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TECH TALK

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2 Department Heads Will Step Down

The heads of two departments in the School of Engineering—Rene H. Miller of aeronautics and astronautics and Wilbur B. Davenport, Jr., of electrical engineering and computer science—have asked that successors be appointed by July 1, 1978.

Professor Miller, who was named head of the Department of Aeronautics and Astronautics in November, 1968, plans to devote his activities to teaching and research in the general area of flight transportation. He is the H. N. Slater Professor of Flight Transportation.

Professor Davenport, who has headed the Department of Electrical Engineering and Computer Science since February, 1974, indicated that he would like to devote the next few years of his career to work in the area of communications system technology and policy here at MIT.

Dr. James D. Bruce, associate dean of the School of Engineering, in letters sent to faculty members of both departments, praised Professors Miller and Davenport.

Professor Miller, who has served as department head nearly 10 years, "is by far the 'dean' of the School's department heads," Dean Bruce said. Under Professor Miller's leadership as department head, Dean Bruce noted, the department developed a new innovative approach to the second-year curriculum—the Unified Engineering Program—and a new undergraduate degree program—the Avionics Program.

During Professor Davenport's tenure as head, Dean Bruce said, the department's "pre-eminence in electrical engineering and computer science education and research has continued" and there

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Dean Horn, Director of the Sea Grant College Project, presents a hefty ratchet wrench to Howard Ossinger, captain of the RV Edgerton. The wrench, a tool Captain Ossinger has wanted for a long time, was given him by the Sea Grant Program in appreciation of his efforts during the blizzard of February 6-7 which saved the Edgerton from storm damage.

McCarthy To Direct NASA Lab

Dr. John F. McCarthy, Jr., director of MIT's Center for Space Research, is to become director of the National Aeronautics and Space Administration (NASA) Lewis Research Center in Cleveland, Ohio, on Oct. 1, 1978, NASA has announced.

Dr. McCarthy, who is widely recognized as an expert in systems engineering and vehicle design, has been professor of aeronautics and astronautics at MIT since 1971 and director of the space research center since 1974.

Dr. McCarthy will be taking leave from his administrative and teaching positions, which have been characterized by a series of forward-looking design seminars centered around such problems as closed ecological systems for space and the disposal of man-generated nuclear wastes by rocketing them into the sun.

In commenting on Dr. McCarthy's appointment, Dr. Thomas F. Jones, Jr., MIT vice president for research, said "Dr. McCarthy's outstanding leadership in research in space science and engineering will be sorely missed."

Since 1971, Dr. McCarthy has chaired the Aeronautical Systems Advisory Group of the Air Force Systems Command. In 1973 he was awarded the Meritorious Civilian Service Award by the Air Force for his work on the C-5A transport plane.

Professor McCarthy came to

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ESL Has Been Designated Interdepartmental Facility

MIT's Electronic Systems Laboratory (ESL), an internationally renowned leader in the development of control theory, control systems, and information systems, has been designated an interdepartmental laboratory, Professor Walter A. Rosenblith, MIT's Provost, has announced.

The move reflects the increasingly interdisciplinary nature of the laboratory's research interests, which include control theory, communication systems, algorithms, complex systems analysis, and selected applications areas.

The laboratory will continue to be headed by Professor Michael Athans, its director since January, 1974. Professor Athans, professor of systems science and engineering in the Department of Electrical Engineering and Computer Science, is a leading authority on optimal control theory. He will report directly to the provost.

The 39-year-old laboratory, founded in 1939 as the Servomechanisms Laboratory (it became known as the ESL in April, 1959), has been a departmental entity within the Department of Electrical Engineering (later on Electrical Engineering and Computer Science) throughout its history.

Since 1973, the laboratory's traditional areas of control, communications and information systems have expanded greatly. Current emphasis is on complex information and decision systems that involve distributed and decentralized sensors, communications, data bases and decision systems. Typical application areas involve transportation systems, distributed communications and information networks, optimization of flexible manufacturing systems, power systems and information storage and retrieval systems.

"Interdisciplinary intellectual interactions are vital to the pursuit of such complex systems," Professor Athans said. "This administrative change to an Institute-wide laboratory will facilitate those interactions."

ESL was founded by Dr. Gordon S. Brown, Institute Professor Emeritus and professor of elec-

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Edgerton Captain Cited For Blizzard Service

A much-desired ratchet wrench and a letter of commendation from President Jerome B. Wiesner were rewards yesterday (Tuesday, Feb. 28) to Howard Ossinger, captain of the Research Vessel *Edgerton*, for his valiant and successful efforts to save the boat during the blizzard of February 6-7.

Worried about the vessel, Mr. Ossinger drove in from his home in Holliston in his four-wheel-drive vehicle, arriving at Aquarium Wharf where the *Edgerton* is berthed about 9pm at the height of the storm on February 6. RV *Edgerton* is tied up to a float attached by iron rings to pilings next to the wharf.

When Mr. Ossinger arrived, he found that flooding conditions had lifted the float free of one of its pilings. Otherwise the float seemed secure. He climbed aboard the *Edgerton*, deciding to move the boat to the East Boston side of the harbor. Since turning in the narrow space between the Aquarium and Long Wharves was impossible, Mr. Ossinger backed the vessel out

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Weight Control Series Offered

A weight control series for members of the Institute community has been organized by the Health Information and Education Service of the Medical Department.

The 10-week program stresses awareness of one's eating behaviors and ways those behaviors may be modified to facilitate permanent weight control. The series will be led by Wendy Midgley and Helene Fuchs, both registered dieticians at Peter Bent Brigham Hospital, and a health educator from the Medical Department.

The series will begin Wednesday, March 8. Enrollment will be limited and a modest fee will be charged. Those interested may call x3-1316 for further information and registration.

No Lunch Mar. 3 At Faculty Club

A luncheon for the MIT Corporation will be held Friday, March 3, in the MIT Faculty Club and as a result the Club will be closed for lunch that day to members of the MIT community. "We regret any inconvenience this may cause our regular members," said Brian Smith, manager of the Faculty Club, "but space limitations force us to take this step for this occasion." The Faculty Club will return to its regular schedule following the Corporation luncheon and will be open for dinner, as usual, on the evening of March 3.

Meteorology Department Honored for Leadership

The 1978 award for outstanding services to meteorology by a corporation has been presented by the American Meteorological Society (AMS) to the MIT Department of Meteorology "for its leadership in meteorological education since the founding in 1928 of the first academic meteorology department in the United States."

The award was presented February 1 at the society's annual awards luncheon in Savannah, Ga., and was received on behalf of the MIT department by Dr. Henry G. Houghton, professor of meteorology emeritus and head of the department from 1941 to 1970.

An AMS press release issued at the time of the award said:

"The first professional graduate program in meteorology in the United States was established in 1928 by C. G. Rossby under the benevolent administration of the MIT Department of Aeronautics. Rossby, and shortly thereafter, Hurd Willett introduced the novel results of the Norwegian school of meteorology to the American academic scene.

"A common theme from this early work and one that has persisted to the present was the study of the general circulation of the atmosphere. The first series of Northern Hemisphere synoptic charts was produced at MIT, which led shortly to the first experimental five-day forecasts.

"In the postwar period emphasis was placed increasingly on geophysical fluid mechanics, the basis of numerical weather prediction. In the same period radar was developed as an important tool in cloud physics and mesometeorology. Now at the advent of the semicentennial, studies of climatic change and its consequences are being pursued."

The late Carl-Gustav Arvid Rossby was associate professor of meteorology in MIT's then Department of Aeronautical Engineering from 1928 to 1932, and served as professor in the department from 1932 to 1941. He died in 1957. Dr. Hurd C. Willett, a specialist on long-term weather fluctuations, joined the department during its first year and is now professor of meteorology emeritus.

Libraries to Hold Annual Book Sale

Some 5,000 books, records, maps and technical reports will be available at bargain rates at the MIT Libraries' annual sale Wednesday and Thursday, March 8 and 9, 10am-4pm in the Bush Room (10-105).

Book titles at the sale cover all subjects, including fiction. Special treasures available include an *Encyclopedia Americana* and *Webster's New World International Dictionary*, second edition. All sale items are surplus library material and proceeds from the sale will be used for new materials.

Annual Biweekly Salary Review Underway

Instructions outlining the procedure for the 1978 Biweekly Salary Review were forwarded to all departmental headquarters the week of February 20.

Information for Biweekly employees concerning the Review is contained in a letter which is available through individual Administrative Officers and Supervisors. Employees hired on or before January 2, 1978, are eligible for consideration for raises, which will become effective on March 27, 1978, and will be reflected in April 5, 1978, paychecks.

The 1978 review procedure continues to be unchanged from last year's review. The review will be distributed solely on the basis of individual work performance. John Wynne, Vice President, Administration and Personnel, stated that it is essential that departments make every effort to insure that evaluations of job performance are made as fairly and equitably as possible and that recommended increases accurately reflect these assessments.

The supervisor/employee discussions, which occur as a part of the review and are critical to the evaluation process, should now be well underway. Tentative supervisory recommendations are due in departmental headquarters no later than March 8, 1978, so they may be returned to Personnel Officers for review by the Deans and Vice Presidents by March 10, 1978.

TROLL Computer System Center Has Returned to MIT

TROLL has returned to MIT.

An interactive computer system for quantitative research in economics and other social sciences, TROLL (for Time-Shared Reactive On-Line Laboratory) was born in 1966 as a project of the MIT Department of Economics.

It left MIT in 1971 to become an interuniversity project known as the Computer Research Center for Economics and Management Science—located in Cambridge in Technology Square, funded by the National Science Foundation, and operated by the National Bureau of Economic Research.

Now it is back at the Institute, as of February 1, with the Center becoming part of the Alfred P. Sloan School of Management. In addition, MIT's Information Processing Services has become one of three university sites in America where TROLL is in use. IPS is also the producer and publisher of all TROLL documentation.

When TROLL left the Institute in 1971, it was a small project devoted mainly to problems of interactive systems programming. It is returning as probably the most powerful and sophisticated econometric modeling system in the world. It is used by researchers throughout this country, who access the MIT system over a telecommunication network. TROLL is also run at five sites in Canada, Europe, and the Far East.

Dr. Edwin Kuh, professor of finance and economics at the Sloan School, remains director of the project, which has the new name of Center for Computational Research in Economics and Management Science. Professor Kuh originated the TROLL project at MIT in 1966 and was executive director of the Computer Research Center while it operated as part of the National Bureau of Economic Research from 1971 to 1977.

The principal reason for the return of TROLL to the Institute, Professor Kuh said, "is that our research interests are moving more and more in the direction of those of the MIT community." Many projects at the Energy Laboratory and the Sloan School have been using TROLL heavily for several years.

In fact, he said, there has been a major shift in emphasis from TROLL's early days, when the system was developed to bring interactive programming technology to applied econometric research.

"Anyone interested in modeling and quantitative methods finds that TROLL provides a fairly natural language," Professur Kuh explained. "For example, it uses English commands or abbreviations to perform complex tasks which would otherwise require an econometrician to be an expert computer programmer."

"When TROLL came under the control of the National Bureau of Economic Research," Professor Kuh explained, "the goal shifted to interdisciplinary research on quantitative methods in such areas as econometrics, statistical data analysis, mathematical programming, and numerical analysis."

"TROLL has become an algorithmic research environment," he added. "However, for many users the system continues to serve its original goal as a production tool."

TROLL began its life in 1966 as a subsystem of CTSS, MIT's pioneering time-shared computer facility based on the IBM 7094. All versions since 1968 have been programmed as independent operating systems, utilizing the virtual-machine technology of the IBM System/30, Model 67, and System/360 computers.

The TROLL documentation library comprises over 30 manuals and 4,000 pages. It is organized as a hierarchy of introductory and reference manuals, covering both the basic TROLL modeling system and about 20 subsystems that emerged from the Center's research over the past seven years. The TROLL manual library was produced under the direction of John Kirsch, who now teaches technical writing in the Department of Humanities and Social Science.

For more information about TROLL usage at MIT, contact Dr. Arthur Anger of IPS Application Services (x3-7044).

Forum to Feature Ethnic Cooking

The MIT Women's Forum is planning a series of ethnic food demonstrations for its meetings during the spring term.

Leading off the series will be Artemis Gyftopoulos, who will offer instruction on Greek cooking on Monday, March 6, at noon in the Bush Room (10-105). Married to Professor Elias Gyftopoulos of nuclear engineering, Mrs. Gyftopoulos is past chairman of the MIT Women's League, which is cosponsoring the demonstration.

On Monday, March 20, Hsui-Hsing Chang, a member of the Wives Group, will give instructions on Chinese wok cooking.

Soul food cooking will be the focus on Monday, April 3, presented by Carolyn Baston of the Office of the Special Assistant for Women and Work, Yvonne Gittens of Urban Studies and Planning, Josie Bartie of the Office of the Special Assistant for Minority Affairs and Jeanne Winbush of the National Magnet Laboratory. This meeting will be co-sponsored by the Minority Interest Group.

INSTITUTE NOTICES

Announcements

Conversation Exchange*—The MIT Wives' Group has compiled a list of international women interested in exchanging foreign language conversation for English conversation. Contact: Karen Devine, x3-2916.

Embroidery**—**Open House**, Tues, March 14, 10am-3pm, Rm 10-340. See finished projects and works in progress or bring your own pieces and embroider for any length of time. Info available about approaching classes and workshops. **Blackwork**, one-day workshop, Monday, April 10, 10am-3pm, led by Priscilla Gray. Blackwork is a delicate style of embroidery using one color thread on linen. Limited enrollment, registration required. Contact: Lillian Alberty, 491-3689, or Nancy Hollomon, 723-4763.

Housemaster Tutor Program—The Office of Dean for Student Affairs is accepting applications from MIT graduate students for tutor positions. Students should have at least one year of graduate work at MIT and experience as a resident of one of the Institute Houses as an undergraduate or as a campus resident at another university. Seniors who have lived on campus who will be first-year graduate students are also eligible. Contact: Dean Seelinger, Rm 7-133.

VI-A Open House—Annual Electrical Engineering & Computer Science open house Monday, March 6, 7:30-10pm, Sala de Puerto Rico, Stu Ctr. This is an opportunity for students enrolling in the VI-A program to talk informally with VI-A Company Representatives. Refreshments.

RUNE**—**the MIT journal of arts and letters. Meetings, Thursdays, 5pm, Rm 14N-309. Submissions can be dropped off in Rm 14N-305 or sent through Institute mail to Rm 50-301. Deadline: Wed, March 8. Info: Susan, 566-0030, or Don, 267-6448.

Spring Art Classes**—**Registration for the following SAA classes still open: Tues Night Open Life Drawing, Weekend Pottery Workshop, Chinese Brush Painting, Stained Glass, Framing Workshop. Drop by SAA Office, 1-5pm, Rm W20-429, x3-7019.

Student Loans—All students holding MIT student loan awards for the current term must sign their loan notes at the Student Loan Office, Rm E19-225. Failure to sign notes could cause the assessment of later payment fines on the term bill and/or cancellation of the award.

Spring Crafts Fair**—**Thursdays & ys, April 20-21, 9am-3pm, Lobby Bldg 10. ne can participate but crafts must be nade. Info: Penny Quint, 322-8301.

Urban Action—Students interested in teering can drop by Rm 7-141, Monday-Thursday, noon-5pm, Friday, 3-5pm. Info: x3-2894.

Weight Control Group**—**10-week series beginning Wed, March 8, noon, sponsored by Health Information Service, Medical Dept. Enrollment limited. Modest fee charged. Info: x3-1316.

Club Notes

ACM Student Chapter**—**Meeting, Wed, March 1, Rm 8-314, 4pm. Info: Bill Weihl, x5-7541 Dorm, or Roy Kaplow, x3-3322.

Association for Women Students**—**Weekly meetings, Saturdays, 4pm, Rm 3-310. MIT community welcome.

MIT Bridge Club*—ABCL duplicate open pairs game Thursdays, 7pm, Rm W20-473. Info: 494-8593. Admission .25.

MIT/DL Bridge Club**—**ACBL duplicate bridge Tuesdays, 6pm, Rm W20-473.

