Massachusetts Institute of Technology

108th Ceremony 1,300 to Graduate At Commencement

graduates

tion of Boston.

Cambridge.

Air Force.

Command.

Force ROTC units.

By CHARLES H. BALL Staff Writer

MIT will award degrees to approximately 1,300 seniors and graduate students at its 108th commencement Friday morning, May 31, beginning at 10:30am in Rockwell Cage.

Howard W. Johnson, chairman of the MIT Corporation, will preside, as is customary, at the

The Committee on Commencement urges faculty members to attend an informal reception immediatefollowing graduation ly whether or not they plan to march in the academic procession.

The reception, which takes the place of the commencement luncheon, will be held under tents on Kresge Plaza. Areas will be set aside for each school, where faculty members can meet with graduates and their parents.

exercises. President Jerome B. Wiesner will give the commencement address and award the degrees individually to each of the ALK

Other principals include Dr.

James R. Killian, Jr., honorary

chairman of the MIT Corporation,

The chief marshal will be, by

custom, the president of the MIT

Alumni Association. He is William

S. Edgerly, class of 1949, financial

vice president of Cabot Corpora-

For the first time at an MIT Commencement, a woman will

give the invocation. She is Rev. Constance F. Parvey, MIT Luth-

eran chaplain and pastor of

University Lutheran Church in

The official commencement

week activities will begin Thurs-

day, May 30, at 11am, with the an-

nual commissioning of officers

from MIT's Army, Navy and Air

Eighteen students will be com-

missioned-eight in the Army,

three in the Navy, and seven in the

Speaker at the commissioning

exercises will be Maj. Gen. Ben-

jamin N. Bellis, commander of the

Air Force's Electronic Systems

and Chancellor Paul E. Gray.

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MIT to Close July 4 & 5

John M. Wynne, vice president for administration and personnel, has announced a special holiday closing on Friday, July 5, in addition to the Independence Day holiday on July 4. The usual pay practices applying to special holiday closings will be in ef-

Faculty Meeting to Complete Agenda Today

A motion to establish the rank of Adjunct Professor will be the major topic of discussion at a meeting of the faculty today, Wednesday (May 22) at 3:15pm in Room 10-250.

The meeting is being held to complete action on the agenda of the regular May meeting, which took place May 15.

William L. Porter, Dean of the School of Architecture and Planning will recommend today that the faculty endorse the establishment of the ranks of Adjunct Professor, Adjunct Associate Professor, and Adjunct Assistant Professor, in accordance with the proposal included in the Call to the meeting.

A discussion of the proposed revision of the MIT judicial process will be continued by Chairman of the Faculty Professor Elias P. Gyftopoulos, and Professor Thomas B. Sheridan, who chairs the Subgroup of the CEP on the judicial process.

78 Class Has More Women Than All MIT in '64-'65

More undergraduate women will enter MIT's freshman class next fall than held places in all of MIT's academic departments ten years

A record 20 percent of students admitted to the Class of 1978 are women and 9.5 percent are from minority groups.

Peter H. Richardson, director of admissions, said that of 1874 acceptances mailed out, 802 men and 209 women have sent back affirmative replies. Also expected to attend are 44 blacks, 10 Mexican Americans, 6 Puerto Ricans and one American Indian.

About 40 of the remaining candidates offered admission are expected to accept within the next week, Richardson said. A total of 1,000 places are available in the freshman class next fall (100 more than last year).

Despite a 20 percent increase in applications over a year ago, the yield of students expected to register from those accepted is 'down slightly" Richardson said.

Succeeds Skolnikoff Weiner Named Head Of Political Science Nation: The Indian National

Myron Weiner, a professor of political science and a senior staff member at the Center for International Studies at MIT since 1965, has been named to head the MIT Department of Political Science. The appointment is effective July 1.

The appointment was announced by Dr. Harold J. Hanham, Dean of the School of Humanities and Social Sicence. Dr. Weiner succeeds Dr. Eugene B. Skolnikoff as department head. Dr. Skolnikoff will continue as head of the Center for International Studies and as a professor of political science.

Dean Hanham praised Dr. Skolnikoff for his "distinguished record of service to the Institute. We are most lucky that he will continue as director of the Center for International Studies."

Dr. Weiner, who has done extensive research on political change in developing countries, is currently engaged in research on the political consequences of migration in multi-ethnic societies. He is presently chairman of the National Academy of Sciences Project on Population Policy in Developing Countries and he is a member of the American Academy of Arts and Sciences and the Council on Foreign Relations.

Much of Dr. Weiner's work has been concentrated in India and he has published a number of books on the country, including Politics of Scarcity, Party Politics in India, Party Building in a New

He is also editor or co-editor of several comparative studies in political development including

Congress, Indian Voting Behavior

and State Politics in India.



Professor Weiner

Political Parties and Political Development, Crises and Sequences of Political Development and Modernization: The Dynamics of Growth.

At MIT he chairs an interdepartmental Study Group on Migration and Development.

(Continued on page 8)

Training Section Classes Listed

Registration will begin today (May 22) for three typing courses and a course in machine dictation to be offered by the Training Section of the Office of Personnel Development. Registrations will be accepted at E19-734 or by phone at 3-1912.

The typing courses are Typing 1, Introduction to Technical Typing and Technical Typing.

The two-hour (one hour each day) machine dictation/transcription course is offered to supervisors and department heads who will use the equipment for dictation and to typists who will transcribe from the equipment. Dictation courses are scheduled for Tuesday and Thursday, starting June 4 at 10am in E19-370. A more intensive course will be developed out of the short course.



36 paintings on display in Hayden Gallery in the current exhibition of nineteenth-century European and American paintings from the Museo de Arte de Ponce, Ponce, Puerto Rico. Mr. Ferre, who useum, attended a special press preview the show last Friday. The exhibition will remain on view through June 8. Visitors may sense a rather high humidity in the gallery where the climate is controlled to correspond approximately to the humid Caribbean atmosphere that prevails in the open architecture of the Ponce museum.

About 95 candidates now occupy places on a waiting list, which is traditionally activated when the (Continued on page 2)

Role of Automobile to Be Explored Returning 11111

By ROBERT C. DIIORIO Staff Writer

The automobile-symbol of a society beset with problems but one still ripe with promise-will be the subject of the annual Alumni Days program June 2 and 3 at MIT.

Entitled Automobility, the program will review the opportunities and challenges created by the interrelationships between technology, science and society.

More than 2,000 MIT alumni,

their spouses and families are expected back on campus for Alumni Days, the Institute's traditional homecoming event which follows the May 31 commencement. Class reunions will be held Saturday and Sunday preceeding the Monday program.

Members of the MIT community are invited to attend the Alumni Days events. There will be a charge for the Pops Concert, the buffet and the cocktail parties, but all other events are free.

Papers on a variety of subjects,

ranging from automotive fuels to automotive industrial strategies, will be presented at a day-long session in Kresge Auditorium, Monday, June 3.

On the preceeding day, Sunday, June 2, a variety of events-including a parade of antique cars and autos of the future-are scheduled.

A highlight of the Sunday program will occur at 3:30pm in **Kresge Auditorium when Seymour** A. Papert, Cecil and Ida Green Professor of Education, will demonstrate how MIT is using modern

technology to design radically different learning environments for children. Professor Papert, also a professor of applied mathematics. is co-director of the Artificial Intelligence Laboratory.

J. Herbert Hollomon, director of the Center for Policy Alternatives, and professor of engineering at MIT, will be the moderator for the June 3 morning session, which will review the societal implications of the auto in America.

In the afternoon, Alfred A.H. Keil, Dean of the School of Engineering and professor of ocean engineering at MIT, will head a session which will review changing economic and social constraints that have and will continue to affect the relationship between society and the auto.

A complete list of speakers is included in the Institute Calendar. Morning and afternoon sessions will be held in Kresge Auditorium. The morning session will begin at 8:30. Luncheon and presentation of class gifts will begin at 12:30pm in Rockwell Cage. Afternoon sessions will start at 2:15pm.

Faculty Meeting Hears Humanities Discussion

A motion regarding operating procedures of the committee overseeing the new Institute Requirement in the Humanities, Arts and Social Sciences was discussed by the Faculty at its monthly meeting Wednesday (May 15).

The motion was presented by Professor Salvador E. Luria. The motion requested that for each subject included in the distribution list the committee write a short statement explaining why the subject was approved and informing students and faculty members why the subject was of humanistic orientation. The motion was not passed.

A progress report of the Ad Hoc Committee on Grading was given by Professor Roy Kaplow of the Department of Metallurgy. Discussion of Professor Kaplow's comments was deferred until publication of the committee's report later this year.

Professor Arthur C. Smith of the Department of Electrical Engineering discussed the report of the Committee on Academic Performance, which he chairs, on the

New Microprobe Proves Useful Research Tool

An automated electron microprobe, purchased last year by the Department of Earth and Planetary Sciences, is available for use by any member of the Institute community.

An electron microprobe combines aspects of electron microscopy and x-ray fluorescence analysis to determine the chemical composition of minute volumes of matter. The microprobe has a wide variety of research applications. Geologists use it to analyze individual phases within rocks, biologists to study cell inclusions, and chemists to determine concentration changes across diffusion boundaries. In an unusual application of the probe an MIT professor of metallurgy recently analyzed delicate welds in ancient Peruvian jewelry.

The probe focuses an electron beam on the polished surface of a sample, irradiating a region as small as three microns in diameter and five microns deep. Characteristic x-rays of each element present in the irradiated mass are emitted. The intensities of these x-rays are monitored by three separate x-ray spectrometers and counting trains. Each spectrometer can be set to count only the x-ray photons corresponding to a particular element. All elements beyond beryllium on the periodic table can be analyzed by the microprobe.

All normal operations of the icroprobe are controlled by a PDP-11 computer. The computer directs such operations as spectrometer peaking, x-ray counting, and data reduction. Within three minutes the automated probe can perform a 12 element quantitative analysis on a point and print out the corrected result. There is a fixed charge of \$15 an hour for time actually spent using the probe. This charge also covers support services such as supervision of the operation, assistance with sample preparation and coating, and programming of special operating routines and data reduction procedures.

subjects of negotiated withdrawals, early evening classes (5-7pm) and the extendable five-week span for completion of an Incomplete grade. He also presented a motion on advanced standing examinations. The motion was passed.

Professors Elias P. Gyftopoulos and Thomas B. Sheridan led a discussion of proposed revisions to the MIT judicial process, as published in the May 15 issue of *Tech Talk*. President Wiesner expressed the hope that the Statement of Rights and Responsibilities would be modified so as to become applicable to the entire MIT community. Discussions will continue at this afternoon's meeting of the Faculty (see page 1) and into next fall.

In other business, the slate of nominees for membership on the Faculty's standing committees was presented by Professor Robert Solow of the Department of Economics and a unanimous vote of approval followed.

A resolution on the death of Professor Arthur T. Ippen, Institute Professor Emeritus who died April 5, was presented by Professor Donald Harleman and the faculty rose for a moment of silence.

It was also announced that a Committee for the End of Spring Term would be established to handle last minute changes in the degree list for commencement on May 31.

Affirmative Action Plan Published

MIT's revised general Affirmative Action Plan and 94 departmental plans have been submitted to the Boston Office of Civil Rights of the Department of Health, Education and Welfare.

The text of the general Affirmative Action Plan is included in this paper as a pull-out supplement. Copies of the departmental plans are on file in each departmental headquarters and may be consulted by any person interested.

The departmental Affirmative Action plans and the general plan were revised to respond to specific requests and suggestions made on the 1973 plan by the Office of Civil Rights, which found MIT in substantial compliance with federal legislation. The office of Civil Rights has acknowledged receipt of the 1974 plans and will respond further after they have been reviewed.

Class of '78

(Continued from page 1) admissions granted do not yield the prescribed fall enrollment.

Members of the entering class will come from all 50 states and 28

Alvene Williams to Head Own Business

Alvene Williams, administrative assistant in the MIT Community Fellows Program, will leave the academic world June 28 to become president of her own business.

Ms. Williams said the move is a result of an urban law seminar she recently took with William A. Davis, associate professor of law and urban studies. A discussion of the redistribution of funds from one sector for the purpose of developing capital in another motivated her, she said, to test the principle in her own professional secretarial service, based in Harvard Square.

Soon after Ms. Williams came to MIT in 1966 she was hired to be administrative assistant to Professor Johnson, of political science, who was then also serving as director of the Roxbury economic development program, CIRCLE, Inc.

This off-campus assignment, which extended from 1967 to 1970, encouraged community members to translate self-established skills into positions of greater authority. "Alvene learned the program's lesson very well," Professor Johnson said.

In 1971, Ms. Williams joined the

Other Organizations Adopt INSITE Space Program

By PATRICIA M. MARONI Staff Writer

Expanding Rush-Presbyterian-St. Luke's Medical Center in one square block of urban Chicago space and justifying the number of parking spaces at Brown University to the satisfaction of the surrounding community are two recent applications of MIT's computer-based information system INSITE.

The Institutional Space Inventory Technique system (INSITE) was developed by Kreon L. Cyros, associate director of the MIT Planning Office after several years of research and testing. It now maintains an inventory of MIT's 120 buildings, totaling seven million gross square feet and over 20,000 distinct spaces on the 130-acre campus.

In response to increasing requests from other universities and institutions to share MIT's program, an Office of Facilities Management Systems has been established within the Planning Office to expand INSITE's existing group of users. Cyros will carry an additional responsibility as director of the new office.

At present Brown University, Syracuse University, the Harvard Medical School, the Charles S. Draper Laboratory, Inc., and the Rush-Presbyterian-St. Luke's Medical Center are members of a consortium of institutions which



Alvene Williams

office staff of Vincent A. Fulmer, Secretary of the Institute, and later that year became administrative assistant to Professor Frank Jones, director of the Community Fellows Program,

have contracted with MIT to use the INSITE system.

"The fees received from consortium members will generate the future development required to keep the INSITE system current in light of continuing technological advances," Cyros said.

INSITE is unique in the way it enables users to form individualized space reports from problem-oriented commands in simple English phrases, key words or conventional contractions. In addition to providing tables and charts of space inventory and utilization data by organization, building and room function, it produces MIT's physical facilities report to the annual Higher Education General Information Survey required by the Department of Health, Education and Welfare.

In a conventional sequential file, a simple request for information on one room may require a machine reading of an entire magnetic tape. INSITE uses direct access storage techniques that reduce the cost of keeping data in core storage and avoid a complete scanning operaton.

"Since 1970, when INSITE was first established," Cyros said, "declining budgets and increasing construction costs have made it increasingly critical to identify new ways of using existing physical space to construct new facilities. As a result, the need for and associate director Melvin King in the Department of Urban Studies and Planning.

Ms Williams' partners in her new business venture, which will provide typing, transcription and planning services 12 hours a day, 7 days a week, are Sandra Henderson, former vice president of the consulting firm MERIC, Inc. and Odette Bery, co-owner of the Turtle Restaurant in Cambridge and former manager of the Orson Welles Restaurant.

"I should like to spend my remaining free time teaching high school girls to expect just as much from their office careers," the ambitious new executive said.

Pistol Team Wins National Title

MIT's pistol team capped off its best season ever with a National Team Championship.

The Tech foursome of Capt. Karl Seeler, a junior in civil engineering from Waban, Steve Goldstein, a sophomore in electrical engineering from Providence, R.I., Merrick Leler, a senior in life sciences from Highland Park, Ill., and Gilbert Sanchez, a junior in chemical engineering from Pueblo, Col., fired a team score of 2091 which topped runnerup US Naval Academy's 2081.

The Tech victory marked the third time in the past four years that MIT has won outright or shared the National Collegiate Pistol crown.

The Engineers won the title in 1970 and tied with West Point in 1972.

Steve Goldstein's 530 earned him the National Collegiate Individual title. The other Tech scores were Merrick Leler-525, Karl Seeler-521, and Gilbert Sanchez-515. The trio of Goldstein, Leler and Seeler were also selected for the 1974 All American Pistol Team.

Another precedent on the team this season was the first woman pistol shooter in Tech's 45 year history of the sport. Miss Ellen Scotti, a sophomore in mechanical engineering from East Greenwich, R.I., won a spot on the Tech Varsity, and after only four months of practice, was high woman in the Massachusetts Galler Pistol Championship.

Army ROTC Officer Promoted

The Army Reserve Officers Training Corps Department at MIT has announced the promotion of Maj. Francis W. Creighton to lieutenant colonel in the military intelligence branch.

Lt. Col. Creighton, 37, an instructor in the Army ROTC program at MIT, also is a PhD candidate at the Institute in political science. He entered the Army in February 1959 and came to MIT in 1971 after completing his second tour in Vietnam.

For more information contact Professor John Dickey (x3-1998), Dr. Alan Parkes (x3-3982), Ms. Roxanne Regan (x3-1907), or the laboratory (x3-1995). foreign countries. Roughly 50 percent will be receiving some financial aid.

"Many students accepted last year," Richardson said, "would not have been included in this year's admittance pool because of the marked increase in academic quality in this year's entering class."

The increase in applications to MIT he said, occurs at a time when the entering freshman classes at institutions of similar size are dwindling below estimated enrollments.

Of the students accepted by MIT, 188 were early acceptance candidates, who knew last December that they were admitted. Unlike the Ivy League schools offering an "if accepted-must attend" plan, MIT does not require a decision by the candidates before the May 1 reply date, which applies to all admittees.

Pierson Wins Women's Regatta

Gail Pierson, visiting associate professor at the Sloan School of Management, won the women's single sculls in 3:51.6 last Sunday (May 19) in the Spring Festival Regatta on the Merrimack River. It was the third year that Professor Pierson, an economist who rows for the Cambridge Boat Club, won the 1000-meter event. She defeated Sally Harvey of Riverside Boat Club and Betsy Shaffer of the Cambridge Boat Club.

Next month, from June 14-16 she will compete in the national championships, in Oakland, Calif. The first eight finishers there will comprise the United States team that will compete in the World Championships in Lucerne, Switzerland, in August. a space accounting system is becoming imperative in many organizations."

increasingly critical to identify new ways of using existing physical space to construct new facilities. As a result, the need for a space accounting system is becoming imperative in many orgaizations."

INSITE is now being examined by a number of colleges and universities as an information storage and retrieval system that would enhance their space management and planning activities otherwise inhibited by limited budgets.

"The rate of return on investment is high for a users group such as this," Cyros said. "It represents an opportunity to share with other institutions and extend for mutual benefit the results of MIT's systems development in an administrative area. Lt. Col. Creighton lives in Burlington, Mass.

TECH TALK Volume 18, Number 44 May 22, 1974

Tech Talk: is published 50 times a year by the News Office, Massachusetts Institute of Technology. Director: Robert M. Byers; Assistant Directors: William T. Struble, Joanne Miller, Margo Foote (Photojournalist), Charles H. Ball, Dennis L. Meredith, Robert C. Dilorie; Reporters: Sally M. Hamilton, Pat M. Maroni, Damon P. Wright; Calendar of Events/Want Ads: Susan E. Walker. Address news and editorial comment

Address news and editorial comment to MIT News Office, Room 5-111, Massachusetts Institute of Technology, Cambridge, Ma. 02139. Telephone Ext. 3-2701.

Mail subscriptions are \$6 per year. Checks should be made payable to MIT and mailed to the Business Manager, Room 5-111, MIT, Cambridge, Ma. 02139.

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MIT to Join Architecture Consortium

The MIT School of Architecture and Planning and seven other eastern schools of architecture are joining in a study and action program to improve architectural education in the United States to meet the needs of the changing society.

The Andrew W. Mellon Foundation has awarded \$286,500 to the schools, to be known as the Consortium, for the implementation of the project, which will have its administrative headquarters at MIT

MIT Provost Walter A. Rosenblith said, "This proposal, which aims at reforming architectural education on a national scale, is a project which is most welcome at MIT. I am pleased that the Mellon Foundation and the Deans of the Consortium have seen it appropriate to designate MIT as the host institution '

The proposal for the project was written by Dean William L. Porter of the MIT School of Architecture and Planning and the deans of the other participating schools. It is entitled "A Conceptual Framework for Study and Action to Reform Architectural Education.

Four studies will be undertaken, one on each of the four primary educational objectives-to relate architectural education to society, to the profession, to the university, and to new knowledge.

The studies will be based on current conditions in

sity School of Architecture. 1,800 Expected to Attend Summer Session

Over 1,800 professional men and women who wish to keep pace with new developments in their fields are expected to attend the 1974 MIT Summer Session.

Included in this year's session, which will be held from June 4 to August 30, are 64 special one- and two-week programs from a variety of engineering, management and computer-related fields.

The programs will be taught by members of the MIT faculty and teaching staff and outside visiting lecturers. The intensive day-long sessions, with some evening and Saturday meetings, carry no academic credit.

Professor James M. Austin, Director of the Summer Session, said that of the 1800 registrants, 10 percent are from outside the United States and about nine percent either attended or graduated from MIT. The average age of participants is 37 years.

"The interest in programs is so diverse this year," he said, "that many academic departments will be represented by popular programs in terms of attendance."

