

Daedalus crew triumphs

Fragile craft sets records

By CHARLES H. BALL
Staff Writer

Hail Daedalus.
MIT's ultra-lightweight human-powered aircraft, Daedalus 88, established world distance and endurance records Saturday, April 23, on a 74-mile flight over the Aegean Sea from Crete to the island of Santorini.

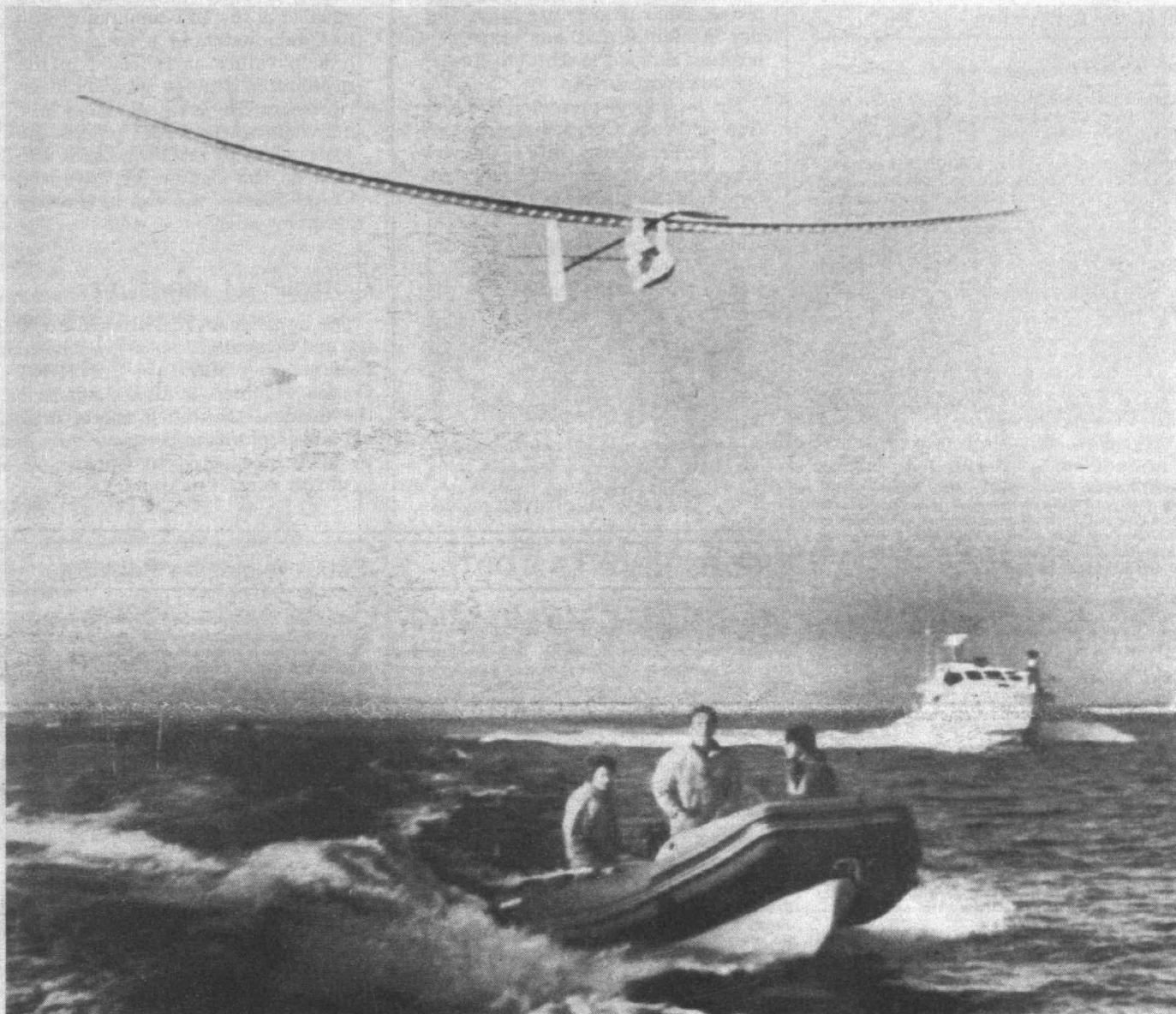
Greek national bicycling champion Kanellos Kanellopoulos celebrated his 31st birthday a day early by pedaling and piloting the 70-pound plane into the record books. He took off from the military airfield in Heraklion, Crete, at 7:06am local time (12:06 EDT) and arrived at Santorini approximately 3 hours, 55 minutes later at about 11am (4 EDT).

As the fragile craft was approaching its landing site on the black sands of Perissa Beach, on the southeast coast of Santorini, it encountered turbulent winds. A gust snapped the plane's tail boom, causing the craft to fall into the water about 30 feet off beach from a height of 10 to 12 feet, according to MIT Professor Mark Drela, the senior engineer for the project responsible for aerodynamic design.

Professor Drela, who was in one of the boats accompanying the plane, said Kanellopoulos quickly swam free of the plane in about six feet of water and was making his way to the beach when the boats reached him. He was not injured, Professor Drela said.

"There were fairly strong winds parallel to the beach," Professor Drela said. "Initially the plane was coming in straight on to the beach but as it swung

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Daedalus 88 nears Santorini Island and the completion of its record flight.

—UPI/Reuter Photo

Siegel named to chair

Building, professorship, games honor Howard Johnson

By ROBERT C. DI IORIO
Staff Writer

MIT honored former president and chairman Howard W. Johnson last weekend for "two decades of brilliant and caring leadership," naming the Athletics Center for him and announcing both the establishment of the Howard W. Johnson Professorship of Management and the creation of a Sloan School lecture series in his name.

Mr. Johnson was celebrated in formal remarks, by the spirited participation of more than 1,500 members of the community in the Johnson Games on Saturday and at the Athlon Ball that evening where more than 800 danced into the wee hours.

Dr. David S. Saxon, chairman of the MIT Corporation, who presided at the naming of the building, announced the establishment of the professorship. He also announced that the first occupant of the Howard W. Johnson chair is Dr. Abraham J. Siegel, former dean of the Sloan School and a professor of industrial relations.

(Other articles and photos on the Johnson Festivities appear on Page 9.)

The official resolution of the MIT Corporation naming the Athletics Center for him praised "Howard Wesley Johnson,

a man of uncommon vision and dedication, whose clarity, wit and wisdom have added over many years to the stature of MIT..."

Mr. Johnson displayed all of those qualities and more in his response at the naming ceremony Friday afternoon.

"I am almost at a loss for words—but not quite. I am moved, almost beyond words, at what my old colleagues in the Corporation have done here with such generosity; at what my old comrades in the faculty have endorsed; at what generations of our alumni have apparently accepted; and what the present student body has tolerated with such forbearance...

"While mine seems to be the name on the lintel of the Center, I want you to know that I see many other names there along with mine. Betty (Mrs. Johnson), first of all. My old colleagues and collaborators in the Academic and Faculty Councils; Betty Whittaker and Constantine Simonides and Walter Milne; Jim Smith and Royce Flippin (the former and present director of athletics). I will always see their names here too...

"The Institute has long worked at providing a place where the human side of MIT—men and women, students and

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Howard W. Johnson

—Photo by Donna Coveney

INSTITUTE NOTICES

- * - Open to public
- ** - Open to MIT Community only
- *** - Open to members only

Announcements

I. Austin Kelly III 1987-88 Prize Competition - For best scholarly or critical papers in any of these fields: literary studies, history, musicology, anthropology, or archaeology. All full-time MIT undergraduates except previous winners are eligible. Rules and guidelines available in Rm 14N-409, x3-4446. All entries must be submitted to the HASS Office, 14N-409, no later than 5pm, Thurs, April 28. Competition results announced on or about May 16.

June Degree Candidates Who Have Student Loans Administered by MIT - Will receive a notice to schedule an Exit Interview with the Bursar's Office, Rm E19-215 x3-3341. Exit interviews are mandated by the US Office of Education and are required by the Institute. International students should call x3-4007 for an appointment.

Registration Material for 1988 Summer Session - Available at the Registrar's Office, Rm E19-335. Registration forms must be filled in and returned to the Registrar's Office by Fri, April 29.

Registration Material for First Term 1988-89 - Available in Lobby 10, Mon, May 2 and Tues, May 3. Descriptions of subjects available for reference in the Main Libraries, The Information Center, and in Department Headquarters.

Career Planning and Placement Company Recruitment Presentations** - University of Iowa - April 29, 10am-3pm, Lobby 13.

Political Science Dept Open House** - Thurs, April 28, 12-2pm, Rm 5-232. Come by to find out about majoring, minor-ing and about internships in political science.

Tennis Contract Time to be Sold** - Contract time for re-servicing courts in the Carr Indoor Tennis Bubble will be sold in the lobby of the duPont Athletic Ctr on a first-come, first-served basis, Mon, May 9, 8am-5pm. Time may be purchased after that date at the duPont Ctr Equipment Desk.

International Visitors Registration/Orientation** - Weekly information session for all newly appointed foreign faculty and staff. Discussion of services and facilities, visa requirements and documentation. Contact International Visitors Office, x3-2851 to sign up for next session.

MIT Radon Project** - Radon Testing Service** - Kits for air or water from private wells (including processing) are \$6 each, with a minimum of 2 per home for air. Test for radon in your basement as well as in a living area on the first or second floor. Drop by Bldg 58, 1st floor, M-F 3:30-5:30pm or MWF 12:30-1:30pm. Lincoln Lab personnel may pick up kits at their Safety office. All members of MIT Campus, Draper Labs and Lincoln Labs are invited to make use of this student-run, not-for-profit service.

MIT Language Conversation Exchange - Sponsored by the MIT Wives' Group assists members of the MIT community to practice a foreign language with a native speaker. Applications accepted throughout the year from those interested in practicing English, as well as other languages. Call the Wives' Group secretary, x3-1614, who will try to match your interests with those of newcomers.

Free Museum of Science Admission for MIT Students - With MIT student ID, provided by Mass Beta chapter of Tau Beta Pi, the National Engineering Honor Society. Reduced admission to special exhibits.

Arts Hotline - Recorded information on all art events at MIT may be obtained by dialing x3-ARTS. Material is updated every Monday morning.

Nightline** - a student-run campus hotline is now seeking staffers for fall term. No experience is necessary, just an open mind. For more information, call x3-7840 between 7pm and 7am. Freshmen and grad students re welcome. Open every evening of the term, 7pm-7am. If you need information about anything or you just want to chat, give us a call. We're here to listen. x3-7840.

Club Notes

MIT Student Television Channel 36** - Seeks people interested in programming the cable television network. Info: Christopher Coon, x5-9432 dorm.

Tool and Die** - MIT's humor magazine, Regular meetings, Tues, 5pm, 5pm, Walker Rm 50-309.

MIT/DL Bridge Club* - Duplicate bridge, Tues, 6:30pm, Rm 33-419. ACBL masterpoints awarded; come with or without partner, newcomers always welcome. Special tournaments monthly. Handicap game, 3rd Tues every month. Info call Gary Schwartz, x8-2459 Draper, or Mark Duley, 868-5518. Admission: \$1/ students, \$2/non-students.

MIT Go Club* - Meets every M/Th, 5-7pm, Bldg NE43 7th floor lounge. Ring bell to get in if locked. Info: x3-4874.

MIT Chess Club* - Players of all levels welcome for informal play and rated tournaments, Sat, 1-5pm, Rm 5-232. Bring equipment. Info: George Yu, x5-9616 dorm or x3-7001.

MIT Table Tennis Club** - Meets Fri, 8-10pm; Sat, 6-9pm, DuPont T-Club Lounge. All levels welcome. Info: Hoang Do, x3-2843.

MIT Science Fiction Society* - The world's largest open collection of science fiction books and magazines is located in Student Ctr Rm 473. Meetings, Fri, 5:30pm. Info: x5-9144 dorm.

Animal Rights Forum* - Meets 2nd & 4th Weds each month, 5pm, Rm 8-105. Info: Peter Mead, x5-9616 dorm.

COCA (Committee on Central America)* - Meets at least once a month to plan activities relating to events in Central America. Info: Charlie Welch, 783-1668 eves/messages.

MIT Nautical Association** - Recreational and Competitive sailing on the Charles and beyond. Sailing Pavilion open every day, 9am to sunset. Sailing cards on sale at Cashier's Office (Lobby 10): \$10 students, \$30 staff/faculty; \$40 alumni. Free basic sailing classes Mon & Thurs, 5-15pm. Info: x3-4884.

MIT Outing Club* - Camping, cycling, climbing, canoeing, cabins, meets M/Th, 5-6pm, Student Ctr Rm 461. Office and rental hours - Mon/Th, 5-6pm, Rm W20-461. Also, see our bulletin board in "Infinite Corridor" next to Athena.

MIT Soaring Association* - Weekend Soaring - Learn the exciting sport of soaring. We fly from the Mansfield airport every weekend and some holidays (weather permitting). Mansfield is 45 minutes south of Cambridge, off Rt 95. Student membership: \$125; typical flight: \$16. Contact: Bob De Saro, 622-1472 or 264-4426 eves.

MIT Hobby Shop** - Complete supervised facilities for wood-working and metalworking, Rm W31-031, M-F, 10am-6pm; Wed, 10am-9pm. Fees: \$15/term students; \$25/term community. Info: x3-4343.

MIT Aikido Club** - Non-competitive martial discipline, meets M-F, 5:30pm, DuPont Exercise Rm. Beginners always welcome. Info: Mitch Hansberry, 1-872-5015 or 258-1272.

MIT Judo Club** - Meets M/Th, 5:30-7pm, Dupont Gym Wrestling Rm. Info: Donna Duffy, x3-5773 or 661-9469.

MIT Yoga Club* - Strengthen body and mind with Kundalini yoga, M/W, 5-6pm, Rm 1-136. Beginners welcome. Info: Bill, x5-6601 dorm.

MIT Wu Tang Martial Arts Club** - Learn Northern Chinese kung fu. Long fist and praying mantis styles, short sabre and sword. Beginners welcome. Meets T/Th, 8-10pm; Sat, 9am-12noon, Athletic Ctr. Info: Jeff, Cohen, x3-6204 or 621-0559.

Religious Activities

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

Tech Catholic Community* - Roman Catholic Masses: Suns, 9am, 12 & 5pm, MIT Chapel. Tues & Thurs: 5:05pm, MIT Chapel. Fri, 12:05pm, MIT Chapel.

MIT Hillel** - Wed, April 27 - *A History of Jewish Covering and Uncovering* - Study Session with Rabbi Dan Shevitz, 8pm, Hillel. Fri, April 29 - *Orthodox Mitzvah*, - 6pm, Walker Basement; *Shabbat Dinner* - 6:45pm, Kosher Kitchen - \$7.50 cash/Validine with required reservation by Thurs, 4/28, 4pm.

Lutheran Ministry and Episcopal Ministry** - Weekly Service of Holy Communion - Wed, 5:10pm, MIT Chapel. Supper follows at 312 Memorial Drive. For further info, call x3-2325/2983.

Baptist Student Fellowship* - Sunday Night - Protestant worship service for all interested students and community, Sundays, 7pm, MIT Chapel; **Boston-Wide Tuesday Night Fellowship** - Tues, 6-8pm, Metropolitan Baptist Church, Cambridge. Dinner and topical Bible study; **Married Couples Fellowship** - Wed, 8-9:30pm, Westgate Cl-1; **Graduate Study in Romans** - Thurs, 1-2pm, W2a. Bring your lunch (PBJ provided).

Graduate Christian Fellowship** - Come join other grad students, faculty and staff as we meet in small groups to learn about and grow in the Christian faith. Activities are open to both Christians and those interested in learning more about Christianity. Info: Curt Bronkhorst (G), x3-4414, Reta Lee (staff) x3-3680, Roz Wright (G), x3-7314.

United Christian Fellowship** - Large group meetings. Join us for worshipful singing, prayer, sharing and Bible teaching, and small group Bible studies during the week in various dorms, Fri, 7pm, Rm 6-321. Info: Tracy, x5-9676 dorm.

MIT Islamic Society* - Daily prayers, Ashdown House (basement), 5 times a day. Call x5-9749 dorm, for schedule. Friday prayer, Ashdown House 1-1:30pm, Khutba starts at 1pm, congregation at 1:20pm.

MIT Bahai Association* - Informal discussions, Thurs, 8pm, Nancy, x3-3361 or Brian, 354-0117.

MIT Vedanta Society* - Meditation and Discourse with the Bhagavad Gita - Swami Sarvagatananda, minister, Ramakrishna Vedanta Society of Boston, meets Fri, 5:15pm, MIT Chapel.

Christian Science Organization at MIT* - Weekly Testimony meetings, Thurs, 7:30pm, Rm 4-145.

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

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

Noon Bible Study* - Every Wed, Rm 66-160, bring lunch. Ralph Burgess, x3-8121. (Since 1965.)

Edgar Cayce Study Group* - Tuesdays, 6:30-9pm, Edgar Cayce's Search for God material will be used as the basis for group discussion & meditation. For info: Douglas McCarroll, 497-0819 12-9pm or Scott Greenwood, x3-7423.

MIT Campus Crusade for Christ* - Fridays, 7:17pm, Marlar Lounge, Rm E37-252, TGIF weekly meeting of MIT Campus Crusade for Christ. We "thank God it's Friday" every week with singing, biblical input, discussion and fun. Info: x5-9153 dorm.

International Opportunities

Fulbright Faculty Grants for Lecturing and Research Abroad, 1988-1990. Approximately 1,000 awards spanning 120 countries. Major deadlines: JUNE 15 - Australasia/India/Latin America/Caribbean (except lecturing awards in Mexico, Venezuela and Caribbean). SEPTEMBER 15 - All other countries (and lecturing awards in Mexico, Venezuela and Caribbean). Write/call: Council for International Exchange of Scholars (CIES), Eleven DuPont Circle NW, Washington, DC 20036-1257, 202-939-5401. On-campus info: Lillian H. Whelpley, x3-1939, Rm 4-237.

MIT-Japan Science and Technology Program. A unique opportunity to science and engineering students to spend a year working at a major Japanese company or laboratory. Students are trained in Japanese language and culture at the Program's expense before being placed in Japan. Placement is tailored to the student's background and experience. Travel to/from Japan and living expenses will be covered. For further information, call Patricia Geric, x3-3142, Ctr for International Studies, MIT-Japan Science and Technology Program, Rm E38-856.

Neste Oy, Research and Development. Summer employment 2-3 months. BS, Chemical Engineering or Polymer Chemistry, Organic Chemistry. Location Kulloo Finland. Neste Oy is the largest corporation in Finland; located 20 miles from Helsinki, the capital of Finland. Neste as an oil company serves the energy, transport and chemical industries. Contact: Marianne Ciarlo, Rm 12-170.

Volunteer Exchange With Germany. June 6-September 1: Bavarian State Forest Service. Rehabilitation and maintenance of trails and recreation sites. Reforestation and tending newly-planted trees. Revegetation and erosion control Wildlife habitat protection and improvement. Fence construction and stream rehabilitation. Free housing, stipend for food provided; work-related travel within Germany paid. Travel to and from Germany is individual volunteer's responsibility. Contact: Marianne Ciarlo, Rm 12-170, x3-4735.

Alumna wins Peace Corps honor

The 1988 John F. Kennedy Peace Corps Volunteer of the Year is Amy B. Smith, MIT Class of 1984, the daughter of Professor Arthur C. Smith of EECS and the late Mrs. Smith.

Ms. Smith, who received the SB in 1984 in mechanical engineering, was chosen for the award out of 2,500 volunteers in Africa. She is a volunteer in Ghanzi, Botswana, located in the Kalahari Desert, one of the most difficult and isolated locations in that country. Her primary job is teaching children of the Bushmen Tribe. She also teaches beekeeping, a project that can generate income for her students, and has started a business club at the school to encourage entrepreneurship.

The award was presented by Loret Ruppe, Peace Corps director, and Mrs. Barbara Bush, wife of the vice president, last week in Washington. Sen. Edward M. Kennedy and Sen. John F. Kerry also attended.

Ms. Smith is no stranger to teaching, rural life or to volunteer service. Before joining the Peace Corps she worked as a private tutor, a farm apprentice, and served as a volunteer with the Boston Food Bank and with the Special Olympics in Boston.

The runner-up for the award was Rebecca Rotberg of Lexington, daughter of a former MIT professor, Robert Rotberg. She is a volunteer in the Central African Republic.

Student Jobs

There are more job listings available at the Student Employment Office, Rm 5-119.

Special Note: The Student Employment Office has many "one time only" jobs. Many students find these jobs a good way to earn money fast.

Off Campus: Non-Technical Summer '88
Painting residential homes in Belmont and Cambridge area. No experience necessary. Must have own transportation. Flexible hours, 40/wk. Salary: \$6.50-8/hr. Contact: Quinn Miller or Tom Lindsley, 110 Clarke St, Belmont, MA. 484-2206.

Off Campus: Summer '88
Need a production assistant who has some understanding of desktop publishing equipment (ie Macintosh/IBM/WORD, MacDraw) editing and proofreading and design and layout. Training provided. Projects include whole or parts of manuscripts. Interviews will be conducted this term. Reply by April 29. Salary: \$7-9/hr, depending upon experience. Contact: Lauri Singh, Production Editor, Simon and Schuster, 160 Gould St, Needham Hts, MA 045-7000.

On Campus: Technical
Advanced statistical analysis help needed for the development of economic models. This is a consulting type of job which can develop into long-term for a starting public policy corporation. Hours: weekends, evenings. Wage: up to \$10/hr. Contact: Julian Riley, The Metropolitan Housing Project, 53 Trowbridge St, Cambridge, 547-8375.

Economic assistant, part-time. Duties will include programming, help with correspondence, and preparing papers, text material, and class notes. Use easy-to-learn Wordstar, augmented for equations. BASIC programming for computations and bibliographic searches by computer. Hours: negotiable. Salary: negotiable. Contact: Prof Frank A. McClintock, Rm 1-304, x3-2219.

UROP

MIT and Wellesley students are invited to join with faculty members in pursuit of research projects of mutual fascination. New spring term projects are now posted on the bulletin boards located in the main corridor and in the UROP Office. Faculty supervisors wishing to have projects listed should send project descriptions to the UROP Office. Questions? Contact UROP at x3-7909, Rm 20B-141.

Microfabrication Technology Laboratory. UROP available in the department of Electrical Engineering, the Microsystems Group. Looking for a motivated UROPer to assist in microfabrication, programming, and experimentation in microsensor devices and VLSI this summer. Will train. This is an excellent experience. Faculty supervisor: S. Senturia. Contact: Fariborz Maseeh, Rm 39-665, x3-0725.

Brain and Cognitive Sciences. Deficiencies in cognitive skills dependent on the right hemisphere of the brain are thought to contribute to some types of learning disabilities. This project examines the performance of learning disabled and other children on a variety of experimental right hemisphere tasks. Position available beginning this summer. Faculty supervisor and contact: Dr. Rhea Gendzier, Rm E10-019A, x3-5796 or 862-0177.

Power Usage Study. UROP needed to perform data manipulation on PC for 10-20 hrs/wk starting during the remainder of spring term and up to full time in summer. Project involves fine tuning model parameters for estimating electric power usage of residential appliances as well as coding and testing of a multi-state appliance algorithm. Background in math or elementary statistics helpful. Working knowledge of C required. Credit or PAY, thesis possible. Faculty supervisor: Prof Schweppe. Contact: Daniel Flagg, x3-0014.

C. Fayette Taylor wins Kepes Prize

The Council for the Arts at MIT has awarded the Gyorgy Kepes Fellowship Prize to Professor, emeritus, C. Fayette Taylor of the Department of Mechanical Engineering.

Professor Taylor was honored for his achievements in metal sculpture, which range from small, free-standing works and wall reliefs, to large-scale installations. Angus MacDonald '46, who presented the award for the council, said Professor Taylor's sculptures for public and private spaces represent the "passion of the engineer, the precision of the artist." The presentation came at the 16th annual meeting of the council.

The prize, named in honor of Institute Professor, emeritus, Gyorgy Kepes, is bestowed annually on a member of the MIT community who has demonstrated a concern for human values as reflected in the relationship between art and the environment. The prize celebrates MIT individuals whose work reflects the goals upheld by Professor Kepes, who founded the Center for Advanced Visual Studies and was its director for many years.

Course VI meeting

The Department of Electrical Engineering and Computer Science has scheduled a 4pm meeting May 4 in Rm 34-101 for Course VI juniors to discuss admission to the Graduate School, graduate financial aid and employment prospects. Any junior at MIT interested in Course VI for graduate work is welcome.

Cable Television Schedule

MIT Cable Television serves the MIT campus. For connection and programming information, call x3-7431. This schedule is subject to change. For up-to-date information, call Randy Winchester, x3-7431.

Wednesday, April 27
Channel 9
12-1pm - Beyond Fear. Part of the MIT Medical Department's AIDS-AWARE effort.
10-10:30pm - Changing the Rules. Part of the MIT Medical Department's AIDS-AWARE effort.

Channel 10
10:30am-12:30pm - Live coverage of the MIT Optics and Quantum Electronics Seminar.

Thursday, April 28
Channel 9
5:30-6pm - AIDS in the Workplace. Part of the MIT Medical Department's AIDS-AWARE effort.

Friday, April 29
Channel 8
5pm - Physics Help Session #10. Will repeat until 5/6, 5pm.

Channel 9
12-12:30pm - Changing the Rules. Part of the MIT Medical Department's AIDS-AWARE effort.
10-10:30pm - Changing the Rules. Part of the MIT Medical Department's AIDS-AWARE effort.

Saturday, April 30
Channel 9
12-12:30pm - Changing the Rules. Part of the MIT Medical Department's AIDS-AWARE effort.

Tuesday, May 3
Channel 10
3-5:30pm - Live coverage of the MIT VLSI Seminar.

Wednesday, May 4
Channel 10
10:30am-12:30pm - Live coverage of the MIT Optics and Quantum Electronics Seminar.

Friday, May 6
Channel 8
5pm - Physics Quiz Review #3. Will repeat until 5/11, 12noon.

TECH TALK



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News Office Director: Kenneth D. Campbell; Associate Director: Robert C. Di Iorio; Assistant Directors: China Altman, Charles H. Ball, Donna Coveney, photojournalist; Eugene F. Mallove; Joanne Miller, Tech Talk editor; Reporter Lynn Heinemann (Institute Calendar, Classified Ads, Institute Notices).

Permission is granted to excerpt or reprint any material originated in Tech Talk.

International Fair

A day-long International Fair will be held on the Kresge Oval Friday, April 29, under the sponsorship of the International Students Organization.

The event will include food sales, craft exhibitions, cultural information and displays, songs, dances and a parade of national costumes. The organizers hope the event will broaden international awareness at MIT. For more information contact the International Fair Committee, c/o Zubin Sarkari, 410 Memorial Drive, or the International Students Office, Rm 5-106.

Crime prevention

The MIT Campus Police will hold its annual Crime Prevention Exhibition from 9am to 3:30pm Wednesday, May 4, in Lobby 7.

Patrol Officer Cheryl Vossmer, who is coordinating the event, said displays will include auto-theft prevention, bicycle safety and theft prevention, hardware to secure computer equipment, drug education information, home security tips, security systems for offices and labs, and information on self protection.

There will also be films on rape prevention and burglary prevention. Personal alarms will be on sale at discount prices or at cost. Free literature will be available and a crime prevention trivia game offers a chance for prizes, Officer Vossmer said.

Attention smokers

A five-session version of the Medical Department's smoking-cessation program, "From Smoker to Non Smoker," will start Thursday, May 5, and continue on subsequent Mondays and Thursdays. Hours are noon to 1:30pm. Sessions will be led by Janet Van Ness, a former smoker, who is director of the Health Education Service. Cost is \$25 to students and MIT Health Plan members, \$30 to others. Call x3-1316 to register.

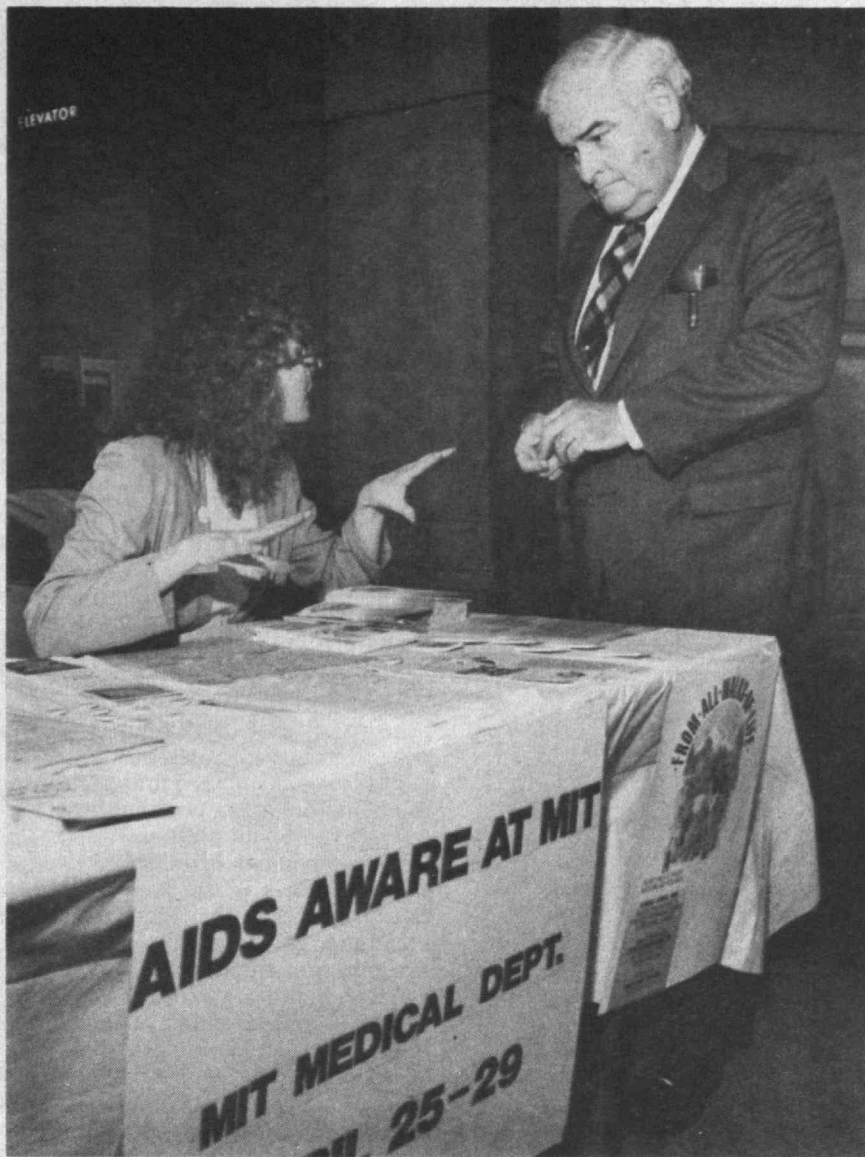
Telethon invitation

The Alumni Fund has invited members of the MIT community to join in the annual Spring Telethon May 9, 10 and 11 from 6 to 10pm in the Bush Room, 10-105.

Last year the effort reached nearly 17,000 alumni and raised \$919,000, it was reported.

Participants will be served dinner and receive a souvenir MIT glass.

Call Jenny Archibald, x3-8203, or Angela Horton, x3-8242, to reserve a seat or for information.



President Paul E. Gray was among the first members of the community to visit the "I'm AIDS-AWARE" table set up Monday in Lobby 7 by the Medical Department. Talking with Dr. Gray is Janet Van Ness, director of health education for the department.

—Photo by L. Barry Hetherington

Medical Department offers AIDS data

At tables in Lobby 7, through confidential telephone conversations, and with videotapes on the cable system, the MIT Medical Department is making up-to-date information on AIDS available to the community this week.

The "I'm AIDS-AWARE" tables will be in operation in Lobby 7 from 11am to 2pm each day. Staffing the tables will be health educators and other Medical Department people.

Confidential telephone calls can be made on x3-1316 between 2:30 and 3:30pm until Friday, April 29.

