recently passed the state examination and are now registered architects.

Michael Lorimer, CE'87, is a self employed builder. He married Denise Lassaline Dec. 31, 1992. Michael and his wife live in Clarkston.



Steven G. Farrelly, Ar'88, BAr'89, RA, has joined Arthur F. Smith Architects in

Southfield. He is responsible for the development and quality control of a number of projects, including a 300-acre camp facility in Michigan's Irish Hills.

Douglas M. Remell, EE'88, has

married Sylvia Jarzembski. He works for Chrysler and resides in Troy with his new bride.

R. Scott Auvenshine, Ar'89, is an architect with Kurmas & Associates in Birmingham. He married Anne Marie McGowan Oct. 3, 1982 and the couple resides in Howell.

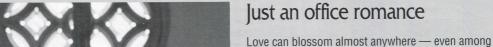
Jill Lynn Hottum, ME'89, is a development engineer with Ford. She and her new husband, Donald Redmon, live in Chelsea.

Keith D. Jones, CE'89, has joined TolTest, Inc. as a remediation engineer. Working out of the firm's Detroit office, Keith is responsible for all phases of soil and groundwater treatment projects including specifications, development of work plans, permits, construction, and operation.

William D. Swanson, ME'89, is vice president of manufacturing at Power Systems Inc. in Howell. The firm provides custom engineered and proprietary transformer products for machine manufacturing industries. Bill lives in Pinckney.

1990-93

John D. Cox, ME'90, is an engineer with Ford. He and his wife, the former Mary Elizabeth Ladd, married Nov. 21, 1992, and reside in Canton.





nearly 25 percent of the department's staff!
David and Heather "retired" from their near-minimum wage student jobs upon graduation but continued to date as each pursued careers. Currently, Heather works for General Motors and Dave is at Chrysler

dom overlapped. Adding to the unlikelihood of their

interaction, their stern "taskmaster" was no-nonsense

office secretary Debbie Stamps — Heather's mother -

known for exacting a full measure of effort out of each student aide. There was always plenty for the two stu-

dents to do and keep busy — together, they comprised

"I didn't even think Dave was Heather's type," Debbie says, but she is very happy with her daughter's choice. "Kids," she smiles. \square *BJA*



Larry A. Hoganson, Ar'90, BAr'91, is a project architect with Sundberg, Carlson and Associates Inc. in Kingsford, MI, a regional provider of architectural, engineering, surveying, and environmental services.

Gordon S. Johnson, ME'90, married Allison Murphy Sept. 18, 1992. He is employed by American Yazaki in Canton. The couple makes their home in Livonia.

Joseph A. Kahn, Ar'90, an ensign in the Navy, recently graduated from the Basic Civil Engineer Corps Officer School at Port Hueneme, CA.

David W. Schneider, ME'90, is an engineer with TRW Vehicle Safety Systems, Inc. He resides in Waterford with his new bride, the former Colleen Ann Dwire.



Wayne G. Sieloff, Ar'90, BAr'92, has been elected to the city council in Trenton, a

Trenton, a southern Wayne County commu-

nity with 21,000 residents. Wayne is an intern with Architectural Engineering Services in Farmington Hills.

Thomas S. Stecker, Ar'90, IA'90, and the former Elizabeth Grein were married in April. He is an associate architect with Ventura and Associates. The couple resides in Royal Oak.

Jennifer Ann Gipprich, BA'91, has married Paul Cook. The couple resides in Farmington Hills. She works in materials control for Ford.

David P. Cooper, BA'91, has been promoted to vice president of research and development for Lowry Computer Products Inc. in Brighton. David is managing engineering and new product development at the firm, which is a major national supplier of bar code hardware products, supplies, and support services for manufacturing, distribution, and warehousing.

Michael P. Demo, EE'91, and Maria Kotsifakis, CST'91, were married Oct. 24, 1992. Michael is an engineer at Kolano and Saha, Inc. Maria works at East Detroit Chiropractic. The couple lives in Trov.

Joseph Asa Nochman, Ar'91, who received his M.Arch. from Texas A&M, was part of a team of four students and alumni at Texas A&M's School of Architecture chosen as the winner of the 1993 TSA/Herman Miller Student

Charette. The competition focused on the redevelopment of the Interstate 30 corridor south of downtown Fort Worth. Joseph's team competed against five Texas schools.

John G. Rasico, ME'91, and Renee Hofstetter were married Aug. 8, 1993. He is a mechanical engineer with Ford. The newlyweds reside in Farmington Hills.

Christopher B Vilson, ME'92, and Karen Marcinak exchanged vows Dec. 23, 1992. Chris is a product engineer with Webasto Sunroof in Rochester Hills.