One of the first two programs to be oversubscribed this year is being offered by the staff of the MIT Planning Office. The registration limit of 40-45 for "Facilities Management Systems and Inventory Techniques (INSITE) was filled almost six weeks prior to the Session's scheduled opening date.

Another first this year will be a series of programs on communication sponsored by the Office of Design Services. Jacqueline S. Casey, director of design services, will lecture on the design and

production of university publications.

Other special programs offered include "The Mighty Mini-A Close Look at Minicomputers and their Application to Real World Problems"; "Analysis and Design of Transportation Systems"; "Strategic Planning in the Energy Sector"; "Nuclear Power Reactor Safety" and "Advances in Human Nutrition Knowledge."

the schools of architecture, with special reference to

the experiences of the Consortium schools and to

A fifteen-month period, from June of 1974 to August

A full-time study director will be appointed for

each of the four studies. The board of directors will

consist of the Deans of the Consortium and several

jointly by Dean Porter and Dean Maurice Kilbridge

of the Graduate School of Design at Harvard, and one

starting point of the proposed study is our collective

recognition that architectural education is an under-

developed area of the academic world." He said that

architectural education "must be improved so that it

can meet the challenges and opportunities of a

The Consortium schools, besides MIT and Har-

vard, are the Columbia School of Architecture, Cor-

nell University College of Architecture, Art and

Planning, Howard University School of Architecture

and Planning, University of Pennsylvania School of Architecture, Princeton University School of

Architecture and Urban Planning, and Yale Univer-

Dean Porter, quoting the proposal, said, "The

estimates of society's present and future needs.

of 1975, has been set for conducting the studies.

other distinguished practitioners and educators. The coordination of the studies will be managed

of the four study directors.

changing society."

New Health Sciences Fund Will Support Graduate Study

MIT has established a "Health Sciences Fund" to support faculty and graduate student research in the life sciences and biomedical engineering.

The fund will be under the direction of President Jerome B. Wiesner, Dean Irwin W. Sizer of the Graduate School and two Corporation members, Dr. George W. Thorn and Uncas A. Whitaker.

For the academic year 1974-75, \$40,000 has been made available from the fund to support graduate students who are or will be doing research in this area.

Graduate students who wish to apply for a Health Sciences Fellowship should submit an application which includes a summarized research proposal to their department head or to a director of an interdisciplinary program. The nominations must be submitted to the Dean of the Graduate School before June 15, 1974. Awards of fellowships will be announced on July 1.

The fellowships will be for a 12-month period and will pay full tuition and medical fees, plus a \$3,600 stipend.

Excellent progress in research,

as reflected in annual reports, could bring about renewals of fellowships for a period of up to three vears

Dean Sizer, commenting on the new program, said:

"MIT is most grateful to receive this support for graduate students at a time when it is needed most. With the loss of several large federal fellowship programs during the past three years, it is essential to find new sources of support.

"With the help of the Development Office, the Graduate School has been successful this year in obtaining a number of fellowships from private industry, foundations and individuals. It is especially gratifying that some of these new fellowships have been designed for women and minority graduate students."

Tanker Collection Completed at Hart

A model of a giant ocean-going tanker has made port at MIT's Hart Nautical Museum, increasing to nearly 90 years the span of time covered by the museum's model fleet of tankers.

The oldest ship represented in the display goes back to 1885.

The new model, which brings the



Johan Akerman with the Little Iron Man

Little Iron Man Trophy Caps Successful Fencing Season

By SALLY M. HAMILTON Staff Writer

It was a very good year for the 3-man MIT Fencing Team, a superb freshmen trio led by the exuberant Johan Akerman, 19, of Stockholm, Sweden.

The team's record of 35 wins in 36 collegiate meets was capped when they won the eastern foil team championship at the 77th annual Intercollegiate Fencing Association (IFA) meet in March.

Other members of the team are Richard W. Reimer, of Richmond Hill, N.Y. who won second place in the New England Fencing Tournament and Arlie G. Sterling, of Norfolk, Mass.

Winning the IFA team championship, the most prestigious fencing team title in the country, was a first for MIT foilers and with it came the coveted "Little Iron Man" trophy, the oldest inter-collegiate athletic trophy in the country. Until this year the trophy, which was established in 1894, has been won almost continously for the past 40 years by teams at Columbia and New York Universities.

Akerman also won this year's New England Intercollegiate Foil Championship. Before coming to MIT he was the Scandinavian Junior Foil Champion and Middle Swedish Senior Epee Champion.

In addition to participating in the team's regular schedule of meets, Akerman entered at least 10 outside competitions and would have fenced even more if tournament rules had permitted.

Akerman will live fencing even more in the coming year. He has been inducted into the Swedish Army for a year, where he will spend most of his time training with the best foilers in his country.

He plans to return to MIT in 1975 to fence and complete an engineering degree.

More Charter **Trips** Listed

The MIT Quarter Century Club recently announced its latest series of vacation trips for the MIT community.



Double christening ceremony at MIT's Harold Whitworth Pierce Boathouse on a sunny, but windy, day last Wednesday formally conferred names on an eight-oared racing shell and a coaching launch. Howard W. Johnson, chairman of the MIT Corporation, pours champagne over the bow of a shell named for him, and Mrs. Florence Jope christens launch in the name of her late husband, Ralph T. Jope. Mr. Jope, a member of the MIT class of 1928, was business manager for Technology Review from 1929 to 1965 and director of the Development Office from 1951 to 1960.

exhibit up to date, is of the Esso Gascone, a 250,000-ton deadweight VLCC (Very Large Crude Carrier).

The model, a gift of the Donmarel Foundation, was built by C.M. Smeltzer Jr., of Matawan, N.J., from plans donated to the museum by Exxon International. Mr. Smeltzer had constructed four of the other models in the tanker fleet, which is exhibited in one of the corridor cases on the first floor of Building 5.

The Esso Gascone and five sister ships were built by the A.J. "Weser" Shipyard in Bremen, West Germany, from 1972 to 1974. She is 1,141 feet long over-alllonger than three football fieldsand can carry about 16 times the cargo of a standard World War II T2 tanker.

The model, built on a scale of 1/32 inches per foot, is about three feet long.

At the second day of the IFA meet, Akerman defeated five of the top foilers in the country to win the tournament's individual championship.

Akerman was first introduced to fencing when he was seven, with some forceful coaxing by his cousin, Kerstin Palm, then the junior world champion. Of his first lesson, Akerman said, "I hated it so much that I escaped by leaving through a second story window."

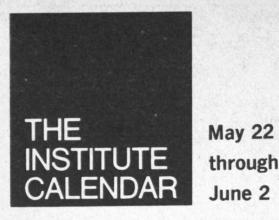
There is no sign of that inauspicious beginning now for as MIT Maestro Silvio Vitale says, "Johan lives fencing."

Brochures for vacations in Switzerland (July 5 to 13) and the Costa del Sol, Spain (Aug. 11 to 19) have already been sent out. This is the first time that summer trips-which the Club has had many requests for-have been offered. Initial returns have been very good.

Other upcoming trips are to Scotland (Sept. 12 to 19), Bucharest, Romania (Sept. 30 to Oct. 7), Rio de Janiero (Dec. 3 to 11) and Tokyo (Jan. 6 to 15).

For further information and to suggest destinations for future trips call Roely Meddens at x3-7914. Scotland and Romania brochures will be mailed in about a month.

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Events of Special Interest

Military Commissioning Exercises - Thurs, May 30, 11am, Kresge Auditorium.

Commencement Exercises - Fri, May 31, 10:30am, Rockwell Cage.

President's Reception - For graduates and their guests. Fri, May 31, 1pm, West Campus.

1974 Alumni Days - This is not a complete schedule. For further details consult the Alumni Days brochure, which also contains registration forms for those events which require tickets for admission.

Sunday, June 2

Automobiles of the Past - See and ride in vintage cars. 1-7pm, Briggs Field.

Film Series - ABC Series - What About Tomorrow - Searching the Unknown; City of the Future; Facing the Consequences. 2-3:20pm, Kresge Little Theatre.

A New Concept in Education - Seymour A. Papert, education & applied mathematics; co-director, Artificial Intelligence Lab. 3:30-4:45pm, Kresge Auditorium.

Class Cocktail Parties - Cocktails at new fraternity houses, 5-6pm, 405-407 Memorial Drive. Tickets required.

International Buffet - Sumptuous dinner from around the world, with an unlimited supply of draft beer. 5:30-7:30pm, Stu Ctr. Tickets required.

Tech Night at the Pops - Arthur Fiedler at his best. 8:30-10:30pm, Symphony Hall. Buses leaving from front of Stu Ctr, 7pm, Tickets required, available Rm E19-437, x3-4876.

Monday, June 3

Perspective: A historical look at the impact of the automobile on America.

The Dangerous Future - Elting E. Morison, Elizabeth and James R. Killian Professor, School of Humanities. 9-9:20am, Kresge Auditorium.

Changing Constraints: 9:30-11:30am, Kresge Auditorium. Participants: Automotive Fuels - Morris A. Adelman, economics. Environment - Henry D. Jacoby, management. Congestion, Shortages and Equity – David Gordon Wilson, mechanical engineering. Safety – William Haddon, Jr, M.D., '49 president; Insurance Institute for Highway Safety, Washington, DC. Question and answer period.

Future Options: A review of some of the alternate routes we're likely to take. 2:30-5pm, Kresge Auditorium. Alfred A.H. Keil, Dean of the School of Engineering; ocean engineering; moderator. Participants: Technology and Design in the Future - John B. Heywood, mechanical engineering. Fred Bowditch, executive environmental activities staff, General Motors. Public and Mass Transportation - Daniel Roos, civil engineering. Government and Public Policy - Alan Altshuler, secretary of transportation & construction, Commonwealth of Massachusetts. Legislative and Legal - Lloyd Norton Cutler, Wilmer, Cutler and Pickering, Washington, DC. Industrial Strategies - James W. Ford, assistant controller, Ford Motor Finance Staff. Question and answer period.

Social Hour - 5:15-6:15pm, duPont Athletic Center. Tickets required.

University. Metallurgy & Materials Science Polymer Science and Engineering Seminar. 3pm, Rm 4-231.

Wednesday, May 29

A Three Component Laser Interferometer for Measurement of Turbulent Flow - Joseph E. Rizzo, aero/astro, Southampton University. Mechanical Engineering Seminar. 4pm, Rm 3-343.

Community Meetings

Women's Forum* - Final "formal" meeting of the year will look back on the year's activities over lunch, coffee and some special goodies. Tues, May 28, 12n, Rm 10-105.

MIT Club Notes and Meetings

Classical Guitar Society – Classes, group or private. Thurs, 5-9pm; Sat, 9am-12n; Rm 1-132, 134, 136. New group class for beginners every month. Vo Ta Chuoc, x9633 Dorm.

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

Student Homophile League* - Meetings 1st & 3rd Sun of each month, 4pm, Rm 1-132; next meeting Sun, June 2. Info, talk, help in coming out, call Hotline, 494-8227. Come out, come out, wherever you are!

Wellesley Events

Agnes Abbot: A Retrospective Exhibition* - Includes 60 watercolor landscapes and several in oil. Thru Wed, June 5, Wellesley College Museum, Jewett Arts Center, Wellesley campus. Hours: Mon-Fri, 8:30am-5pm; Sat, 8:30am-12n, 1-5pm; Sun, 2-5pm. Free.

The Claude Lorrain Album* - Sixty drawings from the collection owned by Norton Simon, Inc. Museum of Art. Through Sat, June 8, Wellesley College Museum, Jewett Arts Center. Hours: Mon-Fri, 8:30am-5pm; Sat, 8:30am-12n, 1-5pm; Sun, 2-5pm.

Social Events

End of Finals Week Rock Party* - Sponsored by the senior class. Fri, May 24, Stu Ctr Lobdell. Time will be announced during finals week.

Movies

Charulata/The Lonely Wife - Film Society. Fri, May 24, 7:30pm, 9:30pm, Rm 6-120. Admission \$1.

Abhiman* - SANGAM. Indian movie with subtitles. Sat, May 25, 6:30pm, Rm 3-370. Admission 50 cents with ID.

Abhiman* -SANGAM. Indian film with subtitles. Sun, May 26, 3:30pm, Kresge Auditorium. Admission 50 cents with ID. Indian refreshments available.

2001 Space Odyssey* - Sponsored by senior class. Wed, May 29, Sala. Times will be announced during finals week.

Bullit - LSC. Fri, May 31, 7pm, 9:30pm, Rm 10-250. If its a hot night, Rm 26-100. Admission 50 cents.

Voyage to Italy - Film Society. Fri, May 31, 7:30pm, 9:30pm, Rm 6-120, Admission \$1.

Monkey Business - LSC. Sat, June 1, 7:30pm, 9:30pm, Rm 10-250. If it a hot night, Rm 26-100. Admission 50 cents.

Music

Spring Revels* - Celebration of spring by a large company of dancers and musicians, with songs and dances drawn from English, Irish and American traditions. Directed by Jack and Carol Langstrass. Thurs, May 23, 8pm; Fri, May 24, 4pm, 8pm; Kresge Auditorium and Plaze. Tickets: \$3 adults; \$1.50 children; \$2 MIT student, Kresge ticket office.

Theatre

Androcles and the Lion* - MIT Community Players presents

Announcements

Book and Clothing Drive for Charity* - Cleaning out your room for the summer? Bring your books, clothes to collection places in all dorms between now and June 3, and they will be donated to Goodwill.

TCA Needs Summer Workers* - If you will be in the Cambridge area and would like to work on HoToGamit, Freshman Picturebook, Course Evaluation or any other projects, stop by TCA, 4th fl Stu Ctr, and let us know when you are free and what interests you.

Child Care - For information on day care centers, nursery schools, family day care homes - where they are, how much they cost and what is the parent's role - call the Child Care Office, x3-1592, or drop by Rm 4-144.

Dining Service

Thursday, May 23 - Lunch: tuna noodle casserole. Dinner: pork steak & applesauce. Friday, May 24 – Lunch: baked codfish. Dinner: shrimp creole over rice. Monday, May 27 – Lunch : sliced chicken & biscuit. Dinner: spaghetti & meatballs. Tuesday, May 28 - Lunch: seafood newburg over toast. Dinner: sauteed beef liver & onions. Wednesday, May 29 - Lunch: kielbasse & hot Dutch potato salad. Dinner: meatloaf & gravy.

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 May 29 through June 9 to the Calendar Editor, Room 5-111, Ext. 3-3279, before noon Friday, May 24.

Reactor to Be Modified

MIT's Nuclear Research Reactor will be shut down Friday, May 24 for modifications to improve its scientific usefulness, it has been announced by officials in the Department of Nuclear Engineering.

The modifications, principally an improved core design, will begin on Tuesday, May 28 and take about four months. According to Co-Director of the MIT Reactor, Professor of Nuclear Engineering David D. Lanning, the objective of the modification is to improve the flux of neutrons from the reactor. Professor Lanning is in charge of reactor modifications, while operation of the reactor is under direction of Lincoln Clark, a research associate in the department.

These neutrons are used in scientific research and to bombard materials to produce radioisotopes for medical centers and firms in the Boston area. At present, said Professor Lanning, the flux of neutrons from the fission reaction is more dense at the center of the core, where radioisotopes are produced, than at the edges of the core where neutron beams are drawn off for use in scientific experiments.

The improved beam quality will be obtained by making the core more compact, increasing the neutron flux availble at the beam ports by three-fold. Other improvements in beam quality will be obtained by using light (ordinary) water as a coolant and moderator, and by employing heavy water as the primary neutron reflector.

No significant changes will be made in the reactor shielding, containment building, or control instrumentation. Because the facility will continue at the same 5 megawatt power level at which it has been operating since 1965, no modification of the heat exchangers, cooling towers, or other parts of the heat removal system are required. As in the past, the reactor will operate at a temperature of 100-130 degrees Fahrenheit and at atmospheric pressure.

A license application to upgrade the reactor was approved by the US Atomic Energy Commission in April, 1973. Shortly thereafter orders were placed for major components and for fuel for the new reactor. Since most of these components have been received or are scheduled for delivery, the decision was made to shut the reactor down and prepare for the modifications, Professor Lanning said.

Seminars and Lectures

Wednesday, May 22

COMPENDEX - On-line demonstration of the computerized version of Engineering Index, a new bibliographic data base recently available through NASIC. 2:15pm, Science Library. Info, NASIC Coordinating Office, Rm 10-400, x3-7746.

The Purpose of Privacy in Information Systems* - Jeffrey A. Meldman, G. Electrical Engineering Telecommunications Policy Planning and Research Seminar. 4pm, Rm 9-450.

Reliability of Slender Columns* - Rudiger Rackwitz, visiting engineer, Technical University of Munich. Civil Engineering Structures Division Seminar. 4pm, Rm 1-236.

Friday, May 24

Plasma Containment in Cusp Geometries* - M. Levine, Airforce Cambridge Research Labs. RLE Plasma Dynamics Seminar. 4pm, Rm 36-261.

Tuesday, May 28

Hydrodynamics of Solids* - Dr. P.D. Fleming, chemistry, Brown

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Bernard Shaw's play. Thurs-Sat, May 23-25, 8:30pm, Kresge Little Theatre. Tickets: \$2.50, Bldg 10 Lobby and at the door.

Exhibitions

Photographs by MIT Students* - Exhibition of black and white prints. Thru Sat, June 1, Creative Photography Gallery. Hours: 12n-7pm weekdays, 12n-6pm Sat, Sun. Free.

Paintings from the Museo de Art, Ponce, Puerto Rico* - Organized by MIT Committee on the Visual Arts. Fri, May 17-Sat, June 8, Hayden Gallery. Hours: Mon-Sat, 10am-4pm; closed Sun, holidays. Free.

Music Library Exhibit - Chinese musical instruments.

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.

Athletics

Maggie's Spring Exercise Marathon** - Beginning Mon, June 3, daily for 2 weeks, 5 hours of exercise per day: 7-9am, 12n-2pm, 5-6pm, duPont Athletic Ctr. Only those who have been exercising regularly, including running, for 11/2 hours/day, should expect to participate.



The Department of Mechanical Engineering held a grand opening party for its new Student Lounge, May 13. The Lounge came to reality through the efforts of an ME Department student committee, and was designed by Mitchell Lewis Green, a junior in architecture.

The Lounge is one phase of a multi-phase effort by mechanical engineering to create a focal point of activities with which undergraduate, graduate, mechanical engineering and non-mechanical engineering students can identify.

AFFIRMATIVE ACTION PLAN OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

March 1, 1974



OFFICE OF THE PRESIDENT

This Institute-wide Affirmative Action Plan has been prepared as an expression of MIT's commitment to the principle of equal opportunity in employment and in education and is in accordance with all Federal government regulations affecting equal opportunities in higher educational facilities as of January 1, 1974.

This Plan, the commitment it affirms, and the policies it proclaims have my full personal agreement and support.

Buliesner

U Jerome B. Wiesner

Communication of the Plan

The substance of this Plan will be disseminated to the MIT community through publication in *Tech Talk*, the official Institute newspaper. Subsequent Institute policies and procedures developed either to meet goals outlined in this Plan or to address later provisions and amendments of Federal government regulations, will be disseminated to the Institute community through *Tech Talk*, and will be added to this Plan annually.

A reference copy of this Plan will be on file in each department, office and laboratory and in the Institute Information Center, Room 7-211. Copies of the total Plan, including each department's specific Affirmative Action Plan will be on file in the appropriate Personnel offices, in the Office of the Special Assistant for Minority Affairs, in the Office of the Special Assistant for Women and Work, and in the Office of the President and Chancellor.

Additional information on the dissemination of the Plan internally to the community and externally to the community and public at large can be found in Appendix F.

PERSONS DIRECTLY RESPONSIBLE FOR OVERSEEING MIT'S

portunity Coordinator for Lincoln Laboratory—reports directly to Laboratory Director.

Additional Assistance Can Be Obtained From the Following Persons:

Mary P. Rowe Ext. 3-5921 Special Assistant for Women and Work in the Office of the President and Chancellor—Coordinator of equal opportunity in Employment and Education for Women.

Clarence G. Williams Ext. 3-4846 Special Assistant to the President and Chancellor for Minority Affairs—Coordinator of equal opportunity in Employment and Education for Minorities.

Appendix (G) outlines the responsibility for implementation of the Affirmative Action Plan in more detail and clarifies the decision making process in the employment area.

I. INTRODUCTION

As a major educational institution, a large-scale employer, and an influence on our society through its students, its alumni, and its employees, the Institute stands committed to the principle of equality of opportunity in employment and in education.

In its most elementary and comprehensive form, our adherence to the concept of equality of opportunity requires that we strive toward a condition in which considerations of race, sex, national origin, and religion are irrelevant as determinants of the access an individual has to opportunities for education, for employment, for achievement, and for personal fulfillment. Rather, the controlling factors in all such matters must be individual ability, interest, and merit.

