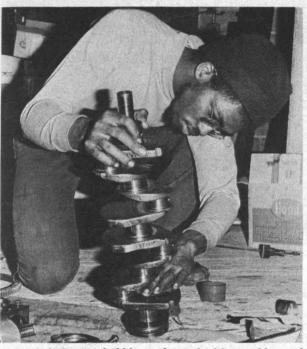
Massachusetts Institute of Technology



January 17, 1973 Volume 17 Number 27







A crankshaft, soap bubbles and auto ignition problems absorb students in two of the myriad activities of IAP '73. More stories and pictures on Page 3.

-Photos by Margo Foote

W.S. Owen To Head Metallurgy

Dr. Walter S. Owen, a widelyknown British-born metallurgist now serving as vice president for science and research and professor of materials science at Northwestern University, Evanston, Ill., has been appointed professor and head of the MIT Department of Metallurgy and Materials Science, effective next July 1.

Announcement of the appointment was made by Dr. Alfred H. Keil, dean of the school of engineering at MIT. Metallurgy and materials science is one of eight academic departments that make up the MIT engineering school.

Professor Owen will succeed Professor Thomas B. King who resigned as head of the department earlier in order to return to teaching and research within the department. Professor Carl F. Floe has been acting head and will continue until June 30.

Professor Owen, a native of Liverpool, England, received the Ph.D. degree in metallurgy from the University of Liverpool in 1950 and in 1972 was awarded a Doctor of Engineering degree from the same university. Before receiving his Ph.D., Dr. Owen spent five years in British industry as a research metallurgist. In 1951, he came to MIT as a Commonwealth Fund Fellow to work with Professor Morris Cohen on mechanical behavior and brittle fracture of metals. He subsequently returned to MIT as a member of the DSR staff for a three-year period (1954-57) to continue his research on the physical metallurgy of fracture.

In 1957, Dr. Owen returned to the University of Liverpool as the Henry Bell Wortley Professor of Metallurgy and head of the metallurgy department. In collabora- . tion with the physics department, he initiated a new joint Physics/ Metallurgy Honours Course and during his tenure there enrollment in metallurgy increased from three to some 30 students per class, with a faculty of 14. The metallurgy department at Liver-



Dr. Walter S. Owen

pool now ranks among the best in, England.

In 1966, Dr. Owen joined Cornell University as Thomas R. Briggs Professor of Engineering and director of the department of materials science and engineering. In 1970, Dr. Owen went to Northwestern to become dean of the Technological Institute and professor of materials science, and in 1971 was promoted to Vice President for Science and Re-

Gift Supports Thyroid Studies

The John A. Hartford Foundation of New York City has made a three-year grant of \$191,412 to MIT to support studies in the MIT Department of Nutrition and Food Science on the biochemical and dietary factors involved in deficient function of the thyroid gland and in the development of goiter.

Announcement of the grant was made by President Jerome B. Wiesner and Harry B. George, president of the Hartford Foundation. Principal investigator will be John B. Stanbury, M.D., professor of experimental medicine in the Department of Nutrition and Food

(Continued on page 2)

Divestment Scheduled

Duffy Named President-Elect In Draper Lab Reorganization

Organizational changes at MIT's Charles Stark Draper Laboratory, including appointment of a president-elect to head the Laboratory beginning July 1 when the Laboratory is scheduled to become autonomous, have been announced by Dr. Charles S. Draper, founder and present president, and by Dr. Albert G. Hill, MIT vice president for research and chairman of the Draper Laboratory board of directors.

Dr. Draper is an Institute Professor Emeritus and Professor Emeritus of Aeronautics and Astronautics. He was Head of the MIT Department of Aeronautics and Astronautics from 1951 to 1966. He founded the Laboratory, a center for the development of inertial guidance, navigation and control systems, in 1935 and he has continued in its direction since becoming emeritus professor in 1966. Formerly called Instrumentation Laboratory, the name was changed in 1970 in honor of the founder.

In a memorandum to the nearly 1,800 Laboratory employees last week, Dr. Draper said that Robert A. Duffy, vice president for the past year, has been appointed president-elect and will succeed Dr. Draper July 1 when the Lab is scheduled to become autonomous. Mr. Duffy is a retired Air Force brigadier general who formerly was with the Air Force Space and Missile Systems Organization at Englewood, Calif. He joined the Laboratory at the time of his Air Force retirement.

Dr. Draper said he will continue to take an active part in Laboratory affairs after July 1. He said he will continue as a member of the Lab's board of directors and will serve as a consultant to the Lab in advanced technology.

"My plans and best wishes are, as always, centered on the Laboratory," Dr. Draper said.

Dr. Draper and Dr. Hill also announced several other reassignments for key Laboratory leaders* in preparation for the establishment of the Laboratory as an autonomous unit.

John E. Kirk of Weston, who has been assistant to the president for the past year, has been appointed vice president, succeeding Mr.

(Continued on page 8)

ABC Show Previewed

NEW YORK-The first in the new television series-"What About Tomorrow?"-produced by ABC News in collaboration with MIT, was previewed for national television editors here Tuesday at a network press conference where a principal speaker was MIT President Jerome B. Wiesner.

Press previews, a common practice, give editors the opportunity to report and comment on programs in advance of airing.

Local press previews at ABC affiliate stations will be scheduled later this week

The first program, entitled "On the Side of Man" and dealing with efforts to improve communications between man and (Continued on page 3)

Gen. Lampert to Direct Resource Development

MIT president Dr. Jerome B. poration. The members of this Wiesner has announced that Lt. council include Chairman John-Gen. James B. Lampert (USA, son, General Lampert; President Ret.) will assume full responsi- Wiesner; Chancellor Paul E. bility for direction of the Institute's development program as Vice President for Resource Development, effective immediately.

General Lampert joined the Institute staff in September, 1972, as Vice President and Special Assistant to the President and the Chairman of the Corporation.

In making the announcement, Dr. Wiesner said, "Establishing this new position at MIT further defines the specific contributions that we are confident General Lampert will bring to increasing the Institute's support from alumni, friends, foundations and corporations. We look forward to a continued record of success in the times ahead."

Overall policy for the Institute's development activities is set by the MIT Council on Resources of the Institute; headed by Howard W. Johnson, Chairman of the Cor-

Gray; Provost Walter A. Rosenblith; Vice President and Treasurer Joseph J. Snyder; and James R. Killian, Jr., Honorary Chairman of the Corporation who is also Chairman of the MIT Corporation Development Committee.

