Massachusetts Institute of Technology

TECH TALK

August 6, 1975
Volume 20
Number 3

Cause of Tang Hall Fire Still Under Investigation

MIT is continuing to investigate a late-morning fire July 22 in the P.Y. Tang Residence Hall that resulted in the death of a 24-year-old graduate student.

The student, Renato C.V. Ribeiro, a Ph.D. candidate in physics from Sao Paulo, Brazil, died at Massachusetts General Hospital on July 27 from burns and respiratory injuries.

The fire, cause unknown, was confined to the 19th-floor corridor of the 24-story dormitory at 550 Memorial Drive. It houses about 400 unmarried graduate students.

Ribeiro, whose apartment was on the 19th floor, was found unconscious, in his pajamas, in front of the elevator doors. Authorities believe he was awakened by the fire alarm, went into the hallway and could not get back into his room.

Three others on that floor stayed in their rooms, which have fire-resistant doors, and eventually were led to safety along with 15 others from upper floors by Cambridge firefighters. One 19th floor resident reported he had stepped out of his room but was driven back by heat and heavy, noxious smoke.

Two MIT employees—Charles A. (Scotty) Thomson, 59, the building manager, and Manuel F. Sopas, 49, the maintenance mechanic—were injured when they took an elevator to the 19th floor at the sounding of the alarm at about

(Continued on page 5)

WELCOME BACK, CLOCK. A familiar face—missing from the main lobby for several weeks—is back in place, greeting those who enter with the correct time. Many from Physical Plant took part in overhauling the clock and refurbishing the entrance to the main corridor, including Roland Davis of the electrical shop, shown setting the freshly goldleafed hands. The clock was presented to MIT in 1945 by the Lowell Institute School in memory of Abbott Lawrence Lowell.

Five MIT Scientists to Participate In Viking Missions to Mars

By BARBARA BURKE
Staff Writer

Five MIT scientists will take part in studies conducted by NASA's two Viking spacecraft, the first of which will be launched next Monday (Aug. 11) to land instruments on Mars next July 4.

The scientists—chemist Klaus Biemann, biologist Alexander Rich, astro-physicists Irwin I. Shapiro and Robert Reasenberg, and geophysicist M. Nafi Toksoz—will participate in the search for organic compounds on Mars; the search for life on Mars; the study of the Martian gravity field and atmosphere; tests of general relativity; and the study of Marsquakes and other ground motion.

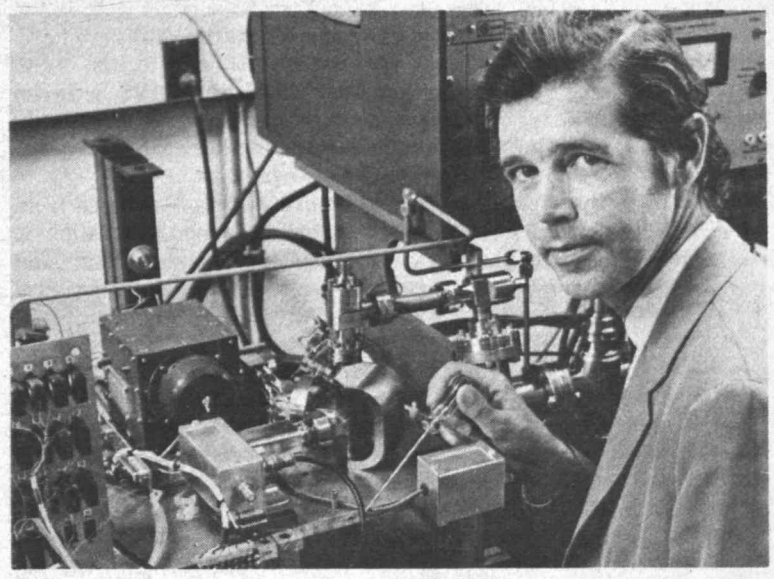
Professor Biemann of the Department of Chemistry is leader of the Viking Molecular Analysis team, which will analyze the composition of the atmosphere at the surface of Mars, and will search for—and identify—organic compounds in the surface layer.

Organic compounds (compounds containing carbon) will be separated from inorganic substances by heating. (Most organic compounds vaporize at much lower temperatures than inorganic substances.) The compounds will then be separated in a gas chromatograph, and analyzed by an attached mass spectrometer, carried to the Mars surface aboard the Viking lander. The technique was previously developed at MIT by Dr. Biemann and his associates.

If organic compounds are found on Mars, they could have been formed either by living systems, or by purely physical processes.

The search for life on Mars will be conducted by the Active Biology team, which includes Dr.

(Continued on page 5)



Dr. Klaus Biemann, professor of chemistry, demonstrates a model of the gas chromatograph and mass spectrometer which will be carried to Mars aboard the Viking spacecraft, to search for organic compounds. Dr. Biemann is leader of the team responsible for the investigation.

India May Cause China's Earthquakes

India may be slowly shoving China eastward out over the ocean floor, according to two geologists at MIT.

They suggest that the constant northward pushing of the Indian subcontinent against Eurasia is squeezing China eastward over the Pacific Ocean floor, at a rate of a few centimeters a year.

This sideways movement could account for the complex distribution of earthquakes in China, according to Peter Molnar, assistant professor of geology in MIT's Department of Earth and Planetary Sciences, and Paul Tapponier, who was a visiting research fellow at MIT, and has since returned to France. They discuss their theory in the August 8 issue of *Science* magazine.

Earthquakes in China puzzle geologists: they don't fit very well into the popular theory of "plate tectonics," which seems to explain ocean earthquakes extremely well.

Earthquakes beneath oceans

(Continued on page 4)

Telephone Costs Soar

Telephone costs, which threaten to get out of hand, are the subject of a series of recommendations and seminars announced recently by Chancellor Paul E. Gray.

Costs for phone services have risen 25 percent over the past two years, long distance rates rose 35 percent this spring, and an anticipated rate increase will boost MIT costs another 30 percent this fall, the chancellor said.

"Without strong restraints, the cost of telephone service at MIT will jump from $2 million in 1974-75

(Continued on page 5)

Gurney Play Lauded at BU

"The thoroughly satisfying production of 'Scenes From American Life' by A.R. Gurney, Jr., being staged by the Boston University Summer Repertory Theater, may be the best thing you'll see this summer in Boston."

Ray Murphy of the *Globe* staff began his glowing review of Professor Gurney's 1970 play, with that paragraph. More high praise for this first Boston production has come from Chuck Kramer of WCVB-TV and Carolyn Clay of the *Boston Phoenix*.

Tickets for remaining performances—tonight (Aug. 6) as well as Aug. 12, 14, and 16—are available to MIT community at half price (for $2.00 to $3.25). Reservations can be made by calling Helen Rees at 353-3321 or Sandy Brown at 353-3391. The theater is at 264 Huntington Ave., Boston across from Symphony Hall. Curtain time is 8pm.

Coal Gasification Poses Economic Questions

Producing synthetic high BTU gas through the coal gasification processes currently at the pilot-plant stage in this country offers little promise of economic reward, two members of MIT's Energy Laboratory have concluded.

"Present gasification technologies already at the development stage appear to offer little promise," said Ogden H. Hammond and Martin B. Zimmerman. Their article on the economics of coal-based synthetic gas is published in the July-August issue of Technology Review, MIT's magazine of science and technology.

"It would appear that as far as producing an economically attractive coal-based synthetic fuel, we are still at a stage where money would best be spent on research rather than large-scale development projects."

Hammond, lecturer in the Department of Chemical Engineering, and Zimmerman, research associate at the Sloan School of Management, said present government policies call for development of several coal gasification and liquefaction processes.

"Much has appeared about the technical feasibility of these processes—or the lack of it—but there has been little examination of the expected economic rewards if the processes prove technically feasible," they said.

Hammond and Zimmerman argue "that for space heating at least one alternative—the heat pump—may have a lower real cost than the gasification of coal."

The MIT researchers do not say that heat pumps—in use since the 1950s in such appliances as air conditioners and freezers—are necessarily desirable. "We are simply saying that they are less undesirable than the production of coal-based synthetics for space heating.

"And since space heating will be one of the largest potential markets for synthetic gas, this amounts to a recommendation that careful thought is in order before further investment is made in the type of coal-based synthetic plant currently at the pilot plant stage."

The gasification route followed by the processes now at the development stage is not the only one possible, "nor does it appear to be the best," the MIT researchers said. It is, however, a sure method, they said, "one well adapted to the needs of World War II Germany where it originated."

Among the different approaches under investigation at MIT are:

—Rapid devolatilization in a hydrogen atmosphere, a project being worked on by Dr. Jack B. Howard of the Department of Chemical Engineering.

—A coal-iron-steam process, on which Dr. Hammond is working.

Other processes are under investigation industrially.

"All of these processes have their own sets of difficulties and it will be several years before their worth can be estimated," Hammond and Zimmerman said. "Upon initial analysis, processes which use a more subtle approach appear to be favored economically.

"The key elements that make present processes so expensive are the high temperatures and pressures required and the expensive catalytic methanation with the inherent inefficiencies inplied in the generation of low temperature heat while requiring high-temperature heat inputs."

Hammond and Zimmerman say their analysis leads them to the conclusion that the heat pump is more desirable economically than synthetic gas despite the fact that they made the comparison assuming several conditions highly favorable to synthetic gas.

Music Notes

CAVS' Amacher to Create Work for Buffalo Center

By SALLY M. HAMILTON
Staff Writer

Composer Maryanne Amacher, a fellow at the Center for Advanced Visual Studies, has been commissioned by the Center for Creative and Performing Arts in Buffalo to create a special work to commemorate the Center's tenth anniversary.

Ms. Amacher creates experimental musical compositions that explore the direct and indirect use of environmental sound in its relation to acoustical and architectural space.

The commissioned work is a joint enterprise for Ms. Amacher and an international group of musicians in residence at the Buffalo Center who will premiere the work this fall at the Albright-Knox Art Gallery in Buffalo.

Ms. Amacher was previously associated with the Center as a composer in residence in 1967-68, when it was emerging as one of the foremost institutions dedicated to the performance and composition of "new music" under its director, Lukas Foss, the prominent composer and conductor.

In February, Ms. Amacher made the first of a series of recordings for the commissioned work with a group of eight musicians in Buffalo. In May, a second collection of recordings was made in the anechoic chamber at MIT's Building 20 with Eberhard Blum, flutist with the group, and William Crosby, sound recordist.

In addition to recording in the chamber, Blum gave two concerts at CAVS which included the performance of a sound environment work by Ms. Amacher and Mr. Blum entitled *Incoming Night: Blum at Ocean Pier 6, Boston Harbor* which was also taped and is incorporated into the commissioned work.

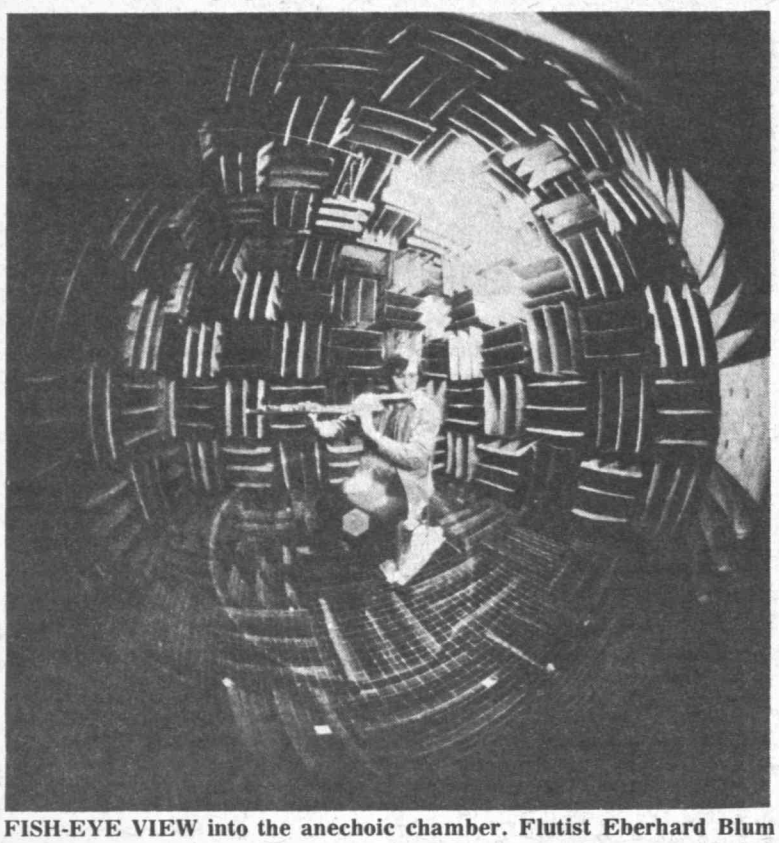
The first hour of *Incoming Night* consisted of selections of prerecorded music from Ms. Amacher's music collection, *Life Time and Its Music*. Later "live" sound from the waterfront was picked up, and Blum, who was on the pier, performed on the flute.

Mr. Blum's work in the anechoic chamber and earlier performance of *Incoming Night* are illustrative of Ms. Amacher's present interest in spontaneous musical passages that respond to the "sound" of specific acoustical or environmental space.

For "hearing" such spaces, she frequently relies on a sound installation, located either indoors or outside.

Incoming Night uses such a device. An open microphone has been in place for two years on the sill of an open window on Pier 6 in Boston. From this site the microphone relays back to Ms. Amacher's studio at CAVS a broad spectrum of distant and immediate sounds that can be heard clearly over time.

Some of her work derived from the harbor sound installation is familiar to MIT audiences. Last year *Hearing the Space, Day By Day, 'Live'* was part of the Hayden Gallery exhibition "Interventions in Landscape."



FISH-EYE VIEW into the anechoic chamber. Flutist Eberhard Blum plays to silence, as part of recent work on Ms. Amacher's composition for the Center for the Creative and Performing Arts in Buffalo.