Catch a Class Act! Reunion '94 is April 16, 17

Mark your calendars! The 1994 reunion weekend is set for April 16 and 17, with a gala dinner-dance on Saturday evening highlighted by remarks from Lawrence Tech President Charles M. Chambers. Alum Vic Favot, BA'84 will entertain with his band, the Coachmen. Watch for your official invitation in February. All classes ending in "4" and "9" celebrate anniversaries!

The 1994 Reunion co-chairs have selected the Southfield Residence Inn as the official host hotel. Special rates will be available to alums. Phone the Alumni Services Office: (810) 356-0200, ext. 2200, or toll-free, 1-800-CALL-LTU, for advance information or for help in contacting classmates.

News for Alumni N	otes	
Use the space below to tell us about you or your fellow Lawrence Tech or DIT alums. Tell us about honors, promotions, marriages, appointments, and other activities.		☐ New address?
Name		Major/Yr
Street		
City	State	Zip
Home phone ()		

Send to: Director of University Relations and Alumni Services, Lawrence Technological University, 21000 West Ten Mile Road, Southfield, MI 48075-1058

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 and any Lawrence Tech-connected survivors and their graduation dates. If sending a newspaper clipping, include the date and name of the paper. Send to: Director of Alumni Services, Lawrence Tech, 21000 W. Ten Mile Rd., Southfield, MI 48075-1058.

Frank I. Kirsten, Tech'34, of Venice, FL.

Robert Berg, CivE'39, of Grosse Pointe

Harvey Humphries, ME'39, of West Bloomfield, on Feb. 10, 1993. He was retired from Detroit Diesel Div. of General Motors and is survived by his wife, Avis, and daughter.

Marion J. Kolasa, ME'40, of Royal Oak, on Sept. 10, 1993. Mr. Kolasa was a consulting engineer with Beckert and Heister, Inc. and earlier was regional manager for Westinghouse Electric. During his career, he also worked as an engineer for Detroit Edison, Chrysler, and GarWood Industries. A commander in the U.S. Navy during WWII, he served in the active reserves for 22 years. He is survived by his wife, Blanche, two sons, and two daughters.

Ralph E. Carlson, EE'41, of Eugene, OR. Mr. Carlson was retired from General Electric. He and his wife, Betty, were members of the Presidents Club.

Leslie Shoemaker, Eng'41, of McLean, VA.

Herbert R. Fortgang, AeE'43, of Van Nuys, CA, on Nov. 5, 1985. His wife survives.

William Vaisman, ME'43, of South Orange, NJ, in April, 1993

Melvin J. Anderson, CivE'46, of Mt. Pleasant, on May 20, 1993. Mr. Anderson retired from Darin and Armstrong contracting in 1972. He is survived by his wife, Inez, a son and daughter.

Seymour Sterling, EE'46, of Birmingham, on June 4, 1993. Mr. Sterling founded S. Sterling Co. in 1946, one of the largest manufacturing representatives in the Midwest, with offices in six states handling 32 product lines. It became Comtel Corp. in 1968. In 1975, he founded Sterling Technologies which made engine control systems and instrument panels for heavy trucks. He also was involved in developing missile guidance systems, test equipment for automotive quality control, and

digital displays. Mr. Sterling received Lawrence Tech's Alumni Achievement Award in 1963. Surviving are his wife, Shirley, four sons and two daughters.

Norman T. Kehoe, EE'49, of Stanwood, MI on Dec. 2, 1991. Mr. Keehoe's career was in the tire industry — 24 years at Uniroyal as a field engineer and then with Firwood Manufacturing as a sales engineer. He is survived by his wife, Jean Mary, three sons and two daughters.

Kurt W. von Gruben, ME'48, of Port St. Lucie, FL, in 1987.

Theodore F. Lapinski, ME'48, of Farmington Hills, on Dec. 27, 1992. Mr. Lapinski worked for Ford Motor Co. for 38 years, retiring as a design engineering manager in body engineering. After retirement, he worked for the JH Corp., doing creative design and art projects. He is survived by his wife, Carlin, a daughter, and three sons

Frederick G. Krueger, ChE'49, of Livonia. Carl A. Lofstrom, IE'49, of San Jose, CA, on Oct. 27, 1992. Survived by his wife, Betty.

Melvin L. Rauch, ChE'49, of Perris, CA. He was a chemical engineer retired from Raytheon Co.

Edwin F. Zarend, ME'49, of Livonia. He was retired from Ford Motor Co.

Gerald T. Calladine, EE'50, of Dearborn.

