Massachusetts Institute
of Technology

TECH TALK

June 22, 1983
Volume 27, Number 39

Disaster drill

The MIT Medical Department will hold a "disaster" Wednesday, June 29 to test its ability to respond to a major catastrophe, should one occur on the campus.

"This the first disaster drill in the new Health Services Center," Dr. Melvin H. Rodman, medical director, said, "We plan to stage them periodically to maintain our ability to respond when needed."

The Medical Department held its first disaster two years ago to evaluate its existing disaster plan. The plan has since been revised and the new plan will be reevaluated following this disaster.

The June 29 disaster will involve everyone in the Medical Department. Routine appointments for medical care will be lightly scheduled that day, but emergency care for illness or injury will be available throughout the drill.

Also participating in the disaster will be the Campus Police, Physical Plant, the Environmental Medical Service and the Safety Office. Representatives from the Cambridge Fire Department and Civil Defense have been invited to observe.

In order to maintain a sense of realism, the exact time, location and nature of the disaster are a secret.

Tennis lessons

A new series of tennis classes will be offered in July by the Department of Athletics. Instructors will be Jim Taylor, coach of men's tennis, and John Chen, captain of the men's varsity team.

Beginners' lessons will be held Mondays and Wednesdays, beginning July 6, 5:15-6:15 and 6:15-7:15pm. Intermediate classes will be given Tuesdays and Thursdays, beginning July 5, also 5:15-6:15 and 6:15-7:15pm. All classes will be held on the second floor of the Athletics Center.

Students must provide their own tennis rackets and wear flat-soled tennis sneakers. Tennis balls will be provided.

There is a $25 fee for the eight lessons. A 1983-84 Athletic Card is required. Classes are open to all members of the community and those in their immediate families (defined on the back of the card) over 13. Classes will be limited to 10.

TT summer dates

This issue closes Volume 27 of Tech Talk. Volume 28 will open with the July 13 issue. Other publication dates during the summer will be July 27, August 10 and 24, after which weekly publication will resume.

Because of the infrequency of issues during the summer, we will relax our policy of not permitting ads to be repeated in successive issues. However, the policy of one ad per person per issue will remain in effect. Please read the instructions at the top of the ads about how to place one.

CU raises limit

Recognizing changing times and advancing prices, the board of directors of the MIT Employees' Federal Credit Union has updated its policies on secured loans, particularly new car loans.

Effective June 13, CU will lend "approximately 80 per cent of the total vehicle purchase price up to a maximum of $10,000, with up to 48 months to repay." The board felt the increase was necessary to enable members to borrow the larger amounts needed for new automobiles.

The present 13.5 annual percentage rate on loans remains in effect.

Holiday notice

The Institute will be closed Monday, July 4, in observance of the Independence Day Holiday. Normal holiday pay practices will be in effect.

PRANK REPEATED—MIT alumni didn't know what to expect Friday (June 10) when they were asked to gather near a grassy area on the campus for a special demonstration. The surprise came out of the ground—a red, 12-foot weather balloon that prompted gasps, laughter and applause as it inflated and finally burst. (See other photos, page 5; related story, page 4.)

—Photo by Calvin Campbell

'Bright boy' attends 50th

At least one member of the 50th reunion class of 1933 had a special story to tell on Technology Day about the circumstances that originally brought him to MIT.

Wilbur B. Huston recalled that as a high school student in Seattle, Wash., he had wanted to attend MIT, but couldn't afford it and didn't even apply.

He was planning to enroll at the University of Washington, he said, when he became one of 49 finalists (one from each of the states and the District of Columbia) in an unusual contest sponsored by the inventor, Thomas Edison.

Some of the newspapers at the time said the contest was a search for "the brightest boy in America," but Mr. Huston laughed at that description in telling his story.

The contest judges included Edison himself, Henry Ford, Charles A. Lindbergh and Samuel W. Stratton, the eighth president of MIT.

The winner, determined by the results of

(continued on page 4)

Three take new posts in physics

The appointments of a new head for the Department of Physics and new directors for the Laboratory for Nuclear Science and the Center for Theoretical Physics have been announced by Dean John M. Deutch of the School of Science.

The new department head is Professor Jerome I. Friedman. He succeeds Dr. Herman Feshbach, head of the department since 1973, who recently was appointed Institute Professor, a title MIT reserves for scholars of special distinction.

Professor Arthur K. Kerman will succeed Dr. Friedman as director of the Laboratory for Nuclear Science.

Professor Jeffrey Goldstone will succeed Dr. Kerman as director of the Center for Theoretical Physics.

Dr. Friedman is an experimental particle physicist who has made important contributions to that subject, Dean Deutch said.

"Perhaps his most important papers have involved the series of fundamental experiments in which the deep inelastic scattering of high energy electrons by protons and neutrons was investigated. These experiments have had a tremendous influence on our ideas regarding the internal structure of nucleons. It is not too much to say that these experiments proved the existence of quarks which up to that time had only been a vague hypothesis," the dean added.

Professor Friedman, who holds the AB (1950), the MS (1953) and the PhD (1956), all from the University of Chicago, joined MIT as an assistant professor in 1960 after spending 1956-57 as a research associate at the University of Chicago and 1957-60 as a

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Library charges to increase July 1

Because of increasing costs for library materials and services and a decrease in the Libraries' operating budget, several library fees will increase, effective July 1, Jay K. Lucker, director of Libraries, has announced.

The new schedule of charges is:

—Self-service, coin-operated photocopying from five to 10 cents/page.

—General circulation fines on overdue materials from 10 to 25 cents/day.

—Reserve materials fines from 25 cents to $1/hour.

—Fines for materials recalled for another user, $1/day, following a three-day notice period.

The maximum on all fines will be $20.

Thesis processing fees also will be increased effective with September degrees. Masters' theses will go from $17 to $20; doctoral theses from $24 to $30.

In addition, Mr. Lucker noted, library card fees for alumni will be increased from $50 to $100/year; for individual non-alumni borrowers from $150 to $250/year, and group membership (10 cards) from $1,000 to $1,750/year.

Summer hours in the libraries have been cut back somewhat from last year, he said, and the Computerized Literature Search Service will be reduced from 9am-5pm to 9am-3:30pm, effective July 1. Mr. Lucker said he expected the academic year schedule to be very much like that of previous years.

Advisory groups seen imperiled

Citizen advisory committees generally have played a constructive role in the development of regulatory policies for toxic substances, but Congress and the public also must guard against their misuse as "rubber stamp" groups, says an MIT researcher.

In a paper presented last month at the annual meeting of the American Association for the Advancement of Science in Detroit, Dr. Nicholas A. Ashford traces the history of advisory committees and particularly examines the creation and use of such committees in the regulation of toxic substances in manufacturing.

"If there is a great potential for improving the regulatory process through the use of advisory committees," he states, "there is also a great potential for subverting that process through their misuse. Advisory committees, ostensibly created to provide citizen input on a particular issue, have sometimes been used by government for little more than the implementation of a decision made before the

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Halstead heads computer group

By CHARLES H. BALL
Staff Writer

Most current computers can do one thing at a time. Clearly, their performance could be greatly enhanced by having them undertake several tasks at once.

There's a term for that—"parallel- or multi-processing"—and several researchers at MIT's Laboratory for Computer Science are hard at work developing multi-processing computers that can be used by a variety of people to do a number of different experiments. Currently, one of these groups, led by Dr. Robert H. Halstead, Jr., is constructing an experimental multi-processor, called "Concert," which they will use in their work. When fully built, Concert will include 32 Motorola MC68000 microprocessor chips, each a complete computer with the same power as many of today's full-fledged machines.

Of the work being carried out by Professor Halstead and others, Professor Michael L. Dertouzos, director of the Laboratory for Computer Science, said: "The harnessing of

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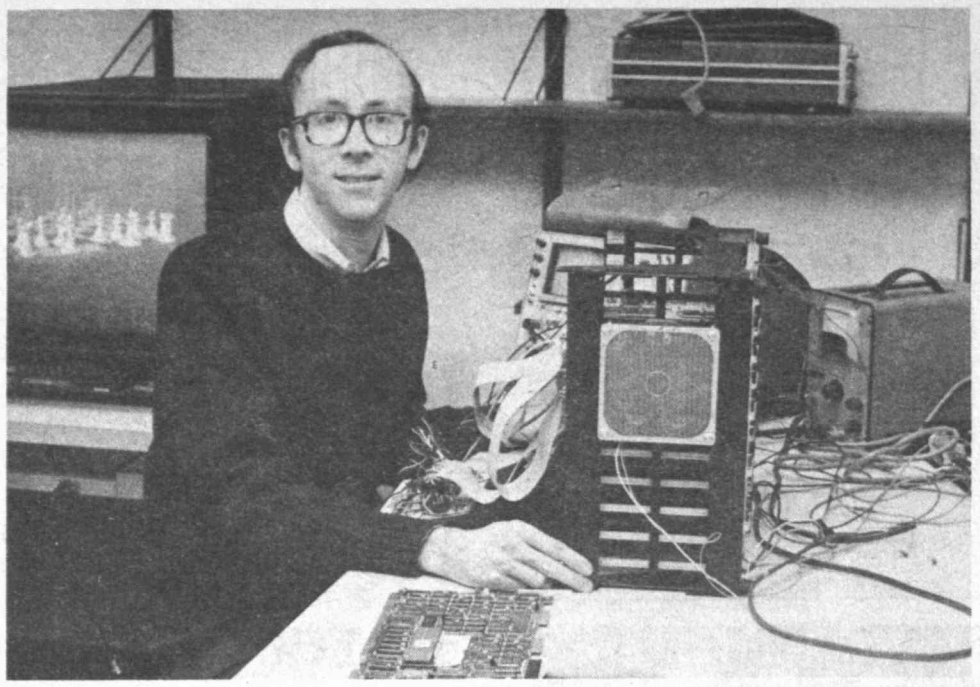
Bluegrass fiddler

Fans of the Hatch shell concerts on the Boston-Esplanade will be able to hear a blue grass fiddler from MIT this summer.

Ronald A. Siegel, a graduate student in Electrical Engineering and Computer Science, plays for the Spider Bridge band which will be performing three Esplanade concerts: July 9 and 17 and August 20. Mr. Siegel joined Spider Bridge three years ago. The Boston-based group has been playing professionally for ten years and just released their first record, "Backs To The Wall," on the Old Homestead label. It will be available in the MIT Coop in July.



Halstead heads computer group

(continued from page 1)

large numbers of processors all working on the same task is a revolution within the computer revolution. If successful, it will provide a sound foundation for making machines that see and that can understand human speech."

"One of our goals," said Dr. Halstead, the first holder of the ITT Career Development Professorship in Computer Technology at MIT, "is to find styles of programming these machines to help cope with problems inherent in parallel processing."

One of the most acute of these problems, Professor Halstead said, is the matter of coordination. "It's an organizational problem, really," he said, "having to do with identifying separate tasks and providing for the necessary communication between them."

He used as an analogy an office scene in which several clerks are attempting to use the same file cabinet full of records at the same time. "You can imagine what chaos this can create," he said, "particularly if two or more need the same file at the same time. In a real office, some systems would have to be worked out to flag missing files and that sort of thing. Dealing with such concurrency is one example of the programming challenges presented by multi-processor computer systems."

"We have several projects going on to develop programming languages for these multi-processing systems," Professor Halstead said. "The goal of these languages is to present the multi-processor environment in a friendly way, to make it as easy as possible for the programmer to implement his solutions to the coordination problems of his particular application."

One of the languages being developed, called Multilisp, is a variant of the programming language LISP, used widely in the artificial intelligence community and invented at MIT more than 20 years ago. Another is Simultaneous Pascal, a version of the programming language Pascal.

"Both have been derived from current languages," Professor Halstead said, "with additional features that allow you to express parallel execution."

All Professor Halstead's work, which includes experimentation with real-time interactive graphics, has the aim of getting higher-performance capacity by using parallel processing. Present-day computer systems are approaching the limit of what can be achieved by simply using faster components in the same designs, he explained, and further progress will increasingly have to come from new organizations, such as multi-processors. Then performance increases can come from parallel execution of many tasks, rather than faster execution of a single task.

Professor Halstead—who received three degrees from MIT—the SB in 1975, SM in 1978 and PhD in 1979—has long been interested in systems that must deal with concurrency and that can be incrementally expanded or contracted over a wide range of sizes. Because VLSI (very large scale integrated circuits) is a logical implementation technology for such systems, he has had a corollary interest in architectures and design tools for VLSI.

Professor Halstead became an assistant professor at MIT in 1979 and was appointed to the ITT professorship last July.

ITT, a world leader in the design, production and sales of telecommunications and electronic equipment and systems, established the chair in 1981 to provide support for promising young faculty members in the Department of Electrical Engineering and Computer Science, MIT's largest.

The company's long association with MIT and its sponsorship of research dates to 1939. Many individuals from the university and the corporation have collaborated on major projects throughout the years. In addition, ITT is actively involved with several Institute programs, including the Industrial Liaison Program, the MIT-Industry Polymer Processing Program and the Research Program on Communications Policy.

William R. Dickson, MIT senior vice president, recently received a check to support development of a computer-aided drafting system from Michaeline Doyle, manager of office development engineering at the Atlantic Richfield Company. Kreon Cyros, director of OFMS, which will carry out the work, is at right.

ARCO grant to develop CAD system

MIT has received a $40,000 grant from the Atlantic Richfield Company for development of a computer-aided drafting (CAD) system to be linked to INSITE, the computerized space accounting system developed here earlier and now used by 32 other institutions.

The new system will enhance the facilities management capabilities of both MIT and ARCO, according to Kreon Cyros, director of the Office of Facilities Management Systems (OFMS), which will carry out the program.

The proposed system will digitize, maintain and update floor plans which will be displayed on a screen or drawn by a plotter for reproduction at any scale. The plans could also be manipulated to display overlays of facilities management data.

The ARCO grant will have two phases. The first, to be completed this summer, will be research into the system needs of ARCO and MIT, after which specifications for the system will be written. During this phase OFMS will also review state-of-the-art CAD systems to determine which—if any—could be modified to meet the specifications.

In the second phase, MIT will either modify an existing CAD software system or write completely new software. The resulting CAD hardware and software, together with the software link to INSITE, will be given to OFMS by ARCO. The MIT developed software link to INSITE will be provided to ARCO along with the training and support necessary to assure a successful implementation at ARCO's Los Angeles headquarters.

INSTITUTE NOTICES

Announcements

Talbot House Available—There are still weekends available in June at Talbot House. Any MIT group 15 to 27 in number may apply to use the house. Talbot House is a guest house located in South Pomfret, Vt, nr Woodstock, and is ideal for informal gatherings in a country setting. For info call Renee Caso, x3-4158.

Summer Study in the Netherlands*—Nijenrode, the Netherlands Summer School of Business, is offering a course of study focussing on International Business (June 27-August 5). The School was founded in 1946 by several large Dutch Corporations (such as Philips, Unilever, L.L.M.). It is a residential school which offers programs on the undergraduate and the graduate level. MIT students have participated in this program with great success. If you are interested in further information, please call Dr. Gary DeVos, University of Massachusetts - Boston, 929-8076. Dean for Student Affairs Office/Student Assistance Services Section/Foreign Study.

The MIT Community Players are looking for directors with show for the coming season. Call x3-2530.

IPS Academic and Research Computing Services (ARCS) is offering introductory (non-credit) summer courses: COMP—Introduction to Computing; CMSI—Introduction to CMS; MULI—Introduction to Multics; SASI—Introduction to SAS; CSI—The Consistent System; TROLI—Introduction to TROLL; RDMS—Organizing Data into a Simple Relational Database; PASC—Introduction to Pascal; PLI—Elementary PI/I; FORT— Introduction to Fortran 77; FOCI—Introduction to FOCUS; WMUL— Word Processing on Multics; WCMS—Word Processing on CMS.

Registration is open in Rm 11-315. Fees range $30-$40 for the MIT community; $90-$120 for others, payable at registration.

Club Notes

Nightline*—We're a student-run hotline from 7pm-7am on MIT campus. For info or just to talk, give us a call at x3-7840.

MIT/DL Bridge Club*—ACBL Duplicate bridge, Tues, 6pm, W20-473. Info call Gary Schwartz, x8-1484, Draper or Sam Smith, 244-4679.

Association for Women Students R/O Meeting**—Association for Women Students, June 27, 1983, 7pm, Student Center, Rm 447. All women interested in helping AWS R/O please attend or leave your number with Elizabeth Wang, 225-8230.

The MIT Aikido Club**—meets Mon, Wed, & Thurs, 5:30pm; Tues & Fri 7:30am, DuPont exercise room. Aikido is a non-competitive Japanese Martial Discipline. Beginners welcome.

MIT Hobby Shop**—Complete facilities for wood working metal working & darkroom. Summer hours: Mon-Thurs, 8:30-6:30. Fee 15/per term students; $25/per term community. Info call x3-4343, Bldg W31-031.

Tiddlywinks**—Interested in learning tournament style tiddlywinks? All welcome, learn or observe Wed, 8-10pm, Student Center, Rm 473.

MIT Tae Kwon-Do Club*—Meets Mon, 6-8pm, Burton Dining Hall; Wed, 6-8pm, Burton Dining Hall; Fri, 6-8pm & Sun 4-6pm, T-Club Lounge. Tae Kwon-Do is a Korean martial art. Info call Charlie, x3-7764.

MIT Outing Club*—Plan hiking, camping, canoeing, ski trips, rental equip avail, Mon & Thurs, 5-6pm, Student Center, Rm W20-461.

MIT European Club*—8pm, Tang Hall Lounge, 550 Memorial Dr. For info call 864-5510.

MIT Ice Dance Club*—Membership open to any skaters able to skate forward & backward edges, no experience necessary. For info Call Esther, 254-3088.

MIT Badminton Club**—Practice Fri, 7-10pm & Sun, 10am-1pm, Rockwell Cage. All levels welcome. Bring own equipment. For info call Dorm x5-9690 or x5-9593.

ACBL Duplicate Bridge at MIT*—Bridge games every Sat, 7pm; every Thur & Mon, 6:30pm, $.75 entry fee, Rm 407, Student Center, 4th flr. Lessons free w/entry at 6:15pm from Bridge Senior Masters. No partners necessary, all welcome. Info, Rajan Batta, x3-6185, 494-1968, 876-4515 or Dorm x5-9563.

MIT Table Tennis Club**—Meets Sat, 4-6pm & Sun, 6-8pm, T-Club Lounge. All welcome. For info call Suguru Araki, 494-1100, x3-5342.

MIT Frisbee Club**—Ultimate Frisbee Wed afternoons, 4-7pm, Sat, 10:30am-2pm, Great Court, weather permitting. For info, call Frank Revi, 225-6161 or John Schutkeker, 576-0536.

The MIT UHF Repeater Association**—offers radio communications assistance to any MIT event free of charge as a public service. If you or your group are interested call Richard D. Thomas, 354-8262 for details.

MIT GO Club*—Play an Oriental game of high strategy, every Thurs, 8pm, Rm 1-136. Will teach beginners. GO sets & books available.

MIT Judo Club**—Mon & Wed at 7pm, Sunday at 4pm, Special Fitness Rm.

MIT Cycling Team—Bicycle racers interested in intercollegiate competition should check the bulletin board by the Dupont desk for information. Eric Martinot, Dorm x5-6107.