—Photo by William Crosby

Ms. Amacher recently started another commissioned piece, this one for the National Endowment for the Humanities. The work, to be completed this month, is for the Bicentennial Theater's production of Tennessee Williams' *Sweet Bird of Youth*. The play will be presented in Boston in September and later in New York City and still later at Washington D.C.'s Kennedy Center for the Performing Arts, the Bicentennial Theater Company's home.

Other recent works by Ms. Amacher have included performances and sound installations at the California Institute of the Arts, the Chicago Art Institute, the Museum of Contemporary Art in Chicago, the Walker Arts Center in Minneapolis and the Institute of Contemporary Art in Boston. Earlier this year her lastest work *Events 133 and 134* for the Merce Cunningham Company was premiered at the Company's studio in New York.

Women's Grant

The Center for Research on Women at Wellesley has received a $93,000 grant from the US Office of Education to support a series of eight workshops on "Expanding Work Options for Women."

Kodak Grant

MIT has received a grant of $6,000 from the Eastman Kodak Company to support graduate education and research in electrical engineering. The grant was one of 41 made to colleges and universities across the country as part of the company's educational aid program.

7 Assistant Professors Appointed

Seven assistant professors have been appointed to the MIT faculty, effective July 1, 1975. They are:

Zvi Body, for one year in the Sloan School of Management. Dr. Body received the BA degree in philosophy from Brooklyn College in 1965; the MA degree in economics from Hebrew University, Jeruselem in 1970; and the PhD degree in economics from MIT in 1975. From 1972 until the present, Dr. Body has been an instructor in economics and finance at the Boston University School of Management.

James W. Driscoll, for three years in the Sloan School of Management. Dr. Driscoll received the AB degree from Harvard College in 1966; the MBA from Harvard Business School in 1971; and the PhD from Cornell University in 1975. While at Cornell, he served as instructor in the New York State School of Industrial and Labor Relations. Dr. Driscoll's field of expertise is organizational behavior.

Frederick L.A. Grauer, for three years in the Sloan School of Management. Dr. Grauer received the BA degree in economics from the University of British Columbia in 1969; the MA degree in economics from the University of Chicago in 1972; and was scheduled to receive the PhD degree in finance from Stanford in June. In 1973, Dr. Grauer served as a consultant to the Institute for the Future.

Manohar U. Kalwani, for three years in the Sloan School of Management. Dr. Kalwani received the Bachelor of Technology degree in 1969 from the Indian Institute of Technology in Bombay, India; the MS degree in 1970 from Purdue University; and was scheduled to receive the PhD degree from Columbia University Graduate School of Business in June. While at Columbia, Dr. Kalwani taught business mathematics and computer porogramming.

Alcira G. Kreimer, for one year in the Departments of Urban Studies and Planning and Architecture and Urban Studies. Dr. Kreimer received the MA degree from the School of Architecture and Planning, University of Buenos Aires in 1966 and the PhD degree from Berkeley in June 1975. In 1967 she did postgraduate work at the Centre de Recherche d'Urbanism in Paris. As a practicing architect in Buenos Aires from 1968-70, Dr. Kreimer specialized in communication environments and multi-media events. She will teach environmental design.

Yue-Ying Lau, for three years in the Department of Mathematics. Dr. Lau received the SB degree in 1968, the SM degree in 1970 and the ScD degree in 1973, all in electrical engineering from MIT. He has been an instructor in applied mathematics at MIT since 1973. The author of several publications, Dr. Lau's field of interest is astrophysics.

Andrew Chi-Chih Yao, for three years in the Department of Mathematics. Dr. Yao received the SB degree in physics from National Taiwan University in 1967; the AM degree in 1969 and the PhD degree in 1972, both in physics from Harvard University. After spending a year as a research associate in physics at the University of California at Santa Barbara, he moved into computer science, and received the PhD degree in that field from the University of Illinois at Urbana-Champaign in June 1975. His research interests are in mathematical problems related to computer science.

Fellowships

Social Science

Two MIT faculty members are among 139 scholars to receive awards for research in foreign areas. They are:

Dr. Willard Johnson, professor of political science, for research in the Middle East and Africa on promoting Middle East Petro-Fund investments in Africa through studies of the possibility of increasing the project management skills of institutions that receive such funds.

Dr. Wayne Cornelius, assistant professor of political science, for research in Mexico on migration, rural underdevelopment and public policy. He will work in collaboration with Carlos Salinas de Gortari of the Ministry of Finance and Public Credit, Mexico City.

The awards were made under programs sponsored jointly by the Social Science Research Council and the American Council of Learned Societies, with funds provided by the Ford Foundation.

NATO

Two MIT faculty members have received NATO Senior Fellowships awarded jointly by the National Science Foundation and the Department of State.

Dr. Malcolm L. Gefter, associate professor of biology, will do research on cellular biology at the Pasteur Institut in Paris.

Dr. Harvey M. Sapolsky, associate professor of political science, will work at the Organization for Economic Cooperation and Development in Paris and at the University of Sussex, England.

Professors Gefter and Sapolsky were among 72 selected to receive awards out of a total of 232 applicants.

Obituaries

Rita D. MacMillan

Rita D. MacMillan, 56, of Cambridge, who was on a disability leave as a clerk at Graphic Arts since 1972, died on Thursday, July 10. Mrs. Macmillan, who joined the Institute in 1968, is survived by her husband, Joseph; a daughter, Mary Deacy, of Arlington; two sons, Joseph Jr., of Groton and John, of Lowell; and 10 grandchildren.

Margaret M. de Levin

Word was recently received from Emma M. Henderson, of Galveston, Tex., of the death in May of her mother, Margaret M. de Levin, 82, a former librarian at MIT for 31 years. Mrs. de Levin had been living in Santa Fe, New Mexico, since her retirement in 1958.

Earl S. Luther

Earl S. Luther, 81, of West Medford, who was a machinist at MIT from 1934 until his retirement in 1960, died Friday, August 1. Mr. Luther leaves his daughter Doris M. Luther of West Medford.

Student Death Ruled Suicide

Services were held at Doylestown, Pa., last week for Richard W. Cobean, Jr., 20, an undergraduate student and resident of Bexley Hall who was found dead in a basement corridor of the Fairchild Bldg. (Bldg. 36) Sunday morning, July 27. The Cambridge medical examiner ruled the death a suicide.

Water Main Is Boon to Gardeners

When an eight-inch water main was installed on MIT's West Campus last month to close the area's "utility loop" Westgate vegetable gardeners were delighted.

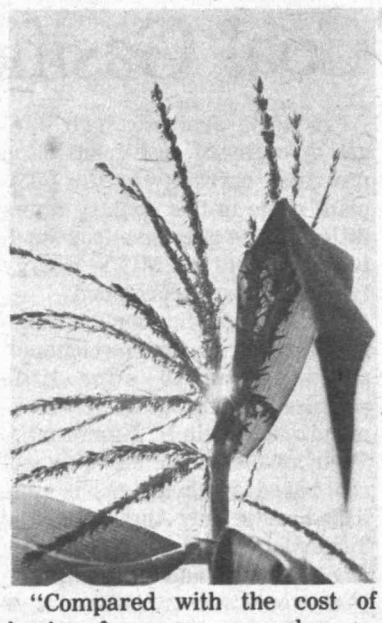
Previously they had to water their gardens by hand, carrying water from a 35-gallon tank supplied by Charles Thomson, manager of Westgate and himself one of the gardeners.

The new source has eased cultivation chores for the 24 campus-resident gardeners whose 8 x 12-foot plots are colorful with bean sprouts, zinnias, corn, salad greens, gladioli and Chinese cabbage.

A national poll reveals that 30 million Americans would garden if they had the land. So far at MIT, the supply of plots has kept up with demand, according to the Planning Office, which originated the program and assigns the plots.

"We tried a lottery system of assigning once, but it didn't work," Jean Poteete, administrator of the gardens for the Planning Office said. "The growing interest in gardening as a way of cutting supermarket food costs may force us to return to that method, but for now it's first come, first serve."

According to Steven Ehrmann, a Westgate resident, savings for the gardener amount to about $5 per hour of labor on the net return.



"Compared with the cost of buying frozen or canned vegetables, that's a pretty good yield for novice gardeners," he said.

Original turning over and mulching of the gardens was carried out by the Physical Plant grounds crew, but each gardener is responsible for watering, planting, fertilizing, fencing in and cultivating his or her own plot.

MIT gardeners are an individualistic lot. John R. Miller's plot, for example is pure corn, while Grace Chu's specializes in a variety of Chinese vegetables. Lettuce preferences go to the leaf variety which is easier and faster to grow. Tomatoes lead as everyone's favorite, but space savers like zucchini, radishes and tiny hot peppers fit nicely into the limited growing areas.

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Researchers Announce Cholesterol Breakthrough

Intravenous feeding radically lowers blood cholesterol levels in patients with critically high cholesterol levels, investigators at the MIT Arteriosclerosis Center and the Massachusetts General Hospital have shown.

The investigators do not know why intravenous feeding lowers cholesterol levels, but it may have to do with the fact that food absorbed intravenously bypasses the liver.

"The same food eaten by mouth gives an entirely different result," said Robert S. Lees, MD, professor of cardiovascular disease in the MIT Department of Nutrition and Food Science, and director of the Arteriosclerosis Center and of the MGH Cardiac Noninvasive Diagnostic Laboratory.

Intravenous feeding is expected to prove a valuable tool in exploring ways to reverse high cholesterol levels in the blood. This condition—usually hereditary—contributes to atherosclerosis, or hardening of the arteries, which is responsible for nearly half of all deaths in the US each year.

Although intravenous feeding is unsuitable as a standard treatment for high blood cholesterol, the MIT-MGH investigators have been able to study its effects on a small number of patients with homozygous hypercholesterolemia. Persons with this rare, inherited and extremely difficult to treat condition have very high levels of blood cholesterol and do not respond to drugs or diet. Women usually die before the age of 30; men in their teens.

The investigators reported their findings in the March 15 issue of *The Lancet*, a British medical journal. Besides Dr. Lees, they are: Harald Torsvik, MD, now in Oslo; Joseph E. Fischer, MD, a surgeon at Massachusetts General Hospital; and Henry A. Feldman, a Harvard graduate student in applied mathematics who is cross-registered at MIT. The research was sponsored by the National Heart and Lung Institute.

The physicians treated three patients with severe hypercholesterolemia, two for five weeks and the third for three and one-half weeks. Food—essentially a mixture of dextrose and amino acids—was infused through a tube inserted directly into the superior vena cava, the vein that carries blood from the upper body to the heart.

Plasma concentrations of cholesterol and low-density lipoproteins (proteins which transport cholesterol) fell rapidly, by 19 to 44 percent. When treatment stopped, the levels did not begin to rise again for about two weeks.

The results confirmed an earlier report that intravenous feeding had resulted in dramatic cholesterol lowering in a 12-year-old hypercholesterolemic girl seriously ill with congestive heart failure.

In addition, the intravenous feeding study has already provided some evidence about the cause of high blood cholesterol.

"One of the things that has been hotly debated for a long time is whether high blood cholesterol is due to too much cholesterol being put into the blood or to a restriction of the body's ability to remove it from the blood," Dr. Lees said.

By using harmless radioactive labels, the investigators were able to measure how much cholesterol the three patients secreted into their blood, and removed from their blood, each day.

The results suggest that victims of severe hypercholesterolemia remove cholesterol from their blood at a normal rate; they just make too much. However, the intravenous feeding appears to work not by reducing the production of cholesterol—but by helping the patients to remove cholesterol even faster than normal people can.

By enabling investigators to change cholesterol levels quickly and markedly in the most severe cases of hypercholesterolemia, the intravenous technique can be a useful tool in fundamental studies about how the body produces and removes cholesterol.

Ultimately, such knowledge should help physicians find better drugs and treatments to lower blood cholesterol levels—and reduce the risk of heart attack for millions of people.

Student Certified As CPR Instructor

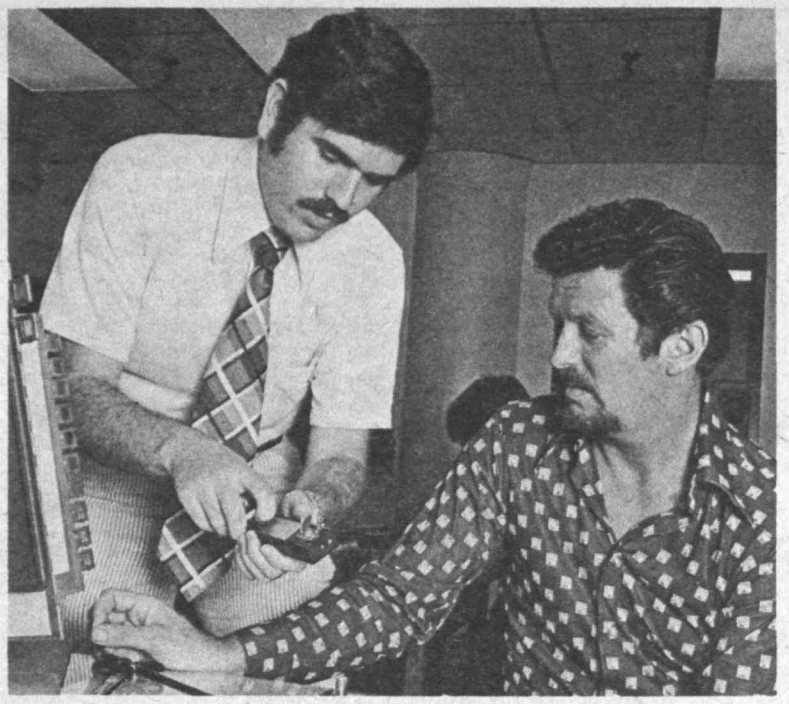
Steven Altchuler, a graduate student in the Department of Nutrition and Food Science, recently became certified as an instructor of Cardiopulmonary Resuscitation (CPR), by the Massachusetts Heart Association.

As a CPR instructor, Altchuler will be able to train others in the technique of closed chest massage and rescue breathing for reviving a victim whose heart has stopped.