Arnold W. Weinberg, MD, MIT medical director, said, "The media bombards us daily with news about the epidemic of AIDS, yet it is often difficult to sort out fact from fiction, safe behaviors from risky ones. . . . The AIDS epidemic will present a growing challenge to our society and to our Institute community for a very long time to come. Please, join us now in our AIDS-AWARE effort."

A description of the videos to be

shown and the viewing schedule, as provided by the Medical Department, follows.

BEYOND FEAR A compelling film, produced by the American Red Cross, that focuses on The Virus, The Individual, and The Community in three 20 minute segments. This is a good, general introduction to the AIDS epidemic, though viewers should be aware that since the film was released, the number of people with AIDS has risen to almost 60,000. Beyond fear was well received when shown on Campus last Fall.

EPIDEMIC OF FEAR: AIDS in the Workplace Produced by Pacific Bell, this 23 minute film deals with a number of concerns that arise for people with AIDS and their colleagues at work.

AIDS: CHANGING THE RULES Originally aired on PBS, Changing the Rules is a documentary about the risk and prevention of AIDS in heterosexual adults. The film deals with the topic of safer sex in a verbally direct and explicit way. Hosted by Ron (not Ronald) Reagan, Changing the Rules introduces "New Rules" for sexual behavior and presents in a music video ways in which the virus CANNOT be spread.

Changing The Rules (CR) : Length 30:00
Beyond Fear (BF) : Length 40:00
AIDS in the Workplace (AM) : Length 23:14

Time	MON	TUES	WED	THUR	FRI	SAT
noon	AM		BF	CR	CR	
	4-231		4-231		4-231	
5:30p		CR		AM		
		1-150		1-150		
10:00p	BF		CR		CR	

Please be aware that Changing the Rules deals with the topic of safer sex in a verbally direct and explicit manner.

Those without ready access to MIT Cable may view the films at noon and 5:30 p.m. in rooms noted.

MIT research published in 1986 draws congressional scrutiny

By EUGENE F. MALLOVE
Staff Writer

Research done at MIT several years ago has come under congressional scrutiny by House committees that oversee funding for the National Institutes of Health. Washington hearings that began April 11 were prompted by allegations of two NIH scientists that some research data, on which part of an article in the April 25, 1986, issue of Cell was based, were used in error.

The data came from the laboratory of Professor Thereza Imanishi-Kari, now an assistant professor of pathology at Tufts University. She was an assistant professor in the MIT Department of Biology when the article appeared. Professor David Baltimore, director of the Whitehead Institute for Biomedical Research and a member of the MIT Department of Biology is one of the article's six co-authors.

The paper in Cell concerns biochemical mechanisms in immunology and offered an unexpected and significant finding — that genes native to a host cell's DNA seem to copy the function of genes artificially transferred to the host — in this case a mouse.

The NIH scientists who made the criticisms are Walter W. Stewart and Dr. Ned

Feder, who have in recent years developed reputations as "whistle blowers" in the scientific community. Neither is an immunologist. They have maintained their criticisms of the Cell paper in the face of two university-level reviews that found the paper to be without significant error. The activities of Stewart and Feder led to the hearings by the congressional committees and the decision early this year by NIH to name a panel to review the paper. Such a review had been suggested by Dr. Baltimore in March, 1987, when Mr. Stewart and Dr. Feder first raised questions about the Cell article, but they declined.

In 1986, Professor Herman N. Eisen, an immunologist, made an investigation for MIT. He acted after a postdoctoral research fellow in Professor Imanishi-Kari's laboratory, Dr. Margot O'Toole, raised the question of misrepresentation of data. Dr. O'Toole did not characterize Dr. Imanishi-Kari's actions as fraud, but as "scientific error."

Professor Eisen's report states: "Dr. O'Toole cited four issues, three of which challenge the conclusions drawn in the paper on grounds that some assays were not sufficiently sensitive or that they were misrepresented. The issues raised by these

three objections seem to be matters of judgment and could not be described as evidence of misconduct."

The report further concludes that these three issues "are best dealt with by allowing the scientific process to take its course. Other laboratories are trying to extend the findings. In this way we will know if the interpretations are right or wrong."

Professor Eisen's report then addressed Dr. O'Toole's fourth charge, which raised questions about misrepresentation of data. The report states: "My conclusion is that O'Toole is correct in claiming that there is an error in the paper; but it is not a flagrant error."

"The correction," Professor Eisen said, "would be too minor to rate a letter to the journal; it certainly does not warrant a retraction, especially because the paper contains a substantial body of other data that is clear and impressive."

The O'Toole accusations were also examined by Dr. Henry Wortis and his colleagues at Tufts Medical School, who found "no evidence of deliberate falsification or misrepresentation. Alternate interpretations of existing data can be made but that is the stuff of science."

At about the same time, Professor Balti-

Computer thefts mount; police nab men with burglary tools

The alertness of a computer repair technician who regularly works at MIT has led to the arrest of two men on several charges. Their apprehension comes during an intensive investigation by the Campus Police into a rash of computer thefts at the Institute in recent months.

The two were captured at gunpoint by MIT and Cambridge police at about 11:45am on April 14 after about 10 police—a number of them in plainclothes—had staked out the suspect's car parked outside the 33 Massachusetts Ave. entrance (opposite Amherst Street).

Computer thieves hit Graphic Arts Service

Computer thefts in at least three more locations—including a major break-in at the Graphic Arts Service Building (N42) at 211 Massachusetts Avenue—continue to plague the campus, according to the Campus Police.

In the weekend thefts at Graphic Arts, police said, thieves apparently forced their way into the building to steal a number of items, including desktop computers and typesetting machines.

Computer thefts also have been reported in Buildings 12 and W91.

Campus Police Chief Anne P. Glavin said the thefts underscored the need for continued community vigilance and precaution.

The computer technician, who was dropping someone off when he saw a man put a bicycle into the car about 10am, drove to the Campus Police headquarters about 100 yards away on Massachusetts Avenue and told the desk sergeant, William J. Rogers, what he had seen.

The car matched the description of one that had been seen several times in the vicinity of the Institute and which the Campus Police regarded as suspicious. The police also had been seeking three men seen acting suspiciously in and near MIT buildings.

As a result of the report by the technician, the police went to the scene, saw that the car with the bicycle in it was still there, and arranged for a stakeout.

About two hours later, police said, the man and a companion emerged from the main entrance at 77 Massachusetts Avenue and went to the car, where they were arrested. Neither offered resistance, according to the police.

Campus Police Lt. Michael J. Norton, head of the Special Services Division and the officer in charge of the investigation,

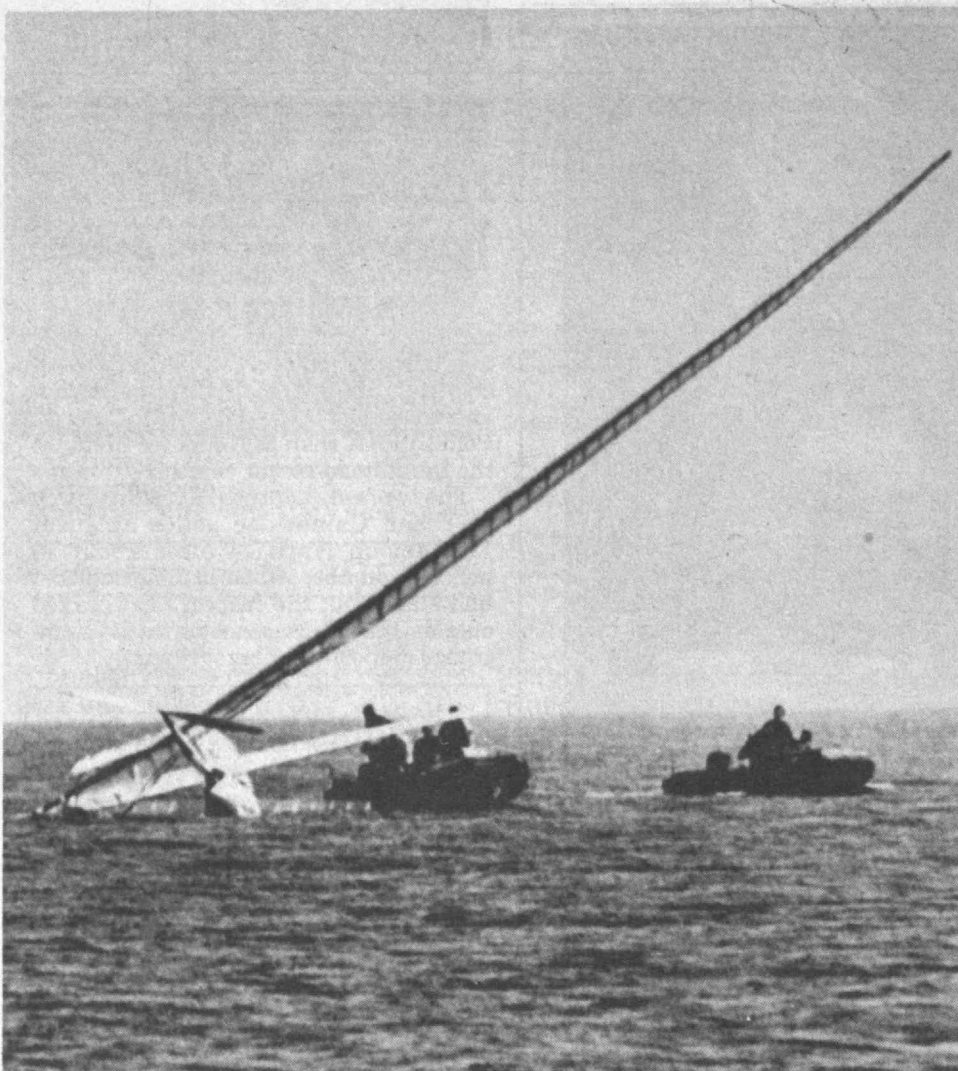
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more, whose laboratory had performed molecular biological research in a collaboration with Professor Imanishi-Kari, also concluded that any errors in the Imanishi-Kari laboratory were clearly within the bounds of normal scientific experience.

Dr. Charles Maplethorpe, who was a graduate student in Dr. Imanishi-Kari's former laboratory at MIT and who is now at T Cell Sciences in Cambridge, testified at the recent hearings that he worked four years in Dr. Imanishi-Kari's laboratory before graduating in 1985. He said, "I felt that Dr. Imanishi-Kari was committing fraud and I told an assistant to the president of MIT." Dr. Maplethorpe said he was provided at that time with guidelines for filing fraud charges, but he did not file charges of fraud while at MIT.

According to testimony before the congressional committees by Mr. Stewart and Dr. Feder, Dr. Maplethorpe brought his concerns to them and they approached Dr. O'Toole. They said she was at first reluctant to give them anything, but eventually provided them with photocopies of 17 selected pages from a laboratory notebook from Dr. Imanishi-Kari's lab.

(continued on page 12)



Daedalus, in the surf off Santorini after its record-setting 74-mile flight.
—AP Photo

Daedalus 'quotes'

These were quotes gleaned from various sources following the history-making Daedalus flight:

"My warmest congratulations to John Langford, Kanellos Kanellopoulos and the entire Daedalus team.

"You have set a new world record and new standards of excellence in engineering and human endurance. Your imagination, your intensive effort and your exemplary team work are an inspiration to all.

"We are very proud of you."

—MIT President Paul E. Gray, to the Daedalus Project team.

"This is a triumph for science, for man and for history. We have revived the myth and have discovered a new means of travel between the islands."

—Kanellos Kanellopoulos, pilot.

"The flight had the calculated smoothness of Daedalus, but the dousing off Santorini got us to wondering if Icarus might have also been watching."

—Erik Schmidt, one of the five Daedalus pilot-athletes.

"He (Kanellopoulos) was really nervous. I expected nothing less from someone who had the expectations of two countries and hundreds of thousands of hours in preparation riding along with him."

—Erik Schmidt.

"An unparalleled combination of theoretical, computational and experimental research in aerodynamic capabilities."

—Professor Steven Bussolari, Director of Flight Operations.

Daedalus does it

(continued from page 1)

sideways to land into the wind if possible, it just really hovered above the beach until the winds snapped the tail boom, causing the plane to collapse."

From an engineer's standpoint, Professor Drela said, the breakup of the plane—after the tail boom snapped, the wings folded back and the craft settled into the water—was "extremely spectacular."

Professor Drela said the team members recovered the major parts of the plane. Still on Crete is a backup plane, Daedalus '87, which is nearly identical to the plane that made the flight.

He said the weather was "nearly perfect" most of the way and that the team had learned of the winds at Santorini about halfway through the flight.

Despite the breakup at the end, he said, the flight was "definitely a success," achieving the goals of the project.

The flight had been expected to take as much as five or more hours—the plane flies at about 15 miles per hour—but a slight tail wind pushed the average speed to about 18.5 miles per hour, shortening the time by about an hour.

Kanellopoulos told onlookers just before takeoff, "This is the best way to visit Santorini." He also said, "The flight belongs to MIT and Greece. We together are going to realize and keep the myth."

After being awakened in his hotel room at 4am, he rode his bicycle in the pre-dawn darkness to the airfield several miles away. He also rode his bike around the airfield while waiting to enter the Daedalus cockpit, according to Erik Schmidt, one of the five pilot-athletes who trained for the mission with "Kano."

The flight route across the Aegean Sea was a symbolic recreation of the mythical flight of the Greek architect, engineer and sculptor, Daedalus, 35 centuries ago.

The plane took off after a takeoff roll of about 100 feet, and headed out over the Aegean Sea on a northerly route, assisted by a tail wind of about 3 knots.

The Greek Navy, Coast Guard and Air Force all provided assistance for the over-water flight.

The flight more than tripled the distance record for straight-line human-powered flight set by Bryan Allen on June 12, 1979, when he piloted the Gossamer Albatross 22.3 miles across the English Channel.

Kanellopoulos also more than doubled the absolute distance record for human-powered flight of 36.4 miles set by fellow Daedalus Project pilot Glenn Tremml in the Daedalus prototype plane, the Light Eagle, at Edwards Air Force Base, California, on January 22, 1987.

The Greek athlete also established a new endurance record for human-powered flight, eclipsing Allen's flight time of 2 hours and 49 minutes.

The flight seemed less demanding on the pilot, at least in respect to Kanellopoulos, than had been anticipated. The tail wind probably was a factor, Professor Drela said. Another observer commented that the 6-foot, 159-pound Kanellopoulos is extremely strong, "a horse."

Professor Drela said Kanellopoulos was

"comfortable" throughout the flight and was still strong at the end. His heart rate, which was monitored throughout the flight, indicated it was a "fairly easy flight for him, like an easy training ride on his bike," Professor Drela said.

He added that Kanellopoulos consumed only about half of five liters of a special energy drink prepared for the project by the Shaklee Corporation of San Francisco, Calif., the nutritional and training sponsor for the pilot team.

Professor Drela commented that the weather was becoming quite warm by the time Kanellopoulos arrived at Santorini. A longer flight might have begun to sap his strength quite quickly, he said.

Kanellopoulos, of Vrahneika, Greece, the only Greek among the pilot-athletes, is a 14-time Greek cycling champion and a member of the Greek Olympic Cycling Team. He is a graduate of the University of Athens and is currently on leave from his position as teacher of physical education in the Greek Ministry of Sports.

He was taught to fly during months of training, much of it conducted during the fall and winter in California. In the Daedalus, the pilot pedals to keep the plane aloft while seated in a semi-recumbent position. A mechanical linkage rotates a large, lightweight propeller.

Kanellopoulos made the flight because he was the flight-ready pilot when the weather conditions came together to permit the flight. A rotation determined which of the project's pilots would be flight-ready on any given day. Under the system, the pilots were in a flight-ready status for two days, and then in training for the next six days. This was the first of Kanellopoulos' two days on flight-ready status.

The United Technologies Corporation of Hartford, Conn., was the primary sponsor for the construction of the Daedalus aircraft, providing financial and technical support totalling more than \$430,000.

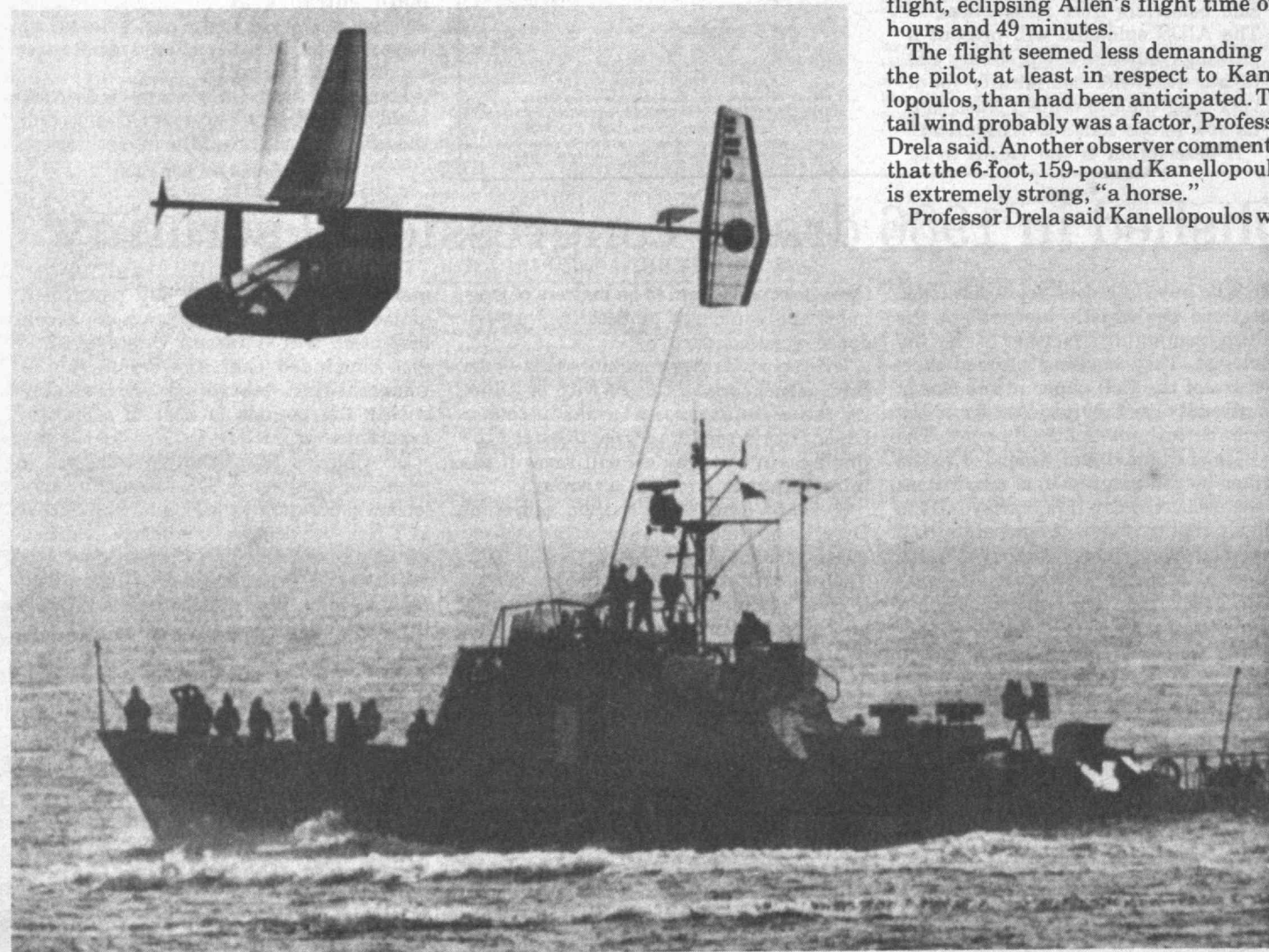
The major foreign sponsor of the flight was the Hellenic Industrial Development Bank S.A. of Athens (ETBA).

Olympic Airways also gave support to the project.

The plane was designed and constructed by MIT students, faculty members and alumni. The project manager is Dr. John S. Langford, who holds four MIT degrees and who led the development of two earlier human-powered aircraft, Chrysalis (1979) and Monarch (1983-84), which holds the speed record for human-powered flight.

The Daedalus Project began three years ago with a feasibility study funded by MIT and the Smithsonian Institution and cost approximately \$1 million.

Some 30 members of The Daedalus Project team had been on Crete since the first of April waiting for the right weather: winds of three knots or less, temperatures below 70 degrees Fahrenheit so the pilot wouldn't overheat, visibility to the horizon for navigation without instruments, and wave swells in the Aegean of less than 3 feet.



Side view shows the flexibility of Daedalus 88's wings, which are longer than a DC-9's.

—AP Photo

For the record

These were the unofficial records for human-powered aircraft established by Daedalus 88. The official certification of records will come from the Federation Aeronautique Internationale (FAI).

—Longest straight-line flight, 74 miles. (Previous record, 22.3 miles).

—Longest flight, straight line or closed course, 74 miles (previous record, 36.4 miles.)

—Longest time aloft, 3 hours, 55 minutes (previous record, 2 hours, 49 minutes.)



Daedalus pilot Kanellos Kanellopoulos holds a torn section of the aircraft's wing after he crash landed just off the beach on Santorini. —AP Photo

Bussolari — 'We made it'

These are excerpts from the operations report filed by Professor Steven Bussolari, director of flight operations for the Daedalus project, following Saturday's record-breaking flight:

"The flight could hardly have been smoother (with a) three knot tail wind component. Kanellos (Kanellopoulos, the pilot) did a great job in the cockpit...keeping his aircraft attitude on course nailed solid. His heart rate throughout was 133 to 140 beats per minute, an easy workload for him. Cockpit temperature was perfect. There was very little turbulence aloft and he maintained approximately 25 to 30 feet of altitude throughout the flight. Almost before we knew it, we were two hours into the flight and half way to Santorini.

"Navy and Coast Guard escorts did a terrific job for us and we had only one large ship anywhere near our route. That one, a ferry, did the sharpest 180 degree turn I've ever seen after a short radio transmission from our Navy torpedo boat. I wonder what was said.

"Haze obscured visibility a good deal and we did not sight Santorini until we were within 10 nautical miles... Winds at the landing site had picked up considerably due to the sea-breeze effect and there was a 10- to 12-knot wind from the southwest that ran parallel to the beach. I elected to [have the pilot] steer right of course line and approach our beach into the wind. As we neared the beach, Kanellos did a great job with the upwind turn in considerable turbulence. As he turned to within 20 degrees of the landing direction, about 10 meters from the shoreline and 200 meters downwind of the touchdown aim point, a gust of wind from the west weathercocked him parallel to the waterline and his groundspeed went to zero. He began to make some headway, but was really fighting some severe gusts and he lost about two meters of altitude in three seconds.

"Another lateral gust failed the tailboom forward of the rudder attach point and he lost lateral control. The aircraft entered a right slip and the wing spar failed inside the lift wire attach point. The wings folded straight up and the aircraft sank unceremoniously into the water 10 meters from shore.

"Kanellos got out of the cockpit without any trouble and swam to shore where he was greeted with enthusiasm by the considerable crowd that had gathered. We threw a line around the fuselage tube and towed Daedalus to shore where we disassembled it. Scraps of pink foam and mylar washed up on the black sand of the beach."

And then Professor Bussolari ended his report with the happy words: "We made it."

An MIT reporter at Heraklion

By KENNETH D. CAMPBELL
Staff Writer

As Kanellos Kanellopoulos prepared to enter the Daedalus 88 cockpit for the flight to Santorini, he shucked his trousers, revealing cycling shorts which had diamond-shaped cutouts along the side. "That's my surprise," he said grinning.

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On the Greek Navy gunboat "P 29," a big cheer went up at the announcement during the flight that Kanellopoulos had broken the 22.3-mile point-to-point distance record for human-powered flight held by Bryan Allen since 1979. Not long after came the announcement that Daedalus 88 also had set a record for flight time aloft, surpassing Allen's record of two hours and 49 minutes.

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Nine sea craft, a light plane and a helicopter accompanied the Daedalus.

Nikolas Melissidis, official observer of the Federation Aeronautique Internationale (FAI), and president of the Heraklion Aero Club, said that the flight appeared to be satisfying all requirements. He said the takeoff weight included 13.23 pounds for the high-energy drink on board.

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With Daedalus 88 about an hour away from Santorini, Hellenic Navy Capt. G. Foussianis yelled radio directions at a ship that suddenly appeared on the horizon, heading directly for the plane's flight path. "Turn south! Immediately!" he shouted. And that's just what the ship did, executing a measured pirouette in the water.

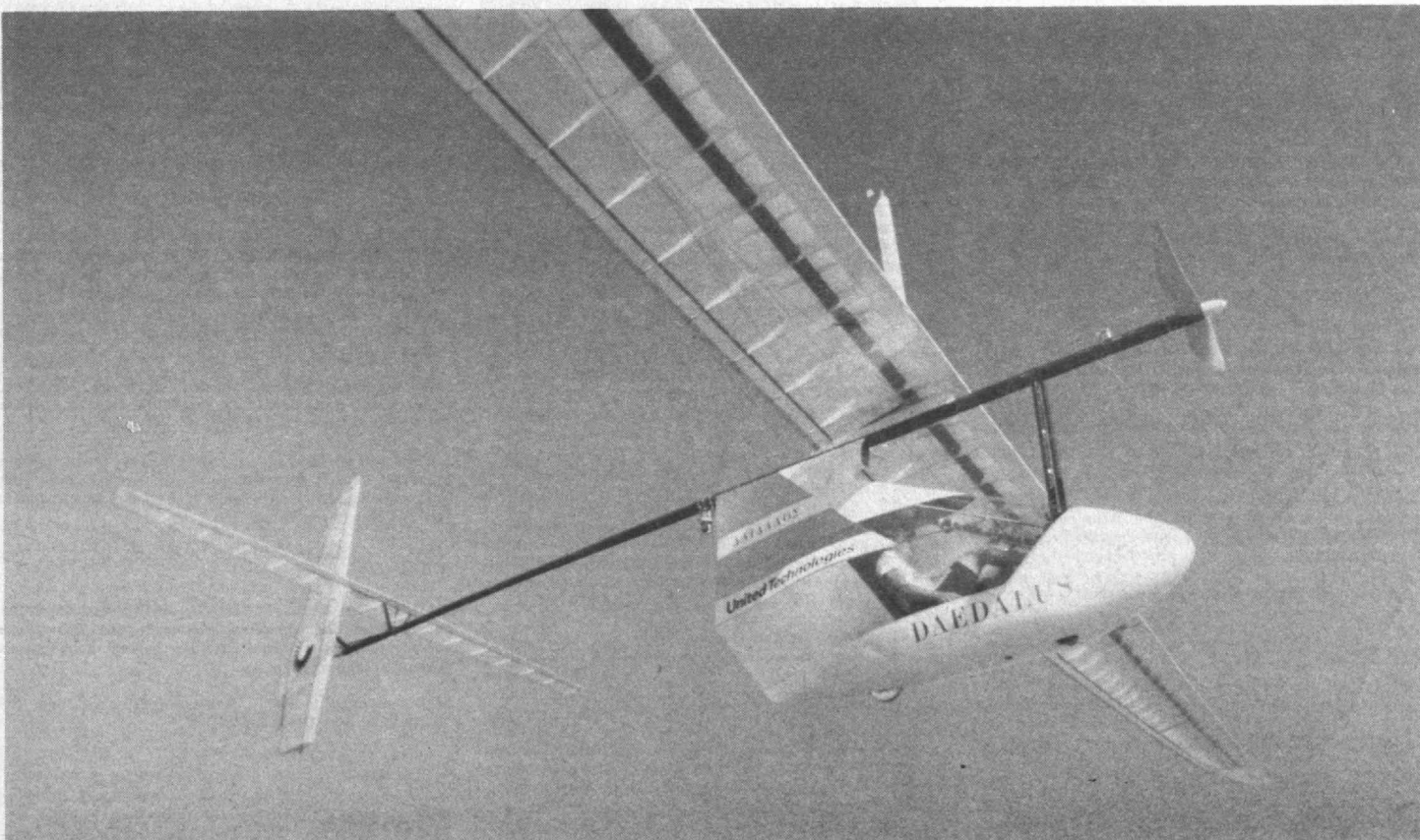
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"Nothing like a tailwind," said Professor Bussolari with a smile, commenting on the speedy 18.5 miles per hour average pace set by Kanellopoulos.

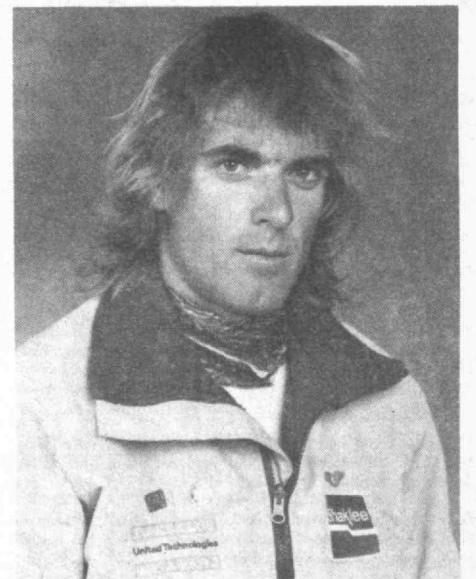
At Santorini, as the Navy boat stopped offshore as planned, press photographers and TV camera people scrambled down a rope-and-board ladder to climb into a four-person rubber inflatable "Zodiac" and a fishing launch to get to the beach. The launch was too large to go into waters of less than six feet, so some photographers had to transfer again into a small rowboat hailed down by a Hellenic Coast Guard officer. The zoom lenses came out and photos were taken with one hand as photographers snapped photos of the plane breaking up as Daedalus 88 settled into the water.

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The Santorini beach was crowded with up to 1,000 people, including residents and tourists. Many walked away with pink foam wing scraps, many signed by Kanellopoulos, who was immediately hailed as a hero and the "contemporary Daedalus," as several reporters phrased it.



A Daedalus training flight in the California desert.



Pilot Kanellos Kanellopoulos

THE INSTITUTE CALENDAR

April 27-May 8

Events of Special Interest

Memorial Convocation for Dr. Bern Dibner - Thomas P. Hughes, University of Pennsylvania; Brooke Hindle, Smithsonian Institution, MIT/Brandeis/Boston University/Harvard University/American Academy of Sciences Convocation, Fri, May 6, 3pm, Rm E51-329.

Frisbee Fling for Cystic Fibrosis - Alpha Chi Omega Benefit, May 7, 1-5pm, Kresge Oval and Frisbee Field. Rain location: Indoor track.

Seminars and Lectures

Wednesday, April 27

Apple Desktop Communications - Apple Computer representative, Information Systems' Noontime Seminar demonstrating systems for sharing information between MS-DOS and Macintosh machines, print spooling, and file exchange, 12-1pm, Rm 37-252.

Theory of Nonlinear Motions in a Stratified Fluid with a Free Surface - Dr. A.B. Odulo, Shirsov Institution of Oceanology, U.S.S.R., Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915.

Two-Group, One Dimensional Reactor Kinetics - Ayse Zeyner Tanke, Dept of Nuclear Engineering Seminar, 3-4pm, Rm 24-213.

The Second-Order Sum-Frequency Vertical Force - J.N. Newman, Dept of Ocean and Civil Engineering Hydrodynamics Seminar, 3-4:30pm, Rm 5-314.

Extensional Models for the Formation of Sedimentary Basins and Continental Shelves - John Slater, American Association of Petroleum Geologists, Dept of Earth, Atmospheric and Planetary Sciences Conoco Lecture, 4-5pm, Rm 54-915.

Simplification in Nuclear Power Plant Construction and Its Design Implications - Chris Lapp, Dept of Nuclear Engineering, Reactor Engineering Section Doctoral Seminar, 4pm, Rm 24-121.

Induction of the Sexual Cycle in a Marine Diatom - V. Armbrust, Ralph M. Parsons Laboratory Aquatic Sciences Seminar, 4pm, Rm 48-316.

Sustainable Agriculture: Can it Feed the Third World? - Michael Dover, ecologist, The Cadmus Group; Monty Yudelman, former director of agriculture, World Bank; August Schumacher, Mass. Commissioner for Food and Agriculture, Technology for Development Group/Hunger Action Group/DUSP/GSC Seminar, 6pm, Rm 2-190.