R. Paul Engle, ArE'50, of Farmington Hills, Nov. 18, 1993. Mr. Engle was retired from the National Bank of Detroit where he was vice president and director of the property management and purchasing division. His wife, Norma, writes that "Paul was very proud of his affiliation with Lawrence Tech and he recommended many young men to attend, feeling that their education could not be surpassed at any other institution. Mrs. Engle also notes that Paul was very proud of his participation on the fencing team, winning a gold medal in 1949 at the Epee tournament. Mr. Engle received the University's Alumni Achievement Award in 1972.

Harold H. Helms, BA'50, of Madison Heights.

Walter Lobur, EE'50, of Clawson, on Apr. 13, 1993. Mr. Lobur was a research engineer and owner of E.R.M., Inc. He served in the Army Air Force during WWII.

Frank F. Moderacki, IE'50, of LaVale, MD, on Mar. 26, 1992. Mr. Moderecki was employed with the University of Maryland, College of Engineering. Among his responsibilities was development of the technology extension service for the university, providing resources to the industrial community. He received numerous state and national awards for his work, according to his wife, Edith, who survives, along with two sons.

Louis Sibal, ME'50, IE'52, of Union Lake, on Dec. 1, 1992. Mr. Sibal was retired from Rockwell International and is survived by his wife

David W. Talbert, BA'50, of Owosso, on May 3, 1993. A WWII Army veteran, Mr. Talbert cofounded the Phomat Corp. in 1957 and was recently employed with Fotofax. He is survived by his wife, Patricia, and three children.

Walter J. Berklich, Eng'51, of Leonard, in 1984.

Kendall E. Kirsch, BA'51, of Berkley, on Jan. 19, 1993. Mr. Kirsch retired as a project coordinator for Blue Cross. Earlier, he was a buyer and sales manager for the J.L. Hudson Co. A Navy veteran of WWII and Korea, Mr. Kirsch is survived by his wife, Sylvia, and a daughter.

Harold J. Crutchfield, ME'52, of Burton, MI, on Feb. 20, 1992. His wife, Altha, writes that Mr. Crutchfield was a "proud graduate of Lawrence Tech. He transferred there because he loved mechanical things — his main interest in his life except for his family." He was a retired General Motors engineer.

Oscar Mittelstaedt, ChE'53, of Royal Oak, on Oct. 18, 1993. Mr. Mittelstaedt was an emissions developmental engineer who worked at Chrysler Corp. for 38 years before retiring in 1988. Survivors include his wife, Kay, two daughters and two sons.

Edmond R. Gionet, MT'54, of Royal Oak.

Milosav Jajich, CivE'54, of Birmingham, in 1981.

Kenneth Mason, IM'54, of Weirton, WV, in 1993. Mr. Mason received the Alumni Achievement Award in 1978 when he was director of safety for U.S. Steel Corp.

Thaddeus C. Romans, IE'54, of

Shelby Twp. in 1993. Mr. Romans was a retiree from General Motors and is survived by his wife, Genevieve.

John F. Schell, MT'54, of Bloomfield Hill, Dec. 9, 1992. Mr. Schell retired in 1963 as an engineer with Thompson Products. Earlier he worked for Ford Tractor and Implements. He is survived by his wife, Lucille, and a son.

George L. Cotter, ET'55, of Grosse Pointe, in 1993.

Curtis M. Meech, ET'56, of Farmington. Mr. Meech was employed by the Ford Motor Co.

Sheldon D. Freeland, MT'57, of Venice, FL, on Apr. 7, 1992.

Stanley Kotowski, IM'58, of Sun City, AZ on Dec. 17, 1992. Mr. Kotowski was a civil service employee, working in electronic engineering and contract management. Survivors include his wife, Rose, a son and daughter.

James E. Millis, ET'58, of Lompoc, CA, in Apr., 1993.

Theodore H. Moszynski, IST'58, of

Dorotha Lawrence, participant in University founding

Dorotha Howe Lawrence, 82, the last surviving participant in the founding, sixtytwo years ago, of what is today Lawrence Technological University, died February 6, 1993 at her home in Venice, FL, after a long illness

Mrs. Lawrence was predeceased by her husband, Dr. E. George Lawrence, in 1974. Dr. Lawrence was president of Lawrence Tech from 1934 to 1964.

Mrs. Lawrence was secretary of Lawrence Tech's original board in 1932 and was a charter member of the corporation at Lawrence Tech, which she continued to serve until her death. She was also a co-signer of the original Lawrence Tech articles of incorporation.