The Institute's posture with respect to the principle of equality of opportunity in this community was expressed in the *Report of the President and Chancellor* for the 1971-72 academic year:

MIT, together with other institutions in this ociety, must rethink and recast the structure of opportunity which we afford those who spend time with us-opportunity for individual satisfaction and self-fulfillment, opportunity for employment and subsequent advancement. All who study here and work here stand to benefit from greater attention to these basic human needs. Persons employed at the Institute require ready access to opportunities for advancement, as well as greater attention to their needs for personal and career development. Those who study here deserve an education which enriches the essential lifelong process of growth and educational self-renewal and places a premium on self-sufficiency and intellectual independence. While these goals pertain to all members of the MIT community, at this moment in time we have a special responsibility to expand opportunities for members of minority groups and women at all levels of the Institute. We must not stand aside from the society as it struggles to consolidate the opportunities for a decent life that now exist. Indeed, we should be innovative and creative in our handling of these difficult problems with the hope that, in so doing, we will point the way for others,

as well as enriching our own environment for all members of this community. We must put special emphasis on placing in significant positions at all levels competent women and members of minority groups with whom young people may identify professionally and personally. Our record of achievement in the past year has been significant but falls short of the standard that we have set for ourselves. We are taking steps to improve our means for meeting our pledge to the Federal government and, even more importantly, to ourselves.

At the present time women and members of some minority 1 groups are underrepresented in many categories of employment and in most student categories. This underrepresentation has resulted from the history of American society, which was reflected in past Institute practices which, until very recently, have been at best neutral with respect to this underrepresentation and, at worst, discriminatory with respect to minorities and women.

Our present and future course in these matters, which goes beyond nondiscrimination, i.e., the elimination of all policies and practices that work to the disadvantage of individuals on the basis of race, sex, national origin, or religion, is based on the concept of Affirmative Action.

The principle of Affirmative Action requires the Institute to determine if it has met its responsibilities to recruit, admit, employ, promote, and reward women and minorities to a degree consistent with their availability and merit, whether or not any failure to do so can be traced to specific discriminatory policies or actions. Where women and minorities are underrepresented at MIT in the student and employment ranks, the Institute will recruit and employ them in accordance with their increasing availability. The premise of this commitment is that the corrosive effects of systematic exclusion, inattention, and overt discrimination in the past cannot be remedied in appropriate ways and in a reasonable time by a posture of neutrality with respect to race and sex. Affirmative action is necessary to avoid the perpetuation of the inequities that are our heritage from these exclusionary and discriminatory practices of the past.

While the Institute is obliged, as a major Federal contractor, to develop and sustain a program of Affirmative Action, our commitment to these matters transcends legal or contractual requirements. We undertake these actions and adopt these policies not because we are required to, but because it is right and proper that we do so.

AFFIRMATIVE ACTION PLAN

The President and Chancellor have designated to the following persons the responsibility for monitoring the progress of MIT's Affirmative Action programs. All inquiries in reference to this Plan should be directed to the appropriate person listed below.

MIT CAMPUS John M. Wynne Ext. 3-4942 3-4943

Patricia A. GarrisonAExt. 3-1512E3-1519OLINCOLN LABORATORYJohn DarginDExt. 1817407E

Vice President, Administration and Personnel and the Institute's Equal Employment Opportunity Officer—overall Equal Opportunity Coordinator and official liaison with all appropriate Federal and State agencies. Assistant to the Equal Employment Opportunity Officer. Y Director of Personnel and

Equal Employment Op-

II. MIT AFFIRMATIVE ACTION POLICY

The Institute's Affirmative Action program is intended to expand our efforts to guarantee equality of opportunity in employment and in education and to reduce underrepresentation and underutilization of minorities and women at MIT. For all Institute categories of employment, our objectives are to achieve a representation of women and minorities that is at least in proportion to their current availability and to provide new opportunities for career development which both stimulate and respond to their changing interests and aspirations. Similarly, for all of the Institute's educational programs, our

1. The term "minority" used in this Plan refers to Black Americans, Indian Americans, Oriental Americans, and Spanish-surnamed Americans. objectives are both to achieve representations of minorities and women in the student body which reflect their current availability and interests and to encourage larger proportions of these groups to seek careers for which the Institute's educational resources are designed to prepare them.

In accordance with these overall objectives, numerical goals and timetables for employment at the Institute have been set. 2

Achievement of these goals and attainment of the longer-range objectives require adoption of the following principles:

1. All categories of employment at the Institute having fewer minorities and women than would reasonably be expected on the basis of their availability in the work force must be identified. These imbalances must be reduced by vigorous and systematic recruitment efforts. Where appropriate and feasible, job training and professional development efforts will be undertaken. These requirements apply to academic departments (including faculty and academic staff categories), laboratories, and all administrative and support activities.

It is important to note that many unreasonable limitations and inequitable situations in employment are rooted in occupational segregation and in the stereotyping of roles in our society. Thus, equality of opportunity requires that we make equally accessible to all persons job categories that have been preponderantly occupied by women and/or minorities.

- 2. All employees will be encouraged to make the fullest use of their skills and talents by participating in educational and career development opportunities for promotion and transfer consistent with both the needs of the Institute and the with both the needs of the Institute and the individual's ability and aspirations. Special efforts will be made to ensure that women and minorities are aware both of this principle and of specific opportunities that may be of interest.
- 3. Equal compensation, benefits, and support will be provided without regard to race, sex, national origin, or religion to all staff and employees of equal merit in positions of equivalent responsibility.
- Access to educational programs, financial assistance, and other services and facilities will be provided to students in a manner that does not discriminate against women and minority students.
- 5. It will be our goal to increase the numbers of women and members of minority groups within our undergraduate and graduate student bodies. This goal can be attained only by a vigorous program to recruit potential applicants and to increase the interests in, preparations for, and availabilities of women and minorities for careers in science and technology. While ultimate success will result in substantial changes in admission patterns, our immediate efforts must concentrate on enlarging the pool of qualified women and minority applicants from which we admit students.
- Selections among candidates for employment 6. and among student applicants must reflect both continuing attention to individual merit and quality and a recognition that narrow interpretation of qualifications or credentials has worked to the disadvantage of women and minorities. In other words, the Institute's employment practices and its admission policies must emphasize individual merit, performance, and potential in ways that reflect the fact that limited prior opportunity, social discrimination, and enforced segregation influence a person's record of achievement. 7. Procurement and purchasing practices must ensure maximum opportunity for the participation of minority and female vendors in the provision of services and materials and for the employment of minority contractors and construction workers in the construction or renovation of Institute facilities, either on or off campus. In this regard, each contractor

who seeks MIT business is expected to have and to follow an Affirmative Action program that is in accord with Federal and state regulations.

The primary responsibility for adherence to these principles, and for the establishment of an atmosphere in which the evolving concept of Affirmative Action is accepted and supported, rests with supervisors at all levels and with every person having administrative responsibility within the Institute.

Overall monitoring, auditing, and staff coordination of the Institute Affirmative Action program has been assigned to the Vice President, Administration and Personnel who has been designated the Institute Equal Employment Opportunity Officer as of July 1, 1973 and who has the responsibilities outlined in the Federal Contract Compliance Regulations.

In the long run, our objective as an institution is to change in ways that will achieve true equality of opportunity in employment and in education and which, thereby, will obviate the need for specific programs of affirmative action.

III. AFFIRMATIVE ACTION FOR ACADEMIC STAFF

A. Aims and Plan of Action

At the present time, women and minorities are underrepresented in most academic positions within the Institute, particularly in faculty positions, both tenured and untenured. Our commitment to a policy of Affirmative Action requires that we make every effort-and that we show substantial progress over time-in the following directions. First, we must increase the number of minorities and women on our Faculty and academic staff. This increase must be consistent with departmental needs for teaching and research talent and consistent with the needs for development of existing and/or new professional fields and programs. Second, MIT must seek to broaden the pool of available candidates for each position on the Faculty and academic staff by recruiting and educating minority and women students (see Section V), as well as by developing shorter-range programs of career orientation and professional development. In particular, our efforts must be designed to encourage and to facilitate the movement of promising women and minority candidates into the fields of science and engineering and the applications of science and technology to human and social problems. The academic fields related to science and technology are of particular concern to us because MIT is committed to leadership in these fields, in which the present imbalance in representation of minorities and women is large.

In addition to our efforts to increase the numbers of qualified women and minorities, we are committed to supporting those who are now on our Faculty and academic staff by providing for them the opportunities for promotion and professional growth that will in turn increase their representation in the senior ranks of the academic professions.

In short, our program for the Faculty and academic staff is a maximum, result-oriented effort to increase the number of women and minorities and to create an atmosphere of support, encouragement, and congeniality in which all faculty and academic staff may thrive professionally and personally.

The following course of action is intended to achieve the Institute's goals and meet existing ment's faculty and academic staff. In academic areas where there is underutilization of women and minorities, vigorous and systematic efforts will be undertaken to identify and to recruit women and minority candidates.

- 2. Each department will establish, bi-annually beginning in July 1973 numerical goals and timetables as guidelines for its progress in recruiting and hiring women and minorities for academic positions for the next two years. Appendix H includes statistical summary sheets showing the representation of minorities and women at the Institute as of December 31, 1973 and goals for July 1974 and July 1975 aggregated from the individual goals of each department, laboratory and center projected in April 1973.
- 3. The departments will seek to increase the pool of potential candidates in their areas by vigorous and systematic recruitment of women and minority graduate students.

To implement this program, departments will follow the specific set of procedures outlined in Appendix E-1, Academic Departmental Procedures for Affirmative Action.

B. Responsibility for Implementation

Responsibility for meeting departmental goals and timetables rests with each department head. It will be expected, however, that all members of the academic staff will cooperate and support these efforts, in terms of both their supervisory roles and their participation on various Institute committees.

Responsibility for the assurance of good faith efforts belongs to the academic Deans and the Academic Appointments Subgroup of the Academic Council which considers serious search efforts with regard to women and minority candidates in weekly reviews of proposed academic appointments.

The Institute's Equal Employment Opportunity (EEO) Officer and the Special Assistants for Women and Work and for Minority Affairs will play leading roles in the development, coordination, and monitoring of all Affirmative Action programs. They will assist department heads in the preparation and implementation of specific plans to ensure the effectiveness and continuity of the Institute Plan within each department unit. In addition, department heads will monitor progress on a quarterly basis and will submit an annual evaluation report to the Institute's EEO Officer.

To assure good communication and visibility, each department head (or director of a research center or laboratory) will act as departmental EEO Representative. If a department head chooses to delegate some of the responsibility in this area, he or she may appoint a member of the department as EEO Representative. This person will assist the department head-working with members of the department, the appropriate Dean or senior officer, the EEO Officer and the Special Assistants for Women and Work and for Minority Affairs to implement and monitor both the academic and non-academic policies and procedures that are contained in the Institute's Affirmative Action Plan, as well as the department's Affirmative Action Plan.

EEO departmental Representatives for the 1973/74 year are listed in departmental plans and with the EEO Officer and the Special Assistants for Minority Affairs and for Women and Work.

The specific responsibilities of the departmental EEO Representative (whether or not he or she is the department head) will be as follows:

1. to establish specific methods for identifying

2. The specific employment objectives are detailed in the individual Plans of the Institute's organizational units which are listed in Appendix A. These goals have been projected for July 1974 and July 1975 and the aggregation of the individual department goals is show in Appendix H.

Page 2, Affirmative Action Plan, March 1, 1974

problems in this area:

- Each academic department will identify the extent to which women and minorities are underutilized in each professional rank, by means of a utilization analysis ³ of the depart-
- 3. According to the Federal guidelines for Affirmative Action programs, "underutilization is defined as having fewer minorities and women in a particular job classification than would reasonably be expected by their availability." The utilization analysis, which is a required part of the Plan, is intended to show representation of women and minorities in comparison with relevant "catchment" or recruitment "pools" for faculty and academic staff positions. The utilization analysis should estimate the proportions of women and minorities available at the appropriate skill levels both within and without the Institute. It is the purpose of this analysis to show clearly those areas where women and/or minorities are underrepresented, together with the reasons for underrepresentation.
- the underutilization of skills and talents of women and minority staff and employees within the department and to encourage both their participation in educational and career development programs and their taking advantage of opportunities for promotion and transfer, consistent with their individual abilities and aspirations and with the needs of the Institute;
- 2. to seek the help of everyone in the department, particularly women and minorities, in identifying problem areas related to the goals of Affirmative Action (including possible problems with attitudes, atmosphere, etc.) and in referring qualified minority and women candidates for both academic and non-academic positions;
- to develop a serious search strategy, including an up-to-date list of contacts, for identifying women and minority applicants in career fields appropriate to the department's needs;
- 4. to maintain a file on minority and women applicants and potential candidates for academic positions within the department;

- 5. to undertake a careful review of departmental employment criteria relating to merit and to make certain that all job requirements are specifically necessary for the category under consideration (e.g., whether certain degrees are necessary, whether "requisite" skills are actually utilized, and whether on-the-job training could be substituted for certain requirements);
- 6. to review the criteria for departmental hiring, retention, promotion, and tenure as actually implemented to ensure that procedures are in compliance with the Higher Education Act of 1972 and HEW Guidelines;⁴
- to disseminate the latest Institute policies and procedures on Equal Employment Opportunity to all members of the department, both professional and non-professional;
- to develop strategies for increasing the available pool of candidates for academic positions, such as actively recruiting women and minorities for graduate programs and post-doctoral training;
- 9. to conduct quarterly reviews of progress, and, if necessary, to take steps for (or recommend) re-evaluation and corrective action; and
- 10. to develop within the department specific procedures for reviewing alleged complaints of discrimination consistent with the Institute's complaint policy which is now in operation.

IV. AFFIRMATIVE ACTION FOR NON-ACADEMIC EMPLOYMENT

A. Aims and Plan of Action

Women and minorities are underrepresented in many non-academic positions at the Institute. Furthermore, the Institute recognizes that many inequitable situations in employment are rooted in occupational segregation and in stereotyping of roles in our society. These persistent problems have resulted in widely held perceptions by many minority and women employees (and prospective employees) that job responsibilities and opportunities for advancement are seriously limited, and that individual skills and talents will be inadequately recognized and rewarded. Accordingly, given the Institute's commitment to equal opportunity in all employment areas, the Affirmative Action Plan for non-academic employment has a double responsibility: first, to correct the present underrepresentation and underutilization of women and minorities; and, second, to reverse prevalent feelings of frustration and low expectations for change on the part of many valuable and talented employees.

The recent reorganization of services in the Personnel Office is intended—in large measure—to alleviate this problem. Specifically, personnel officers have been assigned to each department, office, and laboratory with full responsibility for all personnel matters—including assistance in affirmative action—at all levels of non-academic employment.

In view of both the problems and aims described above, the following course of action has been established:

1. Within each non-academic area (administrative unit, office, department) of MIT, the imbalance in representation of minorities and women vis-a-vis other (white male) employees will be identified and documented.

- goals, and procedures with respect to nondiscrimination outlined in the Institute's Affirmative Action Plan. Special efforts will be made to ensure that women and minorities are aware of specific opportunities for promotion, transfer, and training that may be of interest to them.
- 6. Steps will be taken to sensitize supervisors to both subtle and overt forms of discrimination and to inform them in detail about the Affirmative Action program, both in terms of legal requirements and of MIT's particular commitments.
- The Institute will make efforts in the direction of improving access by all persons to job categories which have traditionally been preponderantly occupied by women and/or minorities.

Specific affirmative action policies for non-academic employment are detailed in Appendix E-2. In addition, procedural instructions to implement the policy considerations in the plan have been developed by the Personnel Office and are available for review.

B. Responsibility for Implementation

Responsibility for meeting the objectives in this area rests with the department head or the director of each office, center, or laboratory. For certain staff positions, the responsibility for good faith efforts is vested in the Provost or in the Vice President responsible for the specific organizational unit and in the Staff Appointments Subgroup of the Academic Council which considers the serious search effort in weekly reviews of non-academic staff appointments.

For the recruitment, referral, and hiring of candidates in non-academic categories, there is a sharing of responsibility between the departmental leadership and the Personnel Office. Specifically, in order to enable each department to meet its equal opportunity goals, the Personnel Office is responsible for providing minority and women applicants according to their availability. It is the responsibility of individual departments to supply the Personnel Office with basic, essential job requirements for each available position in sufficient time to allow for a serious search to produce "qualified" ⁵ minority and women candidates either from within the Institute or from external recruitment sources.

An annual review and analysis of all employment categories will be undertaken by the EEO Officer and the Assistants for Women and Work and for Minority Affairs to monitor progress toward full representation of minority and women employees at MIT. Minority and women referrals and transfer requests from each department will be included in this analysis. This data will be supplied by the Personnel Office in cooperation with each of the departments, laboratories, offices, and centers.

The EEO Officer and the Assistants for Women and Work and for Minority Affairs will play the same roles in developing, coordinating, and monitoring departmental affirmative action programs as described in Section III, part B.

The head of each administrative unit (office or department), or his designee, will be appointed as Equal Employment Opportunity (EEO) Representative and will have specific responsibilities as outlined for academic EEO Representatives in Section III, part B.

V. AFFIRMATIVE ACTION FOR EDUCATIONAL

substantial changes in admission patterns, our immediate efforts must concentrate on enlarging the pool of qualified women and minority applicants from which we admit students.

It is also our objective to remove educational, social, and financial barriers which have discouraged many women and minority students from taking advantage of educational opportunities offered by the Institute.

On another level, the Institute and each of its academic departments are aware that most professional opportunities for women and minorities in science and engineering require graduate degrees, and, hence, the number of minorities and women with advanced degrees must be greatly increased to help increase their representation at MIT, at other universities, and in business and industry.

In view of these objectives, the Institute has established the following plan of action:

- 1. Access to educational programs, financial assistance, and other services and facilities will continue to be provided to students in a manner that does not discriminate against women and minority students.
- 2. Minorities and women often feel isolated academically and socially at MIT both because of their small numbers and because of cultural and/or sex role stereotypes. To address this problem, the Institute will continue to provide special support both formally, through the Dean of Student Affairs Office and the Office of the Dean of the Graduate School, and informally, by encouraging minority and women faculty, staff, and students to serve as advisors on academic and social matters.
- 3. The Institute will continue to provide special academic support services, where appropriate, to ensure that the needs of students with special problems are met.

Implementation policies and procedures in the student-related areas—admissions, financial assistance, student support services, student activities and housing, student placement, and graduate student support—are detailed in Appendix E-3.

B. Responsibility for Implementation

Responsibility for implementation of the Affirmative Action programs and procedures in the student-related areas rests with each office director or Dean and the standing review committees in the areas mentioned above.

Each administrative unit with responsibility for various aspects of the educational and student affairs areas defined above will review its particular policies and procedures according to the Affirmative Action Plan and will develop an implementation plan incorporating specific goals which will be reviewed and approved by the appropriate policy committee at MIT.

On a yearly basis, each office will review its plan and will prepare an annual report which will outline and analyze both efforts and progress made toward meeting Institute goals and Federal regulations. This annual report, including any proposed changes in policies or procedures, will be submitted to the Office of the Equal Employment Opportunity Officer by the end of each academic year and will be reviewed by the EEO Officer and the Assistants for Women and Work and for Minority Affairs.

VI. AFFIRMATIVE ACTION

 Each department will establish bi-annually beginning in July 1973, specific numerical goals and timetables for the next two years in an effort to correct imbalances, and specific methods will be developed to facilitate achievement of the goals.

Appendix H includes statistical summary sheets showing the representation of minorities and women at the Institute as of December 31, 1973 and goals for July 1974 and July 1975 aggregated from the individual goals of each department, laboratory and center in April 1973.

- 3. Vigorous and systematic recruitment of minorities and women, both inside and outside the Institute, will be undertaken.
- 4. Job training, career counseling, and professional development programs will be offered where appropriate and feasible.
- 5. All employees will be informed of the policies,
- 4. See Higher Education Guidelines, Executive Order 11246.

OPPORTUNITY

The purpose of this section is to describe MIT's commitment to increasing the numbers of women and minority group members in our undergraduate and graduate student body through a vigorous and systematic program of recruitment. The plans and procedures set forth in this section have also been written to conform with Title VI of the Civil Rights Act of 1964 and the Equal Educational Opportunity Act of 1972.

A. Aims and Plan of Action

At the present time, women and members of some minority groups are underrepresented in most student categories at MIT. It is our policy to reduce these imbalances by increasing the interests in, preparation for, and availabilities of women and minorities for careers in science and technology. While ultimate success will result in

5. Defined in terms of merit as described in Section II, item 6.

IN CONSTRUCTION, VENDING AND PROCUREMENT

A. Aims and Plan of Action

Over the past five years, MIT has become a leader in promoting minority group participation in Institute-related construction and vending enterprises. To maintain its leadership position in this area and to continue in compliance with the Federal and state regulations governing construction and vending, the Institute is committed to the following course of action:

1. Existing procedures will continue to be employed, and new procedures will be developed to secure maximum participation of minority vendors in Institute purchasing and minority contractors and construction workers in new

Affirmative Action Plan, March 1, 1974, Page 3

construction or renovation, both on and off campus.