The Politics of Incest: Feminism, Child Sexual Abuse and the Media - Louise Armstrong, author, *Kiss Daddy Goodnight*; Beatrix Campbell, British feminist journalist and author, *Sweet Freedom, Iron Ladies*; representatives of Boston-area survivor support networks, MIT Program in Women's Studies Forum, 7pm, Wiesner Bldg Bartos Theater. Signed for the hearing-impaired. Wheelchair accessible.

Thursday, April 28

Arabic Language Word Processing on the Mac - Jafar Hosseinzadeh, Information Systems' Noontime Seminar demonstrating ALKAATIB, V.1.03 for Arabic language word processing, 12-1pm, Rm 4-270.

Novel Opportunities in Materials Engineering and Processing Research - Dr. Shyaam Samanta, Program Director, National Science Foundation, Laboratory for Materials Processing Seminar, 3pm, Rm 35-520.

Oriental Ordering Phase Transitions in Adsorbed Monolayers - Prof W. Gelbart, Dept of Chemistry, University of California-Los Angeles, Program in Polymer Science and Technology Seminar, 3:30pm, Rm 37-252. Refreshments served, 3pm.

Technical, Political and Economic Solutions to the Noise and Capacity Challenge for the Future Airspace System - Al Blackburn, associate administrator, Policy Planning and International Aviation, Federal Aviation Administration, Flight Transportation Laboratory Seminar, 3:30-5pm, Rm 33-419.

Massively-Parallel Algorithms for Finite Element Method, and Network Equilibrium - Nayel el-Shafei, MIT CE/AI Lab, Artificial Intelligence Lab/Dept of Civil Engineering/ASCE/ASME Seminar, 4-5pm, Rm 1-190.

Public Intervention and Poverty: A Critique of Critiques - Amartya Sen, Depts of Economics and Philosophy, Harvard University, Dept of Urban Studies and Planning Institutional Perspectives on the State in Third-World Development Workshop, 4-6pm, Rm 51-332. Wine and cheese served.

Design of RCM and Its Performance - Pyongwan Park, Mechanical Engineering grad student, Sloan Automotive Laboratory Seminar, 4pm, Rm 31-161.

Muon Catalyzed Fusion - Dr. Melvin Leon, Los Alamos National Laboratory, Physics Colloquium, 4:15pm, Rm 10-250. Refreshments served, 3:45pm, Rm 26-110.

Friday, April 29

2D Electron Correlation and Localization in Strong Magnetic Fields - Prof Dan Tsui, Dept of Physics, Princeton University, Ctr for Materials Science and Engineering Colloquium, 12:15pm, Rm 12-132. Lunch served, 12noon.

Hydrometallurgical Catalyst Design - Kirk Limbach, Chemical Engineering Seminar, 2pm, Rm 66-110.

The Galileo Mission to Jupiter with Venus, Earth and Asteroid Flybys - Linda Robeck, JPS, MIT '86, Dept of Aeronautics and Astronautics Seminar, 3pm, Rm 33-319.

Scaled-down of Separation Processes - Dr. George E. Keller, II, Union Carbide Corporation, Chemical Engineering Seminar, 3pm, Rm 66-110.

The Use of Accident Data in Engineering Decision Making - Dr. Roger L. McCarthy, president, Failure Analysis Associates, Dept of Mechanical Engineering Seminar, 3pm, Rm 3-270. Refreshments served, 4pm, Rm 1-114.

An Experimental Study of Chaos in Electronic Oscillators - Dr. Paul Linsay, MIT Physics Dept, Plasma Fusion Ctr Seminar, 4pm, Rm NW17-218.

Monday, May 2

Crying in Public - Margaret S. Ross, MD/psychiatrist, MIT Medical Dept, Women's Forum Program, 12-1pm, Rm 10-105. Open to all men and women in the MIT Community.

Non-Linear Dynamics of a Rotating Extending Beam - Roger Hain, MIT, Dept of Aeronautics and Astronautics Structures, Materials and Aeroelasticity Seminar, 3pm, Rm 33-206. Refreshments served.

Fusion Neutron Production in the FTFR - Dr. Daniel L. Jassby, Princeton Plasma Physics Laboratory, Plasma Fusion Ctr/Nuclear Engineering Dept Seminar, 3:30pm, Rm NW12-222.

Electrical Engineering for Oceanography - Prof Arthur Baggeroer, MIT, Electrical Engineering and Computer Science Colloquium, 4pm, Rm 34-101. Refreshments served, 3:30pm.

Unsteady Wing Theory: A Technical History - Prof William R. Sears, professor emeritus, University of Arizona, Dept of Aeronautics and Astronautics Seminar, 4pm, Rm 35-225. Coffee & cookies served, 3:30pm, Rm 33-218.

Wall Pressure Fluctuations and their Relation to the Near Wall Flow - Prof Joseph Haritonidis, MIT Dept of Aeronautics and Astronautics, Dept of Mechanical Engineering Fluid Mechanics Seminar, 4-5pm, Rm 5-234.

Statistical Issues in Community Health Studies: The Woburn Example - Prof Steve Lagakos, Harvard School of Public Health, Dept of Civil Engineering Division of Water Resources and Environmental Engineering Seminar, 4pm, Rm 48-316.

Flight Control of Oblique Wing Aircraft - Dr. Dale Enns, Honeywell Systems and Research Ctr, Joint MIT/Draper Dynamics, Guidance and Control Seminar, 4:15pm, Rm 33-206.

Technology, Gender and Development - Kay Warren, feminist anthropologist/head, Women's Studies, Princeton University, Program in Women's Studies/Program in Science, Technology and Society/Program in Anthropology Seminar, 4:30-6pm, Rm E51-332.

Tuesday, May 3

Compact Free Electron Lasers: Myth or Reality - Bruce G. Danly, MIT Plasma Fusion Ctr, Seminar on Modern Optics and Spectroscopy, 11-12noon, Rm 37-252. Refreshments follow.

Materials for Design and Construction: A Perspective - Prof J. Connor, MIT, Dept of Civil Engineering CFD Seminar, 12noon, Rm 1-236.

Active Substrate System Integration - Prof Bruce A. Wooley, Stanford University, VLSI Seminar, 4pm, Rm 34-101. Reception, 3:30pm.

Student Presentation - Dept of Mechanical Engineering Rehabilitation Engineering Research and Practice Seminar, 4-5:30pm, Rm 1-114.

The Design and Construction of a Radial Diffuser Test Rig - Victor G. Filipenco, Dept of Aero/Astro, Dept of Aeronautics and Astronautics Gas Turbine Laboratory Seminar, 4pm, Rm 33-206. Refreshments served.

Progress Toward a Science of Precise Life Prediction for Turbo-machine Components - Dr. Neville F. Rieger, Stress Technology, Inc, Rochester, NY, Dept of Mechanical Engineering Applied Mechanics Seminar, 4pm, Rm 1-246.

Cosmic Strings and the High Energy Background - Prof Jeremiah P. Ostriker, Princeton University, Physics Seminar, 4:15pm, Rm 37-252. Refreshments served, 3:45pm.

Turning Around a Business in a Traditional Service Industry: Back to Basics at Marine Transport Lines - Karl Mayer, chairman and CEO, Marine Transport Lines; Dirk Langeveld, COO, Marine Transport Lines, MIT International Shipping Club Seminar, 4:15pm, Rm E51-144.

The Future of Darwinism: Towards a More General and Integrative Evolutionary Theory - Dr. Steven Gould, Museum of Comparative Zoology, Harvard University, Biology Colloquium, 4:15pm, Rm 10-250. Coffee served, 3:45pm, outside Rm 10-250.

Light and Heat: How the Dual Effects of Laser Radiation Affect Vascular Reactivity - Jeffrey M. Isner, Tufts New England Medical Ctr, Seminar on Lasers in Biomedical Research, 5-6pm, Wellman Laboratory, Mass General Hospital, 55 Fruit St, Boston.

Wednesday, May 4

Microwave Multiplexed Optical Communication Systems for Wideband Distribution - R. Olshansky, GTE Laboratories, EECS/RLE Seminar on Optics and Quantum Electronics, 11-12noon, Rm 36-428.

The Agulhas Current - Dr. James Luyten, WHOI, Oceanography Sack Lunch Seminar, 12:10pm, Rm 54-915.

Free Surface Disturbance Due to a Submerged Helical Vortex Sheet - FT. Korsmeyer, Dept of Ocean and Civil Engineering Hydrodynamics Seminar, 3-4:30pm, Rm 5-314.

Waveform Relaxation for Simulating Large Circuits - Jacob White, MIT Dept of Electrical Engineering and Computer Science, Dept of Mathematics Numerical Analysis Seminar, 4pm, Rm 4-159. Refreshments served, 3:30pm, Rm 2-349.

The Politics of Military Funding - Nick Kotz, Pulitzer-prize winning journalist, Science, Technology and Society Program/Technology Review Seminar, 4pm, Rm E51-332.

Bacterial Chemotaxis in a Sheared Fluid - J. Bowen, Ralph M. Parsons Laboratory Aquatic Sciences Seminar, 4pm, Rm 48-316.

Use of a Pressurized In-pile Loop to Reduce Dose Rates by Improving PWR Water Chemistry - Rene Sanchez, Dept of Nuclear Engineering Reactor Engineering Doctoral Seminar, 4pm, Rm 24-121.

Santa Monica Basin Tracer Experiment - Dr. Jim Ledwell, Lamont Doherty Geological Observatory, Columbia University, Dept of Earth, Atmospheric, and Planetary Sciences Conoco Lecture, 4-5pm, Rm 54-915.

The UNHCR and International Law of Refugees - Guy Goodwin-Gil, United Nations High Commission for Refugees, Ctr for International Studies Lecture, 4-6pm, E38 7th Flr Conference Rm. Refreshments served.

Thursday, May 5

Interaction Between Basic Science, Technology and Politics as Exemplified by CERN - Dr. Herwig Schapper, director general, CERN, Geneva, Joint MIT Ctr for International Studies/MIT Science, Technology and Public Policy Program

MIT Science, Technology and Society Program/Harvard Ctr for European Studies Seminar, 4-6pm, Rm E51-332.

Feminism, Reproductive Technologies and the Social Control of Women - Prof Jana Sawicki, University of Maine, Program in Women's Studies Seminar, 4pm, Rm 66-360.

Historical Look at Gibbs' Statistical Mechanics - Dr. Martin Klein, Yale University, Physics Colloquium, 4:15pm, Rm 10-250. Refreshments served, 3:45pm, Rm 26-110.

Friday, May 6

The Visual Arts and the World of High Tech - The New American Scene - Prof Alan Trachtenberg, Yale University; Totalled Machines: Photography, Criticism and Technological Change - John Tagg, associate chairman, Art History, SUNY-Binghamton, List Visual Arts Ctr Symposium, 3-5pm, Wiesner Bldg Bartos Theater.

Optical Measurement of Forbidden Line Transitions to Measure Electric Fields in Plasmas - Dr. Fred Begay, Los Alamos at University of Maryland, Plasma Fusion Ctr Seminar, 4pm, Rm NW17-218.

Saturday, May 7

The Visual Arts and the World of High Tech - Chip and Veil - Prof Molly Nesbit, Barnard College; Panel Discussion - led by Prof Leo Marx, MIT Kenan Professor of American Cultural History, List Visual Arts Ctr Symposium, 3-5pm, Wiesner Bldg Bartos Theater.

Community Meetings

Alcoholics Anonymous (AA) - Meetings every Tues, 12-1pm, Rm E23-364. For info call Sarah, x3-4911.

Al-Anon - Meetings every Fri, noon-1pm, Health Education Conference Rm E23-297 and every Tues, noon-1pm, Rm 1-242. The only requirement for membership is that there be a problem of alcoholism in a relative or friend. Call Sarah, x3-4911.

Alcohol Support Group - Meetings every Wednesday, 7:30-9am, sponsored by MIT Social Work Service. For info call Sarah, x3-4911.

Narcotics Anonymous - Meetings at MIT, every Mon, 1-2pm, Rm E23-364 (MIT Medical Dept). Call 569-0021.

From Smoker to Non-Smoker - MIT Medical Dept Smoking Cessation Program, starting Thurs May 5, and meeting on subsequent Mondays and Thursdays for a total of five sessions, 12-1:30pm. Cost: \$30, \$25/MIT Health Plan members & students. Info/registration: x3-1316.

MIT Faculty Club - The Club is open Mon-Fri. Luncheon hours: noon-2pm; dinner hours: 5:30-8pm. For dinner and private party reservations, call x3-4896, 9am-5pm daily.

Working Mother's Group - Meets every other Wednesday, 12:15pm (drop in any time), Rm E25-202. Next meetings: April 13, 27. Join an ongoing support group to help with the hassles of being a working mother with young children. We discuss the usual problems, including daycare, work conflicts, siblings, summer camps, awful behavior of kids in public, coping with sleep deprivation, etc. New members and potential parents always welcome. Info: Janette Hyde, x3-4290.

MIT Wives' Group - Morning Group: April 27 - Freedom Trail; info: Regina Crawford, 641-0590 or Nancy Mellon, 387-1182. May 4 - Freedom Trail; info: Miho Fuchida, 494-1931 or Roxana Volkart de Mateo, 494-8187. May 11 - Wellesley College; info: Yvonne von Estorf, 566-6485 or Eleny Kosturakis, 621-1670. Afternoon Group: April 27 - The Controversy Around Surrogate Motherhood, Judith De Cene, 3-5pm, Walker Rm 50-220. May 4 - Some Thoughts on the Presidential Election, Gretchen Ritter, 3-5pm, Walker Rm 50-220. May 11 - Norway, Eva Seides and Annbjorg Haoy, 3-5pm, Walker Rm 50-220. Babysitting provided for Afternoon Group meetings in Walker Rm 50-201.

Student Wives Support Group - For wives whose husbands are working on their dissertations or attempting to cope with over-demanding work pressures. Group plans to meet weekly in the evening or on the weekend to accommodate working wives. Women interested in exploring the possibility of joining the group should contact Dr. Charlotte Schwartz, MIT Medical Dept, x3-1614.

Informal Embroidery Group - MIT Women's League Group meets April 27, May 11 & 25, June 8, 10:30-1:30pm, Rm 10-340.

MIT Activities Committee

MITAC, the MIT Activities Committee offers discount movie tickets for General Cinema, Showcase and Sack (USA Cinemas) Theaters (\$3 ea). Tickets are good 7 days a week, any performance. (*Note: USA tickets are not valid at Copley, Nickelodeon, Janus, & Harvard Sq. Theatres.)

Tickets may be purchased at MITAC Office, Rm 20A-023 (x3-7990), 10am-3pm. Mon through Fri. Ticket are sold in Lobby 10 and E18 on Fridays 12-1pm. Lincoln Lab employees may purchase tickets in Rm A-263 from 1-2pm, Tues-Fri only. Check out our table of discounts for camping, dining, musical and cultural events available to you through MITAC.

Day Trip to Hammersmith Farm and Newport, RI. Sat, May 7. Refined elegance, gracious charm, and style... Relax and spend a day exploring Newport, RI. Visit Hammersmith Farm (established in 1640 by William Brenton) - the summer White House to John F. Kennedy. Stroll through the sunny foyer; awe in the meticulously designed gardens - and more! Then spend time exploring the harbor, or stroll through the charming shops of downtown Newport. Bus leaves West Garage at 9am; returns approx 6:30pm. Cost: \$18/pp.

An Evening With the Concord Orchestra. Fri, May 13. Spring into spring with an evening of music by the Concord Orchestra. The Pops-style program includes selections by Rossini, Massenet, Strauss, Saint-Saens, Still, Sousa, Gershwin, and Lowe. At the Performing Arts Center, 51 Walden St, Concord, 8:15pm. Tickets: \$8/ea (reg \$10/ea), available in the MITAC office.

Tour of the Lowell National Historical Park. Sun, May 15. It was once "this country's foremost textile manufacturing city" - and it's right in our backyard. Rediscover Lowell with a tour to its National Historical Park. Learn about textile production, a 19th century turbine, etc with tours (on your own) that include: "The Mill Experience," "Making the System Work" - and more. Bus leaves West Garage at 9:45am; returns approx 5pm. Cost: \$8.50/pp.

Seal Watch in Boothbay Harbor, Maine. Sat, May 21. Climb aboard Cap'n Fish's cruising vessel and take a peek at those entertaining and gregarious fellows - the seals! Learn more about the playful aquatic mammals in their natural habitat with a 2-hour cruise through Boothbay Harbor. And, view light-houses, coves, & harbors along the way. After the seal watch, spend time exploring the quaint shops along Boothbay Harbor's Pier I. Bus leaves West Garage, 8:30am; returns approx 8pm. Cost: \$19.50/adult; \$15.75/child (under 12). Reservations in the MITAC office.

How the Other Half Loves. Wed, May 25, 8pm, Lyric Stage. The steamy plot: "...hilarious miscommunication among 3 couples revolves around the alibi invented by the youngest man and oldest woman to hide their respective spouses..." and the com-

edic twist as the plot's entanglement ensues! Another boiling pot of frolicking fanfare. Tickets: \$9/ea (reg \$10/ea) available in the MITAC office.

Weekend Escape to West Point and the Hudson River Valley. Sun-Tues, May 29-31. The lush greenery; the scenic surroundings; and the rich, historical past. Spend a weekend exploring New York's West Point and the Hudson River Valley. Trip includes lodging at the Hotel Thayer (on the grounds of the US Military Academy); a visit to Woodbury Common - location of over 50 shopping outlets; tour of Philipsburg Manor & Sunnyside Mansion; tour of West Point and the Brotherhood Winery, 2 lunches, and round-trip transportation. Only \$138/pp/dbl occupancy. Bus leaves West Garage at 8am, Sun, May 29; returns approx 8pm, Tues, May 31. Make your reservations NOW! in the MITAC office.

F.Y.I. We would wrap up the purple blooms in wet paper towels and aluminum foil and give them to our favorite teacher - and, oh how fragrant the classroom would smell from those delicate lilacs! Don't miss Lilac Sunday at the Arnold Arboretum on Sun, May 22. Special creations of thematic beds and the "50 Best Lilacs of New England." More info: 524-1718.

F.Y.I. III Explore the artistry, precision, and technique of wood-working at the Woodworking Expo at the Bayside Expo Ctr, April 29-May 1. Swiss cabinetry, scroll saws, chip carving, and more \$1-off coupons to the Woodworking Expo are now available in the MITAC office (reg admission: \$6/pp; with discount coupon admission is \$5/pp).

Council for the Arts Museum Passes. On campus, there are 10 passes employees may borrow for free admission to the Museum of Fine Arts. To check on availability, call x3-5651. At Lincoln Lab, passes are available in the Lincoln Lab Library, Rm A-150.

Museum of Science Tickets. Available for only \$1. Pay another \$1 at the door, for a total savings of \$3/pp/adult; \$1/pp/child (reg \$5/pp/adult; \$3/pp/child).

Important! To avoid disappointment, purchase tickets and make reservations early as we are limited by ticket availability and transportation. All MITAC events and ticket purchases are non-refundable due to the non-profit nature of our organization.

Social Activities

Tech Community Women Spring Dinner - May 8, MIT Endicott house, a French-style chateau set among beautiful gardens and woods in Dedham. Please make reservations before April 28. Info: x3-4538 or 577-8824 or 577-8159.

Japanese Lunch Table - Every Tues, 1pm, Walker 220. Enjoy lively conversations and new faces each week.

Movies

For the latest Lecture Series Committee movie and lecture information, call the LSC Movieline, x5-9179 dorm.

Monika - Lecture Series Committee Classic Movie, Fri, April 29, 7:30pm, Rm 10-250. Admission: \$1.50, MIT/Wellesley ID required.

Real Genius - Lecture Series Committee movie, Fri, April 29, 7 & 10pm, Rm 26-100. Admission: \$1.50, MIT/Wellesley ID required.

Thunderball - Lecture Series Committee movie, Sat, April 30, 7 & 10pm, Rm 26-100. Admission: \$1.50, MIT/Wellesley ID required.

Hair - Lecture Series Committee movie, Sun, May 1, 7 & 10pm, Rm 26-100. Admission: \$1.50, MIT/Wellesley ID required.

The Miracle of Morgan's Creek - Lecture Series Committee Classic Movie, Fri, May 6, 7:30pm, Rm 10-250. Admission: \$1.50, MIT/Wellesley ID required.

After Hours - Lecture Series Committee movie, Fri, May 6, 7 & 9:30pm, Rm 26-100. Admission: \$1.50, MIT/Wellesley ID required.

Dirty Dancing - Lecture Series Committee movie, Sat, May 7, 7 & 10pm, Rm 26-100. Admission: \$1.50, MIT/Wellesley ID required.

Man of La Mancha - Lecture Series Committee movie, Sun, May 8, 7 & 10pm, Rm 26-100. Admission: \$1.50, MIT/Wellesley ID required.

Music

Noon Chapel Concert - Alice Robbins, baroque cello; Sarah Gray Megan, harpsichord, Italian Baroque works by Alessandro and Domenico Scarlatti and Vivaldi, Thurs, April 28, 12:05pm, MIT Chapel. Free.

MIT Chamber Chorus - John Oliver, director, Thurs, April 28, 8pm, Killian Hall. Free.

MIT Faculty Series - Mark Harvey and Aardvark Jazz Orchestra, Fri, April 29, 8pm, Kresge Auditorium. Free.

MIT Symphony Orchestra - Alan Yamamoto, guest conductor; Mikel Dean, baritone, works of Sibelius, Ravel, Debussy and Brahms, Sat, April 30, 8:30pm, Kresge Auditorium. \$1 at the door. Info: x3-2826, M-Th, 12-5pm.

MIT Women's Choral 55th Annual Spring Concert - Nancy K. Wanger, conductor, Mendelssohn, Copland, Fine, Faure and others, Sun, May 1, 3pm, Rm 10-250. Info: x3-3656 or Jane Howard 648-1936. Free.

MIT Chamber Music Society - Marcus Thompson, director, chamber music concerts by students, May 3-5, 5-15 pm; and Sat, May 8, 8pm, Killian Hall. Free. (Subject to Change)

MIT Affiliated Artist Series - Paul Orgel, piano, Thurs, May 5, 8pm, Killian Hall. Free.

MIT Jazz Bands - Jamshied Sharifi and Everett Longstreth, directors, with guest bands from area colleges and universities, Fri, May 6, 8pm. \$1 at the door.

MIT Choral Society - John Oliver, director, Bach's B Minor Mass, Sat, May 7, 8pm, Church of the Covenant, Back Bay, Boston. Tickets at the door, Lobby 10, 14N-434: \$5, \$10, free to MIT/Wellesley students with ID.

MIT Concert Band - John Corley, director, Sat, May 7, 8pm, Kresge Auditorium. Free.

MIT Outdoor Brass Festival - MIT Brass Ensemble, Richard Given, director, and guest ensembles from area colleges and universities, Sun, May 8, 2pm, Kresge Oval. Rain location: Kresge Auditorium. Free.

MIT Women's Chorale - Meets every Thurs, 8-10pm, Rm 10-340. Info: Jane Howard, 648-1936.

Theater

The Marriage of Bette and Boo - MIT Dramashop production of Christopher Durang's darkly comic play, directed by guest director Scott Zigler, April 28-30, May 5-7, 8pm, Kresge Little Theatre. Tickets: \$6/general; \$5/students & seniors.

Massachusetts Institute of Technology



April 27, 1988

MIT Personnel Office, E19-239
400 Main Street
Cambridge, Massachusetts

MIT POSITIONS AVAILABLE

SMOKING PROHIBITED BY LAW

IN CONJUNCTION WITH THE CITY OF CAMBRIDGE ORDINANCE #1046, EFFECTIVE MARCH 7, 1987, SMOKING IS PROHIBITED IN ALL MIT ACADEMIC AND SERVICE BUILDINGS LOCATED IN CAMBRIDGE.

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.

MIT is an equal opportunity/affirmative action employer.

This list includes all nonacademic jobs currently available on the MIT campus. Duplicate lists are posted outside Room 10-215 and in the Personnel Office (E19-239).

Information on openings at Lincoln Laboratory (Lexington, MA) is available in the Personnel Office (E19-239).

Persons who are NOT MIT employees should call the Personnel Office at 253-4251.

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

Carl Belforti 253-4278
Ken Hewitt 253-4267
Cynthia Froeber 253-1591
Appointments:
Rose Rizzo 253-4274

Sally Hansen 253-4275
James McCarthy 253-4269
Maureen Wolfe 253-1594
Appointments:
Leslie Bowden 253-4268

Kim Bonfiglioli 253-4076
Appointments:
Debbie Roebuck 253-4263

Effective 4/13/88, All Support Staff Positions will be listed first in POSITIONS AVAILABLE followed by the Administrative, Academic, Research, and Service Staffs.

SECRETARY/STAFF ASSISTANT

ADMINISTRATIVE SECRETARY, Resource Development, National Campaign Office, to work with one or two District Directors in managing flow of work from initial planning to completion. This work will entail coordination with the activities of National Campaign Office staff as it identifies, qualifies, and solicits MIT gift prospects. Will type, edit, proofread correspondence, memos and reports, etc.; maintain Directors' calendar and files; make travel arrangements; plan meetings; and provide coverage of general office functions such as telephone coverage, business and computer maintenance, petty cash, and office supplies, etc. Requirements: a minimum of 4.5 years of direct/related experience. Post high school education preferred. Must be able to organize, set priorities, and be detailed oriented. Ability to work well under pressure and meet constant deadlines important. Good interpersonal skills and ability to deal with a variety of people essential. Knowledge of wordprocessing, personal computer, and use of dictating equipment very helpful, and/or willingness to learn necessary. B88-185

ADMINISTRATIVE SECRETARY, Working with Vice President and Treasurer and his executive assistant, to perform a wide variety of duties in a very busy office focusing on major fundraising campaign. Responsibilities include taking and transcribing dictation; drafting, proofreading, and editing correspondence; opening and distributing mail; handling heavy and often complicated telephones; and interacting with a wide variety of people. Requirements: excellent interpersonal, oral, and verbal skills as well as a minimum of 4.5 years of direct/related experience. Knowledge of shorthand or equivalent desirable. Knowledge of IBM XT/AT and wordperfect software helpful and/or willingness to learn required. Ability to use good judgment and tact necessary. Must be able to work independently and set priorities. B88-148

ADMINISTRATIVE SECRETARY, Earth, Atmospheric and Planetary Sciences Department, to serve as an assistant to Department Head and manage all aspects of his daily activities. Will coordinate meetings and travel arrangements, schedule appointments, and assure that all deadlines are met; screen visitors and telephone calls; interact extensively with faculty and administrators; type and/or compose correspondence; and review department head's incoming mail and route/respond. Requirements: must have exceptional office skills, including a high level of communication skills. A minimum of 4.5 years of direct/related experience as well as familiarity with Macintosh personal computer helpful. Ability to work without direction and use own judgment in dealing with sensitive issues important. Must be flexible and adaptable. B88-139

ADMINISTRATIVE SECRETARY, Resource Development, to perform a full range of secretarial duties for two staff members focusing on fundraising from foundations and corporations on a highly professional level. Responsibilities include drafting and typing correspondence and reports; keeping busy calendars, scheduling appointments, meetings, visits, and luncheons; making travel arrangements, preparing itineraries, obtaining travel advances, and completing reimbursement forms; sorting, copying, and distributing mail/correspondence; maintaining files; and ordering and maintaining supplies. Requirements: a minimum of 4.5 years of direct/related experience and accurate typing and knowledge of IBM XT and wordprocessing and/or willingness to learn. Must have strong interpersonal and good verbal communication skills. Ability to use tact, discretion, and handle information on a confidential basis necessary. Must be able to set priorities. B88-134

ADMINISTRATIVE SECRETARY/ADMINISTRATIVE ASSISTANT, Chemical Engineering, to supervise the day-to-day operation of the department's administrative office and provide secretarial support and general administrative assistance to the Administrative Officer. Responsibilities include processing of personnel appointments, terminations, and visa materials; maintaining departmental personnel listings and files; assisting with building operational problems, room and key assignments, telephone installations and repair; preparing weekly support staff payroll; hiring and supervising temporary secretarial help for the department; acting as liaison between department faculty and support staff; entering and maintaining personnel and account file material on computer data-base system; preparing documents, and correspondence using a personnel computer. Requirements: excellent secretarial skills (typing, shorthand, or speed writing). A minimum of 4.5 years of direct/related experience and strong administrative and interpersonal skills important. Experience with wordprocessing and data entry on IBM XT (or comparable system), WORDPERFECT, SYMPHONY, DBASE III desirable. B88-066

ADMINISTRATIVE SECRETARY, Alumni Association, to support two Regional Directors, one for Gulf-Atlantic, the other for the Midwest. Will type correspondence and general materials; provide information to Alumni, Institute Staff and Faculty and representatives from outside organizations about alumni activities; assist ongoing alumni activities in running smoothly and efficiently; assist and support two Regional Directors with special programs and activities; and perform other general office procedures. Will also work with other Administrative Secretaries in alumni Relations group to balance out and over workload requirements for entire group. Requirements: minimum 4.5 years of direct/related experience and excellent secretarial skills necessary. Good interpersonal skills and discretion in handling confidential materials essential. Ability to exercise judgment, recognize priorities, and work independently imperative. B88-056

ADMINISTRATIVE SECRETARY, Residence and Campus Activities, Office of the Dean for Student Affairs, to perform various secretarial duties for the Assistant Dean, Advisor to Fraternities, and Administrative Officer. Duties include responding to considerable and complicated telephone and in-person inquiries; coordinating priorities and determining the needs of a variety of people wishing to communicate with RCA staff members directly; serving as the primary source of information on established office and institute policies and procedures related to residence issues, including housing assignments,

fraternity relations, housemasters and graduate residents; and assisting with other duties as assigned. Requirements: high school graduate and 4.5 years direct/related experience. Typing (65 wpm), and knowledge of word processing, (DECmate or IBM) preferred. Should possess excellent organizational and interpersonal skills. Ability to handle detail and work under pressure necessary. Knowledge of MIT helpful. B87-382

SR. STAFF ASSISTANT (SECRETARY TO DIRECTOR), Sloan School Office of Career Development. Join office providing career planning and placement services to 400 master's students. Will maintain office library; assist in resume book production; process employer job descriptions; assist with career seminar preparations; type/word process Director's correspondence; produce office newsletter; input computer data and compile data for special projects. Requirements: solid typing skills and a minimum of 2.5 years of direct/related office experience. Would prefer individual with bachelor's degree and familiarity with college student environment. Excellent verbal and written communication skills and ability to work both independently and as part of a team important. Familiarity with automation equipment and/or willingness to learn. Attention to detail necessary. Office hectic and demands high energy during recruiting season (7 months of year). Sense of humor important. Should enjoy working with students. B88-191

SR. SECRETARY, Department of Brain and Cognitive Sciences (part-time 30 hrs/wk), to work with two Professors in Neurobiology and perform a variety of office functions. Duties include typing and wordprocessing in the preparation of correspondence, manuscripts, reports, and grant applications; facilitating the ordering of supplies for the office and laboratories; preparing Institute forms; maintaining files; photocopying; answering telephones; and providing other office support functions as necessary. Requirements: good typing and proofreading skills as well as a minimum of 2.5 years of direct/related experience. Familiarity with medical/biological terminology a plus. Good interpersonal and organizational skills with the ability to set priorities necessary. Flexibility and initiative important. Experience with DECmate II or other wordprocessing system, and/or willingness to learn essential. B88-188

SR. SECRETARY, Chemistry Department, to perform secretarial duties for two chemistry professors. Duties include typing correspondence, technical manuscripts, grant proposals, and course material; answering telephones; arranging appointments, and making travel arrangements; monitoring research accounts; and filing. Requirements: a minimum of 2.5 years of direct/related experience and ability to set priorities and organize work without supervision. Knowledge of Macintosh computer and/or willingness to learn important. Strong technical typing skills necessary. Some accounting experience and familiarity with MIT highly desirable. B88-187