In describing his plans, General Lampert said, "Our efforts will be heavily dependent upon the strengthened participation of all elements of the development program. The MIT development staff is composed of dedicated men and women who I know will continue to contribute their knowledge and skills in full measure. In addition to the Council on Resources of the Institute, members and the professional development staff, the academic deans, and many faculty members participate actively in the development of financial resources for support of the Institute's programs. The In-

(Continued on page 2)

\$191,412 Gift Supports Thyroid Studies

(Continued from page 1)

Among the disorders affecting the endocrine system, those of the thyroid gland are among the most common and result in problems ranging from metabolic difficulties to dwarfism, deafness and severe mental retardation (cretinism). Some of these arise from dietary limitation of iodine, while others have a genetic basis.

In some countries with diets deficient in iodine, more than half the population may suffer from some form of thyroid dysfunction. But in the US, where iodine deficienty is not a major problem, four to ten percent of children and adolescents still exhibit some form of thyroid abnormality, the cause

of which largely remains to be established.

According to Dr. Stanbury, one phenomenon about goiter is well established-it is often found among members of the same

"This indicates a genetically determined biochemical disturbance which, presumably acting in concert with environmental factors, leads to the clinical expression of the disease," Dr. Stanbury said.

"If that is so, then determining the exact error will provide an understanding of the nature of the thyroid disorders and may point a way to their prevention.'

Professor Stanbury and his colleagues will examine the chemistry of iodine in patients with thyroid problems and perform analyses on malfunctioning thyroid glands in an endeavor to determine what is wrong.

The researchers also will study the relationship between the mother and fetus in order to determine how chemical substances and hormones in the mother's blood affect the offspring, causing thyroid problems that appear at

At the same time, Professor Stanbury will attempt to develop an improved rat model for cretinism for use in studies on the role of thyroid hormones in the development of hearing and the differentiation of certain key brain

Community Fellows to Hear William Worthy

William Worthy, a noted black freelance writer and historian, will speak at the MIT Community Fellows Program seminar on Tuesday, January 23, in Room E40-169, from 5 to 6:30 p.m.

Mr. Worthy, a graduate of Bates College and former Harvard Nieman Fellow and Ford Foundation Fellow in African Studies, has traveled widely on reporting assignments, including visits to China, Cuba, North Vietnam and Cambodia.

He first gained international attention in 1956 when he was deported from the Union of South Africa while on assignment for the Baltimore Afro-American and CBS News.

Mr. Worthy's work has appeared in Esquire, the Christian Science Monitor and the St. Louis Post Dispatch, to name a few. He is also coauthor of the book Black Power and World Revolution.

Lampert to Head Resource Program

(Continued from page 1)

stitute is fortunate to have such generous support from its senior officers and its faculty members."

Mr. Johnson said, "Few institutions match MIT in the quality of its support by its friends. The development staff, instituted under Dr. Killian's guidance, has been ably organized by Mr. Vincent A. Fulmer, Vice President and Secretary of the Institute, during the last ten years. We look forward now to sustained effectiveness, and we are delighted that General Lampert has agreed to serve MIT in this important work."

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Please address all news and comment to the editorial office, Room 5-111, Ext.

19 College Presidents Back **Federal Hiring Guidelines**

MIT President Jerome B. Wiesner was among 19 college and university presidents last week who pledged support for federal guidelines in the hiring of women and minorities.

The 19 sent a telegram to President Nixon and Casper Weinberger, secretary-designate of the US Department of Health Education and Welfare, saying:

"We, the undersigned college educators, wish to reaffirm our belief in the principle of affirmative action as a means of eliminating systematic discrimination in hiring and promotion, and state our support of the HEW guidelines on affirmative action issued Oct. 1, 1972."

Wellesley College President Barbara W. Newell, who helped organize the communication, said it "grew out of the necessity to maintain a national focus on the needs of minority groups and

Scientists Find Mercury's **Surface Similar to Moon**

Two separate sets of observations of Mercury, made by scientists of the MIT Planetary Astronomy Laboratory, indicate that the surface of the hot, innermost planet is probably like that of the moon, covered with a soil rich in dark glasses of high iron and titanium content.

In a paper in a recent issue of Science, Thomas B. McCord, head of the Planetary Astronomy Laboratory of the Department of Earth and Planetary Sciences and associate professor of planetary physics, and John B. Adams, West Indies Laboratory of Fairleigh Dickinson University, report measurements of the reflection spectrum of the integral disc of Mercury.

The Planetary Astronomy Laboratory studies the surfaces of planets with earth-based telescopes. This can be done because reflected light bears the characteristics of the reflecting surface. When the spectral reflectivity of a substance is analyzed using a spectrometer, dark absorption bands appear at frequencies indicating the kinds of molecules the substance is made of.

The observations of Mercury were made first with the 60-inch telescope of the Cerro Tololo Interamerican Observatory in La Serena, Chile, and then with the 36-inch number 2 telescope of the Kitt Peak National Observatory in Kitt Peak, Arizona. Except for absorption features in the infrared, McCord and Adams found that Mercury's spectrum has a constant positive slope from 0.32 microns to 1.05 microns, a curve matching closely the curve for the upland and mare regions of the

They write: "The moon exhibits different reflectivity curve-types for different terrain-types, i.e., maria, uplands, mare bright craters and upland bright craters. Most of the lunar surface is covered by mare and upland

material and thus, when viewed integrally as Mercury was, the properties observed would be those of these two area-types. Mercury's reflectivity curve is quite similar to that for the lunar upland and mare material, and thus the integral spectral reflectivity of Mercury is quite similar to that for the integral moon."

McCord and his co-worker reasoned that since studies have shown that lunar spectral reflectivity is controlled by the titanium and iron rich lunar glasses, these materials should be abundantly present on Mercury as well. On the moon, these glasses are created by meteoroid impact which vitrifies a porion of the impacted material and scatters it through the soil. McCord expects the surface of Mercury to be pitted with craters. When the Venus-Mercury fly-by occurs next November, pictures of Mercury's scorched face sent back to earth will show if this is the

Health Sciences Session

Meeting to Focus on Eye Diseases

A meeting to foster interdisciplinary research on diseases of the eye will be held January 22 at MIT.

Organized under the auspices of the Harvard-MIT Program in Health Sciences and Technology, the meeting will address the topic, "The Scientific Basis of Ocular Disease."

The speakers, all active researchers in the field, will present the physical and chemical problems associated with glaucoma and aqueous dynamics, retinal detachment, corneal disease, lens opacity and blood circulation in diseases of the retina and choroid.