- An effort will also be made to develop appropriate policies to address the growing problem of discrimination against women in these areas.
- 3. It is the Institute's policy to give its full support to local community agencies, such as the Contractors Association of Boston, who are working to improve utilization of minority contractors.

In particular, MIT's Affirmative Action program in construction contains the following provisions:

- a) An equal employment opportunity clause will be written into all renovation and new construction contracts.
- b) The Institute, through the department involved, will require contractors, negotiating or bidding on work, to be in compliance with Executive Orders 11246 and 11375 before contracts are awarded.
- c) A description of the plan for minority contractor utilization, including subcontractors, will be required as a component of the bid procedure.
- d) During the actual construction, each prime contractor will submit a weekly statement to the appropriate resident engineer outlining the work force composition and the use of minorities by his or her organization both directly and through subcontracting.
- e) The Equal Opportunity Construction Representative will visit construction sites weekly to review and report on Affirmative Action compliance.

With regard to vending contracts the following provisions will apply:

- a) The Equal Opportunity clause will appear on all purchase orders.
- b) A listing of suppliers, purchasing agents, and purchasing associations having Affirmative Action programs will be compiled.
- c) A listing of minority and women suppliers, purchasing agents, and purchasing associations will be compiled.
- d) These lists will be used by the EEO Officer and the Assistants for Women and Work and for Minority Affiars to maximize opportunities for minority and women vendors and to see that all vendors are aware of MIT's Affirmative Action requirements in order to improve their opportunities to bid for Institute contracts.
- e) At the time of bid presentation, vendors will be required to provide certification of compliance with Federal and state guidelines.
- f) MIT's Purchasing Council will review progress annually in the utilization of minority and women suppliers and, subsequently, will make appropriate changes in procedures.

B. Responsibility for Implementation

With respect to construction contracts, the Director of Physical Plant will be responsible for making sure that the provisions stated above are carried out during all phases of the planning and actual construction of each project. Reports of each project will be forwarded to the EEO Officer and the Assistants for Women and Work and for Minority Affairs. The Equal Employment Opportunity Officer will be responsible for auditing the construction program efforts and for recommending changes whenever necessary. Office of Provost (including Education Division, Urban Systems Lab., Lowell Institute, Institute Professors, Cancer Research Center, ROTC)

Artificial Intelligence Laboratory Cambridge Project Center for Advanced Visual Studies Center for International Studies Committee on the Visual Arts Health Sciences and Technology Division Joint Center for Urban Studies Libraries **Neurosciences Research Program Project MAC** Sea Grant Project Summer Session Office of the Vice President for Research **Center for Materials Science and Engineering Center for Space Research Energy Laboratory** Laboratory for Nuclear Science National Magnet Laboratory **Research Laboratory of Electronics** Lincoln Laboratory Office of the Vice President, Administration and Personnel Admissions **Career Planning & Placement** Personnel **Planning Office** Student Financial Aid Office **Office of Treasurer, Vice Presidents Audit Division Budget** Office Comptroller Lincoln Fiscal Office Office of Sponsored Programs Purchasing **Treasurer's Office** Office of Vice President, Operations (including Endicott House) **Campus Patrol Graphic Arts** Housing and Food Services **Physical Plant** Safety Office Office of Vice President (Wadleigh) Arteriosclerosis Center Medical Department Registrar Office of Vice President, Resource Development Industrial Liaison Office MIT Associates **Resource Development** Secretary of the Institute Office of the Dean of Architecture and Planning Architecture **Urban Studies & Planning** Office of the Dean of Engineering Aeronautics & Astronautics **Chemical Engineering Civil Engineering Electrical Engineering** Mechanical Engineering Metallurgy & Materials Science **Nuclear Engineering Ocean Engineering** Center for Advanced Engineering Studies **Center for Policy Alternatives** Office of the Dean of Humanities and Social Science **Economics Foreign Literatures & Linguistics Humanities** Philosophy Political Science

cerned especially with equal opportunity in employment and education, is appointed by the President of the Institute. In his choice of persons to be appointed to the membership, the President seeks to assure the equitable representation of protected class members on the Committee. The Special Assistant for Minority Affairs, the Special Assistant for Women and Work, and the Equal Employment Opportunity Officer are members of the Committee, ex-officio. The latter officer has a special relationship with the Committee, given his responsibilities as Vice President, Administration and Personnel. He will bring to the Committee reports of progress in Affirmative Action efforts, problems arising in the implementation of the Affirmative Action Plan and will review with the Committee proposals for changes in policy or procedure relating to Affirmative Action including comment on proposals originating within the Committee itself.

The authority and scope of the Committee is comparable to that of other Presidentiallyappointed Institute committees in that it assists the President in maintaining cognizance over the program assigned to it, with authority to obtain such information as necessary to keep itself informed as to the effectiveness of the program. In assessing effectiveness, the Committee has the responsibility for initiating improvements, including making recommendations to the President and the Academic Council or to the Faculty for changes in policy or procedure to make the program more effective. The Committee may request such information from appropriate Institute sources as necessary for it to judge the need for changes in policies or procedures or the merits of proposed changes.

In all these respects, the Committee's role is comparable to that of other Presidentiallyappointed committees. The Committee will consist of 24 members drawn from the Faculty, the research and administrative staff, other employees, and the student body. The President will designate the Chairman, and the Committee will meet at the Chairman's call. The Chairman and members of the Equal Opportunity Committee can be obtained from the Institute Catalogue, the annual Presidential Committee composition in *Tech Talk* or from the EEO Officer or the Special Assistants for Minority Affairs and for Women and Work.

APPENDIX C-2

Academic Council

The Academic Council is the senior policymaking group of the Institute within the administration, composed of the President, Chancellor and Provost, the Deans and Vice Presidents, Director of Libraries and Chairman of the Faculty. The Acaemic Council reviews major policy issues, budgetary levels and priorities, significant organization changes, major appointments and plans and programs involving issues of the nature and direction of the Institute. From time to time, it also reviews the progress and status of ongoing Institute programs. The Affirmative Action Program is one of these. The status and progress of the Affirmative Action program and proposals for significant changes in policy or procedure to increase its effectiveness, from whatever source, will be subject to the review and final approval of the Academic Council.

For purposes of its consideration of appointments, the Academic Council contains two (overlapping) subgroups, the Academic Appointments Subgroup and the Staff Appointments Subgroup. The Affirmative Action responsibility of these groups is to receive requests for authorization to make offers of appointment-to faculty positions in the case of the Academic Appointments Subgroup and to Administrative and Research Staff positions in the case of the Staff Appointments Subgroup. They examine the evidence provided by the Department Head regarding the serious search for qualified minority and women candidates which have been conducted by the department, how the appointment relates to the Affirmative Action Plan of the department and either authorize or withhold authority from the Department Head to make the offer of appointment. The members of the Academic Council, including the Academic Appointments and Staff Appointments Subgroups, are so designated because of the particular position they hold within the Institute. The Vice President, Administration and Personnel who holds the additional responsibility of the Institute's Equal Employment Opportunity Officer, is a member of the Academic Council and of the two appointment subgroups. As such, he has the opportunity and responsibility to keep the Council informed on the progress of the Affirmative Action Program, and to bring to the Council recommendations for policy or

With respect to vending contracts, it is the responsibility of the Purchasing Office to identify minority and women businesses among potential suppliers and to require the compliance of all suppliers with Executive Orders 11246 and 11375.

APPENDIX A

List of Departments, Offices, Centers and Laboratories having Affirmative Action Plans Office of President, Chancellor, and Vice President (including Assistants, ASPG)

Institute Information Services MIT Press Dean for Student Affairs Athletics Information Processing Services Information Processing Center Program Development Office Office of Administrative Information Systems Dean of Graduate School Office

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Operations Research Center Office of the Dean of Science Biology Chemistry Clinical Research Center Earth & Planetary Science Mathematics Meteorology Nutrition & Food Sciences Physics Alumni Association Faculty Club

Psychology

Sloan School of Management

APPENDIX B

This appendix is an organizational chart of the Massachusetts Institute of Technology and is included in copies of the Institute Plan on file in the locations listed in the Preface.

APPENDIX C-1

Equal Opportunity Committee The Equal Opportunity Committee, a broadly representative Committee of the Institute conprocedural improvements which are of the level or scope to require the Council's approval.

APPENDIX D-1

Added or Revised Faculty Policies

The following revisions and restatements of faculty policies and procedures were adopted as of July 6, 1972, in accordance with Federal equal employment opportunity regulations, and will be included in the revised edition of Policies and Procedures, the Institute guide for staff members:

- 1. An Equal Employment Opportunity statement was added to the revised Policies and Procedures.
- 2. Sections 2.20 and 2.61 of Policies and Procedures were revised to reflect:
 - a) modification of continuous service and age requirements with respect to tenure decisions;
 - b) additional leave of absence without penalty for child-bearing and child-rearing; and
 - c) a new anti-nepotism policy (see below).

"The Institute reaffirms its policy to base appointments and promotions on qualifications and performance.

"In keeping with this policy members of the same family, including husband and wife, are eligible for employment as faculty members as they have been eligible for positions within the other job categories. However, a supervisoremployee relationship shall not prevail in these instances at the time of employment or thereafter, nor shall one member of the family relationship assume for the other the role of advocate or judge with respect to conditions of employment or promotion.

"Where members of the same family are recommended to work for the same supervisor, the arrangement shall be approved in advance by the President and Chancellor. This change in regulations emphasizes the criterion of merit in all Institute appointments and promotions." This policy, while written specifically for faculty members, applies also for other categories of employment.

APPENDIX D-2

Procedure for Grievance

Any person employed⁶ at MIT who believes that the Institute's stated policy of non-discrimination has been violated or that they have been treated unjustly for any reason should have access to a clear means of seeking redress. Such persons should be encouraged to communicate, either in writing or in person, with the Assistant for Minority Affairs or the Special Assistant for Women and Work. Either will initiate an inquiry into all the facts relevant to the complaint and will attempt to resolve the matter to the satisfaction of both the aggrieved individual and the person or organization against which the complaint has been brought. recommending a final decision in each instance to the Chancellor.

This process will be held confidential to the extent that the aggrieved person wishes it. It is hoped in most instances that any person who feels aggrieved will have sought to resolve his or her complaint with the appropriate persons within the department, including the department head, and, in the case of other than academic staff, with the assistance of the appropriate personnel officer before bringing the complaint to the attention of the Assistant for Minority Affairs or the Special Assistant for Women and Work.

APPENDIX D-3

responsibility exercised by the Deans of the Schools into the process, changes have been made in the operation of the process from time to time.

The following information, in the form of a letter, will accompany each recommendation for an appointment and will be forwarded by the department head to his or her academic Dean for the three faculty ranks (including visiting faculty) and instructors:

- 1. Information relating to Department Plan
 - a) The number of women and minority group members in the department and the goals for the next two years.
 - b) The number of women and minority group members in faculty ranks and the goals for the next two years.
 - c) If the goals have not been met, the expected opportunities for additional appointments which will still remain to meet the goals
 - d) Any other information which would help to see the proposed appointment in the context of the plan.
- 2. Search related to this appointment
 - a brief description of the search process for the particular appointment being proposed.

The Dean, if satisfied that the search has been satisfactory, will discuss the proposed appointment and nature of the search with the Academic Appointments Subgroup of the Academic Council.

APPENDIX D-4

Serious Search Policy for Staff Appointments Incorporated July 15, 1972

Prior to making any offer of appointment to a person outside the Institute for a full-time Research staff,⁷ administrative staff, library staff, or medical staff position with a term of one year or more, the department or laboratory head is required to demonstrate that a serious search for qualified women and minority candidates has been made.

To provide the required assurance of a serious search, it has been suggested that a letter accompanying each recommendation for an offer of appointment be forwarded by the department or laboratory head to the appropriate academic Dean or Vice President (or to the Provost in the case of interdepartmental laboratories and centers reporting to him), containing the following information:

- Search Procedure-the methods used to 1. search for candidates for the position being filled and any information known about the size of the pool of qualified women and minority candidates for the position.
- Evaluation of Candidates-the number of women and minority candidates developed as a result of the search and the means used to evaluate them, the results of interviews, whether any offers were made to women or minority candidates, the nature of the offer and the response.
- 3. Information relating to the department Plan
 - a) the number of women and minority group members in the department and the goals for the next two years
 - b) the number of women and minority group members in the applicable staff rank and the goals for the next two years
 - c) if the goals have not been met, the expected opportunities for additional appointments which will still remain to meet the goals
- d) any other information which would help to see the proposed appointment in the context of the Plan
- Dean, Vice President, or the Provost, if

APPENDIX D-5

Maternity Leave Policy

The following policy regarding maternity leave will apply to personnel on the hourly, biweekly, exempt, administrative, and sponsored research staff payrolls.

1. Leave of Absence

Regular full-time or part-time (50% or more of normal work week) employees who have completed their probationary periods of employment are eligible for maternity leaves, regardless of marital status, subject to the conditions below:

a) Regular Leave: A leave of eight weeks, without pay, will be granted provided the employee gives reasonable notice (normally two weeks) and indicates intention to return to work. The employee's job, or a job of equivalent classification and pay, will be restored by the department or laboratory at the completion of the leave unless the position has been eliminated by reduction in force or operational change under circumstances applying equally to other similar jobs in the department. If the former position has been so affected, efforts will be made to find other suitable employment, first in the department concerned and, secondly, within the Institute as a whole.

All benefits may be kept in force, at the option of the employee, provided this is arranged in advance for payment of the normal benefit deductions.

- b) Extended Leave: Leaves without pay of more than eight weeks may be granted at the discretion of the department concerned, for periods up to but not exceeding 26 weeks. Approval of such extended leave carries with it a commitment by the department to restore the same or an equivalent job at the end of the leave period. Benefits will not be continued beyond the eightweeks period provided under the regular leave policy unless an exception is requested in writing by the Department Head and approved by the Provost, Dean or Vice President concerned and by the Personnel Office.
- 2. Use of Sick Leave for Child Bearing

A woman who has been granted maternity leave will be allowed to apply her available sick leave to a period of ten days beginning with the day she enters the hospital for the purpose of child birth. Additional sick leave may be authorized if she remains disabled after this period because of a serious complication resulting from the birth. Employees who request additional sick leave will be required to furnish medical evidence as to the nature and extent of the disability involved. A check for any eligible sick leave will not be issued until the employee returns to work.

APPENDIX E-1

Academic Departmental Procedures for Affirmative Action

Each academic department, center, or laboratory has developed its own Affirmative Action Plan for academic positions, consistent with the Institute goals and the procedures outlined below:

1. Each department will continue to set goals and timetables for the appointment of minorities and women in academic positions. These goals will be based on an analysis of the present and projected pool of candidates and on departmental needs and be set every two years. 2. Each department head will periodically inform all faculty and staff in the department of the policies, procedures, goals, and progress of the department's Affirmative Action Plan. 3. Annually, between June and August, each department will review and evaluate its plan in depth to determine the progress made toward achieving its goals. Problem areas will be identified, and the plan will be updated in terms of specific correctional action. In seeking to fill academic positions, every ef-4. fort will be made to recruit in such a way that women and minorities will have adequate opportunity to be considered. (Specifically, the practice currently in use by some departments-that of identifying a qualified candidate, then finding a position for that candidate-will be encouraged.)

Serious Search Policy for Faculty and Other Academic Staff, Incorporated December 10, 1971

The extension of the Affirmative Action Plan for Equal Employment Opportunity issued by President Howard W. Johnson in May, 1971, requires the following policy in the appointment of women and minority group members to faculty and other academic staff appointments:

"Prior to making any new academic staff appointments each year, department heads are expected to demonstrate to the Equal Opportunity Task Force for Faculty and Staff that a serious search for qualified women and minority candidates has been made."

To make this policy more effective and to bring

6. This procedure is not intended to apply to employees who are represented by a labor union. Collective bargaining agreements applying to these employees include grievance and arbitration procedures and equal opportunity provisions.

satisfied that the search has been satisfactory, will discuss the proposed appointment and nature of the search with the Staff Appointments Subgroup of the Academic Council.

Recruitment for Research (DSR) and administrative staff positions is often carried out either exclusively by the Personnel Office or jointly with the department offering the position. In such instances, the search documentation by the department should include an account of efforts to recruit women and minority applicants through the Personnel Office. Additional information on search procedures may be obtained from the Office of Personnel Services.

7. Certain research appointments that are immediate post-doctoral appointments requiring highly specialized knowledge and limited to 2 years or less are reviewed on an individual basis by the appropriate Dean or Vice President, prior to offer of appointment and by the appropriate Subgroup quarterly.

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Also, each academic department, with its School, will compile and continuously update a list of women and minorities who are potential candidates, including candidates from among MIT alumni, students, and current employees, as well as candidates identified through communication with professional societies, graduate schools predominantly black and women's institutions, and other appropriate sources. This search should include the use of professional journals and other media, as well as educational search organizations and professional organizations that reach minorities and women in academic fields appropriate to the programs available at the Institute. The use of exchange programs and summer institutes will be explored in an effort to widen the search beyond traditional channels.

- The Institute employment policies and practices shall not prohibit the simultaneous employment of two members of the same family.
- 6. There will be full opportunity for staff appointments, including tenured appointments on the faculty, for persons who may be able to devote only part of their time to their academic or staff duties during their child-rearing years.

APPENDIX E-2

Affirmative Action Procedures for Non-Academic Employment

Each organizational unit at the Institute has developed its own Affirmative Action Plan, which will be consistent with the following policies and procedures:

- Each organizational unit will continue to set goals and timetables for the employment of minorities and women in each non-academic job classification. These goals will be based on an analysis of the present and projected number of qualified and qualifiable minorities and women in MIT's potential recruitment area, as well as on MIT's projected employment needs and be set every two years.
- 2. Each department will review its plan in depth and will evaluate the progress made toward reaching its goals on a yearly basis (between June and August, as described in Appendix E-1, item 3).
- 3. In seeking to fill positions, vigorous and systematic efforts will be made to ensure that women and minorities have adequate opportunity to be considered, based on the following recruitment and hiring procedures:
 - a) Records will be maintained in the Personnel Office of the receipt and disposition of all applications, and a summary will be forwarded to the EEO Officer and the Special Assistants for Women and Work and for Minority Affairs on a quarterly basis.
 - b) At all major locations where interviews are conducted, notices shall be displayed that MIT is an "Equal Opportunity Employer," as prescribed by law.
 - c) Employment advertisements have and will continue to be run regularly in publications with wide circulation to minorities and women. An ongoing evaluation of the effectiveness of these ads will be made by the Personnel Office. It will be a standard procedure to use the phrase "An Equal Opportunity Employer" in all advertisements and job postings. Whenever advertisements are placed in non-minority publications, the phrase "We are Actively eking Minority and Women Applicants shall be used in the text or the ad. d) In those areas where there is underrepresentation of minorities and women because of a history or pattern of exclusion and/or discrimination, preference in the applicant referral and selection process will be given to minority or women applicants if two candidates are equally qualified according to the concept of merit expressed in Section II, item 6.8 Procedures have been instituted, and will e) be periodically reviewed, to ensure that minorities and women (as well as other employees) are considered for promotion or upgrading before a position is filled from the outside.

- f) A minorities and women applicants' file will be established in the Personnel Office. A similar career development file of those women and minorities seeking transfers or career advancement will be established. (This file will be available only to the employment interviewers in the Personnel Office.) A search of this file will be required as the first step in identifying candidates for all new appointments and other vacancies, temporary or otherwise.
- g) Vacancies for all non-academic positions will ordinarily be posted, 9 and no offers or commitments may be made before the end of an application period which allows for a reasonable response to the posting by interested applicants; however, reasonable exceptions, such as, for example, in cases of internal reorganization, will be permitted. Such positions will be announced initially to the MIT community by the Personnel Office through publicizing all vacancies in Tech Talk and through posting them in a conspicuous place in the Personnel Office reception area. Vacancies will also be posted in other areas, when appropriate. All such positions and openings will also be announced to agencies in the community where minority and women applicants are registered.
- h) Supervisors will be apprised that positions are to be made equally accessible to all qualified candidates for job categories that have traditionally been preponderantly occupied by women and/or minorities.
- i) The supervisor will make the final hiring decision and will send the person's name to the personnel interviewer. Reasons for not hiring minorities and women deemed qualified or qualifiable by the personnel interviewer will be fully explained by the supervisor on the referral forms.

The personnel interviewer shall determine whether the requirements of the law and the policies of the Institute have been met, with respect to both external appointments and internal transfers. If so, the Personnel Office will process the appointment document.

No employment commitments can be made until these procedures have been followed.