Born in Casey, IL, Mrs. Lawrence attended Indiana Central College 1928-30. At Lawrence Tech, as the president's wife, she organized many functions and activities during the University's early years and was a close confidant and aide to her husband, who suffered from multiple sclerosis during the latter half of his 32-year presidency.

"This great university is a monument to the foresight and devotion of the Lawrence family," said Dr. Perry Gresham, president emeritus of Bethany College (WV) and also a member of Lawrence Tech's governing board. "Her



life and her contributions here are worthy of long remembrance."

Dr. and Mrs. Lawrence moved to Venice, FL, from Southfield following their retirement in 1964. Locally, Mrs. Lawrence's activities included membership in the Women's City Club of Detroit 1943-60, helping to organize the Northwoods Garden Club in 1954, and serving as a United Way volunteer. She was also a member of the Lawrence Tech Founders Society, the University's highest contributor organization.

Mrs. Lawrence is survived by a sister, Genevieve Montgomery. \square *BJA*

Plymouth, on May 23, 1993. Mr. Moszynski was retired from Unisys Corp. Survivors include his wife, Dorothy, and a son.

Edgar Q. Venney, BT'58, of Madison Heights.

Gerald E. Jesuale, ME'57, EE'59, of Sterling Heights, on Dec. 28, 1983.

Gerald J. Spindler, IM'59, of Warren, on Dec. 24, 1992. Mr. Spindler was a senior accountant for Allstate Insurance. He is survived by his wife, Mary Ann, a daughter and two sons.

James P. Brown, IM'60, of Berkley, on Aug. 28, 1993.

Robert W. Garrison, ET'60, of Glendale, AZ, on May 10, 1990.

Bernard J. Gauthier, CivE'60, of Winter Park, FL, on June 14, 1993. Mr. Gauthier was an architectural engineer with Giffels and Associates for 30 years prior to retirement in 1987. He served in the Navy during WWII and in the Air Force and was awarded the Purple Heart. Survivors include his wife, Virginia, four sons and three daunthers.

Fenwick S. Geggie, MT'60, of Birmingham, on Apr. 21, 1993. Survivors include his wife.

Jacob J. Sokolowski, ME'61, of Riverview, on Jan. 26, 1993. Mr. Sokolowski was retired from BASF Corp. and a member of the Presidents Club. Shirley A. Stewart, IST'62, of Farmington, on Dec. 2, 1991.

Robert W. Jensen, MT'64, of West Bloomfield, on Sept. 7, 1993. Mr. Jensen was retired from World Wide Financial and earlier had been a mechanical and sales engineer and self-employed builder. He served in the Army during the Korean War. Survivors include his wife, JoAnn, a daughter and son.

Carleton Dawson, IM'66, of Brighton.

Jun Kojima, MT'66, of Preston, MS, on Apr. 11, 1993.

Edward J. Valentine, ME'67, of Ft. Wayne, IN. He was retired from Ford Motor Co.

James R. Wood, ME'67, of Detroit, in Dec. 1992.

Richard C. Russell, IM'69, of West Bloomfield, on June 15, 1993. Mr. Russell was an accountant for Ford Motor Co., working in the central accounting and control division for 20 years. He served with the Army Reserves during the Vietnam War. Survivors include his wife, Cecilia, a son and two daughters.

Robert A. Stehlin, ET'69, of Wyandotte, in 1990. Survived by his wife. Ira R. Jannett, IM'70, of Parkland, FL. Survivors include his wife, Kathy.

Everett J. Raymond, ET'72, of Clawson, on Oct. 22, 1992. Survivors include his wife and daughter.

Ronald M. Yura, IM'72, EE'87, of Detroit in 1991.

Warren P. Lamb, IST'73, of West Bloomfield, on May 14, 1993. Suvivors include his wife, Elaine.

S.E. Kaplowitz, IST'75, of Livonia.

Timothy A. Meert, Ph'75, of Bay St. Louis, MS, on Feb. 3, 1993. After receiving his doctorate in solid state physics from Wayne State University, Dr. Meert worked as a physicist for the Naval Research Laboratory, Stennis Space Center. Survivors include his wife, Julie Wenders-Meert.

Timothy J. Rosiak, Ar'78, of Jacksonville, FL, in Sept. 1993. He was employed by the Haskell Co. Mr. Rosiak's survivors include his brother, Fred, EE'71.

Renda M. Tosuner, Ar'84, of Ann Arbor, in Dec. 1992. He formerly worked for the architectural firm of Hobbs & Black. According to an article in the *Bay City Times*, Mr. Tosuner died while on a private mission to rescue orphans in Bosnia. Survivors include his wife, Handan, and two daughters.