Non-Resident Student Association—NRSA. Bed/lockers/k/shower/bathrms/temp or overnight use, social activ to grads/undergrads, M/F, off-campus members MIT/Wellesley community, $5/semester. Come by 311 Memorial Drive, or x5-9166 or x3-2444 anytime.

MIT Nautical Association**—Memorial Dr. opposite Walker Memorial, hrs 9am-sunset, 7 days/wk. Beginning sailing & advanced classes every Wednesday, 5:15pm; beginning windsurfing clinics every Monday, 5;15pm. Call for current schedule, x3-4884.

Register for Summer Art Classes**—MIT Student Art Association, Art Classes in ceramics, photography, chinese brush painting, drawing, etching, painting, mixed media, & silkscreen. Classes start week of June 13, Rm 429, Student Center. Fees range from $15-$80. Call x3-7019.

Religious Activities

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

Charismatic Prayer Group*—Mon eves, 6:45, Miller Room 1-114. Pot-luck supper followed by prayer meeting, Bible sharing, music & praise. Jim Mahoney, x3-3074.

Christian Science Organization at MIT*—Weekly Testimony Meeting, Thurs, 5:15pm, 6th flr Lounge, Ashdown.

Islamic Society*—Daily prayers, Ashdown house (basement), 5 times a day. Call 225-9837 for schedule. Friday prayer, Ashdown House 1-2pm, Khutba starts at 1:15pm, congregation at 1:45pm.

Jewish Services*—Call x3-2982.

Lincoln Laboratory Noon Bible Studies*—Tues & Thurs, Kiln Brook III, Rm 239. Call Annie Lescard, x2899.

Morning Bible Studies—Fri, 7:30-8:30am, L-217. Ed Bayliss, x3456, Lincoln.

Noon Bible Study*—Every Tues, Rm 3-465, bring your lunch. Ralph Burgess, x3-8121. (Since 1965).

Prayer Time*—Fri afternoons, 1-2pm, weekly Bible Class, Rev. Miriam R. Eccles, founder & director of Alpha and Omega Missionary Society. Guest speakers & refreshments. Center for International Studies, Seminar Rm III (E38—6th flr).

Tech Catholic Community*—Sunday Mass only, 9am, noon, 5pm, Chapel; week day Mass, Tues, Thurs, 5pm; Fri, noon, Chapel. Bible study, Thurs, 7:30pm, Ashdown, 6th flr Lounge. Call x3-2981.

The Gospel of John*—Bible study. How Christ came to be man's life to produce God's dwelling place on earth. Tues, noon-1pm, Rm 8-119.

Association for Research and Enlightenment Study Group—Tuesdays, 8-10pm, Ashdown House First Floor Lounge. Edgar Cayce's Search for God material will be used as the basis for group discussion & meditation. For info: Dave Rosenblitt, x5-8275 or Scott Greenwald, x5-9592.

The Church of Christ in Cambridge—Christians meet for worship, study, discussions, fellowship, Tang Hall, 1st & 3rd Sunday eve each month, 6:30pm. Call Robert Randolph, x3-4861/3-5085 or Claudia Lewis, 494-1326 (Ashdown).

The Lutheran Ministry and Episcopal Ministry—Hold weekly service of Holy Communion Wed, 5:10pm, Chapel. Supper, scripture study & discussion follows at 312 Memorial Drive. Call x3-2325 or x3-2983.

Campus Crusade for Christ**—Family time, 7:15pm, Fri, eves, Rm 37-252, (Marlar Lounge). Come for fellowship, scripture teaching, prayer, singing, refreshments & fun. Tues, prayer time, 7:30-9am, W20-441, Student Center. Call Dorm x5-9153.

Graduate Studies

Radcliffe College invites proposals to two programs of support for postdoctoral research. The Radcliffe Research Scholars Program awards stipend and research expenses of $16,000 to as many as four postdoctoral scholars. Application deadline for either Summer '84 or 1984-85 academic year is November 4, 1983. The Radcliffe Research Support program offers grants up to $3,000 for research expenses to post doctoral scholars. Application deadlines for 1984-85 program are September 15 and December 15, 1983 and February 15 and April 15, 1984. Applicants to either program must draw on resources of the Schlesinger Library on the history of Women in America and/or the Murray Research Center. For further information contact Jeanne Richard, Associate Dean Graduate School Office, office, Rm 20B-141, x3-5049 or 3-4849 unless otherwise specified in the listing. Undergraduates are also urged to check with the UROP bulletin board in the main corridor.

Internships

The Champion Broadcasting System, Inc. has a summer internship with the possibility of extension for a student with skills in research techniques and resources, library informational systems, historical, political, government and current events knowledge and interest. If you are interested and would like further information, Call Jennifer Jorday, Director of Public Affairs, 367-9003, Boston.

The Boston Redevelopment Authority has a summer internship available for a Urban Designer to assist in preparing Development Strategy and Urban Design Guidelines for Central Boston. Work will involve mapping, graphics, and field studies. Send resume immediately to: Barbara Barros, Rm 934, Boston Redevelopment Authority, 1 City Hall Square, Boston, MA 02201.

The Council on Economic Prioities, a non-profit, public interest research organization, is seeking a one year intern to assist in the research and writing of a major study of the toxic waste disposal industry. The study will entail evaluation and comparison of companies; site evaluation; trucking; financial strength, adequacy of insurance. Preferably, they are interested in graduate level students in some aspect of the environmental sciences. You will be located in CEP's New York office, with some field work involved. You must be able to arrange for academic credit for this internship. Submit a resume with samples of research/writing to: Toxics project, Council on Economic Priorities, 84 Fifth Avenue, New York, N.Y. 10011. No telephone calls.

For further information on internships, contact E. Reed or D. Wilhoite, Rm 12-170, x3-4733, Career Services and Preprofessional Advising.

TECH TALK

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Langer to hold new Poitras chair

Dr. Robert S. Langer, Jr., associate professor of biochemical engineering in the Department of Nutrition and Food Science at MIT, has been appointed the first Dorothy W. Poitras Professor in Medical Engineering jointly in the department and in the MIT Whitaker College of Health Sciences, Technology and Management.

Announcement of the appointment was made by MIT President Paul E. Gray and Professor Kenneth A. Smith, MIT associate provost and vice president for research.

the application of engineering and chemistry to the analysis, understanding and treatment of human disease. His research interests focus on development of improved drug delivery systems, on enzymatic drug removal systems, and on new approaches to drug development.

A graduate of Cornell University, Dr. Langer received the ScD degree from MIT in chemical engineering in 1974 and became a research associate at Children's Hospital Medical Center in Boston that same year, a position he continues to hold. He became a visiting assistant professor of nutritional biochemistry at MIT in 1977, assistant professor of nutritional biochemistry in 1978, and associate professor of biochemical engineering in 1981. He also joined the faculty of the Whitaker College at the same time.

The Dorothy W. Poitras Professorship is one of two professorships established under the terms of several gifts to MIT totalling $3.7 million by the late Edward J. Poitras of the Class of 1928, and is named in honor of his widow. Currently, MIT is taking steps to appoint a holder of the second professorship, the Edward J. Poitras Professorship in Experimental Medicine.

A third portion of the gift has been used to establish the Edward J. Poitras Fellowship Fund for graduate students working in the areas of medical engineering and medical physics at Whitaker College and a fourth portion was used to establish the Edward J. Poitras Scholarship Fund for the benefit of undergraduate students.

Two PhD candidates in medical engineering and medical physics in the Harvard-MIT Division of Health Sciences and Technology presently hold appointments as Poitras Fellows in the Whitaker College. They are Joseph M. Smith of Baltimore, Md., a 1979 graduate of Johns Hopkins University, and Howard Bernstein of Quebec, Canada, a 1979 graduate of McGill University in Montreal, Canada.

Thirty-five undergraduate students at MIT this past year held Poitras Scholarships.

Mr. Poitras was an engineer, inventor and philanthropist. He was a former president, director, and secretary, and director of engineering for Fenwal, Inc., of Ashland, Mass., and a vice president of its parent firm, Walter Kidde, Inc.

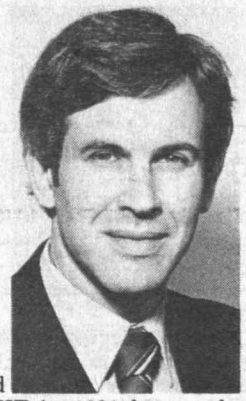
Following graduation from MIT in 1928 in electrical engineering, he worked for the General Electric Co., the Ford Instrument Co., and, prior to World War II, the California Institute of Technology, where he designed the controls for the 200-inch Hale telescope and the 48-inch and the 18-inch Schmidt telescopes at the Mount Palomar Observatory.

He was with the Office of Scientific Research and Development and received the Presidential Certificate of Merit for his wartime service.

Following the war, he joined Fenwal. He made his home in Holliston, Mass., for many years and had been semi-retired at Vero Beach, Fla., for five years at the time of his death in 1981. He held more than 70 patents on servomechanisms, gyroscopic instruments, thermostats, heat detectors, alarm systems and medical instruments and devices.

Three more are promoted

Three more faculty promotions, effective July 1, have been announced. They are:



Linn W. Hobbs, BS 1966 Northwestern University; D. Phil. 1972, Oxford University, from associate to full professor in the Department of Materials Science and Engineering. Dr. Hobbs has made pioneering contributions to classic ceramic and oxidation problems and is among of the most distinguished electron microscopists of ceramic materials in the world

Since coming to MIT in 1981 has made major contributions to departmental curriculum development and serves as chairman of the Materials Science degree program. Dr. Hobbs was an NSF post doctoral fellow at Oxford in 1972-73, a Junior Research Fellow and Research Fellow of Wolfson College, Oxford, from 1972-76 and a section leader at the Atomic Energy Research Establishment from 1973-76. From 1976 until he came to MIT, he was on the faculty of Case Western Reserve University.

Ravindran Kannan, B. Tech 1974, Indian Institute of Technology; MS 1977 Cornell University, from assistant to associate professor in the Department of mathematics. Dr. Kannan joined the MIT faculty in 1980 after having been a lecturer and postdoctoral fellow at the University of California, Berkeley, in 1979-80. He works at the interface between operations research and computer science where his major contributions have included finding algorithms for obtaining Hermite and Smith normal forms and improved methods for solving integer linear programming of bounded dimension.

Jean A. Heiney, BS 1971, Ball State University, MS 1974, Indiana University, from assistant to associate professor in the Department of Athletics. Professor Heiney came to MIT in 1977 as head coach of women's basketball and assistant coach of field hockey and softball, as well as instructor in physical education. In 1981 she became head coach of softball and in 1982 she assumed additional responsibilities assistant coordinator of MIT's very large program of intramural athletics. She also serves on the Transportation and Parking Committee and as a freshman advisor.

CAVS artists in ICA exhibit

Five artists from MIT's Center for Advanced Visual Studies are among the 27 selected for the "Boston: Now '83" exhibition at the Institute of Contemporary Art this summer. This includes a retrospective of Aldo Tambellini's work at MIT since 1977.

Mr. Tambellini's Communicationsphere will be installed in the ICA's Video Gallery throughout the show (through August 14). In addition, his work will be part of the exhibition's two-hour video program which includes the work of CAVS fellows Vin Grabill and Bernd Kracke, graduate student Luc Courchesne and Ellen Sebring, an artist who works at CAVS as an administrative assistant. CAVS representatives make up five of the nine video artists on view. Working with Mr. Tambellini as coordinator of Communicationsphere is graduate student Sarah E. Dickinson.

An interactive video installation using the Robot Research SSTV (slow scan television system) will be a part of Tambellini's Communicationsphere, which includes photographic and video documentation of media events at MIT since 1977. A pioneer in video and media art, Mr. Tambellini considers Communicationsphere also to be a concept which he defines as "concerned with the redefinition and transformation of our environment by the continuously changing communications technologies which are dissolving the boundaries between the communications media and art."

ICA director David A. Ross characterized the "Boston: Now" series, in its third year, as a major concentrated effort on the part of the Institute to exhibit Boston area artists. ICA officials reviewed more than 800 artists for this year's exhibition.

"Aside from the extraordinary level of competence (seen in the review) we reconfirm the fact that the diversity and depth in the quality of work here rivals that of any major city," Mr. Ross said.

Pool hours extended

MIT's Alumni Pool will be open an additional hour this summer for members of the MIT Community. Starting June 27 and continuing until August 19, the pool will be available for open swimming fro 8-9am Monday-Thursday in addition to regular open swim hours (12-1:30pm and 5-8pm). Friday's open swim hours remain the same (12-1:30pm and 5-8pm).

During the 8-9am period, three lanes of the pool will be designated "intensive training" for those individuals desiring a more regimented exercise swimming program. In the interest of safety and enjoyment, the Alumni Pool staff would appreciate continued cooperation during this experiment. All swimmers will be asked to follow the lifeguards requests for appropriate lane positions based on swimming speed.

A quick snip and Ida Flansburgh Green Hall was formally named, with Cecil H. Green and President Paul E. Gray, left, and Chairman Howard W. Johnson, right, observing Mrs. Green's scissorwork.

Ida F. Green Hall is dedicated

By ROBERT M. BYERS
Staff Writer

For Ida Flansburgh Green of Dallas, Texas, it was a day of pleasure, pride and promise.

The occasion was June 10—Technology Day 1983—as some 150 persons gathered for ceremonies in which the university formally gave its first residence for women graduate students ever the name of Ida Flansburgh Green Hall.

"I don't know when the naming of a university building has given me such pleasure," Mrs. Green told the assembled audience. "When I think of the distinguished women who have been associated with MIT I feel very proud."

Even so, Mrs. Green said she is even more excited about the 46 young women who are the first residents of the hall—and about those who will follow them in later years—for it is they who hold "the promise of what is to come."

The four-story brick building at 350 Memorial Dr. was completed in 1903—the same year Mrs. Green was born—as a home, office and hospital for the late Cambridge surgeon, Dr. Albert H. Tuttle. It served as a proprietary hospital until 1948 when it was acquired by the Daughters of Mary, Immaculate Conception, and was operated by them as Sancta Maria Hospital (where patients, among others, often included injured members of the Boston Red Sox baseball team) until 1968 when Sancta Maria was relocated on Concord Ave. in Cambridge at the Belmont line. MIT, having acquired the building in 1966, operated it as the MIT Infirmary until the MIT Medical Department moved to new and larger quarters on East Campus.

Late last year, the building was renovated at a cost of $1 million to provide residential accommodations for 46 women graduate students, plus their faculty residents, Dr. Edith Waldstein, assistant professor of German in the Foreign Languages and Literatures Section of the Department of Humanities, and her husband, Dr. Fredric A. Waldstein, Assistant Director for Public Affairs at the University of Massachusetts. First residents began moving into the building even before it was entirely finished in January.

Selecting a name for the new residence was not difficult for MIT. Mr. and Mrs. Green—he is one of the founders and principal officers of Texas Instruments Incorporated, and its predecessor, Geophysical Services Inc.—have become over the past three decades major benefactors of the university, providing millions of dollars for buildings, professorships, scholarships and fellowships.

Mrs. Green's particular interest has been women graduate students. The Greens have established the Ida Green Fellowships at MIT through an endowment which provides first-year grants to six young women every year, and the number of graduates who have benefitted from this program now grown to more than 75.

Both Mr. and Mrs. Green are Life Members, Emeritii, of the MIT Corporation. Mrs. Green was made an honorary member of the MIT Alumni Association in 1980. Mr. Green is a member of the Class of 1923.

The Greens have been generous to other institutions as well as MIT. Some 35 other schools, colleges, universities, hospitals and institutions have received their support over the years. So important have been their benefactions that in November 1978 the presidents and chancellors of the institutions receiving aid held a major ceremony in their honor at the National Academy of Sciences. In 1979, the National Academy of Sciences inducted them as honorary members and bestowed upon them jointly its coveted Public Welfare Medal. Included among their philanthropies was establishment in 1968 of the Ida Green Fellowship open to outstanding Texas women in mathematics or biological or physical sciences and administered by the Educational Foundation of the American Association of University Women.

Ceremonies naming MIT's new residence in Mrs. Green's honor were held in the dining hall at McCormick Hall, MIT's residence for undergraduate women, which is next door to Green Hall and which is where Green Hall residents take their meals. An MIT student group provided chamber music for the occasion.

At the ceremonies, those in attendance heard praise for Mrs. Green from Howard W. Johnson, chairman of the MIT Corporation, from President Paul E. Gray, from Dean for Student Affairs Shirley M. McBay and from a spokeswoman for Green Hall residents, Adra E. Smith of Rochester, N.Y., who is working toward her doctor's degree in materials science and engineering.

The ceremonies concluded with the remarks by Mrs. Green whereupon Mr. Green, who had accompanied his wife onto the stage through the ceremonies but who had otherwise not taken part, made references in an aside to the departing audience to Britain's national re-election victory of a woman prime minister, Margaret Thatcher, the day before.

"Now I know how *Mr.* Thatcher feels," he said.

A ribbon cutting and reception at Green Hall in honor of Mrs. Green followed the speaking program. A commemorative plaque was uncovered which lauded Mrs. Green as a staunch advocate of women in the professions and generous benefactor of women graduate students.

Dramashop, Ensemble collaborate

A Midsummer Night's Dream will be presented on two successive July weekends in the first collaboration between the Dramashop and the Shakespeare Ensemble.

The free performances will be in Kresge Little Theatre July 7, 8, 9 and 14, 15, 16. Being directed by Tom Garvey '82, and produced by Bill Glickman '83, the play will have costumes and masks made by Jennifer Hance '83 and Marilyn and Sue Downing. Make-up will be by Mary Ellen Zurko '82.

Bill Bryant '83 will be both co-director and co-producer. Choreography is by Frances Barg '82 and graduate student Amy Ritzenberg. The technical crew includes Lenny Foner '86, Angela Hwang '86, Keith Bryzienski '85 and Brian Pierce from Lincoln Lab.

Students and graduates in the cast are: Jean Alpers '86, David Brackman '83, Kevin Cunningham '82, Sue Darlington, Wellesley '81; Ian Dowell '86, Sue Downing-Bryant '81, Anne Frates, Wellesley '80; Stephen Genn '86, Mike Guenette '81, David Park '84, Geoffrey Pingree '81, Stuart Rumsey '80, Jay Slagle '85, Tom Stefanick '80 and Elaine Wu '85.

The cast also includes graduate students Barbara Masi and Jim Tate; Edward Averett, senior secretary in civil engineering; Rogina Haase from Lincoln Lab; Mark Holzbach, technical assistant in the Department of Physics; Diana Kenney, senior secretary in the Department of Chemical Engineering and Marcus Walker from the Cambridge community.

Those supporting the special production include the Council for the Arts at MIT, the Office of the Dean of Student Affairs, Dr. Louis Menand III, special assistant to the provost; and the Department of Humanities.

Student wins ANS award

Carl M. Malbrain, a graduate student in nuclear engineering, has received the 1983 Verne R. Dapp Memorial Scholarship from the American Nuclear Society. The scholarship carries an honorarium of $500.

Mr. Malbrain has published articles in two journals and has been involved with preparation of "A Handbook on Nuclear Waste Management."

THE INSTITUTE CALENDAR

June 22-July 17

MISS THE TECH TALK DEADLINE?