- j) If the personnel interviewer suspects noncompliance with the Affirmative Action Plan, the matters will be reviewed with the Personnel Services Director who will resolve the matter with the department head before final personnel action is taken.
- k) All supervisors will be apprised that compliance with the policies of the Institute's Affirmative Action Plan is a responsibility for which they will be held accountable.
- 4. Promotion policies and practices will be administered in such a way as not to discriminate against minorities and women. In many cases, special efforts may be required to ensure that minorities and women are not at a disadvantage:
 - a) In some instances, a minority or woman applicant may not be fully qualified, but is judged to be highly qualifiable. Whenever possible, opportunity for "on-the-job" training will be provided.
 - b) When an employee applies for another position in the same department or elsewhere at MIT for which he or she is currently qualified, no covert or overt barriers will be placed in the way of his or her application for the position.

nated to the MIT community through Tech Talk and other means, as appropriate. Employees will be continuously encouraged, through both departmental support and individual initiative, to investigate and enroll in any Institute or off-campus programs that are related to the employee's career development.

APPENDIX E-3

Student Related Affirmative Action Procedures
1. Admissions

In 1968 special efforts to recruit minorities, particularly Blacks, were begun at MIT. These efforts will continue and will be augmented by special efforts to recruit women. 10

- a) All-persons involved in the process of reviewing applications will be kept aware of MIT's equal opportunity policies regarding admissions.
- b) Admissions information and other official publications sent to prospective students, high-school counselors, and others will tinue to reflect and emphasize the Institute's equal opportunity policy.
- c) Special admissions pamphlets and brochures will continue to be produced and distributed to assist in the recruitment of minority students.
- d) Admissions criteria for minority students will be reviewed periodically to help ensure that no minority applicant who has the potential for academic success at MIT is refused admission.
- e) The selection teams reviewing applications will continue to include minority and women faculty and staff.
- f) The Admissions Office, the MIT Alumni Office and the Educational Council, and other groups and offices engaged in recruiting students will continue to make special efforts to locate and recruit minority and women students; continuing efforts will be made to increase the number of women and minority Educational Counselors.
- g) Minority and women prospective students will be counseled on the full range of opportunities at MIT, particularly those fields in which they have been conspicuously underrepresented.
- h) The Institute will continue, when feasible, to invite prospective minority and women students from high schools near MIT to the campus for first-hand familiarization.
- i) Minority and women students at MIT will continue to aid the Institute in recruiting women and minority prospective students through personal contacts and, where appropriate, through visits to their hometown high schools.
- j) A Task Force on Educational Opportunity for Minorities, which was established in 1968 to develop new programs for the recruitment, admission and support of minority students at both the graduate and undergraduate levels, will continue to function.
- k) In 1972 a Committee on the Needs of Women Students, convened by the Dean for Student Affairs, submitted a report on the status of women students at MIT. Though the Committee has since disbanded, attention will continue to be given to the implementation of policies and procedures recommended by that report.
- 1) MIT will continue to support a Talent

 To be monitored by the Personnel Office on the campus and at Lincoln Laboratory.

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- c) Possible career ladders for non-academic positions will be defined and disseminated as appropriate.
- 5. The Institute will initiate and continuously review career development programs that will provide upward mobility for its employees.

The following programs are now in operation:

a) Tuition Assistance Program

b) Technical Skills Training

c) General Office Practices

d) Administrative Development Program

e) English as a Second Language

f) GED Program

The conditions of eligibility for the various job training and career development programs will be clearly specified and dissemi-

 Posting and bidding requirements for unionized employees will be as specified in union contracts.

- Search Program in Cambridge and to maintain an Upward Bound Program in cooperation with Wellesley College.
- m) MIT's recruitment efforts with respect to minority students will include an intensive search for prospective students who meet MIT's normal admissions criteria, as well as those who have potential but who need additional academic preparation (such as that provided by Project Interphase).
- n) A committee of women students, with the help of the Dean for Student Affairs Office, has prepared a booklet describing life at MIT for women, which will be used to aid in recruiting prospective women students.
- 2. Financial Assistance
 - a) All services provided by the Financial Aid Office are available to every student without regard to race or sex. Strong efforts

10. MIT has been coeducational since 1872 and has enrolled minorities, including Black Americans, since 1897. will be made to ensure that there are on the staff persons, including minorities and women, sensitive to the special needs and circumstances of minority and women students.

b) Financial assistance to all students, undergraduate and graduate, will continue to be provided in such a manner as not to discriminate against applicants on the basis of race or sex. All eligible minority and women students are encouraged to participate in scholarship, loan, and work-study programs.

3. Student Support Services

- a) The Institute will continue to encourage minority and women faculty, staff, and upperclassmen to help provide supportive services for minority and women students by serving as freshmen advisors, tutors, and informal resource personnel.
- b) Although all services in the Dean for Student Affairs Office are available without regard to race or sex, strong efforts will be made to ensure that there are on the staff persons, including minorities and women, sensitive to the special needs and circumstances of minority and women students.
- c) An Assistant Dean for Student Affairs will continue to serve, in part, as an advocate for the needs of undergraduate women.
- The Institute will continue its intensive efforts, through such programs as Project Interphase, to make educational opportunities available to those minority group members (and others) whose academic preparation differs somewhat from MIT's usual admission criteria. Such programs will be reviewed on an annual basis to help ensure that they are meeting the students' expressed needs. Project Interphase includes: 1) search and selection procedures directed toward bringing such people to MIT; 2) special introductory academic programs, including counseling, during the summer preceding the freshman year; and 3) special arrangements for financial assistance, as required.
- 4. Student Activities and Housing
 - a) Rooms or apartments in Institute-supported housing are made available to all students in a non-discriminatory manner. There is no restriction on admission of women based on available campus housing.
 - b) Landlords participating in the Institute's off-campus housing program must submit a non-discriminatory pledge issued by the Massachusetts Commission Against Discrimination before their offerings may be listed with the Community Housing Service. Any realtor who refuses to sign the pledge or who has a just cause complaint issued against him or her will be ineligible to have his or her rentals listed in the office files. Complaints presented to the Housing Office will be turned over to the Massachusetts Commission Against Discrimination for appropriate action.
 - c) Though the Institute encourages all of its students to participate in the wide range of social and cultural activities sponsored by the Institute, special efforts will continue to be made to help ensure full participation in Institute life by minorities and women.
 - d) All social clubs and fraternities supported by the Institute will be required to submit a written non-discrimination pledge to the

- a) Each employer seeking to hire MIT graduates is requested to:
 - i. provide proof that the organization is an equal opportunity employer as defined by Executive Order 11246;
 - ii. whenever possible, send minority and/or women recruiters who are familiar with the employer's priorities and commitments with respect to equal opportunity; and
 - iii. hire undergraduate minority and women students for summer internship programs when possible.
- b) Each company or business representative inquiring about MIT graduates will continue to be apprised of MIT's equal opportunity placement procedures.
- c) Companies are encouraged to distribute literature that expresses their commitment to equal opportunity for minorities and women in all of their job categories.
- d) The Placement Office will continue to work with the Graduate School Office, the EEO Officer, the Special Assistants for Women and Work and for Minority Affairs and the Personnel Office of the Institute to keep minority and women graduates informed of career opportunities at MIT and at Lincoln Laboratory.
- e) The monthly schedule of visiting company recruiters will be circulated to academic and administrative offices and posted on bulletin boards in areas frequented by minority and women students.

6. Graduate Student Support

In cooperation with the Graduate School Office and the Committee on Graduate School Policy:

- a) All academic departments offering advanced degrees will be encouraged to recruit minority group members and/or women to the faculty from their graduate programs and will be expected to monitor continuously their progress. Departments should appoint such students to positions as research assistants and teaching assistants and should make their policy known to all of their faculty members.
- b) Present admissions and financial aid policies will be reviewed and modified, where appropriate, to be sure that they do not discriminate against women applicants with children.
- c) All information on grants, loans, scholarships, and fellowships will be posted in a manner accessible to all inquiring students.

APPENDIX F

Dissemination of Affirmative Action Plan

The preface to the Institute Affirmative Action Plan outlines the major dissemination of the Plan through publication in *Tech Talk*. Additionally a reference copy of the plan is available in each Institute office. Offices with special responsibilities regarding the Plan (i.e., Administration and Personnel, office of Women and Work, office of Minority Affairs, Information Office) will have copies available for general distribution upon request.

Each department at the Institute has listed in its own departmental plan the method of dissemination to be used in informing persons in the department about the plan. Each department, center and laboratory at the Institute had their plan reviewed by members of the Institute administration including suggestions for dissemination of the plan to all employees. These major review meetings will be followed by periodic reviews through the efforts of the EEO Officer and the Special Assistants for Minority Affairs and for Women and Work. This policy has already been incorporated in the Secretary's Handbook and will be included in the Institute Policies and Procedures Manual and the Supervisor's Manual when revised. Revisions of these handbooks should be accomplished in the next fiscal year.

All recruitment sources receive a Position Available Listing which includes all non-academic openings at the Institute. The introduction to this list is reproduced below and indicates the Institute commitment to Affirmative Action. The majority of the recruitment sources specialize in the placement of women and minority candidates. (The total list of recruitment sources is available for review at the MIT Personnel Office). These sources are continually reviewed for commitment and degree of success in our Affirmative Action efforts.

"Enclosed is the new, complete listing of all non-academic employment opportunities currently available on the MIT campus. You will note an inclusion of many high-level administrative and research staff positions, as well as the clerical and support positions ordinarily listed. Similar listings will be sent to you weekly. We ask that you share them with your colleagues and branch offices.

This list has been circulated throughout the MIT community for at least a week before it reaches you. This is in keeping with our Institute policy for making all career development opportunities available first to our own employees. Consequently, when you have interested candidates to refer to positions listed, please call the Personnel Office at 253-4251 to verify the vacancies and to arrange appointments for your applicants.

Concurrent with our responsibilities to our present employees is our deep and serious commitment to affirmative action in the employment of minorities and women. We look to the support of you and your services to help us achieve our goals."

Section VI of the Affirmative Action Plan describes the policy for construction contracts, vending and procurement. In addition a letter is being sent to our entire list of active suppliers (approximately 5000) advising them of our Affirmative Action Program and stating the action required of them as an MIT supplier. The Purchasing Office will soon have available for review, a list of current suppliers and their statement of understanding of our commitment to Affirmative Action.

APPENDIX G

Responsibility for Affirmative Action Plan Implementation

The President and the Chancellor have designated the responsibility for monitoring the progress of MIT's Affirmative Action Program, to the persons listed in the preface of the Plan. Additionally, there is a common responsibility of many members of the Institute community in implementing the Affirmative Action Program, particularly in the employment area. The following narrative elaborates on the levels of authority at the Institute, shown in the organization chart in Appendix B, as they relate to employment decisions.

- 1. Non-Academic Employment
 - General Authority
 - a) Academic or administrative department heads, laboratory or center directors. Hiring authority for non-academic positions rests with the heads of the 90 some academic and administrative departments, laboratories and centers. This authority includes the hiring of adminis-

Office of the Dean for Student Affairs.

- e) The Institute will encourage women students to participate fully in athletic activities of their choice.
- f) The Athletic Department has appointed a Director of Women's Athletics (increasing the number of full-time female instructors to two) and recently published a booklet entitled "Athletics for Women at MIT."
- g) The use of MIT athletic facilities will continue to be made equally available to all members of the MIT community, regardless of race or sex.
- h) The Institute will continue its policy of not recruiting any student because of his or her athletic capabilities.

5. Student Placement

It is the policy of the Placement Office to ensure not only the equitable treatment of graduating minority and women students in finding employment, but also to help ensure that employers using the services of the Placement Office recruit graduating students for all positions in their company without regard to race or sex. The intent and substance of the plan has been discussed extensively with members of the Academic, Faculty and Administrative Councils and is a periodic agenda item for these groups.

The Manager of Union Relations in the Office of Personnel Relations and the Assistant to the EEO are engaged in a series of individual meetings with union officials to inform them of Institute policy with regard to Affirmative Action. The collective bargaining agreements with the major unions representing employees at MIT will expire on July 1, 1974. Negotiations for new agreements will commence in the Spring of 1974 and the issue of a nondiscrimination clause in the agreement and review for any possible discriminatory aspects will be raised at that time.

All documents relating to policy instruction or guidance will include a statement of policy regarding Affirmative Action condensed, where appropriate, from the Institute Affirmative Action Plan. trative, exempt, research (DSR) staff, secretarial/clerical, hourly and union employees.

b) Personnel Office

The Personnel Office has authority for initial interviewing, screening and referral of candidates to Institute supervisors for all categories of employment mentioned above. Nine (9) Personnel Officers and two (2) Personnel Assistants refer applicants for positions available. Personnel Officers in the interviewing role will process documentation on employment only if requirements of law and policies of the Institute have been met.

c) Dean or Vice President in Charge of Area The concurrence of the Dean or Vice President having the responsibility for the specific unit doing the hiring is required for all "additional" appointments. This concurrence is not required for routine re-

Affirmative Action Plan, March 1, 1974, Page 7

placement resulting from turnover. Special Authority

- a) Staff Appointment Subgroup of the Academic Council
 - Approval for the administrative and Research (DSR) Staff categories of nonacademic employment rests with this subgroup if a full-time appointment is to be made to a non-minority or male from outside the Institute. Such approval is based upon a review of the department's documentation of serious search for women and minority candidates to fill the position. (See Appendix D-4 of the Affirmative Action Plan.)
- b) Executive Committee of the Corporation The Executive Committee of the MIT Corporation has certain responsibilities regarding appointments of Research (DSR) Staff and Administrative Staff appointments. This group has final approval on all staff employment of persons whose salary exceeds stipulated salary levels.

2. Faculty Employment Authority General Authority

a) Academic Department Heads

The effective authority for appointing Faculty members, (Professors, Associate or Assistant Professors) rests with the Department Head in each department, often in consultation with other members of the faculty in the department, and with the concurrence of the Dean of the School. Since the procedures differ by department, the details are left to the individual departmental Affirmative Action Plan. The appointment of Professors and Associate Professors further requires the approval of the Academic Appointments Subgroup of the Academic Council.

Special Authority

a) Academic Appointments Subgroup of the Academic Council

As a special procedure, concurrence of this

group regarding the adequacy of the search for minority or women candidates prior to an offer of a full-time appointment to any of the three ranks of Professor (including Visiting) or to Instructor. (See Appendix D-3 of the Institute Affirmative Action Plan.)

- b) Executive Committee of the Corporation The Executive Committee of the Corporation has certain responsibilities regarding appointments of Faculty. This group has final approval on the appointment of all Institute Professors and Professors as well as appointment of all ranks of faculty whose salaries exceed a stipulated amount.
- 3. Academic Appointments (other than Faculty) General Authority
 - a) Academic Department Heads, Laboratory and Center Directors

Appointment authority for Academic Appointments such as Research Associate, Postdoctoral fellow, Technical Assistant, etc. rests with the head of the academic department, laboratory or center in which the appointment is being made. Because of procedural differences in appointment process, the details must be left to individual departmental Plans. These appointments require the concurrence, as appropriate, of the Provost, the Vice President for Research or the Academic Dean of the School.

Special Authority

a) Staff Appointments Subgroup of the Academic Council

Approval for certain categories of Academic appointments (other than faculty) rests with this group in terms of Affirmative Action objectives. The "serious search" process outlined in Appendix D-4 of the Institute Affirmative Action Plan includes such academic staff categories as Administrative Officer, Administrative Assistant, Librarian and Medical Staff member.

b) President/Provost and/or Vice President for Research

The appointment of Senior Research Associates and Senior Research Scientists requires the concurrence of the President. In the case of appointments of other academic staff in the various research laboratories and centers, the concurrence of the appropriate senior office, either the Provost or the Vice President, Research is required.

4. Accountability for Affirmative Action Policy Implementation in Employment

A process of review for possible violations of the Institute policy of non-discrimination is described in Appendix D-2 of the Affirmative Action Plan. Additionally, Appendix E-2 specifies a procedure to be used for any failure to adhere to EEO policies and procedures in non-academic hiring, specifically, "if the Personnel interviewer suspects noncompliance with the Affirmative Action Plan, the matter will be reviewed with the Personnel Services Director who will resolve the matter with the department head before final action is taken."

MIT has no formalized "disciplinary procedures" for failure to adhere to any Institute policies and procedures. Supervisors are expected to adhere to all policies, however, and when violated, appropriate action is taken through normal channels of supervision. Input on problems of supervision come from many sources; employees, colleagues, other offices, Personnel Office, etc. Action on improper supervision or failure to adhere to EEO policy rests with the department head and/or the responsible senior officer. The same policy will apply for failure to adhere to EEO policy and procedures.

APPENDIX H

Statistical summary of MIT Representation of Minorities and Women as of December 31, 1973 and Goals projected for July 1974 and for July 1975

MIT Reports to Office of Civil Rights HEW

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MIT Employment Goals for July, 1975
(Projections Aggregated from Department Goals set in April, 1973)

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*Goals not totally comparable with data from past years or employment records in December 1973 because of changes in minority definition

**"Other" category on campus, included in Institute Total

Page 8, Affirmative Action Plan, March 1, 1974

(Institute)

Martha Donahue Named AFROTC Unit Commander

Martha Donahue of Milton, Mass., will soon become the first woman at MIT to have 40 Air Force ROTC cadets marching around duPont Athletic Center at her command.

The same week that the junior in management liberated her town's militia by being the first woman to



Cadet Martha Donahue

join, she was also named cadet corps commander by Air Force ROTC Director LT. Col. Victor B. Goodrich. She is the first woman in the history of ROTC at MIT to hold the position of authority.

Miss Donahue says her reasons for joining ROTC had little to do with "intentionally breaking down male/female sterotypes."

"My promotion from flight commander to cadet corps commander," she said, "will give me organizational and administrative responsibility in a job earlier than could ordinarily be expected in the

Grades Needed

Members of the teaching staff were urged recently to comply "with the spirit as well as the letter" of a faculty resolution requiring that spring term grades be submitted to the Registrar as early as possible but no later than 4pm Friday, May 24.

In a letter to the Instructing Staff, President Jerome B. Wiesner and Professor Elias P. Gyftopoulos, chairman of the faculty, called for early submission of grades so that the faculty can avoid injustices and errors in awarding degrees because of the tight schedule at the end of this term.

'Nova' Features Faculty Member

"Fusion-the Energy Promise"

management field."

Last summer at Tyndall Air Force Base in Florida, where male cadets outnumbered women by four to one, Miss Donahue was required to hold control of a jet fighter plane and "go first" in a simulated parachute jump training session as part of her ROTC junior summer camp program.

After her commissioning as second lieutenant next year, she hopes to be assigned to Patrick Air Force Base, also in Florida, to work in research and development management.

Other offices Miss Donahue has held since she joined ROTC as a freshman include executive officer of the Company C-12 Pershing Rifle Association, information officer for the cadet corps, commander of the Arnold Air Society at MIT and commander of the now defunct Angel Flight society for Air Force women. She was promoted to staff sergeant in her sophomore year.

Miss Donahue, who is the oldest of six, claims she inherited her "ability to make up her mind" from her father, an alumnus of MIT's Class of 1944 and a member of Course XV, like his daughter.

An active participant in Milton town politics, Miss Donahue was recently elected town meeting manager but lost by one vote in a recount. Her friends' analysis of her campaigning effort, she said, was similar to their reaction when she wears her Air Force uniform to class:

"You've got guts, Martha," they tell her.

NCAA Invites Baseball Team

The MIT varsity baseball team, winner of 15 of its 22 regularseason games, has been invited to compete in the National Collegiate Athletic Association's regional Division II tournament which begins Thursday, May 23, at Princeton University in New Jersey.

MIT, fresh from its best season in history, will oppose New Haven College in the double-elimination tournament. Other schools in the regional competition are C.W. Post College, Ithaca College, Adelphi University and Montclair State College.

The winner of the regional tournament will go to the national championships which will be held from June 1-5 at MacMurray College, Jacksonville, Ill.

The MIT team, coached by Francis C. O'Brien Jr., included victories over Boston College, Northeastern and Tufts in its 15-7 season.

The team's leading hitter is Dave Tirrell, the second-baseman. A feature story in the May 15 issue of the Boston Globe referred to Tirrell as "MIT's mighty macer" and recalled the astonishment of Coach O'Brien when Tirrell first reported for practice three years ago. He then stood 5 feet 4 and weighted 125 pounds.

Norwegian Artist Carl Nesjar

To Execute Picasso Sculpture By WILLIAM T. STRUBLE

Staff Writer

One of the late Pablo Picasso's great sculptures—a nude bather heretofore clothed in relative obscurity as a cardboard model—will come to life this summer at the hands of Carl Nesjar, Norwegian artist and fellow at the MIT Center for Advanced Visual Studies.

Fellow at CAVS

Sometime in August, Nesjar will go to Chicago to begin work on "The Bather," a 30-foot-high construction of reinforced prepacked concrete that Nesjar will engrave by sandblasting.