MIT Chess Club*—Meetings, Saturdays, 1-6pm, Rm W20-407. Speed chess, analysis and tournaments. Info: Brad, x5-8156. **Speed Chess Tournament**—Sat. March 4, 2pm, Rm W20-407. Entry fee 75¢. **USCF Chess Tournaments**—Sat-Sun, March 11-12, 10am, Stu Ctr. Two tournaments will be held, one Saturday only, one Saturday & Sunday. Admission $1. Info: Louis, x5-6453 Dorm.

MIT Ecology Action*—Booth in Lobby 10 Mondays & Tuesdays to advertise Sun Day & other projects. **Sun Day Committee Open House**—Thurs, March 2, 4:30-6:30pm, Mezzanine Lng, Stu Ctr. Representatives of MIT Ecology Action's Sun Day Committee, the Ad Hoc Faculty Committee on Sun Day & the Massachusetts Sun Day Committee will describe this international celebration of renewable energy resources & discuss activities to be held on campus and elsewhere. Slide show on solar energy previewed. Stop in any time during meeting. Info: x3-7922.

Eta Kappa Nu***—**General meeting, Wed, March 1, 8:30pm, Rm 37-232. Attendance of officers required.

MIT Folk Dance Club**—**International**: Sundays, 7:30-11pm, Sala de Puerto. **Balkan**: Tuesdays, 7:30-11pm, Student Center, Rm 491. **Informal**: Fridays, Noon-2pm, Kresge (Lobby 7, if bad weather). **Israeli**: Wednesdays 7:30-11pm, Sala de Puerto.

Gays at MIT*—Meeting & coffeehouse, Sunday, March 5, 5pm, Rm 50-306. Get to know each other.

MIT Go Club**—**Regular meetings, Wednesdays, W20-473, Thursdays, Rm 4-145, 8pm. Players of all ranks, play games, sometimes informal talks on strategy & tactics. Instruction available for beginners.

Hobby Shop**—**Mon-Fri, 10am-6pm, Rm W30-031. Fees: $10/term for students, $15/term for community. Info: x3-4343.

MIT Motorcycle Club**—**Regular meetings first Tuesday each month beginning March 7, 7:30pm, Muddy Charles Pub (50-110). All old members and any interested newcomers welcome. Info: x3-6924.

Shotokan Karate Club**—**Practice, Mondays & Tuesdays, 6-7pm, Fridays, 6-8pm, duPont, T Club Lng. Info: Bill Kerr, x5-6518 Dorm.

T'ai Chi at MIT*—Meetings Thursdays, 4:15-5:15pm, Rm W20-407. Prof E. Liu, director. All welcome.

MIT Rugby Football Club**—**Preseason training for spring in Rockwell Cage, Tuesdays & Thursdays, 7pm. Info: Charlie Cox, x5-7393 Dorm.

Placement

The following companies will be interviewing during the time period covered by the current Institute Calendar. Those interested may sign up in the Career Planning and Placement Office, Mon-Fri, 9am-3pm, Rm 12-170, x3-4733.

Wednesday, March 1—Battelle Columbus Labs; Bell System; Bureau of the Census; Crawford & Russell Inc; Du Pont; General Electric Co.

Thursday, March 2—American Electric Power Service Corp; The Boeing Co; General Electric Co; General Atomic; Harris Corp/Composition Systems Div; Link Div/Singer Co; Peace Corps/Vista; Schlumberger Well Services; Texas Eastern Transmission Corp; TRW.

Friday, March 3—American Microsystems, Inc; Amoco Oil & Amoco Chemicals; Argonne National Lab; Boeing Co; C-E Lummas Co; EDS Nuclear, Inc; Fermi National Accelerator Lab; General Atomic; Hughes Aircraft Co; Ingersoll Rand Co; Martin-Marietta Corp; Northrop Corp/CA; Pattern Analysis & Recognition Corp; Texas Eastern Transmission Corp; TRW; United Technologies/Pratt & Whitney.

New UROP Listings

For more detailed information on UROP opportunities listed, MIT undergraduates should call or visit the Undergraduate Research Opportunities Program Office, Room 20B-141, Ext. 3-5049 or 3-4849 unless otherwise specified in the listing. Undergraduates are also urged to check with the UROP bulletin board in the main corridor of the Institute.

Eloranta Summer Fellowship Program

A limited number of summer research fellowships will be awarded this spring under the Eloranta Fellowship Program. The fellowships are intended to support summer research or study projects and associated travel. Any MIT undergraduate may apply, including seniors whose summer projects would actually occur after graduation. Students must submit a written proposal outlining plans for a summer project, including an indication of how it will contribute to his/her education objectives, how it will be carried out, the support available, and a budget. Letters of recommendation should be included. Proposals for the summer of 1978 should be submitted before March 20, 1978 to Ms. Norma McGavern, UROP Office.

IBM Cambridge

Opportunity exists for a student with background in numerical integration of differential equations. Some knowledge of continuous systems simulation desirable. Work would be in the area of language design and development, particularly the possibility of combining languages for simulation of continuous systems with languages for discrete simulation. Both design work and programming (PL/1) would be involved.

Toughening Heat Resistant Polymide Resins

Heat-resistant polymide resins tend to be brittle because of their highly crosslinked nature. Project will explore ways of improving fracture toughness of such resins by including second phases, likely to be rubber phase. Chemistry and structure of liquid rubbers will be investigated.
Contact: Prof. C.S.P. Sung, x3-6681, Rm 8-109.

Infrared Sensor Resolution Measurements

Laboratory measurements would be made of the modulation transfer function of infrared sensor arrays. The experiment consists of imaging a standard 4-bar infrared source using an infrared charge coupled (CCD) array. Optical magnification is varied to determine resolution limits and the standard source temperature is varied to determine sensitivity limits as a function of resolution.

Other Opportunities

Environmental Internship Program

The Massachusetts Audobon Society is offering a few Environmental Intern Program applications available for various places in the general New England area. These are for twelve-week periods, and generally carry a small reimbursement ($1470 for Bachelor level, and $1650 for Masters level) sufficient to cover housing and transportation. These internships are meant primarily to provide an educational and experience opportunity during summer months to those with particular interest in activities natural to the Audobon Society. Many students in the New England area have found such summer internships valuable elements in their overall educational program. Descriptions and application forms are available in the office of Professor D.J. Rose, Rm 24-212. Completed application to the Audobon Society must be postmarked no later than midnight, March 15, 1978. Announcements will be made starting April 4.

CABLE TV SCHEDULE X3-3625

March 1 - 7, 1978

Wednesday, March 1
Channel 8:

11am-12noon	*MIT SCIENCE REPORTER* with John Fitch. Guest: Dr. Harold Edgerton. Recorded January, 1976.
12-1pm	*BASEMENT VIDEO PRESENTS* "The Boston Repertory Ballet Company"
1-2pm	*TECHNOLOGY REVIEW* by Paul Earls. "Video Wallpaper"

Thursday, March 2
Channel 8:

11am-12noon	*RHETORIC & JOURNALISM* with Ed Diamond. Guest: Judy Edwards, Editor, "Savvy" Magazine. Recorded February 17, 1978.
12-2:30pm	*ARTIFICIAL INTELLIGENCE* by P. Winston. Director, AI Lab. Recorded August, 1977.
5-6pm	*LIVE FROM HARVARD UNIVERSITY*: Dr. Michael Levitt, Lab of Molecular Biology, Medical Research Council and Salk Institute for Biological Sciences, La Jolla, CA. Title to be announced.
7-8pm	*BASEMENT VIDEO PRESENTS* "The Boston Repertory Ballet Company"

Friday, March 3
Channel 8:

12-1pm	*TECHNOLOGY REVIEW* by Paul Earls. "Video Wallpaper"
1-2pm	*MIT SCIENCE REPORTER* with John Fitch. Guest: Dr. Harold Edgerton. Recorded January, 1976.
2-3pm	*RHETORIC & JOURNALISM* with Ed Diamond. Guest: Judy Edwards, Editor, "Savvy" Magazine. Recorded February 17, 1978.

Monday, March 6
Channel 8:

11am-12noon	*MIT SCIENCE REPORTER* with John Fitch. Guest: Dr. Harold Edgerton. Recorded January, 1976.
12-2:30pm	*ARTIFICIAL INTELLIGENCE* by P. Winston. Director, AI Lab. Recorded August, 1977.
4:30-5:30pm	*LIVE FROM HARVARD UNIVERSITY: MECHANISMS IN MEMBRANE ASSEMBLY* by Dr. James Rothman, MIT.

Tuesday, March 7
Channel 8:

12-1pm	*RHETORIC & JOURNALISM* with Ed Diamond. Guest: Judy Edwards, Editor, "Savvy" Magazine. Recorded February 17, 1978.
1-2pm	*TECHNOLOGY REVIEW* by Paul Earls. "Video Wallpaper"
3-4pm	*BASEMENT VIDEO PRESENTS* "The Boston Repertory Ballet Company"
4:30-5:30pm	*FEEDING THE CABLE* Film and tape from everyday and not-so-everyday life. Live from the Film Section.

Religious Activities

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

Christian Service*—Sundays, 10:45am, Chapel. Singing, preaching, sometimes testimonies, prayer following. All invited.

MIT Hillel Services*—**Daily Minyan**: 8am, Rm 1-136. **The Downstairs Minyan** (Conservative Egalitarian): Saturdays, 10am, 312 Memorial Dr. **Reform**: Fridays, 6:30pm, Chapel. **Orthodox**: Fridays, Sundown, Kosher Kitchen (50-005); Saturdays, 9am, Bush Rm (10-105).

Interdenominational—Worship and holy communion, Wednesdays, 5:05pm, Chapel, sponsored by Lutheran-Episcopal Ministry. Get acquainted supper following. Info: Randy Clark, x3-6921.

MIT Islamic Society*—Friday Prayers held in Kresge, Rehearsal Rm B, 1pm.

Prayer Time**—**Bible class, Fridays, 1-2pm, Rm 20E-207, guest speakers, music, refreshments. Miriam R. Eccles, founder-director, Alpha and Omega Missionary Society.

Tech Catholic Community*—Liturgies: Sundays, 9:15am, followed by coffee, W-2A, 12:15 & 5:15pm; Tuesdays & Thursdays, 5:05pm; Fridays, 12:05pm, Chapel. Sun, March 5, meal following 5:15pm service, Ashdown House dining room, 25¢ donation. **Preparation for Marriage Weekend**—Thought, prayer & encounter about people's upcoming marriage. Registration fee, $10. Info: x3-2981. **Spring Term Seminar—Sacraments**, an overview & update. Six evening sessions beginning Wed, March 1, led by Deacon Bob Keane. Info: x3-2981.

MIT Vedanta Society*—Meditation and discourses on the Gita by Swami Sarvagatananda, of the Ramakrishna Vedanta Society of Boston. Fridays, 5:15pm, Chapel.

Echoes

February 26 - March 4

50 Years Ago

Technology's Glee Club has been chosen to sing at the National Education Convention, now being held in Boston. They will appear on the program with Col. Charles A. Lindbergh, who will be present to see his mother honored with the award of life membership in the National Education Society.

40 Years Ago

Howard C. Lawrence, '38, gave a talk on the subject of television at a meeting of the Radio Society. He exhibited an experimental receiver which he had constructed and spoke about practical details concerning television, such as economic feasibility, clearness of the image and the elimination of flickers.

25 Years Ago

Professor William C. Greene of the English and History Department discussed the problem of overcoming the lack of cohesion in a place as large as the Institute at The Tech Smoker this week. He flavored his comments with wry remarks, stating that he liked to read students' opinions—even though they were usually wrong. The professor was also amazed at the length and vehemence of many letters to the editor and felt that when students get angry they certainly seem to get angry at length.

Prepared by Marcia Conroy, MIT Historical Collections, x4444.

TECH TALK
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School of Engineering Announces Appointments

Dr. Christos Georgakis has been appointed Esther and Harold E. Edgerton Assistant Professor in the Department of Chemical Engineering until 1979.

His appointment was one of four School of Engineering personnel changes recently approved by the Executive Committee of the MIT Corporation.

Professor Georgakis, who received the BS from National Technical University in Athens, Greece, in 1970, the MS from the University of Illinois in 1972 and the PhD from the University of Minnesota in 1975, has been a member of the MIT faculty for three years.

His research has concentrated on development of an order-of-magnitude methodology for examining the dynamic characteristics of and designing control strategies for chemical processes, and on the modelling, analysis and design of chemical reactors.

Other personnel changes in the School of Engineering were:

Walter E. Morrow, Jr., director of Lincoln Laboratory, was appointed a professor of electrical engineering in the Department of Electrical Engineering and Computer Science. Mr. Morrow was named to head the laboratory in March, 1977, succeeding Gerald P. Dinneen who was named to a Defense Department post by President Carter. Mr. Morrow joined the laboratory in 1959 and had been assistant director since 1972.

Som D. Sharma was appointed visiting professor in the Department of Ocean Engineering until December. Dr. Sharma is a senior research scientist at the Institut Für Schiffbau, University of Hamburg.

E. Harry Law was appointed visiting associate professor, part-time, in the Department of Mechanical Engineering until May. Dr. Law is associate professor of mechanics and mechanical engineering at Clemson University. His major research interest is rail vehicle dynamics.

Vincent Price To Speak Here

Vincent Price, the well known actor, author and art collector, will speak on Monday, March 6, at 8pm in Kresge Auditorium. His talk, entitled "Villains Still Pursue Me," is sponsored by the Lecture Series Committee.

Mr. Price is best known for his roles as villain in horror movies, a fact reflected in the title of his lecture. His career, however, has shown him to be a person of true versatility, encompassing fields as divergent as cooking and art, and roles ranging from gothic villain to his latest sensitive portrayal of Oscar Wilde in "Diversions and Delights," the one-man performance that has played to critical acclaim and to enthusiastic, capacity crowds in cities across the country.

Tickets at $2.00 are available to the MIT community at the LSC ticket booth in Lobby 10, at the LSC office (W20-469) and at all LSC movies. If not sold out, tickets will be available at the door the night of the lecture.

HAIL THE VICTORS—MIT's national collegiate computer programming champions hoist their victory mug aloft. From the left: Curt Sanford, Larry DeMar, Abe Lederman and Daniel D'Eramo. DeMar is a junior, the rest sophomores, all in electrical engineering and computer science. The national contest was Feb. 22 in Detroit.

MIT 'Pick-up' Team Wins ACM Programming Contest

MIT has won the 1978 national collegiate computer programming championship, thanks to the work of a "pick-up team" of four electrical engineering computer science undergraduates.

Abe Lederman, Larry DeMar, Curt Sanford and Dan D'Eramo finished first in a Feb. 22 contest in Detroit that pitted teams from 24 colleges and universities.

The FORTRAN programming contest was arranged by the Association for Computing Machinery (ACM) and Upsilon Pi Epsilon, the national computer science honor society.

The MIT students qualified for the finals by winning the northeast regional competition against eight other teams. The regional contest was held in Troy, N.Y., at Rensselaer Polytechnic Institute.

It was Lederman, a sophomore from New York City, who first learned of the contest through an ACM publication.

When he discovered that the ACM chapter at MIT was not presently active (it has since reorganized), Lederman interested his fellow Baker House students—DeMar of Chicago, Sanford of Santa Monica, Cal., and D'Eramo of Hopewell Township, Pa.—in entering the contest.

They boned up on FORTRAN, pooled some money to rent a car and took off for Troy. The four came home winners—but winners with a problem: where to get the money to get to Chicago.

The solution to the problem—and the money—came from the School of Engineering, thanks to Associate Dean James D. Bruce, and from the Department of Electrical Engineering and Computer Science, thanks to associate head Fernando Corbato and administrative officer Richard Caloggero.

The Detroit contest was a batch FORTRAN one, involving the need for keypunching. Because the keypunchers couldn't keep up with the teams, the Detroit contest had to be extended past its announced ending time. When the final bell rang MIT had solved two of four problems and so had New York University, but MIT won because its team had taken less time to reach its solutions.

Michigan State, last year's champion, finished third and Purdue was fourth.