Put your announcement on the MIT Cable System. "Today at the Institute" runs 24 hours a day on Channel 12 and can be viewed in Lobby 7, Lobby 10, and anywhere the cable is connected.

Simply submit announcement in writing to Rm 9-030. We prefer a day's warning, but faster action may be possible.

Useful also for correcting errors, notifying about cancellations, and dealing with emergencies.

Note: If you have met the Tech Talk deadline, your announcement is automatically put on the cable (except for exhibits and some multimeetings programs).

Events of Special Interest

Hi Speed Signal Averaging and Analysis Workshop*— Staff Engineers of Lecroy Research Systems. Material Science Department. Featuring the Lecroy 3500SA Signal Analyzer. July 14, 10am-4pm, Materials Science Center, Rm 13-2143.

Formation of Microbial Peptides by Multifunctional Enzyme Systems*—Dr. Horst Kleinkauf, Institute of Biochemistry, Technical University, W. Berlin. Sponsored by the Department of Nutrition and Food Science, July 14, 4pm, Rm 16-310.

Seminars and Lectures

Thursday, June 23

Industrial Stagnation in India*—Dr. Isher Ahluwalia, Fellow, Indian Council for Research on International Economic Relations, Center for International Studies Seminar, 12:15-2p, Rm E38-615. All Welcome.

Friday, June 24

Brainstem Neurons Controlling Gaze*—Dr. Alain Berthoz, laboratoire de Physiologie Neurosensorielle, CNRS, Paris, France. Department of Psychology Seminar, noon, Rm E10-013.

Community Meetings

Alcohol Support Group—**Meets Weds, 7:30am, sponsored by MIT Social Work Service. Call Ruth, x3-4911.

Overeaters Anonymous—**Will meet weekly in Rm 4-149 on Sunday morning, 9:30am-11am. All welcome.

Al-Anon*—Meetings held every Tues, noon-1pm, Moore Rm 6-321; every Fri, noon-1pm, Health Education Conference Rm E23-297. The only requirement for membership is that there be a problem of alcoholism in a relative or friend. Call Ruth or Shirlee, x3-4911.

MIT Faculty Club—**The Club is open Mon-Fri. Luncheon hours: noon-2pm; dinner hours: 5:30-8pm. For reservations call x3-4896.

Nightline—**We're a student run hotline from 7pm-7am on the MIT campus. For information or just to talk, give us a call at x3-7840.

Parent Support Group—**Health Education Service. Support system for working parents of the MIT Community, open to prospective parents as well as new parents. Call x3-6320 or x3-1744.

Activities Committee

Tickets may be purchased from 12:30 - 1:30pm at MITAC booths in Lobbies 10 & E18, Fridays, and from Quarter Century Club, 20A-023, from 10am - 3pm daily. Lincoln Lab employees purchase tickets Wednesdays & Fridays from 1 - 3pm, Rm C-372 from Malcolm Coley, x4014.

MITAC, the MIT Activities Committee offers discount movie tickets for General Cinema and Sack Theaters. Tickets are $2.50 each and are good 7 days a week, any performance. Regular theater admission is $4 so you can save $1.50 per ticket. In addition MITAC will be selling discount passes for the Museum of Science which are good any time through Dec. 31, 1983. Passes are $1, plus $1 at the door, a $2.50 savings on the regular $4.50 adult admission.

Movies

LSC Movie Horror Double Feature—**June 24 ***The Abominable Dr. Phibes,*** 7pm, ***The Haunting,*** 8:45pm, Rm 26-100. Admission: $1 w/MIT or Wellesley ID.

Blow-out—**LSC Movie, June 25, 8pm, Rm 26-100. Admission: $1 w/MIT or Wellesley ID.

Hitchcock Double Feature*—*Spellbound,* LSC Movie, July 8, 7pm; ***Marnie,*** 9pm, Rm 26-100. Admission: $1 w/MIT or Wellesley ID.

Phantom of the Paradise*—LSC Movie, July 9, 8pm, Rm 26-100. Admission: $1 w/MIT or Wellesley ID.

Music

Flute Recital*—Pieces: C.P.E. Bach, Hamburg Sonata; Prokofieff, Sonata in A; both pieces are flute and piano; also Select movements from Claude Bolling's "Suite for Flute and Piano" with flute, piano, string bass, a percussion. Co-principle of MIT Symphony Orchestra. Deena Fishbein, flute; David Bieii, pinao; Joshua Levin-Epstein, bass. Music Section, July 24, 4pm, on stage of Kresge Auditorium.

Wellesley Events

Museum closed Mid-June, July, August.

Exhibits

COMMITTEE ON THE VISUAL ARTS

Hayden Gallery: Affinities: Bill Jensen and Myron Stout; Terry Winters and Brice Marden. Exhibition explores an intimate, generative relationship between two generations of artists who share a commitment to the traditional ambition of painting at a time when many other artists are seeking more extrinsic or shocking alternatives, through June 26.

Hayden Corridor Gallery: Contemporary Self-Portraiture in Photography. Lee Friedlander, Duane Michals, Lucas Samaras, Cindy Sherman, Linda Benedict-Jones, Ellen Carey, Robert Cumming, Jerry Uelsmann and William Wegman. Through July 4.

THE MIT MUSEUM

New Exhibits at The Museum: Zen Zuh Li, MIT '22: Painter and Poet. Landscape paintings in traditional Chinese style on scroll and sheet from an MIT chemical engineering graduate who turned to the art of his native country at age 56. Through September.

Paintings by Gyorgy Kepes. An exhibition of paintings, including a painting commissioned by the MIT Class of 1948 for their 35th reunion this June. Through August 15. Mon-Fri, 9am-5pm. Admission: Free.

Math in 3D: Morton C. Bradley's richly colored geometric sculptures revolve in space to evoke Plato's thought: "Perfect beauty is geometric beauty." 9am-5pm; Through August. Free.

Ongoing exhibits: **The Tech:** One Hundred Years of Student Activities, as viewed by the student newspaper. Through September; **Jan Van Goyen (1596-1656)***—Five chalk drawings by the Dutch landscape master; **Mechanical Computing:** slide rules, slide rules, and more slide rules; **A Bunch of Electricals: An MIT Electrical Engineering Retrospective.** Including the Bush Differential Analyzer and the Edison Dynamo given to MIT by Thomas A. Edison in 1887. Through June.

Margaret Hutchinson Compton Gallery*—Engineering Wizard of Bristol: Nathanael G. Herreshoff. Models, drawings, artifacts of the legendary naval architect and marine engineer Nat Herreshoff (MIT 1870) of Bristol, R.I. In his 79-year career he designed more than 800 vessels, including a torpedo boat for the US Navy. The exhibit includes a Herreshoff dinghy and one of his steam engines. Through Sept. 16. Mon-Fri, 9am-5pm, Sat, 10am-4pm. Admission: Free.

Hart Nautical Galleries*—The America. Color lithographs of schooner Yacht America, winner of the 100 Guinea Cup later known as the America's Cup. **William A. Baker '34: A Tribute.** A memorial exhibition of his watercolors, drawings, plans of historic vessels, etchings and models. Through June. Daily 9am-10pm, Rm 5-126. Free.

Ongoing exhibits: **MIT Seagrant**—A review of MIT ocean research; **English Harbor Scenes 1829**—Etchings by E.W. Cooke. Etchings published in London in 1829 show the variety of ships and craft to be found in English harbors at the beginning of the Industrial Revolution; **collection of Ship Models**—Half-models and drawings. Historical view of the design and construction of ships.

Corridor exhibits: Building 1 & 5, 2nd floor: **John Ripley Freeman Lobby. Building 4: Samuel Cate Prescott, Rogers Building, Norbert Wiener, Karl Taylor Compton. Community Service Fund, Ellen Swallow Richards.** Building 6: **Laboratory for Physical Chemistry.** Building 8: **Solar Energy, Society of the Sigma XI.** For information call MIT Museum, X3-4444.

Stroboscopic Light Laboratory Corridor*—Permanent exhibit of high speed photographs. Main corridor, near Rm 4-405.

Rotch Visual Collections*—Changing exhibitions pertinent to the School of Architecture and Planning. Weekdays 8:30am-6pm. Rm 7-304. Free.

DATA: Visual Artifacts of Research*—Visible Language Workshop, through July 29, Mon-Fri 10am-7pm, VLW Bldg N51, 275 Mass. Ave.

Dance

Children's Dance Class**—Instructor, Pamela Day. Creative Movement/Modern Dance Classes for the summer. Children ages 3-4 meet Wed 2-3pm & Sat 10-11am. Children ages 5-7 meet Wed 3-4pm & Sat noon-1pm. Children ages 7-12 meet Sat 11am-noon. West Campus location, convenient to Westgate, Children do not have to speak English. For info & registration call Pamela, x3-5758.

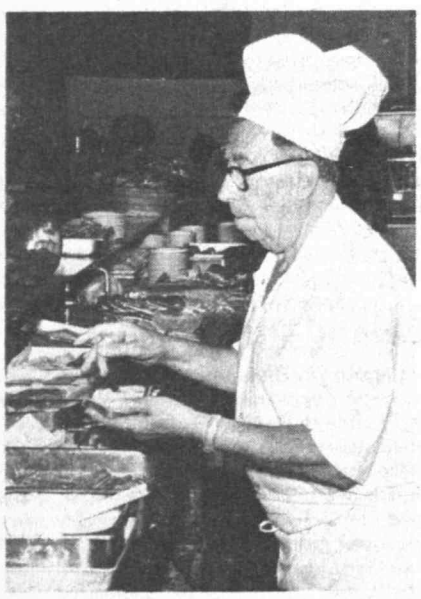
MIT Ballroom Dance Club*—Ballroom Dancing. Mon, June 27, 7-10pm, Sala de Puerto Rico. Swing lesson begins at 7:30pm. Free.

CALENDAR

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 fields.

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

Send notices for Wednesday, July 13, through Sunday, July 24, Calendar Editor Rm 5-113, before noon, Friday, July 8.



"Joe the Sandwich Man at Walker" who can produce upwards of 75 sandwiches an hour while still carrying on conversation with his customers, will retire June 30 after 43 years of catering to the community. The MIT community is invited to a reception honoring Joe Di Napoli—and wishing him well—Thursday, June 30, 3:30-5pm in—most appropriately—Walker's Morss Hall.

Alumni gifts, pledges total $13.8 million

Reunion class gifts of more than $13.8 million were announced Friday (June 10) at MIT's annual Technology Day Luncheon. This represents gifts received in the past five years and pledges payable through 1988.

The luncheon, in the Athletics Center, was attended by some 1,200 alumni and their guests.

The gifts from the three major reunion classes—totalling $6,641,637—were presented to President Paul E. Gray by the reunion gift chairmen. The gifts from these quinquennial classes, the Classes of 1933, 1943, and 1958, comprise all gifts and pledges made to MIT by members of the classes during the five-year period preceding the reunion.

In addition, Denman K. McNear, president of the MIT Alumni Association, announced that the Class of 1923 has given the Institute $7.2 million in celebration of its 60th Reunion, the first such gift in MIT history, and that the Class of 1978 had made a gift of $18,000 for its Fifth Reunion.

The 50th Reunion Class of 1933 announced a total gift of $3,650,775 with 55 per cent participating in the effort. In addition, plans for future gifts from members of the class total $2.6 million. Dr. Dayton H. Clewell, chairman of the 50th Reunion Gift Committee, made the presentation on behalf of the class whose gift is the second largest 50th Reunion Gift in MIT history.

The Class of 1943, celebrating its 40th Reunion, announced a gift of $2,288,455. Stanley M. Proctor, chairman for the 40th Reunion Gift Committee, also noted that the Class of 1943 had raised $547,078 to endow a professorship as part of its gift to the Institute. Fifty-seven per cent of the Class of 1943 participated in the 40th Reunion Gift, which is the largest 40th Reunion Gift from living alumni to MIT.

The Class of 1958 presented a 25th Reunion Gift of $702,407. Joseph J. Gal, chairman of the 25th Reunion Gift Committee, noted that the Class of 1958 also had raised $313,123 to endow a professorship as part of the gift. Fifty-seven per cent of the Class of 1958 participated in the reunion effort.

More than 400 members of the Class of 1978 contributed to its $18,000 gift, according to the reunion gift chairman, David A. Woodruff. The 72 per cent participation was a new record for a young class. Included in the gift total is more than $7,500 toward the endowment of the Class of 1978 Student Aid Fund. The class has committed to raise $50,000 to fully endow this fund by its 10th reunion.

The announcement of the senior class gift—a contribution of $4,349.41 toward the establishment of the Jerome B. Wiesner Student Art Gallery and Lounge in the Student Center—was made by the senior class president, Kenneth E. Dumas. This gift was matched by the Class of 1933.

Alumni representing 75 classes, as far back as the 75th Reunion Class of 1908, attended the luncheon. The most senior alumni were two members of the 1908 class, Harold S. Osborn of Montclair, N.J., and Franklin T. Towle of West Roxbury, Mass.

The alumnus who came the furthest was Professor Shikao Ikehara, Class of 1928, from Tokyo, Japan.

Three MIT employees were inducted as honorary members of the MIT Alumni Association—D. Hugh Darden, who on July 1 becomes assistant treasurer, planned gifts and legal affairs; Julia C. McLellan, senior associate director of admissions, and Salvatore Lauricella, manager of vending services and special functions.

Also honored was Howard W. Johnson, who steps down as Chairman of the MIT Corporation June 30, and Mrs. Johnson. They received a certificate of appreciation and a Steuben glass beaver from the Alumni Association.

Shortly before the luncheon began, the alumni had been treated to a reenactment of last fall's balloon prank at the Harvard-Yale football game in Harvard Stadium (see photos, pg 5). At the luncheon, Victor J. Cook III, one of the Delta Kappa Epsilon fraternity members responsible for the prank, told the alumni how it was carried out.

At the conclusion of the luncheon, Mr. McNear, the departing Alumni Association president, turned over his gavel to Dr. Robert W. Mann, Whitaker Professor of Biomedical Engineering at MIT, who becomes the 88th president of the association. Dr. Mann earned three degrees at MIT—the SB in 1950, the SM in 1951 and the ScD in 1957.

The Technology Day activities began with a continental breakfast for alumni in the Sala de Puerto Rico. Later, close to 1,000 persons attended a program on artificial intelligence in Kresge Auditorium. A memorial service in the MIT Chapel preceded the luncheon, and the day was concluded with a reception in McCormick Hall Courtyard.

The Technology Day chairman was Lois Champy, AR '71. The chairman for next year's program will be Bruce Sunstein '65.

'Bright boy' attends 50th

(continued from page 1)

a four-hour written examination, was Mr. Huston.

"The prize was a full tuition scholarship with travel expenses to the college of my choice," he said, "but I was in a bind of sorts because I hadn't submitted an application to MIT."

"When I won, I said I wanted to go to MIT, and I guess the admissions people figured that passing that four-hour exam was good enough for them."

All that occurred in 1929, and four years later Mr. Huston graduated with an SB in physics.

Most of his career was spent working for the federal government, first as an aeronautical research scientist for the National Advisory Committee for Aeronautics and more recently, until his retirement from government service as a satellite meteorologist with the National Aeronautics and Space Administration. Since 1975, he has worked with OAP Corporation of Greenbelt, Md., a high technology problem-solving group.

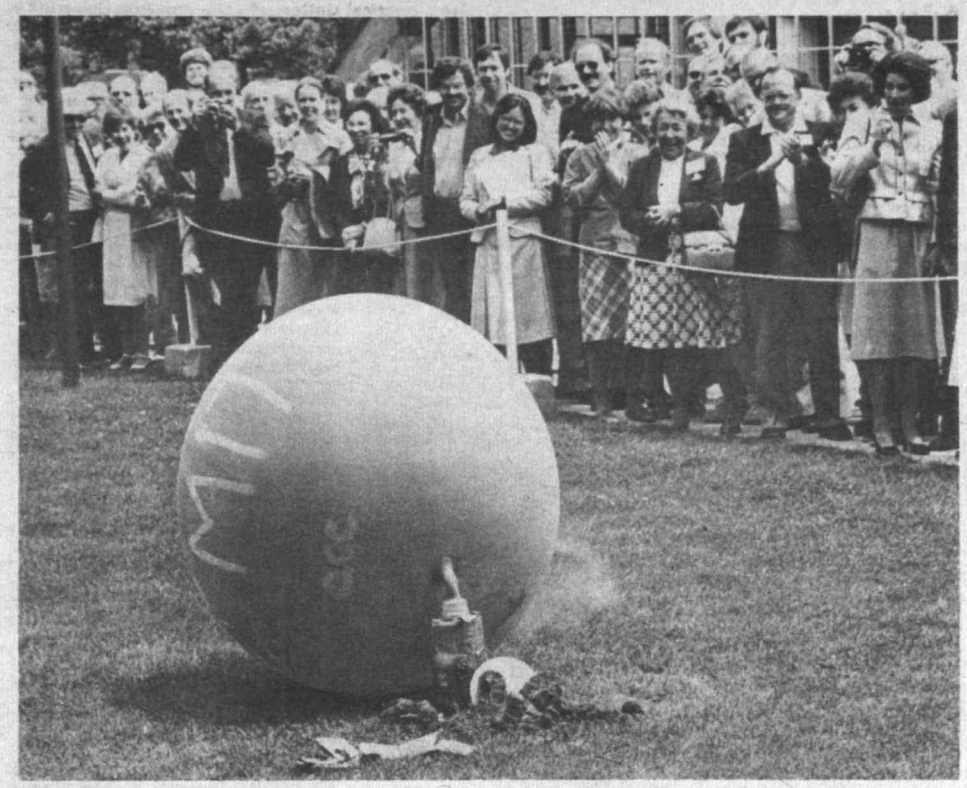
He lives with his wife, Dorothy, in Crofton, Md. They have six children.

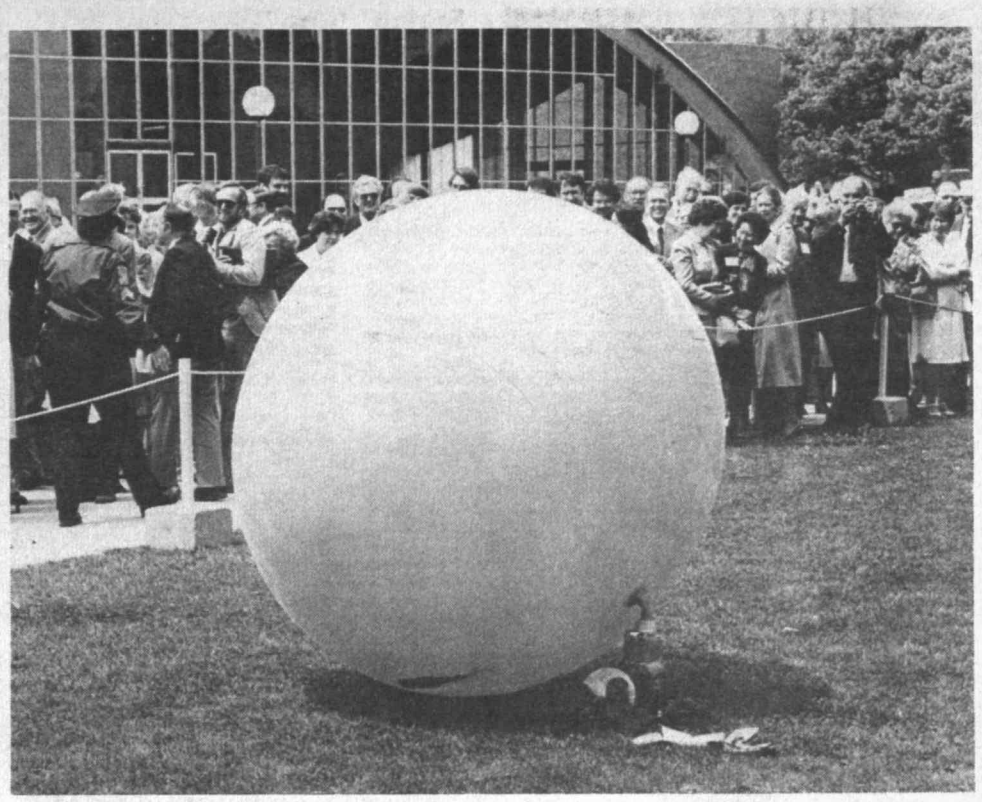
Keil wins rare honor

Dr. Alfred A.H. Keil, Professor of Ocean Engineering, Emeritus, Ford Professor of Engineering, Emeritus, and former Dean of the School of Engineering at MIT, has been accorded a rare honor by the 127-year-old Association of German Engineers.