The afternoon and evening meeting in the penthouse of the MIT Faculty Club will begin at 1:30 p.m. Welcoming remarks will be made by Irving M. London,

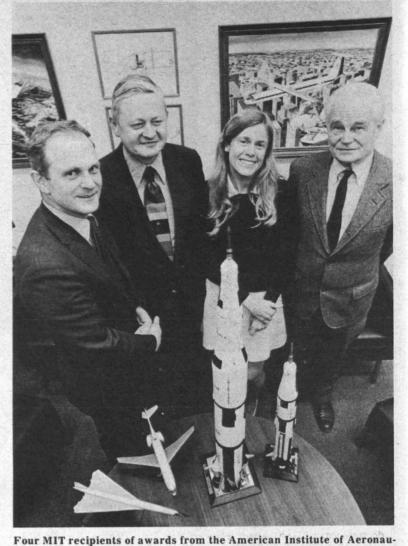
M.D., director of the Harvard-MIT program. Moderator for the meeting and one of the speakers will be George B. Benedek, Ph.D., MIT professor of physics.

Other speakers will be Morton M. Grant, M.D., of Harvard Medical School; Charles L. Schepens, M.D., director emeritus of the retina service of the Massachusetts Eye and Ear Infirmary and director of the department of retina research of the Retina Foundation, Boston; Claes-Henrik Dohlman, M.D., of Harvard Medical School and head of the cornea research unit of the Retina Foundation; David Miller, M.D., of Harvard Medical School and chief of ophthalmology at Beth Israel Hospital; Y. Ben-Sira, M.D., of Hebrew University,

Jerusalem, Israel; and Charles Riva, Ph.D., of the retina research unit of the Retina Foundation.

The meeting is one of a series aimed at stimulating collaborative research among scientists, engineers and physicians, according to Irving Berstein, Ph.D., research and development officer of the Health Sciences Program. He said the program welcomes inquiries from qualified persons who wish to attend the meeting and explore participation in continuing research on eye diseases.

Because the meeting will be a working session among prospective researchers, attendance will be limited. Information on registration may be obtained from Dr. Berstein in Room 26-142, MIT or at



propulsion, who received the Robert H. Goddard Award.

MIT Urban Action to Aid City-Wide School Census

tics and Astronautics (AIAA) pose together at MIT after presentation of

awards at the January annual meeting of AIAA. They are David G.

Hoag, newly appointed director of NASA work at the Draper Laboratory,

and Richard H. Battin, the Laboratory's Apollo mission director, who

shared the Louis W. Hill Transportation Award; Sheila E. Widnall,

associate professor of aeronautics and astronautics, who received the

Sperry Award, and Edward S. Taylor, professor emeritus of flight

Members of MIT Urban Action will participate in a city-wide educational census to be made this winter by the Cambridge School Department.

John Sass, of New Rochelle, N.Y., and Marcia Jaffe, administrative assistant in Urban Action, will be among 500 volunteers who will conduct the survey of 100,000 Cambridge residents from January 26 through February 14.

The first undertaking of its kind, the census was announced January 10 by State Secretary of Education Joseph Cronin and Cambridge Schools Superintendent Alflorence Cheatham.

According to Secretary Cronin, Cambridge is the first Commonwealth city to announce such extensive compliance with General Laws Chapter 72, Section 2, Chapter 71, Section 46, that require a census of all school children ages 5 to 16 and all children served or eligible for special education services or programs.

Mr. Cronin said that the Cambridge plan will exceed the basic requirements of the law by expanding the census to include the entire population of the city, from infants to the elderly.

Mr. Cronin also noted the importance of determining the number of foreign speaking students who should be attending school under the law but who are not registered in classes.

Superintendent Cheatham said interviewers will be identified by official cards, which are being donated by the Polaroid Corporation.



IAP can mean: Looking into automobile matters...



or watching arc welding in a metal sculpture class.

-Photos by Margo Foote

The Value of a Giggle

By Joan Friebeley Editor, IAP Guide

It's a week before MIT will appear on national television in ABC's documentary "What About Tomorrow?" My calendar is covered with reminders of seminars, lectures, and movies I want to attend, and will only have a chance to attend, because the Institute is experimenting with the Independent Activities Period. I wonder if the richness of life at MIT will be communicated in this television broadcast, or if it will show only that peculiar mixture of earnestness and idealism that so many people who cope with technology's problems and progress, day in and day out, reveal openly around here.

IAP invites us to put seriousness in perspective, to get our hands on the rudiments of some of the stuff of daily life, to be whimsical, or kinky, if we want.

I asked a young man with figure skates knocking on his shoulders if he was doing anything "serious" during IAP. He was browsing around in the Oceanography Museum. "Figure skating," he said, "I'm taking figure skating. What are you doing?" Slightly rebuffed, I didn't feel like telling him about my class in auto repair, so I answered, "Madness in literature and medicine?" His eyes widened, the whites showed all around the pupils, and stretching his arms in the helpless way we might in submitting to a surgeon's scalpel, he said, "In medicine! It's safe enough in literature, but in medicine?"

He had me. I went off to look at the IAP bulletin board in the lobby of Building 7. It's a column that Jon Sachs, who also designed this year's two Guides, wrapped in layers of corrugated cardboard. There's something very appealing about a 40-foot high stone column being wrapped up.

I looked over the additional IAP listings that were posted.

Otto Piene's "Wind Things" caught my eye. He fills big spaces with color, as all who know he made the rainbow at the end of the '72 Olympics are aware. "Wind Things" is an opportunity for people to make their own "flags, windsocks, flying animals." What whimsy! I walked around dazed by images of the flagpoles in the Great Court filled up with Affenpinschers, St. Bernards, and circus animals flapping in the breeze from the Charles. I hear his class is going well, even without me.

Perhaps my images of the output of this class aren't serious enough, I came to think. So I didn't go. Filling space with color or jokes is no joke. I'd really like to see what they make, what they fly.

Really, I was on my way to the Schedules Office for some serious business, but I hadn't yet eaten the machine sandwich I'd bought in concession to the demands of finding time to get a lot of work done, not only for my IAP courses, but also for my job. The Browse and Borrow Library was on my way, and seemed a civilized place to eat. About fifteen people stood around, thumbing the conveniently displayed books on subjects ranging from art to zoology. I got into one on anthropology while nibbling away at the sandwich till I hit the cellophane, and in disgust at the taste, texture, and my unseriousness, I made haste for the Schedules Office.