Motorola Joins VI-A

The Chicago-based firm, Motorola, Inc., has joined the roster of prestigious companies participating in the cooperative program (Course VI-A) in the Department of Electrical Engineering and Computer Science.

Students will be placed initially in Motorola's Communications Division in Schaumburg, Ill., according to John A. Tucker, VI-A program director. In another year, it is hoped that assignments may be added at the Semiconductor Division in Phoenix, Ariz.

Initial discussions with Motorola began last year when William J. Weisz, '48, president of the company, and some of his associates visited MIT for two days of technical presentations with the electrical engineering and computer science faculty. Final arrangements for joining the VI-A program were completed by Mr. Tucker last fall.

Course VI-A is now in its annual selection process for members of its 61st class. All applicants may meet participating companies at an open house in the Sala de Puerto Rico on Monday, March 6, at 7:30pm.

Following open house will be two days of interviews after which the class will be selected from those ranking highest on preference lists submitted by the companies.

Last spring 165 students sought admission to VI-A and the companies conducted nearly 800 interviews with the applicants, using all of the facilities of the Career Planning and Placement Office. This year approximately 150 applications are expected, Mr. Tucker said, about half of whom will be accepted in the program.

Present enrollment in VI-A is 182, including juniors, seniors and graduate students—the highest enrollment in the 60-year history of the program.

Speaking for Motorola at its recent orientation meeting were Norman Skelton, corporate manager for staffing and recruitment, and Lewis Rosenthal, '73, a VI-A graduate, who spoke for the Communications Division. The two students Motorola selects will begin their first work assignment at the Communications Division in June.

Professor James D. Bruce, associate dean of the School of Engineering, will serve as faculty advisor for the Motorola students. Professor Bruce has been a consultant and advisor to Motorola for a number of years.

Solow to Discuss Inflation in Killian Lectures

Dr. Robert M. Solow, Institute Professor and professor of economics, has selected the topic, "What We Know and Don't Know About Inflation," for the 1978 Killian Award Lectures.

The lectures will be presented on consecutive Thursdays, April 20 and 27, in Rm. 54-100 at 4pm.

Professor Solow, widely recognized as an outstanding economic theorist, said that the lectures will sketch the history of the United States price level during the past 50 years, and trace how our understanding of inflation has evolved from the interplay of facts and theory.

"The analysis of inflation has many of the characteristics that make economics both interesting and frustrating," he said. "It is important to our lives. There is much public misunderstanding about causes and effects. And since an important part in the mechanism of inflation is played by changing economic institutions, attitudes and expectations, the 'correct' theory of inflation is a moving target; so there is a danger that we will always be fighting the last episode and be surprised by the next."

Among the important issues, Professor Solow said, are these:

What are the significant differences between the postwar behavior of the price level and the experience of the earlier part of the century? How are those differences to be explained? How does inflation interact with the "real" economy of production and consumption? In what sense is it a "purely monetary" phenomenon? Is there something special about the last few years? How are the price levels of different countries connected? What are the main unanswered questions and what are the possibilities of answering them?

Professor Solow was selected as the 1977-78 recipient of the James R. Killian, Jr., Faculty Achievement Award by a faculty committee last spring. Traditionally, the recipient of the award delivers the Killian Award Lectures the next spring.

The award, which recognizes "extraordinary professional accomplishments by MIT faculty members, was established in 1971 as a tribute to Dr. Killian, MIT's 10th president and former chairman of the Corporation.

Tay-Sachs Screening Available

The MIT Medical Department is cooperating in a screening program for Tay-Sachs disease, a rare genetic disorder in metabolism afflicting infants that is invariably fatal.

The Tay-Sachs gene is carried by one in 27 Jewish persons of Ashkenazi descent (from central and eastern Europe), and by one in 300 persons in the non-Jewish population. Both parents must carry the gene in order to have a child with the disease. Each pregnancy in a carrier-carrier union has a 25 per cent chance of producing a child with Tay-Sachs disease.

Screening is done by a blood test performed by the Tay-Sachs Prevention Program. Blood will be drawn for the test on the second Monday of each month from 9am-noon in the Medical Department. Appointments are necessary and may be made in advance by calling x3-4481.

Each person wishing to be screened will be asked to fill out a questionnaire to accompany the blood sample. Results of the test will be mailed directly to the individual.

In cases where both partners are carriers, a diagnosis can be made by amniocentesis during the fourth month of pregnancy, allowing selective abortion if desired.

Although there is no charge for the screening test, the Tay-Sachs Prevention Program would appreciate a $10 contribution to help defray expenses.

Edgerton Captain

(Continued from page 1)

into Boston Harbor.

Once out in the harbor, he turned the *Edgerton* toward the East Boston side where there was the double protection of a lee shore and a covered pier. With visibility down to about 100 feet and heavy snow cluttering his radar, he proceeded very cautiously toward his destination. He was in touch with Art Clifton (MIT's research vessel manager) throughout the night.

The next morning, after the tide turned and the wind died down somewhat, Mr. Ossinger and the *Edgerton* returned to the Aquarium. He found that the surging sea had lifted the float further during the night. One corner was resting on top of a piling. A single iron ring attached it to an extended two by four used to support power lines to the boat. The structure was tilted at a sharp angle and much of its flotation had been torn away by the storm.

He managed to reset the float in place, and to retrieve the flotation from the water, lashing it to the float itself.

Mr. Ossinger's concern, action and skill kept damages to the *Edgerton* and its float to a minimum. The vessel came through virtually undamaged. He and Mr. Clifton, who also received a commendation from President Wiesner, were able to repair the float with equipment Mr. Ossinger salvaged from the water.

All supervisors in Building Services of Physical Plant have recently completed successfully the American Red Cross/Heart Association basic course in cardiopulmonary resuscitation (CPR). The eight-hour course was taught by Joseph Kuchta of the Safety Office. Certificates were presented by William Dickson, director of Physical Plant, to: (kneeling L to R) Harold Roberts, John Whitnell, Michael Micciche and Ralph Jackson; (seated) Charles Wilkins, Ralph DeMarco, George pesaturo, Jr., Benjamin Paulekas and George Carney; (standing) Ronald Verrochio, Paul Motroni, Austin Petzke, Patrick Wells, Charles Jennings and George Gillis.

THE INSTITUTE CALENDAR X3-3270

March 1 through March 12

Events of Special Interest

MIT Annual Library Book Sale* — Wed, Mar 8 and Thurs Mar 9, 10am-4pm, Rm 10-105, Bush Room.

Edgerton's Stroboscopic Projects* — High speed films shown by Dr. Edgerton. Sponsored by the Compton Gallery Committee with the assistance of Committee of Visual Arts. Thurs, Mar 9, 7:30pm, Rm 10-105.

Seminars and Lectures

Wednesday, March 1

Continental Shelf Waves with a Boundary Current* — William McKee, earth and planetary sciences. Oceanography Sack Lunch Seminar, Noon, Rm 54-915. Coffee, bring own lunch.

Eating in Response to Stress** — Don't let pressure control your eating. You control it. Nutrition and Food Science discussion, every Thursday, Noon, Rm 37-272.

Applications of Non-Linear Optics to Molecular Structure* — John G. Bergman, B.T.L., Holmdel, New Jersey. Electrical Engineering and Computer Science Seminar, 2-3pm, Rm 36-428.

Energy Choices from Utility Perspective* — Dr. Andrew Kadak, Manager of Nuclear Information, Naragansett Electric Company. EPSEL Seminar, 3pm, Rm 4-149.

Information Theory, The Second Law and the Equations of Motion* — Dr. George Hatsopoulos, senior lecturer, President of Thermo Electron Corp. Thermodynamics Seminar, 4pm, Rm 1-114.

Science & Social Engineering: Sex Research Policy in the 1920's* — Diana Long Hall, assistant professor, history and biology, Boston University. Technology Studies Seminar, 4pm, Rm 20D-205. Coffee 3:30pm.

Space-Time Evolutions of Particle Productions* — Wit Busza, associate professor, physics. Undergraduate Physics Colloquium, 4:15pm, Rm 4-339. Social hour follows.

American Foreign Policy in Southern Africa* — Sitho Buthelezi, External Representative of Black People Convention of South Africa: associate of Steve Biko. Pot Luck Dinner, then discussion, bring contribution. Seminar on International Students and Participation in Development, 5:30pm, West Lounge, Student Center.

Thursday, March 2

Tri-Level Echoes in Atomic Vapors — Sven R. Hartmann,** Columbia University. Modern Optics and Spectroscopy, 11am-Noon, Rm 66-110. Coffee 10:30am.

Simulation of Viscous and Viscoelastic Fluid Flow — Michael F. Malone,** chemical engineering, University of Massachusetts. Chemical Engineering Seminar, 3pm, Rm 66-110. Coffee served.

Techniques for Vibration Isolation Helicopters* — W.E. Hooper, director of Vehicle Technology, Boeing Company VTOL Division. Aeronautics and Astronautics Seminar, 4pm, Rm 37-252. Coffee served preceding seminar Rm 33-222.

Supergravity — Prof Stanley Deser,** Brandeis University. Physics Colloquium, 4:15pm, Rm 26-100, Tea 3:45, Rm 26-110.

Friday, March 3

Some Thoughts on Current Issues in the Israeli-Arab Confrontation* — Prof Saul Friedlander, history, Tel Aviv University and visiting professor, School of Humanities and Social Studies and Center for International Studies. CIS Seminar, Noon-2pm, Rm E53-482.

Visual-Vestibilar* — Prof C.F. Pfaltz, Germany. Man Vehicle Laboratory Seminar, Noon-1pm, Rm 37-252.

Public Policy Towards Public Enterprise Monopoly-A Case in Transportation* — Dr. Aaron J. Gellman, Gellman Research Associates, Inc. Center for Transportation Studies Lucheon/Seminar, 12:45pm, Mezzanine Lounge Student Center, Free. Buffet Lunch $1.

Chemical Engineering Seminar* — Viroica Lopez-Avila, Distribution and Transport of Industrial Pollutants in a Freshwater Environment, 2pm. **Lanny Schmidt,** University of Minnesota. Kinetics, Surface Marphology, and Surface Chemical Composition in Heterogeneous Catalysis, 3pm. Room 66-110.

Stability of Rotor-Bearing Systems* — Prof Edgar J. Gunter, director of roto dynamics research laboratory, University of Virginia, Charlottesville, Virginia. Mechanical Engineering Seminar Series, 3pm, Rm 3-133. Coffee 4pm, Rm 1-114.

Experimental Results from EBT* — Dr. Norman H. Lazar, Oakridge National Laboratory. Plasma Dynamics Seminar, 3:30pm, Rm 36-261. Refreshments at 3:15pm.

What Kind of Neuronal Machine is the Cerebellum?* — Prof Masao Ito, University of Tokyo Medical School. Psychology Colloquium, 4:30pm, Rm E10-013. Coffee at 4:15pm.

Christiania: An Experimental Community in Copenhagen* — John Lamperti, Dartmouth College. Student Action Coordinating Committee Lecture, 8pm, Rm 9-150.

Monday, March 6

Experiments with Wave Energy Conversion — Prof A.D. Carmichael,** ocean engineering. Water Resources and Environmental Engineering Seminar, 4-5pm, Rm 48-316.

Inverse Scattering Transforms and Painelive Transcendents* — Harvey Segur, research associate, aeronautics, Princeton Inc, Princeton, NJ. Applied Math Colliquium, 4pm, Rm 2-338. Refreshments 3:30pm, Rm 2-349.

MIT Hillel* — Panel discussion with Andrei Amalrik, Moshe Gitterman, Avital Sharansky, Yefim Yankelevitch. Four Russian Emigres discuss actions which can be taken by members of the academic community to help the cause of Human Rights in the U.S.S.R. 5pm, Rm 10-250.

Tuesday, March 7

On the Performance of Bayes and other Subset Selection Procedures' Prof Shanti Gupta, statistics, Perdue University. Seminar on Statist within the Mathematics Department, 4pm, Rm 2-338. Coffee and 3:30pm, Rm 2-349.

Workshop on Visas Post-Graduation** — Sponsored by Eugene Chamberlain, foreign student adviser, and Virginia D. Lyons, assistant international visitors. Seminar for Foreign Students, 3:30-5pm, Bush Roo

Recent Work on Mixing in a Density Stratified Shear Flow — Gregory Gartrell, Jr.,** California Institute of Technology. Water Resour and Environmental Engineering Seminar, 2:30pm, Rm 48-316. Coffee 3:45pm, Rm 48-410.

The Impact of Satellite Soundings upon the National Meteorologi Center's Analysis and Forecast System* — Dr. M. Steven Tract National Meteorological Center, National Weather Service. Seminar, 4p Rm 54-100. Tea and Coffee 3:30pm, Rm 54-923.

Interaction of Ships with Obstacles in Shallow Water — Ron Yeung,** assistant professor, Ocean Engineering. Applied Mechan Seminar, 3-4pm, Rm 3-133. Coffee at 4-5pm, Rm 1-114.

Relaxation Processes in CO_2* — Itamar Burak, chemistry. Seminar Physical Chemistry, 4pm, Rm 4-370. Coffee 3:45pm, Rm 6-321.

Wednesday, March 8

Vertical Variations of Selenium in the Northeast Atlantic Ocean* — Chris Measures, earth and planetary sciences. Oceanography Sack Lu Seminar, Noon, Rm 54-915.

Acoustically-Scanned Optical Imaging Devices* — Dr. Fred Leonberger, Lincoln Laboratory. EECS Optics Seminar, 2-3pm, rm 36-

Far Infrared Astronomy* — Edward Wright, assistant professor, phys Undergraduate Physics Colloquium, 4:15pm, Rm 4-330. Social hour f lows.

On Relatedness to the World in a Box: Photography and Aspects of Mimetic Tradition — William Parker,** professor of art and histor photography, University of Connecticut. Creative Photography Lect 4:30pm, Creative Photography Laboratory, 120 Mass Ave., Cambridge. fee served.

Thursday, March 9

Diatomic Laser Spectroscopy: Sharply Focused and With Ambiguity — Robert W. Field,** assistant professor, chemistry. Mod Optics and Spectroscopy Seminar, 11am-12pm, Rm 66-110. Coffee 10:30

The Applications Revolution Promised by Communications Satellite B.O. Evans, VP Engineering Programming and Technology, Internati Business Machines, Corp. Laboratory for Computer Science Seminar, 3 Rm 9-150.

Symmetries in Nuclear Data Decay — Prof Frank P. Calapr** Princeton University. Physics Colloquium, 4:15pm, Rm 26-100. Tea 3:45 Rm 26-110.

Role of Gas Chromatography/Mass Spectrometry in the Study of Solar System* — John M. Lavoie Jr. Analytical Chemistry Seminar, 4 Rm 8-105.

Friday, March 10

Space-Time Turbulence Structure and Stochastic Diffusion'' Palaiseau D. Gresillon, Ecole Polytechnique, France. Plasma The Seminar, 11am-noon, Rm 36-261.

Rare Ancient Instruments Now on Display

MIT's collection of rare, old scientific instruments—one dating from the first century AD—is now fully displayed in MIT Historical Collections for the first time since it was acquired by the Institute 20 years ago.

The approximately 100 pieces on view constitute one of the best collections of its kind, according to Warren A. Seamans, director of the Libraries' Historical Collections. All of the instruments are "exceptionally beautiful" and most are so rare that no monetary value can be placed on them, he said.

The instruments, which for the most part are measuring, time-telling and weighing devices, were given to MIT in 1958 by an anonymous New York City woman, who also donated parts of her collection to the Hayden Planetarium in New York City and to the Museum of Science in Boston.

Some of the instruments received by MIT were exhibited in 1964 and some have been displayed in cases on the third floor of Building 10, but the entire collection has never before been shown, Mr. Seamans said. The new exhibit is permanent and also is fully documented, he said.

Some examples of the instruments on view are:

—A gilded brass triquetrum, made in Italy in the early seventeenth century, that was used to take the altitude of the sun and stars.

—Miniature combination sun dial-compasses, exquisitely engraved, crafted by an English instrument maker named Michael Butterfield who settled in Paris in 1685.