SR. SECRETARY, Sloan School of Management, to work for three professors in the Applied Economics, Finance, and Accounting Area. Will support the busy professors in both their teaching and research, some of which is technical in nature, as well as assisting with the administrative details of a weekly seminar; become actively involved in office automation by becoming proficient on IBM PCs using Wordperfect and other software, and by learning how to use the electronic mail system. Requirements: excellent typing and proofreading skills and a minimum of 2.5 years of direct/related experience. Post high school education may count toward experience. Technical typing skills (50 wpm) highly desirable. Willingness to learn the IBM pc essential. Excellent organizational skills and ability to work with minimal supervision important. Ability to work with a variety of people necessary. Knowledge of MIT helpful. B88-184

SR. SECRETARY, Plasma Fusion Center, to perform a variety of office functions. Responsibilities include typing routine correspondence; handling office mail and telephones; photocopying and filing; ordering office supplies; preparing and maintaining check requests for telephone payments; and providing other secretarial duties as needed. Requirements: a high school graduate and/or equivalent. A minimum of 2.5 years of direct/related experience, post high school education will count toward experience. Typing (50 wpm) important. Knowledge of MIT helpful. B88-183

SR. SECRETARY, Office of the Director of the Microsystems Technology Laboratories, Department of Electrical Engineering and Computer Science, to provide secretarial support to the Director and the Assistant to the Director. Will type, edit, and proofread memos and reports, etc.; prepare course materials; handle telephones; provide travel arrangements; order supplies, etc. Requirements: typing (50-60 wpm) and familiarity with PC wordprocessing and spreadsheet programs preferred. Must pay close attention to detail. Ability to tolerate interruptions and handle a variety of tasks simultaneously a must. Must be able to deal well with a variety of people. B88-182

SR. STAFF ASSISTANT, Undergraduate Education Office, to provide support to busy office with broad Institute-wide responsibilities. UEO is concerned with Undergraduate Research Opportunities Program, the Writing Requirement, and

Curriculum Support. Duties include providing information and referral as necessary for undergraduate students; greeting visitors; providing assistance with data collection and analysis; assisting with publications; and monitoring/updating office and office budgets and undergraduate research payroll. Requirements: a minimum of 2.5 years of direct/related experience with organizational and interpersonal skills. Knowledge of MIT helpful. Familiarity and/or willingness to learn computer systems important. B88-181

SR. SECRETARY, Center for Space Research, to be responsible for onsite administrative and secretarial needs of active research group. Will perform technical wordprocessing; prepare and proofread proposals and papers including tables and equations, reception, and keeping schedules; perform telephone screening; use computer networks and other means to maintain liaison with administrators and academics within the Institute and worldwide. Will perform complex travel arrangements; file; assist project supervisors; review and correct monthly statements; plan and support special events; and perform miscellaneous clerical services as needed. Requirements: a minimum of 2.5 years of direct/related experience and an interest in learning interactive communications and TEX formatting. Must be able to work independently, determine priorities, and meet deadlines. Ability to work well with a variety of people important. B88-176

SR. SECRETARY/RECEPTIONIST, Center for Technology, Policy, and Industrial Development, to provide secretarial support to the Administrative Officer and serve as information resource for the Center. Will answer telephone; respond to inquiries; greet and assist visitors; type and edit memos, letters, and forms; establish and maintain personnel and miscellaneous files; sort mail and oversee postage meter; distribute and order supplies; maintain telephone and space lists; and perform other duties as assigned. Requirements: strong secretarial and organizational skills and a minimum of 2.5 years of direct/related experience. Ability to work with interruptions in a service environment essential. Excellent interpersonal skills necessary. Knowledge of IBM pc and/or willingness to learn important. B88-168

SR. SECRETARY, Urban Studies and Planning (part-time, 25 hrs/wk), to type correspondence, reports and manuscripts; provide assistance to general inquiries, and handle busy telephone. Will also set up appointments and make travel arrangements for faculty and help out in general departmental typing if necessary. Requirements: minimum of 2.5 years of direct/related experience, excellent typing abilities, and prior secretarial experience. Knowledge of Word Processing (Word Perfect/Word Star) and/or willingness to learn important. (The work schedule for this position is Monday through Thursday.) B88-087

SR. SECRETARY, Graduate Alumni Program, Alumni Association, to support Director's work with MIT's Ph.D and Master degree alumni/ae, graduate students, department heads and school development officers. Responsible for assisting in telethon recruitment and planning; production of annual department mailings in fall (approximately 20 mailings) and dean's mailing in spring; organizing functions for graduate alumni/ae and graduate students. Will also provide general support in receiving visitors; reading and prioritizing mail; maintaining files; answering telephones; receiving visitors; reading and prioritizing mail; maintaining files; scheduling appointments; handling meeting logistics; and temporarily assisting with other staff members at the request of the GAP Program Director. Requirements: high school diploma plus 2-3 years of direct/related experience. Excellent organizational and interpersonal skills as well as the ability to work well independently and under pressure essential. Attention to detail, diplomacy, and discretion. A sense of humor preferred. Experience with Macintosh computers and with MIT very desirable. Occasional overtime required. B88-161

SR. SECRETARY, Office of the Dean for Student Affairs, to perform moderately complex secretarial duties under general supervision in support of the International Students' Office within the Student Assistance Services section. Responsibilities include responding to telephone and in-person inquiries regarding a variety of international students' concerns; preparing documentation and correspondence in support of the international graduate student admission and visa requests; providing administrative support and processing financial transactions for international students' events; and providing secretarial support to the Committee on Foreign Scholarships. Requirements: a minimum of 2.5 years of direct/related experience and knowledge of and/or willingness to learn wordprocessing (IBM Wordperfect or DECmate preferred). Excellent interpersonal skills important. Attention to detail and accuracy essential. Ability to work under pressure necessary. B88-160

SR. MEDICAL SECRETARY - Psychiatric Service, Medical Department, to perform reception and secretarial support duties for a large volume of patients. Responsibilities include arranging and maintaining complicated schedules for approximately 20 therapists; handling inquiries concerning service use and procedures; preparing and maintaining a monthly appointment book; serving as a vital communication link between staff, patients, and various Insti-

tute personnel; typing correspondence; transcribing dictations; filing; and performing other clerical tasks as assigned. Requirements: a minimum of 2.5 years of direct/related experience and ability to take initiative, set priorities, and act with perceptive judgment and tact in sensitive interpersonal situations. Ability to work cooperatively and flexibly with colleagues necessary. Must be able to handle a large volume of work and a variety of tasks in a busy and demanding office. Attention to detail essential. Excellent organizational skills, good typing, and ability to work with detailed clerical systems necessary. B88-143

SR. SECRETARY, Office of Sponsored Programs, to perform a variety of secretarial duties for the Intellectual Property Coordinator. Responsibilities include maintaining an active log of invention disclosures and software licenses; preparing and submitting timely notices to research sponsors of patent activities; typing correspondence and memoranda; maintaining file system; and handling routine questions from the academic staff and Technology Licensing Office regarding patent disclosure matters. Requirements: strong organizational and interpersonal skills as well as a minimum of 2.5 years of direct/related experience. Must have discretion and tact. A willingness to work as part of a team necessary. Good secretarial skills and/or training essential. B88-141

SR. SECRETARY, Biology Department (part-time, 17.5 hrs/wk), to perform varied secretarial duties for biology faculty member and her research group. Duties include preparing grant proposals and monitoring of funds in active grants; processing and following through of purchase orders for office and laboratory supplies; typing and editing scientific manuscripts; and composing letters and other secretarial work. Requirements: a minimum of 2.5 years of direct/related experience and knowledge of wordprocessing and spreadsheet software on a personal computer. Must be able to work independently and deal with a variety of people. Familiarity with numbers essential. B88-136

SR. SECRETARY, Sloan School of Management - Behavioral and Policy Sciences Area, to provide support in teaching and research for three senior faculty. The professors' respective fields are organization studies/technology and innovation; human resource management; and strategy and policy. All are involved in research sponsored by the Management in the 1990's Research Program; in addition, one of the professors directs the program and one coordinates the program's research aspects. Faculty recruiting and account monitoring add variety to regular office activities. Will become actively involved in office automation, using the PROFS electronic mail system, the Xerox Star, and doing wordprocessing on the IBM pc. Will also interact daily with a wide variety of people. Requirements: excellent typing, proofreading, organizational and interpersonal skills and a minimum of 2.5 years of direct/related experience. Post high school education may count toward experience. Degree training from a secretarial school a plus. Knowledge of wordprocessing highly desirable, as well as a willingness to learn the wordprocessing systems within the area. Must be assertive in problem-solving. Ability to prioritize tasks and work independently essential. B88-133

SR. SECRETARY, Sloan School of Management - Behavioral and Policy Sciences Area, to provide support in teaching and research for three professors. The professors will teach and perform their research in the field of corporate strategy and policy, with different emphases: technology strategy, Japanese technology management, strategic planning, measurement in strategy research and business history. Will also be involved in the process of recruiting new faculty for the strategy and policy sub-area; and manage the workload. Will actively participate in office automation as major part of job - use Xerox Star, Apple-Macintosh, PROFS electronic mail system and do wordprocessing on IBM pc. Requirements: excellent typing, proofreading, organizational, and interpersonal skills as well as a minimum 2.5 years of direct/related experience. Post high school education may count toward experience. Must be able to work in a busy environment and be assertive in problem-solving. Knowledge of wordprocessing and willingness to learn specific systems highly desirable. Should be able to deal with a variety of people. Must be able to prioritize tasks. B88-124

SR. SECRETARY - TECHNICAL, Plasma Fusion Center (part-time, 25 hrs/wk, 9:00 a.m. to 2:00 p.m.), to perform a variety of office functions for a well-organized and dynamic research group. Will type technical reports, as well as correspondence and proposals, etc.; answer telephones; distribute mail; arrange appointments and meetings, etc.; and make travel arrangements. Requirements: excellent typing and interpersonal skills. A minimum of 2.5 years of direct/related experience and/or high school graduate or equivalent necessary. Ability to set priorities, manage workloads, and work independently important. Word processing and technical typing desirable. B88-122

SR. STAFF ASSISTANT, Nuclear Engineering, to work for three professors performing a variety of office procedures. Will prepare classnotes, research reports, technical papers, and general correspondence

from handwritten materials; handle telephone calls, appointments, and travel arrangements. Will also be responsible for the transparencies for class and research work; preparing various MIT accounting forms; and assist with applicable duties as necessary. Requirements: a minimum of 2.5 years of direct/related experience. Experience with typing of Greek equations and knowledge IBM PC w/T³ software preferred. Experience on a personal computer important. Strong communication skills helpful. Must be able to deal with a variety of people. B88-116

SR. SECRETARY, Energy Laboratory, to provide secretarial support to Co-Director and other staff. Will type and proofread correspondence, reports, and manuscripts, etc., from hand-written material; make travel arrangements; arrange meetings; handle appointments; distribute Laboratory publications; and contact various organizations by telephone. Requirements: excellent secretarial skills with word processing experience and/or willingness to learn. A minimum of 2.5 years of direct/related experience and ability to communicate with others important. Good organizational skills necessary. Must be able to establish priorities and meet deadlines. Should be flexible. B88-113

SR. SECRETARY, Sloan School of Management, to manage a busy office for three Operations Research/Statistics professors whose research includes fear of flying, fear of crime, the search for oil and gas deposits, and the desire to expose "red rings" in a series of statistical clues. Will coordinate course preparation; type and edit technical manuscripts; and help administer research projects. Requirements: a minimum of 2.5 years of direct/related experience as well as excellent typing and organizational skills. Ability to handle several tasks simultaneously important. Prior word-processing and extensive technical typing experience desirable, and/or training will be provided. Knowledge of MIT a plus. B88-109

EDITORIAL SECRETARY, Acquisitions, MIT Press, to perform a variety of secretarial functions. Duties include typing correspondence and other materials pertaining to publication projects; making travel arrangements for editors, including processing travel advances and filing travel vouchers; duplicating and distributing materials in-house; assisting in maintaining contract files; assuming primary responsibility for answering Department's telephones; and assisting acquisition editors on special projects. Requirements: excellent secretarial skills (65 vmp minimum) and at least 2.5 years of direct/related experience. Familiarity with office procedures and ability to work with a varied group of people essential. Knowledge of English grammar important. Must possess a pleasant telephone manner and a sense of humor. Should be detail oriented. B88-108

SR. SECRETARY, Medical Department (part-time, 20 hrs/wk), to work in the Psychiatric Service and share receptionist and secretarial support duties with one co-secretary (with back-up from additional support staff). Responsibilities include booking appointments for a large volume of patients; arranging and maintaining complicated schedules for approximately 20 therapists; handling inquiries concerning Service use and procedures; preparing and maintaining monthly appointment book; serving as vital communication link between staff, patients, and various Institute personnel; typing correspondence and transcribing dictations; filing; and performing other clerical tasks as assigned. Requirements: a minimum of 2.5 years of direct/related experience as well as excellent organizational and good typing skills. Ability to work with detailed clerical systems necessary. Must take initiative and set priorities. Should be cooperative, act with perceptive judgement, and possess tact in sensitive interpersonal situations. Must be capable of maintaining a busy office as well as paying attention to detail. (The hours are full-time Monday and Tuesday, and 8:30 a.m. to 1:30 p.m. on Wednesday). B88-107

SR. SECRETARY, Laboratory for Computer Science (part-time, 20 hrs/wk), to handle general secretarial responsibilities for a computer science faculty member. Duties include typing correspondence and class notes; maintaining calendar and filing system; handling telephones and inquiries; and performing other assignments as needed. Requirements: a minimum of 2.5 years of direct/related experience. Must be willing to learn a number of computer systems. Ability to work independently and communicate effectively important. Good typing skills and a technical background a plus. B88-105

SR. SECRETARY, Office of the Dean for Student Affairs, in the Carnegie-Sponsored Quality Education for Minorities Project which is a two-year national project that will develop strategies for improving the quality of education received by minorities, as well as for increasing the number of minority students completing each educational level from high school through post-doctoral studies. Responsibilities include coordinating with the Administrative Assistant and providing general secretarial support to the Project Director and Project Staff. Will respond to telephone and in-person inquiries; type major reports as well as routine documents; process travel documents, purchasing documents, and other routine forms; and assist with mailing and other office activities as needed. Requirements: strong secretarial and organizational skills as well as a minimum of 2.5 years of direct/related experience. Wordprocessing experience (Wordperfect) important. Must be accurate and pay close

attention to detail. Strong interpersonal skills essential. An interest in the goals of this national project highly desirable. B88-097

SR. SECRETARY, Laboratory for Nuclear Science (part-time; work schedule is anywhere from 25-35 hrs/wk), to be a group secretary for faculty, staff, and graduate students. Will type limited correspondence; prepare yearly budgetary material for contract agencies; prepare minutes of group meetings; coordinate travel arrangements; prepare travel vouchers; maintain preprint library; maintain stock of stationary supplies; reconcile monthly financial statements; and maintain database of addresses for sending preprints. Requirements: knowledge of word processing, preferably MASS11, and/or willingness to learn. A minimum of 2.5 years of direct/related experience necessary. Must be able to work independently and set priorities. B88-096

SR. SECRETARY, Physics Department, to provide secretarial support to faculty, postdocs, and visitors in the Condensed Matter Theory Group. Will type technical manuscripts, correspondence, and grant proposals; open and distribute mail; maintain office supplies; photocopy; answer telephones; handle travel arrangements; and perform other duties as requested. Requirements: excellent typing skills and a minimum of 2.5 years of direct/related experience. Should have the ability to work independently and assume responsibility for the office important. Knowledge of the Macintosh Apple Computer and Xerox Memorywriter 640 and/or willingness to learn essential. B88-040

SR. SECRETARY, Mechanical Engineering, to provide secretarial and administrative support for two faculty members. Duties include typing of technical reports, manuscripts, teaching material, and correspondence; arranging travel and meetings; maintaining accounting records, petty cash, and files; answering telephones; photocopying; distributing material; and interacting with faculty, students, and government funding research. Requirements: excellent technical typing and a minimum of 2.5 years of direct/related experience. Must be an efficient and responsible person who works independently and can set priorities as well as work under pressure. Attention to detail and accuracy important. Pleasant personality and good interpersonal relations valuable. Must have knowledge of basic accounting. MIT experience desirable. B88-001

SR. SECRETARY, Aeronautics and Astronautics, to perform full range of secretarial duties for five professors and laboratory staff. Duties include word processing, typing correspondence, class materials, and travel vouchers; maintaining files; and acting as a source of information on laboratory staff. Requirements: good typing skills and a minimum of 2.5 years of direct/related experience. Ability to organize tasks and set priorities necessary. Word processing and technical typing preferred. B87-569

SR. SECRETARY, Brain and Cognitive Sciences, to perform complex and diverse secretarial duties for several faculty members in the department. Responsibilities will include the preparing of teaching materials, manuscripts, proposals, and correspondence; coordinating of purchasing needs and travel arrangements; answering telephones; opening and directing mail; maintaining files and calendar; and other office management and maintenance tasks; performing special projects as assigned; and serving as liaison with administrative headquarters. Requirements: excellent secretarial, interpersonal, and organizational skills and a minimum of 2.5 years of direct/related experience. Must be willing to assume responsibility and work independently as well as part of a team. Ability to prioritize work effectively essential. Experience with wordprocessing desirable, and/or willingness to learn essential. Familiarity with microcomputers and operating systems (UNIX, MS-DOS) helpful. Department will consider applicants at the Administrative Secretary level depending on experience. B87-562

SR. SECRETARY, Civil Engineering, to support one Research Associate and one faculty member. Will use IBM PC to type correspondence, monthly reports, manuscripts, and class notes; maintain files; answer telephones; photocopy; handle large mailings; maintain accounts; coordinate meetings; and perform other related duties as assigned. Requirements: a minimum of 2.5 years of direct/related experience. Wordprocessing experience necessary. Knowledge of IBM PC desirable. Hours negotiable. B87-560

SR. STAFF ASSISTANT, Artificial Intelligence Laboratory, to perform general secretarial duties in support of 3 faculty members, one of whom is Associate Director of the Laboratory. Responsibilities include typing, proofreading, and editing; answering telephones; maintaining files on a computer system; handling mail and correspondence; initiating correspondence; arranging appointments, meetings, seminars, and site visits; assisting in all stages of proposal preparation; photocopying; library searches; ordering supplies and equipment; making complex travel arrangements; and occasionally assisting with orientation and training of new support staff. Requirements: high school diploma (or equivalent) and some college background may count toward experience. A minimum of 2.5 years of direct/related experience. Must be willing to learn computer text-editing and text-typesetting. Should enjoy working as part of a team both within the supervi-

ors' research groups and within the broader setting of the Laboratory. Must work well under pressure and with little supervision. Good writing and interpersonal skills a must. Flexibility important. B87-557

SR. SECRETARY, Biology, to work for a Biology faculty member and his research group. Will maintain financial records for research grants; order supplies for laboratory and office, and keep track of expenditures on a monthly basis; prepare grant applications, manuscripts, teaching materials, and correspondence, etc.; make travel arrangements; and perform other secretarial functions as needed. Requirements: minimum of 2.5 years of direct/related experience and ability to set priorities necessary. Should possess excellent organizational skills. Familiarity with personal computers (spreadsheet, wordprocessing software) preferred. B87-454

SR. SECRETARY, Mathematics, to support the Personnel Administrator, Administrative Officer and Department Head of the Mathematics Department Headquarters Office. Duties include extensive telephone coverage; answering questions and directing them to the proper individuals; maintaining inventory; handling general secretarial duties when requested; posting mail daily; and performing general receptionist duties for the whole department when needed. Requirements: excellent typing skills and technical typing with a minimum of 2.5 years direct/related experience. IBM PC experience desirable. Ability to establish priorities and work independently with good judgment and minimum supervision necessary. B87-323

SR. SECRETARY, Mechanical Engineering, to provide secretarial support to two faculty members. Duties include using DEC word processor; answering telephones; screening mail; preparing general correspondence; typing class notes, research reports and general correspondence. Requirements: good typing skills and a minimum 2.5 years direct/related experience. Technical typing desirable, as well as knowledge of DEC equipment or willingness to learn essential. B87-293

SR. SECRETARY, Media Lab, Visible Language Workshop, to provide secretarial support to Director and four staff members. Duties will include receiving visitors; answering phones; reviewing and sorting mail; answering general inquiries and composing standard correspondence. Will also maintain Director's schedule; arrange various meetings; make travel arrangements; help prepare and type research proposals, reports, and correspondence; proofread, edit, and format on computer system; xerox reports, handouts, and class notes; organize and maintain filing system; keep statistics for classes; monitor supplies; and prepare requisitions and vouchers for supervisor's approval. Requirements: good organizational, interpersonal, and communication skills and a minimum of 2.5 years of direct/related experience. Must be able to set priorities and work independently. Experience with and/or willingness to learn office computer systems for word processing, mail, and statistics required (especially Macintosh). Familiarity with MIT procedures desirable. Must be able to meet deadlines and keep track of varied activities in a busy environment. B87-230

SR. STAFF ASSISTANT, Nuclear Engineering, to support two professors and one senior research scientist. Will use IBM PC to prepare class notes, research reports, technical papers, and general correspondence from handwritten materials; handle telephone calls, appointments and travel arrangements; produce transparencies; prepare MIT accounting forms; and perform other duties related to faculty members' departmental administrative work. Will interact with both graduate and undergraduate students. Requirements: good typing skills and a minimum of 2.5 years of direct/related experience. Experience typing equations preferred, as is experience with a personal computer. Knowledge of T³ desirable. Strong communication skills important. B87-010

SR. SECRETARY, Fiscal Planning and Budget Office, to support nine staff members. Will answer phone and greet visitors; type all correspondence and statistical tables using either personal computer or typewriter; maintain and order office supplies; act as key operator for photocopier; assist in arranging meetings and office functions; photocopy, log budget changes, file, mail budget authorizations; and perform other related duties as required. Requirements: good typing skills, including statistical typing, and a minimum of 2.5 years of direct/related experience. Ability to use dictaphone necessary. Must have strong organizational skills and a pleasant phone manner. B87-943

SR. SECRETARY, Laboratory for Information and Decision Systems, to support one senior faculty member and two senior research staff members. Will prepare and type course materials, articles for publication, proposals, correspondence and technical reports; keep and maintain student records; arrange international and domestic travel; make extensive conference arrangements; and act as liaison with all levels of faculty and staff. Good typing skills, including some technical typing, and minimum 2.5 years direct/related experience required. Experience with or willingness to learn technical word processing on an IBM PC necessary. Must have good attention to detail and work well independently. Good knowledge of Institute procedures very helpful. B86-583

SR. SECRETARY, Undergraduate Academic Support, Office of the Dean for Student Affairs, to support section head in exercising overall management of the office, and to support the freshman advising program, the research efforts of the office and the new special freshmen initiatives. Position involves interaction with the MIT community, both in person and by telephone. Requirements: excellent typing skills, familiarity with or willingness to learn word processing and a minimum of 2.5 years of direct/related experience. Familiarity with MIT helpful. Excellent interpersonal and organizational skills essential. **B86-450**

SECRETARY, Mechanical Engineering, to provide secretarial assistance in a two-secretary environment for four full-time faculty members. Duties include screening telephone calls; interacting with students and faculty; dictaphone transcription using engineering terms; extensive photocopying; preparing teaching materials with classtime deadlines; arranging complete travel itineraries and scheduling multi-person meetings; and handling mail. Requirements: excellent typing skills, a willingness to learn, as well as a minimum of one year of direct/related experience. Ability to meet deadlines important. Technical typing desirable. Wordprocessing skills on Volkswriter III Deluxe, and PC Text desirable. **B88-186**

SECRETARY, Haystack Observatory, to type technical manuscripts; correspondence and grant proposals; open mail; maintain petty cash; order office supplies; photocopy; answer telephones; send out reprints; arrange travel; and perform other related duties as necessary. Requirements: good typing skills and a minimum of 2.5 years of direct/related experience. Word processing experience important. (This position is located in Westford, Ma.) **B88-175**

SECRETARY, Provost/Upward Bound, to function as Program Secretary and perform a variety of functions. Responsibilities include typing all Program correspondence; handling office mail and telephones; processing voucher payrolls; maintaining files; ordering office supplies; and operating office equipment. Upward Bound is a co-educational, multi-racial, multi-ethnic college-prep program serving 70 high school students from the Cambridge area. The primary goal of the program is to motivate participants to develop both the necessary skills for academic success and the persistence to progress to college. Requirements: must be able to work with adolescents and people of varied ethnic, cultural, and racial backgrounds. Typing (40 wpm) and at least one year of direct/related experience important. A valid Massachusetts drivers license necessary. Own transportation helpful but not required. During the summer session (7 weeks) the individual must be willing either to commute to Wellesley College or reside there 5 days per week. Must be willing to work flexible hours on occasion which might include evenings and/or weekends. **B88-157**

TECHNICAL SUPPORT STAFF

PHLEBOTOMIST/TECHNICAL ASSISTANT, Medical Department, to draw blood samples from patients in the Clinical Laboratory Service and the Inpatient Service. Responsible for accurate collection procedures and ensuring that patient has observed any necessary restrictions before blood is drawn; instruct patients in the proper method of collecting other specimens; interact with patients while making sure all are comfortable; answer telephones; and assist with all clerical tasks and perform other duties as necessary. Requirements: a high school diploma and at least two years' phlebotomy experience in a recognized hospital or clinical laboratory important. **T88-190**

TECHNICAL ASSISTANT/WORDPROCESSOR, Center for Real Estate Development, to maintain the Center's information systems, files, records, and data systems under the supervision of the Administrative Officer. Will type and proofread reports, manuscripts, correspondence, and similar material from rough draft, dictaphone and/or direct instructions; assist in maintaining the Center's computer facilities including the rendering of technical assistance; provide back-up support in answering telephones; reproduce printer materials; and bulk mailing and distribution of printed material. Requirements: a minimum of 2.5 years of relevant experience, accurate typing (60 wpm) and proficiency with wordprocessing. Operating knowledge of IBM/PC II hardware systems and HP Laserjet printer important. Familiarity with Wordstar, Dbase III, Symphony, and Lotus 1-2-3 necessary. Should be articulate and capable of getting along with others. Ability to prioritize work and take direction essential. **T88-042**

TECHNICAL ASSISTANT, Medical Department, to perform a variety of routine laboratory tests under the supervision of a medical technologist in hematology, chemistry, bacteriology, urinalysis, and serology. Will draw blood samples from patients; plant bacteriological cultures; process specimens as needed; and perform other tasks as directed. Requirements: high school diploma and at least one year's experience as a registered MLT (ASCP) or CLA (ASCP) in a recognized hospital or clinical laboratory necessary. **T87-486**

TECHNICAL ASSISTANT, Medical Department, to perform a variety of laboratory tests, many of which are complex and require professional judgment in hematology, chemistry, bacteriology, urinalysis, and

serology. Responsible for producing prompt, accurate test results and meeting established quality control standards; must recognize the interdependency of tests and the conditions that affect test results; draw blood samples from patients; process specimens as needed; perform preventive maintenance on equipment; and other tasks as directed. Requirements: bachelor's degree in medical technology or related field necessary. At least one year's experience as a registered MT (ASCP) in a recognized hospital or clinical laboratory essential. **T87-485**

HVAC DESIGNER/DRAFTSPERSON, Physical Plant, to work in the utilities engineering section. Will make load calculations, design HVAC systems and carry design through the drafting stage. Requirements: graduation from technical school and a minimum of five years of experience in the mechanical designer drafting field. Must be able to work with minimal supervision. **T86-837**

LIBRARY STAFF

LIBRARY ASSISTANT III, The Libraries - The Retrospective Collection (part-time, 17.5 hrs/wk), to perform circulation routines and a variety of office functions. Will receive requests via telephone for materials, retrieve materials from shelves, charge, and discharge materials using both automated and manual circulation procedures; renew materials, collect statistics, and assist on-site library patrons. Will perform general stacking routines: collect materials from tables and book-trucks, sort and reshelve materials, shelf-read, and search for missing items. Requirements: a minimum of one year direct/related experience; post high school education can count toward experience. Familiarity with keyboard and a PC desirable. Ability to organize a variety of tasks and duties necessary. Punctuality and regular attendance essential. Physical stamina needed for stacking duties important. (The hours for this position are 9:00 a.m. to 12:30 p.m., Mon. through Fri.) **L88-164**

LIBRARY ASSISTANT III, Catalogue Department - LC Cataloguing/Retrospective Conversion Section (part-time, 17.5 hrs/wk), to process monograph records to be converted from manual to machine-readable form. Responsibilities include maintaining files of records to be converted (charge cards); photocopying Union shelflist cards; organizing photocopies in preparation for conversion; maintaining files of printouts of converted records; mailing barcode labels with bibliographic information to Divisional/Branch Libraries; and compiling conversion backlog statistics. Also, responsible for pre-cataloguing searching, both online and offline, for materials to be recatalogued/reclassified; and performs auxiliary assignments such as filing and typing. Requirements: a high school graduate and/or minimum one year of direct/related experience. Accurate typing (40 wpm) and experience using PC terminal desirable. Attention to detail essential. (The hours are Mon. through Fri., 9:00 a.m. to 12:30 p.m. - negotiable.) **L88-144**

LIBRARY ASSISTANT III, Libraries-Hayden Circulation (part-time), to perform various shelving, patrolling, and office tasks as needed. Duties include shelving library materials. Maintenance and control of current periodicals in Humanities, newspapers in basement, and indexes and abstracts in Science; monitor user activity on all floors of the library; enforce no eating, drinking, or smoking policy; keep statistics such as head-counts and items picked up during shelving; respond to urgent need of repairs; possibility of being trained for follow-up of GEAC related routines, with total involvement with all GEAC functions, including charging, discharging, recalling, renewing, placing holds, etc., and other related duties as assigned. Requirements: minimum one year direct/related experience. Post high school education can count toward experience. Ability to work independently important. Should be able to work with a variety of people. The hours for both these jobs are 11:30 p.m. to 8:00 a.m. (One job is 24 hrs/wk, Sun. through Tues.) **L88-318** (The other job is 32 hrs/wk, Wed. through Sat.) **L88-317**

OFFICE ASSISTANT/ADMINISTRATIVE ASSISTANT

ADMINISTRATIVE ASSISTANT, Department of Electrical Engineering and Computer Science. Will perform administrative and secretarial duties for the Department head in coordination with other secretaries and staff. Primary responsibilities include preparation for Department Personnel Committee and other committee meetings; coordination of faculty meetings and student functions; support faculty promotion and tenure cases; perform word-processing of papers, reports, and lecture materials; make calendar appointments and travel arrangements; respond to nonroutine mail and/or telephone requests; maintain confidential files; and provide back up coverage of headquarters telephone and reception duties. Requirements: a minimum of 4.5 years of direct/related experience and ability to set priorities. Discretion and attention to detail highly desirable. A willingness to share secretarial workload important. Good typing skills necessary. **S88-178**

ACCOUNTING ASSISTANT, Center for Materials Science and Engineering, to assist in a variety of accounting related functions. Duties include calculating and processing journal vouchers, as well as responding to departmental inquiries and follow ups;

relating packing slips to purchase orders and paying invoices, and correcting purchase order commitments; processing travel advances and vouchers; reconciling central facility and research accounting statements; and processing the reimbursement and reconciliation of all petty cash slips. Requirements: a general business education and/or a minimum of 2.5 years of direct/related experience. Experience in database management and wordprocessing desirable. Must be able to communicate effectively with a variety of people and work well as a team member. **S88-167**

ADMINISTRATIVE ASSISTANT (Research Analyst), Resource Development - Office of Campaign Systems, to identify, research, and prepare profile reports on prospective individual, corporate, and foundation donors to the Institute. Will review lists of major prospects and donors; compile background material on prospects using files, references, and electronic databases; and provide administrative support to the daily operations of the Campaign Systems Group. Requirements: minimum of 4.5 years of direct/related experience; college degree desired; higher education will count toward experience. Strong research, writing, and organizational skills necessary. Ability to interact well with others, meet deadlines, and work well under pressure important. Familiarity with computers and databases and/or an interest in learning preferred. Must have strong devotion to accuracy and excellent judgment. **S88-174, S88-173**