We worked for a good hour and a half, and then eased into some words about IAP. She, too, had the bug. She's taking a class in schedules programming. It makes so much sense!

Having bundled my papers, I returned to work on them in my office for a few hours. There was time to finish that job before the Technology and Culture Seminar's lecture series by Alasdair MacIntyre. Or so I thought. I got in, but I had to sit in the aisle of 9-150 since all the seats were taken by people who'd left their offices earlier than I.

Professor MacIntyre is serious. In his lecture series he is developing a basis for political action that avoids the naivetes of Marxism and of liberal democratic idealism. His discussion is tightly argued and technical, at the moment. I always appreciate the performance of a steel-trap mind that clamps its prey with Professor MacIntyre's precision and force. And when he's outright witty, he's awfully funny. But I hope the discussion will expand from the logical basis it has started out on. Logic is not my favorite approach to major issues, its importance notwithstanding.

I like this place, especially now, and other times partly because MIT is open to the kind of thing IAP is. Indeed, MIT created it. I go on wondering what legitimacy there is to the fears IAP isn't serious enough, and will refrain from classical quotes about life's vanity, the value of a giggle, the inspiration of a drawn or flying line. I hope the first national broadcast, most of which ABC filmed here, about people's interaction with computers lets on there are whole people behind the serious computers.

Students Flock to Campus for IAP

MIT students have appeared on campus in large numbers for the beginning of the January Independent Activities Period (IAP), according to reports on dormitory returns, food consumed, and questionnaires answered by people offering IAP activities.

Dormitories are filled to about 75 percent capacity, and the Dining Service counts 71 percent of the level of business done in the arbitrarily selected base period from last November.

Nearly 4,000 heads have been counted by respondents to a questionnaire mailed last Wednesday to people offering IAP activities scheduled to begin during the first week. Responses to the questionnaires provide strong evidence that over 90 percent of the activities scheduled for the first week of IAP actually took place. The 270 activities represent slightly more than half the total planned for some time during the month. Of

Career Workshop Scheduled

The Women's Forum is sponsoring a Career Development Workshop for members of the MIT community to be held on Tuesday, January 23, from 7 to 9pm in Room

Purpose of the workshop is to consider a broad overview of career planning as an integral part of life planning. The session will include a short discussion of life planning and goal clarification and focus on a panel discussion of the evolvement of specific career

Five panel members who began their careers as biweekly employees at the Institute will serve as role models. Each will relate the development of her career to her personal goals and life style.

Video Program **Seeks Audience**

The Center for Advanced Engineering Study needs an audience for a videotaping session of a television program on energy to be filmed Thursday, January 18, at 7pm in Room 9-150.

The segment to be filmed at MIT will include a brief summary of the energy crisis presented by Professor David White, recently appointed director of the new Energy Laboratory.

the 270 questionnaires mailed, 43 percent had been received by Monday.

IAP teachers were asked if their activities were underway, how many participants had appeared, how this number compared with expectations, and if they had any comments about the mix of students or any other possibly noteworthy effect of the Period.

Forty said they had more participants than anticipated, 21 reported fewer, and 46 had no comment or said participation was as expected. About 15 who observed that a wide range of departments and academic levels, as well as staff and employees, turned out for both academic and nonacademic offerings.

Comments indicate reactions to IAP run the gamut from near

exhilaration to despondency, though the overwhelming proportion appear positive.

Professor Lawrence Susskind, of Urban Studies and Planning, said "Undergrads and grads from 12 departments, Wellesley, Harvard, Boston University, and the Radcliffe Institute came, plus local community residents who asked permission to attend. The sessions went extremely well!"

Several faculty members remarked on the seriousness of the students. John Negele, associate professor of physics, said, "I intended the course for a small group of select and hard-working students interested in learning some tough but important material, and that is essentially the kind of group which came." The group consists of 14 students.

ABC Show Previewed

(Continued from page 1)

computers, will be shown at 10:30 p.m. (EST) next Monday on the ABC network (WCVB Channel 5 in Boston). Dr. Edward Fredkin, Dr. Terry Winograd and Dr. Seymour Papert are featured in the first film.

The series of six half-hour programs, being filmed primarily at MIT, will be aired at the rate of one a month on the ABC network.

Dr. Wiesner told editors MIT welcomed the opportunity to participate in the series. New science and new technology, he said, can help mankind solve mounting social problems and lead to an improvement in human life.

"This will be possible only if there is a sympathetic and understanding public," he said. "MIT is pleased to be able to contribute to public understanding through these films.'

20 Speakers Scheduled For Anti-War Teach-In

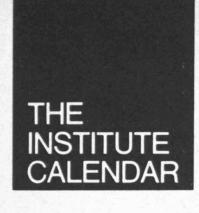
Cambridge Mayor Barbara Senator; State Representative mese student Ngo Vinh Long will be among more than 20 speakers at a teach-in Friday, January 19 at

Sponsored by the MIT Peace Coalition, the teach-in, entitled "Thirty Years of War. No More!-A Pre-Inaugural Teach-In," will begin at 4 p.m. in the Sala de Puerto Rico of the MIT Student Center and is expected to continue to midnight or later. It is open to the public.

Poetry and theatrical readings will be given by poets Denise Levertov, Barry Spacks and Patricia Cumming, the improvisational theater group, The Proposition, and The Interdiction, a Boston University theater group.

Other speakers scheduled to appear Friday include: Jack Backman, Massachusetts State

Ackerman, political writer John Businger; Noam Chomsky, Richard Goodwin, and Vietna- Ferrari P. Ward Professor of Modern Languages and Linguistics at MIT; John K. Fairbank, Francis Lee Higginson Professor of History and director of the East Asian Research Center at Harvard; Sandra Graham, Cambridge City Councilwoman; Edwin Kuh, professor of economics at MIT; Jerome Lettvin, MIT professor of Biology; Philip Morrison, professor of physics at MIT; Carl Oglesby, visiting lecturer in humanities at MIT; Frances Fox Piven, professor at Boston University; Rabbi Herman Pollack; Daniel Schecter, political commentator, Radio WBCN; Paul Solman, editor of The Real Paper; Nathan Sivin, associate professor of humanities at MIT, who is just back from a year in Japan; and Howard Zinn, professor of history at Boston University.



January 17 through January 26

Organizations that wish to have activity listings reinstated in the Calendar should call or write Calendar Editor, Rm 5-111, X3-3279.