Keith B. Stellwagen, CE'85, of Strongsville, OH, on Mar. 16, 1993. Mr. Stellwagen was a management information systems consultant for Roadway Logistics in Akron. Survivors include his daughter.

Sam Lewis, long-time accounts receivable coordinator

Samuel F. Lewis, 66, who retired June 30, 1993 after 24 years with Lawrence Tech's Business Affairs Office, died July 13 of complications from a long illness. Mr. Lewis was a well known campus figure who, with a ready smile and fatherly counsel, was popular with students despite his primary responsibility — assur-



Lewis

ing that deferred tuition payments and other collections were made on time.

Earlier, Mr. Lewis's 21 years in the U.S. Air Force included service during the Korean and Vietnam Wars. He held a number of medical care positions and later was a medical administrative supervisor and NCO in charge of the Pacific Aeromedical Evacuation operation in Japan. He was also responsible for budget preparation of Grand Forks Base Hospital, and Camrahn Bay (Vietnam) Air. Force Hospital.

Mr. Lewis was a leader in community housing cooperatives in the Utica area for many years and served as a director of the National Association of Housing Cooperatives for eight years. He was Utica's 1971 Michigan Week chairman and a member of the Shelby-Utica citizen's research committee for consolidation. He served on the city's local officers compensation board and was twice a candidate for Utica city council. He was also a former district commissioner for the Clinton Valley Council, Boy Scouts of America.

Mr. Lewis is survived by his wife, Delores, and three children. \square *BJA*

Continuing Education and Professional Development opportunities

Grand Manors and Glorious Gardens of Great Britain July 22-31, 1994

A tour not to be missed by those interested in magnificent British residential architecture and the lifestyles of the rich, famous, and infamous! Enjoy 10 days in the grandeur of Brighton, Brentford, Bath, Gloucester, Chipping Camden, Stratford-upon-Avon, and much more with your guide, Gordon P. Bugbee, an award-winning professor of architecture and cultural history at Lawrence Tech. \$1495 includes land transportation, accommodations, some meals and more. Airfare and single supplement, extra.

Personal Money Management and Financial Planning

(Call for dates in Southfield and Livonia.)

"C++" Programming Language Mar. 29, 1994

Architectural AutoCAD 12.0 for Windows: Intermediate, Apr. 6-27;

Advanced, May 11-25

Bandwidth and Public Policy National Teleconference

Apr. 14, 1994

Americans With Disabilities Act Seminar (Call for May date in Grand Rapids) For information on these and other offerings of Lawrence Tech's Division of Continuing Education and Professional Development, phone 1-800-CALL-LTU, ext. 4050.

Limited edition print benefits courtyard

An original Richard Rochon lithographic print, "A Vision For the Pellerin Courtyard," signed and numbered by the artist, is being offered for sale to support the redesign of the courtyard in the College Architecture and Design.

This edition of 250 prints, professionally matted with museum quality 100 percent rag board, is available for a limited time to friends of the College and alumni. The special prepublication price is \$175 through April 30. Orders at the prepublication price are being taken in the College of Architecture and Design. Prints will be available in early April.

Publication price of \$250 (not including matting or mounting) is effective May 1. Proceeds from the sale will be used for the construction of an outstanding courtyard, named after Earl W. Pellerin, founding dean of the College, in the architecture building. The new courtyard will provide space for exhibitions, studios, reflection and relaxation.

For further information contact Harold Linton, assistant dean in the College of Architecture and Design, at (810) 356-0200, ext. 2864. \square

1930-39

Julius Goldman, EE'32, just doesn't quit. These days, although retired as an engineer, he tutors math students at Oakland Community College. One student comes back to learn from him although she has transferred to another college. "He's that good," she says.

1950-59

Howard Mordue, Phar'56, is semiretired as a consultant to several pharmaceutical firms. He donated his extensive collection of 19th century medicines and paraphernalia to Wayne State university in 1976. The collection forms the University's Pharmuseum,

housed in the College of Pharmacy and Allied Health Professions' Shapero Hall. Mordue has also shared his expertise and artifacts with the Smithsonian, the Detroit Historical Museum, and Disneyland. For several years he ran an old-time pharmacy at the Michigan State Fair.

1960-69

Paul Stamatakis, Ch'67, is superintendent of the Warren Consolidated Schools. He had previously directed the Dearborn Heights District 7 schools for eight years, having worked in the Hamtramck school system for almost 20 years before that. He is credited with turning around the financially troubled Dearborn Heights system with a "team concept" of management. His first goal in Warren was to work out a teacher contract, a task he says is "always difficult."