The training involves a three-day, ten-hour course of lectures, demonstrations and performance critiques, using mannequins to simulate victims.

CPR training is offered periodically by the MIT Safety Office to groups of interested individuals. Joseph Kuchta of the Safety Office, himself as a CPR instructor, recommends the training for employees in laboratories or departments where there is high voltage, dangerous chemicals or similar hazards.

In addition, nearly all MIT Campus Patrolmen have received CPR training, and undergo an annual refresher course.



Merrick Leler, left, and George Hosker in the Work Control Center.

Work Control Center Expands FIXIT Service

The newly expanded Work Control Center in Physical Plant will provide better service to the community and improved management control.

The Center is charged with scheduling general maintenance and repair at MIT. All work orders are now processed through the Center.

Regular maintenance is aided by a new computerized preventive maintenance program which generates monthly work orders identifying equipment to be serviced and keeps track of what is done.

Repairs are handled through FIXIT (x3-4948), which now has radio dispatching capabilities for faster service. Communications controller for FIXIT is George Hosker, a former maintenance mechanic in Heat and Vent, whose background is helpful in diagnosing problems.

For speedy repair service, dial FIXIT, explain the problem as fully as possible and be available to meet the repair crew when it arrives.

Center supervisor is Merrick J. Leler, who received the SM degree in management in June and is responsible for making the system as efficient and responsive as possible.

Cusick Promoted At Neurosciences

Kathryn Cusick has been appointed associate director for administration and finance of the MIT Neurosciences Research Program effective July 1.

Ms. Cusick joined the NRP in 1964 and has been its administrative officer for eight years. Announcement of her promotion was made by Dr. Frederic G. Worden, director of the program, who cited her abilities in organization and interpersonal communication.

Ms. Cusick

Dr. Worden said Ms. Cusick's new title will combine the positions of business manager and administrative officer into one post responsible for administratiion and financial affairs. Ms. Cusick will be involved in initiating, developing, organizing and implementing the scientific activities of the NRP.

Before coming to MIT, Ms. Cusick was an administrative assistant with Westinghouse. She participated in the first Administrative Development Program at MIT, and expects to receive a master's degree in management from Simmons in the summer of 1976.

Volunteers

The Foreign Student Office and the Medical Department are seeking volunteers to staff the third annual Open House for incoming foreign students, staff and faculty. The Open House will be in the Bush Room, 9:30am-9pm Tuesday and Wednesday, Sept. 2 and 3, and 9:30am-5pm, Thursday, Sept. 4. Those able to offer hospitality are asked to sign up on the notice on the Foreign Student Office bulletin board.

Isaacs Book

Professor Harold R. Isaacs of political science is the author of *Idols of the Tribe*, a new book concerning ethnic identities, recently published by Harper & Row.

4 Named Visiting Professors

Four visiting professors were recently named to the faculty. They are:

Klaus Hepp has been appointed visiting professor in the departments of Physics and Mathematics for one year effective July 1. Professor Hepp studied physics and mathematics at the University of Munster and received the BS (1958), the MS (1960) and his doctorate (1962) at the Eingenussiche Technische Hochschule (ETH). Known internationally for his work in the field of mathematical physics, he has taught and done research in the US at the Institute of Advanced Study in Princeton, N.J., at Harvard and the Battelle Seattle Research Center. Professor Hepp is currently professor of theoretical physics at ETH, a post he has held since 1969.

Hermina Sinclair-de Zwart has been appointed visiting professor of education and developmental psychology in the Department of Psychology and in the Division for Study and Research in Education for two months effective September 1. She is currently professor of psycholinguistics and head of the Department of Psychology at the University of Geneva where she received her PhD in psychology in 1964. Professor Sinclair-de Zwart has also received degrees including her doctorate in linguistics from the University of Utrecht in the Netherlands.

At the Sloan School of Management, David Kai-Mei Hsiao was named visiting professor for four months effective September 1. He currently holds a joint appointment at Ohio State University as associate professor in the department of computer and information science and senior computer specialist in the Instruction and Research Computer Center there. Professor Hsiao received the BA (1961) and MS (1964) from Miami University in Ohio and his doctorate (1968) in computer and information sciences from the University of Pennsylvania.

Professor Hansgeorg Jeggle has been named visiting professor in the Department of Electrical Engineering and Computer Science for eight months, effective August 1. Professor Jeggle attended the University of Tubingen and the Technical University of Darmstadt where he received a doctorate degree (1966). Since 1973, he has been professor at the Technical University of Berlin.

Sheehan Speaks In Yugoslavia

Professor John C. Sheehan of the Department of Chemistry, who in 1957 discovered how to synthesize penicillin, discussed the future of penicillin and related antibiotics at a recent congress in Ljubljana, Yugoslavia.

Areas of future research, he said, include studying the resistance of organisms to antibiotics; developing antibiotics which will attack resistant organisms; and developing narrow-spectrum antibiotics, which could destroy specific pathogens without destroying useful bacteria.

Brock Paintings

An exhibition of acrylic paintings by Anne H. Brock is on exhibit in the Faculty Club lounge and corridor show cases through this month. Mrs. Brock is married to Kenneth S. Brock, MIT director of resource planning.

Community Help Needed in Electricity Conservation

The Physical Plant has taken several steps this summer to reduce electric consumption during peak demand hours—when it costs considerably more—and is asking the MIT community to help.

"The cost of electric power at MIT is determined by two factors," explains Carl W. Hagge, environmental engineer.

"One is the amount of energy used and the other is a 'demand charge' based on the peak power demand in a calendar month. The minimum 'demand charge' is based on 95 percent of the peak demand over the preceding 12-month period. Thus there is a great incentive to reduce the summer peak period electric consumption because it affects the cost of electricity for the entire year."

Peak consumption at the Institute—and in the metropolitan area—is from 12:30 to 4pm. The peaks are most pronounced during hot weather, when air-conditioning loads are highest.

One of the ways Physical Plant is cutting consumption during these hours, Hagge said, is to operate some equipment on cycles through automatic control and to turn off other equipment whenever possible.

On especially warm days, these efforts are intensified by additional manual control of equipment and, as a final resort, by using the diesel emergency motor generator at the Central Utilities Plant to generate additional power. (This helps the area's power companies avoid summer "brownouts," Hagge said.)

Hagge said that members of the MIT community should avoid the use of electricity during peak periods whenever practical.

This is particularly true, he said, of operations using substantial amounts of power. "In those cases the savings can be dramatic if the use of electricity can be rescheduled during the morning or on days when the outside temperature is below 80."

Summer Energy Saving Tips

Use venetian blinds or other window shades to keep out the heat of the sun. Tilt blinds so the lower edge is toward the window.

Turn off any unnecessary source of heat, such as lights and other heat producing equipment. Control coffee makers so that water is heated just for brewing, rather than being kept hot all the time. (Typical coffee makers require an average of 300 watts to keep water hot in readiness for brewing).

Where possible, turn air-conditioning off at night, weekends and at other times when it is not required. If temperature adjustments are available, set to limit temperatures to 78.

Reschedule, where practical, significant use of electricity to avoid the afternoon hours on hot days.

If there are any questions or additional suggestions, call the Environmental Engineer at X3-4755.

THE INSTITUTE CALENDAR

August 6 through August 24

Seminars and Lectures

Tuesday, August 12

Inertial Effects and Spin-up in Low Collisionality Regimes* – J. Fisher, G. Plasma Theory Seminar. 11am, Rm 36-261.

Tuesday, August 19

Follow-up Talk on Current Problems in Neoclassical Transport Theory* – S. Hirshman, G. Plasma Theory Seminar. 11am, Rm 36-261.

Community Meetings

Quarter Century Club Clambake* – Tues, Aug 12, 5:30pm, on Kresge Plaza.

Community Players* – Auditions for fall production of "Hedda Gabler," by Ibsen, which will be presented Oct 10-18, will be held Mon-Wed, Aug 18-20, 8pm, Stu Ctr Rm 400.

Women's Forum** – Meetings Mon, 12n, Rm 10-280.

Social Events

Strat's Rat – Sponsored by SCC. Continuous music provided by WTBS radio's disc jockeys. Light or dark beer, $.25/16 oz cup or 5/$1. Free admission. Fri, Aug 8 & 22, 8:30pm, air conditioned Sala. College ID required.

24 Hour Coffeehouse* – Enjoy relaxing conversation, piano playing, games, inexpensive food, candy & drinks. Summer hours: Sun-Thurs, 11am-12m; Fri & Sat, 11am-2am; Stu Ctr 2nd fl lge.

Over 30's Singles Club – Lunchtime meeting in Stu Ctr East Lge (small dining room off Lobdell), Fri, 12:30-1:30pm. New members always invited. Look for the table with the red balloon. Erica, x3-2117 or Marty x8-1206 Draper.

Over 30's Singles Club* – Swimming and picnic party Sun, Aug 10, beginning 1pm, Walden Pond swimming area. Info: Ann, x3-3400.

Movies

What Did You Do in the War, Daddy?** – LSC. Fri, Aug 8, 7:30pm, air conditioned Rm 26-100. Admission $.50, ID required.

Interview with Salvador Allende (Landau & Wexler)* – Film Society. Fri, Aug 8, 7:30 & 9:30pm, Rm 6-120. Admission $1.

Bonnie and Clyde** – LSC. Sat, Aug 9, 7:30pm, air conditioned Rm 26-100. Admission $.50, ID required.

Seven Days in May** – LSC. Fri, Aug 15, 7:30pm, air conditioned Rm 26-100. Admission $.50, ID required.

Lazarillo (Ardavin)* – Film Society. Fri, Aug 15, 7:30 & 9:30pm, Rm 6-120. Admission $1.

When Comedy was King – LSC. Sat, Aug 16, 7:30pm, air conditioned Rm 26-100. Admission $.50, ID required.

The Night They Raided Minsky's** – LSC. Fri, Aug 22, 7:30pm, air conditioned Rm 26-100. Admission $.50, ID required.

Kaya, I'll Kill You (Mimica)* – Film Society. Fri, Aug 22, 7:30 & 9:30pm, Rm 6-120. Admission $1.

Sherlock Holmes in Washington* – LSC. Sat, Aug 23, 7:30pm, air conditioned Rm 26-100. Admission $.50, ID required.

Theatre

Scenes From American Life – Boston University Repertory Theatre production of the play by **A. R. Gurney, Jr.,** humanities, directed by Harold Stone. Performances Aug 6, 8, 12, 14 & 16, 8pm, BU Summer Repertory Theatre. Tickets: $4-$7.50; student discount available at ½ price. Reservations: 353-3392.

Dance

Tech Squares* – Square dancing, modern western style. Everyone is welcome, whether experienced or not. Tues, Aug 12 & 26, 8-11pm, Lobdell (Aug 12) & Sala (Aug 26). Admission $1, free 1st time. Mike Tersoff, x3-7659 or 266-8266.

Folkdancing – International: Sun, 7:30-11pm, Sala. **Balkan:** Tues, 7:30-11pm, Stu Ctr Rm 491. **Israeli:** Thurs, 7:30-11pm, Sala. **Noon dancing:** Fri, 12n-1:30pm, Kresge Oval in good weather, otherwise Bldg 7 Lobby.

Exhibitions

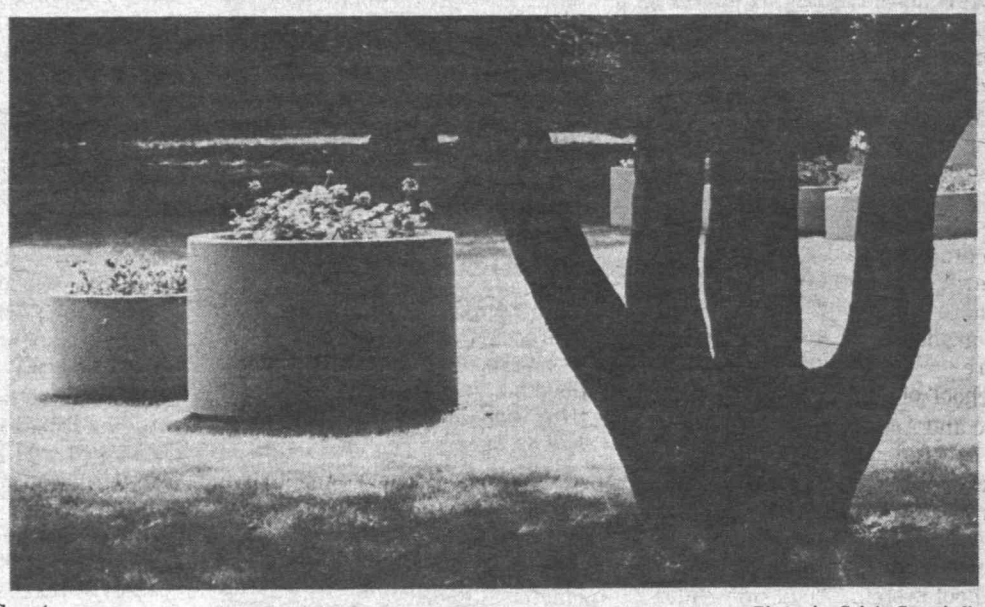
Hart Nautical Museum* – Permanent exhibit of rigged merchant and naval ship models, half models of yachts and engine models. Open daily in Bldg 5, 1st floor.

MIT Historical Collection* – Permanent exhibition, open Mon-Fri, 9am-5pm, Bldg N52, 2nd floor.

Freshmen are encouraged to attend departmental lectures and seminars. Even when these are highly technical they provide students one means to learn more about professional work in a department and field.

***Open to the public**
****Open to the MIT community only**
*****Open to members only**

Send notices for August 20 through September 7 to the Calendar Editor, Room 5-111, Ext. 3-3279, before noon Friday, August 15.



NATURE'S RELIEF Amidst soaring temperatures, there is the cooling shade of Killian Court. —Photos by Calvin Campbell

India's Drift May Cause Earthquakes In China

(Continued from page 1)

are generally restricted to narrow zones that geologists believe represent the boundaries between the different "plates" of lithosphere, the outer part of the solid earth, about 70 kilometers thick.