Events of Special Interest

Thirty Years of War-No More*

Teach-in sponsored by MIT Peace Coalition. Speakers include George Wald, Philip Morrison, Howard Zinn, Noam Chomsky, Barbara Ackerman, Sandra Graham, Barry Spacks, and many others. Fri, Jan 19, 4pm-midnight, Student Center.

Seminars and Lectures

Wednesday, January 17

High-Power Laser Interaction with Solids and Gases (162)

Prof. Benjamin Lax, Daniel Cohn, NW14-4111, X3-5524. Topics include: fusion with lasers, laser heating of plasmas, laser breakdown, X-ray lasers, nonlinear interactions. One topic per day, through Fri Jan 19, 10-11:30am, Rm NW14-2209.

The Chemist in Industry (50)

Dr. Richard Hinman, Pfizer, Inc, will discuss "The Nature of Industrial Chemical Research." 11am, Rm 4-270.

No Place to Go but Down*

Martin Klein. Blink. . . Ping. . . and Other Strobe Lab Topics (99). 11am-12n, Rm 3-446.

Establishing an Independent Consulting Practice

Dr. Terrence K. McMahon, McMahon Technology Associates. Chemical Engineering IAP Lecture Series (42). 1pm, Rm 12-102.

Design and Construction of an Excitation System for a Supercon-

Thomas A. Keim, graduate student. Mechanical Engineering doctoral thesis presentation. 2pm, Rm 3-343.

Chemical Composition of the Earth

Prof. F. A. Frey. Earth and Planetary Science Discussion Series (69). 2pm, Rm 54-425.

Physics in Australia

Dr. David Peaslee. Lecture Series in Physics (274). 3pm, Rm 26-414.

The Thermal Evolution of Planetary Objects

Prof. David C. Tozer, University of Newcastle upon Tyne. Earth and Planetary Sciences Colloquium. 4pm, Rm 54-100.

Critical Factors in Early Development (294)

Prof. Hans-Lukas Teuber, head, Dept of Psychology. 7pm, Rm

26-100.

Debate with Profs. Jerome Lettvin and Bernard Feld. Dean Robert Holden, moderator. Hillel IAP Activity. 8pm, Student Center West Lounge.

Thursday, January 18

Electronic Flash Lamps-Their Application and Uses*

Bruce Newell. Blink...Ping...and Other Strobe Lab Topics (99). 11am-12n, Rm 3-446.

Extensional Flows of Elastic Liquids

Dr. William R. Schowalter, Dept of Chemical Engineering, Princeton. Chemical Engineering IAP Lecture Series (42). 1pm, Rm 12-102.

Prof. R. Dudley, mathematics. 2pm, Rm 2-190. (Lecture geared for

Using Housing Market Models to Compare Federal Subsidy Policies and Looking at a Markov Process through an Imperfect Channel* Prof. Joseph Ferreira, urban planning, and Prof. Alvin Drake, electrical engineering. Operations Research Center Seminar Series. 2:30-4pm, Rm 24-307. Refreshments following, Rm 24-219.

Physical Sciences in Medicine

Prof. H. E. Stanley. Lecture Series in Physics (274). 3pm, Rm

Computer Science (Artificial Intelligence, Automata Theory, Programming Linguistics, Etc.)

EE Undergraduate Thesis Seminar (115). 4pm, Rm 10-105. Refreshments, 3:30pm.

Tu Bishevat (Jewish Arbor Day) Seder

Rabbi Everett Gendler. Hillel IAP Activity. 4pm, Talbot Lounge, East Campus.

Come the Revolution: Growth or No Growth?* Prof. Marshall Goldman, economics, Wellesley College. Technology & Culture "Future of Progress" Series. 5:15pm, Rm 6-120.

Friday, January 19

The Chemist in Industry (50)

Dr. Richard Hinman, Pfizer, Inc, will discuss "The Future of Industrial Chemistry." 11am, Rm 4-270.

Extensional Flows of Elastic Liquids

Dr. William R. Schowalter, Dept of Chemical Engineering, Princeton. Chemical Engineering IAP Lecture Series (42). 1pm, Rm

Rivers from the Mantle: The Nature of Volcanic and Related Rocks Prof. J. Dickey. Earth and Planetary Science Discussion Series (69). 2pm, Rm 54-425.

The Biggest Thing in the Universe

Prof. Bernard Burke. Lecture Series in Physics (274). 3pm, Rm

Monday, January 22

A Study of a Cylindrical Pulsed Solid Fuel Microthruster William Seeglitz, graduate student, aero and astro. Doctoral thesis presentation. 10am, Rm 33-206.

Reflections on Socialism (73D)

Prof. Evsey Domar, economics. 10:30am, Rm E52-394. Continued Wed, Jan 24, 10:30am, Rm E52-365. (Note: changed from Jan 15

Commercial Development of Technology

Dr. Samuel W. Bodman, chemical engineering. Chemical Engineering Lecture Series (42). 1pm, Rm 12-102.

Plate Tectonics as Viewed from Plate Edges: Earthquakes; Stresses and Driving Forces

Prof. S. Solomon. Earth and Planetary Science Discussion Series (69). 2pm, Rm 54-425.

Prof. Kenneth Johnson. Lecture Series in Physics (274). 3pm, Rm

The Importance of Conformation of the Tetrahedral Intermediate in the Hydrolysis of Esters and Amides*

Prof. Pierre Deslongchamps, Karl Pfister Visiting Lecturer from University of Sherbrooke, Quebec. Chemistry Seminar. 4pm, Rm

Thermally Activated Large Strain Deformation of Polyethylene and

Prof. A. P. L. Turner, mechanical engineering. Joint Polymeric Materials Program Seminar. 4pm, Rm 3-133.

Tuesday, January 23

Art and Technology-United in a Flash*

Herold Tovish. Blink. . . Ping. . . and Other Strobe Lab Topics (99). 11am-12n, Rm 3-446.

Why Do Mirrors Reverse Right and Left but Not Up and Down? (241A)

Prof. Ned Block, RLE. 2pm, Rm 14N-325.

The Application of Superconductivity to the Electrical Power Industry

Dr. J. K. Hulm, Westinghouse Research Labs. Science in Industry Seminar (272). 3pm, Rm 9-150.

Problem Finding Continued (318)

Dean William Pounds, Sloan School of Management. 4-6pm, Rm E52-461.

Recent Pulsar Observations

Prof. Joseph Taylor. Five College Astronomy Program, UMass. Center for Space Research Astrophysics Colloquium. 4:15pm, Rm 37-252. Coffee, tea, 4pm.

Talks on Living, Studying and Teaching in France (376) Prof. William Locke, foreign study advisor. 4:30pm, Rm 10-105.