1970-79

Shirley E. Schwartz, Ma'78, is a staff research scientist at General Motors. As part of her work on engine wear and engine-oil degradation, Schwartz developed GM's automatic oil-change indicator system. She spoke to Pontiac junior high school students last year encouraging girls to excel in math and science. In addition to her DIT degree, she holds a B.S. in chemistry from U of M, a master's in biochemistry and a Ph.D. in physical chemistry from Wayne State.

1980-

Ralph R. Ives, Bus. Tech'81, of Fenton, is plant manager at Kelsey-Hayes in Brighton. He has been with the company for 20 years. Kelsey-Hayes is a major worldwide automotive supplier of brake systems and electrical control devices.

Michigan Supreme Court Justice Robert P. Griffin, of Traverse City, who received an honorary degree from DIT, was the keynote speaker at commencement exercises at West Shore Community College in Ludington in May, 1993. He told grads about two kinds of leaders — "those interested in the flock, and those interested in the fleece." A World War II Army veteran, Justice Griffin holds a bachelor's degree from Central Michigan, and

a law degree from the University of Michigan. He served in the U.S. Senate and House, and was appointed to the Michigan Supreme Court in 1986. He and his wife Marjorie Jean have four children.

New Detroit Mayor **Dennis Archer** attended DIT, studying psychology. His Alpha Phi Alpha fraternity brothers were a big part of his victory celebration at the Westin Hotel. Larry Boatwright, president of the Detroit alumni chapter, paid homage to Archer's "historic accomplishment of being the first Alpha man or any black Greek letter member to ascend to the chief executive position of the city."

DIT IN MEMORIAM

Frederick W. Arnold, Sr., Phar'34, of Berkley, July 20, 1993. Mr. Arnold worked in various Birmingham pharmacies from 1935-88. In 1979 he began the senior citizen "Elder Program" and in 8 years he spoke on the topics of health and medicine to more than 8,000 seniors in 160 programs. He was also a Boy Scout leader and coach, coordinated the Oakland County "Health-o-Rama" for many years, and most recently taught elementary students about poison prevention. Survivors include a daughter and two sons.

Arnold R. Gabel, Ch'35, of Port Charlotte, FL, on Mar. 28, 1993. Mr. Gabel was a loving husband and father to his wife, Karan, and three children, who survive him. He had worked as a chemist for the Dow Chemical Company and the Michigan Department of Transportation.

Milford A. Saunders, Acct'37, of Columbia, SC, on Dec. 19, 1992. Mr. Saunders held several positions with the former American Motors Corp. and retired in 1971. He served in the Navy in WWII. Survivors include a son.

Douglas W. Booth, BArts'39, of New Port Richey, FL, Nov. 11, 1993. He was founding partner of the Waterford Twp. law firm, Booth, Patterson, Lee, Need, and Atkinson. He retired in 1974. Survivors include his wife, Dorothy, a daughter and son.

Hugo E. Ristow, EE'39, of Superior Twp., on Oct. 27, 1993. Mr. Ristow was formerly a research engineer at the University of Michigan, working at the Willow Run labs and ERIM. He is survived by his wife, Jeanne, and three children.

Constantine (Jim) Civan, ChE'43, of Southfield, Oct. 14, 1993.

Leonard K. Kane, ME'48, of Wetmore, on June 16, 1993. Mr. Kane retired from the Detroit Edison Co. in 1977 as assistant general manager of construction and maintenance. Survivors include his wife, Helen, two daughters, and two sons.

Ralph E. Meyer, Acct'48, of Lansing, on Sept. 30, 1993. Mr. Meyer was a former public school teacher and later worked for the Michigan Department of Education for 21 years, retiring in 1986. Survivors include his wife, Mary, and four children.

Eugene R. Bonkowski, Phar'49, of Detroit, on Feb. 13, 1993. Mr. Bonkowski was a neighborhood pharmacist who later became head of the pharmacy department at Herman Kiefer Hospital. He helped to develop the hospital's methadone program and retired in 1989. He had a reputation for helpfulness: financing student tuitions, getting families out of poverty, helping people break drug habits, and aiding senior citizens and shut-ins. A Detroit Free Press obituary stressed Mr. Bonkowski's good nature, and noted that he died of complications from a heart attack suffered while clearing neighbors' sidewalks.

Anthony H. Andrews, Phar'50, of Northville, on Nov. 5, 1993. He owned three Sav-Mor pharmacies in Belleville, Garden City, and Detroit, retiring in 1991. Mr. Andrews served in the Army during WWII. Surviving are his wife, Vivian, and several stepchildren.