A part of MIT's collection of rare, antique scientific instruments, a gilded brass triquetrum made in Italy in the seventeenth century, is examined by J. Scott Ferguson in MIT Historical Collections, where the devices are now fully displayed for the first time. The triquetrum was used to take the altitude of the sun and stars. Mr. Ferguson, a senior in biology from Hoboken, Ga., who has worked at Historical Collections for the last four years, worked in organizing and cleaning the instruments and in completing a catalogue of the exhibition, which numbers about 100 instruments.

—A first century Roman steelyard, or balance, for weighing objects.

—A nineteenth century Chinese astrological compass.

—A Spanish steelyard, from the fifteenth century.

—A nineteenth century Chinese equatorial dial in carved ivory.

—A pedometer made in Germany in the seventeenth century.

—A miniature ivory sundial, in the form of a book, made in France in the seventeenth century. When the "book" is opened, it stretches out like a string that serves as the gnomon.

—A terrestrial pocket globe, with a brass meridian circle, made in London in 1817. About the size of a softball, the globe is in a black leather case, the top of which is lined with a diagram showing the planets and their orbits.

Texiera Named

Everett Texiera, senior audio visual specialist at MIT, has been appointed an "aide-de-camp" to Somerville mayor Thomas F. August to represent veterans' involvement in the city government. A member of the American Legion, Mr. Texiera serves as chairman of its Boy Scouts committee in Somerville.

Informal German Exchange Arranged with High Schools

A new exchange experiment between MIT students and Boston area high school students met with enthusiastic response all around according to Clair Kramsch, lecturer in German in the Department of Humanities.

Two groups of MIT students studying German visited local high schools during IAP for informal discussions with high school German students.

Visiting Bedford High School were: David Bates, a senior in mathematics from Sewanee, Tenn., Kenneth Keverian, a junior in electrical engineering and computer science from Lutherville, Md., and Christopher King, a junior in materials science and engineering from Burlington.

Carrying on a conversation entirely in German, the MIT students described campus life and their experiences working and studying in Germany. The Bedford students were especially interested in the latter because they have been working for three years to raise money for a trip to Germany this spring.

The other group of students visited Boston Latin Academy. They were: Claudia Buser, a freshman from Wall Township, N.J., Dan Metzger, a junior in chemistry from Maumee, Ohio, Tom Russ, a junior in electrical engineering and computer science from Newport News, Va., and Arthur Wendel, a senior in physics from South Hackensack, N.J., who live in German House, and John Dunlap, a junior in mathematics from Casper, Wyo.

The Boston Latin Academy students were particularly interested in the position of women students at MIT. They wondered if the women students "got more attention" because they are a minority. The MIT students felt they had encouraged the high school students to consider MIT as a possible college choice.

Ms. Kramsch said the enthusiastic willingness of the MIT students to share their German and MIT experiences with high school students may be continued informally if term-time schedules permit.

Hall to Discuss Research Policy

Diana Long Hall, associate professor of history and biology at Boston University, will speak on "Science and Social Engineering: Sex Research Policy in the 1920s" at the Technology Studies Seminar today (Wednesday, March 1), at 4pm in Rm. 20D-205.

In the 1920s the National Research Council accepted a grant from the Rockefeller Foundation to support fundamental research on sex. Professor Hall will discuss the NRC Committee for Research on Problems of Sex and the way in which the Committee members' assumptions of what was good science and what was acceptable as social engineering entered into the determination of their research policy.

The seminar is sponsored each term by the Technology Studies Program. Coffee is served at 3:30pm.

Chemical Engineering Seminar* — Terry S. King, Predicting Surface Properties of Binary Alloy Catalysts, 2pm. **Jay J. Schnitzer,** Localization of Low Density Lipoprotein in the Arterial Wall, 2:30pm. **Mohammadreza Hajaligol,** to be announced, 3:25pm, Rm 66-110.

The Application of Robust Multi-Variable Control Theory to Power Systems Automatic General Control* — H.G. Kwanty, mechanical engineering, Drexel University, Philadelphia. Systems Communication and Control Seminar, 4pm, Rm 39-500.

Mechanics and Design Problems in Energy Resource Recovery — Sidney J. Green, president, Terra Tek, Inc., Salt Lake City, Utah. Mechanical Engineering Seminar, 3pm, Rm 3-133. Coffee 4pm, Rm 1-114.

Logical Reasoning: Representation, Process, and Development* — Prof Rachel Joffe Falmagne, psychology, Clark University. Psychology Colloquium, 4:30pm, Rm E10-013. Coffee at 4:15pm.

Community Meetings

Wives' Group* — An Afternoon of Crafts with Nancy Holloman. Wed, Mar 1, 3-5pm, West Lounge, Student Center. Baby Sitting provided.

University Scouting Advisors Meeting** — Thurs, Mar 2, 7:30pm, Rm 7-403. Info: Jeff Aldridge 494-8552 or x5-9466 Dorm.

Speed Chess Tournament* — MIT Chess Club. Speed chess, with prizes. Very informal. Sat, Mar 4, 2pm, Rm 407, Student Center. Admission: 75¢. Info: Brad x5-8156.

Poetry Reading* — David Ignatow, winner of the 1975-76 Bollingen Prize, will give a poetry reading. Wed, Mar 8, 7:30pm, Rm 14-304. Sponsored by The Writing Program of the Department of Humanities. Free.

Tech Wives International Cooking** — Technology Wives Organization. Wed, Mar 8, 8pm, Rm 10-340. Info: Tasilm Sabur at 494-0296 or Pattie Dobson at 646-4080.

MIT Community Players* — Regular meeting. Election of nominating committee. Thurs, Mar 9, 7:30pm, Rm 400, Student Center.

Tech Wives Excercise Class** — Technology Wives Organization. An hour of exercise taught by professional Marilyn deKleer. Every Monday through May 1, 8pm Info: Linda Morecrost 494-8434.

Social Events

Mezzanine Coffeehouse** — Sponsored by SCC, Coffeehouse performers in a relaxed atmosphere. Fri, Mar 3, 9pm-Midnight, Mezzanine Lounge, 3rd Floor, Student Center. Free, coffee, donuts, cider.

Vegetarian Dinner** — Pot luck vegetarian dinner, Fri, March 3, 6:30pm. Contact: Bill, x3-7130, Doug, x5-7411, Ann, x5-6681.

Just a Plain Old Party* — Sponsored by MIT and Harvard Hillels. Party atmosphere with music, dancing and munchies. Sat, Mar 11, 8:30pm, Burton Dining Hall. General admission $1.50, Hillel members $1.25. Free refreshments. Info: x5-8665 Dorm.

Movies

The **Deep** ** — LSC movie. Fri, Mar 3, 7 & 10pm, Kresge. Admission 75¢ w/MIT or Wellesley ID.

The **Man Who Knew Too Much*** — Film Society movie. By Alfred Hitchcock, Fri, Mar 3, 7:30 & 9:30pm, Rm 6-120.

Lenny** — LSC movie. Sat, Mar 4, 7 & 10pm, Rm 26-100. Admission 75¢ w/MIT or Wellesley ID.

Midnite Movie: Funny Girl** — Sponsored by SCC. Bring your own blankets and sit on the floor. Sat, Mar 4, Midnight, Sala De Puerto Rico, Student Center. Free.

The Maltese Falcon** — LSC movie. Sun, Mar 4, 6:30 & 9pm, Rm 26-100. Admission 75¢ w/MIT or Wellesley ID.

Ascenseur Pour L'Echafaud — Director Lou Malle,** French with English subtitles. Sponsored by the department of humanities, Mon, Mar 6, 4:30pm & 7pm, Rm 66-110.

Films: Grandma Moses; Junkyard; Bowl of Cherries** — Sponsored by SAA. Thurs, Mar 9, 5:15pm, Student Center, Refreshments. Info: x3-7019, 1-5pm.

Breathless** — Film Society movie. Jean-Lue Godard (France, 1959, 89 min). Fri, Mar 10, 8pm, Rm 6-120. Donation $1.25.

Three Musketeers** — LSC movie. Fri, Mar 10, 7 & 9:30pm, Rm 26-100. Admission 75¢ w/MIT or Wellesley ID.

Fun With Dick and Jane** — LSC movie. Sat, Mar 11, 7 & 9:30pm, Rm 26-100. Admission 75¢ w/MIT or Wellesley ID.

Lost Honor of Katherina Blum — Director Volker Schlodorff,** German with English subtitles. Sponsored by the department of humanities, Sat, Mar 11, 5pm, Rm 66-110.

Summer of '42** — LSC movie. Sun, Mar 12, 6:30 & 9pm, Rm 26-100. Admission 75¢ w/MIT or Wellesley ID.

Music

Noon-Hour Chapel Concert* — Thurs, Mar 2: Misick for the Generall Peace, featuring Marion Verbruggen, recorder, in a program of music by Bach. **Thurs, Mar 9:** Sandra Stuart, soprano; Gordon Pruett, baritone; and James Busby, harpsichord. Works of Monteverdi, Purcell, J.S. Bach, 12:10, MIT Chapel. Free.

Music Lecture* — Prof Klaus Liepmann presents the second of two lectures on Mozart Opera. Violinist and conductor, founded and developed the music program and directed the Glee Club, The Choral Society and Symphony Orchestra for many years. Tues, Mar 7, 4pm, Rm 10-250. Free.

Music at MIT* — Guest Recital: Haskell Small, pianist, will perform Mozart, Sonata in B-flat major, K. 570; Beethoven, Sonata in E Minor, Op. 90; Small, Introduction and Fugue; Chopin, Ballade, Op.23; and Barber, Sonata, Op.26. Wed, Mar 8, 5:15pm, Music Library. Free.

Festival and Concert Jazz Bands* — Herb Pomeroy and Everett Longstreath lead the MIT bands and host two others: University of Lowell Studio Orchestra with Nat Paella, and the Harvard University Jazz Band with Thomas Everett. Fri, Mar 10, 8:30pm, Kresge. Admission: $1 at the door, free in advance in Lobby 10.

Symphony Orchestra* — Gary Steigerwalt is soloist and **David Epstein** conducts William Schuman's Piano Concerto. The program also includes Prelude and Love Death for Wagner's Tristan and Isolde and Hindemith's Symphonic Dances. Sat, Mar 11, 8:30pm, Kresge Auditorium, Admission: $1 at the door; free in advance in Lobby 10.

MIT Concert Band and RPI Symphonic Band* — Symphonic Band directed by Henry Cox and Paul Aldi, will perform for the first half of the concert. John Corley will conduct the MIT Concert Band in Variation on a Korean Folk Song by John Chance and Music for a Festival by Gordon Jacob, second half of the concert. Sunday, Mar 12, 2:30pm, Kresge Auditorium. Free.

Exhibitions

Edgerton's Stroboscopic Projects* — Photographs and demonstrations by Harold Edgerton selected from forty years of investigations of natural phenomena. Sponsored by the Compton Gallery Committee with the assistance of the Committee of Visual Arts. Through Wed, April 12, Mon-Fri, 9am-5pm. Margaret Hutchinson Compton Gallery, Maclaurin Building 10.

Tower and Roof and Pinnacle: The Architecture of College Hall* — Wellesley College Museum. A selection of 19th century photographs of College Hall, Wellesley and a series of preliminary and presentation drawings made by the architects of College Hall, Hammatt Billings and J.E. Billings, showing the evolution of the design. Through March 23, Mon-Fri, 8:30am-noon and 1pm-5pm, Sun, 2-5pm. Gallery talks Sundays, 3pm. Jewett Arts Center, Wellesley, Free.

James Wilson Rayen, Recent and Revised, 1975-1978* — Wellesley College Museum. An exhibition of paintings and drawings by James Wilson Rayen, associate professor of art and director of the studio art major at Wellesley. Through Sun, Mar 26, 8:30am-noon and 1-5pm, Sunday 2-5pm. Gallery talks Sundays, 3pm. Jewett Arts Center, Wellesley, Free.

Famous Conductors* — Music Library, Rm 14E-109. Photographs with biographical notes on famous conductors from Lully to Stokowski.

MIT Historical Collections* — Permanent exhibition Mon-Fri, 9am-5pm, Bldg N52, 2nd floor. **Katharine Dexter McCormick,** '04; **Vannevar Bush,** '16; and **1876 Exhibit,** Bldg 4 corridor. **The New Technology Exhibit** 2nd floor balcony of Lobby 7. **Energy Exhibit** Bldg E40, 1st floor. **Radiation Laboratory Exhibit** main corridor, Bldg 8. **Center for Space Research, Astrophysics Exhibit** main corridor, Bldg 4. **Bldg 6 Dedication Exhibit.**

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

Strobe Alley* — High speed photographs by Harold E. Edgerton, Institute Professor and Professor of Electrical Measurement, Emeritus. Bldg 4, 4th fl.

Athletics

Home Schedule — Wed, Mar 1: M V Fencing,** St John, 7pm. **Fri & Sat, Mar 3 & 4: W V Basketball,** Maiaw, All Day. **Sat, Mar 4: V Rifle,** NECRL Final, 9am. **V Hockey,** Assumption, 7pm. **Sun, Mar 5: V Rifle,** NRA NE Sectionals, 9am. **Sat & Sun, Mar 11 & 12: V Pistol,** International & Conventional Sectionals, 9am.

Theatre and Shows

The Lion in Winter* — MIT Community Players. William Roldr biting drama of royal life in the 12th century. Thurs, Mar 2, 3, 4, Kresge Little Theatre. Admission $3, ($2.50 w/MIT ID). Ticket info: x or x3-5716.

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

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

Send notices for Mar 8 through Mar 19 to Calendar Editor, Rm 7-102, x3-3270, before noon, Friday, Mar 3.

Uranium Supply Guarantee Needed, Professors Say

Developing nations planning to build nuclear power plants should be guaranteed adequate supplies of uranium in order to discourage them from constructing fuel-reprocessing facilities, two MIT professors believe.

"From an American viewpoint the acquisition of nuclear fuel-reprocessing facilities by more nations is disquieting because plutonium is produced in such facilities," write Professors George W. Rathjens and Carroll L. Wilson. "Plutonium is one of the substances used in nuclear weapons. An increase in the number of nuclear weapons states is generally agreed to increase the danger that such devastating weapons will be used."

In an article in the "Opinion and Commentary" section of *The Christian Science Monitor*, the authors argue that the "one effective and feasible inducement" that would lead these nations to cancel or postpone plans for building fuel-reprocessing facilities would be to assure them of sufficient nuclear fuel for their needs without such facilities.

"We suggest," they write, "that they be guaranteed enough uranium for 30 years (the life of a typical nuclear power plant) by countries with plentiful supplies such as the United States, Australia and Canada."

Dr. Rathjens, professor of political science, and Dr. Wilson, the Mitsui Professor in Problems of Contemporary Technology, emeritus, say that a reliable supply of fuel is essential for countries that decide to buy a nuclear power plant.

"First, it is likely to cost about $1 billion," they note. "Second, a million people and tens of thousands of jobs will in the future depend on a continuous supply of electricity from the nuclear power plant."

To provide fuel for one such reactor for 30 years, the authors estimate, will require about 4,500 tons of uranium for a total cost of $270 million at current prices.

According to Professors Rathjens and Wilson, nations turning to nuclear power may have good reason to doubt that an adequate supply of uranium will be available from the four countries having 75 per cent of the world's uranium reserves—Australia, Canada, South Africa and the United States.

Australian uranium is not now being mined, they point out, because of a national debate about whether supplying it to the world will increase the danger of nuclear weapons proliferation. There are similar debates in Canada and the United States.

In the face of such uncertainty, the developing countries may well decide to build their own reprocessing plants, as expensive and technically difficult as this may be, in order to obtain the supplies of uranium or possibly enriched uranium that they need.

Clearly, they would be better off buying 30 years' uranium supply and stockpiling it at home, Professors Rathjens and Wilson note. The cost, for example, would be only about 30 per cent of the cost of the nuclear power plant.

It is also clear, the authors say, that Canada and the United States, the largest sources of natural uranium, and the United States, the major source of enriched uranium, have enough material to fill such orders from several countries.