As these plates slowly slide apart or together, the upper part of the lithosphere, called the crust, is deformed at the boundaries, and occasional earthquakes result.

In China, however, earthquakes are spread over a region hundreds of kilometers wide. Molnar and Tapponier believe that this unusual pattern can be satisfactorily explained by the theory that China is being squeezed eastward along great faults, known to geologists as "strike-slip" faults.

They arrived at the theory by studying photographs of China taken by the US Earth Resources Technology Satellite, now called LANDSAT. The photographs show long, active strike-slip faults, which the two geologists say support the idea of a sideways movement of China over the ocean floor.

Geologists generally agree that India is pushing against Eurasia, and has been doing so for millions of years. They disagree about the fate of the part of the earth's crust that is caught in the crunch.

When India first collided with Eurasia, rocks were pushed upward to form the Himalayas, as the Ural mountains were formed when Europe collided with western Asia.

But while Europe eventually stopped pushing after it hit Asia, India has kept on shoving, with apparently inexhaustible—and inexplicable—energy.

This slow movement over millions of years, the two geologists say, leaves between 1,000 and 2,000 kilometers of motion between Eurasia and India unaccounted for. Where did all that crust go?

One theory, they say, is that it was all shoved under Tibet—"a giant underthrusting of one block of continental crust beneath the other along a very long, very shallow fault zone."

But there is little geologic evidence to support that theory, they say. And because the continental lithosphere is so buoyant, it is often assumed, they say, that such a subduction of one continent beneath another is impossible.

They believe that although one or two hundred kilometers of the missing crust may have been thrust under Tibet, the rest can be better accounted for by the theory that China is being squeezed "eastward and out of the way of the impinging continent along the great strike-slip faults.

"Major strike-slip faults in China and Mongolia are clearly an important element in the overall deformation of Asia," said Molnar. "Movement on them may allow material lying between the stable portions of the Indian and Eurasian plates to move laterally out of the way of these two plates."

He said that comparisons of the faults with the San Andreas fault indicate that "probably a total of 500 kilometers, and conceivably 1,000 kilometers, of east-west motion could have occurred along these faults."

The study by Molnar and Tapponier of LANDSAT photographs was funded by the National Science Foundation. The satellite has been in orbit since July 1972; the information it gathers is used by several agencies, including the National Aeronautics and Space Administration, the Department of Agriculture, the Department of the Interior, the National Oceanic and Atmospheric Administration of the Department of Commerce, the US Army Corps of Engineers, and the US Environmental Protection Agency. A second LANDSAT satellite was launched last January.

Special Masses for the Feast of the Assumption will be held Friday, Aug. 15, at 8am in the MIT Chapel, and 12:15pm in the Student Center Mezzanine Lounge.

Conservation Program Cited

MIT's system of using computerized clocks to control various equipment has been cited by *The Chronicle of Higher Education* in an article on energy conservation programs in the nation's universities.

The July 21 article quotes Thomas E. Shepherd, superintendent of utilities, as saying that MIT already has 200 clocks in use and expects to install many more.

With a central control system, selected power users such as motors, pumps and fans are hooked up to a computer programmed to shut them down when they are not needed.

Shepherd told the *Chronicle* that MIT's computerized "power-demand monitoring and limiting system" became fully operational for eight buildings last December.

Although the system was expensive to install, Shepherd told the *Chronicle*, "by April we had realized an energy saving of 10 percent in the buildings hooked up, or a projected $100,000 savings for the year."

"After we installed the master computer, which is really just a superclock," Shepherd said, "we started putting clock controls on equipment that used to run uncontrolled, like air conditioning and ventilating fans."

Midwife Joins Medical Staff

Helena McDonough, a nurse-midwife, is the newest staff member in the obstretics-gynecology division of the MIT Medical Department.

Ms. McDonough

As a nurse-midwife, Ms. McDonough will give routine gynecological exams and contraceptive counseling. In Massachusetts midwives are not legally permitted to deliver children, but Ms. McDonough's obstetrical duties will include taking medical histories, giving prenatal care and counseling couples on such things as nutrition and the psychological impact of having a child. Nurse-midwives function in collaboration with physicians.

Ms. McDonough, an R.N., received the M.S.N. (masters' degree in nursing) from Yale University in 1975 and certification from the American College of Nurse Midwives. From 1968 to 1973 Ms. McDonough was a part-time member of the nursing staff of MIT's Medical Department. During the summer of 1974, she worked as a nurse-practitioner in the OB-GYN clinic at MIT.

Five to Participate In Viking Mission

(Continued from page 1)

Rich of the Department of Biology. The team has devised three experiments to search for life in the Martian soil.

Two experiments assume that if Martian life exists, it would use carbon chemistry. In one, soil will be exposed to radioactively labeled carbon dioxide; in the other, it will be exposed to a variety of potential foods for Martian organisms, such as sugars and amino acids, with labeled carbon atoms. Tests will then be conducted to see whether the carbon dioxide has been incorporated into larger molecules, or whether the foods have been broken down into smaller molecules.

Dr. Rich

Dr. Shapiro

In the third experiment, soil will be exposed to potential food, and the gas above the soil will be analyzed for any changes that may take place.

Professor Shapiro and Dr. Reasenberg, both of the Department of Earth and Planetary Sciences, will take part in four experiments conducted by the Radio Science team. They will test the theory of general relativity, by measuring the time it takes radio signals to travel from earth to the spacecraft and back.

Dr. Reasenberg

Dr. Toksoz

They will also use radio signals to study the gravity field of Mars, and to determine the orientation of the solar system with reference to quasars, which are so distant that they form a constant frame of reference.

They also hope to determine the density of the Martian atmosphere by having the satellites orbit close enough to Mars so that the drag of the atmosphere can be detected.

Professor Toksoz, director of MIT's new George R. Wallace Geophysical Observatory, is a member of the Viking Seismology Team.

Each Viking lander will have a tiny, three-component seismometer to measure Marsquakes and other ground motion. Each is expected to operate for 90 days, with a 45-day overlap. Data from the seismometers is expected to help scientists determine the planet's internal structure and tectonic activity.

Wilson Assumes Admissions Post

Gail P. Wilson, a June graduate of Boston University, has recently been named assistant to the director of admissions in the Office of Admissions.

Ms. Wilson

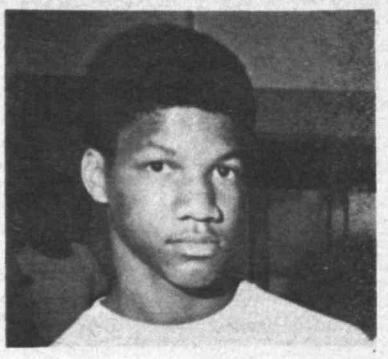
Ms. Wilson, who received the BA degree in political science, came to Boston from New York City where she was a graduate of the High School of Music and Art.

In the past four years she has served as an educational counselor in the Atlanta Urban Corps at Georgia State University and as a student intern in the Atlanta public school system. At Boston University she was a dormitory counselor and coordinator for student volunteer services.

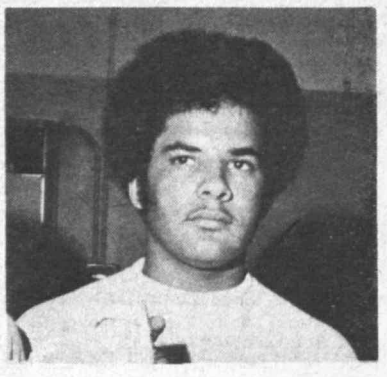
Her general admissions duties will include interviewing prospective students visiting the Institute as well as recruiting activities.

Bridge Design Competition Caps M.I.T.E.

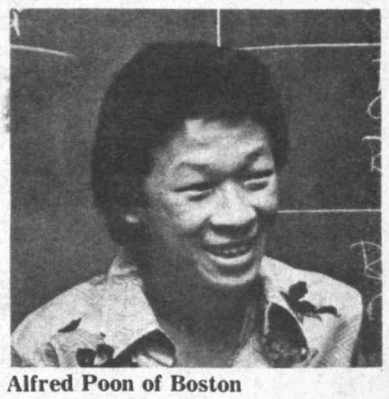
The winning model bridge, constructed by three high school students participating in the Minority Introduction to Engineering program at MIT, finally gave way supporting a load of 79 pounds. Watching from left to right are: Tim Evans, a winning participant, Gerald Adolph of Nanuet, N.Y., and James Clark of Quincy, Fla., resident tutors for the program which brought 37 high school students to the campus for a two-week glimpse of engineering careers. The bridge design competition—using popsicle sticks, string, cardboard, some glue and thumb tacks as materials—was a high point in the program, which ended July 26. The M.I.T.E. program was held at MIT for the first time this year and was one of 28 at universities across the country, sponsored by the Engineers Council for Professional Development. Members of the winning team are at the right.



Chester Brown of Dorchester



Tim Evans of Chelmsford



Alfred Poon of Boston

Tang Fire Being Investigated

(Continued from page 1)

11:25am. They were enveloped in smoke but were able to escape down a stairwell.

Thomson was released that night from the MGH Burn Unit after treatment for smoke inhalation. Sopas, who had respiratory burns and burned hands, was discharged last Saturday (Aug. 2).

Raymond M. Diffley, associate director of the Safety Office, said the fire apparently started in some cardboard cartons left near a rubbish chute door at one end of the 19th floor corridor.

Investigators may never know what ignited the cartons, Diffley said, and are assuming the fire was caused by a carelessly disposed cigarette or something similar.

He said that anyone who can shed light on the cause of the fire should contact the Safety Office.

Although the fire was intense, the State Fire Marshal's Office found no evidence of arson or that an accelerant was involved, Diffley said.

He explained that the close confines of the corridor probably contributed to the intensity of the blaze, acting to hold in the heat and smoke.

Materials in the hallway are being checked to determine the source of the acrid smoke, he said.

A fire alarm box in the corridor, a few feet from where the fire started, was melted off the wall, turning in the alarm.

Cambridge firefighters reached the 19th floor by taking the elevator to the floor below and walking up. They extinguished the fire using standpipe hoses in the stairwell.

Seventeen 19th floor residents were put up at MacGregor House. They were notified Friday (Aug. 1) that they could move back to their apartments.

A memorial service was held Wednesday (July 30) in the MIT Chapel for Ribeiro. He received a bachelor's degree from the University of Sao Paulo in 1972 and entered MIT in September, 1973, under a fellowship from the United States Agency for International Development. He recently had begun research in theoretical solid state physics with Professor Bruce R. Patton.

He was one of nine children. He also leaves his parents.

Telephone

(Continued from page 1)

to about $2.8 million this year," Dr. Gray said.

A committee, chaired by Morton Berlan, superintendent of telecommunications, was appointed by Dr. Gray last spring to recommend ways of curtailing telephone costs. Their recommendations include:

—Closing the switchboard from midnight until 7:30am, which took effect July 1.

—Increasing the percentage of direct distance dialed calls. More than half of MIT's long distance calls are now being operator assisted, which costs from 10 to 60 percent more than direct dialing.

—Cancelling all non-essential MIT credit cards. This may mean the upgrading of some telephones to permit direct distance dialing.

—Reducing and simplifying telephone equipment where possible. Multi-button telephones and other sophisticated equipment are more expensive in recurring costs and installation charges.

The telecommunications office is holding a series of seminars to acquaint administrative personnel with methods of ordering and accounting for telephone services and means of cost reductions.

Seminars will be held during August from 1:30-2:30pm and 3-4pm in Rm 39-530. Those interested in attending should notify Beverly Robinson, x3-3651.

Bluestone Named In Personnel

Burton (Buzzy) Bluestone, whose 1974 summer study on the annual performance evaluation and salary review used at MIT for office and clerical personnel led to formation of the Working Group on Office/Clerical Issues, has been appointed to a staff vacancy in the MIT Office of Personnel Development.

Mr. Bluestone

John Wynne, MIT vice president for administration and personnel, said Mr. Bluestone will work with Adam and Maureen Yagodka, co-directors of the office, in conducting workshops in human processes in organizations, which have been in demand by all levels of MIT employees, and in planning programs in supervisory training.

Mr. Bluestone, a 1971 business administration graduate of Boston University where he later worked as an administrative officer, received the SM degree in management from the MIT Sloan School earlier this year. He was a part-time research assistant to Mr. Wynne when he conducted the study that resulted in the Bluestone Report. The Working Group is studying ways to improve performance evaluation, compensation administration and the development of career paths for employees.

INSTITUTE NOTICES

Announcements

OFFICIAL NOTICE
SEPTEMBER DEGREE RECIPIENTS
POST CARDS MUST BE RETURNED TO E19-344 NO LATER THAN AUGUST 15, 1975 TO INDICATE WHETHER DIPLOMAS ARE TO BE MAILED, CALLED FOR IN PERSON OR IF JUNE ATTENDANCE IS PLANNED.
AUGUST 5, 1975 REGISTRAR

Student Furniture Exchange—Open Tues & Thurs, 10am-2pm. Buy and sell to students, tax-free donations gratefully accepted. 25 Windsor St., x3-4293.

Subjects Needed—For 3 psychological experiments with pay: students general psych experiment; subjects w/knowledge of French for sleep experiment; French students, bilingual Canadians & Americans. Judy, x3-6047.

MIT Club Notes

Bridge Club*—ACBL Duplicate Bridge. Open pairs Thurs, 7pm, Stu Ctr Rm 473. Steve, 782-2756.

MIT/DL Bridge Club**—ACBL Duplicate Bridge. Tues, 6pm, Stu Ctr Mezzanine Lge.

Goju Karate Club*—Mon, Wed, Fri, 7pm, Stu Ctr Rm 491. Beginners welcome. Info: 492-1741.

Hobby Shop**—Mon-Fri, 10am-6pm, Rm W31-031. Fees: $10/term for students, $15/term for community. Info, x3-4343.

MIT Kung-Fu Club***—Practice Tues & Thurs, 7-9pm, Stu Ctr Rm 407. Jim Lee 494-8674.