My Experiences as a Writer and Historian*

William Worthy, freelance writer and historian. Community Fellows Program Seminar. 5-6:30pm, Rm E40-169.

Politics as Drama

Prof. Alisdair MacIntyre, University Professor and dean of Boston University College of Liberal Arts. Political Conflict and Views of Human Nature-A Series of Lectures (324). 5:15pm, Rm 9-150.

Wednesday, January 24

Reflections on Socialism (73D)

Prof. Evsey Domar, economics. 10:30am, Rm E52-365.

Strobe Videography*

C. E. Miller. Blink. . . Ping. . . and Other Strobe Lab Topics (99). 11am-12n, Rm 3-446.

Design of Ideal Cascades of Gas Permeators

Dr. James H. Porter, chemical engineering. Chemical Engineering Lecture Series (42). 1pm, Rm 12-102.

New England Geology and Continental Drift

Prof. R. Naylor. Earth and Planetary Science Discussion Series (69). 2pm, Rm 54-425.

Some Aspects of Numerical Weather Prediction in the Soviet Union Drs. Bugaev, Dymnikov, Miridonov and Sitnikov. Meteorology Seminar. 3pm, Rm 54-100. Call X3-2281 on Wed, Jan 24, for final

Is There Room for Women's Participation in the Jewish Service? Rabbi Meyer Strassfeld. Hillel Seminar. 7:30pm, Rm 1-273.

Thursday, January 25

Photech IV-Next Generation High Speed Movie Camera* Robert Shoberg. Blink. . . Ping. . . and Other Strobe Lab Topics (99). 11am-12n, Rm 3-446.

X-Ray Astronomy: A Young, Exciting, Rapidly Expanding Field Prof. Walter Lewin. Lecture Series in Physics (274). 3pm, Rm

So You Want to Start A Business? (319) Prof. Arnold Amstutz. 4-6pm, Rm E52-461.

An Anthropologist Looks at the Bible Rabbi Maurice Zigmond. Hillel Seminar. 7:30pm, Rm 54-100. Friday, January 26

Viking: A Mission to the Surface of Mars Dr. Ronald A. Hites, chemical engineering. Chemical Engineer Lecture Series (42). 1pm, Rm 12-102.

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Very Long Baseline Radio Interferometry: How It Works and Wi

Prof. C. Counselman. Earth and Planetary Science Discussion Ser (69). 2pm, Rm 54-425.

Dr. A. Eschenfelder, IBM. Science in Industry Seminar (272). 3p. Rm 9-150.

Community Meetings

Women's Forum Open House

Barbara Newell, president of Wellesley College, will discuss "Wome in Higher Education." Mon, Jan 22, 12n, Rm 10-105.

Career Development Workshop

Panel discussion of career paths for women and group discussion career planning. Sponsored by Women's Forum. Tues, Jan 2 7-9pm, Rm 10-280. Call Carolyn Scheer, X3-2046.

MIT Club Notes and Meetings

Association for Women Students

Peter Richardson, director of admissions, guest speaker. Mon, Jan 22, 4-6pm, Rm 3-310. All members of the community-male and female-are invited. Refreshments.

Figure Skating Club Mon, Wed, and Fri, 11:30am-12n, Skating Rink. Will work of

figures, free style, dance. Call Gwen Champion, dorm X8-928.

Monday-Friday, 10am-6pm, Rm W31-031. Fees: \$6/term for

students; \$10/term for community. Call X3-4343.

MIT/DL Duplicate Bridge Club** Every Tues, 6pm, Student Center Rm 407.

Tiddlywinks Association*

Every Wed, 8-12pm, Student Center Rm 491.

Social Events

on Phogographers (sault) Hillel Student-Faculty Luncheon Dr. Myer Kessler, guest speaker. Tues, Jan 23, 12:30pm, Rn 10-105. Lunch \$1.25. Make reservations in Hillel Office, 312 Memorial Drive, X3-2982.

Ashdown House IAP Party*

Hot rock music, drinking, live performance, cheese & crackers punches, etc. Fri, Jan 26, 8pm, Sala de Puerto Rico and Lobde Dining Hall. Admission: ladies free, men \$1 in advance. Call C. Y Lo, dorm X9-542.

Friday Afternoon Club**

Music, conversation and all the cold draft Budweiser you can drink Every Friday, 6pm, the Thirsty Ear in Ashdown basement Admission: men \$1, women 50 cents. Must be over 21.

Muddy Charles Pub**

Join your friends for music, beer, wine, snacks, conversation at the Muddy Charles Pub, 110 Walker. New hours: Monday-Friday 11:30am-2pm and 4-7:30pm; Saturday, 7-12pm. Starting January nightly specials will include: Mondays, all wines 25 cents; Tuesday through Thursdays, free pretzels and chips. Call GSC, X3-2195.

SCC Pot Luck Coffeehouse*

Live entertainment every Friday and Saturday, 8:30pm to 12m Student Center Mezzanine Lounge. Free coffee, cider, doughnuts Sponsored by Student Center Committee. Volunteers to perform of otherwise help out, call Paul Mailman, dorm X9626, or Doug Fried

Movies

Five World Views through Films (240)

Wed, Jan 17: 3pm, Requiem for a Faith; 3:45pm, The Sufi Way. Thurs, Jan 18: 3pm, A Conversation with Krishnamurti. All in Rm

Who Killed Determinants?

Spirited lecture on historical patterns of research and growth in field of determinants. Math Film. Wed, Jan 17, 4pm, Rm 2-390.

Feynman Film Series (249)

Wed, Jan 17: Relation of Mathematics to Physics. Fri, Jan 19: The Great Conservation Principles. 4pm, Rm 26-100.

Resistance: Film and History (135). Wed, Jan 17, 7:30pm, Rm 10-250. Free, open to those interested.

Open City*

Humanities Film Series. Wed, Jan 17, 7:30pm, Rm 10-250. Free, open to those interested.