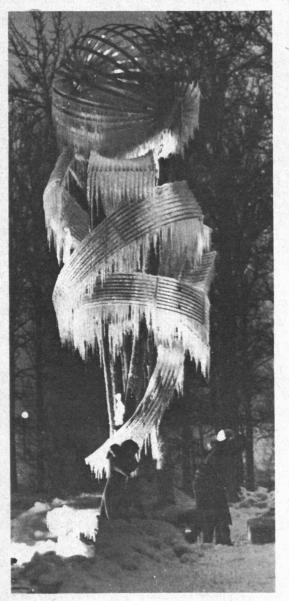
It will be the 17th concrete sculpture executed for Picasso by Nesjar, who introduced Picasso to the technique in 1956 and who, because of his faithfulness to Picasso's designs, was given exclusive rights to carry out Picasso's works in this medium.

"The Bather" will grace a pool in a woodland setting specially constructed for it in Gould Center, a \$30 million commercial and recreational development covering 40 acres in the Rolling Meadows section of Chicago's northwest suburbs.

For the project, Nesjar will bring two mouldmaking specialists from Norway and will import some 20 tons of black granite aggregate from a quarry just outside his hometown of Larvik in Southeast Norway. After the mould is filled with aggregate, a silicate and aluminum concrete blend will be pumped in from below. Once the concrete has hardened, Nesjar will go to work with his sandblasting hose.

The difficult work has both physical and artistic perils, according to Nesjar. The sand jet at a pressure of about 100 pounds could, in a slip, cut off a hand if unprotected. Blowback of the sand scratches and blurs goggles, which must be changed in from 10 to 25 minutes. And, because the sand stream cuts quickly, it must be carefully controlled to avoid errors in design.

"The Bather" is one of a series of sculptures that Picasso evolved from an oil painting he composed as a set of variations based on Manet's "Dejeuner sur l'Herbe." Four of the figures, for which Picasso specified park settings, are in the garden of the Museum of Modern Art in Stockholm. For many years "The Bather" resided as a



model in Denmark's museum of modern art, the Louisiana Museum, near Copenhagen, for lack of funds to execute it.

After "The Bather" is completed, Nesjar will begin work on a 10-story-high Picasso abstraction, "Head of A Woman," for the campus of the University of South Florida, in Tampa, if a fund-raising drive there is successful. Because of its size, that project has already required lengthy consul-



Drawing from the Chicago Tribune indicates size and setting of Picasso sculpture to be executed by Carl Nesjar in Chicago's Rolling Meadow's section.



Picasso and Nesjar together at Notre Dame de Vie, Mougins, France, in 1962.

tation between artist and engineer, balancing the

is the title of a science show with narration and commentary by MIT Professor of Nuclear Engineering David J. Rose, to be shown this Saturday, May 25, on WGBH-TV, Channel 2, at 6pm.

The program, one segment of the BBC-WGBH-produced television sciences series "Nova" was first shown nationally on the Public Broadcasting Network on Sunday, May 19, and repeated Monday, May 20.

In the program, which traces the growth of research on thermonuclear fusion as an energy source, Professor Rose tells of the historical development of the process and its international nature.

Chamber Concert

The Chamber Music Society will give a concert of works by Mozart and Schumann, 3:30pm, Friday, May 24 in the Music Library. "Now he's a 5-8, 150-pounder and he's our leading hitter with a .388 average. You name it and he does it," the Globe quoted Coach O'Brien.

Kepes to Speak

Gyorgy Kepes, director of the Center for Advanced Visual Studies will speak with Rudolf Arnheim, professor of the psychology of art at Harvard on the topic "Are the Arts Alienated from Society?" 8pm, Wednesday, May 22 at the First Parish Church in Cambridge, 3 Church Street, Cambridge. The forum is open to the public, free of charge.

In its winter mode, the glow of a lighted yearround fountain by Carl Nesjar shows the way for passersby on a somber evening in Norway. The fountain, 25 feet high, is at the Norwegian Agricultural University near Oslo. • by Carl Nesjar. demands of aesthetics against the dictates of structure.

For example, to achieve adequate wind bracing, the Florida piece will incorporate a sevenstory solid steel beam 12 by 12 inches embedded three stories into the concrete foundation.

At MIT, Nesjar is working on his own projects large and intricate "ice fountains," or "yearround fountains,"—some lighted—that vary in form, mood and texture with the seasons. One of them is intended for the same park in Rolling Meadows.

Nesjar is also a photographer, principally of abstractions found in nature, whose work has been acquired by other artists and museums.

Although Norwegian, Nesjar is completely at ease in the English-speaking world with a total fluency acquired largely in his youth when his father was supervising engineer for the construction of, among other things, the tower of the Chrysler building in New York City.



Ads are limited to one per person per issue and may not be repeated in successive issues. All ads must be accompanied by full name and Institute extension. Only Institute extensions may be listed. Members of the community who have no extensions may submit ads by coming in person to the Tech Talk office, Room 5-111, and presenting Institute identification. Ads may be telephoned to Ext. 3-3270 or mailed to room 5-105. Please submit all ads before noon, Friday, May 24.

For Sale, Etc.

Tires, 2, E78x15 (7.35x15), prac nw, \$10 firm. John Golis, x182-183-201 Bed Fl Facil.

Graduating, furn: dbl bed, \$40; antiqued dresser w/mirror, \$40; sofa, \$25; desk, \$10; shag rug, odd shape, orig 9x12, \$15. Gary, x3-1639.

Scott 300-C fm rcvr, 35/35 rms, \$150 or best; Schwinn 5 spd, \$35; kryptonite lock, \$7.50. Glenn, 491-6963.

Miracord 50 H Mk II trntbl, exc cond, \$135. Call, 723-2986, 7-11pm.

Collier baby carriage/carbed/stroller, lk nw, \$25, Lee, 494-8597.

Marine trans, Paragon mdl JP1D, best over \$10; Bar marine Willy's wtrcooled maniford, best over \$6. Call, exh 321-1893, aft 5:30pm.

EPI 100's, \$60ea; xtra long full sz matt, \$55. Dave, 738-5657.

F 3 spd bikes, 2, \$35/ea; '71 cabin tent, 10x11, v little use, Sears price \$85.49, \$45. x3-2720.

Parfait glasses, 8, b nw, \$6.50. Mrs. Bishop, 868-9066.

Tennis rckt, Wilson T-2000, almost nw, 4 5/8 grip, med wt, \$25. Alan, 963-6909.

Nw Volvo tire, 185x15, mtd '68 wlh, \$5. W.E. Kelly, x 3-4493.

Chickering spinet piano, \$500 or best. Robin, x8-4566 Draper.

Martha's Vineyard, Gay Head, home sites, wd & open land, w/brook & stone walls, exc view Elizabeth Is. Dr. Koltun, x3-1555.

M 3 spd Eng-made bike, gd cond, ask \$40. Vicki, x3-4849.

Med-Ital BR set incl matt, yr old, \$500. x 3-2935.

Sofa, conv to bed; mtch rocking chr; hutch, gd storage; sharp looking furn but am moving. Call, 277-4553.

B nw Remington 600 super hand-held dryer, \$10. Liz, x3-6162.

Contemp lamps, 2, 261/2" hi, lk nw. x8-4061 Draper.

Regrig/frzr, 2 dr, cprtne, 12 cu ft, nw cond, \$75. Leon, x3-2991.

Dresser, \$15; bkshlv, \$6. Don, x8-1282 Draper.

Scuba equip: backpak, gd cond, \$15;

HP-35 w/security cradle, perf cond, all acces, \$190. Neil, 254-6669, evgs.

\$650. x3-3367.

incl

268-4203.

snows, \$200 or best. Call,

'66 Falcon, 6 cyl, 200 cu in, 2 dr, std,

running but nds work, any reas offer. Dennis, x8-3333 Draper.

'66 Dodge Coronet, auto, r, p st, gd run cond, best. Soon, x7637 Linc.

'66 Merc Comet conv, yel, gd body &

int, nw parts: mstr cvl, top, valve job

but nds work, great for car buff, \$170

'66 Volvo 122S, B18D eng, 24+ mpg,

body exc cond, nw paint, 7 gd tires

incl snows, nds some eng work, forced

'67 Volvo 122S, 70 K, amfm runs lk

'67 Ply, ac p st & br, 4 gd tires, 2 snows, 60 K, 14.5 mpg, exc cond, must

sell, lving cntry, \$550 or best. Call,

'68 Pontiac, v gd cond, exc run cond,

'68 VW bug, exc run cond, ac, nw br, nds body work, 2 snows, \$350. David,

'69 VW beetle, exc cond, std, nw tires, r, gas heater, \$950; 4000 BTU ac, \$60. Call, 864-4417.

'69 Austin America, runs great, dent rt

fender. Call, 628-0742 aft 9pm, or lve

'69 Cortina wgn, 70 K, many nw parts,

2 snows, gd gas mileage, some dents,

\$800 or best. Michael Kirson, x3-4843.

'70 Olds Cutlass Supr, 2 dr conv, sm 8

cyl, p st, auto, rear tint glass, exc mpg,

'71 VW sqbk, 40 K, 28 mpg, exc cond,

'71 Fiat 840 Spyder conv, 32 K, amfm

Blaupaunk, Abarth exh, exc cond, orig owner, Michelins, luggage rack,

'72 Pinto sta wgn, brn, roof rack, 30 K,

nw tires, ask \$1,900. Don, x7606 Linc.

'73 VW superbeetle, semi-auto, 12K,

used every day, some body damage, \$1,950. Call, 267-7416.

'71 Honda 750 cc, has sissybar, pad, crash bar, chain inlock, 2 hlmts,

Wixom faring, lots more, \$1,595. Guy,

'73 Honda CB350, gold, beaut cond,

'73 Honda 350, nw March, 350 mi,

'73 Honda CB350, gold, exc cond,

many xtras, \$995. Call, 247-4198, aft

Why not ride mtrcycl to sch? Eco

transp is yours w/'68 Lambretta, perf city bike, no pkg problem, traffic jams,

many nw parts, ready to ride, \$190.

All, sub 6/1 or 15 w/Sept opt, bright,

comf 2 BR, furn, etc, \$200. Mel,

All, 2 & 3 BR apts, w/pkg, nr bus Cent

Sq, \$200, \$250; W Newton, sgl home,

gd loc, exc cond, 2 car gar, \$39,000. J. Lee, x8-4567 Draper.

Arl Hts, brick 4 BR hse, 1½ B, gar, unfurn, nr T, 9/1/74-8/31/74, \$380 +

h & util. Call, 643-3739, 7-9pm.

3.5K, \$975. Rod, 247-8048.

\$1,000. Rod, x5879 Linc.

x8751 Dorm, morns.

Housing

x3-1870.

\$1,750 or reas offer. x3-4257.

\$1,750 or best. Call, 429-4107.

John, x7202 Linc.

x5597 Linc.

6.

msg Guillermo, Rm 7-331.

nw br, lving states, \$350. x 3-3356.

nego, x3-6596, 10am-3:30pm.

to sell, ask \$425. x3-6229.

top, \$950. x3-3194.

494-8446

x3-3880.

Guitar, nrly nw, \$20; shop cart, gd cond, \$3. Chan, 491-0636.

Free (almost) 3,000 damaged plastic rcrd jackets, no gd for rcrds, glue they used wl damage rcrd, if have another use for them, take them. Bruce, 734-8462, evgs best.

Port adjust TV stand, shlf, \$10; mag rack w/3 tiers, \$7; 6 drwr wht/gold dresser, well made, v gd cond, \$35; rnd wd grain formica tbl top, no legs, \$7; uphol chr, nds arm rest, \$7. Call, 267-7416.

Armchrs, \$10 & \$5; 2 coffee tbls, \$5; concrete bricks for bkshlvs, take away. Call, 731-5347.

Upright piano, in tune, \$60; refrig, \$50; other furn, cheap, moving out. Call, 628-3194.

Moving, must sell washer & dryer, 3 yrs, exc cond, \$60/ea. Dave x8-3677 Draper.

Oxford 10 spd touring bike, \$75 or best. Al, x 5873 Linc.

Playboy mag: 3 issues '55, compl '56-'60, many others. E. Davis, x 3-2934.

B nw Pentax super multi-coated lenses, 135 mm telephoto, 35 mm wide angle, w/cases, 50% list pr. Eddie, 266-8138.

Darkrm: compl Bogen 66A enlarger, (3) 5x7 trays, (3) 8x10 trays, safelite, print dryer, more \$100; Dynaco PAT-4 preamp, \$60 TEAC AN-40 Dolby, gd shape, \$25. Dave, 782-3539.

Poker playing computer program, BASIC, \$2.50. Paul, 323-7289.

Scuba equip: safety vest, fins (8-91/2), boot, weight belt, mask & snorkel, knife, exc cond, all \$35, sell set; fish Shakespeare Baitcasting, level reel, wind, GC, \$5. Jim x3-7828.

Desk, \$20: 2 desk chrs, \$10/ea: dbl bed, matt & spr, \$15; dresser, \$15; ski boots, 2 pr m sz 9, plastic, \$20/ea. Dave, x 3-3724.

Nikkormat FTN body, nw, latest mdl w/wrnty, \$170; Tamron lens, 35 mm f 2.8 auto, case, Nikon mnt, \$35; both \$200. Aldrich, x3-5360.

Corkbrd on plywd, 71/2x4, \$17; drapes, sprd, trav rod, \$25; sneakers, sz 101/2, nw, \$3.50; navy ox fords, sz 10, \$6; sm aquariums, cheap; stereo phono, nds transformer, \$13. Richard, x3-3161.

Reel-to-reel tape deck, 5 yrs, Ampex 1260 w/90 tapes, \$140. Thomas, 494-0235.

Tires, Delta 140 super prem, t-less, B78-13, prac nw, \$12 or best/ea, or set 4. Ted, x 3-3782.

Red/blk tweed carpet, lk nw, \$35 or best; Zenith 4 spd stereo phono, amfm, hdphones, \$125; over 60 class rcrds, \$50; Ger-made violin, 2 bows, case, \$150. Richard, x3-6028, aft 1pm.

Port washer/spin dryer combo, Hoover, \$50. x3-6653.

Set medical instruments, cheap. Richard, x 3-3724.

Nw drapes, 3 pr red brocade, pleated, 27' wide, 84" long. Bob, x3-7305.

Ast hseplants, 50 cents & up, some large; also beaut m Ger Shep nds qt cntry home. Wed, 12n-2pm, Rm 13-3078, x3-6893.

Snows, 3, must sell immed, used less seas, exc cond, 735-14; lg coffee perc, 32 cup, b nw, nvr used; both cheap. Marni, 547-3907.

Mpl chest drwrs, \$20; hollywd bed, fr, matt, \$15. Jane, x3-7135, aft 12n.

'63 Mercedes Benz 220, exc mech & Camb, sum sub w/opt, 2 BR, LR, Ig K, int cond, some body rust, gd mileage, pkg, 2 min walk Cent Sq, nice & conv avail 6/1, \$200. Raymond, loc. x3-7267. '65 Merc sta wgn, runs well, gd transp,

> Camb, Westgate, BR, ac, river view, part furn opt, avail 6/7-9/1. x3-4433.

> Camb, sum sub Cent Sq area, Grn St, 2 BR, ac, ww, disp, pkg, nr Harv, MIT, T. Call, 492-1693.

Camb, BR, 5 blks Cent Sq, nr T, stores, MIT, ww, tile B, cab K, avail 6/1, \$175 incl h, util. Call, 547-5374, evgs best.

Camb, Cent Sq, sum sub June-Aug, 2 \$175 incl h. Robert May, rms, x3-3221.

Camb, effic 5 min H Sq, ww, ac, dw, avail 6/1, \$195 incl h. Cathy, x3-5797.

Cambport, sum sub w/opt, lg hse, LR, DR, nw K, B, 5 BR, rent nego. Call, 547-8929.

Camb, off Prtr Sq, MIT affil nr MIT, mod, lg 2 BR, ac, ww, dw, avail 6/1, \$250 incl h. Call, 628-4454.

15 min walk MIT, sub Camb, 6/10-12/31, 2 BR, LR, DR, K, study, B, historic hse w/huge rms, sun, fac sgl or cpl pref, \$185 + util. Dolores, x3-4414.

Camb, Tang Hall, BR apt, avail 6/1 w/opt, \$86. Steve, 494-9248.

Chestnut Hill, 4 BR fac home, avail July, Aug at cost; for sale; antique pinball mach, nds minor repair, free in Bklne, x3-4923.

Ipswich, 6 rm 200 yr old hse, cntry setting, free access Crane's beach, avail 7/15-8/31, \$300. x3-7209.

Jam Pl, 2 rm apt, furn, B, priv ent, nr T, qt area, gd for visit prof or stu, \$170, incl util. Nancy, x3-4433.

Dennisport, 2 BR cottage, slps carpet, heat, porch, short walk priv bch, shops, family only, 8/17-8/31, \$175/wk. Call, 872-0566, 6-8pm.

Lex, caretaker's cottage on estate, LR w/beam ceil, frpl, 2 BR, grdn w/gazebo, garage, avail 7/1, \$350 incl util. Call, 862-5591.

Newton, sum sub 5 min Thruway, 6 rms, patio, lg yard, off st pkg, d&d, cent ac, washer & dryer, swim, tennis, golf nrby, \$300. Call, 965-2118.

Nwtnville, 3 BR, avail 7/1, 2nd fl 2 fam hse, v conv stores & sch, family only, \$245. Call, 267-2672.

Som, 50 Craigie St, BR restricted MIT married cpls, avail anytime. Call, 731-4473.

Som, nr Porter Sq, dw, ww, stove, refrig, ac, avail immed, rent incl h. Paul, 628-0961.

Som, 2 BR lux apt, sub 6/1-9/1, 15 min walk MIT, ww, 2 ac, dw off-st pkg, \$245. Call, 628-1518.

Som, sum sub 6/1-9/1, BR, 5 min Harv, fully furn, nw bldg, ¼ blk bus, d&d free pkg, \$190. Call, ac. 628-0870.

Upton, 2 BR hse, exc cond, beaut view, frpl, screen porch, lots privacy, mod K & B, 1+ acres, corale, barn, toolshed, 2 fenced grdns, 35 mi Bos Mass Pike, low taxes, \$35,000. Richard, x3-3724.

Wellesley, off Rt 9, 2nd fl, roomy K w/pntry, mod B, 5 other rms, bk yrd, pkg, nr T, \$300 + util. Call, 237-2309, anytime.

Cape Cod, Centerville, 3 BR hse on lake, wl rent M-F basis, start 6/3, 10, or 17 for \$100 or 7/8 for \$125. Gary, x8-1484 Draper.

Hull, Nantasket, 5 rm hse, outside shower, lg porch w/water view, lg LR w/frpl, all elec appl, furn, off-st pkg \$130/wk or \$1,200/seas, July-Aug \$140/wk. Call, 335-8422.

UCLA, apt minutes from campus, spac rm, qt, nice res area. Mike Perlmutter, x3-3697.

Charming renovated Fr farmhse, 4 dbl BR, comf furn, all conv incl dw, washer, hilltop loc, 20 min dwntwn Geneva & Univ, avail 3 mos-3 yrs, photos avail, \$500. Write: Skala, 13 Avenue Des, Phalenes, 1050 Brussels, Belgium.

Animals

AKC mini blk f poodle nds gd home, 6 mos, all shots, v affect. Jean, x3-7410.

AKC mini schnauzer pups. Jim, x8-3458 Draper.

Free kittens, 2 blk, 2 multicolored, 10 wks, playful, people oriented, litter trained. Call, 492-3591.

Fine young cats, 2, nd nw home urgently, marmalade & blk neutered m. Jim, x3-1926.

siamese, 2 yrs, \$15 (3) 1/2 siamese kittens, \$5/ea; raised w/chldrn, other pets, exc temper. Paul Mascal, x8-2861, Draper.

Lost and Found

Found: Money, identify container & amt to reclaim. K.W. Shafer, x3-3517, Rm 5-303.

Found: tckts, claim by identifying. George, x8-3953 Draper.

Wanted

Hse or lg apt, rent or sub 74-75 acad yr, for 5 grad & undergrad stu, lking for suburb loc nr T, pref furn. Paul, x3-1541.

F rmmate, own rm in furn apt, ac, 2 pools, 5 min BC, avail 6/1-8/31, \$135. Gail, x3-5374.

graduation tickets. Doug, Xtra x3-7193.

Insane people, into plants, music, people, psychic exper? Nd 2 rmmates, m or f, share 3 BR Camb apt, \$90 + util. Donna, x8-1231 Draper.

Child Care Program nds donations of chldrn's furn, toys, books, games, instructional mat'l & equip. x3-1592 or Rm 4-144.

Rmmates, 2 BR avail in 3 BR 20th fl Tang Hall. Call, 494-0254, or housing office.

Visit prof & wife nd sm furn hse or apt 11/1-12/31, no chldrn, reas commute distance MIT. x3-7077.

M rmmate, Lex hse, furn, must have own car, \$95. Sia, x 3-3911.

Grad tckt, 1, wl pay \$5-\$10. x5808 Linc.

Nd tckts to commencement. Gregory Daley, x 3-3406.

Trlr hitch & cart for compact car. Nancy, x8-4465 Draper.

Rmmate, own rm in 4 BR hse, avail 6/1-9/1, nr BU Bridge, Stop & Shop, \$67.50. Call, 491-1364.