Assuming that the paramount purpose of American and Canadian policy is to reduce as far as possible the proliferation of plutonium factories, they write, then these nations should be willing to sell sufficient fuel to meet the 30-year needs of nations that do not wish plutonium for weapons but insist upon an assured fuel supply for their nuclear electric plants.

"The result would be a practical impediment to nuclear proliferation," they conclude.

Perkins to Head Dam Safety Panel

Dr. Frank E. Perkins, head of the Department of Civil Engineering at MIT, has been named chairman of the Federal Dam Safety Independent Review Panel.

The appointment was made by Dr. Frank Press, director of the Office of Science and Technology Policy and science adviser to President Carter.

Dr. Perkins, head of the MIT department since July, 1975, and a member of the faculty since 1965, is known for his work in developing computer applications for the fields of water resources engineering and hydrology.

The panel will review the regulations, procedures and practices of federal agencies as they pertain to dam safety. The first meeting of the panel will be in March.

Others named to the panel were: Professor Clarence R. Allen, California Institute of Technology; Dr. Elio D'Appalonia, D'Appalonia Consulting Engineers, Inc., Pittsburgh; Gerald Farquhar, a member of the Washington law firm of Ford, Farquhar, Kornblut & O'Neill; H. Keith Honaker of the Kentucky Department of Natural Resources and Environmental Protection; Professor L. Douglas James, director, Utah Water Research Laboratory; Eric B. Kollgaard, International Engineering Co., San Francisco; Dr. Ray K. Linsley, Hydrocomp, Inc., Palo Alto, Calif.; Professor H. Bolton Seed, University of California, Berkeley; and Professor Erik Vanmarcke, MIT Department of Civil Engineering.

Professor Perkins lives at 250 Country Club Lane, Brockton, Mass.

MIT Seeks to Uphold Record at Blood Bank

MIT, as most of us know, is a special place.

One thing that makes it special is its sense of community and as a community, MIT can take pride in its record of blood donations. With .2 per cent of the Massachusetts/Maine population, MIT supplies well over one per cent of the blood used in the region. Blood drives at MIT net nearly 4,000 pints of blood per year for the Red Cross Blood Program.

The spring blood drive this year will be held Wednesday-Friday, March 8-10, and Monday-Friday, March 13-17, in the Sala de Puerto Rico. Hours of the drive are 9:45am-3:30pm on March 8, 10, 14, 15 and 16. On March 9 and 13 the hours are 2:45-8:15pm and on the final day, March 17, no appointments will be made after 2pm in order to accommodate last-minute donors.

Giving blood takes about one hour from start to finish, including a brief medical history, temperature and blood pressure checks and refreshments after donating. It is Institute policy to allow time off, wherever possible, for all employees to give blood.

Because of large organizations like MIT, the Red Cross can meet the blood needs of the Massachusetts/Maine area. Blood is provided free of charge, except for hospital costs, to all who need it.

LINCOLN DRIVE

Lincoln Laboratory's Spring Blood Drive, conducted by the Lexington Red Cross, will be held on Monday and Tuesday, March 6 and 7.

MIT's eight-day fall and spring blood drives are especially important to the area because they permit hospitals to plan for major elective surgery with the assurance that adequate blood supplies will be available.

MIT's success as a major blood contributor is achieved through a network of volunteers. Students in the Technology Community Association (TCA) organize the drive and schedule advance appointments. Co-chairmen for the spring drive are Jim McCormack, a junior in interdisciplinary science from Tenafly, N.J., and Rob Steidlitz, a junior in chemical engineering from Cherry Hill, N.J.

While the blood drive is in progress the MIT Women's League provides major support for the Red Cross in registering donors, taking temperatures, escorting donors and serving refreshments. Jean Bridge of Sudbury is organizing the Women's League effort this year with assistance from Marie Finston of Lexington.

The other important volunteer effort is yours—sign up to be a donor.

CLASSIFIED ADS X3-3270

Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Persons who have no extensions or who wish to list only home telephones may submit ads by coming in person to the *Tech Talk* office, Rm 7-102, and presenting Institute identification. Ads may be telephoned to x3-3270 or mailed to Rm 7-102. **Deadline is noon Friday before publication.**

For Sale, Etc.

Concorde II integra elec shaver, bought nw $28, 9/mo old, now $14, reas for sell: have a beard. Charles 494-8342 eve.

Lady, mod 120 bass accordion, reas prc, gd cond. Pauline x3-2772.

M hockey skates, sz 8½, $15; Bwer telephoto & wide ang lens, polaroid, nw nvr used, $20. Jack x8-3754 Draper.

Bar bell, $15; blender, $15. Call x5-6693 Dorm.

SAE MK 31B, pw AMP, 50 w RMS, mint cond, $200. Call Charlie x5-9534 Dorm eve.

Pr snows, rad R78-15 from Datsun 240Z, used one seas, $50. Call 964-2681 eve.

Fig ice skates, sz 8, $7; Nike "Waffle" rn shoes, sz 8, nw worn 2, $28; 26" phillips 3sp Bike frntwhl miss, $5; Winter Coat, blk wool, knee lngth, gd lin, sz 42-44, $35. Call x3-4550, 661-4111 eve.

Draft tbl/desk, prof qual, all steel constr w/lino tops (2), lck drw and storage space, white, cond vry gd. $100. Call x3-6116.

Sony TC-160P csstt deck w/built-in 14 W amp for monitor great for eff spkrs, was top of the line, tape drv get old, elect vry gd cond, $95. Jeff x5-6627 or 494-0195.

Southwest Tech Prod Corp, preamplifier, prfct work cond, $60. Call 872-9466 & lv msg.

'67 VW, eng reblt, 5,000K, must take bdy w/eng, gd cond, $300. Call x3-4113.

2 harnss, rigid heddle Erica loom, nv used, ptbl, $30. Fivalla classic guitar w/case, $30. Jane x3-5042.

Queen sz bx sprg & steel frame, almst nw, $120. Call x3-2226.

S-100 connect, 3 lvl gold WW fits IMSAI, used, some wrapped, $2.75 ea. Call 494-8888.

Heavy dty, 2 whl hand truck, gd wrk cond, $30 or best; IBM Select typrewrt current under serv, full operat, gd cond, $350 or best. Contact LSC x3-3791.

Harmon Kardon HK 2000 tape dck, lk nw, 3 yr part & labor wrrnt, $325 or best. Call WJ 266-7273 aft 5pm.

Panasonic, 12" clr TV, exc cond, 8 mo old, $200; M 19" 10 spd Nishiki bike 8 mo old, lock & pmp incl, $100. Call x3-1857.

Head ski outfit (jack & warmup pant), W sz 10, worn 1, org $150, now $75 or best. Call x5-8619 or lv msg for Virginia Chen 253-5961.

Polaroid SX 70-mod 1, brn nw in bx, $75; 10 pack film, $4 ea, brush chrome w/leath. Don x8-3337 Draper.

2 tickets, The Damnation of Faust, Berlioz, Mar 28, 8pm, Opera Company, Bos. $40. Call x3-2916.

Pr ADS 500 spkr, $210; PE trnble $60, nego. Mike 661-8857, lv msg.

Sony TC 355, reel to reel tape dck, 3 Heads, nd some wrk, $100 or best. Call Jeff x5-9350.

Assort 14" tires, snows & reg. Call Craig 494-0194 aft 6pm.

Kodak carousel project, 102mm f/2.8, BC 764 brnd nw, $160; Cannon camera, FD 50mm, f/1.4, $320. Call x3-3494.

Tw sz bx spg & matt, $40, wl deliv; adult sz med, judo ghi, $12; pr old sty leath ski boots, M 9½, $10; lrg army rainct, $15, nv usd. Call Karl x3-2402.

Steel blt rad, FR78-14, org 40K guarantee, usd ls 1500 mi, $60/pr or best. Call x5-9700 eve.

23' papacommander parachute, red/gold/black, 100 jumps w/mini-sys harns & contain, gd cond, $350. Call Bob x5-6170, 494-8227.

Hart skis, metal 6'7", 200cm, $15; Reiker boots, 9½ M, old type w/laces, $10. Call x5778 Linc.

Used Shure, M91E, phonocrtdg, org $60 now $20, Mark x7856 Linc.

Skis, Head compet Slalom, 210cm, Look Nevada binding, exc cond, $40. Tom x3-3212.

M Eng gray tweed jack, sz 38, lttl used, $130, Camels Hump, now $60. Graham x3-7325 day, 868-0982 eve.

Lafayette stereo sys: Garrad trntbl, Criterion spk & Lafayette AM/FM recvr, 20 watt/channel, perf cond, must sell immed, $200, nego. Call Pete x3-5353.

Complt 54 vol "Great Bks of West World W/bkcase, ask $150, nw set sells $800. Call x3-3834.

Minolta XE7 35mm SLR w/28mm F/1.9 lens, auto flash, filt, slide copy & case SW pre-amp, best; Bill x5-9338 Dorm.

Yellow GE wall oven, runs, nd nw thermo, $20. Call x7825 Linc.

10 spd bike, 1½ yrs old, Beacon mod, gd cond, $60, lv country, Kyptonite lck & tools incl. Call 494-9220 eve.

Pr full suspension legal file cabnt, 2 drw, blck, unused, $80 ea or best. Call 924-3653 eve.

Hitachi B/W TV PA 5 w/ 1½ yrs org wrrnt, lk nw, $70. C Car seat, lttl use, lk nw, $20. Call x3-7097.

Vehicles

'66 Dodge Dart for prts, nw tires, carbtr, alterntr, battery & water pmp, $100. Joe Blais x5441 Linc.

'66 Ply VIP, gd cond, $200 or best. Call x3-8258 or 661-1203.

'66 Saab stat wg, 2-strk reblt eng, nw brk, nw paint, exc cond, $500. Call Tom x3-1756.

'66 Sunbeam Alpine roadstr, gd cond w/steel hrdtp, tonneau. Call John 494-8214.

'68 Chevrolet Impala stat wg, almst reblt eng, nw exhaust, nw tires, best. Call x3-5109 days or 494-0130 eves.

'68 Mercedes 230, 6 cyc eng, 4 spd, exc cond insd & out, 100K, $2500. John x3-5922.

'69 Ford wg, usd every day, exc buy, must be sold. Call Chuck x8-3705.

'70 BMW, reblt eng, gd trans, gd mech cond, nd bdy work, $800. Jim x8-2818 Draper.

'70 (May) Toyota Corona Mark II deluxe, 1900 auto, 2 extr tires, air cond (nds wrk), heat, AM, tuned up last wk, 52K, vry gd mech cond, $650 or best. Mahmood x3-2346 days, 494-8883 eves.

'71 Toyota Corona Mark II, bdy nd wk, eng mech sound, $350 or best. Call x8-1544 Draper.

72 Chevy 9 pass wg, 350V8, 80K, gd cond, $1,000 or best. Call x8-3482 Draper.

'72 Chevy Vega, standrd, gd rn cond, many nw parts, $450. Call 492-2889.

'72 Datsun 510 wg, $600 or best. Call x7276 Linc.

'72 Pinto wg, 4 spd, 4 cyl 2000cc eng, 4 gd tires, AM/FM, runs wl. Jerry x3-6488.

'72 Vega, 59K, auto trans, nw eng, nw tires, nw shck, nw muffl, nw batt, exc mech cond, slgh bdy damage, $500. Call x5-9636 Dorm.

'72 VW Pop-Top camp, 75K, (15K on rblt eng), vry gd cond, $2,200. Call 494-9218.

'73 Chevrolet Malibu wg, auto, pw st & brk, AM/FM stero, 350cu V8, 83K hghwy, run exc, $1,450. Call x3-2772.

'73 Eldorado Cadill, gd bdy, exc mech, $2,800. Call x3-6335.

'73 International Sct, V8, 3 spd manu, w/2 spd 4 whl drv, pw st & brk, runs wl, gd cond, $2,600. Ron x8-2818 Draper.

'73 Mustang conv, copper w/wht, pw st & brk, radio, 61K, alarms, exc cond, best over $2,700. Call x8-3135 Draper.

'73 Suzuki T.M.-125cc, in storage '74, nw cyl & tires, reblt carb, Bassani exhaust, $600 or best. Call Steve 358-2094, aft 6pm.

'74 Chevy Vega, auto, vnyl top, 33K, snows, gd cond, $1,075. Call x5-9715 Dorm aft 5pm.

'74 Dasher, 2 dr sedan, 4 sp, rad, AM/FM/CB, 73K, exc bdy, reg maint, $2000. Call x3-2562 day, 492-0263, 7-11pm.

'74 Old Cutls Supreme, air cond, alarm r/window defog/landow rool, nw tires, 41,254 mils. Call Peggy x3-2305.

'76 Impala Landau coop, auto trans, pw str, steel blt rad, AM r/window defog, r/spkr, brown w/blck vinyl insd, 17K org. Al Deleo x8-4567 Draper.

'77 Honda Civic, Hatchbk, 5 spd, exc cond, $3,500. Ron x7229 Linc.

Housing

Back Bay, f rmmate nd to share 2 BR apt, furn, dryer, $155/mo incl util. Call x5-8397.

Brk Vill, rm for rnt, space, cath ceil, 3rd fl, sng home, 2 min to Riversd, no K, reas rent, Call 738-6949.

Camb, Central sq, 3 rm furn apt, incl heat & util, 3 fl, T. Call x3-3864.

Littleton, 1BR apt in/antiq col home, lg LR w/-firepic, wide pine fls eat in K w/sundeck, prv entr, $250/mo incl heat, utils & wash mach. Call 486-3023.

Salem, eleg greek rivl, ca. 1830 w/LR, libry, dn rm, K & pnty, 4 BR, 6 firepic, 3 B (1 w/firepic), lg bckyrd, gd cond, exc area, walk to train & bus, reduce to $65,000. Call Eva x3-5742 more details.

Sudbury retrt, charm, 1 BR, cabin, winterz, Buildbl lot, 3.2 acr, beaut wood land, rare wild flwers, $51.9. Call 227-1614 eve, 235-4950 day.

Animals

Free F Blck, lng hair kittens. Pei Chen 731-9130.

Free to gd home, F puppy, 4/mo, mstly shepherd, hsebrkn, nds love & time spt with. Call Lois x3-7137 day, Peter x5-6194 Dorm eve.

Lilac point siamese kittens 9 wks old, $30. Call x3-3601.

Lost and Found

Lady watch, stainls steel w/lng neck chain, lost about 3/4 wks at Rm E19, sentimental value. Reward $30. Sophia x3-3345 or 489-3092 eve.

Lost: Gold Cross mrk pen, betwn Albany & Bldg 39, feb 22, init engrv W.O.R., 10-26-77, reward. Call x3-3541.

Lost: Green tote bg w/navy trim, w/ init J.P.G., betwn Rm 37-241 & Albany. Pls call x3-1456.

Wanted

Belmt, 2 Family hse. Call 648-4860 or x8-1294 Dorm.

Clerical P nd to transfer G stud council survey onto coding forms. Pay arnd $4/hr. Call Pegg Hunter x3-2195.

Cello for adult begin, $200-$300. Judith x3-5117, 9-1pm.

Elec piano, prtbl. Call 484-6472 eve.

Model nd for life draw at MIT, $4.50 per hr, Thurs aft & Mon, Wed & Fri eves. Pls call 253-4415 day.

Refrig/Freez, apprx 5' tall. Call x5-6162 Dorm.

Rent car wnt, Now through June. Call Jessie x3-3141.

Soda mach (can or bottle). Contact LSC, x3-3791.

Steam Iron. Call Bill x3-2843.

Stereo tape drv w/tape heads, w/out pre-amp & record circuits. Call Mark J x3-1541 lv msg.

Transcrbr for oral history prgm, 10-12 hrs per wk. Call x3-5688.

Usd copy of Spiro, H. Finance for the non-financial mgr. Call Lee Linsky x3-1782.

Yamaha classic guitar. Call x3-1549.

Roommates

Arl, 6th rmmate for clean quiet hse, laund, park, nr bus to Kendall sq, $115. 643-5297.