Space Habitat Study Group*—Meetings Wed, 7:30pm, Rm 24-407. Info: M. Gaffey or B. Hazelton, x3-1917.

Strategic Games Society—Sat, 1pm-1am, Walker Rm 309 & 318. Offers opponents and discounts on merchandise to members plus gaming & periodical library. Help needed for SUMMERCON & WINTERCON. Info: Paul Bean, 266-6108 or Robert Sacks, 494-8889.

Student Homophile League*—MIT Gay Lounge (Rm 50-306) open for lunch and most evgs; call ahead, x0745 Dorm. Meetings 1st & 3rd Sundays each month, 4pm, Rm 50-306. For info, talk, help in coming out, call Tom at the Hotline, x3-5440. (Hotline is being moved and is temp out of commission!)

MIT Tae Kwon Do Club**—Meetings & workouts Tues & Thurs, 5-7pm, Stu Ctr Rm 491.

Tech Squares**—Square dancing Tues, 7:30pm, Sala. Admission $1, at door.

Tiddlywinks Association*—Meetings Tues & Thurs, 8pm, Stu Ctr Rm 473.

Religious Activities

The Chapel is open for private meditation 7am-11pm daily.

Campus Crusade for Christ*—Family time Fri, 8-9pm, Rm 37-252.

Roman Cathloic Mass*—Sun, 10am, Chapel.

Summer Bible Study Group**—Tues, 12:30-2pm, Rm 13-5002.

CLASSIFIED ADS

Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Only Institute extensions may be listed. Members of the community who have no extensions may submit ads by coming in person to the Tech Talk office, Room 5-111, and presenting Institute identification. Ads may be telephoned to Ext. 3-3270 or mailed to Room 5-105. **Please submit all ads before noon, Friday, August 15. They will be printed on a first come, first served basis as space permits.**

For Sale, Etc.

Microscope, binoc Zeiss (Jena), 4 obj, mech stage, illum, 2 pr eyepces, perf cond, $400. Tom, 876-8127.

Accordian, Pancordian, video mdl 120 bass, exc cond, w/carry case, $210 or best. Mike, x7759 Linc.

Moving, must sell: Magnavox solid st port stereo, $60; wndw fan, $8; dining chr, $5; twn flat shts, art prints, other hsehld items. Mike, x3-1868.

Yamaha FG200 folk guitar, gd cond, w/case, $125 or best. Bob, 876-0063, aft 6pm.

Hasselblad 500 C/M body, 500 EL/M body, 150 MM Sonnar lens, intervolumeter, gadget beg, access, hrdly used, $1,200 or best. Steve or Scott, x3-6619.

Twn box spr & matt, 2, $70. Tatsuo, x3-1867.

Dishes, srvc for 6; stemware; elec Broilmaster; desk lamp; drop leaf end tbl. Gladys, x3-4198.

Furn, odds & ends; tbls; chrs; sofabed; much more, terriffic buys. x3-3375.

Oval 10x13 rug, rust hues, w/2 mtch throws, $30; 5x7 Rya type rug, brite reddish hues, $30; wlnt DR tbl, med sz, $30; 4 chrs, carved backs, old, $10; $80 tog. Call, 247-4186.

Beaut upright piano, gd cond. Sonia, x3-6046.

Rebit player piano, nds a little work, playing cond, w/rolls, $650. Frank, x3-2091.

Beyer M-500 mic, omnidirectional, ideal for rock band, close miked rcrding, vocalist, interviews, films, $70. Tim, x7569 Linc.

Openwork cotton summer blnkt, twin sz, green, $5; wood-soled lthr clogs, sz 8, hrdly worn, $5; 14" steel shlf brckts, 50 cents ea. Helen, x3-7690.

Dk brn twd lge chr & ottoman, exc cond, $35; pr twn sprds, wht quilt w/red eagles, $15; beaut 9x12 braid rug, $35; elec Olivetti-Undrwd add mach, mult, 7 digit, $30. Gerry, x8-1288 Draper.

Sears 8,000 BTU AC, used 1 yr, $150; 23" RCA color TV, 80% solid st, console or on std, can see w/legs or std, $375. Marge, x3-2974.

Sofabed, $35. x3-3769.

Lg canvas tent w/screen porch, gd cond, $75 or best. Marianne, x3-3707.

Dbl sz bed, matt & box spr, $50. Carlos or Raquel, 666-2294.

LR 3 pc set, perf cond, mahog trim, $200; antique loveseat, rocker & straight chr, $250. Pat, x3-6337.

DR set: lg tbl, buffet, 4 chrs, $60 or best. Call, 646-9437.

Lvg, must sell: 20"x40" b&w TV, remote cntrl, $40; stereo, trntbl & 2 spkrs, $15. x3-6603.

Moving, must sell DR tbl, 4 chrs, $25; antique 4 poster dbl bed, $30; sofabed, $20; end tbls, $5/ea; sm items. Marilee, x3-3802.

Furn, mint cond: 3 drwr bureau, $15; formica coffee tbl, $15; roll-away sgl bed, nw, $20; see for yourself. Call, 494-8669, evgs.

Refrig, $100; desk, $40; bureau, $20; 2 rugs, $100 & $30; K tbl & 4 chrs, $40. x3-7825.

Philco AC, 115 V, 11,400 BTU, exc cond, $125. x3-3140.

Philco 12" b&w TV, 6 mos, gd cond, must sell, going to sch in Calif, about $40. Beth, 266-2968, evgs.

NE Patriot tckts for Giants (8/10), Vikings (8/17), Chargers (9/7), 2/ea. Hank, x8-1206 Draper.

'69 VW transporter eng w/full flo oil cooler & fltr, Isky Hyd cam, hi vol pump, recent valve job, $175; 14" VW rims, $6/ea; '69 bus brake asmblys; f seats. Bill, x3-7230.

Canoes, fbrglas, 13-16', $195-$200. x3-6722.

B sink, bge porcelain on cast iron, v gd cond, chrome fix incl, $25. x5778 Linc.

Yamaha guitar & case, $50; UHF tuner, $15; frpl screen, cradle & brass plate andirons, $20. Beth, x8-1217 Draper.

Dynaco A-25 spkrs, $80/pr. x9578 Dorm.

Dresser set, 3 pc, rosewd, gd cond, 6 drwrs, 2 shlvs, $75. Call, 864-5272.

Remington port typwrtr, gd cond, $15. Jones, x3-3404.

Frame pack, $10. Dick, x3-5586.

Royal blu 9x12 rug, $20; 9x12 bge rug w/pad, orig $150, $75; brn metal closet, $20. Carol, x3-4710.

Cameras; tape rcrdr; glassware; paintings; frames; mag rack; lamp; hassock; Lincoln rocker; Qn Anne coffee tbl; buffet; sofabed; more. Call, 876-4328.

Cartop luggage carrier, 13 sq ft, $10; baby back carrier, $10. Ricardo, x3-4163.

Semperit radials, 4, 175 SR 14 STT, used 5 K, $40/ea; Cory auto coffee perc, essentially nw, 6-20 c, $25; nego. x3-2241.

G Ital 10 spd bike w/Weinmann ctr pull brakes, Simplex derailleurs, gd cond, $80. x3-1669.

Southwest technical pre-amp, $50. Ken, 492-6983.

Polaroid 440 camera w/flash gun, portrait attach, case, $50 or best. x3-2663.

Fine upright piano, free, U move. Call, 864-6379.

'72 Chevy Imp Cstm, 2 dr, power, ac, exc cond, $2,000; Fisher stereo 401 & (2) 105 spkrs, $350; 23" Zenith chromaclr, $200; amfm radio, $15, etc. Call, 646-9682, aft 6pm.

Bell & Howell 16mm projectors, 2. Tony, x3-5717.

Umbrella 8'x8' tent, nw, nvr used, $50 or best. Jim, x8-2872 Draper.

SR50 calc, $70; m 3 spd bike, $30; frame pack, $10. Dick, x3-5586.

Concord tape deck, wnrty, nw motor, 4 nw heads, also SOS, SWS, echo & auto rev, 4 trk, $225. Bob, x3-4242.

Tires, 2, 5.60x15, mtd old VW 5 hole rims, nrly nw, $10/ea or best. Call, 494-8720, evgs.

Stroller, lk nw, 2 position back rest, bskt, $14. x3-6153.

Full sz matt & boxspr, $20 or best. Phillip, x3-5054.

Sailing pram, 8' plywd, dacron sail, nw. Don, x3-3550.

Kodak carousel slide proj, exc cond, $80. Neal, 661-8240, evgs.

Beaut hand craft furn, end tbls, stools, DR tbl & 4 chrs, rugs, lamps, & many items, must sell, lving cntry. 494-0380 evgs, kp try.

Ten spd bike, 2 mo old, $65; bl/grn carpet, $25. Jawaid, x3-5945.

Heathkit type sq wave gen, over 100 kc, hi & low outputs, perf cond, $5. Mel Alpert, x3-4192.

Metal office dsk, $25, & cabinet, $10; 2 drssrs, 1 w/ mir, $10 ea; wd K tbl w/ 2 chrs, $15; lg armchr w/ ftstool, $7; sm desk w/ chr, nd repair, free. Sandy, x3-6239.

Complete set 60 Amer Heritage solid sterling silver medallions, mint cond, $750. Call, 843-3159 aft 5.

Twin beds w/ bkcse, hdbrds, frames, nw spreads, $75 ea; DR tbl w/ leaf, oiled mahog, $80; 90" LR sofa, brn wool fabric, lk nw, $150. Bill, x8-4422 Draper.

Lg sgl bed, 13" storage under, $45; wd desk, $9; nw chest w/4 drwrs, 36"x36"x17", $13; bkcse, 3x29" shlvs, $6; pole lamp, $6; Lasko 12" fan, $6; chr, $2, etc. Paul, 494-9135, aft 6pm, Tang.

Motor, 16', 35 hp, Bahama top, incl trlr & access, best. Call, 376-8045, Millis.

RCA 19" b&w port TV, VHF & UHF, $40. Penn, x8-2872 Draper.

Stereo; armchr; bike; crtns; wooden loft; numerous books, rcrds, misc. Sam, x9614 Dorm.

Whirlpool washer, still under wrnty, $150; GE 3 yr dryer, $75; DR set: 2 cptn chrs, 4 mates chrs, buffet, $250; coffee tbl & mtch endtbls, $50; DR tan rug, 8x10, $50. Betty, x7289 Linc.

F 10 spd bike, ctr pull brakes, Shimono derailleurs, stem shifters, $150 or best. x3-4462.

Oak 4 drwr desk & mtch chr, gd cond, $75; nw port studio 45 Olivetti typewrtr, man, ½ spacer for correct, case, used few times, $75. x3-2782.

Lane cedar hope chest, $100; desk & chr, $25; baby dress tbl, $10; Bobby-Mac carseat, $10; Lib tbl, $25; crnr tbl, $25; twn bed, $30; bureau, $10; all A-1 cond. x3-2828.

Solid cast iron Franklin stove, Hartshorn & Ames, open hearth, decorative, lks antique, ask $200. Call, 327-4757, Roslindale, kp try.

Danish mod love seat & chr, great cond, $35. Theresa, 876-7004, aft 6pm.

Hammond organ, dbl keybrd, full stops, foot pdls, bench for music, exc cond, best. Call, 861-9440, aft 5pm.

Henredon DR tbl, buffet, china cab, import fruitwd, 52" rnd tbl, 2 lves, $550. Nancy, x3-3405.

Fur coat, sz 10 or 12, $25. x3-4758.

Mtch conv sofa & chr, $75. Jerry, x3-2173.

Pr sport style whls, 14" for GM cars, 5 hole, wl take G78 or wider tire. Dave, x8-3518 Draper.

Full matt w/box spr, $100; 3 spd bike, $35; both lk nw. x3-2432.

G 3 spd bike, gd cond, $25; g sgl spd bike, gd cond, $20. Jim Klumpp, 358-7659, Wayland.

Tbl, 4 chrs, buffet, $60; 2 side tbls, $3/ea; 2 easy chrs, $10/ea; refrig/frzr, $40; coffee tbl, $25; bureau, $10; lots other hsehld items. Call, 646-9437.

Dyna stereo 400, nw, wrnty, list $670, ask $425; Dyna Mark III amps, nw tubes, $125/pr; PAS 2X preamp, ask $25. Skip, 855-2255, days.

M 10 spd C. Itoh bike, 24" frame, gd cond, $50. Ralph, x3-1552.

Vehicles

'65 Buick Le Sabre, 4 dr, p st & br, $225. Larry, x8-4009 Draper.

'65 MG Midget conv, wire whls, 4 nw radials, roll bar, runs well, moving to Eur, must sell, ask $700. Michelle, x3-1771.

'65 Buick Spec, 4 dr, auto, p st, amfm, radio, AC, gd tires, runs gd, body rough, $100. Victor, 547-4154, evgs.

'65 Buick Wildcat, gd cond, dependable transp, snows, must sell, moving, $300. x5826 Linc.

'65 Comet, 6 cyl, std, nw-used eng, comp & reliable, runs great, $260. Al, x3-6469.

'65 Ply, nw tires, nw batt, nw brakes, gd cond, $500. Judy, x8-1349 Draper.

'66 VW, 57 K, eng perf cond, 2 nw tires, nw br, starter, gen, minor body damage, $700. Herb, x3-6015.

'66 Dodge, 8 cyl, 2 dr, gd cond, nw parts, $325 or best. Frank, x3-4958.

'67 VW bug, sunrf, $450. Dick, x8-2810 Draper.

'67 Buick Spec, V6, gd eng, body has rust, $200. Stan, x7551 Linc.

'67 Ford Frlne, p st & br, snows, radio, runs gd, $350 or best. Call, 782-5128.

'67 Chevy, 4 dr sed, sm V8, auto, p st, ac, radio, body & int gd, $350 or best. x7374 Linc.

'67 Cougar hrdtp, 8 cyl, $300 or best. x3-7169.

'68 Ply wgn, 73 K, running cond, $300. x3-5094.