Foreign stu wl buy xtra graduation tckts for relatives from abroad. Adil, x3-7213.

M or f rmmate, own BR in 4 BR hse, nr

H Sq, qt safe street, encl bkyrd, pkg,

Rmmate, own lg rm in 2 BR Kenmore

Sq apt, 15 min walk MIT, ww, d&d, ac,

K. B. LR. Indlrd in bldg, \$135 incl util.

F multi-spd bike, 26" plus. x8-2479

avail 6/1 or 6/15, \$110. x 3-6717.

Call, 536-9530, aft 6pm.

Draper.

regulator, \$80; ¼" wetsuit, 1g, gd cond, \$60. Ed Franks, 742-3151 x265, aft 3pm.

Dbl bed w/hdbrd, dresser, chest, Med style, gd qual, exc cond, Mike, x3-5217.

Kenwood KW-5066 tape deck, 3 hds, 19 tapes, \$100; Master work compact amfm tuner w/trntbl, 2 8" spkrs, \$20; bkcse w/World Bk Encyc, \$5; asst paperbks. Kathy, x 3-7047.

Zuckerman harpsichord, gd playable cond, as is, unfinished exterior, easily transp, \$200 firm. Virginia, x3-1810.

Unitron MKD-A150 microscope, 10X widefield eyepc, 4X, 40X, 100X oil immers objectives, cab, mech stage, immersion acces, all papers, \$150. Ed or Tom, x3-6155.

Office desk, \$25; metal top dining tbl, \$15. Gubbins, x3-4992.

Mtd tires, (2) 65x15, less 1.5 K, \$18/ea. Bill, x7185 Linc.

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Miranda Sensorex SLR, 50/1.4 2/case, acces, \$100; auto Miranda 28/2.8 lens w/case, haze fltr, \$50; lens shade, \$40; 2X teleconverter 2X +3X. \$10, \$15; other acces; all exc cond, pkg price \$200. Tom, x8-1510 Draper.

Sears port washer/dryer set, 1½ yrs, hook to K faucet, nds no dryer vent, lg 8 lb load, exc cond, vertical rack, ideal apt or sm hse, \$150/set. Suzy or Len, x3-1788.

Must move, 2 beaut handmade bkcses; chrome pole lamp; dbl bed matt; bench; hot tray; other sm items, nego. Susan, x3-1671.

Util trlr, 1 whl, universal bumper hitch, spare susp, \$80. x5869 Linc.

Bkcse, \$40; crib & matt, nw \$100, ask \$30; wl rug, \$8; G78-14 stud snows, 1 seas, \$25; mirror, \$5. Call, 494-9336.

Phillips 10 spd bike, comparable to Raleigh Rcrd, gd cond, rides well \$55. Tony, 247-8124.

Vehicles

'61 Chevy Imp, gd cond, only 60K, 2 tires, \$250 or best. Mark, 244-5259, evgs.

Belmont, 5 rm apt, avail July or Aug, unfurn. x3-6814.

Bos, Beac St nr Mass Ave, just over Harv Bridge, sub w/opt, lg BR, qt bldg, some furn avail, \$185 incl h. Janet, x3-5230.

Bos, Marlboro nr Mass Ave, 2 BR, B, eat-in-K, LR, well kept bldg, gd loc, avail 7/1, \$260 incl h, h water. Call, 266-8346.

Bos, Park Dr, 2 BR avail 6/1 w/opt, lg enuf 3 people, med B, Kette, ww, gd Indlrd, \$265 incl util. 267-4481.

Bklne, nicely furn apt, sum sub for visit prof, 6/1-9/15. x3-5658.

Bkine nt T & BU, 3rd fl priv hse w/sep ent, lovely nbrhd, lg LR, 2 BR, sm mod K, bkfst rm, B, storage, pkg, cln, no pets, ideal for visit prof bec furn incl hsehold gds, \$300. x3-1661.

Bklne, nr Coolidge Crnr, compl furn 2 BR, frpl, ac, TV, all appl, qt nbrhd, off-st pkg, avail 7/1, \$200 incl util. Ed or Steve, x 3-1691.

Bklne off Comm Ave, 2 rm, furn, \$140 incl pkg, util. Call, 566-1276, aft 11am.

Yarmouthport, Cape, yr rnd hse avail 6/16-7/31, 7 rms, 3 BR, 2 B, nr bch, secluded view Cape Cod Bay, \$240/wk, \$800/mo. Priscilla, x7865 Linc.

Sum sub w/opt, 2 rm apt, lg K, 5 min MIT, share K & B, avail now, semi-furn rm \$52.50, other \$60 unfurn. Dietram, x3-7646.

Sum sub 2 BR apt, Coolidge Crnr, fully furn, June-Sept, \$230 incl h. David, x 3-7770.

Stoddard, NH, 2 lkfront cottages, secluded on 9 mi Highland Lake, frpl, elec stove, refrig, h-c water, porches, rowboats, piers, priv bch, 90 mi (2 hrs) Bos. Call, 843-2279.

Maine, 5 BR 300' on sm lake nr Bethel, no elec, \$120/wk in Aug, min 2 wks. Call, 332-0767.

rental, hse on Sum Memphemagog, 4 hrs away on Candian brdr, 5 BR, 2 LR, boat, no gas shortage, \$180/wk incl all util. x 3-2742.

Vt, well equip modernized old hse, 6 BR, 3 B, sauna, winterized, planted grdn, \$550. x 3-4771. Rider to west coast, beg June, split gas, tolls, driving. Kay, x 3-4158.

Mature, respon grad stu(s) to work as bartenders, 1 or more evgs/wk, 4-8pm, start 6/3, Muddy Charles Pub. x3-2195.

Rmmate, sum sub w/opt, own lg BR in furn 4 BR apt, Cent Sq, LR, B, mod K, \$70 + util. Larry, 547-6726, lve msg.

Help! Desperately nd place to live this sum, wl hse or apt sit. Reliable, respon, straight grad stu, wI take exc care of home, some rent possible, ref provided. Andi, x3-2701.

Rmmate, own BR in 4 BR Winthrop, share w/3m, sum sub avail 6/1, furn, lg LR, K, B, free pkg, nr ocean, \$62.50. Charles, x 3-2539.

F, share 4 BR Newton duplex, June-Aug, pkg, furn, ac, 15 min Bos, \$100. Call, 965-0021.

Tbl type or sgl pedestal desk, wd, 48-60" long. x 3-1421.

MD cpl seeks comf hse, Bos area, 7/20-8/15, exch for magnificent villa 10 min Brussels, Belgium, meadows, golf, horses, swim, car avail. x3-7586.

Used typwrtr, gd work cond, elec pref, manual considered. Call, 244-6278. Solid state electronic design required. Work schedule will require evening and

F rmmate, 25 +, sum sub, spac furn home nr Harv Sq, own rm, 2 K, 2 B, avail 5/24. Call, 547-7762.

Sm wd machinist tool box; Hildebrand, Methods in Applied Math. Jim Hannoosh, x3-5353,

M stu for nutritional requirement study, beg approx 6/10 for approx 4 mos, incl spec diet, blood, urine & fecal samples. Info, Miss Miller, x3-6337.

M rmmate, 2 rm furn Camb apt, own rm, avail 6/4 \$60. Aurelian, x3-3920.

Rmmate, Camb sum sub w/opt, 1 or 2 agreeable people in nice lg sgl or dbl, 5 person apt, Mag St nr Cent Sq, qt, sunny, cln, nr T, \$85. Call, 354-1579, evgs.

Fl lamp, pole lamp, coffee tbl, couch, bean bag chr, lounge chr, others for LR, reas price & gd cond. David, x3-5714.

Sub furn rm, Tang Hall, reduced price w/opt next yr. Call, 494-8970, aft 6:30pm.

Rmmate, coed apt nr Kendall Sq, own rm, 5 min walk MIT, avail now or 6/1 w/opt, \$85 incl util. Marc, x3-5743.

Rmmate, Ig sunny coed apt, crnr Mass Ave & Marlborough, \$80. Call, 267-7434.

Rmmate, Bri, Wilson Park off Comm Ave, own BR in 7 rm apt, share w/2, avail now, \$66.67 + util. Bob, x3-5505.

Rmmate, 2 lg furn rms, sum sub, lg eat-in-K, LR, cln safe bldg, 7 min walk MIT, \$100, \$110. Call, 267-7416.

Rmmate, share 2 BR apt nr Inman Sq. Cheryl, x3-5677.

Nd 3 rmmates, All hse, m or f, share w/3 friendly people, \$100/person. Call, 738-5657.

Miscellaneous

MIT stu wi help u move, 2 m, van, exp. Jim, 494-9285.

Non-tech typing, IBM selec carbon ribbon, Chris, x3-2958.

WI do gen & thesis typing. x8-3333 Draper.

Interested in grad sch in psych? Enroll June-Dec in statistically verified intensive prep program for top GRE Aptitude & AP Psych Test scores, making admission highly probable. x3-6711.

Positions Available

This list includes all non-academic jobs currently available on the MIT campus. Duplicate lists are posted each Tuesday preceding Tech Talk publication date on the Women's kiosk in Building 7. outside the Office of Minority Affairs, 10-211, and in the Personnel Office E19-239, on the day of Tech Talk publication, Personnel interviewers will refer any qualified applicants on all biweekly jobs Grades I-IV as soon as possible after their receipt in Personnel. Employees at the Institute should continue to contact their Personnel Officers to apply for positions for which they feel they qualify.

Virginia Bishop	3-1591
Mike Parr	3-4266
Philip Knight	3-4267
(secretary – Joy Dukowitz)	
Sally Hansen	3-4275
Jack Newcomb	3-4269

3-2928

3-4278

3-1594

3-1595

Work schedule will require evening and weekend work. 74-448-A (5/22).

DSR Staff in Electrical Engineering will develop and construct specialized electronic circuits to interface with electrical/electronic equipment such as an electric power system physical scale model, a transmission system sim-ulator, measurement systems for underground power transmission, and automated electric power meter readers. MS in EE required; experience in the design, construction and testing of electronic circuits and computer interface equipment and in the operation of switching surge simulators necessary. 74-333-A (5/22).

Admin-Area Systems Coordinator istrative Staff in the Office of Administrative Information Systems will analyze and develop solutions to business problems; provide systems support; direct and coordinate the work of systems analysts and/or programmers as needed. Applicants should have business and administrative experience, analytical ability, knowledge of programming. and 74-563-R (5/22).

DSR Staff Engineer in Earth and Planetary Science will supervise the design and implementation of electrooptical data acquisition systems for astronomical application; develop a solid state imager as a photometric data system; maintain, modify, and update slow-scan silicon vidicon photometer system; act as technical consultant to student projects. Degree or strong background in EE: extensive experience in analog and digital circuit and mechanical design hardwork design. 74-429-A (5/15).

DSR Staff Engineer in the Energy Laboratory will work in the Sloan Automotive Laboratory. Participate in basic and applied research programs on combustion problems related to performance and emission characteristics of automotive engines. Research will be experimental and theoretical. Ph.D. in Engineering or equivalent academic training, with good back-ground in combustion, thermodynamics and fluid mechanics required. Experience in design and operation of optical, electronic and spectroscopic instrumentation used in basic aerodynamic, combustion and engine related experiments important. Ability to work closely with faculty students essential. 74-415-A and (5/15).

DSR Staff Lab Technician Part-Time will perform laboratory procedures in connection with lipoprotein quantitacholesterol-triglyceride detertion, mination and other lab functions. Experience in blood chemistry, especially lipoprotein quantitation required. Degree in Biochemistry preferred. 9am-1pm. 74-414-R (5/15).

Administrative Staff - Assistant to the Director of the Alumni Fund will be responsible for all internal administration of Alumni Fund activities; coordinate programs and field activities of three Associate Directors and one Assistant Director; establish and administer systems for all phases of the volunteer Alumni Fund organization. An alumnus/alumna of MIT is preferred, but not essential. 74-348-A (4/24).

DSR Staff at the Laboratory for Nuclear Scince will design, develop, and maintain the operating system of the IBM 360/65 in the laboratory's computer facility. Assist users with special projects. Degree in computer science, physics, or mathematics; programming experience, particularly Assembly Language required. 360 74-361-R (5/1).

DSR Staff in the Energy Lab must have minimum 5 yrs experience in defining, securing support, organizing and supervising research in heat transfer related to energy production and utilization. Familiarity with MIT; experience in supervising student theses research and staff; Ph.D. in Mechanical Engineering required. 74-359-A (5/1).

Administrative Staff - Associate Director of the Alumni Fund will be responsible for Staff support to alumni boards and committees engaged in the annual solicitation programs. Duties require extensive interaction with senior alumni and corporation executives throughout the country, at MIT. Individual must be an alumnus/alumna of MIT. Position entails a moderate amount of travel. 74-347-R (4/24).

Accountant – Exempt or Adminis-trative Staff in the Grants and Contracts section of the Comptroller's Accounting Office will perform internal cost audits of research contracts and grants; coordinate accounting and audit functions with other Institute offices and departments. Prepare cost reimbursement billings and other grant fiscal reports. Minimum qualifications are a college degree or current attendance at school; general accounting experience. 74-410-R; 74-411-R (5/8).

Marketing Director - Administrative Staff at the MIT Press must have experience and skills in some or all of the following areas: direct mail, scientific/technical, international, research and planning, trade and library rela-Innovation, creativity, tions. adaptability for goals; ability to work as part of a publishing team in a university environment. Please submit resume with educational background; accompanying letter must describe in detail marketing methods and achievements. 74-313-R (4/17).

DSR Staff in Nutrition and Food Sciences will coordinate the specialized analytical services of the department; advise and assist in the development and application of analytical methods manage the mass spectrometry and laboratory. BS or MS in chemistry or related field and experience in operating a mass spectrometer required. 74-302-R (4/10).

DSR Staff in the Laboratory for Nuclear Science will participate in fundamental particle research at major accelerators and in data analysis. Candidate must have Ph.D. in high energy physics or a related field with experience in scintillation counter and spark chamber techniques and familiarity with large computer data analysis. 74-220-A (3/13); 74-221-A (3/13).

DSR Staff - Curriculum Developer at the Artificial Intelligence Lab will develop and write new mathematical curriculum material in the Logo language for elementary school use. job will often require working The outside normal office hours. Academic qualifications in developmental psychology and mathematics, demonstrated experience in teaching computer programming to children required. Position available 5/74. 74-153-R (2/20).

Assistant Director - Administrative Staff in the Development Office will direct developmental support of MIT's senior officers and Resource Development Staff. Participate in developing funding goals; write background briefs, memoranda, proposals, ad hoc statements; direct funding projects. Minimum 3 years formal experience in development required, preferably in a university environment. Professional individual, tactful, imaginative, skilled in writing is needed. 74-327-A (4/17).

DSR Staff in the Laboratory for Nuclear Science will participate in fundamental particle research at major accelerators and in data analysis. Candidate must have a Ph.D. with a minimum of two years experience in high energy physics. Detailed knowledge of bubble chamber techniques is essential. 74-222-A (3/13); 74-233-A (3/13).

DSR Staff Physicist in the National Magnet Laboratory will conduct original research in experimental solid state and low temperature physics with emphasis on the magnetic fields. Ph.D. in physics or related area and 3 years postdoctoral laboratory experience in magnetism and low temperature physics required. Familiarity with crygenic and electronic instrumentation desired. Position available after 10/1/74. 74-130-A (2/13).

have four years of working experience in EDP, a degree in Accounting, knowledge of COBOL or PL/1, and accounting experience. public 74-150-A (2/20).

Assistant Director (Photo Journalist) Administrative Staff for the News Office will make news photographs for press releases and various newspapers and magazines. Maintain darkroom and photography equipment; perform own darkroom work for primarily black and white photography. Previous experience on daily newspaper, extensive work as darkroom technician required. 74-409-R (5/8).

Systems Programmer - Administrative Staff in the Programming Development Office will work on the 370/165. Perform systems programming and maintenance, systems assurance, and user interface functions. Applicant should have project management experience with HASP, assembler language, and PL/1. 74-408-R (5/8).

Applications Analyst - Administrative Staff at the Information Processing Center will work in the Application Services group to advise users on procedures and techniques in setting up a statistical problem for computer solution. The equivalent of a master's degree in statistics or social science with statistical training is required; experience in programming and solving problems is essential. 74-403-R (5/8).

DSR Staff Systems Programmer at Project MAC will perform system analysis and system programming on a research version of Multics operating system. SM or EE degree required; 2-3 years programming experience in the supervision of some advanced operating system required. Ability to contribute to research and work with students important. 73-1234-R (11/14).

Applications Programmer Administrative Staff in the Office of Administrative Information Services will translate detail program specifications into computer code; test codes and documents program for operational use; review specifications; develop program flow charts; test and debug programs; perform other duties as assigned. Minimum 2 years expein Business applications rience gramming required. 74-278-R. 74-279-R (4/3).

DSR Staff Member in Research Laboratory of Electronics will conduct experimental determination of sound pressure in the fluid of the inner ear. Recent Ph.D. in EE with background in physiological experimentation and acoustics. Knowledge of the auditory system, particularly the inner ear, is required. 74-120-A (2/20).

Senior Applications Programmer Administrative Staff in the Office of Administrative Information Systems will assist in the development of program specifications; translate specifications into computer executible programs; test and document programs; perform all functions of an applications programmer. Experience in business applications programming required. 74-354-R (5/22).

Systems Analyst – Administrative Staff in the Office of Administrative Information System will develop under direct supervision, solutions to business problems; prepare, design, and program specifications for new programs and for modificatons to existing systems. Applicants should have business and administrative experience, analytical ability and familiarity with computers. 74-360-A (5/1); 74-391 (5/8).

Programming Analyst - Administrative Staff for the MIT Information Processing Center must have experience and knowledge of large-scale timesharing computer systems. PL/1 and FORTR AN language. Documentation and communication skills are necessary qualifications. The User Services Group requires an individual who understands and is responsive to the needs of the Center's users.

Assistant Food Production Supervisor Exempt in Food Service will assist in all areas of daily production, inventory and quality control, purchasing and a sanitation program. Will assume full responsibility in the absence of the Food Production Supervisor. Degree or experience in food production, knowledge of menu planning, food production, quality control, food purchasing required. Must be able to work irregular hours and weekends, 3 days 7am - 4pm; 2 days 10:30am 7:30pm. 74-454-A (5/22).

Assistant Unit Manager - Exempt will assist with the administration and operation of a Food Service Facility. Assist in the supervision of personnel, planning and monitoring daily operations, maintaining standards within the system. Will handle administrative duties in personnel, payroll, budget and purchasing areas. A degree or experience in administration of a food service unit required. Ability to communicate and work with all levels of the MIT community important. 74-453-A (5/22).

Food Production Supervisor - Exempt in MIT's Food Service will be responsible for all operations of the kitchen and its food production personnel: daily production, inventory control, purchasing quality control and sanitation. Assist in menu planning and estimating food quantities. Degree and experience in food production; technical knowledge in menu planning, food production, quality control, purchasing required. Ability to work irregular hours and weekends and to train personnel important. Mon.-Fri. 6am-3pm. 74-562-A (5/22).

Pantry Supervisor - Exempt in MIT's Food Service will be responsible for the unit serving areas, flow of food and utensils, portion controls and sanitation program for area. Will supervise the pantry employees. Technical knowledge in food production, ability to work with deadlines under pressure, ability to train personnel required. Must be able to work irregular hours and weekends. 4 days 10:30am 7:30pm; 1 day 7am - 4pm. 74-455-A (5/22).

Secretary IV in Civil Engineering will handle a variety of general secretarial duties. Type technical manuscripts and statistical tables and charts, set up format and proofread; independently answer some correspondence; maintain records and student files. Technical typing skill, previous experience, familiarity with shorthand required. Ability to work on many projects simulta-neously important. 74-406-R (5/8).

Editorial Secretary IV at the MIT Press Editorial Department will type correspondence, handle routine office procedures, assist the editors in their work. Accurate typing; ability to work with details, and a large number of people; sincere interest in book production required. College background desirable. 74-369-R (5/8).

Secretary IV for the editor-in-chief and two acquisitions editors at the MIT Press. Type letters from tapes and rough drafts; independently acknowledge receipt of manuscripts and proposals; prepare expense accounts. Good typing, attentive to details, maturity and tact essential. 74-386-R (5/8).

Senior Secretary V to the Metallurgy and materials Science Department Head will coordinate busy schedule of meetings, appointments; type various reports, technical manuscripts; type correspondence from tapes or dictation, independently answer some correspondence; maintain confidential departmental files; provide secretarial assistance to Administrative Officer as necessary. Excellent typing, shorthand or speedwriting required; technical typing experience or working experience in an academic department preferred. Ability to handle a complex job, establish priorities essential. Discretion and tact important. 35 or

Claudia Liebesn (secretary - Dixie Chin)

(secretary - Mary Ann Foti)

Evelyn Perez

Dick Higham

Pat Willia

New applicants should call the Personnel Office on extension 3-4251.