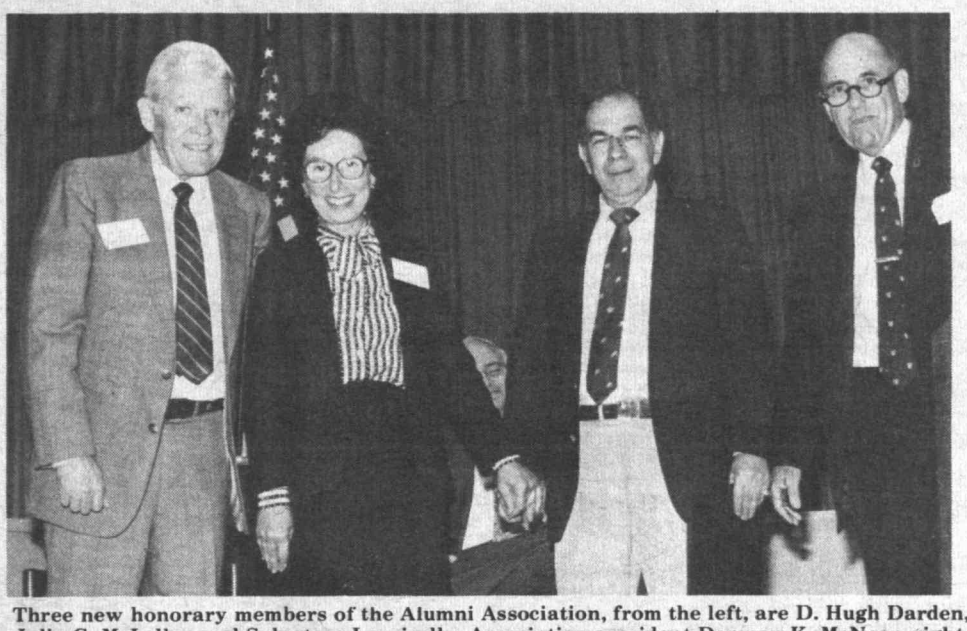
He was among 13 engineer scientists worldwide inducted as corresponding members of the association during an association meeting celebrating German Engineers Day in Frankfurt last month. The occasion marked the first time the association has inducted foreign corresponding members since 1869. In fact, only three—one from England and two from Switzerland—were inducted between the association's founding in 1856 and the last induction in 1869.

Other Americans included in the group inducted this year were: Dr. Stuart W. Churchill, University of Pennsylvania; Dr. Frank E. Crossley, University of Massachusetts at Amherst; Dr. J.M. Prausnitz, University of California at Berkeley; Dr. Klaus D. Timmerhaus, University of Colorado; Dr. Wolfgang A. Mack of Werner and Pfleiderer Corp., Ramsey, N.J., Dr. Darle W. Dudley, Dudley Engineering Co., Escondido, Calif.





The balloon was a repeat performance—arranged by MIT officials—of a prank that gained nationwide attention last fall when an MIT fraternity group buried a balloon beneath the sod of Harvard Stadium and inflated it during the Harvard-Yale football game. The device used to thrust the balloon out of the ground and inflate had been in the custody of Harvard officials, but was recovered through "an underground retrieval system," an MIT spokesperson said, and put back in working order by some of the same Delta Kappa Epsilon fraternity members responsible for the original stunt. "The Harvard and Yale alumni got a chance to see it," one of them said, "so we thought we owed it to our own alumni to do it once again." The repeat performance occurred during the Institute's Technology Day program for alumni. The balloon device will find a permanent home in the MIT Museum.



Three new honorary members of the Alumni Association, from the left, are D. Hugh Darden, Julia C. McLellan and Salvatore Lauricella. Association president Denman K. McNear, right, made the announcement. *—Photos by Calvin Campbell*

Three take new posts in physics

(continued from page 1)

research associate at Stanford University. He was promoted to associate professor in 1964 and to professor in 1967.

In 1980 he was named director of the Laboratory for Nuclear Science, a post he held until his appointment as department head.

Dr. Kerman, who will take over as director of the Laboratory for Nuclear Science, is a theoretical physicist who has made significant contributions to a broad range of problems in nuclear physics.

"Professor Kerman has had an important impact on the development of nuclear physics, not only because of his research, but also through his interaction with experimentalists throughout the world and through his advice to the scientific management of the national laboratories including Brookhaven, Argonne, Los Alamos and Berkeley," Dean Deutch said. Professor Kerman is a member of the Department of Energy/National Science Foundation Nuclear Science Advisory Committee and the White House Science Council.

His most recent research has been concerned with the quantum theory of dissipation for nuclear collisions and with the statistical theory of multistep compound and direct nuclear reactions.

Earlier, he was the first to discuss the Coriolis effect in rotational nuclei. With others he formulated a description of the reactions induced by high energy particles colliding with nuclei which remains central to that field. He developed a method of treating collective motion in finite many-particle systems and developed a self-consistent method for calculating nuclear properties. He also suggested an important experimental method for forming hypernuclei which was later realized.

Professor Kerman holds the BS (1950) from McGill and the PhD (1953) from MIT. He joined the faculty here in 1956, became associate professor in 1960 and professor in 1964.

Dr. Goldstone is known for his outstanding contributions to the theory of nuclear structure and the theory of elementary particles. In the former he showed how the techniques of quantum field theory could usefully be applied to the theory of nuclear matter. The techniques he introduced have become standard in dealing with this problem. In elementary particle physics, he has made important contributions to several areas. Considered his most notable achievement in particle theory was the discovery that a spontaneously broken symmetry requires the existence of a zero-mass particle—the "Goldstone Boson."

"This concept," Dean Deutch said, "has been of fundamental importance to much of the progress in particle theory since it was first introduced."

Professor Goldstone holds the BA (1954) and the PhD (1958) from Cambridge University. He came to MIT as a professor of physics in 1977. Before that he was a research fellow of Trinity College, Cambridge, 1956-60; staff fellow from 1962-77; University Lecturer in the Department of Applied Mathematics and Theoretical Physics, Cambridge, 1961-76, and reader in mathematical physics, Cambridge, in 1976.

In making these appointments Dean Deutch remarked that all three individuals possess remarkable intellectual distinction which, once again, demonstrates the strength of the MIT Physics Department.

AAAS elects four

Four members of the MIT community have been elected Fellows of the American Association for the Advancement of Science.

They are: Professor Loren R. Graham of the Program in Science, Technology and Society; Professor Edward N. Lorenz of the Department of Meteorology and Physical Oceanography; Dr. Kosta M. Tsipis of the Program in Science, Technology and International Security; and Professor Sheila E. Widnall of the Department of Aeronautics and Astronautics.

They were among 296 individuals elected AAAS Fellows by the AAAS Council at the recent annual meeting of the AAAS in Detroit.

Altshuler named at NYU

Dr. Alan A. Altshuler, professor of political science and urban studies and planning, has been appointed dean of New York University's School of Public Administration, effective September 1.

Professor Altshuler joined the MIT faculty in 1966 and left the Institute to serve as Secretary of Transportation and Construction for the Commonwealth of Massachusetts in 1971-75. He then rejoined the faculty and was head of the Department of Political Science in 1977-82. He has been co-director, with Professor Daniel Roos, of "The Future of the Automobile Program" in the Center for Transportation Studies.

Advisory groups seen imperiled

(continued from page 1)

committee was established."

"Historically," he added, "this has been done either through the appointment to the committee of members who will merely 'rubber stamp' government decisions, or through the appointment of influential community leaders whose support is needed if a government decision is to be implemented."

Dr. Ashford, associate professor of technology and policy and director of MIT's Center for Policy Alternatives, said that two agencies that regulated the production and use of toxic substances—the Occupational Safety and Health Administration (OSHA) and the Environmental Protection Agency (EPA)—at one time avoided such overt manipulation in their appointment and use of advisory committees, but recently have committed flagrant abuses in the retirement of "unacceptable" members of their advisory committees. The now-famous EPA "hitlist" contained many names of Science Advisory Board members who were no longer welcome as government advisors, he said.

Such misuse, he said, circumvents the "fair balance" requirement mandated by the Federal Advisory Committee Act of 1972.

He notes that the Act requires advisory committee membership to be "fairly balanced in terms of the points of view represented." Furthermore, he writes, "a concept of fairness would demand more than a token representation of an opposing viewpoint."

As an example in the area of toxic substance regulation, he states that a committee composed entirely of scientists "is clearly not balanced between experts and non-experts, and may not be balanced among technical disciplines."

He adds: "While this may at first glance appear an appropriate composition for a scientific advisory committee, it masks a source of consistent bias."

For illustration, he draws the theoretical case of such a committee being asked to develop exposure standards for a chemical on which the evidence of human carcinogenicity is conflicting. As a group, he contends, scientists faced with such an issue will tend to take a "conservative" posture and adopt a "wait and see" attitude while calling for further study.

"If an agency desires a conservative position on a question of toxic substance policy, then," Professor Ashford states, "it stands a better chance of securing that position if it addresses the issue to a purely scientific committee."

Among toxic substance advisory committees, Dr. Ashford says, the EPA's Science Advisory Board "is conspicuous for its lack of disciplinary balance" among its scientists and engineers.

"To the extent that the SAB delves into policy matters—such as recommending standards for assessing risk-benefit methodologies—this imbalance may pose a potentially serious problem," he writes. Rather than restricting membership to scientists and engineers, he says, "EPA should properly seek a membership which represents a fair balance of other disciplines."

Other recommendations for improving the effectiveness of toxic substance advisory committees involve frequency of committee meetings, cooperation in agenda-setting and continuity and longevity of committee membership.

While ongoing advisory committees need to meet every six weeks to two months to adequately consider the issues before them, Dr. Ashford writes, most toxic substance committees are meeting far less frequenly.

Committee agendas are a critical factor, he says, because if advisory committees are not allowed sufficient autonomy in determining the issues they will consider, important issues may be overlooked and the committee may cease to function as an independent body.

Continuity and longevity of membership are important, he believes, because as members serve together on a committee they build a personal relationship that transcends their individual political and disciplinary biases.

Finally, Dr. Ashford urges the public to take advantage of the mechanisms that make it possible to monitor advisory committee proceedings.

"In the final analysis," he states, "the effectiveness of advisory committees may well depend on the degree to which their use is subjected to public scrutiny... For it is only through a watchful citizenry, and a concerned Congress, that advisory committees can fulfill their potential to serve the public interest."

Leland M. Baker

Leland M. Baker, 89, of Dedham, a retired research staff member in metallurgy, died May 20. Mr. Baker worked at MIT from 1947 until his retirement in 1959.

He is survived by a daughter, Barbara B. Maier of Bedford; a son, Robert H. Baker of Dedham; a sister, Mildred J. Baker of Everett, four grandchildren and three great-grandchildren.

Raymond S. Howell

Word has been received of the death in Clearwater, Fla., of Raymond S. Howell, 79, a retired administrator in Physical Plant. Mr. Howell, who formerly lived in Newton, worked at MIT from 1922 until his retirement in 1969.

He is survived by his widow, Ruth E. Howell, a daughter, Eleanor Compton of Delaware, and four grandchildren. Mr. Howell was a member of the Richard E. Maclaurin Lodge.

Edgar J. Hannaford

A funeral Mass was held June 7 for Edgar J. Hannaford, 83, of Somverville, who died June 4. Mr. Hannaford was a driver at Lincoln Laboratory from 1952 until his retirement in 1965.

He is survived by his widow, Mary E. Konig Hannaford, a daughter, Mary M. Kowalski of Lynn, and three grandchildren.

Emil De Agazio, Jr.

Emil De Agazio Jr., 63, a retired research staff member at the Laboratory for Nuclear Science, died June 12. He had worked at the Institute from 1947 until his retirement two years ago.

Mr. De Agazio is survived by his widow, Beverly Butler De Agazio of Stoneham; a son, Loring of Melrose; two brothers, three sisters and one grandson.

William Lazier

Word has been received of the death on April 21 of William Lazier, 80, of Lyons, N.Y., formerly of Everett. Mr. Lazier was one of the original members of the Campus Patrol (now Police), serving from 1957 until his retirement in 1973. Before joining the patrol he had served 25 years in the US Navy, rising to the rank of chief petty officer. He is survived by his wife, Hazel.

CLASSIFIED ADS

Ads are limited to one per person per issue. All ads must be accompanied by full name and extension. Ads must be submitted in person to the Tech Talk Office or mailed to Rm 5-113. Persons who have no extensions or who wish to list only home telephones must present Institute identification. Ads are limited to approximately 30 words.
Deadline is noon on the Friday before publication.

For Sale

Couches, $30/$60, table, $40; arm chr, $45; curtains, sewing desk, $35; wall unit, $80; dresser, $75; telephone desk, $25; oriental rug, $200/best, more. Bikash, 492-5405.

Victorian walnut pump organ, $500; pressed back quartered oak rocking chr, $125; oak commode, $125. All excellent cond. Call 729-0006 eves or x3-7117 days.

Custom made woven wool drapes, 2 panels, each 90" long, 8'8" across pleated top, $125/best, unusual shade of green-gold. Marilyn, x3-7805.

Matching choker & bracelet, sodalite, freshwater pearls, 14K gold, $60; amethyst Pendant, sm diamond, 14K gold, $60. Call x3-6429 or 825-6495 after 6pm.

Twin bed, vy good cond, mattress, box sprng & frame, $75. Christos, 492-1996 eves.

Sony compact stereo, turntbl, tuner, spkrs, cassette, nds repair, no trouble, $100/best; '68 VW Bug, nds repair or for parts, basic sound, resnble am/fm stereo, $300; refrig, w/frzer, imitat wood exter, formica top, Yugoslavian, $100/best. Mike, 262-3582 or x3-6966.

64K Memory card for IBM-PC w/parity bit. Expandable to 256K, never used, $170. Call 494-0322 eves.

Wooden desks, $40, $45; dining tbl, 4 chrs, $30; full bed, $60; rocking chr, $35; side tbl, $20; misc items. Call 494-0322.

Wooden box for top of station wgn, ideal for camping, sz 62"x12" deep, gd cond, $50/best. Call 643-0056.

Maxi-taxi stroller, hardly used, $35. Tami, x2579 Lincoln or 267-2198 eves.

Axle, springs & whls, 1100x20, from 5 ton army traily, $75; homemade low bed trailer w/900x20 tires, 10'longx7'wide, $150; 1 900x16 tire, new cond, 8 ply, $75. Call 881-4378.

Pro audio, Nikko, Beta 3 preamp, $250; ATD1 time delay, $225; Alpha 440 240 w/ch amp, $700; JVC, QLY5F ttbl, servo dd, quartz, w/microacoustics, 382 crtrg, $375. All boxes pkg, & instr inc. Call 329-9725 or x8-1505 Draper.

19 ft Flying Scot fiberglass '73 one design planing day sailer w/wh hull, Starling tilt trailer, main, jib, plywd, winter storage canopy, canvas cockpit, sailed only in fresh water, $4,500. Call x8-1347 Draper.

Rival elec food slicer 7" serrated steel blade, like new, $35. Rosalie, x8-1401 Draper.

Yamaha XS650 twin late 1977 model w/Kerker exh, runs nice, vy gd cond, $1,000/firm. Scott, x5-9485 Dorm.

Kenmore air cond, 115 volt, autom thermo, 2 fan spds, 4,000 TU, easy installation, 2 yrs old used, 1 season, $175. Bill, x8-4455 Draper.

Simmons, French Prov crib & chest set, $225; Collier stroller, w/attach, $30; hi chr, $30; potty, nvr used, $10; 2 trail cycles, $10/ea; 2 tricycles, 12" frnt whl, $20; 16" frnt whl, $25; BE lamp set, $40. Call 891-7055.

Amtrak 1-way ticket to NYC, $25, unreserved coach, gd thru 6/24. Call 225-9342.

Dbl brass bed w/Serta box sprng & mattress, $250; office sz solid wd desk & exec adjust chr, $200/both. Call 266-6652.

Elec fry pan, $10; can opener, $4; games for all ages, best offer, GE am/fm radio, $15; 2 twn sz mattress, $25/ea; jewlery, gold, silver, pearls, custom, clarinette, Bundy, retails $225, sell $150/best. Call x3-6085.

'68 Airstream travel trailer, alum const, 22 ft self contained, B, shower, gas/elec refrig, htr, extras, $2,800. Dave, x3-2363 or 897-9030.

R.S. Howard upright piano, 76 yrs old, $350. Frank, x8-1476 Draper or 275-6632 after 6:30pm.

'Blossom Navy' couch, love seat, chr, 5 mths old, $800/set; tbls, lamps, etc. Beverly, x3-3132

Nr nw metal bed frame, fits twn, fl, or qn $25; exc firm twn mattress $25; 34x60 metal desk w/glass top $100. Alex, x3-2272 or 391-9544.

2 recliners, $30 ea; twn frame, bx sprng & mattress, $65; b & w studio couch cover & 2 mtching bolsters $20; coffee tbl $7; copper lamp $15. Call 864-4527.

Selmer Bundy flute $100/best. Garry,497-1523, eves.

DEC PDP11/34A Sys, VT55, 256KB w/par, 2 ser drivs w/clk, 5MB RK05, Dual 8" drives, RT11 Op Sys, rack & doc,$9800. Call 478-3849 or x3-8640.

3 varnished plywd bkcases, 2' wide x 3' high, 3 shlvs, $20 ea; 2 lg orange corduroy pillows, $10 ea, all almst nw. Debbie, x3-4003 or 491-6835.

Dbl bd, foam mattress, bx sprng, metal frame, 2 yrs old, $50. Marilyn, 494-1305.

79 Encyclopedia Britannica complete, nvr used, $75/best. Lee, x3-6331 after 4pm.

Moving out of state, must sell, full upright piano. Frances, x3-4737 or Greg, 494-1123.

Men's skis, bindings, poles, $20; 12" TV, nds work, $10. Call x3-7235.