Robert L. DeLanoy, Phar'50, of West Bloomfield Twp. on Dec. 3, 1992. He was a co-owner of the Checker Pharmacy in Westland, a position he worked up to after starting out as a stockboy. Survivors include his wife, Helen, two sons and a daughter.

Edmund Vig, ArE'51, of Allen Park, on Dec. 11, 1992. He retired in 1985 as a General Motors production supervisor. He had been with GM for 42 years. Mr. Vig served in the Army Air Corps in WWII, receiving the Distinguished Flying Cross for his actions during a bombing raid over Germany. Survivors include his wife, Geraldine, and two sons.

Thomas R. Standley, SocS'53, of Detroit, on Oct. 22, 1993. He was a retired executive with the Ford Motor Co. and is survived by four daughters.

Edwin E. Sarowski, ME'56, of Canton Twp., on Jan. 12, 1993. Mr. Sarowski served in the U.S. Army in World War II, and worked as an engineer for Ford for 30 years after graduating from DIT. His wife, Genevieve "Irene," and two sons survive him.

Edward F. Petteys, BA'62, of Royal Oak, on Dec. 9, 1993. Mr. Petteys was a Michigan Consolidated Gas Co. retiree and was a past president of the Michigan Archeological Society. He was a charter member and treasurer of the Michigan Association of Retarded Citizens and was active in the PTA, Cub Scouts, and Cranbrook Institute of Science. Surviving are his wife, Joan, a daughter and three sons.

Paul Colandrea, '64, of Livonia, in Feb. 1992.

Michael G. Udvardi, BA'67, of Redford, in 1989. Mr. Udvardi was employed by the Detroit Edison Co. His wife survives.

J. Edward Shepherd, BArts'70, of Detroit, on May 7, 1993. Mr. Shepherd retired from the Wayne County-Detroit Metro Airport Fire Department, where he was a lieutenant, in 1985. He was a Korean War veteran and is survived by his wife, Estella, and three children.

William J. Gibb, BArts'72, of Royal Oak, on June 30, 1993. Mr. Gibb was a computer draftsman for General Motors. Survivors include his wife, Peggy, and two daughters.

Ferdinand R. Boos, of Grosse Pointe Woods, on Oct. 9, 1993. Dr. Boos was a teacher and administrator at Detroit Institute of Technology for 30 years and was widely recognized and admired as an inspiration to generations of aspiring doctors, pharmacists, and chemists.

"He was extremely influential in the education of literally thousands of young men and women,"
Robert Ellis, Lawrence Tech
provost and former president of
DIT, told the *Detroit Free Press*.
"His impact on the college was so
profound . . . he was one of the
people just completely identified
with DIT" before it closed in 1981.

Dr. Boos received a doctorate from the Catholic University of America. He is survived by his wife, Aline, a daughter and two sons.

Margery Jean Colburn, of Rochester Hills, on Mar. 20, 1993. Dr. Colburn served on the DIT faculty where she directed an innovative program for new students. For the past 15 years she held various student service position with Oakland University. Dr. Colburn received her Ph.D. in English from Wayne State University.

Lifetime giving recognized

ristotle wrote, "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." To thank the many noble individuals who have made the hard choices of philanthropy through an investment in Lawrence Technological University, the following rosters are published.

Founders Society praises those who have achieved total contributions of \$10,000 or more.

The E. George Lawrence Circle honors those whose cumulative giving to the University totals \$5,000 to \$9,999.

The Presidents Club recognizes life-time giving of \$2,500 to \$4,999.

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.

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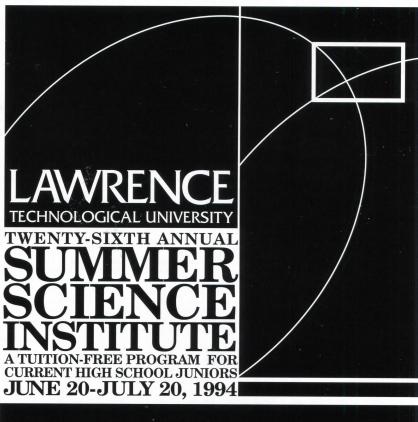
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Two outstanding opportunities for high school juniors: SUMMER WRITING INSTITUTE SUMMER SCIENCE INSTITUTE

The fifth annual **SUMMER WRITING INSTITUTE**, June 20 - July 15, offers talented Detroit area high school writers an intensive workshop in poetry and fiction with published authors. Sessions meet each morning, Monday through Friday, on Lawrence Tech's campus. One session in poetry, one in fiction, and one individual consultation give students the creative workout of their lives. Afternoons are spent writing. The group gives a public reading at the end of the Institute, and publishes a journal of their work. Tell your talented young friends about this chance to hone their skills! Tuition is free. Applications are due by May 16 with a \$35 registration fee. Students should contact their high school English department chair, guidance office, or Prof. Marilyn Shapiro at (810) 356-0200, ext. 3520 for more information.