'69 Dodge City pick-up camper. Woody, x3-4209.

'69 Ford XL, p st & br, 68 K, 1 rear dent, perf run cond, $550. Call, 494-8383, evgs.

'69 Merc Cougar, blu w/wht hrdtp, snows, p st & br, exc cond, $1,250. Call, 926-9884.

'69 Ford Cstm 500, 4 dr sed, 6 cyl, auto, p st, 63 K, top cond, $700. David, x8-1264 Draper.

'69 Mustang hrdtp, 8 cyl, no body rot or dents, $1,050, nego. x8-3844 Draper.

'71 VW camper, exc cond, 20 K on nw eng, nw radials, pop top, equip, $2,800 or best; compl dbl bed, $60; sofabed, $20; crib, $20; b&w TV, $40; stereo, $90; DR tbl & bench, desk, chrs, $120, etc. Pierre, x3-7039.

'71 Vega htchbk, am radio, ww, 53 K, best. Michel, x3-7826.

'72 Camaro 350 SS, 4 spd, v fast, $1,750 or best. Bob, x3-7305.

'73 AMC Hornet htchbk, grn w/wht roof, 6 cyl, auto, exc cond, lo mileage, 21 K, $2,250. Roxanne, x614 Linc.

'74 Mustang II, V6, 4 spd, std, radials, 20 K, exc cond, best over $2,600. Kiyo, x3-6231.

'70 Yamaha R5, 350, under 10 K, nds some work but runs, ask $550. x3-5334.

'71 Honda CL 350, fairing, many xtras, less 12 K, eng recently rebit, exc cond, ask $550; '65 Dodge Dart, 5 nw tires, nw elec sys, br, carb, ask $100. Tony, x3-1826.

'72 Yamaha R5C mtrcycl, 350 cc, nds some work but wl get 60 mpg on road. Mike Gordon, 267-2199.

'73 Yamaha TX 650, 11 K, nds little work, $850 or best. Kevin, x8-4458 Draper.

Shasta motor home, Ford chassis, 23 K, 302 V8, auto, full AC, $6,500. Earl Scouten, 1-582-4980.

Housing

Arl hse, 3 BR, B, dw & disp, ww, furn, nr T, avail 9/75, $400 + util. x8-1313 Draper.

Arl, 7 rm apt, compl furn, nr Winchester Cntry Club, walk to bus for MIT, avail 9/1. Call, 482-2273.

Bri, BR apt, avail 9/1, nr T, grad stud pref, $175 & util. Matthew, x3-6418.

Bkln, cln 2 BR apt in priv home, nr T, LR, bkfst rm, K, washer, nw B, no pets, fully furn incl K utensils, pkg, ideal visit fac w/child, avail 9/1, $325 incl util. x3-1661.

Camb condo, 2 BR, Inman St, top fl, ww, sauna, lndry, common rm pkg opt, $37,500. x3-3632.

Camb apt, Fresh Pond area, 2½ BR, front & back porch, priv pkg, hrdwd flrs, brite & sunny, $185. Denise, x3-4162.

Carlisle hse, 3 BR, low 50's. Dan, x7777 Linc.

Everett, 5 rm apt, 3rd fl, all lg rms, tile B, nr T, avail now. Tony Annetti, x8-2584 Draper.

E Wtrtwn, sub Sept-Feb, furn 2 BR apt, nr T, no pets, $175, htd. Call, 923-9717.

Som, Beacon St, 2 BR, dw, lndry & pkg facil, AC, avail now, $265 incl util. Ramos, x3-3259.

Woburn, 6 rm mod duplex apt, lovely yard, qt res area, no pets, $240. Doris, x7155 Linc.

Dennis, yr rnd hse, 3 BR, frpl LR, eat-in K, porch patio, nr ponds & beaches, $29,000. Call, 398-8015.

Lake Winnisquam cottage, slps 5, beach priv, $75/wk. Frank, x3-3632.

Animals

Want a dog? Grmn shep pup, 2-3 mos. Fernando, x3-2491.

Org/wht 1½ yr m cat, altered, nds home. Sue, x7301 Linc.

Husky pups, AKC, b&w, 11 wks. Call, 369-2262, evgs.

Free 1 & 2 yr old m tiger cats, fixed, declawed, moving. Bill, x7717 Linc.

Yng adult f beagles nd home w/ample rm, AKC, no charge for those who can care for them properly. x3-6243.

Kittens, asst sex & colors. Rick, x5845 Linc.

Lost and Found

Found: m watch, pls call x3-3105 & describe.

Found: parakeet, entr bldg 13, 7/20. Rm 13-4069, x3-6894.

Found: leath Ann Taylor handbag, empty. Aero/Astro lib, Rm 33-316, x3-5665.

Wanted

Borrow '73 MG Midget operator's manual. Art Berg, x3-5579.

Soft desk swivel chr. x8728 Dorm, evgs.

Volunteers for art, photo & gen office work for Ecology Action campaign to save whales & dolphins. Ralph Houston, x3-7922.

Going away for 75-76 school yr? Respons, exper 2nd yr grad stu wl hsesit, wl take expert care of your hse or apt. Andi, x3-2701.

Two f undrgrads seek 2 BR apt nr T, psbly in hse, c. $250 or hsekpg. Trina, x3-2292.

Wd like to sub your apt during Aug. Call, 494-8448.

Power supply or parts to build, capable of 8A at 20V. Eric, x3-4183.

Garage space for storage of car, start 9/1, for 6 wks or more. Audrey, 661-0870.

Furn hse for visit prof & hsbnd, Sept-mid Nov, nr MIT or T, nd to practice cello, music more imp than rent. Carla, x3-3471.

Furn stu or rm in hse for visit prof, fall term, nr MIT or T, not more than $200. Renee, x3-6216.

Visit prof nds furn hse, 2 BR apt or swap w/hse Slvr Spr, Md., fall term, nr T, can hsesit, has refs, not over $400. E. Kampits, x3-3466.

Outbrd motor, 7½-15 hp, gd cond. Billy, x366 Linc.

Wd like to rent or hsesit for prof on lve for yr, refs avail. Buzzy, x3-4076.

Apt, lg BR or 2 BR, pref hse in qt res area, Bel, Wtrtwn, Camb, Bkln, for MIT prof. x3-4969.

Rotary switch, 10 poles or more; electronics for KLH tape deck; lg backpack (lk Kelty SErac); wl pay cash. Call, 494-8888.

M 3 spd bike. Mark, x3-4067.

Pianist for wedding Aug 23, 2pm, $25. Cathy, x0253 Dorm.

Riders to Detroit, psbly Ann Arbor, lvg 8/6, rtn approx 8/18. Randy, x3-5216.

Babysitter p-t for 4 yr girl in my Bel home, thru 9/22, hrs nego. Rae Goodell, x3-4069.

Want to rent barn space for furn construction & repair. Lit, x181-56-154 Haystack.

Riders to Chicago, lve wknd 8/9, wl share driving & exp. x3-3831.

Tbl saw, 9 or 10", w/sep motor, tbl extensions if avail, known brands pref. Gary, x3-3021.

Roommates

M, 2, to share mod spac Concord hse, avail now, approx $140/ea for everything. Lenn, 923-0187, evgs.

Rmmate, f, straight looking, for same to share apt, loc opt. Cathy, x3-2030.

Sk f rmmate for lg Arl apt, own BR, furn if desir, nr T & shops, avail 9/1, $100. Diane, x3-1473.

F, 23+, share 2 BR Camb duplex nr BU Bridge, avail 9/1, bsmnt, wash/dry, dw, safe, no smokers or pets, $137.50 incl ht, off-st pkg. Janet, x3-7726.

F rmmate, share sunny semi-mod 2 BR apt, safe bldg, blk off Comm Ave & H St intersect, 1 min T, avail 9/1, pkg avail, $135 incl ht. Ann, x3-4600.

F, share Camb 2½ BR apt, 7 min walk Cent Sq, v spacious, $90 + ht. Pam, 547-0478.

M rmmate, 4 BR apt, own rm, 15 min walk MIT, Cent Sq, H St area Camb, $43.50 + util. x3-3831.

Want f, 22+, pref non-stu, share 3 BR Cldg Crnr apt w/2 working f, $100 + util. Call, 277-6149, aft 6pm.

F rmmate, 23+, working, to share 10 rm Som hse w/4 f, own BR, piano, frpl, yard, washer, pkg, gd nbrhd, $87.50 + util. x3-1669.

M or f, own BR in 3 BR Beac apt nr Bkln, avail 9/1, lg rms, K, frpl, qt, blk T & shops, 15 min walk MIT, pref non-smoker, $110 + elec. Steve, 868-0581, evgs aft 8/7.

Carpools

Sherborn-MIT, daily 9-5 or 8:30-4:30, some flex, wl share driving. Janice, x3-1611.

Miscellaneous

Wl type theses, manu, etc on Selec, hi qual & accuracy & editing. Alison, x3-1712.

Phototypesetting. Roberta, 444-7724.

Tree srvc, trees felled & pruned, chipping, trucking, 2 stu in Concord area. Call, 275-7976.

Wl do any typing, pre-law spec rates. Carol, 274-7100, x2634, days.

Wl type theses, manu, term papers, etc, IBM Correct Selec. Phyllis, x3-4237.

POSITIONS AVAILABLE

This list includes all non-academic jobs currently available on the MIT campus. Duplicate lists are posted on the women's kiosk in Building 7, outside the offices of the Special Assistants for Women and Work (10-215), and Minority Affairs (10-211), and in the Personnel Office (E19-239). DURING THE SUMMER MONTHS, AN INTERIM LISTING OF NEW POSITIONS WILL BE POSTED AT THE ABOVE LOCATIONS ON THE WEDNESDAYS WHEN TECH TALK *IS NOT PUBLISHED (JULY 16, 30, AUGUST 13, 27). Personnel interviewers will refer any qualified applicants on all biweekly jobs Grades II-IV as soon as possible after their receipt in Personnel.*

Persons who are not MIT employees should call the Personnel Office on extension 3-4251.

Employees at the Institute should continue to contact their Personnel Officers to apply for positions for which they feel they qualify.

Dick Higham 3-4278
Pat Williams 3-1594
(secretary – Dixie Chin)

Virginia Bishop 3-1591
Mike Parr 3-4266
Phillip Knight 3-4267
(secretary – Joy Dukowitz)

Sally Hansen 3-4275
Jack Newcomb 3-4269
Evelyn Perez 3-2928
(secretary – Susan Bracht)

Ken Hewitt 3-6512
Carolyn Scheer 3-6511
(secretary – Ellen Schena)

Effective with the July 9, 1975 issue of *Tech Talk*, each new available position will be described in detail for two issues only. Thereafter, the position will appear in the summary of additional positions available found at the end of this section.

Acad. Staff, Technical Assistant, in Nutrition and Food Science will perform routine support activities of cell culture laboratory: plating cells; sterile manipulation; incubator and microscope maintenance. B.S. in Chemistry or Biology required. C75-19, C75-20 (8/6).

Spons. Res. Staff, Technical Assistant, in Center for Cancer Research will be involved in research on mouse leukemia virus: sterile culture of cells; purification of virus and biochemical isolations. Bachelors degree in Chemistry or Biology, laboratory experience required. D75-130 (8/6).

Admin. Officer, Acad. Staff, in Department of Foreign Literature and Linguistics, will manage headquarters office; assist department head in development and implementation of procedures; assist in budget preparation and monitoring; arrange supply and equipment purchase and maintenance; process payrolls; act as liaison with Institute administrative offices; prepare and monitor class schedules and other procedures related to academic program. Administrative/managerial experience required. Facility with French, German, Russian, Spanish preferred. C75-21 (8/6).

Spons. Res. Staff in Center for Cancer Research will perform independent research on biochemical differences between normal and virus transformed cells. Ph.D. in the field of membrane and transport studies, 2 years postdoctoral experience required. Experience with overgrowth stimulating factor desirable. D75-131 (8/6).

Spons. Res. Staff, Project Manager, in Center for Transportation Studies, will coordinate functions of faculty, staff, student group involved in federally funded study of institutional and market barriers to innovation in urban transportation: responsible for project report production; assure project compliance with MIT and government administrative requirements. Masters degree in social science, urban planning, management or civil engineering, proficiency in analytic and narrative writing, ability to relate to professionals and others concerned with urban transportation issues required. D75-129 (8/6).

Admin. Staff, Project Planner, Planning Office will have responsibility for formulating and implementing programs relating to MIT development goals in Cambridge community: act as liaison with public and private agencies; monitor and evaluate impact of various issues on the Institute; represent the Institute in community planning activities; provide technical assistance to Institute departments involved in community planning projects. Masters degree in Urban Planning, 3-5 years related experience required. Candidate should have oral and written communication skill, professional planning ability and experience. Familiarity with the Cambridge community desirable. A75-44 (8/6).

Spons. Res. Staff in Energy Lab will perform analytical research functions in advanced energy conversion systems and components including magnetohydrodynamic cycles, high temperature gas turbines, coal combustors, seed recovery systems, heat exchangers, environmental effects. Ph.D. (or MS and considerable working experience) in the fields of magnetohydrodynamics, combustion, chemical processes required. Applicants should also be experienced in mathematical modeling with large-scale digital computers. D75-124 (7/23).

Acad. Staff, Administrative Officer, in Harvard – MIT Program will have comprehensive responsibility for administrative aspects of 2-3 research projects, particularly those of the Biomedical Engineering Center for Clinical Instrumentation, budget management and control; approval and inter institutional fund exchange; supplementary grant applications; organization of administrative meetings, technical seminars, site visits; prepare manpower, patent reports. Training and experience in management, cost aspects of grants, contracts and research administration required. Engineering background preferred. Familiarity with the MIT procedures helpful. C75-18.

Admin. Staff, Director, Recruitment Placement and Student Activities; Sloan School will recruit and act as liaison with primarily but not exclusively women and minorities; initiate and manage all aspects of placement; assist in management of masters program. Advanced degree, preferably from Sloan School, management experience required. A75-45 (8/6).