Futon double couch, $50; Hitachi b&w TV 12", $25; Sharp stereo music center, $60; attractive modern desk, $60; plants & assorted household items. Alistair, x3-6784 or 646-7191 eves.

Omni wall system: chests, file drawer, lights, mny shlvs, gd cond. Call 3-6954 or 965-9762.

Tennis racket w/case & press $20; elec hair rollers $15; decorator telephone, beige w/gold trim $30; misc house items. Mary, x3-7217.

Playboy mags, back issues, 3 yrs solid, mid-60s, 12 others same era, all compl, take lot, $20. Hardy, x4958 Linc.

'72 Honda CB500-4, gd cond, custom w/decal, exten frnt end, west saddle seat & bk rest. Eng exc, hwy & crash bars incl, $800. Bob 438-0421 bet 5 & 7pm.

Yamaha cycle XJ650H, 4 cyl, elec start, dir drv, 6100 mi, lk nw. Reasonable offer. Call x3554 Linc or 369-5646.

'74 Kawasaki 250 F11 trailbike, nw rings. Russ, x7690 Linc.

Man's 3 spd bike, nw, just assembled, $55; man's 3 spd bike, old but good, $35. Tom, x8-2794 Draper.

Humidifier, 2 1/4 gal. capacity, $8; elec heater, w/thermostat control, $22. Call x3-4207 or 494-8638.

Convert sofa, butcherblock oak & walnut end's, green uphol, $400/best. Call x3-5626 or 776-1887.

Desk, 48x20 surface, 2 side drawers, chrome legs, small but attrac, sturdy, gd cond, $70/best, must sell. Call 494-8879.

Raleigh "Super Course", 531 Reynolds Tubing, like new, $225. Dennis, x3-4765.

French Prov girl's bedrm set, headbrd, nightstnd, desk, bureau, $280; dryer, $200; LR chr, $100. Aileen, x3-8182.

3 whl & tires; smll model cars, $5/ea; 27" Fuji, 10-spd, Shimano derailler, qk rlse whls, exc cond, used 1 yr, $175; B/tub, ball & claw, leg missing, 1 broken, enamel exc cond, tub fair, $25; wshr/dryr, port, Sears, used 1 yr, yellow, $200. Call 623-7258 lv message.

Sanyo car stereo cassette player, $30; new Ortofon FF15XE MkII phono cartridge, $30. Bril, 266-7273.

Yamaha receiver 30 w/channel, advent spkrs, price negot. Tom, 536-4831 after 6pm.

New GE air cond, 5,800 BTU, $250; pltfrm bed, Sealy mattress, $60; 2 arm chrs, $25/ea; doz bks & records, Bach to The Dead, Who, Led Zep, & Squeeze. Free book or record w/purchase. Tony, 273-0798 eves.

Stroller Parego "Bye Bye Baby" style, hardly used, exc cond, $50; crib, full sz, dark wood, vy sturdy, brnd new mattress, $75/best. Call 864-2446.

'80 3-spd Raleigh bike, exc cond, rarely used, $80/best. Bruce, 523-9763 or 389-6665.

TDK SA c-90 cassettes still $2.70 ea. Minimum order 10 tapes, to reserve yours send name & phone number to: TAPES, P.O. Box 144, MIT Branch, Cambridge, Mass. 02139.

Seth Thomas cottage clock, 12 3/4" hi, 9 1/4" wide, 4 3/4" deep, chimes hour & half, $150. Jerilyn, x3-1990.

LR set, sofa, 2 chrs, coffee tbl, 2 end tbls; grn carpet w/pad, 9x12, $45; Castro ottoman, $50; suitcse, $30; 4 snck trays & stnd, $25; china for 8; pr gold antique satin drapes, 144x92; 2 pr sheers, wht & lt blue. Call x3-2261 or 666-2179.

Apple IIe, 64K, 80 col, U/L case, monitor, w/stand, 2 Apple disk drives, Epson FX-80 printer, 160 cps, $2,500. Call 924-8369.

Women's 5-spd Raleigh bicycle w/basket, $125. Call 492-4610 after 3pm.

Bicycle, blue Schwinn Traveller III, rarely used, exc cond, 26", 10 spd, w/air pump, $150. Lee, x3-7950.

Ham radio, compact, transistorized, ideal dorm/vacation, realigned, $125; Almost worn out A78-13 snows on Pinto rims, $5/both. Call x8-2872 Draper or 475-6580.

Must sell LR set, lounge chr, $250; end tbls, cocktail tbl, lamps, $100; BR set, $400; K set, $75; pr lg floor spkrs Altec Lansing 843A, $500. Hank, x8-3119 Draper.

Will trade 4-drawer office quality filing cabinet, tan, for 2, 2-drawer filing cab. Call 666-9530 after 6pm.

Deluxe elec exercise bike, hardly used, $300; snare drum w/case $60. Roxanne, x7367 Linc.

Boys' Huffy 20" 3 spd bike, exc cond, $40. Call 964-1650 after 6pm.

Dinette set w/6 chrs, $75; 30" Kenmore gas rnge, self-clean $100; '81 Yamaha 650 spec motorcycle, 6K mi, $1600. Call 1-531-3072.

Technics Dolby B & C casette deck, fluor peak meters, nw & under warranty. Kumar x3-6894.

Raleigh Super Course 21", 10 spd, lk nw, $250. Dennis x3-4765.

Var hsehld items: dorm sz frig, $100; chest drwrs, butterfly chr w/cover $8; others. Audrey x3-1793 or 492-0165 after 5pm.

'82 Fuji Royale II man's 25" Blue Suntour components, alloy rims, bar end shifters, avocet saddle, more, exc mech cond $350/best. Joe, 494-8300 eves or lv msge.

'74 Norton 850 Commando Roadster, clean bike from Calif w/strong motor. Chuck, x2868 Linc.

Tires, 6 snows, H78x14, mtd ply whls, $10 ea; 2 nw reg G78x14, mtd ply whls, $18 ea; 2 G78x14, fair $5 ea. Bob, 861-0944.

Refrig, big, 2 dr, Frigidaire. Refrig wks great, freezer not so hot, $25. Wendy, x3-3820.

Sailboat, AMF Alcort Sunfish, fibergls, wh & red flame sail, exc cond. Call 692-8971.

Sm, sturdy bkcse, 3 shlvs, 3' long, gd for paperbks, free. Sue, x3-3321 or 646-4225 eves.

'81 Yamaha XS400 spec, bl, alloy whls, great cond, gd summer bike, helmet & saddlebag incl, asking $900. Dan, 267-5270 or 247-7775.

Wilson T2000 tennis racket w/lg grip $20; 195 cm Kneissel skis & bindings $35; free F cat to gd home. Call x3-3242 Linc or 275-8717 eves.

LR set incl sofa, 2 arm chrs, 1 coffee tble, 2 end tbles. Call x3-2261 or 666-2179.

Elec donut factory $10; elec corn popper & elec can opener $5/ea; lthr brfcse bckgammon $15; 12 Harvard College cognac gls nw in box $20. Call x3-6085.

Wurlitzer baby grnd piano, ivory kybd, $3,000/best; orig Fisher port stereo, perf cond, $200/best. Call 628-0783 eves.

Lawnmower, 22" mastercut, 2 yrs old, $75/best; lge moving boxes, fraction orig cost. Call 938-8565 after 7pm.

14K gold earrings, not studded, $100; misc gold, silver, pearl jewlery, 2 twn mattresses, top qual, gd cond, $25/ea; 1 work bench. Call x3-6085.

Down sleeping bag, Snow Lion winter mountaineering bag, has 32 oz of down, used once, $180/best. Connie, x3-6409.

4 Michelin XZX steel radial tires plenty of tread left, gd cond, $25/ea. Call x3-6424 or 576-3340 after 5pm.

Queen sz mattress, oil burner, wood panelling, best offer. Call 665-6236 after 6pm.

Color TV 13" Sylvania, $150; vac, $15; humidifier, $10; am/fm phono compact, $50; blender, $10; dble bed, wd frame, $50; rugs, apt items, must sell, lving country. Call x3-6734 or 923-9286 eves.

GE washer & elec dryer, $200/delivered or best offer, will sell separately. Call 258-1786 or 862-7284 eves.

Outboard motor, 18 hp Johnson, tuned this year, asking, $300. Jack, x7729 Lincoln.

TRS-80 microcomputer, mod 3, & manuals, like new, retails $800, asking $499. Also avail w/48K, tape recorder cables, software. Call 494-1119 or x3-4204.

Laser sailboat, stiff, lightweight, watertight hull, 2 sails, metal cleats, autobailer, stored indoors, exc cond, gd racing record, recreation/racing, $1,500/best. Derek or Bill, 492-2384 eves.

TRS-80 software, superscript w/dictionary Fortran, L Dos, L Basic, Communications, $75. Call 494-0325 or 253-4207.

Piano, upright, Kohler & Campbell, $500. Caroline, 494-0148.

Sears bunk bed, separates to 2 twn beds, $150. Call x8-2608, Draper.

Pioneer Project 80 spkrs, $75/pr; Pioneer centrex spkrs, $25/pr; Sharp Tape deck, RT 10, $85; roller skates, sz 7 & 9, $35/pr. John, x8-2002, Draper.

New portable 192 sq." gas grill, stand, $20. Call x8-4415, Draper.

Sears Coldspot frostless refrig freezer, coppertone, gd cond, $200; Chateau Magic Chef dble oven gas stove, coppertone, gd cond, $400. Call 643-0056.

24" women's bicycle, 5 spd, new brakes & cables. Judy, x3-5764, lv message.

Sailboat, Ventura 25 ft Genoa Jib, sails & harness, trailer, dinghy, ice box, sink, slps 4, raised keel. Garry, 657-5523 or 687-2064 after 5pm.

Beauty Rest qn sz mattress w/match split box sprg, $95/negot. Bill, x8-1485 Draper.

Two maple captains chrs, perf cond, $25/ea. Robert, x3-4113.

Henniker, N.H. area, 3 acres & 100 ft shoreline on Craney Pond, owner financing. Call 232-1698 eves.

Sofa couch, real mattress, gd cond, $100/best. Deborah, x3-7747.

Moving overseas, Mahogany dbl BR set, bentwood rocker, baby items, chinese lamp, lawn furn, danish desk, plants, bkcase & more. Make offer. Sell cheap. Call 247-3326.

Pine panelled door, 30x78, M-1051, w/frame and hinges, $40. Carl, x8-4567 Draper or 235-7852.

Vehicles

'64 BMW R69S, all orig mint w/large & small tanks & many extras, must sell fast. Charlie, 258-1834.

'68 Mustang, 6 cyl, auto, p/s, exc mech cond, vy gd int, body easily restored, $2,000/best. Gerry, x4877, Linc.

'69 Chev Impala, runs gd, nw brks, front end & exh sys, $350. Frank x8-3632 Draper or 438-3776 eves.

'70 Volvo, 142S sedan, 4 spd, am/fm, runs well, $795/best. Call 924-3656 eves.

'71 Mercury Comet, p/s, 74K, gd run cond, mny nw parts. Have joined vanpool & nd to sell, $500/best. Call 492-5162 or x3-3438.

'71 Porsche 914, red & bl targa top, gd run cond, fantastic appear, $2,990/best. Call & lv msge 235-8018.

'72 Chevy Vega, gd mech cond, 78K, much rust, gray w/exc bl inter, manual 4 spd, gd tires, $250. John x3-5882, lv msg.

'72 Saab, great bdy, brks, tires, runs, $100/best. Call 494-1142.

'73 Volvo 145 wgn, 4 cyl, std, a/c, am/fm, 94K, vy gd cond, $1950. Call Hank x4034 Linc.

'73 Plymouth Satellite Sebring, exc running cond, body rust, everything new on inside, $400/firm. Karla, x3-2203 or 623-5845.

'74 Audi 100LS, reblt motor, great tires, no rust, gd inter, am/fm cass, rear def, 75K, solid car, $1,695/best. Paul, x3-2777.

'74 Vega Coupe, red, 54K, new brks, gd tires & exhst sys, full year sticker, gd running car, $390/best. Call x3-5567 or 623-2998.

'74 AMC Matador, grn, 2 dr, 6 cyl, autom, p/s, p/b, 85K, only $700. Philippe, 862-4709 eves.

'74 VW Dasher, 48K, 4 dr, autom, am/fm, a/c, vy gd working cond, some fender rust, $1,500. Ken, x4816 Lincoln or 489-3658 eves, wkends.

'74 Plymouth Satellite, 4 dr, blue, 76K, orig mi, reg gas, new brakes, water pump, spark plugs & tune up, clean, body nds work, $800. Cathy, 482-0356 or 631-3246 eves.

'75 Peugeot 504, exc cond in & out, no rust, a/c, stereo, nw exh sys, $2,650. Steve, x3-1607.

'75 Olds Starfire sports coupe, am/fm cass, nw trans, brks, radials, exh, no rust, invested $2,700, asking $1700. John, 536-3931 or 266-7791.

'75 Plymouth Duster, 124K, 2 dr, autom, slant 6, radials, some rust but runs well, $500. Call x3-5012 or 272-6926.

'75 Audi Fox, brwn 2 dr, gd cond, $1,500. Call x3242 Linc or 275-8717 eves.

Late '76 Fiat 128, 2 dr, white, am/fm, 41K, immac & faithfully maint, $1700 firm. Elly, x3-6635.

'76 Honda CB200T, exc cond, 11,700 mi, $375; helmet, $50. Mike, 267-8315 after 7pm.

'76 MG Midget, new reblt eng, body & inter exc, nds top, must see. Call x2217 Lincoln.

'76 MGB, 52K, vy good cond, no rust, no dents, $2,900/best. Spiro, 332-9137.

'76 808-Mazda, 4 dr, mny nw parts, vy gd run cond, manual, exc tires, 2 mtd snws, depend, $1,275/best. Call 661-7723.

'76 Buick Regal 2 dr hdtop, a/c, p/s, p/b, am/fm, nw tires, shocks, exh sys, $2,400. Call 535-1327 after 6pm.

'76 Peugeot 504 Diesel, 4 dr sedan, gd cond, 104K, stand, a/c, sunrf, p/w, 31mpg, radials, mtd snws, $2,300/best. Tom, x3623 Linc or 396-7184.

'76 Monte Carlo, nw exh, brks, batt, shocks, strong 350 motor, gd tires & int, well main, $2,300/best. Earl x3-2776.

'76 Honda CB200T, exc cond, 11.7K, $450 w/helmet & lock. Mike, 267-8315 after 7pm.

'77 Plymouth sta wgn, Volare, vy gd cond, roof rack & radio. Call 739-6574.

'77 Datsun 210 sedan, 4 dr, runs great, nw exh, brks, 60K, $2,200. Bill x3-2776.

'77 Plymouth Volare Premier, a/c, p/s, p/b, 77K, gd cond, $1,400/best. Call 969-7899 or 965-5327 after 6pm.

'78 Toyota Corolla liftback, 83K, am/fm, 5 spd, rear def, 4 nw tires, '84 sticker, $2,700/best. Call 332-7977 or 965-5121 eves.

'78 VW Scirocco, low mlg, alloy whls, am/fm, runs well, $3,750. Joan, x3-1496.

'79 Chevy Monza sta wgn, 4 cyl, 2 dr, snows, 27K, mint cond, great for student. Call x3-5389 or 926-8655.

'79 Mustang Ghia, 40K, 6 cyl, autom, a/c, am/fm stereo radio & cassette, moon rf, new all weather radials, many more extras, exc cond, always garaged, $4,500/best. John, x3541 Lincoln or 862-4809.

'80 Mustang, gd cond, 26K, am/fm, rear def, $4,500 firm. Mike, x3-4765.

'80 VW Rabbit-C, auto, 4 dr, sunrf, rear def, am/fm stereo cass, Chapman lock, nw rads, exc cond, all maint records, $4,500/best. Call 492-0530.

'80 Buick Century sedan, red, a/c, exc cond, $5,395/best. Martha, x3-4601 or 395-5522.

'81 VW Sirocco w/less than 10K, 5 spd transm, am/fm & cassette, a/c & rusty jones rustproofing, asking $7,000. Al, 625-4117 btwn 3-8pm.

'81 Honda Accord, Calif lic, owner lvg country first wk of July. Call 864-7869.

'81 Rabbit, 2 dr, 5 spd, 25K, exc cond, hvy duty susp, sport pckg, sandstone color, $5,500 firm. Nancy, x7134 Linc.

'82 Ford Escort L, 2 dr, 17K, std shift, p/b, rustproofing, antitheft, am/fm, rr defog, Michelins, 9 mo left on Ford, 24/24 warranty, $4,800. Call x3-3834 or 734-4314 eves.

'67 Bug, vy gd all around cond, southern car, no rust, new spare, $800. Mark, 547-0265.

'69 Rambler American by AMC, running cond, maintained per factory schedule, incl 2 snow tires, will give name of mechanic, perf for student, body solid, $500. Robert, 258-3055 or 646-1879.

'71 Plymouth sta wgn, gray, mag wheels, V8, 318 cubic in. does not burn oil, autom transm, runs fine, $300/best. Werner, 864-8900, x305.

'71 Volvo, autom transm, $500. Suzanne, x3-3124.

'72 Saab, great body, runs, $1,000/best. Susan, 494-1142.

'72 Honda CB 500-4, gd cond, custom w/decal & flames on tank, extended front end, western saddle seat & back rest, eng exc shape, hiway bars, crash bars, $800. Bob, 438-0421 (Stoneham) btwn 5-7pm.

'73 Capri V-6, 4 spd, recent brakes, mufflers, new fuel pump, reblt carb, vy gd tires, asking $500. Skip, x4433 Lincoln.

'74 VW convert, lo mi, reblt eng, new top, 4 new rdl tires, nds body work, $2,000. Call 253-3872 or 864-2838.

'74 VW Bug, reblt eng, exc body cond, 4 nw tires & snows, clutch, w/sun roof, $1,800. Call x3-2230 or 454-4473.

'75 Dodge Dart sedan, 4 dr, 54K, am, gd running cond, nds new back tires, $1,200. Hans, x3-8450 or 484-5459.

'75 Honda CB500T motorcycle, 7K, depend, gd cond, $800/w access. Hari, x3-2304 or 494-8631.

'76 Chevette, 57K, autom, runs well, nw brakes & tires, some floor rust, $1,000/best. Paul, x5-7675.

'76 Ford sta wgn, am/fm, a/c, all power, new tires, battery, gd cond, 85K, $1,200/best. Call 253-6734 or 923-9286 eves.

'77 Dodge Aspen sta wgn, 72K, a/c, p/s, p/b, am/fm, new battery, starter, brake, exhst, $2,000. Call 494-0436.

'78 Piaggio moped, gd cond, low mi, $250. Debbie, x7062 Lincoln, or 274-6973.

'78 Toyota Celica, 5-spd, exter, inter & mech exc cond, am/fm stereo radio, cassette recorder, low mi, recent tune up, $3,699/best. Call 494-1119 or x3-4204.

'79 Chevette, 4 dr hatchback, 33K, wht w/red stripes, beaut & exc cond, new battery & tires, am/fm stereo, rear def, $2,500. Lee, x3-7950.

Plymouth Fury, sedan, hi miles, no rust, Ziebart treated, am/fm radio, nw exhst & alternator, cruise control, $1,500/best. Carl, x4880 Lincoln.