Camb M or F rmmate wnt to share 3 BR apt, w/LR, B, K, 10 min to MIT, $115/mo, incl gas, ht, hot wtr, avail now. Call 661-9637 aft 6pm.

Camb, Mature P wntd to lk for & share quiet apt. Bill x3-7133, 10am-2:30, 227-4376 eves.

Camb, M rmmate wnt to share 3 BR apt, LR, B, K, 15 min to MIT, avail now, $95/mo, not incl gas, elec. Call Matti x3-5260 day or 547-7978 eve.

Miscellaneous

Heating, air cond, vental, insul wrk to be done. Call Arthur Dubois, 891-7499, aft 4:30pm.

Ride wntd to Atlanta, Georgia spring brk, shr drv and expense. Call x5-8506 Dorm aft 7pm, ask for Hans.

Voice Workshop, enj singing, sm group deal w/-basic techn, breath, relaxation, all enquir welcome, initial consult & evaluate free. Call 643-5791.

Wl type, gen, tech or theses, IBM Correct Selec. Call x3-2153.

Wl type, any kind, 10 yrs exp, IBM Select. Marie x3-3807.

Wl type, theses, manu, report, fast & accur. Call x3-4528.

Wl type, general tech, theses, IBM correct selectric. Ginny x3-3929.

Wl type, any kind IBM Select. Sarah x3-1491.

Wl type, technical to your spec. Call x3-5705.

Lib call Scott mssd you in dive class. 965-0183.

798-2 Rubicon L.C. potentiometer, $247.30.

798-8 Ginder+pestle, $220.

798-14 Oxygen regulator gauge, $216.

798-39 Mod. 53C preamp, $275.

798-41 Scope dolly, $37.73.

798-42 Mod. 535 Oscillo scope, $1,385.

798-44 Oxygen Regulator, $33.33.

798-46 Mod. 130 LC meter, $195.

798-56 Mod. 1301 glotube scaler, $845.

798-57 Mod. 1301 glotube scaler, $1,040.

798-62 Photocopier, —

798-88 Mod. 348A linear amplifier, $1,060.

6798-98 Mod. 52-24 readput power translator, $990.

6798-99 Mod. 30-17 4-ch mixer amplifier, $2,160.

6798-119 Mod. 49-28 6-dec, nonprest scaler —

6798-120 Mod. 49-28 6-dec Nonpreset scaler —

6798-121 Mod. 49-28 6-dec. nonpreset —

6798-122 Mod. 49-28 6-dec nonpreset scaler —

6798-123 Mod. 49-28 6-dec. Nonpresent scaler —

6798-124 Mod. SC-36-0.5M/power supply, $325.

6798-125 Mod. C-481M power supply, $274.50.

6798-141 Mod. 940X adding machine, $359.55.

6798-162 Mod. 52-24 Relay Matrix w/punch, $1,080.

6798-164 Mod. 44-15 Tape Perforator, $1,350.

6798-210 Mod. 132 Calculator, $1,785.

76798-263 Actopraph Electric Pen, $73.

76798-311 Mod. 27103 7-dec. scaler, $475.

76798-312 Mod. 27103 7-dec. scaler, $475.

76798-313 Mod. 27103 7-dec. scaler, $475.

76798-315 Mod. 27101 Preset timer, $605.

76798-318 Mod. 27100 preset timer, $605.

76798-345 Mod. FO-104 hoskins electric furnace, $112.

76798-441 Mod. CP-2M Card programmer, $500.

76798-296 Mod. 360E Electronic Calculator, $1,995.

76798-341 Mod. 1c-1 item, Counter —

798-17 Mod. 67001 millivolt recorder, $456.88.

76798-298 Wonge Keyboard —

Surplus Property

Contact: W.A. Derry, Property Officer, x3-2777, Rm E19-717.

POSITIONS AVAILABLE

This list includes all non-academic jobs currently available on the MIT campus. Duplicate lists are posted on the Women's Kiosk in Building 7, outside the offices of the Special Assistant for Women and Work (10-215) and Minority Affairs (10-211), and in the Personnel Office, (E19-239).

Personnel Interviewers will refer any qualified applications on all biweekly jobs as soon as possible after their receipt in Personnel.

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

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

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

Dick Higham	*3-4278*
Pat Williams	*3-1594*
Carolyn Scheer	*3-1595*
(Secretary — Tertia Perkins)	
Virginia Bishop	*3-1591*
Richard Cerrato	*3-4266*
Ken Hewitt	*3-4267*
(Secretary — Paulette Chiles)	
Sally Hansen	*3-4275*
Lewis Redding	*3-2928*
Kathleen Rick	*3-4269*
(Secretary — Jenni Leibman)	

Admin. Staff, Gallery Manager in the Committee for the Visial Arts to be responsible for design planning and supervision of exhibitions installation in Hayden Gallery, as well as the storage, care and installation of works in the MIT Permanent Collection, and for other special projects. Will prepare exhibition designs; hire and supervise personnel; purchase supplies, equipment; maintain gallery security and proper handling of art works. Position requires Bachelors degree in art or architecture, gallery management experience, and working knowledge of tools, construction, packing and crating as they relate to art works. A78-9 (3/1).

Admin. Staff, in the Dean for Student Affairs Office to direct and coordinate a residence program involving over 4,000 students; participate in all student-affairs policy decisions, financial management and budgeting activity; counsel students; conduct special studies and make projections. Responsibilities will include development and implementation of housing policy and programs; preparation of housing-related literature; liaison with fraternity and independent living groups, with other student support areas, and with city and community agencies. Will work closely with Office of Housing and Food Services in the construction, maintenance and management of housing facilities. Position requires strong communication and managerial ability, substantial college administration experience, especially in student related areas. Familiarity with the MIT Residential Program is desirable. A Master's degree, (preferably in management or its equivalent) is also necessary. A78-8 (3/1).

Sponsored Research Staff, Technical Officer in the Technology Adaptation Program to maintain liaison for several overseas projects in the following areas: public works; manufacturing; energy; socio-economic development. Will coordinate technical activities of faculty, staff and graduate students; prepare progress reports; disseminate program findings and results. A technical background (M.S. or Ph.D.) and knowledge of sector planning and project analysis techniques required. Knowledge of foreign languages and prior living experience abroad desirable. Extensive travel on short notice also required. R78-45 (3/1).

Sponsored Research Staff, Energy Analyst, in the Energy Lab to develop and lead research projects relating to national and international energy issues, especially those relating to nuclear power. Ph.D. in physics or engineering with strong background in nuclear energy required. Knowledge of enrichment methods, power reactor characteristics, nuclear power economics and environmental and political aspects of nuclear power, as well as general knowledge in other energy technologies also required. Must have experience and ability in directing research projects. 40 hrs./wk. R78-43 (3/1).

Sponsored Research Staff, Engineer, in the Earth and Planetary Sciences Dept. to supervise new ion-microprobe facility; instruct ion probe users. Requires ability and experience in vacuum technology, electronic computer design, fabrication and maintenance, dedicated computer interfacing, programming and troubleshooting; mechanical drafting and layout, and high precision machining; supervision of other technical personnel. Also required is knowledge of the principles of ion optics and mass spectrometry. R78-44 (3/1).

Sponsored Research Staff, Programmer, in the Lab for Computer Science to develop various modules of an existing system in LISP for high level language translation. A strong background in LISP programming as well as experience with automatic programming required. College degree or equivalent preferably in math or computer science also necessary. R78-36 (2/22).

Sponsored Research Staff, in Center for Cancer Research immunology laboratory will immunize and bleed mice; purify cells and proteins; do tissue cultures; work with radioactive isotopes. A Bachelor's degree, or equivalent, required. R78-37 (2/22).

Sponsored Research Staff, part-time, temporary, in the National Magnet Laboratory to assist in formulation, preparation and testing of superconducting alloy bars and wires; measure mechanical and electrical properties of superconducting materials at room temperature and liquid helium temperature. A Bachelor's degree in metallurgy or a related field is required. Position is half-time, and runs through August, 1978. R78-40 (2/22)

Sponsored Research Staff in the Sloan School Systems Dybanucs Group to organize, maintain and execute computer files of a large-scale computer simulation model of U.S. economy; organize and file computer output. Will be trained in use of IBM systems CMS time-sharing command language; participate in technical documentation; technical drawing and user assistance. A Bachelor's degree and some computer experience preferred. Precision and attention to detail required, and an interest in social systems modeling, economics and system dynamics are desirable. R78-42 (2/22)

Sponsored Research Staff, Medical Technologist, in the Laboratory for Animal Medicine to perform laboratory tests in hematology, chemistry, bacteriology, urinalysis and serology. Will set-up, read and report results of bacteriological cultures; spin down blood, and perform related tasks as necessary. Bachelor's degree in medical technology or a related field, or college-level course work with some professional experience in medical technology required. Applicants must be currently registered as, or eligible for registration as, a medical technolgist, or have passed an equivalency exam for medical technologists. R78-4 (1/18).

Exempt, Machine Shop Supervisor, in the Laboratory for Nuclear Science to be responsible for the day-to-day shop management: supervise machinists and other shop personnel; schedule and estimate duration of jobs entering shop; establish workload priorities; consult with technical personnel; perform administrative functions as required by the lab; insure adherance to safety regulations. At least 10 years experience and the minimum skill of an Instrument Maker or Project Machinist is required. Also required is an extensive knowledge of metals, their properties, alloys and applied uses. Ocassional travel may be required. 40 hrs./wk. E78-8 (3/1).

Exempt, Nurse, in the Clinical Research Center will be responsible for general and specialized nursing procedures and medications; work closely with lab and dietary department; chart and observe patients. Graduation form an accredited school and Mass. registration required. At least 2 years nursing experience including some in pediatric nursing necessary. 7:30AM-3:30PM, with some rotation to evening or night shifts. 40 hrs./wk. E78-7 (2/22).

Sr. Secretary V to the Director of the MIT Alumni Fund to arrange committee and other meetings; assemble relevant materials; prepare travel itinerary and expense reports; type and compose correspondence and other materials. Excellent typing and shorthand skill required. Organizational ability and good telephone manner important. Ability to exercise judgment, recognize priorities and to work independently also important. B78-79 (3/1).

Secretary V to the Director of both the MIT-Industry Polymer Processing Program and the Lab for Manufacturing and Productivity to prepare general correspondence; supervise activities of 1 secretary; coordinate work of additional personnel ocassionally; plan and supervise technical conferences, workshops and liaison meetings; prepare budgets; monitor lab personnel; assist in developing lab procedures. A minimum of 5 years secretarial experience, with at least 3 at a senior secretarial level required. MIT experience and writing ability preferred. 40 hrs./wk. (3/1).

Secretary IV to faculty members and academic staff in the Educational Programs section, School of Humanities and Social Science. Will perform general secretarial duties including transcription of machine dictation; manuscript typing; minor copy editing; assisting as back up typist for Dean's Office and others. In addition to excellent secretarial skills, a knowledge of French, German or Italian would be helpful. B78-86 (3/1).

Secretary IV in the Office of the Director of the System Dynamics Group, Sloan School of Management. Will set up and maintain files; operate word processing equipment; type correspondence, manuscripts from machine dictation; answer phones; coordinate activities of several individuals associated with projects. Excellent organization skills are required, as well as a command of English grammar and at least 2 years applicable experience. Position may involve overtime work. B78-81. (3/1).

Secretary IV, temporary, in the Nutrition and Food Science Dept. to type manuscripts, correspondence; organize and maintain files; answer telephones. Good secretarial skills including shorthand or machine transcription skill required. At least 3 years secretarial experience preferred. Temporary for 3-4 months. B78-77 (3/1).

Secretary IV, part-time, in the Nutrition and Food Science Dept. to perform routine secretarial duties: type letters, papers and proposals from rough or finished drafts; draft and prepare routine business letters; answer and place telephone calls; file; handle general office duties. Good secretarial skills, command of English language as well as ability to work under pressure required. Minimum of 2 years secretarial experience necessary. 20 hrs./wk. B78-76 (3/1).

Secretary IV, part-time, in the Nutrition and Food Science Dept. Publications Unit to type manuscripts; prepare department newsletter; assist with general office duties. Will be trained to use magnetic-tape typewriters. Good typing ability and attention to detail important. 20 hrs./wk. B78-78 (3/1).

Secretary IV in the Medical Dept. to provide reception and secretarial support to physician and Ear, Nose and Throat Clinic: answer phones; schedule appointments; transcribe medical reports; handle mail; arrange travel; type correspondence; maintain files. Will share in receptionist/secretarial support for supplementary medical staff. Previous secretarial experience required. Excellent typing skill and ability to deal effectively with patients and staff also required. 37.5 hrs./wk. B78-84 (3/1).

Secretary IV, part-time, to share secretarial support of 2 faculty members in Economics with another secretary. Will type and edit class materials including mathematical content, as well as general correspondence; arrange meetings and appointments; assist sutdents. Good general secretarial skills, command of English grammar and ability to work independently required. Secretarial school training preferred. 17.5 hrs./wk. Mon. 9AM-12:30PM; Wed. & Fri. 9AM-5PM. B78-68 (2/22).

Secretary IV to share in providing secretarial support to the Counseling Section of the Dean for Student Affairs Office. Duties will be related to Section's responsibility for advising and counseling students; assisting with withdrawal and readmissions processes, matters associated with faculty committee actions. Will interact directly with students; schedule appointments; transcribe machine dictation and perform other general secretarial duties as necessary. Applicants must be able to handle sensitive material and situations with tact and discretion and have excellent general secretarial skills. Familiarity with student-related Institute procedures helpful. B78-74 (2/22).

Secretary IV, part-time to the Director of the Center for Transportation Studies to perform usual secretarial functions: type reports and correspondence; answer telephones; file; handle mail and answer routine correspondence; arrange travel; make appointments. One year secretarial experience and a college degree, or 3 years secretarial experience required. MIT experience desired. Ability to work well under pressure and independently important. 21 hrs./wk. B77-737 (1/4).

Secretary IV in the Provost's Office to handle a variety of duties: arrange travel; answer and place telephone calls; file; type and compose correspondence. Excellent typing skill and good command of English language required. Ability to recognize priorities and ability to work well under pressure also required. B77-772 (1/4).

Secretary IV to the Treasurer of the Corporation will perform varied duties in a busy office: including a large volume of contact with other Institute offices and representatives of outside organizations; take and transcribe shorthand dictation; arrange travel; reconcile office accounts. Position requires good organizational skills and ability to complete detailed projects with accuracy. Excellent secretarial skills including shorthand also necessary. College or secretarial school training and office experience preferred. Position begins in January, 1978. B77-647 (11/9).

Secretary III-IV, part-time, to a group of writers in Resource Planning will type proposals and publication text for Leadership Campaign; operate word processing equipment; assist in maintaining files; order supplies and perform other general secretarial duties as necessary. Will work under general direction of other secretary. Excellent typing, ability to follow instruction precisely, command of English grammar required. Secretarial school training or minimum of 1 year's experience required. Minimum of 25 hrs. week, with occasional additional hours. B78-82 (3/1).

Secretary III/IV, part-time, for 2 faculty members in the Electrical Engineering and Computer Sicence Dept. to arrange appointments, meetings and travel; check monthly research accoutns; type course material, technical reports, journal articles and correspondence; file; answer telephones and student inquiries. Technical typing skill required. Non-smoking office. 20 hrs./wk. 9:00-1:00 Some flexibility in hours can be arranged. B78-72 (2/22).

Secretary III,part-time, in the Clinical Research Center to take meeting notes; type patient histories and some manuscripts; schedule weekly seminars; maintain various records and coordinate an on-call system. Good typing and at least 1 year secretarial experience required. Familiarity with medical terminology helpful. 15-20 hrs./wk. Irregular schedule. B78-69 (2/22).

Computer Operator IV in Administrative Computing Services to operate IBM 370/148 and associated peripheral equipment under DOS/VS and OS/VS1. A good knowledge of job control language, multi-processing experience, and ability to follow standardized operating instructions required. Position requires a minimum of 1 year experience. 4PM-12AM. B78-87 (3/1).