ADMINISTRATIVE ASSISTANT, Earth, Atmospheric and Planetary Sciences, to manage office and handle administrative tasks for 5 Professors and 1 Senior Research Scientist, and their research staff and students. Will oversee preparation and submission of research proposals; and responsible for management of several research grants and contracts which will entail budget forecasting, salary allocation, and monitoring of monthly statements. Will act as liaison with Department Headquarters with regard to items such as personnel, space allocations, graduate student support, etc., and with OSP on contract and accounting. Will also handle a large volume of extremely complex foreign and domestic travel arrangements involving detailed accounting. Requirements: minimum of 4.5 years of direct/related experience and outstanding office skills. Must be detail-oriented and have facility with numbers. Must be able to take initiative, work independently, set own priorities and follow through, anticipate problems, and interact well with others. Familiarity with Macintosh personal computer and spreadsheets helpful. Knowledge of agency regulations desirable and knowledge of MIT systems helpful. **S88-169**

ADMINISTRATIVE ASSISTANT, Electrical Engineering and Computer Science, to assist the Graduate Officer and Graduate Office Administrator in the processing of more than 1,800 applications to graduate school in the EECS Department. Will maintain an on-line applicant database and a word-processing system for correspondence and will also respond to inquiries regarding the application process, status of application, notification of action taken, financial aid decisions, research interests of department faculty, as well as referring calls to appropriate Institute faculty. Will also provide secretarial support to the Chairman and the Secretary of the Committee on Graduate Students, the Committee on Graduate Admissions and Fellowships, and the Committee on Lifelong Education; and aid in the preparation of the Department Graduate Office brochure, lists of faculty and their research areas, and other Graduate Office literature. Requirements: minimum of 4.5 years of direct/related experience and accurate typing skills. Considerable amount of computer interaction necessary. Ability to convey negative as well as positive decisions to applicants with a degree of understanding and skill important. **S88-165**

ADMINISTRATIVE ASSISTANT, Technology Licensing Office, in the Software Center and Trademark Licensing Program. Duties include responding to inquiries from potential and current licensees; administering and collecting financial data; compiling and maintaining promotional material concerning available software; handling overall responsibility for two software packages; and participating in some negotiation of license agreements. Requirements: minimum of 4.5 years of direct/related experience; high school education or equivalent. Knowledge of PC operations, including Lotus 1-2-3 desirable. **S88-162**

JUNIOR PROGRAMMER V, Alumni Association, to assist with data-processing needs with emphasis on production control and programming. Duties will include inputting and maintaining a new on-line production scheduler; converting to Natural 2, downloading to Mac and IBM/XT; maintaining Natural applications and programs; and modifying current EXEC2 to REXX. Requirements: minimum of 1.5 years REXX, CMS and CMSBATCH experience. Natural 1.2 or 2 a plus. Knowledge of VMLIB helpful. Good interpersonal, organizational, written, and oral communication skills necessary. **S88-170**

ADMINISTRATIVE ASSISTANT, Office of the Dean for Student Affairs (part-time, Mon. through Fri., 1:00 p.m. to 4:00 p.m.), to provide secretarial and administrative support to the Graduate Student Council. Will coordinate and implement fall and spring graduate orientation, including compiling and editing The Graduate Orientation Handbook; coordinate nominations and interviews for graduate seats

on Institute committees; serve as contact and resource person regarding graduate activities and issues of concern to graduate students for departments and graduate living groups; act as resource for graduate activities (financial planning, and space resources, etc.); provide "continuity" to the GSC by coordinating communication between various departments; process all purchasing transactions; review monthly accounting statements and compare actual expenses with budgets; and perform other duties as requested. Requirements: ability to work well without supervision and set own priorities with a minimum of 4.5 years of direct/related experience. Must have excellent interpersonal and interactive skills. Typing (60-65 wpm) and knowledge of word-processing preferred. **S88-159**

ADMINISTRATIVE ASSISTANT, Leaders for Manufacturing, to provide complex and diverse secretarial and administrative support to the faculty co-directors and manager. This is a new program funded jointly by the Schools of Engineering and Management in cooperation with industry, and it is a research and education program aimed at discovering the principles for competitive manufacturing in the international marketplace. Will handle complex travel, appointments, teaching schedules, and meeting arrangements; typing and filing, and performing office management and maintenance tasks; responding to mail and telephone inquiries; and maintaining communications among program participants. Requirements: a minimum of 4.5 years of direct/related experience with good editorial and computer/wordprocessing skills. Must have excellent communications and interpersonal skills. Good organizational skills and ability to set priorities essential. Must be flexible. **S88-152**

ADMINISTRATIVE ASSISTANT, Linguistics and Philosophy and Center for Cognitive Science (50% time each) to work in a two person Department headquarters office. Duties are to assist administrative officer in financial matters including approving invoices and travel vouchers; processing purchase orders; reconciling monthly statements; monitoring research grants; projecting expenditures; supervising student payroll; and contacting outside vendors. Will assist linguistics chair with visitor selection process and share duties such as answering telephones, photocopying; processing mail; assisting visitors; maintaining equipment inventory; and coordinating moves and space changes. Requirements: strong interpersonal and organizational skills and a minimum of 4.5 years of direct/related experience. Ability to interact well with others essential. Must have mature judgment and tact. Attention to detail important. Ability to work with frequent interruptions necessary. Personal computer and spreadsheet software experience essential. **S88-150**

ADMINISTRATIVE ASSISTANT, Aga Khan Program for Islamic Architecture/Design for Islamic Societies Unit, to act as an assistant to the Professor and as a support assistant to other members of the academic staff. Will control and be responsible for all office correspondence, incoming and outgoing; receive visitors, and respond to inquiries by telephone or in person; prepare programs and research papers by wordprocessor; arrange seminars, lectures, and social events; and act as a liaison with the central office of the Aga Khan Program. Requirements: a minimum of 4.5 years of direct/related experience as well as typing/word processing on Macintosh and DEC. Must be mature and able to work well under pressure. Good intercultural communication skills and willingness to support foreign students and visitors important. Ability to work well as a team necessary. Must have good organizational skills. MIT experience preferred. **S88-140**

ADMINISTRATIVE ASSISTANT, Mechanical Engineering, to perform complex secretarial and administrative duties for the Director of the Cryogenic Lab. Responsibilities include providing support to ensure the fiscal integrity of the Lab, and monitoring expenditures and monthly reconciliation of accounting statements; reviewing mail; processing weekly time-cards for hourly personnel; preparing letters, proposals, and similar documents; and performing other related duties when necessary. Requirements: a minimum of 4.5 years of direct/related experience and ability to work independently. Well organized, good judgement, and detail oriented important. Experience with word-processor and/or computer necessary. Must be able to work with many interruptions, and be self motivated. **S88-120**

ADMINISTRATIVE ASSISTANT, School of Architecture and Planning, Dean's Office, to perform a variety of office procedures. Will type and proofread correspondence, reports, proposals, and communications materials from draft or Dictaphone; make editorial changes for style, spelling, grammar, consistency, and clarity; check accuracy of content; inquire about prices and arrangements with Graphic Arts and outside suppliers; know formats and reproduction methods for a whole range of fundraising and communications materials; gather information by computer and library research; carry out research in MIT Development Office and act as liaison with Resource Development area; review databases; retrieve files; request Nexus and Dialog searches; show imagination and initiative in discovering and locating material; assemble data for reports, correspondence, and publications; compile, edit, and manage production of monthly events calendar. Requirements: a minimum

of 4.5 years of direct/related experience. Previous editorial secretary/assistant experience necessary. S88-119

ADMINISTRATIVE ASSISTANT/Carnegie Sponsored Quality Education for Minorities (QEM) Project, Office of the Dean for Student Affairs, to develop strategies for improving the quality of education received by minorities, as well as for increasing the number of minority students completing each educational level from high school through post-doctoral studies. Responsibilities include managing the day-to-day operation of the Project office and providing administrative and secretarial support to the Executive Director and Project staff; responding to all telephone and in-person inquiries; typing major reports as well as routine documents; coordinating all arrangements for national conferences and meetings; processing requisitions, vouchers, and purchase orders; reconciling monthly financial statements; and coordinating other projects as requested. Requirements: a bachelor's degree or equivalent combination of education and experience. At least five years experience in administration of MIT administrative procedures highly desirable. Knowledge of computer systems and software, especially wordprocessing important. Excellent written and oral communication skills necessary. Attention to detail, and a highly developed sense of diplomacy essential. S88-057

ADMINISTRATIVE ASSISTANT, Physics Department, to assist the Administrative Officer and Personnel Officer by providing support on financial matters. Responsibilities include the preparing of departmental reports and statistical summaries; coordinating departmental seminars and institute related activities including weekly faculty teas and colloquia; maintaining accounting files and comparing monthly statements with invoices and receipts; and performing other administrative, financial, secretarial, and clerical duties as necessary to support the departments' activities. Requirements: BA/BS degree and at least 3 years of office direct/related experience. Knowledge of accounting and familiarity with an IBM/PC a plus. S88-006

SR. OFFICE ASSISTANT, Resource Development, to perform various secretarial, clerical, and data processing duties for Fiscal Officer and Assistant to the Vice President for Information Systems in the Office of the Vice President and Treasurer. Will maintain computer database; maintain accurate filing system for open and closed orders and all travel vouchers; verify monthly statements; and perform other related duties as needed. Requirements: a minimum of one year of direct/related experience as well as good interpersonal, communication, and organizational skills. Knowledge of IBM AT/XT, Lotus 1-2-3 or spreadsheet packages helpful. Accuracy and attention to detail important. S88-180

SR. OFFICE ASSISTANT, Resource Development, to perform a wide-range of secretarial, clerical, and data-processing duties for the Office of Development Information Management Services. Duties include answering/screening telephone calls; typing memoranda, letters, and documentation updates; scheduling of meetings; filing; photocopying; performing of courier duties; maintaining PC database records and wordprocessing lists; editing; assisting in the verification and collation of database reports and system manuals; and responding to department database users' questions and information needs. Requirements: a minimum of one year of direct/related experience with some college or post high school education. Must have good typing skills. Knowledge of IBM pc wordprocessing and database software helpful, and/or willingness to learn. Some knowledge of the IBM CMS environment and NATURAL programming helpful, and/or willingness to learn. Accuracy and attention to detail essential. Good interpersonal, written communication, and organizational skills necessary. Ability to set priorities important. S88-179

SR. OFFICE ASSISTANT, The Libraries - Administrative Services, to process manually and by computer all book, serial, equipment, and supply, etc. invoices for submission to the MIT Accounting Office for payment. This includes learning a moderately complex accounting system, telephone, and personal contact with the Accounting Office, library employees and vendors to solve invoice related problems; inputting daily book and serial orders into computerized commitment program generating a monthly report; monitoring commitments vs. budget and informing appropriate person when overcommitments occur; maintaining binding expenditures for input into commitment report; processing monthly online ready reference invoices, preparing transfer vouchers and computerized monthly report; and creating and maintaining invoice files. Requirements: a high school graduate or equivalent. Some college background preferred. A minimum of 2.5 years of direct/related experience. IBM pc and Lotus 123 experience preferred. Some accounting experience desirable. S88-177

SR. OFFICE ASSISTANT, Housing and Food Services, to perform a variety of functions under the supervision of the Manager of Maintenance. Duties include preparation and typing of contracts, specifications, work orders and correspondence; enter and maintain computerized key program; handle telephone inquiries and schedule meetings; provide information on procedures within maintenance area; inter-

act with various departments; and perform other clerical duties as necessary. Requirements: high school graduate and/or equivalent with a minimum of 2.5 years of direct/related experience. Good typing skills (60 wpm) and ability to handle detail and follow moderately complex instructions important. Proficiency with wordprocessor and PC necessary. (The hours for this position are 7:30 a.m. - 3:30 p.m.). S88-156

A/R - COMPUTER OPERATOR/SR. OFFICE ASSISTANT, MIT Press, to perform a variety of office functions. Will run, log, and troubleshoot daily, weekly, and monthly invoices; box invoices and give to proper personnel; file invoices in numeric order; set up end of Day Spooling Programs; back up system daily; maintain hardware in Computer Room; fill in for Head Computer Operator when needed. Accounts Receivable: apply cash to all domestic and foreign accounts; update all inhouse manual files/after payments; total daily cash applied and check cash against End of Day Cash Receipts Reports; keep logs of daily cash slips and total daily cash applied; transfer all A/R information from old to new accounts; write off and adjust accounts when requested by Credit Manager; correspond with a variety of people and departments; assist in opening daily mail; and be a backup for Mail Room when needed. Requirements: a high school or business school graduate preferred with at least one year of direct/related experience. Some computer operator experience very helpful. Accounts Receivable experience desirable (10 key adding machine). Accurate typing (minimum 40 wpm) necessary. CRT experience desirable. Must be able to work overtime on weekends and whenever necessary. (The hours for this position are 11:00 a.m. to 7:00 p.m.). S88-154

SR. OFFICE ASSISTANT, Media Laboratory, to perform a variety of office functions. Responsibilities include sorting and prioritizing mail; drafting routine correspondence; following up on requests for information and materials about the group; serving as a source of information for the public; scheduling and arranging meetings and conferences; preparing travel advances and travel vouchers; and preparing supply requisitions and other purchasing forms. Will also be responsible for LOGO Memos publications, including correspondence, distribution, production and supplies; maintaining and operating office equipment, supplies and machinery; screening telephone calls and responding to inquiries; photocopying; and organizing and maintaining office files and supplies. Requirements: a high school graduate and 2.5 years of direct/related experience. Post high school education will count towards experience. Excellent interpersonal skills necessary. Ability to handle complex duties important. Typing (40 wpm) and wordprocessing experience essential. Some experience on the Macintosh computer helpful. S88-149

SR. OFFICE ASSISTANT/SR. SECRETARY, Center for International Studies, to support the Director and Program Coordinator of the MIT-Japan Science and Technology Program. Will type correspondence; assist callers and visitors; disseminate information about the program to sponsors and the public; update an extensive mailing list; arrange meetings and dinners; coordinate the working paper series; maintain files and equipment; and purchase supplies and services. Requirements: a minimum of 2.5 years of direct/related experience, post high school education will count toward experience. Good communication skills, accurate typing, and the ability to work independently essential. IBM/Wordperfect or DEC experience preferred. S88-117

SR. OFFICE ASSISTANT, Alumni Association-MIT Enterprise Form (part-time, 20 hrs/wk), to prepare monthly newsletter from prepared documents and advertisements, assuring proper format and accuracy as well as publication schedules. Will edit documentation as necessary and interface with printer for publication, mailing, and delivery; assist with the editorial/logistic preparations (including audio-visual and other requirements for meetings, seminars, and conferences throughout the year); independently respond to routine inquiries received by telephone and/or letter, refer inquiries to proper resource; maintain accurate office records and reports; prepare meeting announcements, letters, notices, and other reports as necessary. Requirements: some college experience and ability to type (50 wpm), and fluently use Macintosh SE, especially wordprocessing packages essential. A minimum of 2.5 years of direct/related experience (post high school education counts toward experience) important. S88-055

MEDICAL ASSISTANT, (First Floor/Float) Medical Department, to work in the Clinical Area including Trauma/Triage, Off-Hours Service and Orthopedics. Responsibilities include stocking, ordering, organizing, and maintaining supplies; maintenance of sterile supplies to include cleaning and preparing instruments; preparing patients for examinations and/or chaperoning during exam; and provide medical assistance as requested. Requirements: high school graduate, with one year Medical Assisting experience necessary. Graduate of formal Medical Assistant Program preferred. S88-046

SR. OFFICE ASSISTANT, Mathematics Department (part-time, 25 hrs/wk), to provide information to students and Department faculty. Duties include answering telephones and helping to maintain informational sources; ordering textbooks and overseeing copyright compliance; assisting with projects and multi-sectioned subjects; keeping track of

grades and student flow among recitation sections; and helping with exam administration. Requirements: a minimum of 2.5 years of direct/related experience and some light typing. Must be accurate, detail oriented, and be able to deal with a variety of people. Some computer experience helpful. S88-021

SR. OFFICE ASSISTANT, Graphic Arts Service, to do all accounts payable functions and related clerical duties. Must have a thorough knowledge of accounts payable functions and procedures (invoice, pricing, accounts, etc.). Requirements: accounting or business school graduate and/or a minimum of 2.5 years of direct/related experience. Must have good arithmetic skills and be interested in working with figures. Must be able to operate office calculators. Ability to deal with a variety of people directly and/or by telephone essential. Will be required to work overtime when applicable. S87-516

SR. OFFICE ASSISTANT, Alumni Association, to work with other reunion gift program staff by providing clerical and secretarial assistance. Contact will be with alumni volunteers, Treasurer's Office, Campaign for the future offices, and with other Alumni Association offices. Responsibilities will be to assist Coordinator for General Gifts Solicitation on class direct mail solicitations and telethons; perform reception duties which includes extensive alumni contact by phone and in person; maintain inventory on specific reunion gift supplies, e.g. class stationery, pledge cards, etc.; perform routine filing and record keeping; prepare routine mailings to committees and class members; and assist with preparations for gift committee meetings. Requirements: good typing skills and a minimum of 2.5 years of direct/related experience. Excellent interpersonal and organizational skills necessary. Ability to handle multiple tasks important. Wordprocessing experience desirable. Experience on the Macintosh preferred. Knowledge of English grammar important. S87-513

SR. OFFICE ASSISTANT TO THE UNDERGRADUATE ASSOCIATION, Office of the Dean for Student Affairs (10-month position, September-June), to provide clerical and organizational support to the Undergraduate Association (UA). Will coordinate the operation of the UA Office and the Association of Student Activities and serve as primary source of information for data relevant to all student organizations and activities on campus. Requirements: good typing skills (50 wpm), high school graduate or equivalent, and a minimum of 2.5 years of direct/related experience; post high school education will count toward experience. Ability to work under pressure and deal effectively with people in an environment which requires some independent judgment necessary. S87-248

SR. OFFICE ASSISTANT, Purchasing and Stores, Office of Laboratory Supplies, to do the processing and expediting of personal computer orders from the Micro-computer Center that includes preparation of paperwork, depositing of checks, and entry of orders into computer system. Will also communicate with the MCC and OLS warehouse regarding the status of orders into and the resolution of related problems; process cylinder invoices; match vendor packing slips with purchase orders; enter P.O.'s, requisitions and packing slips information into Cylinder Control & Billing System; contact vendors regarding invoice/packing slip discrepancies; contact MIT users in confirming inventory and status of cylinders and resolution of differences relating to the Cylinder Control & Billing System; maintain and update assigned records and files; and perform other duties as assigned. Requirements: high school diploma or equivalent required; some college desirable. Good typing skills (40 wpm) necessary and a minimum of 2.5 years of direct/related experience in one or more of the following areas: purchasing, expediting, and customer service. Strong communications skills, both written and verbal, helpful. Experience with word processors/personal computers preferred. S87-112

OFFICE ASSISTANT, The Libraries, Microreproduction Laboratory, to perform the following tasks under the supervision of the Business Manager. Will receive requests on the telephone and at the counter and process them accordingly. This includes answering inquiries and discussing available services with Laboratory users; compute the costs of requests; prepare invoices for submission to the Accounting Department; respond to routine written inquiries; tabulate various statistics; and enter and proofread data in a computer microfiche titling system. Requirements: a minimum of one year of direct/related experience as well as a good personality and command of the English language. Must be able to set priorities and allocate time effectively. Accurate typing necessary. Acquaintance with basic accounting procedures desirable. Punctuality and regular attendance important. High school diploma or equivalent necessary. Post high school education may count toward experience. S88-189

OFFICE ASSISTANT - CUSTOMER SERVICE REPRESENTATIVE, Credit Union (part-time, preferably 25 hrs/wk), to input transactions via a CRT (terminal) i.e. share deposits, share withdrawals, and inquiries of accounts. Will issue share receipts, checks and print-outs of account inquiries; and impart Credit Union rules and regulations to current and potential members. Requirements: a minimum of one year of direct/related experience. Knowledge of CRT (terminal) helpful. A facility with figures and ability to use an adding machine important. Must interact well with others both in person and on the

telephone. Prior experience in a financial institution desired. (The hours for this position are 9:30 a.m. to 2:30 p.m.) S88-145

OFFICE ASSISTANT, Physical Plant, Superintendent's Office, to work within the Purchasing section of the department. Primary duties consist of reviewing purchase order requisitions for accuracy and completeness; typing purchase orders; mailing same to vendors; distributing associated copies to pertinent parties; maintaining purchase order log; correcting error reports; and doing general filing and other related activities. Requirements: business training or minimum of one year experience and good typing skills. Must be highly service orientated and personable in dealing with departmental personnel as required. S88-172, S88-163

OFFICE ASSISTANT - CUSTOMER SERVICE REPRESENTATIVE, Credit Union (part-time, 25 hrs/wk), to perform a variety of office duties. Will input transaction via a CRT terminal; i.e. share deposits, share withdrawals, and inquiries of accounts. Will issue share receipts, checks, and print-outs of account inquiries; impart Credit Union rules and regulations to current and potential members. Requirements: a minimum of one year of direct/related experience. Knowledge of CRT (terminal) important. Familiarity with figures and ability to use an adding machine necessary. Must be able to interact well with a variety of people both in person and on the telephone essential. Prior experience in a financial institution desirable. (The hours are Mon. through Fri., 9:30 a.m. to 2:30 p.m.) S88-146, S88-145

SR. DATA ENTRY OPERATOR, Comptroller's Accounting Office, to do data entry of all accounting systems input, including payroll. Must be able to maintain batch balance and verify all data; create magnetic tapes for computer processing and retrieve data from tape to update or correct data; work overtime during holiday periods and emergency situations; and perform other various duties as necessary. Requirements: a high school diploma with two to three years of data entry experience. S88-123

RECEPTIONIST, Naval Science, to perform secretarial and various office duties. Will answer telephones and receive visitors; type correspondence; maintain files; and process mail. Requirements: a high school graduate and/or secretarial school and/or one year direct/related experience. Good typing skills (50 wpm) essential. S88-106

OFFICE ASSISTANT, Medical Department, to work in Record Services and perform a variety of office procedures. Responsibilities include pulling and filing medical records from telephone requests and written order slips; dispatching records; maintaining patient index file; and performing special projects as requested. Requirements: good communication skills and ability to work in a team setting. A minimum of one year of direct/related experience, and able to work under pressure essential. Considerable physical strength is required to lift boxes and push heavy carts. Must be able to stand on feet all day. (May be required to work morning and evening shifts). S88-035

OFFICE ASSISTANT, System Dynamics Group, Sloan School of Management, to work with other support staff to support the work of faculty and research staff. Responsibilities include managing petty cash; paying bills and purchasing supplies; submitting requisitions to generate purchase orders; submitting travel reimbursements; monitoring student phone log and billing them for calls; and monitoring Laserwriter usage and billing for pages produced. Will also type and create graphics on the Macintosh computer (no experience necessary); manage lending of computer equipment; schedule conference room reservations; manage document files; manage and maintain reprint library; have postage meter filled at Post Office; bill other groups for postage use; answer phones; order supplies; act as xerox key operator; manage software and manuals library; bill staff for phone and xerox usage; and assist staff in preparation of large seminars held about 5 times each year. Requirements: high school graduate or equivalent. Flexibility and eagerness to learn important. Previous office experience (1-2 years) preferred. Good typing skills (40 wpm) and ability to use calculator helpful. S87-526

SERVICE ASSISTANT, Earth, Atmospheric and Planetary Sciences, (academic year only position, with 4 hrs/week or every other week usually on Thursday) to purchase, set up and cleanup a cold, picnic style lunch for a faculty meeting. Requirements: a minimum of one year of direct/related experience. Must have driver's license or effective means of transporting food essential. Must be reliable and available on Thursdays. S87-422

OFFICE ASSISTANT/SECRETARY, Student Financial Aid Office, to perform secretarial duties in support of the Director. Will type memos, letters, and reports from rough draft using a Macintosh; preprocess the student payroll each week; take job descriptions from employers and post on bulletin boards; reply to employment verification requests; monitor the College Work Study Program; maintain Student Employment Office files; and be prepared to take on administrative and clerical responsibilities stemming from Student Employment programs. Requirements: good, accurate typing (45-55 wpm) and a minimum of one to two years of direct/related experience. Basic

writing, oral, and arithmetical skills necessary. Good organizational and communication skills important. Must be able to work well under pressure and with constant interruptions. Ability to establish priorities and to be flexible helpful. S87-184

SERVICE ASSISTANT, Earth, Atmospheric and Planetary Sciences (part-time, 12 - 15 hours/week; September through May), to prepare and clean up for daily tea hour. Will order tea supplies, maintain kitchen facility and help set up faculty luncheon. Will occasionally do errands for headquarters. Requirements: valid driver's license. Must be reliable. S87-901

ADMINISTRATIVE AND ACADEMIC STAFF

SR. STAFF ASSOCIATE, Office of the Dean for Student Affairs, to administer programs and produce publications for the Undergraduate Academic Support (UAS) Section, with primary responsibilities involving Independent Activities Period (IAP). Will help develop and publicize educational and community service opportunities for undergraduates during January; define, research, write, edit, design, and oversee production of publications for IAP and other UAS programs, including the Freshman Handbook and publications for incoming students, and promotional material for the Wellesley-MIT Exchange Program; oversee day-to-day operations for IAP and the Exchange; serve as consultant to other staff in the Office on the preparation and production of publications; counsel students, faculty, and administrators regarding participation in IAP and other UAS programs. Requirements: a bachelor's degree or equivalent combination of experience and education. Two to five years of writing, editorial, and production experience, with proven ability to meet deadlines, and administrative experience, preferably in a university or college environment. Familiarity with desktop publishing on the IBM pc a plus. Strong communication, organizational, and interpersonal skills important. Some experience in training and directing other staff preferred. A88-066

ASSISTANT DIRECTOR, Office of Career Development, Sloan School of Management Placement Office, to provide career planning and placement services to 400 master's level management students. Office hosts 160 recruiting companies annually with 70 firms making presentations in the fall. Candidate will manage all aspects of on-campus recruiting program; promote Sloan School students to employers; supervise recruiting assistant, resume book production and serve as primary office representative in Director's absence. Requirements: a master's degree or equivalent and several years of relevant work experience. Direct experience in corporate/college relations highly desirable. Familiarity with business careers, MBA employers, and career planning desirable. Excellent organizational/interpersonal skills and experience in administrative systems/information management essential. Effective communicator with ability to work successfully with senior level executives and MIT staff, faculty, alumni, and students necessary. Supervisory skills important. Working familiarity with wordprocessors/personal computers and willingness to work overtime, especially during recruiting season, necessary. A88-065

LIBRARIAN II, The Libraries, to serve as principal staff assistant to the Director of Libraries and work closely with him and the four Associate Directors in planning, fund raising, external relations, publications, and publicity. Responsibilities include editing faculty and staff newsletters; writing grant proposals, fund raising publications, and reports to sponsors and funding agencies; serving as MIT Libraries' representative to a number of library, university, and external committees; arranging for visitors, meetings, and special events. Will also be expected to take on special projects that might include research, design of survey tools, statistical analysis, interviewing, and preparation of reports; and serve as secretary of Library Council. Requirements: MLS from an ALA-accredited library school as well as direct/related experience in an academic research library. Should be conversant with the organization, management, and operation of university libraries and have an understanding of their role in supporting education and research. Excellent communication skills and ability to work well with a variety of people necessary. Must be able to work under pressure. A88-064

LINDGREN LIBRARIAN III, The Libraries, to serve as a branch librarian and manage the services. Will plan and carry out creative information services and user education programs; build and manage research level collections in all formats in geology, geophysics, astronomy, meteorology, and oceanography and serve as the subject specialist to the MIT community in these subjects; serve as a map specialist for the Engineering and Science Libraries and as a member of various committees. Requirements: MLS from an ALA-accredited library school with considerable professional experience in a research library, including experience in traditional and online reference and in developing collections. A degree in one of the physical sciences or experience in a science library necessary. Some supervisory experience important. Must have strong communication skills. A88-063

ASSOCIATE HEAD, Devey Library, The Libraries, to assist in planning and organizing of collections and services in

the library, in evaluating programs, and in allocating and monitoring the use of departmental resources. Will participate in the full range of personnel management; coordinate the collection management programs; monitor research and instruction in social sciences and management at MIT and assist in formulating budget requests and allocating and monitoring resources; work with the processing librarian to establish priorities for handling materials; serve as a subject specialist in one of the social sciences or management areas; develop and manage research level collections and provide traditional and online information services to all users; and serve as a liaison for members of MIT community. Requirements: MLS from an ALA-accredited library school as well as considerable knowledge of research librarianship. A degree in one of the social sciences or management and/or equivalent experience necessary. Experience with the application of technology to the management of library collections and services highly desirable. Must possess strong communication skills. A88-062

ADVISOR TO FRATERNITIES AND INDEPENDENT LIVING GROUPS, Office of the Dean for Student Affairs, to provide Institute support to MIT Fraternity and Independent Living Group Chapters, their Officers, Chapter Alumni Corporations, the Interfraternity Conference, and the Alumni Interfraternity Conference and its Steering Committee in order to strengthen the operations and on-going viability of the individual fraternities and independent living groups. Requirements: a bachelor's degree with a master's degree in management, student personnel, or a related field preferred. One to three years of business experience highly desirable. Strong communication skills important. Must be sensitive in understanding and relating to others. A88-061

ELECTRONIC PUBLISHING COORDINATOR, The MIT Press, to be responsible for devising and implementing cost- and time-efficient procedures for handling author-supplied media and camera-ready copy. Will work with authors, acquiring and production editors, designers, and production people to coordinate efforts on such projects from conception to execution; create guidelines for nonpaper media; help authors produce true camera-ready copy; handle tapes prepared in high-end editing systems such as TEX and also diskettes prepared on microcomputers; and keep up with changes in the field and serve as an information resource for the rest of the Press. Requirements: should be familiar with both DOS and Macintosh environments and have at least 1 year of production experience. Willingness to learn and to teach, independence, flexibility, ability to create and implement new procedures, and work with others a must. A88-060

ASSOCIATE REGISTRAR AND MANAGER, Student Information Systems, Office of the Registrar, to assist the Registrar in planning, directing, and managing the technical and operational activities of the Registrar's Student Information System. Will provide leadership in developing a strategic plan for SIS, including a separate mainframe; manage technical and operational activities of SIS staff; strengthen academic research capabilities on the database. Will also have substantial contact with Faculty and academic departments; participate in writing and documenting programs; and coordinate instructional courses for SIS users. Requirements: a bachelor's degree, preferably in computer science, mathematics, or a physical science, and/or equivalent education and experience. Extensive experience in operating systems, database management and computer operations at both technical and management levels necessary. Strong supervisory and organizational skills important. Strong written and verbal communication skills necessary. Ability to work under pressure and discretion essential. Experience in a university administration desirable. MIT experience preferred. A88-059

COMPUTER SYSTEMS COORDINATOR, Whitaker College, to coordinate operational activities of a DEC VAX 11/785 computer and oversee the daily operations of the facility. Responsibilities include routine systems maintenance, including system backups and software upgrades; development of software packages and documentation; oversight of hardware maintenance; and monitoring the user request and billing process. Involves substantial interaction with a variety of users on issues and problems related to software packages and system utilities available for general use at the facility. Requirements: Bachelor's degree in Computer Science or related field and minimum of two years of systems maintenance and systems programming experience, specifically with the VAX/VMS operating system. Working knowledge of C, FORTRAN, DCL; experience with word processing packages such as MASS-11, SCRIBE, TEX; and familiarity with spreadsheet programs, SAS, RS/1 packages strongly preferred. Excellent communication skills (oral and written) essential. Ability to function independently as well as working well with others very important. A88-056