Housing

The Off Campus Housing Office—E18-301, has listings of both short and long term rentals for the Greater Boston/Cambridge area, including rooms, apartments, roommate situations and houses. Any MIT affiliate (student, staff and faculty) is free to use this service with proper MIT identification. Call x3-1493.

Alton, N.H. hse, slps 6, lg fp LR/DR, K, 2 Br, scrnd porch, walk to priv lake w/swimming, boating, fishing, hiking, 5 mi to Lake Winnipesaukee, $285, avail immed. Vin, x2524 or 272-9549.

Arlington, 1 spac BR avail in lg 2 BR apt, spac LR, K, DR, Mass. Ave, seconds to T, $300/ht incl. Call x3-7695 or 648-7123 eves.

Summer sublet, 12th flr Tang, now thu 9/1, gd view, K, LR, B, must be MIT student or affiliate, $175 complete. Dan, 547-8554 eves or (523-7900, x2703 days).

Cambridge, Inman Sq, 3 fam, sale by owner, exc transp, 15 min talk to MIT/Harvard, new bathrm & electricity, sep utility, ready to move in by buyer, asking $65,000. Call 272-4085 or x3-5069.

Full furn hse to rent in Wayland, 3 BR, K, study, DR, family rm, LR, 2 full B, 2 car garage, ideal for fam of 4 or 5, exc school sys, $1,000/mo. Avail late Aug. Call 358-4668 or x3-2128.

Camb, nr Harvard Sq, 2nd fl, K, deck, master BR, DR, cathedral LR, 1 ½ baths, 1st flr music studio & garden, exc furn, $700/mo incl utils, $600/mo w/out studio, avail 6/27-8/12. Earle, x3-4877 or 876-7821.

Cambridge, E., spacious, light apt, 2nd & 3rd flrs of hse, 5 rms, mod B, porch, refin wood flrs, newly renov, walk to Kendall Sq. & MIT, $690/mo + util. Call 661-0870.

Avail 7/1, lg 2 BR, E. Boston, LR, DR, K, nwly renov on bus line. Call 569-3618.

Arl, comp furn 2 or 3 BR apt, quiet area close to T, dw, wshr, pkg, children welcome, 1 yr lease avail 7/1, $575/mo. Mrs. Cowan, 648-2635 or 643-2549.

Arlington hse, rent, 2 BR, unfurn, neat, nice environ, $550/mo + util. Call 646-8044.

Boston, furn 2 BR, sublet, July & Aug, 1 ½ mi to MIT, on T, rent negot. Paul, x3-6634, x3-1308, 262-5575.

For rent, 3 BR hse w/basement, compl furn, pking, $800/mo, July 1. Call 924-6397.

Billerica, 3 BR home on 1/4 acre, 1 car gar, Nutting Lake, $49,000. Call 322-4651.

Brookline, furn 1 BR apt, 3rd fl of 2-fam nr Coolidge Corner, own bath & K, share entr, $420/mo incl util & ht, no pets, non-smoker, single only. Jane, x3-2290 or Michael x2764 Linc.

Brookline, furn hse, rent, Jan-Summer '84, 4 BR, 2 ½ B, yard, on Green Line, pref couple w/infant, $1,200/mo. Call x3-6263 or 277-5932.

3 fam hse, 3-3-2, renovated ext, walk to MIT, $85,000. Call x3-2647, 864-3912, 497-5525.

Cambridge, single fam hse, arch des renova, lg LR, DR, except K, study w/frpl, 2 BR, 1 ½ B, pkg, sm yd, walk to MIT, hi 100s. Call 547-9633.

Cambridge, rm in 2 BR furn mod apt, nr Central Sq, 3 min to T, 15 min to MIT, $244/incl util, ht free, non-smoker. Bert, 492-0388 eves after 8pm; Sat & Sun all day.

Cambridge, 1 BR apt, furn, sublet July 1-Sept 10, $300/mo. lg sunny, safe, 5 min to Harvard/Central/Inman Sq. Call 547-2781.

Cape Cod, So Yarmouth, 3 BR hse, rent, beau con, 1 mi to 3 beaches. Nancy, x3-2750 or 933-6741 eves.

Cape Cod, Mashpee, 3 BR hse, priv woodsy lot, walk to lake, drive to warm beach, avail July 9-16, $325/wk. Barbara, x3-5259 or 965-9662.

Dorchester, hse for rent, single fam Vict, 4 BR, on Red Line 35 mins to Kendall, avail Sept 83-84, quiet area, gd for kids, $600/mo + util. Peter or Linda, 436-6643 or x3-3064.

Glencoe, Nova Scotia, vac retreat, vy priv 12-acre site overlking E. River Valley, 2 BR, ½ loft, swim nrby river, waterfall pools, ideal/bird watching, hiking, rock hunting, $235/wk. Call x3678 Lincoln or 369-3973.

Nantucket Center, luxuruous condo, slps 4, avail July 5-7. Call 924-6719.

Lynn, nr Saugus line, 3 BR apt, gas ht, off-st pkg, quiet area, util pd by tenant, $280/mo, sec dep req. Call 599-4935.

Charming 2 BR Maine waterside/cottage, Penobscot Bay nr Camden, chamber music & outdr theater nrby, $250/wk June-Sept. Kathy, 536-4007 days, 266-3189 eves, or Marie, x3-7309.

Mashpee, 4 BR, 2 B, deck, nr lake, beach rights, $49,900, adjacent house lot, nr lake, $9,900. Call 655-0821.

Newton, fully furn hse, rent Aug 20, 1 yr, lux 5+ BR, 2 ½ B, study, DR, d/d, wsh/dry, nr MBTA, off-st pkg, $1,100/mo + util. Call x3-2674 or 244-2696 eves.

Hse to exchange, Oxford, Eng, from 9/83, 3BR, fully furn, gas cent ht, 3 mi from Oxford city ctr. Write Woolgar, 23 Meadow Prospect, Wolvercote, Oxford, Eng OX2 8PP or call x3-2336.

Stow, antique colonial inn, w/attached barn, 2.5 acres, 5 BR, LR, fam rm, DR, study, 2 B, exc house for entertaining, $138,000. Mark, x2937 Lincoln or 897-9090 eves.

Somerville, sublet to Sept 5, $275/person or $370/cpl, lg apt in 3 story hse, quiet, resident area, furn, off-st pking, grdn, bleny, strge, piano, stereo, TV, public transp/MIT/Harvard, landlord in hse, pets negot. Call x3-6886 or 628-9261.

Sharon, 8 rm ranch, a/c, screen porch, wet bar, on priv acre lot, 5 min to train to Boston, $700/mo avail around Aug. Call 784-3589, no roomates please.

Tewksbury, 6 rm Cape, 3/4BR, 2 B, hw flrs, fpl, encl porch, stor shed, 1/4 acre priv lot, 2 zone fhw by oil or wood, low 70s. Call x3-7235 or 851-9413.

Vermont farmhse & 4 acres, barn, marble fpl, nw oil ht, fully insul, currently rented yr rnd, $49,500. Call Lucky, x3-7707.

Watertown condo, sale by owner, 2 BR, LR, eat-in K, hw flrs, exc cond, nr T, easy commute to Camb, Bos & Rte 128, $54,900. Call x3-6797 or 926-2765.

Westport, Mass., priv island avail July-Aug, 2 cabins sleep 7, gd for family or indivs skg quiet retreat w/in 1 hr of Boston, priv beaches, boat avail. Call x3-5831 or 876-6977 eves.

Yarmouthport, edge of saltmarsh, priv swimming hi tide, clamming/fshing, bird watch paradise, nature walks, view Sandy Neck, Cape Cod Bay, quiet, slps 6, BR, loft, dbl pullout, season/wkly, $350/wk. John, 258-4118 or 523-6735.

Reliable married couple seek to house sit or sublet apt in New York City for fall term. Pat, 258-3353.

Animals

Beaut all black female part Siamese cat, spayed, wormed, litter trained, intelligent & affectionate, free to gd home. Call x3-6495 or 825-6495 after 6pm.

Affectionate 4 yr old, b&w neutered M cat, and 8 mo old multi-colored spayed F cat, nd good homes, owner allergic. Call 1-667-4339, Billerica.

Alexis, beau, Maine coon mix, spayed cat, ready to adopt, 1 yr old, vy playful, $20, all shots; Tiger Lily, 5 mos old sm cat, loving, lkg for home, all shots, spaying certificate, $22. Susan, x3-2285 or 646-0181 eves.

2 M Sealpoints, 4 yrs old, healthy & happy, must be placed together. Call x3-5244 days; 734-4077 eves.

Pheasants for sale, var specs, make interest pets, req little care, $5-15 ea. Call Darryl, 1-692-6650.

Regist quarter horse, 6 yr old filly, 14.3 hands, all shots, rides Eng & West, great disposition, must have good home. Call Donna 692-2839.

Good home wanted for friendly, adult female cat, spayed, all shots. Carol, x3-6395.

Lost and Found

Reward. Lost: one $2 ½ American gold coin, lost 3 weeks ago somewhere in MIT bldgs, if found please contact Noelle, 536-8368 eves.

Blue backpack, w/white dress shirt inside, lost at 24 hr coffeehouse on Fri night, May 27. Reward. Dave, x3-5483, Rm 48-212.

Lost: a brown appointment calendar. Call x3-5691.

Wanted

Tutor for reviewing Italian grammar & reading in Italian, have completed 1 yr college level Italian grammar & traveled in Italy. Rates and schedule negot. Call x3-4400.

Apartment painting required during last 2 wks of August, $7/hr. Call x3-7330 or 731-6042.

Driver wanted to transp Datsun Station wgn from Boston to New Orleans, LA, avail on June 20, latest arrival date July 1, 1983. Call x3-4828.

Need help Spring Cleaning? Call Kate, 492-4610 after 3pm. References.

Desire to buy one BR condo, first flr, in Waltham, Watertown, Belmont, Lexington, or Arlington areas. Pauline, x3-2760.

Wanted, international woman student to live in with a family in Newton, 4 children, child care, light cooking, laundry. Call 969-6868 btwn 8am & 8pm, exc Saturdays.

Full sz, student quality violin. George, x8-1811 or 696-4532 eves.

High chr & back pack for carrying a baby. Christof, x3-8597.

Visiting Professor is interested in house to rent starting Sept 1, thru Jan. 1, 1984. Linda Sayegh, x3-6895.

Roommates

Female, non-smoker, to shr sunny 2 BR apt in Jamaica Plain for July & Aug, 1 block to Arborway T stop, $150/mo + util. Betsy, 522-7980 eves.

Rmmte wanted to shr 4 BR spac sunny renovated apt, nr Auditorium, Boston, $150/mo July/Aug, furn, dshwshr. Diane, x3-5882.

Summer rental, M/F, to shr 2 BR apt, walking distance to MIT, non-smokers. Joanne, 547-3324 eves.

Somerville, M rmmte, summer sublet, June-Aug, spac, clean, 4 BR hse, nr Tufts, trans, shops, w/2 M, 1 F, 1 vy quiet child, ideal for student, no pets, non-smoker only, $165/ + util. Brenda, 253-7358.

F 25, seeks mature, responsible, F for sunny room in 2 Br apt, Allston, conven to public transit, avail June or July 1, $180/mo. Call 782-4289 or x3-6412.

M grad student seek single or shared living quarters at $175-$300/mo. Tom, (607) 748-8398, Collect, 4-10pm.

M/F rmmte wanted for triplex at Constitution Quarters, Charlestown, 2 BR, loft, K, LR/DR, 2 B, sun roof, 24 hr security, pool, sauna, pking, $315 incl ht & h.w., avail July. Tom, x3-6081, or 246-9286.

F grad student, non-smoker, to share 4 BR apt, Brighton for Sept 1, resident area nr T, shops, laundry, $280 mo. htd. Irene or Becky, x3-6740.

Two rmmtes wanted in spacious N. Camb single family, off-st pking, quiet st, many baths, wshr/dryr, $220 + util. Linda, 864-7938, lv message.

Carpools

Riders wanted from Bevery to MIT, M-F, 9-5. Nancy, x3-2750.

Miscellaneous

Do you hold or expect to hold a patent? Would you like advice on marketing your patent? We offer expertise on ways of maximizing the commercial value of your patent. Brando, x3-1917.

Licensed day care provider has space in Newton home for infant or toddler. Refs, avail. Call 527-0163.

Responsible father wishes to form small play group of toddlers, 2 yr old range, has previous exper w/small children, ample outdoor space, flexible hours. Hal, 494-8279.

On the move? Hard-working, dependable students to provide professional moving service for you. Kyle, 267-9287.

Flute & piano lessons, all levels, exper teacher. Carol, 734-2031.

Typewriter swap, want to trade 9 mo old Olympia ES 101 in exc cond, for IBM correcting Selectric II or IIi in similar cond, within MIT only. Diane, x3-2870.

Copy editing and prose polishing, by experienced professional. Call 864-8077.

Surplus Property

The Office of Facilities Management Systems (OFMS) has surplus property and typewriters at the Equipment Exchange (NW30, 224 Albany Street, open Monday, Wednesday and Friday 10am-1pm) unless otherwise noted. Surplus items are available for transfer within the Institute for 30 days from the publication of this ad, and thereafter are available for sale to individuals. When funds are required, bids and offers should be sent to Earl C. Fuller, Rm E19-451, x3-2779.

Case T136-T140: $50 offer req'd, IBM Executive Typewriters. Available: 800 Pendaflex folders, cond gd.

Case 1056: Transfer of funds req'd. To inspect call Ed Newman x3-5327. Benson-Varian printer plotter Mdl 9211, cond gd; Digital Vax 22/78Z UP w/floating point accelerator and shared memory all in enclosed cabinet, cond gd; Qume dual head printer, Mdl S3/TT75, cond gd.

Case 1059: AB Dick Duplicating machine, cond gd; Dietzgen Microfilm Reader, cond fair; 2 Data Graphix Microfische Readers, cond fair; Office Stool, cond fair; 5 office chairs, cond fair; File Separators, cond gd; coat rack, cond gd.

Case 1060: 3 typing desks, cond gd; 3 rm dividers, cond gd; sofa, cond poor; 2 coat racks, cond gd; 3 tables, cond gd; 2 office chairs, cond gd.

Case 1061: Delta Bench Grinder, cond fair; wood turning lathe ½ HP motor, rep req'd; DeWalt Table Saw, cond fair; Band Saw w/3 HP motor, rep req'd; White jointer, rep req'd; DeWalt band saw, cond gd; 2 Powermatic disc sander, cond fair; Delta Drill press, cond gd; Mercury 9.8 HP outboard motor, cond gd.

Case 1062: Offer of funds req'd. To inspect call Lincoln Yanco, x7640, Sony Video Recorder, Mdl, VO-1600, cond fair; JVC Video Recorer, mdl, CP5000, cond cair; Sony Video Recorder, Mdl. Vo1800, cond fair.

Case T141: $25 offer req'd, Royal Manual Typewriter.

POSITIONS AVAILABLE

It is Institute policy not to discriminate against individuals on the basis of race, color, sex, sexual orientation, religion, handicap, age, or national or ethnic origin in the administration of its programs and activities.

This list includes all nonacademic 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 (10-215, 10-211) and in the Personnel Office (E19-239).

Information on openings at Lincoln Laboratory (Lexington, MA) is available in the Personnel Office.

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.

Pat Williams	**3-1594**
Ann Perkins	**3-6511**
Dick Higham	**3-4278**
Appointments:	
Deborah Reate	**3-4270**
Virginia Bishop	**3-1591**
Susan Gaskell	**3-4266**
Ken Hewitt	**3-4267**
Appointments:	
Lauren Stevens	**3-4268**
Sally Hansen	**3-4275**
Vera Ballard	**3-4277**
Kenneth W. Chin	**3-4269**
Appointments:	**3-4274**

Administrative and Academic Staff

Administrative Officer for the Laboratory of Architecture & Planning, to manage laboratory's administrative, financial, personnel and student-related functions, on behalf of Director. Will prepare budget proposals; oversee projects and budget forecasting; exercise administrative supervision over laboratory staff. Emphasis on research administration and financial management. Candidates must have bachelor's degree in relevant field, plus 4 years related experience, preferably in an academic setting. Strong verbal and writing skills important. Interest in architecture and planning, background in research administration, and knowledge of MIT preferred. NON-SMOKING AREA A287

Postdoctoral Associate, Division of Comparative Medicine, to participate in research in animal medicine and comparative pathology. Position constitutes postdoctoral training for veterinarians in comparative pathology and laboratory animal medicine. Program emphasizes research training and in-depth clinical investigations. Additional training to include clinical rotations in research institutions affiliated with the Division of Comparative Medicine. Requires PhD in relevant field. Experience in field preferred. Eligibility credit will be earned toward board certification by ACLAM and/or ACVP. C088; C089

Assistant to the Director of the Alumni Fund. Will manage one or more solicitation program areas of the Alumni Fund including Cambridge based telethon programs and senior gift/pledge program. In addition will manage special projects beyond scope of other program managers; plan and implement an enhanced Major Reunion Gift Program, working with Associate Director. Involves daily contact with numerous alumni and students as well as periodic contact with Sr. MIT Officers and key alumni volunteers. Requires bachelor's degree, preferably from MIT, plus minimum of 3 years experience, preferably in fundraising/sales/marketing. Strong communication skills essential. A285

Librarian I: Serials Cataloguer (half-time), Catalogue Department of the Libraries, to catalogue serials in all subject areas, forms and languages, taking primary responsibility for materials, including government documents, in humanities, social sciences, management, architecture and planning. Will establish name, subject, and series authority file records; assign Library of Congress call numbers; perform descriptive and subject cataloguing; participate in departmental and general library committee work for policy/procedure formulation; as well as take part in projects and auxiliary functions of Catalogue Department. Candidates must have master's from an ALA accredited library school, along with 1 - 2 years paraprofessional or professional cataloguing experience (preferably in serials cataloguing) essential. Working knowledge of AACR2, OCLC cataloguing subsystem vital also. Authority file background, plus experience with related serials functions in research library preferred. C087

Assistant Director: Lincoln Laboratory, for high-level position whose major components include senior administrative representation, financial, personnel and general administration. Will deal extensively with broad range of defense, educational, technological, socio-economic and legal issues affecting the Institute and the Laboratory. Candidates' areas of expertise must directly reflect the stated responsibilities of the Assistant Director. Qualifications include significant experience in negotiation of contracts with the federal government; experience in budget preparation, accounting, government costing and internal controls for an experimental R & D laboratory; ability to supervise personnel administration, including equal opportunity efforts and the management of a diverse work force; as well as an understanding of a research environment with the ability to incorporate innovative technology in offices and laboratories. Preferred qualifications include an MBA and/or CPA degrees, knowledge of defense procurement policies and operation of federal contract research centers, as well as a background in the administration of science and technology research organizations.