Dental Assistant IV in the Dental Clinic to assist dentists and dental hygienists with dental procedures; prepare required dental solutions; sterilize instruments; maintain examining room; assist with record keeping. Graduation from an approved dental assistant program required. Previous work experience desirable. 37.5 hrs./wk. B78-85 (3/1).

Editorial Asst. IV to work as part of editorial team in publication of a monthly biology jounal, *Cell*, at the MIT Press. Duties include editing manuscripts, liaison with authors and printer, handling advertising and performing general secretarial duties for editor. Editing skill and good typing ability required. Degree in English and familiarity with biology helpful. B78-67 (2/22).

Sr. Clerk III in the Medical Dept.'s Student Insurance Office to process Medex and Medicare forms; type and maintain student insurance waiver lists; update microfiche; make check deposits; prepare reports. Will also type correspondence, requests and vouchers; xerox; answer telephones and inquiies re: student helath. Good typing skill, aptitude for figures and ability to deal with the public effectively required. Insurance claims experience is desired as well as some familiarity with medical terms. B78-83 (3/1).

Sr. Clerk III, part-time, to perform editorial and research work for a genetic research proejct in the School of Humanities and Social Science. Work will involve editing of transcripts and library research. Editorial and research skills required. 20-25 hrs./wk. B78-73 (2/22).

Sr. Clerk IV to assist with the fiscal administration of Laboratory for Computer Science: prepare billing, budget and expense reports; disburse petty cash; type fiscal reports and correspondence; answer phones. Previous experience in a comparable position, accuracy with figures and typing

Bruce J. Wrobel, left, a junior in management from Evergreen Park, Ill., chairman of the SAELOR Party, poses with this year's Massachusetts poster child, Larry Connolly of Waltham.

skill required. MIT experience desirable. B78-71 (2/22).

Accounts Payable Clerk IV in the National Magnet Laboratory to prepare invoices for payment (veify order numbers, goods receipt, price); contact accounting office and vendors; compile monthly purchase report; file related materials. Will also answer phones, type some routine correspondence and perform other clerical tasks as necessary. B78-75 (2/22).

Sr. Clerk III, part-time, in the Clinical Research Center to keep track of routine paper work; chart vital signs and lab studies; file; update computer on vital signs and lab studies; prepare worksheets. Good typing skill as well as 1 year of experience required. 15-20 hrs./wk. B78-70 (2/22).

Clerk II in Nutrition and Food Science to perform messenger and clerical duties: pick up and deliver materials to campus locations; type forms and memos; file; answer phones; order supplies. Applicants should be high school graduate or equivalent and have good typing skill. B78-66 (2/22).

Hourly, Machinist A, in the Nutrition and Food Science Dept. to set up work and operate machine tools; work from blueprints, specifications, verbal instructions or sketches; translate design sketches via machine work and fabrication; instruct and supervise students in small machinery techniques and safety precautions; make tools such as dies, jigs and fixtures as required. A minimum of 5 years experience required. Ability to machine a variety of materials; a good working knowledge of mechanical machines and ingenuity in troubleshooting also required. 40 hrs./wk. (3/1).

Hourly, Lab Asst., temporary in the National Magnet Lab to assist staff members and higher grade technicians in simple mechanical assembly, wiring circuits, clearing and moving equipment. Some technical background or training desirable. 40 hrs./wk. Temporary 4 months. H77-207 (2/22).

Hourly, Electronics Technician A, in the Energy Lab to install, bring on-line, and maintain instrumentation; assist in the operation of a large research furnace installation. At least 5 years experience in controls and instrumentation of large lab equipment required. Occasionally will work irregular shift. 40 hrs./wk. H77-206 (2/22).

Hourly, Technician C, temporary, in the Lab for Nuclear Science to perform various routine jobs such as: wiring; keeping apparatus in good condition; perform lab tests and analyses. Knowledge of wiring and ability to solder required. Experience with sheet metal and knowledge of machine tools desirable. Temporary up to 1 year maximum. 40 hrs./wk. H78-20 (2/22).

Hourly, Custodian, in Physical Plant to keep assigned areas clean, secure and presentable condition and to perform other related duties as assigned by the supervisor. Applicants must be able to speak, understand and write in the English language. 11PM-7AM Monday-Friday H78-21, H78-22 (2/22).

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

ADMINISTRATIVE STAFF:
A77-3, Systems Programmer, Info. Processing Serv. (2/16)
A77-62, Industrial Liaison Officer, Ind. Liaison Off. (12/14)
A77-73, Sr. Appl. Analyst, Off. of Facilities Mngn't Syst. (11/16)
A77-79, Applications Prog., Info. Proc. Serv. (12/14)
A77-80, Manager, Info. Proc. Serv. (12/14)
A77-82, Associate Director, Sloan School (12/14)
A77-83, Dir. of Personnel Relations, Personnel Relations (12/14)
A77-86, Systems Prog., Info. Proc. Serv. (1/11)
A77-87, Systems Prog., Info. Proc. Serv. (1/11)
A77-89, Proj. Architect, Phys. Plant (1/11)
A77-91, Sr. Prog. Analyst, Info. Proc. Serv. (1/11)
A77-92, Editor/Writer, News Office (1/11)
A78-1, Dir. of Purchaisng & Stores, Purchasing (1/18)
A78-3, Asst. Dir., Office of Minority Ed. (2/1)
A78-5, Staff Writer, Resource Devel. (2/22)

BIWEEKLY:
B77-518, Sec. III-IV, Mech. Eng. (10/5)
B77-590, Sec. IV, Hlth. Sci. & Tech. Div. (1/4)
B77-611, Sec. IV, Elec. Systems Lab. (11/2)
B77-655, Sec. IV, Chemical Eng. (11/16)
B77-671, Admin. Asst. V, National Magnet Lab. (12/7)
B77-672, Sec. IV, Nutrition & Food Sci. (12/7)
B77-679, Sec. V, Nuclear Sci. (12/7)
B77-688, Sr. Clk. V, Account Rep. Computing Serv. (12/7)
B77-696, Sec. IV, Personnel Office (12/7)
B77-716, Accounting Asst. V, Comptroller's Acctg. Off. (12/14)
B77-729. Sec. IV, Earth & Planetary Sci. (1/4)
B77-731, Account Rep. V, Info. Proc. Serv. (1/4)
B77-742, Sec. III, Admin. Comp. Serv. (1/11)
B77-743, Sec. IV, Earth & Planetary Sci. (1/11)
B77-747, Sec. IV, Political Sci. (1/11)
B77-753, Sec. IV, Tech. Adaptation Prog. (1/11)
B77-755, Sec. IV, Earth & Planetary Sci. (1/11)
B77-770, Sec. III-IV, Lab. for Comp. Sci. (1/11)
B78-2, Clk./Sec. III-IV, Ctr. for Cancer Res. (1/25)
B78-4, Sec. V, Civil Eng. (1/18)
B78-5, EDP Proj. Devel. Lib. V, Admin. Comp. Serv. (1/18)
B78-8, Sec. IV, Admissions (1/18)
B78-12, Sec. III-IV, Off. of Spons. Programs (1/25)
B78-13, Acctg. Asst V, Comptroller's Benefit Off. (1/25)
B78-16, Sr. Clk. III, Div. of Lab. Animal Medicine (1/25)
B78-25, Sec. III-IV, Urban Studies & Planning (1/25)
B78-27, Admin. Asst. V, Civil Eng. (1/25)
B78-28, Sec. IV, Lab. for Nuclear Sci. (2/1)
B78-31, Sr. Clk. III-IV, Admin. Computing Serv. (2/1)
B78-33, Sec. IV, Nutrition & Food Sci. (2/1)
B78-37, Sec. III-IV, Office of Minority Education (2/1)
B78-42, Sec. IV, MIT Press (2/15)
B78-47, Sec. IV, Mat. Sci. & Eng. (2/15)
B78-48, Sec. IV, Mech. Eng. (2/15)
B78-49, Sec. IV, Psychology Dept. (2/15)
B78-56, Sr. Clk. III, Sloan School (2/22)
B78-60, Accounting Asst. V, Comptroller's Office (2/22)
B78-62, Admin. Asst. V, Civil Eng. (2/22)
B78-63, Sec. IV, Architecture Dept. (2/22)

ACADEMIC STAFF:
C77-36, Social Worker, Medical (10/5)
C77-45, Tech. Asst., Nut. & Food Sci. (12/7)
C77-46, Tech. Inst., Aero/Astro (1/11)
C77-47, Tech. Inst., Biology (1/18)
C78-1, Tech. Inst., Mech. Eng. (1/18)
C78-3, Tech. Inst., Biology (1/25)

EXEMPT:
E77-44, Admin. Asst., Nuclear Reactor Lab. (1/4)
E77-47, Eng. Asst., Aero/Astro. (10/19)
E77-54, Eng. Asst., Ctr. for Mat. Sci. (12/14)
E77-56, Estimator/Scheduler, Physical Plant (11/9)
E78-1, Unit Coordinator, Medical (1/25)
E78-2, Audiologist, Medical (1/25)
E78-6, Tech. Asst., Lab. of Computer Sci. (2/22)

HOURLY:
H77-89, HVAC Designer/Draftperson, Physical Plant (10/5)
H77-137, Tech. A, National Magnet Lab. (9/14)
H77-170, Waiter/Waitress, Endicott House, Dedham (2/15)
H77-201, Tech. A, National Magnet Lab. (1/18)
H78-19, Cook, Endicott House, Dedham (2/22)

SPONS. RES. STAFF:
R77-37, High Energy Physics Res., Bates Linear Accelerator (3/9)
R77-51, Sr. Research Engineer, Energy Lab. (3/22)
R77-53, postdoc. res., Physics, Res. Lab. of Elec. (4/6)
R77-73, Plasma Physicist, National Magnet Lab. (4/27)
R77-74, Plasma Physicist, National Magnet Lab. (4/27)
R77-79, postdoc. res., Physics, Lab. for Nuclear Sci. (5/4)
R77-80, postdoc. res., Physics, Lab. for Nucelar Sci. (5/4)
R77-91, Sr. Accelerator Physicist, Lab. for Nuclear Sci. (5/18)
R77-93, Design Engineer, National Magnet Lab. (11/9)
R77-94, Design Engineer, National Magnet Lab. (11/9)
R77-95, Biophysicist, National Magnet Lab. (5/25)
R77-97, Chemical Eng., Energy Lab. (6/1)
R77-105, Managing Dir., Energy Lab. (6/22)
R77-112, Magnetic field coil design, National Magnet Lab. (6/22)
R77-137, Experimental Physicist, Bates Linear Accelerator (8/31)
R77-139, Programmer, Res. Lab. of Elec. (8/31)
R77-161, Elec. Engineer, Mech. Eng. (9/7)
R77-170, Combustion Engineer, Energy Lab. (9/28)
R77-192, Computer Language Devel., Lab. for Computer Sci. (10/26)
R77-201, Prog./Data Analyst, Earth & Planetary Sci. (11/9)
R77-209, Res. Scientist, Energy Lab. (11/30)
R77-211, Computer Syst. Design, Lab. for Computer Sci. (12/7)
R77-212, Prog. Language Design, Lab. for Computer Sci. (12/7)
R77-213, Computer Software Design, Lab. for Computer Sci. (12/7)
R77-216, Oceanographic Res., Earth & Planetary Sci. (12/14)
R77-221, Neurochemist Res., Nutrition & Food Sci. (12/14)
R77-228, Plasma Physicist, Res. Lab. of Elec. (1/4)
R77-230, Computer Syst. Designer, Lab. for Comp. Sci. (1/11)
R78-1, Cell Culture Chemist/Biologist, Cell Culture Ctr.)1/18)
R78-2, Chief Oper., Lab. for Nuclear Sci. (1/18)
R78-3, Submicrometer Structure Devel., Res. Lab. of Elec. (1/25)
R78-8, Computer Usage Res., Sloan School (2/1)
R78-9, Regional Economic Research, Urban Studies & Planning (2/1)
R78-18, Theoretical Physicist, Lab. for Nuclear Sci. (2/22)
R78-19, Techoretical Physicist, Lab. for Nuclear Sci. (2/22)
R78-20, Theoretical Physicist, Lab. for Nuclear Sci. (2/22)
R78-21, Theoretical Physicist, Lab. for Nuclear Sci. (2/22)
R77-22, Theoretical Physicist, Lab. for Nuclear Sci. (2/22)
R78-28, Theoretical Physicist, Lab. for Nuclear Sci. (2/22)
R78-29, Writer, Lab. for Computer Sci. (2/22)
R78-30, Program Counsel, MIT/Wellesley Upward Bound Prog. (2/22)

The following positions have been FILLED since the last issue of *TECH TALK:*

B77-708	Sec. IV
B78-55	Sec. IV
B78-14	Sr. Clk. IV
R77-238	Spons. Res. Staff
B78-52	Sr. Sec. V
B77-712	Tech. Asst. V
B78-57	Sec. III
B78-44	Sr. Clk. III
R77-231	Spons. Res. Staff
E78-5	Editoral Asst.
B78-61	Sec. III
B78-43	Sec. IV
B78-50	Sec. IV
R77-227	Spons. Res. Staff
H77-195	Draftsperson
B78-54	Admin. Asst. V
B78-19	Sec. IV

The following positions are on HOLD pending final decision:

B77-768	Sec. IV
H77-198	Hourly
B78-41	Clerk III
C77-23	Acad. Staff
A77-84	Admin. Staff

SAE to Hold Benefit Party

The second annual SAELOR Party to benefit the Muscular Dystrophy Association will be held Saturday, March 4, in duPont Gymnasium, beginning at 8:30pm.

Sponsored by Sigma Alpha Epsilon fraternity, the party will feature live music by two bands—the Chris Rhodes Band and Chuck McDermott and Wheatstraw. Refreshments will be served.

Advance tickets at $3 per person are on sale this week in the Maclaurin Lobby. Advance sale tickets will be eligible to receive door prizes at the party. Tickets will also be sold at the party at $3.50 per person.

With 1,200 persons in attendance last year, the SAELOR Party netted nearly $2,000 for the Muscular Dystrophy Association.

ADP XI Scheduled To Begin

The Office of Personnel Development has announced the beginning the eleventh session of the Administrative Development Program (ADP XI) on Wednesday, February 22. Instructors for the Organizational Psychology section of the program are Drs. Maureen and Adam Yagodka and Ellen O'Hara of the Personnel Development.

Participants selected for the ADP XI are:

Donald Batson, Safety Office; Cheryl Butters, Electrical Engineering and Computer Science; Harold Curtis, Jr., Center for Space Research; Timothy Dempsey, IPS, Systems Programming; Donna Dutton, Nuclear Engineering.

Eleanor Egan, Medical, Radioactivity Center; George Gordon, Center for Space Research; Ellen Henderson, Chemistry; Kenneth Hewitt, Personnel Services; Stanley Hudson, UROP.

Josef Jacquart, IPS, Admin. Comp. Services; Elenore Kehoe, Financial Aid Office; Florence Ladd, School of Architecture and Planning; Richard MacNabb, National Magnet Laboratory; Hedy Mattson, Libraries.

Patricia Paula, Campus Patrol; Kenneth Pogran, Laboratory for Computer Science; Marilyn Reisse, Center for Policy Alternatives Library; Margaret Richardson, Physics; Carole Schildhauer, Libraries.

H. Dany Siler, Admissions; Dante Somma, Physical Plant; Nora Treimanis, Energy Laboratory; Ruth Walsh, Comptroller's Accounting Office; Marion Wasserman, Division for Study and Research in Education; Robert Wright, Comptroller's Accounting, Housing.

The ADP X resumes on Thursday, March 2, with the first class of the Financial Management section. The first portion of this section, financial management theory, is taught by Dr. Zvi Bodie, assistant professor of finance and economics in the school of management at Boston University. The second portion, focusing on "Finances at MIT," is coordinated by George Dummer, director of the Office of Sponsored Programs, and is taught by members of MIT's financial administration.

Students Plan Open House For April 29

MIT students are once again preparing to "turn MIT inside out" for their biennial Open House, to be held this spring on Saturday, April 29, from noon to 5pm.