MANAGER OF DATA PROCESSING, Comptroller's Accounting Office, to manage and coordinate the activities of the Payrolls and Benefit Accounting Data Processing Department. Will act as a liaison to other administrative areas of CAO; consult and participate in decision making process for information systems; coordinate the creation of design specifications and develop resource requirements for systems development and production; coordinate

production support function with IPS; and administer appropriate project control system to monitor progress on projects and report progress to CAO personnel. Will also interview, hire, and conduct performance appraisals of staff; interface with external hardware and software vendors; and participate in outside professional activities to keep abreast of the "state of the art" in data processing. Requirements: a bachelor's degree or equivalent combination of education and experience. Extensive experience in data processing and supervising personnel necessary. Knowledge of IBM hardware preferred. Oral and written communication skills as well as interpersonal skills important. A88-055

EDITOR, The MIT Press, to deal with subject matter and usages in a number of fields and work with free-lance editors on specific projects. Job includes editing manuscripts, dealing with authors, and handling proof and related materials through publication of book. Requirements: must know technical notation and be able to work in such fields as computer and cognitive science, as well as economics. Must have five years' experience in editing manuscripts in a publishing house or equivalent free-lance work. Ability to work with people essential. Reading knowledge of French, German, or Italian useful. Some understanding of electronic publishing methods helpful. A88-054

ASSISTANT DIRECTOR - CAPITAL GIFTS, Treasurer's Office, to develop marketing plans, produce material and organize events to promote gifts of capital by individual donors to MIT, especially through special arrangements such as Life Income Funds. Responsibilities will include preparing and disseminating promotional material needed to implement marketing plan; scheduling and arranging meetings for presentation of promotional material; and marketing research and analysis. Requirements: college degree and three years' experience in marketing, promotion, and advertising. A88-035

ANALYST PROGRAMMER II, Comptroller's Accounting Office. Duties include analyzing user system problems to determine application needs, providing structured techniques for analysis, design, coding, documentation, and testing. Requirements: a bachelor's degree and/or equivalent combination of education and experience. Reasonable experience in systems analysis necessary. Experience with financial systems preferred. Knowledge of Cobol essential. Knowledge of Cobol in a VAX environment desirable. A88-053

ANALYST PROGRAMMER III, Comptroller's Accounting Office. Duties include analyzing user system problems to determine application needs, providing structured techniques for analysis, design, coding, documentation, testing, and implementing systems according to prevailing standards. Requirements: a bachelor's degree and/or equivalent combination of education and experience. At least five years experience in systems analysis necessary. Must have three years in financial systems. Some Cobol experience in a VAX environment desirable. A88-052

ADMINISTRATIVE OFFICER, School of Engineering, to manage the financial, personnel, student-related, and other administrative matters in the Leaders for Manufacturing program. This is a new program funded jointly by the Schools of Engineering and Management in cooperation with industry. It is an educational program aimed at discovering the principles for competitive manufacturing in the international marketplace. Requirements: a bachelor's degree and/or equivalent combination of education and experience. Must have excellent organizational, financial, and interpersonal skills. Familiarity with MIT academic and administrative procedures desirable. A88-051

ENGINEERING PROJECTS MANAGER, Physical Plant, to act as the Institute's administrator and take project responsibility to prepare and coordinate new programs for energy conservation, engineering design, and major renovation projects. Will coordinate with outside engineers and Institute user groups in the design review process and with the contractor during construction; assure that the work performed meets Institute specifications and contractual terms; retain and coordinate work of outside engineering firms required to augment in-house engineering capability; prepare project work schedules; review drawings and contract documents, and obtain approval from certifying agencies; maintain project budget responsibility; review accounting statements and update budgets; write reports based on research and creative analysis for each project; and perform administrative duties. Requirements: a bachelor's degree in Engineering as well as 5 years of direct/related experience and/or a combination of education and experience. Extensive experience in the design, operation, and construction of building service systems necessary. Some project management experience of 5 years essential. A88-049

ANALYST PROGRAMMER II, Administrative Systems Development, to assist in development of external system specifications and translate into internal system specification and computer programs. Will prepare logic diagrams and overall data flow; test and document programs for operational use and future maintenance; assist applications programmers in programming, testing, and debugging techniques; prepare program modification or enhancement specifications for approval by senior systems analyst; establish file

requirements and processing techniques; assist users with program problems; attend classes and seminars, and develop and maintain knowledge of currently accepted programming standards and techniques. Requirements: an associate's degree or bachelor's degree and/or equivalent combination of education and experience. Must have experience using VM/CMS or TSO. Should have two years experience in business applications programming in PL/1. Experience working with NATURAL and ADABAS necessary. A88-048

ANALYST PROGRAMMER I, Administrative Systems Development, to translate external program specifications into computer programs. Will prepare program logic diagrams and data flow; program, test, and debug computer programs; document new programs or changes in existing programs within prescribed standards; assist users with program problems and answer questions; and attend classes and seminars, as well as develop and maintain the know-how in programming. Requirements: an associate's degree and/or equivalent combination of education and experience. A minimum of one and one-half years in an administrative programming environment necessary. Experience with PL/1 preferable. Experience with ADABAS, VM/CMS, writing IBM EXEC II and/or REXX exec language helpful. NATURAL experience a plus. A88-047

PURCHASING ADMINISTRATOR, MIT Microcomputer Center, Information Services, to oversee all activities relating to the physical management of projects, including ordering, warehousing, shipping and receiving, and inventory control of a staff which includes students. Will establish and maintain relationships with all vendors; design and operate systems and procedures for controlling inventory; negotiate among vendors to achieve favorable terms; select or change vendors as appropriate; maintain necessary quantities of items on-hand; create and maintain appropriate schedules and policies to achieve this; coordinate with Sales Manager to review sales projections; maintain physical and administrative capability to pickup/deliver items to/from customers for vendors; maintain a vehicle for this purpose; operate a cash register; provide periodic management reports on various subjects such as inventory investment, turnover, out-of-stock conditions or obsolete items; create job descriptions, as well as recruit, hire, train, and manage; and coordinate activities with other managers. Requirements: a minimum of 4.5 years of management experience in purchasing, warehousing or inventory management, ideally in a retail distribution operation handling high-tech, consumer electronics or appliances. Experience with computerized inventory control systems helpful. Familiarity or interest in personal computers desirable. A88-046

INDUSTRIAL LIAISON OFFICER, Industrial Liaison Program, to interface between MIT and assigned number of member firms. Responsibilities are effecting liaison activities among various groups of people; planning and performing activities involved in servicing companies, including visits to company locations, group presentations, and meetings with company officials; assisting with technical questions; arranging meetings or telephone conversations; and soliciting new company members. Requirements: a bachelor's and master's degrees, with at least one degree in engineering or science. One degree preferred in the field of Electronics and/or Computer Science or Mechanical Engineering. A minimum of two year's industrial experience, and ability to communicate with a wide variety of people required. Should have intellectual depth, poise, and present a good appearance. Must be willing to travel extensively. A88-045

ASSOCIATE DEAN FOR STUDENT AFFAIRS AND DIRECTOR OF THE OFFICE OF MINORITY EDUCATION, Office of the Dean for Student Affairs, to be responsible for the overall operation of the office. Will work with Faculty/Staff Advisory Committee to develop, implement, and maintain academic programs and strategies to support underrepresented minority students at the undergraduate level; coordinate research on variables that influence the retention of minority students, and use these findings to develop programs to assist in their adjustment to the campus environment. Requirements: a master's degree, in an academic discipline, with considerable experience in higher education preferred. A doctoral degree preferred. At least five years experience at the college or university level administering programs and/or working on behalf of various minority student groups important. Strong communication, organizational, and management skills necessary. Must be sensitive and understanding when relating to others. A88-043

SUPERVISOR, The Libraries - Circulation Services, to supervise the daily operations of the RetroSpective Collection. Will oversee the security of the collection; circulation services; stack management; identification of preservation problems; integration of newly received materials into the collection; transfer of materials to remote storage; and the maintenance of appropriate manual and online records for all stored materials. Will also undertake a variety of special projects at the direction of the supervisor, and represent the RSC on committees and task forces; supervise support and student staff assigned to the RSC; recommend personnel actions for staff; and train and evaluate staff

members. Requirements: a bachelor's degree or an equivalent combination of education and related experience. At least three years of direct/related experience with a good knowledge of library circulation and processing routines necessary. Good organizational and communication skills important. Some experience in training and directing other staff strongly desired. Some experience with automated library systems and with personal computers preferred. A88-042

SYSTEMS PROGRAMMER II, Operations and Systems, to support and maintain three VAX computer systems running VAX/VMS. Responsibilities include insuring the consistency and integrity of the file system; maintaining of systems software, utilities, and VMS layered products; system performance analysis and tuning; network configuration and management; and insuring maximum uptime in a business production environment with diligent care of the systems. Requirements: a bachelor's degree in Computer Science and/or equivalent combination of work experience and education. Must have three years of systems programming and maintenance work experience with the VAX/VMS operating system. Knowledge of programming at the systems level, using high level language such as VAX PL/1 important. Strong experience in data communications, general networking experience (DECnet and/or TCP/IP) essential. Strong troubleshooting experience necessary. A88-034

INSTITUTE AUDITOR, Audit Division, to report administratively within the area of responsibility of the Vice President for Financial Operations. Will oversee the internal audit program for its educational, research, and related activity. Annual volume of expenditures currently exceed \$880,000,000 and total assets as book value exceed 1.45 billion dollars. Will be responsible for the supervision of ten professional and three support staff. Duties will include the traditional financial audit activity of compliance review of policy and procedures, safeguard of assets, verification of account balances, and special examinations. Will also participate in the Institute's Strategic Plan for Administrative Computing. Staff includes auditors qualified and experienced in electronic data processing systems reviews and audits to assist in the effective discharge of this responsibility. Will have unquestionable operational access to all Institute operating officers as well as direct access to the Corporation Audit Committee; and will be a regular attendee of Corporation Audit Committee meetings. Requirements: a combination of an undergraduate business degree in accounting and/or an MBA. A professional certification as a CPA, CISA, OR CIA, and several years of demonstrated achievement in financial management, control, or audit-related activity important. A88-023

EXECUTIVE DIRECTOR OF SPECIAL PROGRAMS, School of Engineering. Position presently involves two special programs, Engineering Internship Program (EIP) and the Minority Introduction to Engineering and Science Program (MITES). EIP: to direct the budgeting and administration of funds, and contractual arrangements with companies; counseling of students; supervising of office personnel and coordinating relations between MIT, participating companies, faculty, and students. MITES: in collaboration with the Faculty Director, will manage and coordinate all aspects of the program, and actively participate in the admissions process; assist in recruitment and hiring of instructors and tutors, students and program evaluations; program final report follow up on students and on-site counseling, and all aspects of fund raising; oversee the scheduling of classes and coordinate many student activities and services. Requirements: a bachelor's degree in Engineering, as well as a master's degree highly desirable. A minimum of 5 years experience in the administration of teaching programs and/or appropriate experience in and with industry important. Familiarity with the broad spectrum of engineering fields and their current 'state of the art' essential. Excellent interpersonal skills and interest in working with students important. Knowledge of MIT desirable. A88-022

ACQUISITION EDITOR, MIT Press, to be responsible for acquiring approximately 20 new books in computer science a year. Will expand the breadth and depth of our existing computer science program by contacting potential authors personally and by mail and develop new ideas and opportunities for series, books, and editorial directions; coordinate activities with Executive Editor and Associate Editor; sign authors to write books; and assist other departments within the Press on the production and marketing of books and work with authors to deliver acceptable manuscripts to the Press according to a predetermined schedule; attend professional computer science meetings; and visit authors in their offices and contact them using and contributing to the data-base mail system. Requirements: several years of publishing experience as an acquisition editor, preferably in the computer science or a related field. Must acquire professional and advanced textbooks in computer science of excellent quality and profitability. Extensive knowledge of the computer science field, trends, markets, books, and people, in the U.S. and abroad important. Must be personable, articulate, and literate. Ability to be well organized, aggressive, and perform well in a competitive environment. A88-001

SR. ANALYST PROGRAMMER, Alumni Association, to perform feasibility studies for major new or revised systems. Will define client/user system objectives and requirements; prepare systems external design specifications; develop program and data specifications; analyze personnel and resource requirements for new and modified systems/programs; ensure adequate system documentation; interpret system to users; direct preparation of user manuals; provide functional supervision and direction to assigned systems analysts; maintain close liaison with client/user personnel; and may perform tasks as necessary to facilitate the project. Requirements: a bachelor's degree or equivalent combination of education and experience necessary. At least five years experience in systems analysis and computer-related activities necessary. Strong skills in PL/1, natural, and ADABAS are important. Two years of proven supervisory skills desirable. A88-020

PLANNING OFFICER, Planning Office, to provide professional support for the Institute physical planning activities that contribute to the development and maintenance of the Institute's long range plan for campus development. Will design and execute campus planning projects; provide academic and administrative program analysis; prepare departmental facilities plan; prepare project site analysis, location, and selection studies; participate in the preparation of the Capital Budget program; manage the preparation of fund raising documents; and prepare environmental impact and other government mandated reports. Requirements: a thorough knowledge of urban design, landscape architecture, economic, and financial principles. Familiarity with institutional space planning and management systems important. Must have knowledge of building, zoning, and other regulations affecting MIT development. Excellent writing and presentations skills and ability to manage several projects concurrently important. Should have financial management, budgeting skills, as well as a knowledge of CAD and Database systems. A88-017

SR. CONSULTANT, Information Services (full-time or part-time with a minimum of 20 hrs/wk, M-F), to provide consultation and training to research groups and individuals at MIT in the use of supercomputers. Will provide local support in various areas including remote supercomputer access, vectorization and the use of numerical and scientific libraries, the use of workstations for graphical display of supercomputer computations and the development of tools and utilities to aid program conversion to supercomputers. Requirements: a strong background in numerical analysis and scientific computation. A graduate degree in relevant engineering or scientific discipline and some previous programming experience on a vector or parallel processor such as the Cray, Cyber 205, or the IBM 3090 important. Extensive familiarity with the UNIX operating system and SUN workstations highly desirable. Excellent interpersonal and communication skills necessary. (Will consider full-time candidates and candidates who work a minimum of 20 hours per week). A88-014

ANALYST PROGRAMMER II, Administrative Systems Development, to assist in the development of external system specifications and translate into internal system specifications and computer programs. Will prepare program logic diagrams and overall data flow; document programs for operational use and future maintenance; assist applications programmers in programming, testing, and debugging techniques; prepare program modification or enhancement specifications for approval by senior systems analyst; establish file requirements and processing techniques; perform all the functions of applications programmer as needed; attend classes, seminars and the like to develop and maintain knowledge of currently accepted programming standards and techniques; and exercise functional supervision over applications programmers. Requirements: associate's degree or equivalent combination of education and experience necessary. Considerable programming experience and knowledge of PL/1 and ADABAS essential. Experience using VM/CMS, writing IBM EXEC II and/or REXX exec language important. NATURAL experience a plus. A minimum of 2.5 years in an administrative programming environment using the above tools necessary. A88-012

SYSTEMS PROGRAMMER III, Operations and Systems, to support the operation of Project Athena by providing programming expertise for the maintenance and operation of a network of 700 Advanced Function Workstations (DEC VaxStations and IBM RT/PCs) and 50 VAX-11/750 Server systems running 4.3BSD UNIX. Requirements: bachelor's degree in computer science or equivalent experience and 5-7 years of programming experience in a UNIX environment. Proficiency in the C programming language required. Working knowledge of the Department of Defense TCP/IP networking protocols and Ethernet preferred. A88-010

PRODUCTION ANALYST I, Operations and Systems, to analyze user information systems problems, and suggest or take action during production processing to alleviate the problem and to ensure processing under the supervision of Production Services' Manager. Will review production documentation to comply with production processing standards and techniques; control data flow and assist users with production software preparations or production; assist with scheduling and loading of system master files for production processing; update production

runbooks with processing standards modifications; assist in the preparation of problems reporting, and suggest remedies to avoid occurrence of processing problems; prepare and suggest production flow enhancements to improve production processing; establish PS functional and interface standards; participate in operational meetings whenever necessary; assist users with production processing procedures and job entry software; and attend classes, seminars, and the like to enhance, develop, and maintain up to par with currently accepted production and or programming standards and techniques. Requirements: associate's degree or the equivalent combination of education and experience. Considerable experience Execs Routines, JCL, and other technological tools preferred. A88-008

ROUTE SUPERVISOR, Building Services, Physical Plant, to supervise the cleaning and support operations for Institute Academic Buildings. Will receive direct supervision from shift supervisor and general supervision from Building Service Operations supervisor and Manager of Building Services. Will assist the shift supervisor in carrying out the policies and procedures of the department; perform periodic inspections of facilities and equipment to insure performance of the service staff is of the highest level; coordinate and respond to requests, including emergencies from the MIT community, such as fire, flood, chemical spills, elevator shutdown, etc.; coordinate activities with shift supervisor and other route supervisors to accomplish the goals of the Service Department; follow up on all assignments delegated to service staff; coordinate and implement disciplinary actions according to MIT policies when violations occur from personnel assigned to shift; and monitor cleaning supplies and equipment used by service staff to insure proper utilization. Will also keep all records posted and up to date; provide suggestions to meet higher standards; insure service staff personnel are kept up to date with any changes involving cleaning equipment or other matters affecting the goals of department; provide support to other shifts including West Campus and Physical Plant operations. Must be available to work rotating schedules to include weekends, holidays on all shifts within Department and become knowledgeable and familiar with those duties. Requirements: three years supervisory experience and knowledge of Building Services equipment, supplies, and areas of responsibilities. Must be able to motivate subordinates in all functions related to the Building Services operation to perform efficiently, effectively, and develop them to qualify for higher rated positions. Will communicate and cooperate effectively with a variety of people. A87-200

INDUSTRIAL HYGIENE CHEMIST, Environmental Medical Services, to perform various functions such as recognizing, evaluating, and controlling of exposures of personnel to toxic materials. Responsibilities will include conducting industrial hygiene surveys of workplaces, collecting, and analyzing air or biological samples. Requirements: experience with atomic absorption, gas and HPL chromatography, spectrophotometry, and wet chemistry. Must have undergraduate degree in chemistry or biochemistry. Some training or experience in industrial hygiene and environmental chemistry desirable. A87-190

ASSOCIATE DIRECTOR FOR COLLECTION MANAGEMENT AND TECHNICAL SERVICES, The Libraries, to participate in the overall administration of the library system, including long range planning, program development and evaluation, budget formulation, and the establishment of system-wide policies. Duties include planning, acquiring, and cataloging the collections of the MIT Libraries including administration of the centralized Acquisitions and Catalogue Department, and the preservation program; establishing policies and programs related to bibliographic control and evaluation of collections and selection, retention, storage and preservation of all materials; and representing MIT at a variety of organizations and meetings at all levels where collection management and technical services issues are involved. Various departments will report to the associate director. Requirements: MLS from an ALA-accredited library school or a combination of both education and experience. Additional graduate work in a subject area relevant to the MIT's research and teaching programs desirable. Responsibility in technical services and collection management in a research library essential. Familiarity with the structure of engineering and science literature important. Ability to demonstrate a thorough understanding of issues facing research libraries today and in the near future, as well as highly developed interpersonal and analytical skills, necessary. Should be able to work as part of a senior management team. A87-168

ASSOCIATE LIBRARIAN AND COLLECTION MANAGER, Rotch Library, The Libraries, to work with the Rotch Librarian in the planning and organizing of collections and services in the library and visual collections, in evaluating programs, and in allocating and monitoring the use of departmental resources. Duties include participating in the full range of personnel management activities for the Rotch Staff; integrating services, to strengthen bibliographic linkages of visual and print materials, and cataloging of visual materials; managing and supervising programs under the direction of Rotch Librarian; monitoring research and instructional activities in

architecture and planning at MIT and assisting in formulating budget requests and allocating resources and commitments; implementing appropriate collection evaluation strategies; and providing assistance for the MIT community. Requirements: MLS from an ALA-accredited library school. Some experience with administration and supervision of staff and with provision of information services is necessary. Considerable knowledge of research librarianship is essential, as well as the ability to handle more responsibility. Experience with the applications of technology to the management of visual collections highly desirable. Reading knowledge of French, German, or Italian essential. Strong interpersonal and communication skills important. A87-166

SOFTWARE DISSEMINATION MANAGER, Information Services, coordinates the processing of software acquisition and distribution, including developing and implementing business and support plans for acquired products and conducting appropriate market research and vendor negotiations. Duties will be to conduct primary market research on an ongoing basis to determine the Institute's needs for computer software and to evaluate the effectiveness of vendor software purchase agreements; develop and maintain an online database of Institute computer hardware and software, and make this information available as appropriate to MIT; negotiate site licenses, quantity discounts and other special purchase arrangements for software with software vendors and monitor MIT and vendor compliance with the terms of the purchase agreements; develop software distribution and support plans, including pricing and cost-recovery models, for new software products and coordinate the implementation of these plans; develop mechanisms for responding to user requests for software and financing the acquisition and distribution of software needed by the MIT community; work with Publication Services, etc. Requirements: bachelor's degree, preferably in business, essential. Considerable knowledge of the negotiation of business contracts and marketing - market research, pricing, promotion, communications, as well as a minimum of 4 years of directly/related experience. Excellent interpersonal and communications skills, and experience in the software or computer industry necessary. A87-155

POSTDOCTORAL ASSOCIATE, Biology Department, is specified as full-time research in collaboration with Leonard Lerman in a project on human genomic DNA mapping. The project has been designated for support by the Department of Energy through the Office of Health and Environmental Research for 32 months, beginning June 1, 1988. The project team will include a full-time laboratory assistant and other part-time personnel. The project is expected to develop a new type of molecular map of genomic DNA and to apply the mapping procedure to selected regions of interest in the genome, particularly where modifications or rearrangements are known to occur or are suspected. Requirements: a broad background in genetics, and skill in the conventional laboratory manipulations in molecular biology. A Ph.D. in appropriate field important. C88-012

ASSISTANT RADIATION PROTECTION OFFICER, Medical-Environmental Medical Services, to assist in the overall operation of the Institute's Campus Radiation Protection Program. Duties include surveillance over use of lasers, microwaves, and radiation-producing equipment plus initial review of applications for permission to use radioactive materials; reviewing available facilities and equipment for such work, and recommending changes as necessary; indoctrination and training of personnel in appropriate radiation protection and radionuclide handling techniques; ongoing surveillance of the approved authorizations to ascertain continuing compliance with application regulations; and supervision of RPO technicians involved in surveys and waste collection for those laboratories under his supervision. Requirements: a bachelor's degree, preferably in Physics, and a Master's degree in Radiological Health or Health Physics. Some experience in health physics application in academic programs desirable. Must be eligible for certification by the American Board of Health Physics within 5 years from start of employment. C88-011

POSTDOCTORAL ASSOCIATE, Applied Biological Sciences, to work in a laboratory studying pro and eucaryotic cell behavior, specifically the mechanisms of energy-level sensing. Requirements: Ph.D. degree and strong background in microbiology, chemistry, and recombinant DNA methods. C88-010

POSTDOCTORAL FELLOW, Applied Biological Sciences, to participate in projects on design of enzyme reactors for extracorporeal treatment of disease and peptide synthesis of lipoprotein analogs and structure: function studies in vitro and in vivo. Requirements: Doctorate degree in Chemistry or Biochemistry. C88-009

POSTDOCTORAL ASSOCIATE, Applied Biological Sciences, to work on translational regulation of ferritin biosynthesis by iron, specifically to purify protein(s) interacting with ferritin mRNA in an iron-dependent manner. Requirements: Ph.D. degree. Good background in one or more of the following areas desirable: protein purification; antibody production; recombinant DNA technology; and screening cDNA libraries with antibody or oligonucleotide probes. C88-007

ASSOCIATE DIRECTOR FOR SYSTEMS AND PLANNING, Libraries. Responsibility for the development, implementation, and administration of automated library systems, and for the development of appropriate strategies and processes to assure effective planning for library programs and services. Along with the Director of Libraries and three other Associate Directors, the incumbent will participate fully in the overall administration of the library system, including program development and evaluation, planning, budget formulation, and the establishment of system-wide policies; establish operating programs and policies directed toward extension of the integrated on line library system, the expanding use of microcomputer technology for other library and administrative programs, and the development and introduction of other technologies for library services; create the most effective integration of the MIT Libraries' systems and services; serve as a principal link to campus agencies involved in information technology and telecommunications and to the wider research library community; and exercise principal responsibility for the Libraries' planning process and lead a variety of planning efforts intended to see that full advantage is taken of opportunities to further library program development. Inherent in the planning process is the need to develop a means of evaluating the effectiveness of programs and services and to provide meaningful data and information for future planning efforts. Requirements: ALA-accredited MLS; very extensive and increasingly responsible experience in a major research library which has included the responsibility for the application of technology to library problem solving, particularly in technical services; comprehensive knowledge of issues related to future developments in library automation, telecommunications, and other developing technologies; understanding the role of planning in the administration and management of research libraries; and experience with library planning process and fundraising efforts. Will be expected to demonstrate a thorough understanding of issues facing research libraries today and in the near future, as well as highly developed interpersonal and analytical skills. Ability to work effectively as a member of senior management team important. Demonstrate record leadership and achievement essential. C88-006

DENTAL HYGIENIST, Medical Department (temporary appointment for six months), to perform a variety of office tasks. Responsibilities include initial comprehensive examination and charting, prophylaxis, periodontal treatment, plaque control, taking and processing dental x-rays, screening dental emergencies, conducting patient education programs, and occasional assisting. Will also help assist in coordinating and directing technical staff. Requirements: a registered Dental Hygienist with an A.B. or B.S. in Dental Hygiene preferred. Previous work experience very desirable. Some experience in periodontal care important. Must be sensitive to the needs of patients and relate well to a variety of people. Should be professional in manner and appearance. Ability to be reliable and assume responsibility essential. Personal recommendations important. C88-005

INDUSTRIAL HYGIENE ENGINEER, Environmental Medical Services/I.H.O., to develop, evaluate, and advise on health and environmental programs associated with work conducted at the Institute and related laboratories, with prime responsibility being in design and evaluation of hazard control systems. Will perform and/or supervise evaluations of potential exposures to chemical and physical hazards and assist other staff personnel in containment techniques associated with control of substances that are biohazardous and/or radioactive. Requirements: a degree in Chemical or Mechanical Engineering, additional training or experience in Industrial Hygiene, and be qualified for certification by the American Board of Industrial Hygiene. C88-004

REGISTERED NURSE, Medical Department, to give nursing care to a wide variety of patient diagnosis in the MIT Medical Department's 18 bed Inpatient Unit. Will be responsible for assessment, planning, implementing, evaluating and documenting care given to patients in the licensed JCAH accredited hospital facility. Requirements: must be a registered nurse in the State of Massachusetts, with at least one year experience in the Medical/Surgical Nursing necessary. Some experience with IV therapy preferred. C88-002

POSTDOCTORAL ASSOCIATE, Applied Biological Sciences, to work in a newly organized laboratory studying pro- and eucaryotic cell behavior, specifically the mechanisms of energy-level sensing. Requirements: Ph.D. degree and a strong background in one or more of the following areas: one and two-D electrophoresis, protein purification; isolation of mutants, mapping of E. coli genes recombinant DNA methods; and establishing and maintaining cell cultures. C88-001

POSTDOCTORAL ASSOCIATE, Applied Biological Sciences. Postdoctoral opportunities in the chemistry and biochemistry of carcinogens. Isolation and characterization of protein-carcinogen adducts, naturally occurring carcinogens. Requirements: Ph.D. degree. C87-239

COMPARATIVE PATHOLOGIST, Division of Comparative Medicine, to provide diagnostic pathology and research support for the laboratory animal program at MIT and other Boston biomedical facilities.

Will participate in the teaching and training of postdoctoral students in comparative medicine and pathology; and collaborative research is encouraged with emphasis on recognizing and defining abnormal physiologic conditions and comparative diseases of interest to biomedical researchers. Requirements: a D.V.M. with 2 to 4 years in a pathology training program or graduate school. ACVP board certification or eligibility and demonstrated research ability necessary. Interest in comparative medicine and experimental pathology essential. C87-238

POSTDOCTORAL ASSOCIATE, Applied Biological Sciences, to assist in a research project aimed at developing improved adjuvants and novel immunization systems, with particular emphasis on applications to sub-unit vaccines. Requirements: Ph.D. or M.D. degree with an immunology background necessary. C87-236

POSTDOCTORAL ASSOCIATE, Applied Biological Sciences, three positions available for individuals with interest in mechanisms of chemical carcinogenesis for projects relating to chemically-induced DNA damage to oncogen activation, mutagenesis, gene rearrangement, and expression. Duties include development of methodologies for detection of DNA damage in human tissues collected in epidemiological studies. Requirements: educational background and/or experience in molecular biology-genetics or virology preferred. C87-234, C87-233, C87-232

POSTDOCTORAL FELLOW, Research Laboratory of Electronics, in auditory physiology. Specific areas of interest include comparative physiology of the middle ear, mechano-electric transduction in the inner ear, structure-function relations in normal and pathological ears, coding of acoustic stimuli in the auditory nerve and brain stem nuclei, olivocochlear and middle-ear-muscle systems, neurochemistry of the auditory system, and the use of evoked potentials in clinical applications. Requirements: Ph.D. or M.D. degree. Interest in obtaining training in the physiology and anatomy of the auditory systems at the Eaton-Peabody Laboratory. C87-225, C87-224

POSTDOCTORAL ASSOCIATE, Applied Biological Sciences, to work in an interdisciplinary manner on the immunology and biochemistry of viral antigens. Requirements: Ph.D. and research experience in one or more of the following areas: immunology, virology, protein structure and biochemistry, or biopolymers. C87-208, C87-207, C87-206

POSTDOCTORAL ASSOCIATE, Division of Comparative Medicine, to conduct research on intragastric nitrosation and predictive modeling of gastric carcinogenesis in laboratory animals. Responsibilities include assisting in surgery and preparation and analysis of biological specimens for biochemical analysis. Requirements: D.V.M. or equivalent, experience in laboratory animal surgery and manipulation, training in physiology and knowledge of techniques for biochemical evaluation. C87-204, C87-203

POSTDOCTORAL ASSOCIATE, Biology (temporary, six to twelve months), to investigate the causes of Alzheimer's disease and Down's syndrome. Involves computer-assisted, three-dimensional reconstruction of brain structures; sectioning human post-mortem brain specimens; and performing immunohistochemistry and conventional histochemistry to localize neurotransmitters and neuropeptides. New techniques for combining monoclonal antibody methods with computer assisted reconstruction will be developed. Requirements: Ph.D., at least one year of experience in cutting and staining tissue sections for histology and histochemistry and knowledge of laboratory biochemistry. Experience with mono/polyclonal antibody reagents and PC experience desirable. This position is currently full-time for six months or half-time for twelve months. C87-197

ASSOCIATE DIRECTOR, Division of Comparative Medicine. Will interact with principal investigators regarding animal research activities; oversee the administration of the protocol review process; serve on the Committee on Animal Care; monitor the operation of animal facilities; coordinate clinical services; participate in independent and collaborative research; coordinate the activities, education and training of postdoctoral associates and summer fellows in laboratory animal medicine; participate in the development of training seminars for MIT personnel who work with animals; and organize weekend clinical care. Requirements: D.V.M. or equivalent and board certification or eligibility in the American College of Laboratory Animal Medicine. C87-196

LIBRARIAN IV, Libraries, to administer the acquisitions department. Will participate in planning and implementing automated acquisitions and serials control systems; manage monographic and serial acquisition processes; and manage a staff of four professional and twelve support staff plus student assistants. Other responsibilities include organizational and personnel planning, budget management, allocation and assignment of staff and development and implementation of new policies and procedures. Will serve on library council, which discusses major program and administrative policy issues; and participate in long range planning and budget formulation. Requirements: M.L.S. from an ALA-accredited library school and a minimum of five years professional experience, including two years in an acquisitions department of a research library. Experience with serials programs, gifts and exchange programs and government document depository programs preferred.