Sponsored Research Staff

Research Scientist, Nutrition & Food Science, who will participate in research in the Neuropharmacology Laboratory. Will join ongoing research studies into drug action on membrane ion channels and their control. Involves intracellular (including voltage clamp) and patch clamp recording from mammalian neurons of the central and enteric nervous systems. Candidates should have MD and/or PhD degrees, plus extensive postdoctoral experience with intracellular recording from mammalian neurons, gland cells and smooth muscle. Strong publications record essential. R1108

Technical Assistant, Center for Cancer Research, to participate in research in molecular genetics. Will maintain animal cell lines in tissue culture; carry out experiments involving metaphase chromosome transfer; collaborate in experiments involving molecular biology and genetics of mammalian cells; and take responsibility for maintaining laboratory equipment and supplies. Applicants must have BS in basic science plus working understanding of current research in mammalian genetics. Ability to work with others on common research problem vital. Experience in research in modern biological laboratory, as well as background in tissue culture techniques and karyotin protein biotechnology preferred. R1107

Technical Associate, Center for Cancer Research, to perform research on all aspects of recombinant DNA and genetic engineering. Involves preparation of DNA and RNA from culture cells, organ, embryo, and tumors. Will prepare plasmids and phase DNA; isolate specific probes; screen phage and plasmid libraries using plaque and colony hybridization; isolate, analyze and construct recombinant clones. Will use DNA sequencing technique, plus other techniques such as agarose and acrylamide gel electrophoresis, Southern and Northern hybridization, tissue culture techniques including the passage of cell lines (including hybridomas), preparation of cell cultures from organs, DNA transfection into cultured cells using protoplast fusion techniques. Requires BS in Biology or equivalent degree, plus minimum of 7 to 10 years relevant experience. R1106

Research Associate, Nutrition & Food Science, who will supervise and carry out research on relationships between neurotransmission and the turnover of membrane phospholipids. Emphasis on elucidating metabolic relations between syntheses of phosphatidylcholine and acetylcholine, and the transduction of signals across membranes. Requires PhD in Neurochemistry or Neuroendocrine regulations. Extensive practical knowledge of cell culture techniques, transmission and scanning electron microscopy, gas chromatography, high performance liquid chromatography, radioenzymatic assays, receptor binding and radioimmunoassay, vital. Formal training in nutrition, metabolism, and neuropharmacology also important. Evidence must be available of productivity in neuroscience in form of senior-authored publications. R1105

Technical Assistant, Chemistry, to assist in research under supervision of designated sponsored research staff. Will maintain and operate fermentors (25L-200L) for growth of methanogenic and nitrogen fixing bacteria, cell harvesting, and preparation and purification of enzymes from cells. Will also contribute to molecular level studies of methane and ammonia biogenesis. Position requires flexibility in work schedule. Requires BSc or MSc in Chemistry, Biology, Biochemistry, or related field, and/or experience in large scale culture of bacteria. R1104

Technical Assistant, Chemistry, to operate high resolution mass spectrometer and interpret data obtained. Will use computer as needed to process data; may write programs for new mass spectrometry applications; perform some sample preparation (derivatization, HPLC), as needed; troubleshoot problems in instrument operation with aid of technicians; prepare field desorption emitters; and develop photographic plates. Candidates must have Bachelor's in Chemistry. MS preferred. Experience with latest analytical instrumentation, vacuum systems necessary. Academic background should include work in analytical chemistry, organic chemistry, biochemistry, and computers. R1103

Technical Assistant, Nutrition & Food Science, to participate in research project concerning neuroendocrine and reproductive function in experimental animals. Duties to include: surgical procedures on as well as administering sex hormones and behavioral tests to ferrets and rats. Requires BS or MS in Life Sciences. Strong organizational skills vital for handling tasks independently. R1102

Sponsored Research Staff—Technical, System Dynamics Group of the Sloan School of Management, to participate in organizing, executing, and maintaining computer files for large scale simulation of U.S. economy. Will also assist users of system in writing documentation and making technical drawings on computer-aided design system. Requires bachelor's degree in relevant field, plus interest in economics and systems modeling. Experience in computer programming essential. Calls for flexibility in work schedule. NON-SMOKING OFFICE R1100

Technical Assistant, Earth, Atmospheric & Planetary Sciences, who will direct the design, construction and testing of ocean-bottom seismometers as well as take responsibility for operation of existing seismic recording systems. Involves supervising laboratory staff by undergraduates, engineering students, plus coordinating field tests of instruments. Candidates must have BS in relevant field, or an equivalent combination of education and experience. Strong background in analog and digital electronics vital. Background in sea work, especially in marine seismology, along with experience with tape recording systems and mechanical systems preferred. R1097

Technical Assistant, Nutrition & Food Science, to assist 2 doctoral level investigators on experiments in cells in culture on the metabolism of membrane phospholipids and its correlations with neurotransmission and transmembrane signal transduction. Candidates should have BS or MS in Chemistry, Biochemistry, or Cell Biology, plus experience in tissue culture techniques, radioenzymatic assay and radioimmunoassays. R1093

Technical Assistant: Histologist, Nutrition & Food Science, to prepare slides for assessment of histological/pathological detail by histochemical autoradiographic and other histological techniques, using standard operating procedures of laboratory. Involves developing new methods and assisting in necroscopies. Adhering to study protocols and maintenance of accurate records of studies essential. Requires BA or BS in Biological Sciences or Chemistry or the equivalent. Histological laboratory experience vital. R1092

Registered Nurse (days rotating to nights), Clinical Research Center, who will take responsibility for general and specialized nursing procedures and medications for this 12 bed research unit, working closely with laboratory and dietary departments. Involves maintaining complete knowledge of all patients' conditions and nature of studies being performed, as well as charting accurate observations. Candidates must be graduates of accredited nursing program and have Mass. registration. Minimum 2 years nursing experience essential; pediatric experience helpful. Good interpersonal skills important. Position supervised by head nurse and investigators. R1089

Principal Research Scientist for Department of Earth & Planetary Sciences. Will participate in research in Earthquake Seismology. Will plan and carry out seismic field experiments for collecting local earthquake data; extract optimum data on earthquake source mechanisms and structure of the seismic regions by innovative methods of seismic analysis. Requires PhD in Geophysics and minimum of 3 years postdoctoral experience, along with background in collection and analysis of local earthquake data in analog and digital form. Proven capability in drawing geologically significant conclusions from the application of sophisticated analysis methods to real data necessary. Facility with foreign languages plus ability to repair equipment in the field also essential. R1088

Technical Assistant, Center for Cancer Research, for immunology laboratory. Will prepare and culture cloned lines of murine lymphocytes; purify subpopulations of lymphocytes using various techniques; prepare and characterize hybridoma cell lines; handle immunoprecipitation and gel electrophoresis of cell surface proteins; and perform animal work such as immunization, bleeding, etc. involving mice. Requires Bachelor's degree in Biology or Chemistry or the equivalent. Laboratory experience, including cell culture and animal work, preferred. R1087

Research Scientist—Experimental, Plasma Fusion Center, to participate in research on TARA data directed toward understanding major tandem mirror physics issues of equilibrium, stability, confinement and transport. Requires PhD in Plasma Physics or equivalent training, along with experience in wide range of diagnostics, and capability of synthesizing varying kinds of physics into coherent results. Several years experience in experimental plasma physics essential. Leadership potential plus ability to work as member of large research group also vital. R1084; R1085; R1086

Materials Scientist, Materials Processing Center, who will perform chemical syntheses of materials, typically in glove box. Will calculate concentrations, yields, and other parameters for chemical reactions; analyze materials with variety of instruments (electron microscope and microprobe, x-ray diffraction, thermal analysis, etc.); set up laboratory equipment; report findings and procedures in written form for internal documentation and publication; and interact with other personnel at all levels. Requires BS in Chemistry or closely related discipline, along with capacity to handle numerous ongoing tasks simultaneously. Strong interpersonal skills and attention to accuracy of detail important. R1078; R1079; R1080

Research Associate, Materials Science & Engineering, to work on mathematical modelling of electromagnetically driven flows and associated heat transfer and mass transfer phenomena in welding and crystal growth processes. Requires PhD in relevant field, along with several years well documented experience in numerical solution of Navier-Stokes, Maxwell's equations and moving boundary problems. US citizenship or permanent residency necessary. R1077

Sponsored Research Staff, Energy Laboratory, to participate in research in the Northeast Residential Experiment Station in Concord, MA. Will take part in all aspects of design, instrumenting, monitoring and evaluation of multi-kilowatt photovoltaic power systems. In addition, will expand complex computer network to acquire, process, archive, retrieve and analyze system performance data, as well as design and perform experiments using same data. Involves designing and testing of sensor instrumentation, signal conversion circuits, and analog to digital conversion electronics which monitor DC and AC power circuitry, plus microprocessor-based circuitry and serial and parallel communications channels. Requires master's in relevant field with strong science background. Capacity to prepare mathematical models and simulation software of nonlinear electronic circuits vital. Knowledge of conductive, convective and radiative heat transfer processes helpful. R1076

Technical Assistant in the Department of Biology, to take primary responsibility for project involving recombinant DNA techniques, isolation and cloning of messenger RNA's, identification of developmentally regulated genes, DNA sequencing and cell growth. Will order supplies and handle certain other general laboratory responsibilities. Position involves minimal supervision. Requires BS in relevant field with experience in recombinant technology. R1075

Library Support Staff

Library Assistant IV, Libraries, to work in Monograph Processing Section of the Catalogue Department. Will edit catalogue data online on OCLC 100 (105) terminal for archive tape update and/or card production; edit catalogue data off-line; produce heading labels using terminal and printer; catalogue MIT theses online, including establishing name authority records and files in thesis shelf list. Applicants must have completed high school or the equivalent, and have minimum of 2.5 years related experience, or an equivalent combination of education and experience. Accurate typing skills and attention to detail necessary. College background plus experience with OCLC CRT terminal and OCLC Cataloguing Subsystem preferred. Reading knowledge of one or more foreign languages helpful. B2321

Library Assistant IV, Industrial Relations Collection of Dewey Library, to provide technical and public services in fields of human resource management, labor management relations, labor law. Will provide reference service; process and maintain bibliographic records of materials received; prepare orders for new materials; perform online OCLC searches; index selected journal articles; prepare and distribute *Library Accessions Bulletin*; maintain statistical records; prepare materials for binding; maintain card catalogue; as well as train and monitor student assistants. Involves occasional evening or weekend work. Applicants must have 2 to 3 years directly related experience, or an equivalent combination of education and experience. Good typing skills plus ability to manage diverse tasks in well organized fashion essential. Good interpersonal skills also vital. College background in social sciences plus library experience preferred. B2312

Secretary/Staff Assistant

Administrative Secretary for the Division of Comparative Medicine, to provide secretarial and administrative support to the Director. Will coordinate large meetings; type and edit technical manuscripts, proposals, reports, and correspondence from rough draft, dictaphone, and shorthand notes; process mail; initiate and compose routine correspondence; answer phones; arrange travel; as well as establish and maintain filing systems. Requires 4 to 5 years applicable experience, or an equivalent combination of education and experience. Excellent typing and organizational skills essential for functioning independently in this busy setting. Familiarity with word processing and medical terminology preferred. Business or secretarial school background helpful. B2337

Administrative Secretary, Office of Facilities Management Systems, to maintain Director's calendar; answer phones; handle correspondence; maintain files; administer several payrolls; type confidential materials; maintain personnel files; arrange travel; monitor monthly statements; handle petty cash and postage meter; handle other accounting oriented paperwork; process mail; and photocopy. Candidates must have 4.5 years applicable experience, or an equivalent combination of education and experience. Excellent typing, organizational and general office skills needed. Shorthand, speedwriting, or dictaphone skills important. Involves performing tasks with minimal supervision. This is a busy, service-oriented office. B2329

Administrative Secretary, Materials Science & Engineering, to provide secretarial and administrative support to the Department Head. Will type; perform various general office/clerical tasks regularly; monitor research accounts; process related invoices and purchase orders; and interact continually with large numbers of faculty, staff and students. Requires 4 to 5 years direct/related experience or an equivalent combination of education and experience. Excellent typing, dictaphone and shorthand/speedwriting skills essential. Solid command of English usage plus attention to detail also needed. Strong organizational ability important for managing workloads with minimal supervision. Word processing and technical typing preferred. B2328

Administrative Secretary, Electrical Engineering & Computer Science, to provide secretarial support to several staff and faculty members as well as graduate students in High Voltage Research Laboratory. Will handle administrative details of running laboratory; answer phones; receive visitors; arrange appointments, conferences, luncheons, seminars, and travel; maintain files; type, edit, and photocopy teaching materials, manuscripts, reports, applications for research grants and regular correspondence. In addition, will monitor monthly financial statements; respond to written and telephone inquiries independently; process mail. Candidates must have 4.5 years direct/related experience, or an equivalent combination of education and experience. Excellent general and technical typing skills, plus word processing background or willingness to learn, necessary. Calls for strong interpersonal ability along with excellent organizational skills to set priorities and manage tasks with minimal supervision. NON-SMOKING OFFICE B2316

Administrative Secretary, Aeronautics & Astronautics, to Director of Gas Turbine Laboratory. Will provide secretarial support as well to 4 faculty members and 1 researcher. Involves handling operations of headquarters office. Will type and proofread technical reports, examinations and other related materials from rough draft; type and edit reports on word processor for correct English usage; compose correspondence; answer phones; receive visitors; maintain files; arrange travel; prepare expense vouchers; process mail; maintain office supplies; handle petty cash and key cards; as well as prepare and distribute laboratory reports. Applicants must have 4.5 years direct/related experience, or an equivalent combination of education and experience. Excellent technical typing, organizational, and interpersonal skills necessary. Capacity to set priorities and handle workloads with minimal supervision vital. Word processing background preferred. B2315

Administrative Secretary, Electrical Engineering & Computer Science, who will work with faculty and staff in Microsystems Program Office. Will establish and carry out procedures in support of program activities; assist in coordination of semi-annual research conferences, weekly seminar series, and other special programs; arrange travel; establish procedures for submission of papers, registration, and handling of monies for conferences; implement guidelines for inquiry; describe services and activities of program to professionals from academia, industry and government; use computer text editors and formatters to produce proposals, manuscripts, correspondence, and technical papers; perform editing on same; maintain computerized address system; monitor research accounts monthly; supervise student staff in performing clerical duties; arrange meetings, workshops and travel; and perform other general secretarial tasks as assigned. Applicants must have 4 to 5 years applicable experience, or an equivalent combination of education and experience. Excellent typing, organizational and general office skills essential. Position involves working under time constraints. B2310

Sr. Secretary, Spectroscopy Laboratory, who will perform various secretarial duties for Laboratory. Will prepare manuscripts, proposals, correspondence and teaching materials; answer phones; process mail; photocopy; arrange meetings, travel, etc.; maintain files. Applicants should have 2 to 3 years direct/related experience, or an equivalent combination of education and experience. Excellent typing, organizational, and interpersonal skills needed. B2340

Sr. Secretary (17.5 hrs/wk), Civil Engineering, to provide office support for 1 faculty and 1 research staff member in Water Resources Division. Will type manuscripts, correspondence, reports, etc.; monitor research accounts; perform library research projects and gather other related data; answer phones; and photocopy. Calls for 2 to 3 years applicable experience, or an equivalent combination of education and experience. Excellent typing skills needed; technical typing experience preferred. Word processing background or willingness to be trained preferred. NON-SMOKING OFFICE B2338

Sr. Secretary, Nuclear Engineering, to provide secretarial support for 3 faculty and 1 administrative staff members. Will type correspondence, manuscripts, research papers, etc.; answer phones; process mail; file; arrange appointments and travel; handle travel vouchers, payment requests, requisitions and stamp supply; and utilize word processor on regular basis. Applicants must have 2.5 years relevant experience, or an equivalent combination of education and experience. Good typing and general secretarial skills required. This individual will be expected to set priorities and manage various workloads with minimal supervision. NON-SMOKING OFFICE B2336

Sr. Secretary, Laboratory for Computer Science, to provide secretarial support for research groups led by 2 faculty members. Will prepare class notes, reports, research proposals and technical memos; maintain files and databases; utilize text editor, formatters, computerized files systems as needed; handle correspondence; answer phones; arrange travel; and assist in coordination of meetings. Requires 2 to 3 years applicable experience, or an equivalent combination of education and experience. Good typing and general secretarial skills, including organizational ability for setting priorities independently, essential. Interest in learning office computer system important. B2319

Sr. Secretary—Technical, Mathematics, to handle substantial typing and other secretarial duties. Will prepare mathematical manuscripts, teaching materials, proposals, correspondence and reports for several faculty members. In addition, will answer phones; arrange travel; handle student inquiries; purchase office supplies; as well as maintain files and records. Applicants must have 2.5 years relevant experience, or an equivalent combination of education and experience. Strong technical typing and general office skills vital. Excellent organizational ability and attention to detail important. Knowledge of MIT preferred. B2313

Sr. Secretary—Technical, Electrical Engineering & Computer Science, who will serve as personal secretary to 1 faculty member. Will perform technical typing; arrange appointments and travel; prepare teaching materials; handle correspondence; interact with members of research group and with other members of MIT community. Requires 2.5 years direct/related experience, or an equivalent combination of education and experience. Excellent technical typing and interpersonal skills vital. B2311

Sr. Secretary, who will provide secretarial support for research groups led by 2 faculty members in the Laboratory for Computer Science. Will handle preparation of teaching materials, reports, research proposals, technical memos; maintain files and database of research groups; utilize computer text editor and formatter; file; answer phones; arrange travel and large professional meetings. Applicants must have 2 to 3 years relevant experience, or an equivalent combination of education and experience. Good typing skills plus ability to perform duties independently necessary. Organizational ability for setting priorities and managing detailed information regarding research group work. Interest in learning computer based text-editing and other computer aids important. B2309

Sr. Secretary, Materials Science & Engineering, to assist 1 faculty member and his research staff of 9 graduate students and 1 visiting scientist. Will monitor research accounts; type teaching materials, manuscripts, proposals, etc.; compose correspondence; maintain files and professional library; answer phones; coordinate meetings and travel; perform library research; interact regularly with students and staff; and perform other clerical and administrative duties as assigned. Requires high school graduation or the equivalent, plus 2 to 3 years relevant experience, or an equivalent combination of education and experience. Excellent general and technical typing plus dictaphone skills needed. Strong organizational ability vital for functioning independently. Interpersonal skills important. B2306

Sr. Secretary, Mechanical Engineering, to type correspondence, reports, etc. for Director of Laboratory for Manufacturing & Productivity. Includes extensive technical typing, as well as typing of summary reports for graduate students. Will also photocopy reports and other materials; oversee use of word processor; keep diskette file; train others in use of word processor; order related

supplies; occasionally coordinate seminars and meetings; and answer phones. Requires 2.5 years related experience, or an equivalent combination of education and experience. Good typing and office skills necessary. Word processing background preferred. B2304

Sr. Secretary (part-time and temporary: 10 mos.), Foreign Languages & Literature Section of the Humanities Department. To share position providing office support. Will organize and publicize lectures and special events; type; order supplies and books; file; and perform other related duties as assigned. Applicants must have 2 to 3 years relevant experience, or an equivalent combination of education and experience. Good typing, organizational and interpersonal skills necessary. Knowledge of graphic design, plus reading knowledge of French/German/Russian or Spanish preferred. Willingness to operate or be trained in use of word processor helpful. Involves performing tasks with minimal supervision. B2303

Sr. Secretary, Planning Office, to provide secretarial support to the Director of Planning. Will transcribe, edit, and type correspondence, manuscripts, and reports; answer phones; provide reception; arrange meetings and travel; organize and maintain files; coordinate report production; review monthly accounting statements; and assist in budget preparation. Applicants must have 2.5 years direct/related experience, or an equivalent combination of education and experience. Good organizational and general office skills, including typing, necessary. Good interpersonal skills as well as attention to detail also essential. Experience in or willingness to be trained in word processing important. Knowledge of MIT helpful. Non-smoker preferred. B2298