You're Telling Me**

With W. C. Fields. LSC IAP Movie Series. Fri, Jan 19, 7pm and 9:30pm, Rm 10-250. Tickets: 50 cents.

elle of the 90's**

ith Mae West. LSC IAP Movie Series. Sat, Jan 20, 7pm and 30pm, Rm 10-250. Tickets: 50 cents.

ilms on the Environment (31C)

Chain of Life," "Spruce Bog," and "For Your Pleasure." Thurs, an 18, 1-2:30pm, Rm 9-150.

artheat of a Volcano, Succession on Lava, The Aging of Lakes, d Controversy on the Moon

arth Science Movies (70). Thurs, Jan 18, 2pm, Rm 3-270.

nematech (132). Thurs, Jan 18, 7:30pm, Rm 26-100.

umanities Film Series. Thurs, Jan 18, 7:30pm, Rm 26-100. Free, en to those interested.

rof. David Blackwell, probabilist and statistician, solves purely athematical problem in ingenious fashion. Math Film. Mon, Jan 4pm, Rm 2-390.

evnman Film Series (249)

Symmetry and Physical Law," Mon, Jan 22; "The Distinction of ast and Future," Tues, Jan 23; "Probability and Uncertainty: The uantum Mechanical View of Nature," Wed, Jan 24; "Seeking New aws," Thurs, Jan 25. All shown at 4pm, Rm 26-100.

manities Film Series. Mon, Jan 22, 7:30pm, Rm 26-100. Free, en to those interested.

e Heroes of Telemark*

PO movie. Mon, Jan 22, 7pm and 9:30pm, Rm 10-250. Tickets 50

ilms on the Environment (31C)

safe Insect Control" and "Point Pelee." Tues, Jan 23, 1-2:30pm, m 9-150.

irtsey Volcano

arth Science Movie (70). Tues, Jan 23, 2pm, Rm 3-270.

sylum*

manities Film Series. Tues, Jan 23, 7pm and 9pm, Rm 26-100. ee, open to those interested.

xed Points

of. Solomon Lefschetz describes how his "magic number" applies determine whether a surface has the fixed-point property. Math lm. Wed, Jan 24, 4pm, Rm 2-390.

ttle of Algiers

amanities Film Series. Wed, Jan 24, 7:30pm, Rm 26-100. Free, en to those interested.

e Mount Newman Iron Ore Project

rth Science Movie (70). Thurs, Jan 25, 2pm, Rm 3-270.

ms on Phogographers (340D) non-long transcription with the Is Edward Steichen," "Photography as an Art-Ansel Adams" "Weapons of Gordon Parks." Thurs, Jan 25, 7:30pm, Student nter Rm 429.

ntempt*

amanities Film Series. Thurs, Jan 25, 7:30pm, Rm 26-100. Free, en to those interested.

Evening of Soaring and Gliding Movies*

T Soaring Association. Thurs, Jan 25, 7:45pm, Student Center est Lounge. Films include: "Two Niner Juliet," "SB-9 Flutter search," and "Where No Birds Fly." Free.

usic

Evening with the Dulcimer*

rgil Hughes, guest instrument maker (see IAP 305), will sing and y Southern Mountain Dulcimer, also discuss its history and nstruction. Thurs, Jan 18, 8pm, Music Library, Bld 14E.

ano and Cello Concert*

orks by Beethoven, Debussy, Rachmanioff, Chopin, presented by nist Robert Freeman, member of MIT music faculty and recently pointed director of Eastman School of Music, and cellist Ronald onard, professor of cello at Eastman. Tues, Jan 23, 8:15pm, esge. Free.

ay heater and Shows

sical Theatre Guild*

ditions for "Trial by Jury" by Gilbert and Sullivan. Wed, Jan 17, 0-11pm, Student Center Rm 473; Thurs, Jan 18, 8:30-11pm, dent Center Rm 491. For more information, call Michael Morris, 6294 or 354-7795.

Community Players

ekly discussion group on mime and puppetry. Group will also end local performances during Jan and Feb. For information, call

ance

ese Dance Program*

ic, classical and contemporary Chinese works performed by ang-Ching. Fri, Jan 19, 8:30pm, Kresge. Tickets: \$2, \$3, \$5-\$1 ount for advance purchase and reservations; call X3-4720.

Exhibitions

Paintings and Collages by Adja Yunkers*

Hayden Gallery, Jan 12-Feb 10. Open 10am-4pm, Mon-Sat. Free.

Photographs by Terry Lindquist

Creative Photography Gallery, 120 Mass Ave, ON display through January 31. Free, open daily, 10am to 6pm.

Graphic Notation in Contemporary Music*

Exhibition presented in the Music Library, Rm 14E-109.

Exhibits include "Ocean Engineering Summer Laboratory Projects 1971 and 1972," and "Tugs and Towing." Bldg 5, first floor.

Athletics

Women's Gymnastic Club**

Guest teacher Bel Broadley will hold classes Mon through Friday, 5-7pm, duPont Gym.

Varsity "B" Squash*

Colby. Fri, Jan 19, 7pm, duPont Squash Courts.

F & V Basketball*

Lowell Tech. Sat, Jan 20, 6:15pm and 8:15pm, Rockwell Cage.

Varsity Hockey

Maine. Sat, Jan 20, 7pm, Skating Rink.

F & V Basketball*

Wesleyan. Tues, Jan 23, 6:15pm and 8:15pm, Rockwell Cage.

JV/F Hockey*

Lawrence Academy. Wed, Jan 24, 3pm, Skating Rink.

V & JV/F Fencing*

Yale. Wed, Jan 24, 7pm, duPont Fencing Rm.

Varsity Hockey*

Wesleyan. Wed, Jan 24, 7pm, Skating Rink.

Religious Services and Activities

The Chapel is open for private meditation from 7am to 11pm every

Campus Crusade for Christ/College Life*

Family time, fellowship and teachings from God's Word. Every Fri, 7-9:30pm, Rm 1-132.

Christian Bible Discussion Group*

Every Thurs, 1pm, Rm 20B-031. Call Prof. Schimmel, X3-6739, or Ralph Burgess, X3-2415.

Hillel Services

Mon-Fri, 9am Minyan, Rm 7-108. Fri, 8:15pm, Chapel. Sat 9am, Chapel. Mon-Thurs, services w/elderly in Mattapan, leave Hillel Office 5:20pm. Note: For Hillel sponsored classes and activities during IAP, see IAP Guide or visit Hillel Office, 312 Memorial Drive. X3-2982.

Protestant Worship Service* Every Sunday, 11am, Chapel.

Roman Catholic Masses* Weekly masses in the Chapel: Sunday, 9:15am, 12:15pm, 5:15pm; Wednesday, 5:05pm; Friday, 12:05pm.

United Christian Fellowship*

Christians for dinner, food, fellowship. Every Wed, 5pm, Walker (at sign of the fish). Followed by singing, praying, sharing meeting, 6pm, Rm 14E-303.