Project Leader/Systems Analyst Administrative Staff will investigate the information needs of the Medical Department, coordinate needs and develop the system. Responsible for data aquisition and clerical processing of source documents to the finished reports. Minimum 5 years experience in System Analysis, System Design, PL/1 and 370 BAL Programming for management information system. Familiarity with medical data systems preferred. 74-419-A (5/22).

DSR Staff at the National Magnet Laboratory will design, supervise construction of electrical cryogenic and vacuum systems for operation of Alcator Experiment. Design and fabricate electronic circuitry, mechanical structures and vacuum systems for high temperature plasma diagnostic experiments; supervise technical personnel. MS in Physics or EE. Minimum one year experience in operation of high temperature plasma physics experiments and diagnostic equipment; and

Administrative Staff - Special Events Director for the MIT Alumni Association will organize, coordinate, and promote alumni convocations in major cities throughout the US. Individual with imagination, organizational abili-ties, leadership and interpersonal skills required. MIT degree or knowledge of the Institute is desirable. 74-349-A (4/24).

Administrative Staff Project Manager, Resource/Alumni Data Systems. Will report to the Director of Resource Planning to take full responsibility for development, production coordination and operation of computer systems in support of the Resource Development and Alumni Offices. A minimum of five years professional EDP experience required, including at least three years of systems analysis. Familiarity with MIT systems will be helpful. Will evaluate overall assignment, define group staffing needs and, when approved, be expected to recruit, train, and supervise staff. 74-412-A (5/8).

Staff Recruiter (Admin. Staff) will report to the Employment Officer; will be responsible for coordination of search for well-qualified persons to fill non-academic staff positions. Particular emphasis will be given to assisting laboratories, centers, and departments in fulfilling Affirmative Action Plans with respect to research staff openings. Person will work closely with Personnel Officers and departments in defining description of positions and qualifications required. Frequent travel will be expected; experience in Personnel and/or recruiting required. Technical background with degree in Engineering or Science preferred. Please submit resume. 74-643-A (7/18).

Assistant Auditor – Administrative Staff in the Audit Division will perform EDP internal auditing, reviews of the systems development effort, evaluate internal controls, and post audits of computer systems. Will develop audit programs, questionnaires, write and present reports. Must

User Assistance - Assisting users by providing programming information and debugging help and tracking down special problems.

User Information - Instruction documentation and conducting seminars, workshops, and short courses. 74-178 (2/27).

Keypunch Operator III in the Comptroller's Accounting Office will keypunch accounts payable invoices and all input for the Journal Voucher System, on an Infarex Key-to-Disk entry system. Responsible for verifying and balancing all data entered. Minimum 1 year experience required; previous key tape experience desirable. 74-418-A (5/15).

Senior Keypunch Operator III in the Office of Administrative Information Systems will operate the IBM 029 keypunch machine. Punch into computer input cards formated and unformated documents. Minimum 2 years experience operating IBM 029 or comparable equipment. 74-384-R (5/8). 74-428-R (5/15).

40 hour work week, 74-447-R (5/22).

Senior Secretary V in Political Science will handle a variety of secretarial duties for the new department head. Arrange meetings and schedule appointments; type correspondence, reports; will also handle typing for the Assistant to the Department Chairman. Excellent typing, shorthand or speedwriting required; organizational and editorial skills a must. Ability to establish priorities, and to work in a very busy atmosphere essential. Minimum 4 years experience; MIT experience desired, 74-395-R (5/8).

Senior Secretary V (Part-time) will handle a variety of secretarial and administrative details at the President's home at Watertown. Schedule appointments for Mrs. Wiesner and for the President's House at 111 Memorial Drive; arrange travel, transcribe correspondence, maintain extensive files. Work closely with Dr. Wiesner's secretary; act as liaison for Dr. Wiesner with other MIT offices, community agencies

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Positions Available

(Continued from page 7)

and businesses. Keep payroll and other records; attend meetings when required; write and address invitations for Institute events. Excellent typing and shorthand skills required. Knowledge of the Institute desirable. Discretion, honesty and tact essential to deal with confidential matters and to work in a private home. 25 hour work week; mid-day schedule preferred. Available after 8/15/74. 74-315-R (5/8).

Secretary IV or Senior Secretary V to the Director of a new Special Laboratory will assist in all aspects of developing the new lab; organize the Director's schedule and set up the office systems. Some College and 3-5 years secretarial experience; excellent typing and shorthand required. Ability to organize, establish priorities important, 40 hour work week. 74-368-R (5/1).

Secretary IV or Senior Secretary V for Vice President in the office of the President and Chancellor will handle a variety of duties in a very busy office. Arrange and coordinate complicated appointment and meeting schedules; maintain communications among many people and offices of the Institute. Excellent typing, shorthand, organizational skills and command of language are essential; ability to anticipate, recognize and organize priorities and work as part of a team, resourcefulness for handling complex situations, discretion, tact, and good judgment important. 37½ hour work week. 74-343-R (4/24).

Secretary IV in the Music Office, Humanities Department will handle a variety of secretarial duties; coordinate class schedules and class materials; handle concert arrangements, monitor accounts; take and transcribe notes for the section. Typing and shorthand skills; ability to work with musicians, staff and students required; initiative and ability to work independently important, 74456-R (5/22).

Secretary IV in Chemical Engineering Headquarters will handle secretarial duties for the Department Head aid Administrative Assistant. Ability to establish priorities and to work with a minimum of supervision essential. Excellent typing, shorthand and organizational skills required. Familiarity with MIT procedures helpful. 74-444-R (5/22).

Secretary IV in the Center for International Studies will handle standard secretarial duties for a new program on nutrition planning and training. Will also make travel arrangements and maintain communication with field staff in Pakistan. Organizational skills and good typing required. Shorthand preferred. 74-443-A (5/22).

Secretary IV in Mathematics will handle all general secretarial duties; type correspondence, class notes, quizzes; technical reports and manuscripts; maintain mailing lists; will also do some filing and dictaphone work. Excellent typing and/or previous experience in technical typing required. Ability to work under pressure with careful attention to detail important. 74-564-R (5/22).

Secretary IV will perform general secretarial duties for the Director of the Neuroscience Research Program. Transcribe from tapes, schedule appointments; compile and type special reports. May also do some library and bibliographic research on technical topics. A good educational background, strong secretarial skills required; shorthand desirable. Library research skills, ability to interact effectively with staff and foreign and domestic visitors important. 74-565-R (5/22).

Secretary IV to the Executive Officer of Chemical Engineering will handle general secretarial duties; maintain petty cash account; make travel arrangements; receive visitors. Good typing, shorthand, and dictaphone skills required; previous experience (MIT preferred) or secretarial schooling; ability to work independently, maturity, tact essential. 74-398-R (5/8). tion which involves communication with publishing firms. Reconcile invoices of publishing orders; distribute reprints; maintain files and records of theses and article publications. Excellent typing, organizational ability, independent judgment, initiative required. Library and/or cataloguing experience highly desirable. 74-362-R (5/1).

Secretary IV to the Institute Secretary for Foundations will be responsible for budget accounting, file maintenance; research in reference materials, maintain communications and smooth relations with top level offices of the Institute. Excellent secretarial skills, ability to organize and to use discretion required. Knowledge of MIT desirable. 74-332-R (4/24).

Secretary IV or Senior Secretary V for the Council for the Arts Staff and the Special Assistant to the President for the Arts will coordinate office activities; do considerable typing. Excellent typing and organizational skills required; ability to work against deadlines essential; shorthand and knowledge of MIT are desirable. 37%hour work week; 9-5:30. 74-300-R (4/10).

Secretary IV in the office of the Institute Secretary for Charitable Trusts will monitor the office budget; arrange appointment schedules and travel; type correspondence and proposals from dictaphone and handwritten copy; set up and maintain files; act as liaison between the office and other sources inside and outside MIT. May occasionally conduct research on charitable trusts and foundations. Excellent skills, organizational ability, professionalism essential. Previous experience required. 74-293-R (4/10).

Secretary IV to the Administrative Officer of Chemical Engineering will handle general secretarial duties; maintain contract, grant, personnel records; assist with a variety of headquarter's functions. Good typing, shorthand, dictaphone and organizational skills required. Maturity, tact, ability to anticipate problems desirable. May occasionally work overtime. 74-306-R (4/10).

Secretary IV for a professor in Earth and Planetary Sciences will handle all secretarial functions; perform some administrative chores, some library research and editing. Excellent typing (some technical); shorthand preferred. Editorial and organizational skills important. 74-8-R (1/9).

Secretary III-IV will handle a variety of secretarial and reception duties for the Graduate School Office. Type correspondence, financial aid awards, reports; schedule meeting and appointments for Deans; answer inquiries regarding procedures and fellowships. College background or business schooling required; good typing, shorthand, dictaphone skills needed; knowledge of MIT helpful. 74-420-R (5/15).

Secretary III will provide secretarial support for three faculty members in Chemical Engineering. Perform office reception duties; maintain records; type class material, reports, technical manuscripts, research proposals. Good typing essential (technical typing experience preferred); organizational skills, ability to use the dictaphone and to work independently required. 74-445-R (5/22).

Secretary III in the Humanities Library will handle general secretarial duties for the library; maintain payroll records; participate in interlibrary borrowing operation; assist with some bibliographic searching. Speed and accuracy in typing required; ability to work with detail important. Library experience helpful. 74-441-R (5/22).

Secretary III in Foreign Literatures and Linguistics will type Russian, French and possibly German class material on stencils; catalogue departmental library, perform other general duties. Good typing essential; good knowledge of Russian and one other foreign language, preferably French required. 74-442-R (5/22). graduate Office will handle all general secretarial duties for several courses; responsible for the Greater Boston Physics Calendar. Good typing (some technical); ability to occasionally work under pressure important. 74-401-R (5/8).

Secretary III in Nuclear Engineering will provide reception and secretarial services for department headquarters; maintain department statistical information; type admissions correspondence and research manuscripts. Good typing and dictaphone skills required; ability to establish priorities important. 74-399-A (5/8).

Secretary III in Earth and Planetary Sciences will assist with general secretarial duties for a professor and research group and handle all office duties for another staff member. Excellent typing needed for heavy typing load (technical typing helpful), will compose some correspondence, arrange committee meetings. Ability to handle details essential. 74-321-R (4/17).

Secretary III to an Industrial Liaison Officer will assist with the Institute publication distribution, symposia and faculty travel, research for briefings, handle all other general secretarial duties. Good shorthand preferred; typing skills necessary. 74-100-R (2/6).

Secretary III in Chemical Engineering will type quizzes, reports, technical manuscripts, proposals for three associate professors. Will arrange appointments, file, act as receptionist for the office. Dictation from tapes; technical typing experience preferred. Prompt, dependable, able to accept supervision and follow through on details. 74-162-R (2/20).

Administrative Assistant V in the Harvard-MIT Program in Health Science and Technology will work with the Executive and Business Officers in a wide range of administrative and secretarial duties. Excellent administrative and secretarial skills required. Ability to work independently, organizational skills and editorial experience essential. Familiarity with an academic environment, accounting procedures and technical typing desirable. Maturity and discretion required. 37 or 40 hour work week. 74-274-A (5/22).

Administrative Assistant V in Earth and Planetary Sciences will perform administrative tasks for a group of oceanography professors; coordinate with the Woods Hole Oceanographic Institution and several MIT departments on the administration of the joint degree programs; act as liaison between department; prepare and monitor accounts and budgets. Institute experience desirable; ability to anticipate problems, work independently and make administrative decisions required. 74-561-R (5/22).

Technical Assistant V in the Development Office will be involved in fund raising activities. Analyze and process various types of information relating to philanthropic foundations; maintain central records; identify and write evaluations of prospects; coordinate the work of an assistant. Accurate typing, excellent organizational skills, ability to establish priorities and work with deadlines essential. 74-328-A (4/17).

Senior Library Assistant IV in the Humanities Library will process and distribute technical reports, maintain technical report checklist. Supervise the maintenance of the microfilm collection and microfilm readers; assist library-users in finding materials. Ability to organize own work efficiently, instruct and supervise students; accurate typing, capacity for detail required. Library experience valuable. 74-457-R (5/22).

Library General Assistant III or Sr. Library Assistant IV will be responsible for circulation desk operations at the Rotch Library: inventory, shelving, overdue notice procedures, searches, records and statistics. Supervise and schedule assistants in desk and library procedures. Responsible individual with good judgment, organizational skills required; previous experience helpful. 74-451-R (5/22). bibliographies; type and edit reports, catalog cards, correspondence; monitor accounts. Good typing, organizational skills required; library experience necessary; cataloging experience helpful. 74-365-R (5/1).

Senior Clerk III-IV in the Comptroller's Accounting Office will be responsible for complete control of the Journal Voucher System; maintain batch controls and edit input; create magnetic tapes for computer processing. Individual must be good with figures; previous experience with computer printout, familiarity with keypunch machine helpful. 74-417-R (5/15).

Technical Typist III-IV Part-time in Mechanical Engineering will handle variety of typing: reports, class notes, proposals, some correspondence. Excellent typing required; ability to do technical typing preferred. Good command of English important for answering phones. 25 hour work week, flexible. 74-389-A (5/8).

Senior Clerk III will handle reception duties for the Student Accounts Office and assist the Counselors in servicing student financial requirements, type correspondence, participate in the review of accounts and statements. Accurate typing, maturity and tact, ability to work in a very busy office required. 74-449-R (5/22).

Senior Clerk III in the Registrar's Office will process class room reservations; assist in the development of the schedules for final examinations, classes, registration. Keypunch cards and maintain the master files; type letters and mailing lists, assist with special projects. Good typing required; keypunch experience or willingness to learn important. Ability to work with faculty, students and staff essential. 74-459-R (5/22).

Senior Clerk III in Medical will handle reception duties at the first floor reception desk. Answer phones, schedule appointments, handle a variety of clerical duties. Mature, responsible individual with previous work experience and success in dealing with the public needed. Light typing required. 37½ hour work week/ 8:30-5:00. (5/8); 74-430-R (5/8).

Senior Clerk III in the Comptroller's Accounting Office Travel Section will type reimbursement checks; check batch exists; answer questions on travel problems. Accurate typing, ability to communicate clearly on the phone is important. 74-397-R (5/8).

Senior Clerk III in the Microreproduction Laboratory (libraries) will process requests for microfilm and photocopies; type invoices, work orders; prepare statements for the Accounting Office. Ability to assist customers over the phone and in person is essential; accurate typing skills required; bookkeeping knowledge helpful. 74-416-R (5/15).

Senior Clerk III in the Credit Union will type all daily withdrawal checks; verify member's savings balance; summarize daily disbursements; maintain files; handle telephone inquiries. Business background helpful; accurate typing and ability to work with figures essential. 74-432-R (5/15).

Account Payable Clerk II or III in the Comptroller's Accounting Office will process invoices and batch processed invoices; audit vendor invoices; perform various other procedures; ability to work with figures important. Proficiency on the adding machine required. 74-381-R (5/1).

Jr. Diet Aide II in Nutrition and Food Science will prepare special diets for consumption by human experimental subjects under the direction of the Dietician or Senior Diet Aide. High school graduate with some experience in handling foods preferred. 74-358-R (5/1). stock room records; check requisitions for descriptions. Must have full knowledge of commercial printing paper including: types, finishes, grains, properties, etc. Must be able to use power cutter and work from material cards, Graduation from high school or its equivalent and two years applicable experience required. 40 hour work week. 74-350-R (5/22).

Lab Assistant – Part-time in Nutrition and Food Science will wash, sterilize and prepare glassware for research laboratories. High School background, experience washing scientific glassware in research laboratory desirable. 16 hour work week. 74-566-A (5/22).

Clerk-Messenger II for the Office of Sponsored Programs will be responsible for delivering items from the department to offices around the Institute; maintain postage meter; xerox and collate materials; maintain files, update publication collections; may assist with light typing of forms. Dependability, neatness, flexibility required. 74-392-R (5/8).

Messenger I for the Arteriosclerosis Center will xerox and file reprints, transport blood samples to and from MGH and MIT, maintain office supplies, run errands for the center. Responsible individual willing to be helpful is desired. Typing ability could be helpful. 74-388-R (5/8).

Campus Patrolwoman/Pc.trolman Minimum 10 years experience required in all phases of law enforcement to include knowledge of court procedures and case preparation, investigation of criminal and other complaints and reporting on same. Rotating shift/40 hour work week. 74-94-A (2/6).

The following positions have been filled since the last issue of *Tech Talk* and are no longer available:

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-380-R	Secretary IV
-393-R	Tech. Typist III
-370-R	Secretary IV
-375-R	Waitress/Waiter
-331-R	Secretary IV
-168-R	Secretary III Temp.
-99-R	Secretary III
-342-R	Admin. Staff
-296-R	Sr Secretary V
-377-R	Waitress/Waiter
-400-A	Secretary III P.T.
-267-A	Secretary III
-356-R	Secretary IV
-301-R	Admin. Staff
-376-R	Waitress/Waiter
-378-A	Secretary III
-331-R	Secretary IV
-402-R	Telephone Operator II

The following positions are on HOLD pending final deicison:

73-1357-A	Exempt
74-356-R	Secretary IV
74-357-R	Admin. Asst. V
74-396-R	General Helper

Weiner Named

(Continued from page 1) Dr. Weiner was awarded his B.A. by the City College of New York in 1951 and his M.A. and Ph.D. by Princeton University in 1953 and 1955, respectively.

He joined MIT in 1961 after serving as an instructor in politics at Princeton, and then as an assistant professor in the Political Science Department at the University of Chicago.

Since 1953 he has done extensive field research in India under grants from the Fulbright Program, the Ford Foundation, the Social Science Research Council, the Guggenheim Memorial Foundation, the Rockefeller Foundation and the National Institutes of Health. During 1966-67 he was in Paris and the Balkans under grants from the Carnegie Corporation and the Social Science Research Council, conducting research on political participation and national integration in the pre-war Balkans. He was the recipient in 1968 of the Watumull Prize in the History of India from the American Historical Association for his book Party Building in a New Nation. Dr. Weiner is also a member of the Advisory Panel of the Bureau of Near Eastern and South Asian Affairs of the State Department, the editorial board of the Journal of Interdisciplinary History, the Journal of Comparative Studies and the advisory board of the Population Reference Bureau. He is a consulting editor of the Rand McNally series on political change.

Secretary IV in Meteorology will assist with administrative duties and perform secretarial functions for the Executive Officer of a large research program in physical oceanography. Handle routine office duties, type correspondence, arrange meetings for program participants from all over the world. Ability to organize office and to communicate with 60 scientists on a regular basis. Good office skills important; interest in physical oceanography desirable. 74-379-R (5/1).

Secretary IV to the purchasing staff of the Laboratory for Nuclear Science. Type purchase orders, correspondence; maintain records. Will also be responsible for processing articles for publica-

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Secretary III in Aeronautics and Astronautics will assist the Undergraduate Officer with student registration and various other office duties; type correspondence and technical reports for two professors. Good command of English, ability to organize and work with details required. 74-433-R (5/22).

Secretary III in Urban Studies and Planning will type manuscripts, correspondence, reports, class notes; maintains files; schedule appointments and travel. Excellent typing and previous secretarial experience required, 74-446-R (5/22).

Secretary III in the Philosophy Department headquarters will type manuscripts and correspondence; act as headquarters receptionist; order textbooks and supplies; maintain student records. Good typing essential; shorthand helpful. Previous secretarial experience desired. 74-421-R (5/15).

Secretary III in the Physics Under-

Library General Assistant III in the Engineering Library will stock books and shelf-read on the seventh floor of the library; will also assist at the circulation desk as needed. This position requires a steady careful worker and the ability to communicate with members of the MIT community. 74-458-R (5/22).

Library General Assistant III in the Engineering Library will maintain reference, reserve, journal, theses, and technical report collection; conduct searches for missing books; distributes mail; assists at circulation desk when needed. Ability to work with details, coordinate own workload essential. 74-450-R (5/22).

Senior Library Assistant IV will perform general library duties for the Sea Grant Program Marine Resource Information Center. Answer reference questions; research topics, compile Senior Offset Pressman – at Graphic Arts will do one, two and four color process printing; expose and develop plates, mix inks; operate and maintain press and associated equipment to perfect a direct image, line and half tone registration. May guide and train other operators. Graduation from high school or its equivalent and a minimum of 7 years applicable experience required. 40 hour work week. 74-351-R (5/15).

2nd Class Engineer must have a Mass second class Engineer's license or higher. Individual must be willing to work on any shift. 73-182-R (11/24).

Reactor Operator Trainee IV in Nuclear Engineering will serve as shift operator on the MIT Reactor after passing A.E.C. Operators' Examination. Two years of technical college education or its equivalent background will be necessary for preparing for operators' licensing. Knowledge of electronic circuits would be helpful. Ability to work under pressure of emergencies important. 40 hour work week. 74-560-R (5/22).

Senior Stock Clerk in Graphic Arts will perform all stock room functions; initiate orders for stock; keep reserve

Dr. Weiner lives in Brookline.