Sr. Staff Assistant, the Aga Kahn Program of the Libraries, to maintain database and perform data entry under supervision of documentation specialist (Database covers information on Islamic architectural images, running on FOCUS system). Will write routines for data entry; edit and generate reports using FOCUS Query Language and CMS commands; write documentation of software routines; prepare users' manuals; work with technical consultant on design and implementation of routines; enter data from standardized forms into computer; make online corrections from edited versions; coordinate input schedule with part-time entry staff member; perform routine writing and documentation half-time, as required by project; perform data entry and corrections half-time on a daily basis. Applicants should have 2.5 years related experience, or an equivalent combination of education and experience. Accurate typing skills plus attention to detail crucial. Knowledge of programming language important. Two years college preferred. B2297

Sr. Secretary, Personnel; to provide secretarial and administrative support to the Manager of Labor Relations, the Manager of Personnel Services and Development and associated staff. Will type and proofread correspondence and reports; answer phones; arrange conference participation and travel; monitor expenditures against Institute accounts; take minutes at meetings; compose routine correspondence; review labor relations publications for articles of interest; maintain complex files; arrange meetings and carry out independent research projects on various topics (statistics, summary reports, etc.) Candidates must have 2.5 years related experience or an equivalent combination of education and experience. Excellent typing and organizational skills plus ability to handle detail accurately essential. Dictaphone skills necessary along with computer terminal skills or willingness to learn. Knowledge of word processing or willingness to learn preferred. Must be able to exercise good judgement in setting priorities. Overtime may be involved during periods of high activity. B2292

Sr. Secretary, Mechanical Engineering, who will provide secretarial and administrative support for 3 faculty members. Will prepare and type technical manuscripts and reports; distribute same; answer phones; respond to written and telephone inquiries; prepare teaching materials; as well as interact with students and government agencies funding research. Applicants must have 2 to 3 years applicable experience, or an equivalent combination of education and experience. Excellent technical typing and organizational skills essential for this challenging, detail oriented position. Good interpersonal skills and knowledge of basic accounting important. Familiarity with the Institute helpful. B2271

Secretary (20 hrs. /wk), Mechanical Engineering, to type correspondence, reports, and handle general office support functions for 3 faculty members. Requires high school graduation or the equivalent, plus 1 year related experience, or an equivalent combination of education and experience. Good general and technical typing skills as well as general clerical skills essential. Good proofreading and organizational ability also important for this position in a busy office. B2335

Secretary in the Office of Sponsored Programs, to provide secretarial support for 2 staff members who are responsible for submission of research proposals, negotiation of grants, contracts, and post-award administration for various departments throughout MIT. Will type correspondence; maintain files; answer phones; and perform other related tasks as assigned. Requires high school graduation or the equivalent, plus minimum 1 year applicable experience, or an equivalent combination of education and experience. Good typing and general secretarial skills necessary. Strong interpersonal and organizational skills, including ability to work as team member, also vital. B2326

Secretary, Nutrition & Food Science, to provide office support to the International Food & Nutrition Program. Will answer phones; process mail; photocopy; type correspondence from dictaphone; file; order supplies; handle postage meter and photocopy records; and run errands as needed. Applicants must have completed high school or the equivalent, and have minimum of 1 year relevant experience, or an equivalent combination of education and experience. Accurate typing and proofreading skills plus excellent organizational ability for managing workloads efficiently essential. Attention to detail also important. This is a busy office. B2324

Secretary for the Graduate Office of the Department of Electrical Engineering & Computer Science. Will assist in coordination and processing of incoming graduate school applications; type correspondence from handwritten or typed drafts or from dictaphone; use memory typewriter for form letters; assist in preparing large mailings; respond to inquiries regarding admissions; serve as key operator for photocopy machine; handle postage meter; process incoming mail; and provide secretarial support during absence of other support staff members. Involves training on interactive computer system. Applicants should have completed high school or the equivalent, and have minimum of 1 year applicable experience, or an equivalent combination of education and experience. Good typing and general office skills required. Willingness to be trained in use of interactive computer system also vital. B2317

Secretary (part-time), Environmental Medical Service, to type correspondence and forms relating to radioactive materials licensing and control; distribute film badges and maintain related records; handle staff appointment calendars; maintain files on radiation protection activities. Applicants must have completed high school and have a minimum of 1 year direct/related experience, or an equivalent combination of education and experience. Good typing and general secretarial skills as well as ability to adapt to varied routine procedures essential. Strong communication skills plus word processing and minicomputer experience important. *Position in LINAC Radiation Protection Office in Middleton, MA, twenty miles north of Boston.* B2305

Clerical Assistant, Purchasing & Stores, who will type purchase orders on electric typewriter; handle sorting, distribution, and mailing of purchase orders, change orders; and maintain files in the Purchasing Field Office. High school graduation or the equivalent necessary. Basic typing skills also essential. B2327

Technical Support Staff

Medical Assistant (temporary: 4 to 6 mos.), Medical, who will report to nurse coordinator of Obstetrics & Gynecology Service. Will assist physicians and nurses with routine examinations and with special procedures. Includes chaperoning during examinations, assisting with cautery, IUD insertions, diaphragm lesions, biopsies, and prenatal exams. In addition, will weigh patients; take blood pressures; obtain laboratory samples; perform cleaning and stocking of patient consultation rooms, including washing, wrapping, and preparing instruments for autoclaving; prepare charts, records and various forms; and assist with receptionist duties occasionally. Requires high school graduation or the equivalent, along with 2 to 3 years directly related experience. Medical Assistant training and strong interpersonal skills vital. B2332

Assistant Communications Console Operator, Physical Plant, to answer Work Control Center phones used by MIT community to report maintenance requests, fires and other emergencies. Will monitor Auto Alarm System; maintain daily log of all Work Control calls, alarms; indicate action to be taken; dispatch mechanics to investigate maintenance problems; operate various pieces of communications equipment: paging systems, radio network, phones, etc.; perform other clerical duties in support of Work Control and other Physical Plant shops. Requires high school graduation or the equivalent, along with 1 year applicable experience, or an equivalent combination of education and experience. Strong typing, interpersonal and communication skills necessary. B2323

Office Assistant

Administrative Assistant, Center for Cancer Research, to assist administrative officer with financial and business affairs. Will review budgets; monitor and reconcile monthly statements as well as internal financial reports; verify and authorize requisitions and invoices. Applicants must have 4 to 5 years directly related experience, or an equivalent combination of education and experience. Strong organizational skills important for setting priorities with minimal supervision. Bachelor's degree preferred. Experience in MIT purchasing, accounting and/or grants management helpful. B2339

Administrative Assistant to the Director of the System Dynamics Group of the Sloan School of Management. Will organize correspondence and files as well as coordinate Director's activities with other Group staff members. Duties include: answering phones; relaying detailed information; developing working knowledge of project to respond to inquiries. Will oversee preparation of papers, including proofreading and printing arrangements; maintain records of journal publications; type correspondence from dictaphone; arrange meetings and travel; and coordinate functions of other office support staff personnel. Candidates must have 4 to 5 years direct/related experience, or an equivalent combination of education and experience. Excellent typing and organizational skills, including capacity to handle details efficiently, vital. Involves taking on responsibilities and performing duties independently. Good communication skills important. Two years college preferred. NON-SMOKING OFFICE B2330

Administrative Assistant, to provide office and administrative support for 3 faculty members in the Department of Economics. Will process mail; file; arrange appointments, seminar schedules, travel, etc.; prepare teaching materials; type correspondence, manuscripts; edit same; handle publications collection; assist in grants management, including maintenance of monthly summaries, budget projections, and journal management. Candidates should have 4 to 5 years applicable experience, or an equivalent combination of education and experience. Strong technical typing and general office skills vital. Excellent organizational ability also necessary. B2322

Administrative Assistant, Alumni Association, to provide general office and administrative support for activities of Alumni Relations Program. Will prepare promotional mailings for 13 reunion classes; act as liaison among printer, mailer, and reunion chairpersons; assist staff members with all logistical support for housing, dining, physical plant, and transportation; handle purchase requisitions; monitor monthly statements; attend various committee meetings; as well as supervise temporary and student employees. Clerical duties include: typing correspondence, arranging meetings and travel; maintaining files; and providing office support for MIT Meeting Planners Group and annual Mexican Fiesta. Position includes training in research gathering techniques and use of database management systems. Candidates should have 4.5 years direct/related experience, or an equivalent combination of education and experience. Excellent typing, organizational and interpersonal skills vital. Some overtime will be necessary during peak periods: spring and fall. B2307

Administrative Assistant, Committee on the Visual Arts, to perform all basic and administrative support staff functions. Will handle requisitions, invoices, related records; monitor monthly statements; coordinate sales and distribution of exhibition catalogues; type letters, grant proposals, catalogue essays, etc.; organize meetings; take minutes; maintain mailing lists, press notebook, files and office supplies. Candidates should have 4 to 5 years applicable experience, or an equivalent combination of education and experience. Strong general office skills, including typing, necessary. Well developed organizational ability essential for initiating tasks and functioning independently. Good writing and verbal skills important. Experience in accounting and word processing, plus knowledge of the Institute preferred. Position opens mid-August. B2301

Administrative Assistant, Mechanical Engineering, for the Cryogenic Engineering Laboratory. Will perform secretarial and administrative duties for 1 faculty member and this laboratory. Will oversee daily operations; maintain laboratory records, including financial records relating to helium and nitrogen services. In addition, will accept orders and ensure credit to laboratory accounts; prepare teaching materials; type notes from handwritten form; and do some technical typing. Applicants should have 4 to 5 years relevant experience, or an equivalent combination of education and experience. Good technical typing and general office skills needed. Interpersonal skills and sufficient organizational ability to undertake tasks independently also vital. B2295

Office Assistant, Medical, to perform various office support activities relating to health insurance processing. Will work in MIT Health Plan Office. Duties include: coding, modifying, and verifying information of computerized database; assisting with applications processing; providing secretarial support as needed; handling data entry and reconciliation of health insurance claims information using personal computer. Applicants must have completed high school or the equivalent and have minimum of 1 year relevant experience, or an equivalent combination of education and experience. Good typing and communication skills plus attention to accuracy of detail essential. Experience with online and personal computers preferred. B2331

Office Assistant, Systems Dynamics Group of the Sloan School of Management, to serve as receptionist and provide telephone coverage for group. Will handle variety of other office duties, including: processing paperwork, processing requisitions, allocating charges to accounts, monitoring monthly statements, processing payrolls for supervisor's approval. Applicants must have completed high school or the equivalent, and have minimum 1 year related experience, or an equivalent combination of education and experience. Good general office skills, including typing, needed. NON-SMOKING OFFICE B2325

Service Staff

Sr. Technician (Electronic), Haystack, who will assist in laboratory research or analytical work under direction of scientific personnel. Will operate highly technical experimental apparatus; may direct and train technicians; has demonstrated outstanding skill in field; requires little or no supervision; will coordinate improvements, modifications and carry out continuing maintenance on two radar systems at Millstone Radar in Westford, MA; must have in-depth knowledge of microwave techniques applicable to L-band and UHF receivers; will assist in design and integration of modernized IF and RF systems. Essential that individual have working understanding of antenna servo circuits as well as digital electronics; ability to perform noise figures and phase measurements, establish checklist to monitor performance, keep schematics updated, maintain stock of spares, etc. Requires graduation from 2 year day technical school or its equivalent plus minimum of 5 years applicable experience. Associate's degree in Electrical Engineering preferred. Must be willing to work varying hours and be available for emergency calls; some overtime involved. H816

Hungarian dancers and musicians seen in silhouette during their Lobby 7 demonstration last week. Three members of the Bartok Folkdance Studio and four members of the Ujstilus music group were brought to this country from Budapest by dancer Eva Kish and her husband, Robert A. Hoerr, graduate student in the Department of Nutrition and Food Science. Ms. Kish, who has studied dance in Budapest, performed with her Hungarian colleagues in their American premiere in Kresge Auditorium Saturday night, attended by an audience of 800. Dance, music and singing workshops are being held all week at MIT; there will be a Hungarian folk music cruise in Boston Harbor Friday night and a folk dance party Saturday in the Parish Hall of the Old Cambridge Baptist Church. Information numbers: 253-6302 and 776-7314. *—Photo by Calvin Campbell*

Health plans open enrollment extended

Open enrollment for all of MIT's health insurance choices will be extended through the end of July, Kerry B. Wilson, manager of compensation and employment, has announced.

"Because new health insurance rates are often not determined by the end of June," Wilson explained, "in future years open enrollment will be during May, June, and July, with memberships effective August 1.

"This year health insurance open enrollment is being extended to July 29. The extension will give people adequate time to make a decision after the new health insurance rates are set" he said. "The 1983-84 rates are expected to be announced shortly."

Health insurance applications or changes received by the Benefits Office by the end of June can be effective July 1, and applications received by July 29 will be effective August 1.

After open enrollment ends on July 29, the MultiGroup Health Plan and the Harvard Community Health Plan (HCHP) will close their memberships, except for new employees, until their next open enrollment period, but HCHP will hold a special open enrollment period next winter at the time their new Health Center opens in Peabody.

Both the MIT Health Plan and the Blue Cross/Blue Shield Master Medical Plan have continuous open enrollment, with memberships effective the first of any month after the Benefits Office receives the application.

For more information on coverage under any of MIT's health care choices, call the plans directly: The MIT Health Plan at x3-1322; The MultiGroup Health Plan at 431-1070; The Harvard Community Health Plan 421-8819, and the Blue Cross/Blue Shield Master Medical Plan at 956-3128.

For enrollment forms for any of the plans contact the Benefits Office on campus, Rm E19-434, x3-4271, from 9am to 3pm, or the Lincoln Laboratory Benefits Office, A-123, x3-7059.

ADMINISTRATIVE AND ACADEMIC STAFF:
A277, Assistant to the Treasurer—Planning
A284, Applications Programmer, Information Processing Services
A283, Applications Programmer, Information Processing Services
A280, Technical Supervisor (half-time), Educational Video Resources Section of the Provost's Office
A279, Technical Writer, Information Processing Services
C086, Librarian I: Assistant Librarian for Collections & Reference in the Aga Khan Program (part-time)
C085, Computer Systems Engineer, Electrical Engineering & Computer Science
C084, Project Manager (temporary: 18 mos.), Libraries
A276, Programmer Analyst, Industrial Liaison Program
A275, Industrial Liaison Officer, Industrial Liaison Program
A274, Sr. Applications Programmer, Office of Facilities Management Systems
C083, Applications Programmer, Electrical Engineering & Computer Science
C080, Librarian I: Department of Transportation Liaison Librarian (part-time), Libraries
A263, Managing Editor of Technology Review, Alumni Association
A240, Sr. Systems Analyst, Information Processing Services

SPONSORED RESEARCH STAFF:
R1073, Technical Assistant, Nutrition & Food Science
R955, Organic Chemist, National Magnet Laboratory
R873, Sponsored Research Staff: Engineering/Applied Physicist, National Magnet Laboratory
R1071, Technical Assistant, Biology
R1070, Technical Assistant, Energy Laboratory
R1068, Research Specialist: Computer Programmer, Electrical Engineering & Computer Science
R1067, Research Associate: Systems Programmer, Aeronautics & Astronautics
R1064, Research Engineer, Aeronautics & Astronautics
R1062, Technical Manager/Systems Programmer, Laboratory for Nuclear Science
R1056, Technical Assistant, Nutrition & Food Science
R1052, Research Scientist—Experimental, Plasma Fusion Center
R1051, Research Associate, Earth & Planetary Sciences
R1050, Research Associate, Earth Resources Laboratory of Earth & Planetary Sciences
R1048, Systems Manager, Experimental Music Studio, Humanities
R1047, Research Associate, Nutrition & Food Science
R1046, Research Associate, Nutrition & Food Science
R1047, Research Associate, Nutrition & Food Science
R1046, Research Associate, Nutrition & Food Science
R1045, Engineering Assistant, (temporary), Center for Space Research
R1044, Research Associate in the Materials Processing Center
R1035, Research Scientist-Theoretical, Plasma Fusion Center
R1034, Research Scientist-Experimental, Plasma Fusion Center
R1033, Systems Programmer, Bates Linac Facility
R1024, Research Specialist, Cell Culture Center
R1023, Computer Manager for the Research Laboratory of Electronics
R1022, Research Scientist, Spectroscopy Laboratory
R1018, Manager of Communications Research Computer Facilities, Research Laboratory of Electronics
R1012, Research Associate: Statistician, Sloan School of Management
R1009, Research Associate: Technical Manager, Electrical Engineering & Computer Science
R1002; R1003; R1004, Technical Assistant, Laboratory for Computer Science
R1001, Sponsored Research Staff, Haystack
R988, Experimental Physicist, Center for Space Research
R986, Postodoctoral, Center for Space Research
R983, Research Associate, Materials Science & Engineering
R731, Research Associate, Technology Adaptation Program
R957, Digital Logic Programmer, Laboratory for Computer Science
R943, Postdoctoral, Center for Space Research
R942, Postdoctoral Fellowship, Research Laboratory of Electronics
R927, Research Staff, Laboratory for Computer Science
R926, Research Staff, Laboratory for Computer Science
R917, Research Scientist—Experimental/Theoretical, Plasma Fusion Center
R825; R826; Sponsored Research Staff (postdoctoral), Laboratory for Nuclear Science
R856, Research Scientist, Artificial Intelligence Laboratory
R855, Research Scientist, Artificial Intelligence Laboratory

SECRETARY/STAFF ASSISTANT
B2291, Sr. Staff Assistant, Council for the Arts at MIT
B2290, Sr. Secretary, Materials Science & Engineering
B2289, Sr. Secretary, Laboratory for Computer Science
B2279, Administrative Secretary, Chemistry
B2278, Sr. Technical Typist (part-time), Chemistry
B2271, Sr. Secretary, Mechanical Engineering
B2265, Sr. Secretary—Editorial: Typesetter, Graphic Arts
B2261, Sr. Secretary, Alumni Association
B2257, Sr. Secretary, Mechanical Engineering
B2131, Sr. Secretary, Center for Theoretical Physics
B2241, Sr. Secretary, Sloan
B2219, Sr. Secretary, Biology
B2139, Sr. Secretary, Alumni Association
B2111, Sr. Secretary, Medical

TECHNICAL SUPPORT STAFF
B2256, Technical Assistant IV, Haystack
B2216, Design Draftsperson—Electrical, Physical Plant

OFFICE ASSISTANT
B2288, Sr. Office Assistant, Personnel: Benefits Office
B2266, Administrative Assistant, Political Science
B2258, Sr. Office Assistant: Accounting & Billing Assistant, Medical
B2239, Administrative Assistant, Electrical Engineering & Computer Science

SERVICE STAFF
H814, Metal Worker, Physical Plant
H805, Technician B (Electronic), Energy Laboratory
H798, Sr. Electronic Technician, National Magnet Laboratory
H768, Sr Electro-Mechanical Technician, Aeronautics & Astronautics
H708, Machinist A, Mechanical Engineering
H637, Engineer 2nd Class, Physical Plant