Admission is free, and the public will be invited to attend a wide array of exhibits, demonstrations, lectures, and student activities depicting life on campus. The students especially want this year's Open House to show that MIT activities range across the arts, humanities, and social sciences, as well as the well known emphasis on science and technology.

This year, the annual Massachusetts State Science Fair will be held at MIT on the same weekend, giving Open House visitors the opportunity to see winning high school student projects from regional fairs throughout the state.

Open House is being organized by the MIT chapter of Alpha Phi Omega service fraternity. Altogether, nearly 150 students will be involved as tour guides and leaders for the event. For more information, please phone the Open House Committee at x3-2600.

Fencing Team Takes Ninth New England Championship

By JILL A. GILPATRIC
Director of Sports Information

The MIT men's fencing team had to share the spotlight and the Elde Trophy this year with host Dartmouth in the New England Intercollegiate Fencing Championships held last Saturday in Hanover, N.H. This was the ninth year in a row that the Tech team has taken top honors in the New Englands.

Senior captain **Mark Smith** (Jamaica, N.Y.) became the only man in the 26-year history of the meet to fence three different weapons at three meets in a row. In 1975-76, Smith fenced in the foil competition and took first place. The following year, he was a member of the sabre team that won the Vitale Trophy (most victories of a weapon) and he also won the sabre championships. This past weekend, Smith took third in the epee, and he and sophomore **John Rodrigues** (Woonsocket, R.I.) also tied with Trinity for the Vitale Trophy for their combined performances in the epee.

MIT had four fencers who made it to the final round this year. Smith and Rodrigues took third and fourth places respectively in the epee, and junior **Rich Hemphill** (New York, N.Y.) and freshman **Jim Freidah** (Lake Ronkonkoma, N.Y.) took second and fifth in the foil competition.

The Tech team has two dual meets remaining in the season, this Wednesday against St. John's at home, and the following Wednesday Tech competes against traditional foe Harvard.

On Friday and Saturday, March 10 and 11, the team will participate in the Intercollegiate Fencing Association Championships to be held at Princeton, N.J. From there, Tech fencers who qualify by being medal winners in the IFA's will go on to compete in the National Championships at the University of Wisconsin-Parkside (Kenosha, Wis.) on March 16, 17 and 18.

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The Tech hockey team increased their win/loss record to 12-4 with two victories this past weekend. The MIT team beat Curry 2-1 on Friday night and followed that up with a 4-3 win over Stonehill on Saturday evening.

The Tech team scoring leader is sophomore **Al Strong** (West Sand Lake, N.Y.), who has 12 goals and 10 assists for a total of 22 points, with grad **Barry Biegler** (Northfield, Ill.) following closely behind with four goals and 17 assists. Senior goaltender **Dan Costa** (Franklin, Mass.) has a 2.0 goals against average and tended goal in Tech's first shutout in 16 years, a 3-0 victory over Bates in early February.

The team has only three games left in the 1977-78 season, and they are all home contests. Wednesday night the Tech icemen take on Tufts in a game which had been postponed from an earlier date. The Tech varsity will compete against the Alumni on Friday night at 7:00pm. Refreshments will be served after the game, for alumni and friends of MIT hockey.

RUNE Seeks Works

The staff of *RUNE*, the MIT journal of arts and letters, has begun work on a third edition of the magazine and is seeking submissions from all members of the MIT community.

Essays, poems, graphics, photographs and short stories can be dropped off in Rm. 14N-305 or sent through Institute mail to Rm. 50-301. The deadline for submissions has been extended to Wednesday, March 8.

"Beginning work on a third issue is a big step for *RUNE*," said Susan Ann Silverstein, a junior in humanities and science and newly elected editor. "One of the main goals of the *2 RUNE* staff was continuous publication of the same literary magazine at MIT—an activity that is historically unique at the Institute," she said.

RUNE was first published in October, 1976, by a small group of students and employees under the editorshop of Guy Nordenson, '77. Sales fell below expectation and the staff disbanded without future plans. *RUNE* might have been a one-time phenomenon had it not been for the interest rekindled by Donald Lampe, a senior in humanities and science, in the spring of 1977. With the help of Mr. Nordenson, Mr. Lampe, editor of *2 RUNE* recruited new staff members and began work on a new issue.

Virtually the entire press run of 800 copies of *2 RUNE* sold at 75 cents per copy—half the sale price of the original issue. The staff followed a policy of high reproduction quality and low sale price to keep the magazine accessible to the community.

As sales cover only a fraction of the cost, the magazine is supported by funding from various sources. The Council for the Arts has been the most generous supporter with a large seed grant and later supporting grant. Other sources include the Department of Humanities, the Kelly Fund, the Undergraduate Association and the Alumni Association. The staff hopes to include advertising from outside sources in the next issue in order to insure greater financial stability.

ESL Designated

(Continued from page 1)

trical engineering, emeritus. Dr. Brown headed the Department of Electrical Engineering from 1952 to 1959, and served from 1959 to 1968 as Dean of the School of Engineering. The laboratory gained an international reputation for its contributions to feedback control theory and received numerous awards for its work during World War II in developing control systems for military use.

The laboratory was the original home of the Whirlwind computer project which developed the first high-speed digital computer used at MIT. It is noted also for its development, in the 1950s, of numerical control of machine tools, a manufacturing method now in use throughout industry.

Professor J. Francis Reintjes became director of the laboratory in 1953. He guided the conception and development of INTREX (Information Transfer Experiment), a computer-based interactive bibliographic search system that has made ESL a world center in research on large-scale information systems. Related work on computerization of newspaper layout and editing has contributed to the revolution now taking place in that industry.

'Flight' to Benefit Soaring Ass'n.

Flight, a new ballet choreographed and performed by members of the Dance Collective, will be premiered March 3 and 4 at 8pm at the Longwood Theater of the Massachusetts College of Art (364 Brookline Avenue, Boston). Admission is $5.00, and tickets will be available at the door, or from Lisa Kunstadter, Room 7-133, x3-4051.

The performance is a benefit for the MIT Soaring Association (MITSA). It was conceived by Harris Barron, a director of MITSA, and a professor of art at the Massachusetts College of Art. The choreography was inspired by the glider flights of MITSA.

The staging, score, costume design, and special effects will be provided by the Studio for Interrelated Media, a student group at the Massachusetts College of Art.

The Dance Collective is a professional contemporary dance company whose members are artists-in-residence at the Massachusetts College of Art.

Some 500 friends and associates of Harold and Esther Edgerton gathered Friday, Feb. 24, for the opening of "Edgerton's Stroboscopic Projects" in the Margaret Hutchinson Compton Gallery in the Building 10 Alumni Center. As a happy coincidence, the show opened on the eve of Professor and Mrs. Edgerton's 50th wedding anniversary. Included among the guests were their children and seven grandchildren. Left to right, above, are: Ellen Dixon, 14, Charles and Mary Louise Dixon of Hickory, N.C., Professor and Mrs. Edgerton, Robert Edgerton of Pontiac, Mich., Sylvia Edgerton, 9, Elizabeth L. Edgerton, Nina Edgerton, 12, and Eric Edgerton, 16. Mary Anne, 20, and Bill Dixon, 21, and their sister Janice Dixon Key, 23, had not yet arrived when the picture was taken. In the picture at left, "Doc," an Institute Professor Emeritus, chats with Mrs. Compton, for whom the Building 10 Gallery is named. The occasion was sponsored by the MIT Alumni Association to honor "Doc" on the opening of his exhibition and as a means of introducing the community to the Association's new facilities surrounding the Gallery. The Gallery will be open from 9am to 5pm, Monday through Friday, and the exhibition will run through April 12.

McCarthy Named Director Of NASA Research Center

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MIT from the Los Angeles Division, North American Rockwell Corporation (now Rockwell International Corp.), where he was vice president, systems engineering.

Other key positions he held earlier at North American Rockwell included vice president, research and engineering; executive vice president-technical, at the Los Angeles Division; vice president, research and engineering, North American Aviation Divisions office in Los Angeles; vice president of research, engineering, and test for the Space Division in Downey, Calif.; assistant chief engineer, Apollo, and Apollo directorships in control systems, space sciences and technology.

At the Space Division, he was involved with the basic design and testing of the Apollo command and service modules and the S-II stage of the Saturn V launch vehicle, which successfully performed the manned lunar landings.

From 1965 to 1967, Dr. McCarthy served as a member of NASA's Research Advisory Committee on Space Vehicle Aerodynamics.

Born in Boston in 1925, Dr. McCarthy received the SB and SM degrees in aeronautical engineering from MIT in 1950 and 1951, and the PhD degree in aeronautics and physics from the California Institute of Technology in 1962.

After graduation from MIT, he joined the staff of MIT's Aeroelastic and Structures Research Laboratory where he was responsible for the design and operation of one of the first variable Mach number supersonic test sections, in which he performed some of the earliest supersonic flutter tests. He also did extensive research in aerodynamics, loads, aeroelasticity, and vehicle dynamics.

In 1955, he left MIT to become operations analyst at the headquarters of the Strategic Air Command at Offutt Air Force Base in Nebraska, serving as adviser to the commander-in-chief and his staff on scientific analyses and analytical techniques.

Dr. McCarthy is the author of numerous technical papers and a contributor to four textbooks. He is a fellow and former director of the American Institute of Aeronautics and Astronautics (AIAA), associate fellow of the Royal Aeronautical Society, and a member of Sigma Gamma Tau, the Research Society of America, and Sigma Xi.

He is a member of the Air Force Scientific Advisory Board and of the Joint Strategic Target Planning Staff (JSTPS) Scientific Advisory Group for the Joint Chiefs of Staff, a member of the American Management Association's Research and Development Planning Council. He is a former member of the executive committee of the Aerospace Division of the American Society for Engineering Education, and has been a member of the NASA Research and Technology Advisory Council, Panel on Space Vehicles since 1974.

Haskell Small To Give Recital In Music Library

Young American pianist Haskell Small will give a recital in the MIT Music Library (14E-109) Wednesday, March 8, at 5:15pm. He will play the Sonata in B Flat Major, K. 570 of Mozart; Sonata in E Minor, Op. 90 of Beethoven; Introduction and Fugue by Haskell Small; Ballade in G Minor, Op. 23 of Chopin; and Sonata, Op. 26 by Samuel Barber. The event is sponsored by the MIT Music Section and is free.

Although Mr. Small has played piano most of his life, he studied engineering at Carnegie-Mellon and pursued a career as a rock musician as well. His classical studies in piano and composition were with Robert Sheldon, Theodore Lettvin, with members of the Carnegie-Mellon music faculty (where he received his bachelor's degree), and currently, with the renowned pianist and teacher, Leon Fleisher.

Small

Mr. Small made his debut in Pittsburgh after winning the Pittsburgh Concert Society Auditions. Since then, he has appeared with orchestras and in recital throughout the eastern states. Among his Washington appearances were a recital at the National Gallery and two concerts at the Kennedy Center.

Department Heads to Step Down

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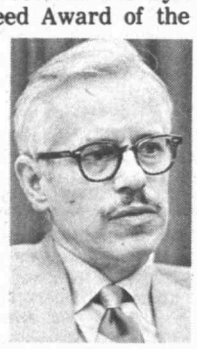
year later, he received the Sylvania Albert Reed Award of the AIAA.



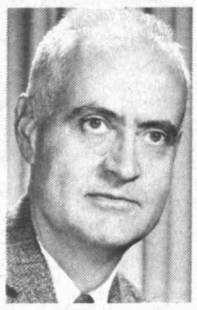
Davenport

Professor Davenport was born in Philadelphia in 1920 and received his BEE degree in 1941 from the Alabama Polytechnic Institute and the SM and ScD from MIT in 1943 and 1950, respectively. After serving in the US Navy, he returned to the Institute in 1946 as an instructor of electrical engineering, and was appointed assistant professor in 1949. In 1951, he joined Lincoln Laboratory as leader of the Communications Techniques Group and became associate head of the Communications and Components Division in 1955. Two years later he was appointed head of that division and in 1958 became head of the newly formed Information Processing Division.

He returned to campus as professor of electrical engineering in 1960 and from 1961 to 1963 was associate director of the Research Laboratory of Electronics. In 1963 he returned to Lincoln Laboratory for a two-year period as assistant director of the laboratory. Returning to the campus in 1965, he began the development in the Center for Advanced Engineering Study of a new subject on random processes while conducting research and teaching graduate subjects in communication theory and undergraduate subjects in electrical engineering and computer scinece. In 1968, he was named undergraduate academic officer and chairman of the Undergraduate Educational Policy Committee of the Department of Electrical Engineering. He held these positions until he was named associate head of the department in 1971. Subsequently, he was named director of CAES, a position he held until named head of the department.

Professor Davenport has acted as a consultant to the Office of Science and Technology, the Department of Defense and the Communications Satellite Corporation. He is a director of the GenRad Corp. and a member of the new Carnegie Commission on the Future of Public Broadcasting. He is author of the book *Probability and Random Processes* published in 1970, is co-author, with Dr. William L. Root, of the book *An* has been a continued increase in "the strength of the interaction within the department between electrical engineering and computer science.... Today the department is stronger—intellectually and administratively—because of Bill's leadership."

Dean Bruce's letters to faculty sought their help in the search for new heads of the departments. Faculty were asked for their opinions on the direction the department should take in the next decade and for their suggestions on candidates.



Miller

Professor Miller, born in New Jersey in 1916, received the BA in 1937 and the MA in 1954 from Cambridge University, England. He came to MIT in 1944 as an assistant professor, and was promoted to associate professor in 1947 and to professor in 1957. He is internationally known for his work on helicopters and other vertical flight vehicles.

His career from 1937 to 1940 was with the Glenn L. Martin Co. From 1940 until 1944 he was with the McDonnell Aircraft Corp., the last two years of which were spent as chief of aerodynamics and research. In this position he was involved in the development of several new flight vehicles including the first ramjet-propelled helicopter, "Little Henry."

While on leave from MIT from 1952 to 1954 Professor Miller was vice president of engineering at Kaman Aircraft Corp. There he was responsible for completing the development of the HOK-1 helicopter and initiated work on a number of new projects including the first remotely controlled drone helicopter, a helicopter autopilot and a rotochute for aerial delivery.

Professor Miller is a Fellow of the American Institute of Aeronautics and Astronautics, the Royal Aeronautical Society, and the American Helicopter Society. He is also the immediate past president of AIAA. In 1967 and again in 1970 he received the Meritorious Civilian Service Decoration from the Army. In 1968 Professor Miller was elected to membership in the National Academy of Engineering and that same year he received the Klemin Award of the American Helicopter Society. One *Introduction to the Theory of Random Signals and Noises* published in 1958, and has written for a number of technical journals.

Dr. Davenport is a member of the National Academy of Engineering and a Fellow of the IEEE, the American Academy of Arts and Sciences and the American Association for the Advancement of Science. He is also a member of the Sigma Xi, Eta Kappa Nu, Tau Beta Pi and Phi Kappa Phi societies.

Charles Harbutt To Give Series On Photography

Charles Harbutt, an internationally known photojournalist and visiting professor at the MIT Creative Photography Laboratory, will conduct a series of lectures this spring analyzing major figures and trends in photography since the turn of the century.

The lectures, which are free of charge and open to the public, will be held on Thursday evenings in the MIT Creative Photography Gallery, W31-310, at 7:30. The next lecture will be March 2.

Mr. Harbutt is the president of Magnum, a worldwide photographic cooperative. He has photographed subjects around the world for many American and European publications. His work includes coverage of the Six-Day War for Paris-Match and Newsweek; coverage of politics for Life; and coverage of a wide range of subjects for National Geographic, the London Sunday Times, Stern, and Epoca.

Travelog, a collection of Mr. Harbutt's personal photographs, was published by The MIT Press and it received the Grand Prize at the Arles Festival in 1974. Mr. Harbutt was co-editor of the Magnum book *America In Crisis,* published by Holt, Rinehart & Winston, and he directed the animated film "America," which won a gold medal at the 1970 Atlanta International Film Festival. He has had a one-man show at the Art Institute of Chicago and has participated in several group shows at the Museum of Modern Art and the George Eastman House.

Further information on the lecture series is available from Ava Cohn at x3-4424.