Spons. Res. Staff, Research Engineer, in Chemical Engineering will be involved in design, construction testing and operation of experimental equipment and data collection and analysis. Position requires MS or Ph.D. in Chemical Engineering, 3 or more years industrial experience in research and development, knowledge of fuels and combustion research techniques, experience in design, construction, operation of probes and other hardware for temperature, volocity, composition measurements in microscopy, mass spectrometry, gas chromatography, optical measurement techniques, computer programming, mathematical modelling. D75-133 (8/6).

Spons. Res. Staff, in Nuclear Engineering program involving new techniques for nuclear medicine imaging: will do mechanical design and development of prototype instruments and initial testing. Experience in fabrication and operation of multi-wire proportional chambers, spark chambers, scintillation counters and familiarity with associated electronics required. Bachelors degree in Physics, Electrical Engineering or Mechanical Engineering plus 3 or more years experience also necessary. D75-134 (8/6).

Admin. Staff, Project Manager, Systems Development in the Office of Administrative Information Systems will develop and modify systems from feasibility study through operational phases: define user objectives; prepare specifications; develop schedules; coordinate user manual preparation; act as user liaison. Demonstrated skill in computer project management, experience in general financial systems and in the design and implementation of a complex payroll system, Bachelors degree, or equivalent, necessary. A75-41 (7/23).

Spons. Res. Staff, in Lab for Nuclear Science will do postdoctoral research involving design, debugging, operation of current high-energy instrumentation apparatus and techniques including Cerenkov counters, proportional wire chambers, time-of-flight techniques, high-speed electronics. Ph.D. in experimental high energy physics, 2-3 yrs experience in the field, thorough knowledge of techniques indicated required. Knowledge of small and mini-computers desirable. One position has a primary work site at Fermi Natl. Lab, Batavia, Ill; the other at the CERN facility, Geneva, Switzerland with travel to foreign and domestic sites for varying intervals. Positions are for 1 year, but may be extended. D75-126, D75-127 (7/23).

Acad. Staff, Admin. Officer, in Mechanical Engineering will manage budget, personnel, space, assist in development and implementation of academic research policy; participate in dept. policy committees; assist faculty in research proposal preparation, supervision, training and evaluation of personnel, space allocation, modification. Bachelor's degree, or equivalent, experience with accounting, personnel management, familiarity with MIT procedures, skill in dealing with people required. C75-17 (7/23).

Spons. Res. Staff, Technical Assistant, in Cell Culture Center, to perform technical work in the mass production of animal cells and viruses: cell growth from primary culture and a variety of cell lines in suspension and as monolayers; virus plaque assays, colony forming efficiency tests. Bachelors degree and some experience in animal cell culture required. Recent graduates, please submit list of relevant courses taken. D75-123 (7/23).

Nurse, Exempt, in Clinical Research Center will perform general and specialized nursing procedures in 12-bed research unit, taking charge as necessary; work with lab and dietary departments. Must be able to observe and chart accurately. Mass. Licensed RN, graduation from accredited nursing school, plus two years experience required. Pediatric nursing experience helpful. 8am-4pm rotating shift and alternating weekend duty. E75-14 (8/6).

Exempt, Dental Hygienist, in Medical Department will perform initial examination and charting, prophylaxis, peridontal treatment, plaque control. Take and process x-rays; screen emergencies. Registered Dental Hygienist required, preferably with AB or BS in Dental Hygiene. Previous work experience, including experience in peridontal care preferred. E75-32 (8/6).

Tech. Asst. IV in the Research Laboratory of Electronics will operate a microwave radiometer at Faulkner Hospital breast cancer clinic. Experience with diagnostic equipment and familiarity with hospital environment required. B75-375 (8/6).

Secretary V to Department Head, Physics Department will work in headquarters office: type correspondence and other material; arrange foreign and domestic travel; maintain files. Position involves much contact with faculty and staff. Shorthand, typing, organization skill and ability to handle a very busy office required. Applicants should have a minimum of 5 years secretarial experience. B75-346 (8/6).

Secretary V to Director MIT Press, will act as liaison between Director and Press staff; type varied materials; arrange travel and meetings; take meeting minutes; maintain files; will compose own correspondence and complete research projects relating to proposals. Excellent typing, machine transcription skills, ability to coordinate several activities simultaneously required. Shorthand/speedwriting skill, college training, MIT experience preferred. B75-356 (8/6).

Secretary V in Resource Development will perform general secretarial duties for 3 District Officers involved in a major capital campaign: make extensive travel arrangements; transcribe and write letters and memoranda; arrange appointments. Organizational skill ability to keep informed of campaign activities and to work independently required. Excellent typing, a pleasant telephone manner, 2-3 years administrative secretarial experience necessary. College training and knowledge of MIT procedures preferred. B75-358 (8/6).

Secretary V to Civil Engineering Department Head will perform standard secretarial duties; act as liaison with public, administration, faculty, students; handle confidential material and specific projects as required. Secretarial skills including shorthand and/or machine dictation required. B75-309 (7/23).

Administrative Assistant V in Center for Advanced Visual Studies will perform secretarial and administrative duties for research projects and educational programs; assist in proposal preparation; supervise student enrollment; type and compose correspondence; administer budget. Organization and secretarial skills, ability to work independently and under pressure, knowledge of MIT accounting procedures required. Knowledge of arts administration, German desirable. Position begins 8/25/75. B75-313 (7/23).

Administrative Assistant V to Administrative Officer, Earth and Planetary Sciences, will perform varied administrative duties involving financial aspects of department operation, interaction with faculty, students, staff, MIT administrative offices on a variety of matters. Must like working with figures and people. College training, or equivalent experience, required. B75-337 (7/23).

Administrative Assistant – Secretary IV-V in the Office of Child Care will have responsibility for all fiscal procedures for the Technology Childrens Center and perform general secretarial duties for Child Care Coordinator and Family Day Care Program Developer: prepare payroll, tax returns, budget reports, statements; prepare statistics: type file; order supplies; provide information and referral services to families; develop payment schedules. Selected candidate will be trained to assist with interviewing and placements. Previous administrative and accounting experience, ability to work with frequent interruptions, judgment and sensitivity required. Experience with preschool programs, child development and growth desirable. Foreign languages helpful. B75-345 (8/6).

Secretary IV to Treasurer of the MIT Development Fund which is involved in the development of new-technology enterprises: will perform general secretarial duties including maintenance of check book and financial records; typing from machine dictation. Good typing, familiarity with dictation equipment, English grammar skill and a minimum of 2 years secretarial experience required. B75-373 (8/6).

Secretary IV to three organic chemistry faculty members, Chemistry Department, will transcribe machine dictation; type technical manuscripts and proposals. Arrange travel; assist students and others with Institute procedures. Technical typing skill, ability to organize work, experience with dictation equipment required. Applicants should have a minimum of 2 years secretarial experience. B75-378 (8/6).

Secretary IV, temporary, to visiting academic staff member and administrative assistant in Joint Center for Urban Studies: will coordinate schedule; type; file; arrange travel; assist in other Center projects as required. Typing skill, ability to work independently required. Temp. to 1/1/76, but may be extended. B75-376 (8/6).

Secretary IV to two faculty members in the Organization Studies Group, Sloan School: transcribe machine dictation; maintain calendars; fill reprint requests; type course material and manuscripts; schedule and arrange seminars; handle space charges; communicate information on administrative matters to and from the Group; monitor statements. Secretarial and administrative, skills, 2-3 years experience required. MIT experience helpful. B75-349 (8/6).

Secretary IV to two faculty members in Biology will perform general secretarial duties including composing own correspondence, typing from handwritten draft, machine dictation; monitor research grants; handle personnel related matters; gather and prepare material for proposals; arrange seminars. Excellent typing, experience with dictation equipment, some experience with accounting procedures required. Familiarity, with MIT accounting procedures desirable. Must be able to organize and complete work independently. B75-350 (8/6).

Secretary IV to Mechanical Engineering faculty members will handle correspondence, arrange travel, appointments and coffee seminars. Excellent typing, including some knowledge of superscripts and subscripts, experience with shorthand and/or dictation equipment, high school graduate, or equivalent with secretarial school training or a minimum of 4 years secretarial experience required. B75-344 (8/6).

Secretary IV in Joint Center for Urban Studies will type manuscripts, including technical material; answer phones; act as receptionist; occasionally share in food service to Center guests. Excellent typing skill, minimum of 2 years experience required. B75-342 (8/6).

Secretary IV in Civil Engineering will type reports, class material, correspondence; prepare manuscript drafts; maintain research accounts and records; provide other secretarial support as required. Good organization and typing skill, secretarial experience, ability to work with a diverse group of people required. B75-341 (8/6).

Secretary IV to Senior Architect, Planning Office will type correspondence, reports; arrange travel, appointments; act as project secretary for specific studies including work for other project staff; maintain files; organize research materials. Excellent typing skill plus 2 years office experience required. B75-343 (8/6).

Secretary IV to two faculty members in Civil Engineering, Water Resources Division: perform general secretarial duties including typing of correspondence, reports, theses; maintain files and accounts; answer phones. Typing skill and willingness to learn technical typing required. B75-357 (8/6).

Secretary IV to Sloan School faculty member working in field of finance and investment securities; type correspondence and manuscripts, containing some mathematical equation, from handwritten drafts; maintain complicated files; answer phone and mail requests for materials; arrange travel and appointments; handle research assignments. Good secretarial skills including excellent typing organization ability required. Background in investment securities helpful. B75-354 (8/6).

Secretary IV to five faculty members in Economics will perform general secretarial, receptionist and clerical duties: type correspondence; course material, manuscripts including some technical data; assist students with general inquiries; answer phones; arrange travel and appointments. Good typing, English grammar skill required. Non-smoking office. B75-355 (8/6).

Secretary IV to Supervisor of Intramural Athletics, Athletics Department: type, mimeograph varied material; prepare payroll vouchers; collect entry fees and fines; perform general secretarial duties for Student Executive Committee; maintain master reservations; prepare user lists. Excellent typing, ability to interact with students and other MIT community members required. B75-364 (8/6).

Secretary IV to 3 faculty members, Chemistry department will type correspondence, reports, including technical material; monitor research accounts; perform other general secretarial duties. Technical typing skill, experience with dictation equipment, minimum of 2 years secretarial experience required. Familiarity with scientific terminology helpful. Position includes extensive student contact. B75-366 (8/6).

Secretary IV, part-time, in editorial section, Nutrition and Food Science will type and prepare scientific manuscripts for publicaton. (Subject areas range from malnutrition in underdeveloped countries to animal pathlogy.); type corespondence; perform other general secretarial duties. Excellent typing skill required. Previous secretarial experience preferred. Selected candidate will be trained to operate MT/ST. B75-370 (8/6).

Secretary IV in Aeronautics/Astronautics will handle secretarial duties relating to research and academic activities; type correspondence, reports, including technical material; compose letters from oral instruction, maintain files and accounting records; arrange travel and appointments. Technical typing skill, ability to establish priorities required. Knowledge of MIT accounting procedures preferred. B75-325 (7/23).

Secretary IV in Urban Studies and Planning headquarters will type correspondence, reports; arrange travel, appointments; luncheon meetings; coordinate committee meetings. Excellent typing, machine transcription skill, previous office experience required. Shorthand desirable. B75-326 (7/23).

Secretary IV in Humanities Literature Section will take and transcribe shorthand dictation; coordinate Section activities (such as catalogue copy preparation, teaching assignments); type manuscripts and other material for faculty members. Excellent secretarial skills, including shorthand, plus 2 years office experience required. B75-334 (7/23).

Secretary IV in Center for Policy Alternatives will provide secretarial support to faculty and research staff working on programs relating to industrial and social applications of technology in foreign countries: take and transcribe shorthand, dictation; arrange meetings and travel; organize, maintain files; order supplies; maintain petty cash. Excellent shorthand, typing skill, 3 years secretarial experience, preferably in international field, ability to apeak Spanish and/or Portugese required. College training desirable. B75-340 (7/23).

Secretary IV to Technology and Culture Seminar Convenor will assist with a variety of secretarial and administrative duties related to Seminar and the responsibilities of MIT Episcopal Chaplain; arrange planning committee meetings; correspond with speakers; arrange travel, publicity; maintain accounts. Secretarial skills, including shorthand, ability to organize and follow through on detail, to edit reports and proposals, to supervise part-time help required. B75-308 (7/23).

Secretary IV to several Mechanical Engineering faculty members will type varied material; arrange travel, appointments, coffee seminars; maintain accounts. Excellent secretarial skills including shorthand/machine dictation, technical typing and the ability to interact well with people required. Possible job-sharing opportunity. B75-321, B75-339 (7/23).

Secretary III-IV to faculty and academic staff in Nuclear Engineering will type varied material including manuscripts, course material, from handwritten draft, machine and/or shorthand dictation; arrange travel and appointments. Typing skill, experience with dictation equipment and ability to work independently required. Shorthand skill helpful. B75-353 (8/6).

Secretary III-IV to faculty, staff members and reading room librarian in Nuclear Engineering: type technical material, correspondence; file, arrange travel; order books journals; catalogue theses; books, pamphlets; order and process technical reports. Experience in reading room maintenance, or willingness to learn, typing, organizational skill, ability to work with students and public with minimum supervision required. B75-361 (8/6).

(Continued on page 8)

Mr. Blandings Is Outmoded

'Dream House' May Be Another Vanishing Species

(The following article, by Robert J. Donovan, an associate editor of the Los Angeles Times, *appeared in that paper June 24.)*

By ROBERT J. DONOVAN

The day is upon us, or soon will be, it seems, when millions of Americans no longer can realize the old yearning for a house of their own surrounded by their own yard and trees in a tranquil neighborhood. The stagflation of recent years has caused an acute shortage of moderately priced, desirable housing for a population that is still growing. No early relief is in prospect.

Furthermore the cost of land and materials and the need to conserve energy mean that many a Mr. Blandings will not be building his dream house on his own plot on a shady lane. More likely he will be squeezing his family into an apartment or a town house or row house in a condominium complex.