Thorough knowledge of the book trade, bibliographic control principles and practices and automated technical processing in a research laboratory important. C87-195

NURSE PRACTITIONER, Inpatient Unit, Medical Department (part-time, 20 hours/week, 11:00 p.m. to 7:00 a.m.), to manage care for ambulatory patients in collaboration with the on-call physician. Will handle all telephone calls from patients; give advice, medical information etc.; maintain documentation; and assist inpatient unit registered nurse with inpatient care on request. Requirements: graduation from approved NLN accredited Nursing School; Massachusetts R.N. license; graduation from nurse practitioner program with ANA certification; and at least one year of experience in nurse practitioner practice. C87-193

SPONSORED RESEARCH STAFF

MANAGER, Sloan School Center for Financial Services Research, to be responsible for ongoing management of a 2.5 million/year multi-sponsor research program. Will initiate and maintain contact with sponsors to facilitate appropriate and continuing involvement in the program; communicate sponsors' viewpoints to Research Director; serve as a resource to faculty with regard to ongoing research questions; responsible for the articulation of the program to external constituencies; assist the director in the preparation of management briefings and for all administrative management including budgets, steering committee agendas, and the like. Requirements: must have ten years professional experience either in the financial services industry or in management consulting; some project management experience highly desirable. Sufficient knowledge of financial management issues to permit effective communication with sponsors at senior and middle management levels, and sufficient understanding of related academic disciplines to communicate effectively between sponsors and faculty project directors. Solid analytical abilities important. Excellent interpersonal and communication skills necessary. R88-071

RESEARCH SPECIALIST, Cell Culture Center, to be responsible for day-to-day operation of a cell sorter facility. Requirements: a B.S. or M.S. in biology or related field and some experience in cell sorting. Experience with Ortho System 60.H and/or EPICS-C preferred. R88-069

RESEARCH ENGINEER, Plasma Fusion Center, Graduate Engineer who will be technical assistant to the Senior Project Engineer, responsible for the development, fabrication, and testing of a large superconducting magnet. Duties include mechanical, quality control, testing, and supervision of manufacturing; ability to oversee and coordinate the installation of our MIT magnet in a test facility in Japan. Requirements: demonstrated ability to represent Group at a foreign test facility desirable. Must have M.S. degree in Mechanical or Electrical Engineering. Should have experience in cryogenics and superconductivity. Must be an experimentalist. R88-068

RESEARCH ENGINEER, Plasma Fusion Center, Project Engineer responsible for fabrication of test devices for superconducting magnet development both outside MIT as well as in the PFC or at MIT workshops. Requirements: must supervise technicians, junior engineers, and students. Extensive (at least 10 years) experience necessary in superconductive systems, superconducting material science, cryogenics, metal processing, wire processing, superconducting powder technology, metallurgy, and contaminants in OFHC coppers and engineering practice. R88-067

TECHNICAL ASSISTANT, Biology Department, to aid in conducting basic research in immunology laboratory. Requirements: competence in one or more of the following necessary: cell culture, immunochemistry, biochemistry, or molecular biology. A B.A. and experience or very solid course work in immunology highly desirable. R88-066

ASSISTANT DIRECTOR FOR ADMINISTRATION (FACT), Civil Engineering, to manage the Program in Advanced Construction Technology. Responsibilities will be for the administration of all research projects, developing procedures for processing proposals, and status reports. Will also be responsible for the purchasing of equipment, determining needs, development priorities, and obtaining prior approval from sponsor. As a member of the Program's executive committee, the Assistant Director will assist in the fellowship processing, and recipient progress. Requirements: a bachelor's degree in business administration preferred. Administrative experience in an academic or research environment helpful. Knowledge of computer software for spreadsheets, databases, and wordprocessing necessary. R88-065

RESEARCH ASSOCIATE, Materials Science and Engineering, to supervise 3 - 4 doctoral students in laboratory undertaking liquid dynamic compaction (spray atomization) studies of a series of low-alloy steels to achieve highly refined structures at high-strength levels with useful ductility, toughness, and formability. Requirements: both powder metallurgy and near-net shape-forming background desirable. Must be proficient in the use of transmission microscopy, scanning electron microscopy, structural analysis, and mechanical behavior of metals. Should have at least five years of direct/related

experience and have published 5 - 10 scientific papers on the subject in referred journals. A Ph.D. degree in Materials Science and Engineering necessary. (The salary range for this position is \$40,000 to \$45,000) R88-064

RESEARCH ENGINEER OR POSTDOCTORAL

ASSOCIATE, Ocean Engineering, to become effective on or about July 1, 1988, for research in the area of computer-aided design and manufacturing. The laboratory is currently involved in research in geometric modeling, databases for design and fabrication, automated analysis, and simulation of manufacturing processes for complex engineering structures. Requirements: must have an advanced degree and experience in at least one of the above areas. Must also be versed in numerical analysis and have experience in at least one computer language, preferably C or LISP. Should be able to contribute significantly in the execution of current laboratory research projects. R88-063

PRINCIPAL RESEARCH ENGINEER, Ocean Engineering, to be hired on or about July 1, 1988, for research in viscous fluid problems in marine vehicle design. Requirements: must have demonstrated ability to generate and develop concepts independently, and in general, to do independent research. Should have a Ph.D. degree and have a strong background and proven research record in theoretical work in at least one of the following: 1) modeling of fluid-structure interaction in real fluids, 2) flow induced vibrations of marine structures, or 3) interaction of ocean waves with shear flows, 4) demonstrated capability in numerical modeling of fluid problems, and 5) ability to integrate results from this research to improve design or marine vehicles. R88-062

PRINCIPAL RESEARCH ENGINEER, Ocean Engineering, to commence on or about July 1, 1988, and will be expected to take a leadership role in research in the area of free-surface hydrodynamics. Responsibilities include, but not be limited to: conception and investigation of basic research topics; supervision of graduate students; support of software which may accrue from this research, for both internal and external users; and management of computer resources for the Computational Hydrodynamics Facility. Requirements: a strong background in analytical and computational free-surface hydrodynamics. A Ph.D. in marine hydrodynamics with emphasis in free-surface flow necessary. Experience with solution of three-dimensional, wave-body interaction problems by panel methods and familiarity with computational approaches to nonlinear free-surface problems essential. A demonstrated ability in technical writing, practical engineering experience, and knowledge of state-of-the-art applications in hydrodynamics research expected. Experience in design and supervision of experimental studies beneficial. R88-061

TECHNICAL ASSISTANT, Department of Applied Biological Sciences, to work in a photosynthesis laboratory on the molecular genetics of purple nonsulfur bacteria. Duties include running a DNA synthesis facility. Requirements: M.S. degree in Biology or related field. Should be proficient in DNA cloning, sequencing, protein purification, microbiological stock maintenance, and other techniques relevant to prokaryotic molecular genetics. R88-060

RESEARCH ASSOCIATE, Center for Information Systems Research, Sloan School of Management, to be a member of a small research staff with concerns and issues related to the management of the information systems function and the organizational impact of information technology. The Sloan School's MIS faculty is the core faculty of CISR; 25 corporate sponsors provide funding and assistance in defining research areas. The Research Associate will participate in all phases of research projects, including design, data gathering, analysis, and report writing, with major responsibilities in project management. A typical project will involve visits to various research sites to conduct interviews or surveys. Will also plan seminars for sponsor audience. Requirements: MBA (or equivalent degree) and 2-3 years professional experience in management information systems or the computer industry. Project management and consulting experience desirable. Knowledge of current information systems issues spanning technical, managerial, and organizational concerns important. Must be self-motivated and have solid analytic abilities. Excellent writing and interpersonal skills necessary. R88-059

RESEARCH ASSOCIATE, Laboratory for Computer Science, to have primary responsibility for the compiler for the functional language Id. The focus of the compiler work will be the development and implementation of new optimizations. Will extend the existing compiler to accommodate new features in the Id programming language; and participate as a member of the team developing the Id programming language. Requirements: a Ph.D. in computer science and extensive experience in compiler development and compiler optimizations for functional languages as demonstrated by publications. Familiarity with dataflow highly desirable. R88-058

RESEARCH ASSOCIATE, Laboratory for Computer Science, to work in the development of dataflow graph interpreters which includes extending and maintaining the existing GITA code for Texas Instruments and Symbolics Lisp Machines, and Sun workstations. The existing code

must be updated to run on new releases on vendor software and extended to add new and updated features. The existing code will also be ported to other workstations, and possibly to Cray supercomputers. This includes the port of GITA from the lisp programming language in the C programming language. The development work will also include the development of new dataflow graph interpreters. This position involves the design and implementation of the I/O system software for the Monsoon Dataflow machine, including participation in identifying the hardware configuration of the I/O system. The primary work involves developing device drivers and other system programming tasks for the I/O processors of Monsoon. The work will be done in C for a Unix operating system. Requirements: an advanced degree (MS or Ph.D.) and extensive related experience. Direct experience in developing operating systems and resource managers necessary. Extensive experience in the C programming language and the Unix operating system, as well as with the Lisp programming language essential. Research experience in functional languages and dataflow highly desirable. R88-057

PROJECT MANAGER, Laboratory for Computer Science, with primary responsibility for the hardware implementation of the Monsoon dataflow machine. The researchers will participate in the design of the high level architecture of the Monsoon dataflow machine and take primary responsibility for its implementation. The researcher will complete the top level design of a processor for Monsoon that will support efficient execution of dataflow graphs with a minimum of hardware. Will also manage the hardware implementation of a single board version of this processor and a subsequent VLSI version of this processor; manage the overall integration of the processors, the network, and the I/O into the Monsoon System; and supervise a team of three to four research staff. Requirements: a Ph.D. degree in computer science, expertise in dataflow systems as demonstrated by publications. Extensive experience in processor and computer system design, as demonstrated by participation in the design of a significant system, and a familiarity with compiler and systems operating design. Research experience in functional languages highly desirable. R88-056

TECHNICAL ASSISTANT, Biology Department, to work with Dr. Leonard Lerman and a new postdoctoral research associate in a project on molecular mapping of human genomic DNA. The work will involve DNA preparation, gel electrophoresis, plasmid cultivation, radioisotope labeling through DNA synthesis, radioautography, and related techniques. Requirements: good laboratory skills, and ability to read and use the original scientific literature. Must have perseverance and have the ability and inclination to work interactively with others. A B.S. or M.S. degree in an appropriate field important. R88-054

RESEARCH ENGINEER POSITION, Aeronautics and Astronautics Department, to work in the Flight Transportation Laboratory and perform duties which involve management of several research projects funded by major airlines. Current projects include the development and implementation of computerized seat inventory control systems and airline passenger demand forecasting models. Requirements: a Ph.D. in air transportation and/or transportation systems analysis necessary, with emphasis in the fields of economics, management, statistics, and operations research. A minimum of five years experience in airline research and operations preferred, and familiarity with current airline marketing, reservations, and capacity yield management practices desirable. Must be able to apply technical models to practical airline management problems, communicate ideas clearly to airline sponsors in technical and non-technical terms, and assist with computer implementation of these models at the airline itself. R88-053

VAX/VMS SYSTEMS MANAGER, Research Laboratory of Electronics, to manage two closely related VAX/VMS research computer systems for our speech communication and Sensory Groups. Each system is under development and will consist of a DECnet LAN of VAX 750's, VAX Stations and personal computers. Job responsibilities include working on system integration; routine system management; some applications programming; user assistance; oversight of hardware maintenance, backups, and documentation. Required experience: VMS system management and integration. Experience with local area clusters, real-time I/O, scientific applications and graphics programming highly desirable. Educational requirements: a bachelor's degree preferably in Electrical Engineering or Computer Science, and/or the equivalent combination of education and experience. R88-041

TECHNICAL ASSISTANT, Applied Biological Sciences, to work on translational regulation of ferritin biosynthesis by iron, specifically to purify protein(s) interacting with ferritin mRNA in an iron-dependent manner. Will also take responsibility for general laboratory management. Requirements: B.S. or M.S. degree. Good background in one or more of following areas desirable: protein purification; antibody production; recombinant DNA technology; and screening cDNA libraries with antibody or oligonucleotide probes. R88-050

EDUCATION COORDINATOR, Upward Bound, to be responsible for the development and implementation of educational support services in a year-round college preparatory

program serving seventy (70) disadvantaged youth from varied economic, ethnic, and racial backgrounds under the supervision of the Program Director. Will recruit and supervise a seasonal staff (academic year and summer) of tutors and teachers; develop student monitoring and evaluation measures; and maintain a network of ancillary support through the target high school and community organizations. Requirements: B.A. or M.A. in Education (secondary concentration) with at least one year of direct/related experience. Experience in developing remedial and/or enrichment educational programs/services extremely helpful. Education assessment/evaluation experience, and an understanding of those issues related to compensatory and urban education important. Residential experience helpful. Massachusetts drivers license important. R88-048

RESEARCH SCIENTIST, Biology Department, to lead research efforts studying capsid assembly in bacterial viruses. Requirements: must have Ph.D. in Physical Biochemistry with 2-3 years of postdoctoral experience and publications in referred biochemical journals. Should have expertise in application of light scattering, circular dichroism and ultracentrifugation to protein polymerization reactions. Familiarity with growth of bacteria and bacteriophage and microbial genetics highly desirable. R88-047

DESIGN ENGINEER, Francis Bitter National Magnet Laboratory, to join a small team involved in the development of high magnetic fields. The Magnet Technology Division has been responsible for the development of the world's highest steady magnetic fields and is about to embark on the next step: a combination superconducting and high-power water-cooled magnet to generate 45 tesla. Requirements: engineers with degree(s) in mechanical engineering, with at least 5 years experience in mechanical design and with understanding of stress analysis, strength of materials, and mechanisms and hydraulics. Familiarity with computing, particularly CAD, cryogenics and/or superconducting materials would be good supporting qualifications but not essential. R88-046

SERVICE STAFF

TECHNICIAN "B" (E-M), Research Laboratory of Electronics, to assist in laboratory and research work and operate experimental and technical equipment under the supervision of scientific personnel and technicians of a higher grade. Must be able to work for periods of time without supervision. Will fabricate fine line patterns using critical cleaning, photolithography, chemical etching, plasma etching and ion etching. Examine samples with highpower optical microscope. Fabricate delicate membrane structures, operate and help maintain clean room apparatus, such as cleaning station, chemical hoods, exposure lamps, microscopes, and vacuum systems. Requirements: graduation from a two year day technical school or its equivalent in applicable experience is the minimum experience requirement. Must demonstrate aptitude and expertise gained from education and/or experience, and be able to do craft like work with delicate samples in a clean room environment, and have capacity to learn and advance, and interact effectively with other people. R88-055

PAINTER, Physical Plant, a minimum of five (5) years experience in all phases of painting trade, including interior and exterior work, preparation and mixing paint materials, tools, pieces of equipment and rigging used in the trade. Must have Painter's Rigger's license and be able to work effectively on staging and ladders. Must be required to work irregular shift. R88-052

ENGINEER, THIRD CLASS, Physical Plant. Massachusetts Third Class Stationary Engineer's License or higher grade required. Minimum of one year operating experience on high pressure boilers, oil and gas fired with automatic combustion controls required. Turbine driven auxiliaries; A.C. & D.C. generation; switchboard and feed water control. Must be willing to work any and all shifts and do any and all kinds of work, consistent with self-sufficiency of the Central Utilities Plant. Experience required on turbine and motor driven refrigeration equipment. R88-045

TECHNICIAN A (ELECTRO-MECHANICAL), Energy Laboratory, to assist in laboratory, research, or analytical work under direction or supervision of scientific personnel. Operates highly technical experimental apparatus. Has demonstrated considerable skill and good performance in the particular field of activity. Requires some supervision. Construction and maintenance of research and test equipment in the Sloan Automotive Laboratory. Duties include assembly and repair of engines and dynamometer test cells, operation of machine tools, welding, piping, and some AC-DC wiring. Position requires working closely with students and other staff. Requirements: graduation from a two year day technical school or its equivalent and a minimum of two years of applicable experience. Ability to work independently and set priorities necessary. Familiarity with the operation of spark ignition engines, diesel engines, and electronic circuits will be a definite asset. R88-044

METAL WORKER, Physical Plant, a minimum of 5 years of trade experience in fabricating and installing steel and sheet metal work from plans and specifications. Must have working experience in all phases of layout, electric welding, gas welding,

burning brazing and the operating of typical metal working shop equipment and hand tools. Requirements: welding certification and experience with metal sash and casement desirable. Must be able to work effectively from ladders and scaffolding and may be required to work an irregular shift and assist other related trades within the Metal Shop. R88-042

CARPENTER, Physical Plant, a minimum of 7 years experience in the trade with particular emphasis on finish carpentry work. Should be able to read prints and do layouts on all types of cabinets. Must be qualified to perform door and partition installation and lay floor tiles. A thorough knowledge and working characteristics of various types of materials and woodworking machinery required. R88-029, R88-028

SR. TECHNICIAN (Mechanical), Laboratory for Nuclear Science, an individual who assists in laboratory research, or analytical work under direction or supervision of scientific personnel. Operates highly technical experimental apparatus. May direct and train technicians of lower grade. Has understanding of the theoretical aspects of the experiments. Has demonstrated outstanding skill and performance in the particular field of activity. Requires little or no supervision. Individual to be primarily involved with the repair, maintenance, and troubleshooting of all vacuum systems at Bates Laboratory from a rough vacuum of 500 millitorr to an ultra high vacuum of 5X10E-11 torr. Thorough knowledge of all vacuum techniques including bake-out procedures for metal sealed systems and thorough knowledge of all vacuum pumps including troubleshooting and disassembly of roughing pumps, horizontal, and vertical turbo-molecular pumps, cryogenics pumps, ion pumps and mass spectrometer leak detectors and residual gas analyzers. A diverse background should include machining on a variety of machine tools with own setup being required. Also required are use of the cut-off and bank saws, silver and all-state brazing and softsoldering. Some stainless steel and aluminum welding desired. A knowledge of rigging and use of cranes with up to a 40-ton capacity also desired. Applicant must be able to work from prints in the manufacture of parts and assemblies. Requirements: two years of day technical school or its equivalent plus five years of applicable experience required. This position is located at the Bates Linear Accelerator Center in Middleton, MA., which is approximately 21 miles north of the MIT Cambridge Campus. R88-040

LABORATORY AIDE, Center for Cancer Research, an individual who performs routine assignments related to the teaching and research laboratories; collects, washes, rinses and sterilizes various types of laboratory glassware (i.e. beakers, vials, pipettes etc.) for use in microbiological, tissue culture, bacteriological, biochemical, etc. experiments. Will use all related equipment, machines and stores clean glassware. Keep laboratory areas clean and orderly for the conducting of experiments. After demonstrated experience may work independently setting work priorities, maintain supplies, prepare media and may give direction to others. Does related laboratory duties as assigned. Requirements: some experience in scientific glass washing desirable. Must be conscientious and have ability to follow directions. Works under general directions and as experience is acquired will work without direct supervision for extended periods. High school graduate or equivalent required. R88-033

CAMPUS POLICE OFFICER, to be responsible for the protection of life and property, traffic control, policing of MIT parking lots, and making foot patrols of all grounds and buildings. Administration of first aid including ambulance service of injured or ill persons. Close participation in emergency procedures, explosions, fire, and chemical spills, etc., and investigations, report writing, and other related duties. Requirements: a minimum of three years police department experience: municipal, state or campus police. Experience in all phases of law enforcement to include criminal law, knowledge of procedures, criminal investigation, case preparation, investigation of complaints and report writing. Will be required to complete successfully any additional police academy training if needed. Must be qualified with use of firearms. Must have valid driver's license, and an honorable discharge from any earlier police service. Ability to handle top level public relations, and work long hours when needed. Must pass Institute physical examination. Will be required to become EMT certified if not already certified. Will be required to maintain all certifications, licenses, etc., current at all times. (The hours for this position are from 6:00 p.m. to 2:00 a.m.). R88-032

ASSISTANT ANIMAL TECHNICIAN, Division of Comparative Medicine, to perform under direction any and all duties involved in the care of animals (dogs, cats, monkeys, mice, rats, hamsters, guinea pigs, and chickens, etc.) working with different species of animals as assignments dictate. Will maintain proper levels of food and water for animals in accordance with established procedures; cleans animal cages and trays; changes bedding materials and/or liter; washes cages, trays, water bottles, and related items; uses cleaning equipment assigned; performs other miscellaneous housekeeping functions, such as cleaning laboratory walls and floors, etc., in animal areas as necessary; monitors animals and notifies Animal Technologist or supervisor if condition of animals dictates; and performs other related duties as assigned. Supervision and/or direction mandatory. Requirements:

graduation from high school and/or equivalent combination of education and experience. Knowledge and ability to work with animals important. Willingness to partake in AALAS seminars and training programs essential. A minimum of 1-2 years of animal care experience preferred. R88-027, R88-023

ASSISTANT ANIMAL TECHNICIAN, Division of Comparative Medicine, under direction performs any and all duties involved in the care of animals (dogs, cats, monkeys, mice, rats, hamsters, guinea pigs, chickens, etc.) working with different species of animals as assignments dictate. Maintain proper levels of food and water for animals in accordance with established procedures. Cleans animal cages and trays. Change bedding materials and/or liter. Wash cages, trays, water bottles and related items. Use cleaning equipment assigned. Perform other miscellaneous housekeeping functions, cleaning laboratory walls, floors, etc. in animal areas as required. Monitors animals and notifies Animal Technologist or supervisor if condition of animals dictates. Does other related duties as assigned. Supervision and/or direction required. Qualifications: graduation from high school or equivalent. Knowledge and ability to work with animals. Willingness to partake in AALAS seminars and training programs. 1-2 years of animal care experience preferred. R88-005

HEAT & VENT MECHANIC, Physical Plant (Irregular Shift). Applicants should have a broad range of experience in building heating, ventilating and air conditioning (HVAC) operations and maintenance. Specific experience in the operation of steam heating systems, HVAC controls, boilers, water treatment, and refrigeration systems with hands on experience in the repair, replacement, and adjustment of their operating components is a requirement. Qualifications: should have a high school education and a minimum of five years experience in the operation and maintenance of building HVAC systems. Formal training in mechanical operations and maintenance may be considered as substitute for a portion of the experience. R87-676

OTHER POSITIONS

EATON PEABODY LABORATORY/M.I.T.

RESEARCH SUPPORT ENGINEER, to join an existing group of 3 experienced engineers. Will provide software support for scientific research in hearing. In particular, will participate in the design and implementation of a new experimental facility using state-of-the-art techniques in real-time data acquisition, digital signal processing and networking. Our software environment is C and UNIX (4bsd variants). The hardware platform for the new experimental facility will be a Sun3 or Masscomp graphics workstation which will be linked into our existing network of two DEC MicroVAXes and a Sun 4/280. We anticipate that X-windows and NFS will be important components of this project. Requirements: a bachelor's degree, ideally in electrical engineering or computer science, but a degree in science or mathematics is also acceptable. 1-3 years recent experience in a similar position preferred, but will consider a spring 1988 graduate with related laboratory experience. Proficiency in one or more of the following areas is desirable but not required: C and UNIX, data acquisition software, real-time programming, computer graphics, user interfaces, digital signal processing. Some knowledge of hardware would definitely be a plus. Good communication skills are essential, as is the ability to work independently with minimal supervision. Please send resume to:

Dr. David Steffens, Chief Engineer
Eaton Peabody Laboratory
Mass. Eye & Ear Infirmary
243 Charles Street
Boston, Ma. 02114

Complete descriptions of additional Administrative, Academic, Sponsored Research, and Service Staff Positions are posted in the Personnel Office in Bldg. E19-239.

DEADLINE INFORMATION

To post MIT openings in Positions Available, "Request for Personnel" forms should be submitted to the appropriate Personnel Officer in the Personnel Office. Deadlines for submission are as follows:

MIT POSITIONS AVAILABLE

MIT Positions Available is a publication of the Personnel Office, Massachusetts Institute of Technology. It appears as a supplement to TECH TALK 35 times a year and as an independent entity other weeks.

Address inquiries or resumes to the MIT Personnel Office, Room E19-239, MIT, Cambridge, MA 02139. General telephone inquiries are received at (617) 253-4251. Please include the job number(s) when making inquiries.

12:00 noon on Wednesday (except when the following Monday is an Institute holiday)

12:00 noon on Tuesday (when the following Monday is an Institute holiday).

John Waugh of chemistry is 1988-89 Killian Lecturer

Professor John S. Waugh, an authority in chemical physics known internationally for his work in magnetic resonance, has been selected as the 1988-89 recipient of the James R. Killian, Jr., Faculty Achievement Award.

The award, bestowed by faculty colleagues, recognizes extraordinary professional accomplishments and service to the Institute. It was established in 1971 as a tribute to the late Dr. Killian, MIT's 10th president and former chairman of the Corporation. The award carries a \$5,000 honorarium and its recipient usually delivers two lectures in the spring term of the award year.

Dr. Waugh is the Arthur Amos Noyes Professor of Chemistry in the Department of Chemistry.

The announcement of his selection was made by Professor Richard S. Eckaus, head of the Department of Economics, at the April 20 faculty meeting. Professor Eckaus chaired the five-member faculty selection committee that included Professors Thomas J. Allen, Julian Beinart, John M. Buchanan, and Peter S. Eagleson.

The citation said in part: "Recognized widely as an authority in physical chemistry, John has contributed to the intellectual life of the Massachusetts Institute of Technology in many respects. His fine mentorship qualities have enriched his many students, post-doctoral associates, and faculty colleagues. He has been a role model for junior faculty and at other leading academic institutions. John's infectious enthusiasm for quality science has spawned one of the finest physical chemistry programs in the world."

Born in Willimantic, Conn., in 1929, Professor Waugh received the AB degree from Dartmouth College in 1949, graduating summa cum laude with highest distinction in chemistry. He received his PhD degree in chemistry and physics from the California Institute of Technology in 1953. He came to MIT as an instructor in chemistry in 1953 and became assistant professor in 1955, associate professor in 1958, and professor in 1962. In 1973 he was named the first Arthur Amos Noyes Professor of Chemistry.

Dr. Waugh's principal studies have dealt with nuclear magnetic resonance (NMR). In NMR the magnetic moments of atomic nuclei are stimulated with static and radiofrequency magnetic fields and give rise to signals useful in a variety of applications—from imaging to spectroscopy.

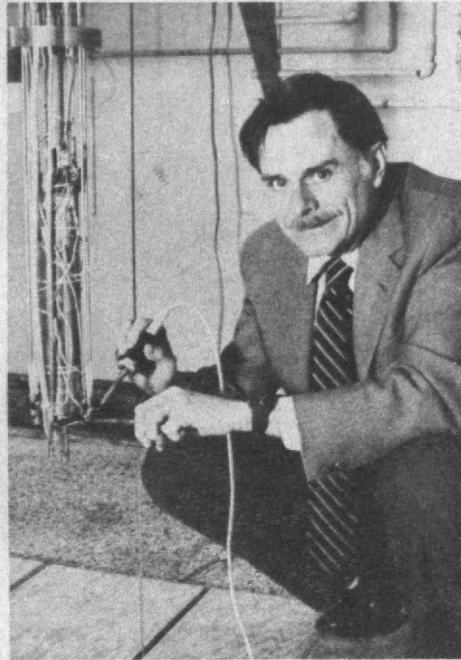
The Killian award citation says of NMR's importance: "This versatile and powerful tool of investigation of molecular structure and dynamics has had an enormous impact on research in chemistry, biology, biochemistry, condensed matter physics, materials science, and medicine. There are few other techniques that have so effectively enlarged scientific knowledge and yielded such great practical benefits in so many diverse fields."

Dr. Waugh's theory of coherent averaging unified the understanding of many existing phenomena in NMR and also provided a conceptual base for the discovery of a variety of new ones. His laboratory extended high resolution NMR spectroscopy from the liquid to the solid state, and also enhanced the sensitivity of the technique for very dilute species.

These techniques are now in widespread use.

Professor Waugh and his students also carried out the first experimental realization of the so-called Loschmidt-Boltzmann paradox by causing a complicated system of many particles to spontaneously evolve "backward in time," seemingly violating the second law of thermodynamics.

Professor Waugh has lectured and been a visiting professor at many institutions in the United States and abroad, at the University of California, Harvard University, Dartmouth College, the Max-Planck Institute for Medical Research,



Professor John S. Waugh

and Moscow State University, to name but a few. Widely published in scientific journals, he is the author of a reference book on NMR and is the editor of the series, *Advances in Magnetic Resonance*.

He is a member of the National Academy of Sciences and a Fellow of the American Academy of Arts and Sciences and has been chairman of the Division of Chemical Physics of the American Physical Society. He received the Haseltine Chemistry Prize in 1949, the Humboldt-Preis in 1972, the Irving Langmuir Chemical Physics Award in 1976, the Pittsburgh Award in spectroscopy in 1978, and the Distinguished Alumnus Award of the California Institute of Technology in 1987.

MIT Road Race set for May 7

By MARY Z. ENTERLINE

Whether you're fast or slow, you can be a winner in the MIT Community Service Fund Road Race, to be held Saturday, May 7, at 9:30am.

Prizes will be awarded to the overall male and female winners and to the masters champions (those over 40). Last year's male and female winners were two MIT students, Knut Engebretsen, a graduate student in mechanical engineering, who ran the four-mile course in 21 minutes and 2 seconds, and Anne McVeigh, now a junior in electrical engineering, whose time was 24:39. The masters champions were Sumner Brown, an MIT alumnus, who finished second overall at 21:18, and Andrea Hatch, financial officer in brain and cognitive sciences, who ran 27:55.

Last among the 302 finishers a year ago were two members of Chi Phi fraternity, Edward C. Hahn (52:10) and Gary Chun (52:11). Chi Phi won the prize for the living group with the highest participation rate (51%). Ten of the last 14 finishers were members of Chi Phi.

According to Mr. Hahn, Chi Phi will be aiming for the prize again this year. "We believe it's a good thing to do the for community," he said. "We're not all runners," he added, perhaps thinking of the preponderance of Chi Phi people at the back of last year's pack. "I've got bad knees."

The entry fee for the race is \$5 until Thursday, May 5. An entry costs \$6 on the day of the race.

An entry form appears in this issue of Tech Talk.

The race is open to all members of the MIT and Wellesley communities, to Draper and Lincoln Lab people, and to Greater Boston alumni. All proceeds go to the Community Service Fund, which supports the work of MIT volunteers in community service and action projects.

The traditional course will be followed, beginning at the Walter C. Wood Sailing Pavilion on Memorial Drive, following the river to the Museum of Science, then returning along Storrow Drive to the Harvard Bridge, and then across the bridge to the finish line at McDermott Court.

The first 400 to register will get free T-shirts. Participants will also be eligible in drawings for prizes supplied by Marathon Sports and Toscanini's Ice Cream.

Please print clearly

REGISTRATION FORM

Entry Fee: \$5.00 pre-post

Return to 5-208

\$6.00 post-entry

(payable to the MIT Comm. Serv. Fund)

Name _____ Sex _____
 Address _____ Age on race day _____
 Telephone _____ Living Group _____ T-shirt size _____
 S M L XL

RELEASE FORM (Mandatory)

In consideration of accepting this entry, I, the undersigned, intending to be legally bound, hereby, for myself, my heirs, executors and administrators, waive and release any and all claims for losses and damages I may have against the Massachusetts Institute of Technology and the City of Cambridge and all other parties and their representatives, successors and assigns for any and all injuries suffered by me in said event. I attest and certify that I am physically fit and have sufficiently trained for the completion of this event. Further, I hereby grant full permission to any and all foregoing to use photographs, videotapes, motion pictures, recordings or any other record of this event for any purpose whatsoever.

NO ONE MAY ENTER THIS EVENT WITHOUT SIGNING THIS OFFICIAL WAIVER.

Signed: _____ Date: _____

If under 18, signature of legal guardian is required.

Dance

Open Rehearsal of Beth Soll & Company with Malombo* - MIT Dance Workshop Informal rehearsal, Thurs, April 28, 3-5pm, Kresge Auditorium.

MIT Ballroom Dance Club** - Sun, May 1: Beginning Merengue, 1-2pm; Intermediate Viennese Waltz, 2-3:30pm; Advanced Quickstep, 3:30-4:30pm, Lobby 13. Sun, May 8: Beginning Polka, 1-2pm; Intermediate Merengue, 2-3:30pm; Advanced Viennese Waltz, 3:30-4:30pm, Lobby 13. Sun, May 15: Beginning Charleston, 1-2pm; Intermediate Polka, 2-3:30pm; Advanced Merengue, 3:30-4:30pm, Lobby 13. PARTY - Tra La, It's May, Sat, May 7, Walker Gym, 8-Midnight. Workshop admission: Beginning - \$.75/non-members, \$.50/members; Intermediate - \$1/non-members, \$.75/members; Advanced - \$3/non-members, \$2/members.