The **SUMMER SCIENCE INSTITUTE** brings together top Detroit area high school juniors who love physics, chemistry, math, and computer science. Together, they attend challenging lectures by Lawrence Tech faculty in the mornings, with related work in laboratories in the afternoons. The students enjoy free access to Lawrence Tech computer equipment, classrooms and labs, and recreational field house. Applications are due by April 22, 1994. Tuition is free — the only charge to students is a \$60 registration fee. Tell your scientifically-minded high school junior about this program. For more information, students may contact their high school math or science chairperson or guidance office, or call Dr. Maria Vaz at Lawrence Tech at (810) 356-0200, ext. 3600.





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T H E B A C K P A G E

Lawrence Tech's
Response took fifth
place overall in the
1993 HEV competition
while garnering first in
such key areas as most
manufacturable, best design,
and safety. How will we fare
this year? Come to campus in
June and see!



CHARGE!

North American Hybrid Vehicle Challenge on campus in June

ome of the most technically advanced automobiles in the world will compete June 13-20 on the Lawrence Technological University campus! The University has been chosen by the Clinton Administration to host the 1994 Hybrid Electric Vehicle Challenge, expected to draw over 40 student teams from across North America along with several thousand engineers, scientists and other visitors.

The competition, between Lawrence Tech and other top university teams, will recognize the vehicles that most successfully combine internal combustion and battery power.

This type of vehicle, called a "hybrid" or "HEV," unites the best of both forms of propulsion, and is widely believed to be the most viable solution to reducing vehicular pollution in urban areas.

In cross-country mode, a hybrid car is powered by an internal combustion engine, which also charges the batteries; in populated areas a microprocessor smoothly switches all systems to electrical power, eliminating undesirable airborne emissions.

Lawrence Tech's student team took fifth place in the 1993 competition, the first year the Challenge was held. The University captured first place in such key categories as most manufacturable, best design, and excellence in safety engineering. Lawrence Tech's car, the *Response*, was one of only 12 vehicles built from the ground up — others were Ford Escort conversions.

More than 300 colleges and universities

Senator Carl Levin (left) takes a hybrid ride with Prof. Charles Schwartz.

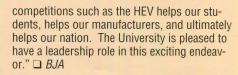
across the U.S. and Canada were originally invited to compete. Only 30 showed up with cars.

Charles Schwartz, faculty advisor to both the '93 and '94 teams, says *Response II* boasts a number of improvements, among them: a lighter, sturdier aluminum frame; a sleek new aerodynamic body made up of a sandwich of graphite fiber over foam; improved power train efficiency; and better ride and suspension.

"The first car did everything we asked of it and could be on the road today," Schwartz says. "The new car will be lighter, more efficient, and even more techologically advanced."

Sponsors of the 1994 HEV Challenge (in addition to Lawrence Tech) include the U.S.
Department of Energy, Society of Automotive Engineers, Natural Resources Canada, and Saturn Corporation. Ford, (the 1993 host), Detroit Edison, and a variety of other top technological firms and automotive suppliers are also involved.

"Lawrence Tech is proud to serve as host for this important competition and to showcase the contributions being made by a new generation of engineers," says Charles M. Chambers, Lawrence Tech president. "Encouraging teamwork and applying new technology through



Participate!

You're invited to campus during the Hybrid Electric Vehicle Challenge June 13-20 to watch the competition unfold! Complete events schedules will be mailed to all alumni late in May. Others can receive a copy by calling 1-800-CALL-LTU, ext. 2200, after May 20.

In the meantime, Lawrence Tech's team needs your help in the form of cash contributions and donations of materials: the 1993 HEV entry cost some \$40,000, in addition to some 20,000 hours of work by the student team! Other Lawrence Tech student teams compete internationally with Formula, mini-Baja, and super-mileage vehicles.

Wayne Brehob, chairman of mechanical engineering, student team members, and faculty advisors have information on specific needs. Phone Brehob at 1-800-CALL-LTU, ext. 2553.

Lawrence Tech also seeks volunteers to help on campus during the HEV Challenge June 13-20. Judges, track officials, guest relations, parking aides, and many other posts need to be filled. Hours are flexible. To register as a volunteer, phone Louise Salmon at 1-800-CALL-LTU, ext. 2000.