Mr. Blandings is not happy with this state of affairs, if the research of Dr. Richard P. Coleman of the MIT-Harvard Joint Center for Urban Studies is any clue.

"There is a deep nostalgia for a better past," he observed in an interview the other day.

To put a finer point to it, Coleman, a senior research associate at the center, who is engaged in a survey of people's attitudes about housing, finds that the condition of housing as such is causing less unhappiness than the condition of neighborhoods.

"The tragedy of American life," he said, "is the way people feel the city has been made unlivable by unrest and supposed 'do-gooding.'

"Most of the people we see right now who live in those sections of urban areas where integration has been occurring are really unhappy. The middle Americans feel abandoned by some elements of the upper class. They feel the upper class has turned against them, and they can't quite understand it.

"They see themselves as the backbone of America, as a good society. Their yards and houses are neat. They don't keep junky cars. Why, they ask, should we be penalized when we've done our job? So there is this unhappiness with 'do-goodism.'

"Because housing construction is not keeping up with demand, the outlook is that people are going to be doubling up more than in the past. Children will be home longer. Each dwelling unit will be more expensive. Units that should be torn down will be retained in use longer than it is desirable.

"The kind of housing people had come to think they were going to have in life is not going to be available. In the 1950s and 60s there was a dramatic escalation in what was expected in the way of housing. Now we are going to have to be readjusting our sights, especially where the goal was larger houses."

If the dream house is receding, dreams are not.

"The great daydream of people who want to remain in metropolitan areas is the walled city," Coleman said. "Some of these communities in the Los Angeles area are typical. They are built around country clubs or golf courses or just swimming pools and tennis courts. Recreation is on the site. The whole place is surrounded by a 6-foot wall. There is a security guard. No one can afford to move in who isn't in the right income situation, so there is social equality.

"The only trouble is that the houses are attached—they are row houses, and the average family still likes to have a house standing by itself. That dream will be dying slowly.

"You find similar walled cities in the Southwest, in Tulsa, Houston, Kansas City." (Also on the outskirts of Washington.)

"Another group, vocal and influential, wants to live close in, in interesting neighborhoods like Georgetown in Washington, Montrose in Houston, parts of Greenwich Village in New York, along Wilshire Blvd. in Los Angeles and on Beacon Hill in Boston. These old neighborhoods with high status and old charm are usually artsy-craftsy chic. People like the semi-Bohemian atmosphere, if only unwanted elements could be kept out.

"Among the highly educated and more sophisticated there is a daydream of living in lineage areas of the city—high-status neighborhoods which have historical backgrounds and may be situated in a museum area. These are the neighborhoods where the cultural leaders may live.

"Many people are daydreaming of leaving cities altogether and moving to the countryside or to the small town where they were born or to resort areas. I don't mean to Miami Beach or La Jolla, but to a small manmade lake with little houses around it."

"In the cities," Dr. Coleman noted, "unhappiness does not have so much to do with housing as with neighborhood characteristics. People are worried about safety. It is tranquility that is being sought. That is the meaning of the walled city and the small town. People are not so desirous of a large house as they are of tranquil neighborhoods.

"One of the biggest housing problems in America is that a lot of housing that is perfectly satisfactory per se has been made socially undesirable by integration of schools and faculties."

The anticipated fading of the single-family house and the large house from the American scene is hardest on those who have lived in such houses and who, even among those from 30 to 35 years of age, anticipated having similar houses of their own.

"The prospect." Coleman said, "is not so painful for the generaion that is coming up. "They know they are not going to be driving big Buicks and Cadillacs. They are coming generally to terms with that.

"They have decided they are only going to have two children, so they are going to be able to accept smaller houses. They have decided the future isn't going to be so great. We no longer have a long lead over the rest of the world. It is more nearly a case of sharing the poverty. We are not going to have as good a standard of living as in the past."

Positions Available

(Continued from page 7)

Secretary III-IV, part-time, to faculty member in School of Humanities and Social Science: type from machine dictation and drafts; arrange meeting; do occasional library research; administer research funds; may prepare material for computer input (will be trained). Grammatical, editing skills and ability to work independently required. 20 hour/week. B75-299 (8/6).

Secretary III-IV, part-time, to 4 faculty members in Architecture will perform varied secretarial and administrative functions: type from draft or dictation equipment; perform clerical library duties; answer phones; maintain xerox accounts and petty cash funds. Will also assist in production of graphic material (design, layout, etc.) Organizational ability, good typing, experience and/or interest and ability in graphic design required. 20 hrs/wk. B75-372 (8/6).

Secretary III-IV to several faculty members in Mathematics will type correspondence, manuscripts including technical material; handle mailings; maintain professional journal files; arrange travel; carry out library searches. Technical typing skill, familiarity with or willingness to learn use of IBM mag card typewriter, ability to set priorities required. B75-371 (8/6).

Secretary III-IV to 3 Chemical Engineering faculty members; type correspondence, course material, technical reports; maintain student records, departmental library; act as receptionist; arrange travel and appointments. Will also perform secretarial work for additional part time staff. Organizational skill, fast accurate typing, ability to work with several personalities required. Technical typing skill preferred. B75-320 (7/23).

Secretary III-IV in Psychology will handle all administrative duties related to introductory course; type manuscripts, reports; arrange hotel reservations for guest speakers; assist with editing of journal; occasional secretarial duties for research staff. Will work under supervision of Department Secretary. Command of English language, excellent typing skill, ability to work under pressure required. College training, shorthand skill desirable. B75-330 (7/23)

Secretary III, part-time, in the Libraries will perform general secretarial duties: type correspondence, reports, manuals; assist in compilation of statistics, flow charts and in manual maintenance. Good typing skill required. 18 hours/week B75-363 (8/6).

Secretary III in News Office will type and process news releases; answer phones; fill requests for releases, biographical information, maintain mailing list. Fast accurate typing, command of English language, ability to work under pressure required. B75-360 (8/6).

Secretary III to two faculty members, in the fields of management science and marketing, Sloan School: will take and transcribe dictation; type course material, manuscripts; file; answer phones; other secretarial duties as required. One secretary office; applicant should have excellent typing, shorthand/speedwriting, organization skill and ability to meet deadlines. B75-367 (8/6).

Secretary III, part-time, to 2 Assts. for Health Information and Education, Medical Dept.: answer phones; type and proofread newsletters, correspondence and other material; schedule informational meetings, discussion groups, including arrangements for meeting rooms, refreshments. Accurate typing, discretion, sensitivity required. 20 hrs/wk. Position available in late August or early Sept. B75-338 (7/23).

Senior Clerk IV will assist Chemical Engineering Administrative Officer in maintaining records of general and sponsored research funds: will prepare and/or analyze monthly accounting statements to insure proper rates; arrange fund transfers; review payroll reports for accuracy; determine costs for proposals; assist in implementation of departmental information system. High accounting aptitude, ability to handle complex accounting records without supervision, to understand graphs and budgets required. Some typing skill necessary. B75-359 (8/6).

Senior Clerk IV, Order Processing at MIT Press, will handle all phases of order process through use of Flexowriter (for computer input), including cash receipts, information updates, mailing list changes, deletions, cancellations, price quotations; assist customers with telephone inquiries and orders; make arangements for special orders. Good typing skill required. B75-318 (7/23).

Accounting Clerk III in Aeronautics and Astronautics will handle all aspects of non-academic payrolls; administer petty cash account; handle purchasing and payment procedures; monitor and file monthly statements; prepare special billings and computer time requisitions. Facility with figures and other detailed work required. Some accounting experience helpful. Non-smoking office. B75-352 (8/6).

Senior Clerk III in Purchasing will maintain requisition log; type purchase orders; numeric and alphabetical filing; may operate folding equipment. Accurate, fast typing, ability to handle detailed work required. B75-362 (8/6).

Clerk Typist III part-time in Sloan School will process subscriber accounts for the *Sloan Management Review:* renewal invoice payments; handle related correspondence; fill reprint requests; open, sort mail; process checks, Typing skill required 20 hours/week. B75-348 (8/6).

Sr. Clerk-Receptionist III in Personnel Office will share responsibility with other receptionist in performing varied duties relating to employment process: provide information on job status, specifications and personnel procedures to applicants and others; assist persons in completing applications; administer typing tests; refer general inquiries to appropriate offices; type memoranda and other material; file. Ability to exercise judgment, sensitivity and patience in service-oriented function, typing skill, required. 37½ hr/wk. B75-365 (8/6).

Senior Clerk III in Libraries Microreproduction Laboratory will have responsibility for receiving orders and inquiries on telephone and in person; type correspondence and forms; retrieve materials from libraries. Command of English language, accurate typing, ability to deal with people required. B75-327 (7/23).

Tea Hostess II, part-time, in Earth and Planetary Sciences will make and serve refreshments at daily social hour for faculty, staff, students; periodically operate dishwasher; keep kitchen clean and lounge in order. A reliable, courteous individual is required. Academic year only (9/2/75-5/28/76); 15 hrs/wk. B75-368 (8/6).

Keypunch Operator III in Medical Department to support patient contact computer system: assist systems analyst in all phases of data processing. A minimum of 1 year working experience on IBM 129 keypuncher and verifier and ability to work with little supervision required. B75-331 (7/23).

The following positions were still available at *Tech Talk* deadline. The date following each position is the date of the most recent *Tech Talk* issue in which the position was described.

ADMINISTRATIVE STAFF:
A75-23, Regional Rep., Alum. Assn. (6/25)
A75-26, Dist. Officer, Resource Develop. (7/9)
A75-27, Director, Development Off. (6/25)
A75-35, Regional Rep., Alum. Assn. (6/25)
A75-38, Operations Mngr., Medical (7/9)

BIWEEKLY:
B75-190, Tech. Asst. IV, Arch. (6/25)
B75-195, Comp. Op. IV, Off. of Adm. Inf. Syst. (6/25)
B75-214, Sec. IV, Hlth. Sc. & Tech. (6/25)
B75-234, Sec. IV-V, Hlth. Sc. & Tech. (6/25)
B75-242, Sec. IV, Mech. Eng. (6/25)
B75-245, Sec. IV, Lab. for Nuc. Sc. (6/25)
B75-254, Sr. Clerk IV-V, Comp. Acctg. Off. (6/25)
B75-263, Sec. IV, Div. for Stdy. & Res. in Ed. (6/25)
B75-265, Sec. IV-V, Chem. Eng. (6/25)
B75-267, Sec. IV, Res. Lab. of Elec. (6/25)
B75-273, Sec. IV, Mat. Sc. & Eng. (7/9)
B75-281, Sec. III, Alum. Assn. (7/9)
B75-289, Sec. IV, Energy Lab (7/23)
B75-290, Sec. III-IV, Energy Lab (7/23)
B75-306, Sec. IV-V, Physics (7/23)

ACAD STAFF:
C75-14, Asst. to Dir., Cent for Adv. Eng. Study (6/25)

SPON. RES. STAFF:
D75-8, Biophysicist, Nat. Magnet Lab. (6/25)
D75-48, Economist, Energy Lab (6/25)
D75-70, Electrical Engineer, Lab for Nuc. Sc. (6/25)
D75-93, Comp. Linguist, Res. Lab. of Elec. (6/25)
D75-101, curriculum devel., Cent for Adv. Eng. Stdy. (6/25)
D75-103, Programmer, Res. Lab. of Elec. (6/25)
D75-106, postdoc. res., Lab. for Nuc. Sc. (6/25)
D75-107, postdoc. res., Lab. for Nuc. Sc. (6/25)
D75-111, Programmer, Artificial Intell. Lab. (6/25)
D75-112, Engineer, Energy Lab. (6/25)
D75-113, Data Mngmt. Spec., Energy Lab. (6/25)
D75-114, Asst. Director, Cntr. for Inf. Systems Res. (7/9)
D75-115, modern control theory, Elec. Systems Lab (7/9)
D75-116, Programmer, Sloan School (7/23)
D75-120, Systems Programmer, Lab. for Nuc. Sc. (7/23)
S75-1, Programmer, Proj. MAC (6/25)

EXEMPT:

HOURLY:
H75-55, Tech. B., Lab for Nuc. Sc. (6/25)

John Bell, groundsperson in Physical Plant, prepares the flare roots of an elm in Killian Court to receive injections of the latest Benalite-based treatment—tested successfully in Canada where it was developed. The new formulation not yet on the market in the US, is in use only on a selective basis in several parts of the country. The Research Institute of New Hampshire, which made it available to MIT requires Physical Plant to do extensive monitoring of the conditions of the trees given the mixture. It is hoped that the treatment may save three ailing elms in Killian Court being watched closely by Larry Pickard, manager of grounds. This is the time of year when elms succumb to blight. Recently five diseased trees on east campus had to be felled.

The following positions have been FILLED since the last issue of *Tech Talk*:

B75-302	Sr. Clerk IV
B75-253	Secretary IV
B75-255	Secretary IV
E75-21	Accountant
B75-251	Comp. Op. IV
B75-319	Secretary IV
B75-332	Clerk III
B75-259	Secretary IV
B75-324	Secretary IV
B75-268	Secretary IV
B75-295	Secretary IV
B75-307	Secretary IV
B75-193	Secretary IV
A75-40	Admin. Staff
E75-26	Exempt
B75-277	Secretary IV
A75-30	Admin. Staff
B75-336	Secretary III
B75-288	Tech. Asst. IV
B75-328	Secretary III-IV
E75-25	Exempt
B75-301	Secretary IV
A75-32	Admin. Staff
D75-94	Spons. Res. Staff
D75-95	Spons. Res. Staff
B75-312	Secretary III
D75-105	Spons. Res. Staff
E75-23	Exempt
H75-57	Hrly.
B75-335	Sr. Clerk IV
B75-297	Bookchecker II
B75-311	Secretary III
B75-317	Secretary III
C75-16	Acad. Staff

The following positions are on HOLD pending final decision:

D75-91	Spons. Res. Staff
D75-55	Spons. Res. Staff
B75-323	Sec/Lib. Asst. IV
B75-333	Secretary IV
E75-30	Exempt