MIT Dance Workshop Classes* - Beginning Modern Technique: M/W, 3-5pm, Dupont TClub Lounge; Composition/Improvisation: Tues, 3-5pm, Dupont TClub Lounge; Intermediate Modern Technique, T/Th, 5:30-7pm, Walker Rm 201.

MIT Dance Club: Aerobic and Jazz-Aerobic* - Aerobic, Mon, 6:30-7:30pm, Dance Studio and Wed, 7-8pm, General Exercise Rm; Jazz Aerobic, 6:30-7:30pm, Dance Studio. Cost: \$3/MIT; \$4/non-MIT. Info: Julia, 492-1369 eves.

MIT Folk Dance Club* - weekly dancing-Sun, International Dancing, 7:30pm, Lobby 13; Tues, Balkan and Western European Dancing, 7:30pm, Rm 6-321 (Moore Rm); Wed, Israeli Dancing, 7:30pm, Lobby 13.

Yoga* - ongoing classes in traditional Hatha and Iyengar style. Beginners: Mon, 5:15pm; Intermediates: Mon, 6:15pm. For information call Ei Turchinetz, 862-2613.

Exhibits

LIST VISUAL ARTS CENTER

Three on Technology. Robert Cumming, Lee Friedlander and Jan Groover, three noted American photographers, present a body of work that documents the elusive effects of the technological revolution. May 7 through June 26. Opening reception - May 6, 5-7pm. (See related symposium under May 6 and 7 "Seminars and Lectures") Kristin Jones and Andrew Ginzler: *Charybdis*. Artists develop a metaphorical tableaux evoking

the power and splendor of weather systems and develop and construct "Charybdis" a major environmental installation inspired by the legendary whirlpool off the coast of Sicily. May 7 through June 26. Lecture and Reception - May 10, 7:30pm. Tishan Hsu. Large, colorful paintings by this Boston-born New York artist (MIT '73, G '75) are mysteriously evocative, combining industrial forms and materials with surreal imagery that suggests the human body. May 7 through June 26. Opening reception - May 6, 5-7pm. Hours: 12-6 weekdays, 1-5 weekends.

THE MIT MUSEUM

MIT Museum Bldg - Earth, Sea and Sky: Charles H. Woodbury, 1864-1940, Artist and Teacher. Paintings, watercolors and drawings by Woodbury, MIT Class of 1886, is the largest retrospective exhibit of works by this master of nature's motion an opposing force. Through October 3. Arnold Newman: Five Decades. Photography of Arnold Newman, renowned American portraitist. Through June 27. Math in 3-D. Brightly colored geometric sculptures based on mathematical formulae, by Morton C. Bradley, ongoing. Light Sculptures by Bill Parker, MIT '74. Changeable, touchable plasma sculptures by the artist who developed this medium, ongoing. Hours: Tues-Fri 9am-5pm. MIT Museum closed to the public on Mondays; Open 12-4pm Sat-Sun; \$2 donation requested.

Compton Gallery - Microscopes: The Hidden Art of High Technology. 50 dramatic photographs, focusing on the seldom-seen world of advanced developments in microelectronics software and lightwave communications. Sponsored by AT&T. Through Sept 9. Gallery hours: Weekdays 9am-5pm, closed Saturdays.

Hart Nautical Gallery

Ongoing exhibits: George Owen '94: Yacht Designer - Line drawings and half-models designed by one of the early professors of naval architecture at MIT. MIT Seagrant - A review of MIT ocean research; Half Models in Naval Architecture and Ship Building - Half-models, ship drawings and photographs illustrate how the half model has aided ship and yacht designers and builders.

Edgerton's Strobe Alley - Exhibits of high speed photography. Main corridor, 4th floor.

Corridor Exhibits

Corridor Exhibits: Building 1 & 5, 2nd floor: John Ripley Freeman Lobby, Building 4: Norbert Wiener, Karl Taylor Compton. Community Service Fund, Ellen Swallow Richards. Women at MIT. An overview of the admission of women at MIT. Five photographic panels with text documenting the circumstances that increased the number of women in the classroom since Ellen Swallow Richards. Building 6: Laboratory for Physical Chemistry.

OTHER EXHIBITS

Institute Archives and Special Collections - James Rhyne Killian, 1904-1988. Photographs from the career of MIT's 10th president. 1904-05: A Pivotal Year for MIT. Chronicles alumni and staff reaction to the most serious of several attempts to merge Harvard and MIT. Hall exhibit cases in 14N, 1st floor.

Sports

MIT Community Summer Softball** - 1988 Organizational Meeting, Wed, May 4, 5:30pm, Rm 1-190. Marino T. Tavaraz, MITCSS-1988 Commissioner. New team entries welcome.

Wellesley Events

Jewett Arts Center* - Selections from the Wellesley College Museum Permanent Collection. From the Medieval period through the 20th century. Through June 5. Recent Acquisitions and Alumnae Gifts. Paintings, sculpture, prints, and photography by Berenice Abbott, M.C. Escher, Claude Monet, and Pre-Columbian and Hellenistic objects. Through June 5.

The Elbert Collection on Slavery, Emancipation, and Reconstruction* - Books, tracts, and narratives from the Elbert Collection displayed in connection with the celebration of the centennial of the graduation of Ella Smith Elbert, second Black graduate of Wellesley College, Margaret Clapp Library. Through June.

Continuing Education Campus Day* - Open house for women over traditional college age interested in obtaining their BA degrees, Thurs, April 28, 10am-12:30pm, CE House.

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

MIT Cable System - Submit announcement in writing to Rm 9-050. We prefer a day's warning, but faster action may be possible. Useful also for correcting errors, notifying about cancellations, and dealing with emergencies. If you have met the Tech Talk deadline, your announcement is automatically put on cable (except for exhibits and some multi-meetings programs).

We are now accepting requests via e-mail. Announcements are shown on MIT Cable channel 12, which is displayed on the receivers in Lobbies 7 and 10. Announcements should be of interest to the general MIT community. Classified ad type messages will not be accepted. Messages should include: date, title of event, speaker or sponsor, time and location. MIT Cable reserves the right to edit your message to fit the screen. Include your MIT phone number. E-mail your announcements to: tv-messageselec.com.mit.edu. Messages will usually be posted within 24 hours of their receipt.

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

Send notices for Wednesday, May 4 through Sunday May 15 to Calendar Editor Rm 5-111, before 12noon Friday, April 29.

Johnson Games, Athlon Ball brighten weekend



Dr. David Saxon, Mrs. Saxon, Howard Johnson, Mrs. Johnson and President Gray, from left, at the Athletics Center naming ceremony.

A.J. Siegel named first Johnson Professor

Professor Abraham J. Siegel, former dean of the Sloan School of Management and a specialist in labor relations and collective bargaining, has been named the first occupant of the Howard W. Johnson Professor of Management.

The establishment of the chair honoring Mr. Johnson was announced Friday by Dr. David S. Saxon, chairman of the MIT Corporation. The announcement came on the first day of a weekend of activities celebrating the contributions to MIT of Mr. Johnson, former MIT president and Corporation chairman.

Professor Siegel served as Sloan School dean from 1981 to 1986 after serving earlier as associate dean and acting dean. He has held dual appointments as professor of industrial relations in the Sloan School and in the Department of Economics.

Professor Siegel has conducted extensive research on labor-management relations and has served widely as a consultant to labor unions, industrial organizations and government. He also has been a fact-finder, mediator or arbitrator in labor-management disputes in many industries and communities in both the private and public sectors.

At MIT, he has served as trustee of the Institute's retirement plans and as chairman of the Administrative Committee of the Retirement Plan for Staff Members.



He also has served over the past quarter century on virtually all the Institute's standing committees of the faculty.

Professor Siegel received a BA degree in 1943 from the City College of New York, an MA from Columbia University in 1947 and a PhD in 1961 from the University of California at Berkeley.

Following service in World War II with the US Air Force, Dr. Siegel began his

academic career as an instructor in economics at CCNY. From 1952 to 1954 he was a research economist at the Institute of Industrial Relations at Berkeley, where he collaborated with Dr. Clark Kerr in studies related to collective bargaining, industrial conflict and the nature and development of labor organizations in industrial societies.

Dr. Siegel came to MIT in 1954 as an instructor in the Department of Economics, was appointed assistant professor in 1956 and associate professor in 1959. In 1964, he was appointed professor of industrial relations.

He also has served as a visiting professor in the Department of Economics at Brandeis University and as a special lecturer in the Trade Union Program of Harvard University. In 1964-65, he was the principal member of the International Institute for Labour Studies in Geneva, Switzerland.

Professor Siegel is the author or co-author of several books, and has contributed to many books of collected essays and to government reports dealing with labor markets and labor policy. He also has published many articles in professional journals dealing with labor economics and labor relations, organizational development, and the management of human resources.



No words needed.

Photos by Donna Coveney



Provost John M. Deutch, right, and teammates Dr. Elliott Thrasher, Stacia Conklin and Kimberly O'Brien set off in the sack race.



Mr. and Mrs. Howard Johnson with the plaque naming the Athletics Center for him.

They jumped, ran, tugged and played 'Howard Says'

They jumped, ran, tugged, hugged and played an appropriately renamed game—Howard Says—as an estimated 1,500 people took part last weekend in the Johnson Games, a series of activities honoring former president and chairman Howard W. Johnson.

Participants included faculty, students, staff, friends and family—the MIT community in the full sense of the word.

And when the friendly and spirited athletic and mental competitions came to an end, hundreds attended the Athlon Ball at the newly named Howard W. Johnson Athletics Center.

Chairperson of the ball was Priscilla K. Gray. Professor Royce N. Flippin was chairman of the games committee.

Results of the Johnson Games, as provided by the committee:

Winning team—Team No. 1—the pink team—made up of The Crash Landers

(aero/astro) and the Fishy Schwas (RLE SpeechGroup); co-captians, Hirak Mitra and Nicolas Cauchy.

Captains Courageous—Kristy Dowers, Team 8, Demo or Die—Waves (media lab) and Gerald Prioleau, Team 25, Nothing Amazing (Black Graduate Students Association) and Next Best (Next House).

Woman of the Hour—Suzanne Behson, Team 11, The Write Stuff (Knight Fellows) and the HUM-dingers (School of Humanities and Social Science).

Man of the Hour—Bernard Lloyd, Team 25.

Trivia Titans, Team 1.

Ain't NoBig Thing Award, Team 12, Sloan Rangers (School of Management) and the Bone Breakers (archaeology and anthropology).

Winners can pick up medals at Rm 3-203 between 9am and 5pm.



Howard Johnson meets the Beaver.

Johnson

(continued from page 1)

faculty—can extend and exercise their full potential, where they can develop the talent for leadership and living, as well as thinking and discovering. And, in fact, that those two concepts are largely congruent. And that has been true from our beginnings. Presidents of MIT have understood it. Rogers knew it when he sought to create a new kind of technology and prepare young people for the new world. Walker, with the memory of Gettysburg still in his mind, knew what the individual could achieve in war and hoped to transfer that achievement in peace. The generations since then have come to know it even better. Jay Stratton, Jerry Wiesner and Paul Gray understood it.

"The great deans of student affairs, the great directors of athletics, the great coaches, who are history, understood and understand it and, most of all, our students understand it. I am grateful to them all for including me in their ranks.

"Early mornings and late afternoons when I used to walk Briggs field and the area behind the DuPont Gymnasium, I could see the great conglomerations of teams and individuals engaged at almost all hours in happy struggle and eventual triumph. One could see then that when we triumph we are all lifted and when we lose, we are not dismayed. In the process we grow as human beings and at the end of the day, we are content that we have given our best—content that we have seen in playful conflict, the template for living in a more hostile environment.

"But let me look forward. I see in the years ahead generations of MIT men and women who will be here to work and play and lead. This institution, of course,

will always be known first and foremost as a seedbed of ideas, important breakthroughs for the human condition, the intellectual achievements, the theoretical discoveries and the practical accomplishments of MIT's alumni and faculty are what drive this place; but what goes on here at MIT in athletics, in this center, is fully consistent with these essential and first goals. and so I salute those students, those men and women of the future, recognizing the reflection of their achievement in what has been taking place in the past.

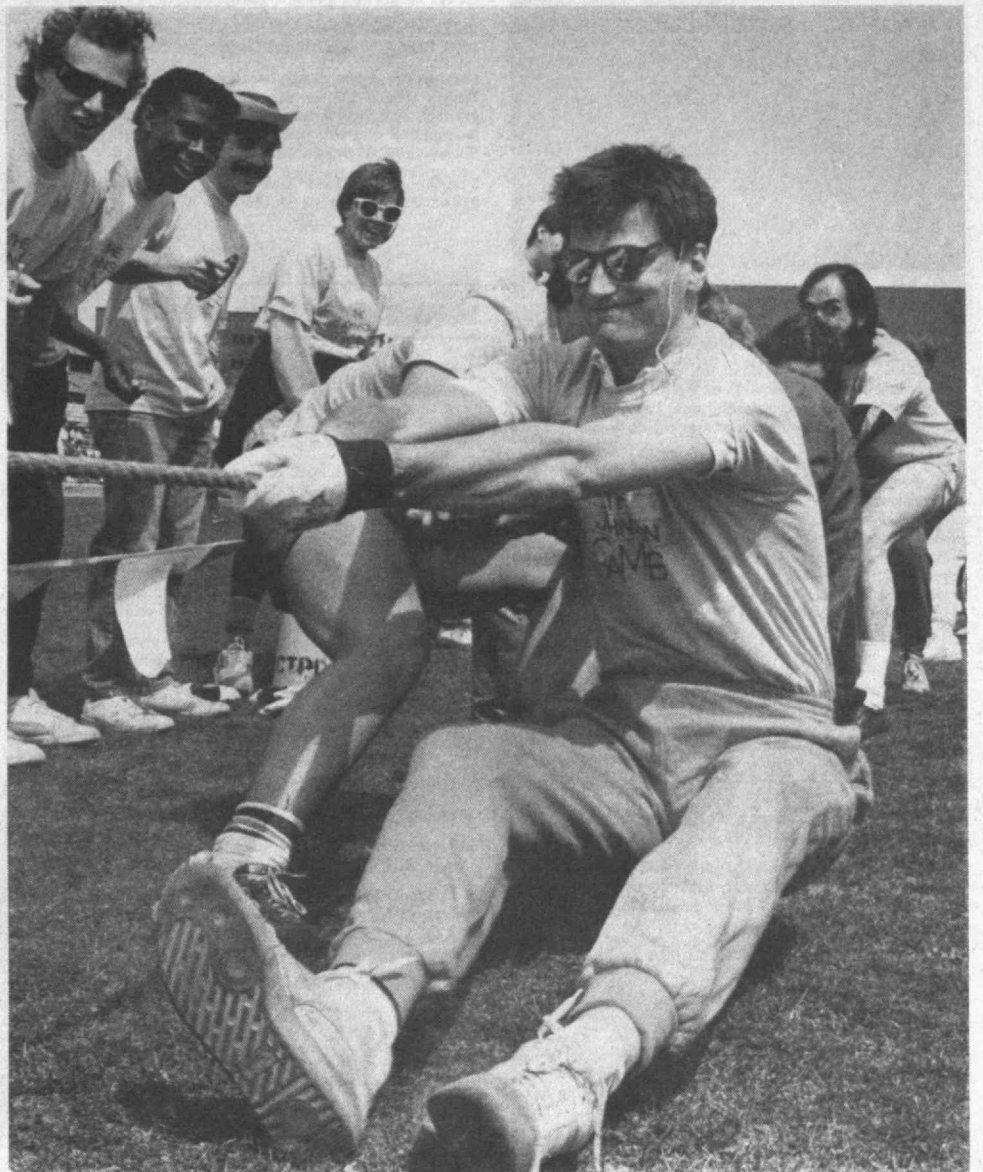
"I salute those young people and know that they will—in the words of that classic description of competitive effort—'fill the unforgiving minute with sixty seconds' worth of distance run.'

"May they enjoy here exhilaration, fulfillment and—in the end—triumph."

The plaque carrying Mr. Johnson's name was displayed on stage. Bearing the date April 22, 1988, it read:

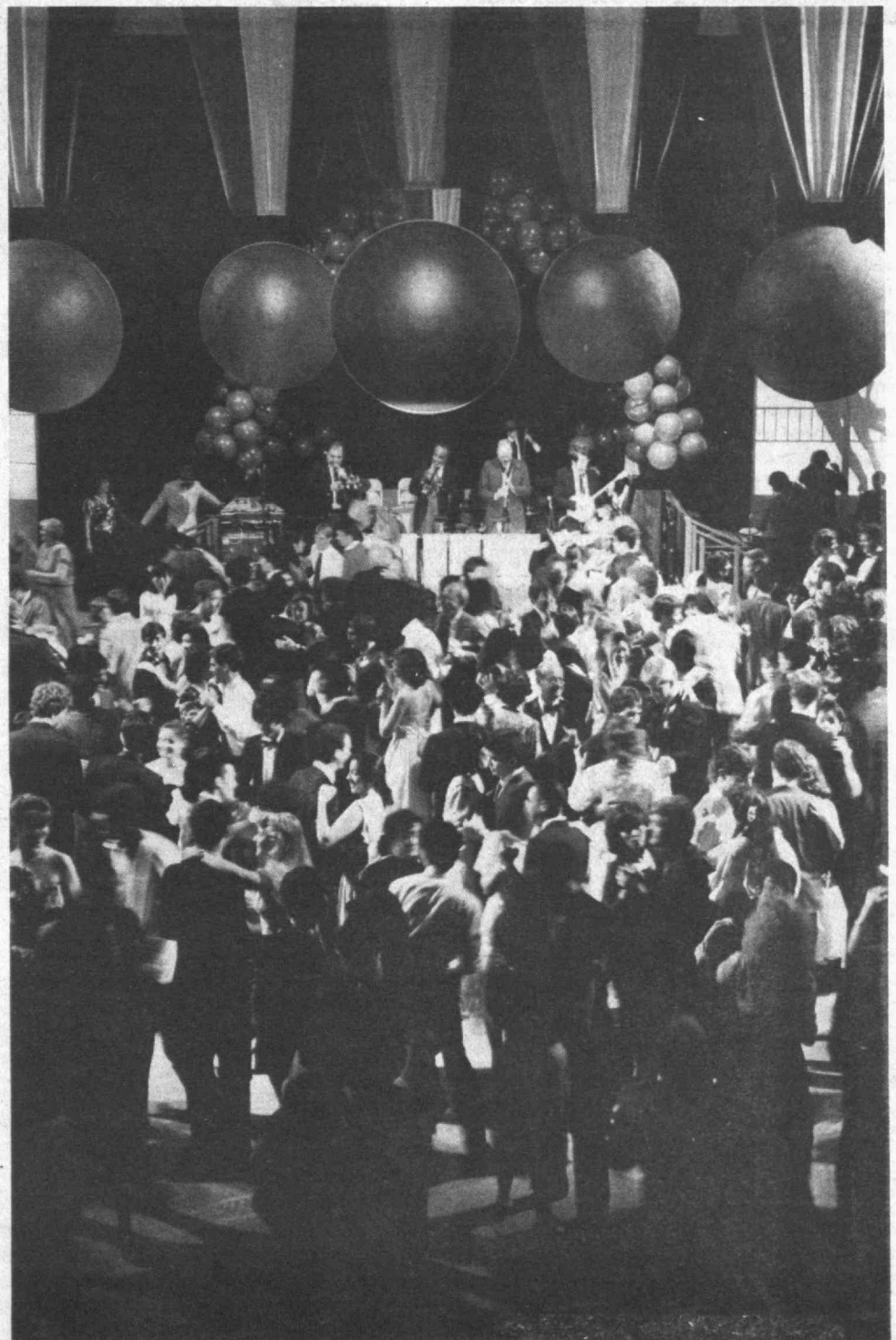
"The Howard W. Johnson Athletics Center. Named in honor of MIT's twelfth president. He led MIT through times of great change with skill, energy, humor, a sense of fair play, and an unwavering commitment to excellence."

Other speakers at the naming ceremony were President Paul E. Gray, Professor Thomas J. Allen Jr., Educational Council director Bonny S. Kellermann, Timothy W. Mattox '88, and Royce N. Flippin Jr. All have strong ties to MIT athletics. President Gray was introduced as a "former collegiate wrestler" and an avid squash player. Professor Allen is chairman of the MIT Athletics Board. Ms. Kellermann is a noted figure skater who teaches the sport at MIT. Mr. Mattox is president of the MIT Athletics Association and Professor Flippin is director of athletics.



Bernd Girod, a visiting scientist, leads tug-o-war effort.

—Photos by Donna Coveney



—Photo by L. Barry Hetherington

Athletes of the afternoon work out the kinks at the Athlon Ball.



THE ARTS

MAY AT MIT

1 Sun

In The Spring Women Sing
MIT Women's Chorale. 55th Annual Spring Concert, Nancy K. Wagner, conductor. Mendelssohn, Copland, Fine, Faure and others. 3pm, Huntington Hall (10-250). 648-1936.

3 Tues

Chamber Music Recital I
Chamber music concerts by students. From the Chamber Music Society, 5:15pm, Killian Hall. 3-2906.

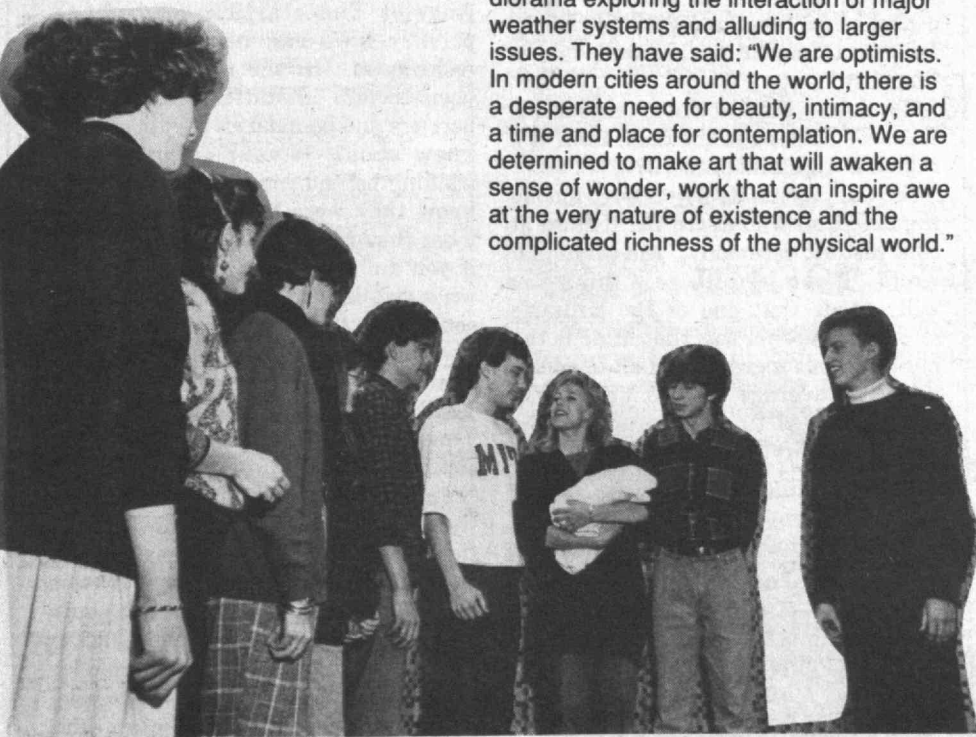
4 Wed

Chamber Music Recital II
From the Chamber Music Society, a recital by MIT students 5:15pm, Killian Hall. 3-2906.



5-7 Thurs/Sat

Final Weekend: Bette & Boo
MIT Dramashop stages *The Marriage Of Bette And Boo*, by Christopher Durang. Student actors supported by MIT's professional theater crew. 8pm Kresge Little Theater, \$6, \$5 students/seniors. 3-2877

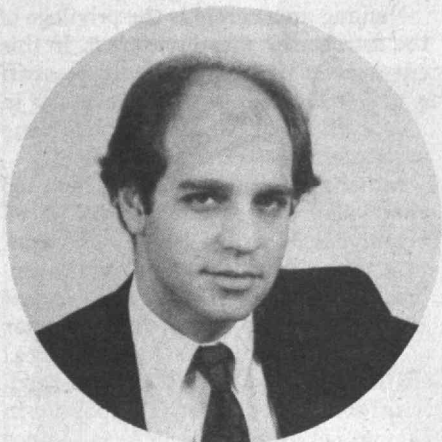


A young man tries to understand his complicated family in *Bette and Boo*, being staged the final weekend of April (28-30) and first weekend of May. In rehearsal, above are: Alexa

5 Thurs

Chamber Music Recital III
Chamber music concerts by MIT students from the Chamber Music Society, 5:15pm, Killian Hall. 3-2906.

Orgel In Piano Recital
Pianist Paul Orgel, below, performs works of Mozart, Janacek, Beethoven, Liszt and Chopin. When he debuted in New York three years ago, a New York Times reviewer said "Mr. Orgel is a thoughtful and serious young pianist; his interpretations are invariably clean, unmannered and deeply calculated." Last concert in this year's Affiliated Artist Series. 8pm, Killian Hall. 3-2906.



6 Fri

Spring Riffs For Jazz
Spring concerts of the MIT Jazz Bands, Jamshied Shariffi and Everett Longstreth, directors. With guest bands from schools in the area. 8pm, Kresge, \$1 at the door. 3-2906.

Three New Exhibitions Open At The List Center
An opening reception tonight, 5-7, for three exhibitions at the List Center:

American photographers Robert Cumming, Lee Friedlander, and Jan Groover — their photographs document the elusive effects of the technology revolution.

Along with this exhibit a two-part symposium, "Visual Arts and The World of High Tech," is presented by the List and MIT's Program in Science, Technology and Society (STS). Bartos Theater, today, 3-5pm, with STS's Leo Marx and art scholars from Yale and SUNY.

Artists in residence Kristin Jones and Andrew Ginzel of New York. Visitors are invited to watch them as they create a diorama exploring the interaction of major weather systems and alluding to larger issues. They have said: "We are optimists. In modern cities around the world, there is a desperate need for beauty, intimacy, and a time and place for contemplation. We are determined to make art that will awaken a sense of wonder, work that can inspire awe at the very nature of existence and the complicated richness of the physical world."

Ogno '91, Cheryl McCullum '89, Katrina Nelsen '91, Julie Theriot '88, Chris Coon '90, Nelson Scharfman '91, Amy Mitchell Wellesley '88, George Madrid '91, Robbie Smith '88.

Tishan Hsu. Bold and sculptural paintings by Boston-born New York artist Tishan Hsu, (who received both bachelors and master's degrees in architecture at MIT, '73 and '75) are mysteriously evocative, combining industrial forms and materials with a surreal imagery that suggests the human body.

These exhibitions continue through June 26. List Visual Arts Center, Wiesner Building, Weekdays 12-6, Weekends 1-5. 3-4680.

7 Sat

Chamber Music Society IV
Chamber Music Society. Chamber music concerts by students. 8pm, Killian Hall (14). 3-2906.

Choral Society Sings Bach
MIT Choral Society. John Oliver, director. Bach's *B Minor Mass*. 8pm. Church of the Covenant, Corner Newbury & Berkeley Streets, Back Bay, Boston \$5, \$10, free to MIT/Wellesley students with ID. 3-2906.

Spring Concert of The Band
MIT Concert band. John Corley, director. Works of Copland, Gould, Bovicchi and Husa. Student conductors Jon Pasternak and Scott Berkenblitt; soloists: Arlene Lanciani, flute; Charlie Marge, clarinet. 8pm, Kresge. 3-2906

Second Art/Tech Discussion
The second part of the special symposium being presented in connection with the List Visual Arts Center's new photography exhibition will be presented today, led by Leo Marx, MIT's Kenan Professor of American Cultural History. Today's panel discussion will be with Molly Nesbit, Professor of Art History at Barnard College. Entitled "The Visual Arts and the World of High Tech, these two discussions (See May 6 for the first) are being jointly presented by the List Center and the Program in Science, Technology and Society. 9:30am to 12 noon in the Bartos Theater of the Wiesner Building. 3-4400.

8 Sun

Brass In The Sunshine
MIT Outdoor Brass Festival. MIT Brass Ensemble, Richard Given, director and guest ensembles from nearby schools. 2pm, Kresge Oval, Rain location: Kresge Auditorium. 3-2906.

9 Mon

How A Family Lives In War
Beirut: The Last Home Movie, will be screened with the filmmaker, Jennifer Fox, present to comment and answer questions. A two-hour documentary about how three aristocratic sisters live and escape the present-day, ongoing war, this film provoked considerable controversy at the London Film Festival last year. 7pm, Bartos Theater, Wiesner Building. 3-1607.

Final ARTS AT A GLANCE, 87-88: Let's Pause For A Word of Thanks
This page marks the final Arts At A Glance for this academic year although the Arts Page will continue through graduation week. This new venture owes special thanks to its graphic designer, Celia Metcalf, and to the production staff: Lee Ward, Steve McClusky, Lorrie LeJeune, Andy Barnes, and Joy Kierstead. Also to major contributors: Clarise Snyder, Dana Friis-Hansen, Judy Whipple, Marcia Conroy, Susan Downing, Denise Cormier, and Barbara Schulman; and to photographers Donna Coveney and L. Barry Hetherington. —China Altman



11 Wed

Friedmann Offers His Music
Graduating senior Samuel Julio Friedmann, who has concentrated in music and geology, presents a recital of his own works: *Four Dream Songs, Prayer for Peace, Flute Sonatina* and others. To be performed by a madrigal chorus of Friedmann's student friends. 8pm, Killian Hall. 3-2906.

12-15 Thurs/Sun

Aviary Flies Into Cube
Aviary, a performance combining video, a sculptural set, dance and an original music score — all drawn from images and sounds of birds — will be presented in three performances. Video and music from Ellen Sebring, light and space design by Beth Galston, both graduates and fellows of the Center for Advanced Visual Studies. The Cube, Wiesner Bldg, May 12-14, 8pm; May 15, 3pm. 3-0631.

20-22 Fri/Sun

American Dance Combines With South African Music
MIT's own famous choreographer, Beth Soll, combines with the Black South African music group Malombo, in a full-length performance piece. The unusual idea is to attempt a blending of two disparate cultures through their indigenous art forms: Black South African music and American modern dance. Soll is director of the MIT Dance Workshop. May 20, 21 at 8pm; May 22 at 3pm. \$10/general public, \$8/seniors & MIT students, Kresge. 3-0862 or 547-8771.

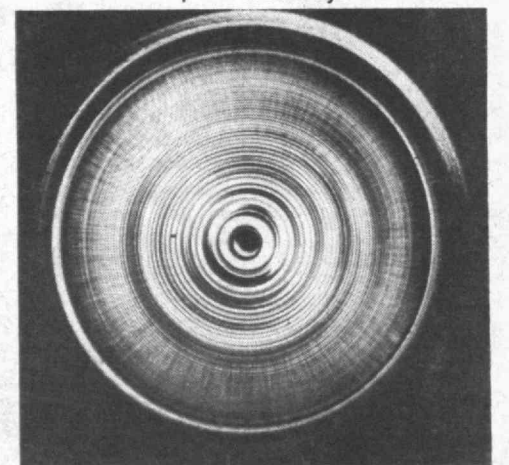
All Month:

The Museum

MIT's Artist Who Found New Way To See The Ocean
Paintings and other works by Charles H. Woodbury, Class of 1886, an important American painter who brought a new vision to seeing and capturing the form and motion of the earth, sea and sky. MIT Museum Building, 265 Mass Ave, Tues-Fri 9-5, Sat-Sun 10-4. 3-4444

The Compton

Microscapes
Fifty color photographs made through electronic microscopes. Weekdays 9-5. 3-4444.



All events are free except where prices are noted.
Photos by L. Barry Hetherington, Clarise Snyder.