Dining Service

Wednesday, January 17

Lunch: egg roll w/rice, oriental sauce. Dinner: roast fresh ham w/gravy, applesauce

Thursday, January 18

Lunch: chop suey w/rice. Dinner: roast veal w/celery dressing,

Friday, January 19

Lunch: codfish cakes w/tomato sauce. Dinner: french fried sole w/tartar sauce.

Monday, January 22

Lunch: chicken a la king w/toasted noodles. Dinner: sweet and sour pork w/rice.

Tuesday, January 23

Lunch: Yankee pot roast. Dinner: baked halibut steak w/lemon. Wednesday, January 24 Lunch: chili con carne w/corn chips. Dinner: roast chicken w/celery

dressing, gravy.

Thursday, January 25
Lunch: keilbasi w/sourkraut. Dinner: BBQ spareribs.

Friday, January 26

Lunch: escalloped tuna noodle casserole. Dinner: roast sirloin of

New IAP Listings

Process of Decision-Making

Meeting times to be determined by participants. Shell Rm, Bldg 52, 4th floor. To indicate interest and time preference call Riva Poor, 868-4447, 9am-8pm.

Additional IAP Information

The following are changes, corrections and additions to the information which appeared in the Final Guide to IAP. The bold numbers in this section (as well as in other sections of the Calendar) correspond to the numerical listings in the Guide.

Visits to Industrial Plants (35A)

Tues, Jan 23, Monsanto Resin Plant, Indian Orchard, Mass. Tues, Jan 30, Cabot Combustion Labs, Billerica, Mass. Sign up with Chemical Engineering Headquarters, Rm 12-135, X3-4561, by preceding Friday.

Goethe's "Werther" (123)

Prof. Martin Dyck, Rm 14N-208, X3-2446. Wed, Jan 17 and Jan 24, 3:30-5:30pm, Rm 14N-208.

Symposium on Music Criticism (131)

Michael Steinberg, music editor for the Boston Globe. Jan 18, 22 and 29, 2pm, Rm 4-160.

Animal Models of Human Disease (222) Prof. R. Wilson, Rm E18-615, X3-6242. Meet Thrus, Jan 18, 2pm, Rm 26-168.

UROP Trip to New York APS Meeting (251) Bus will leave 7am, Mon, Jan 29, from Amherst St (between Kresge and McCormick), return late Tues, Jan 30. UROP students or

undergraduate physics majors who wish to attend, call Fred Dylla,

X3-2540.

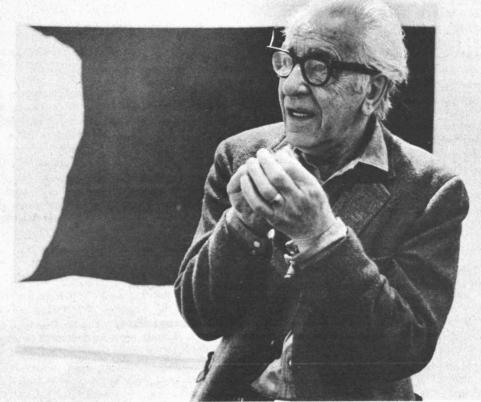
IAP Haystack Observatory Tour (297) Persons interested in visiting Haystack on Fri, Jan 19, should call X3-5283 to sign up.

* Open to the public

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

Send notices for January 24 through February 2 to the Calendar

Editor, Room 5-111, Ext. 3-3279, by noon Friday, January 19.



Artist Adja Yunkers talks about his work during the final preparation of the exhibit now in Hayden Gallery.

-Photo by Marc PoKempner

Cambridge Novel a Real Winner

Author Eliza McCormack, the wife of MIT professor of physics Bernard T. Feld, has written a successful novel, which prompted the following interview. Although the book is not yet a full-fledged bestseller, an editor of the Signet paperback edition reports it is on "a special list of books that are doing exceptionally well" and the author has had word from England that it is "doing remarkably well" there. For Tech Talk readers, Mrs. Feld notes that she has been writing seriously only for the last 16 years, since she stopped practicing law. MIT has been helpful, too, she says, through weekly yoga classes (taught by Eileen Turchinetz), which "provided strength and moral support" during the stressful period of writing. The interview appeared in the January 9 edition of the Boston Herald American and is reprinted here with permission.

By BONNIE SELWAY

Eliza McCormack wrote for 30 years and nobody read her stuff.

Except, that is, the editors at literary magazines, who never published any of it.

"But even an occasional pencilled note of encourage-

ment on the regection slips was enough to keep me going for another year," says the wry author of "Would You Believe Love?"

Then something happened a few years ago at a cocktail party in Cambridge, where she lives with her husband MIT professor Dr. Bernard Feld. And Eliza's grateful to the bigot there who sparked her first successful novel.

It seems he had seen her having coffee with a young black man she'd met while standing in line to photostat yet another story. And he was more than curious "what I was doing having coffee with that young man."

For the sake of a joke, she replied, "Oh, that was my black anarchist lover and we were plotting the violent overthrow of the government."

"Don't be ridiculous," the man said. "He can't be your lover. He's black and you're twice his age."

Incensed, Eliza—veteran of many civil rights marches—went home and wrote "Would You Believe Love?" tapping her 20 years of life in Cambridge and her feelings about its changing social climate.

It was the story of a lonely middle-aged Cambridge housewife—ignored by her busy professor-husband, "irrelevant" to her teenage kids, and too old and unskilled for a good job—who falls in love with a young black man she meets in a draft-resistance center.

The heroine's life of quiet desperation and how she solves her problems hit home with Random House, the Book of the Month Club, seven foreign publishers, Paramount Pictures, reviewers—and lots of American women.

"I've gotten letters from women who say 'You've written my story'," says the author.

"One woman wrote saying 'I kidded myself for years thinking I was important as a mother and wife. But my children have grown up and I'm no longer important as a mother. And I look at my husband and realize I'm not important to him and never have been." "she continues.

important to him and never have been,' "she continues.
"That breaks my heart," Eliza says. "So many women are lonely and feeling out of joint with both the times and their own age. They fall between two stools.

"They're not old enough to be happy doing what my mother does—reading, gardening, with no desire to work—and they're too old to go out and look for what my daughters' generation takes for granted as 'total fulfillment'. They're not liberated enough to start a career."

She rues the fact many women feel unimportant because they don't hve the professional "label" that "makes them someone." She recalls it was that thinking that propelled her through law school many years ago, only to find she hated being a lawyer and finally went back to writing. At Cambridge parties when she's asked "what do you do," she answers seriously "I'm a writer" and changes the subject.

Eliza's surprised that one liberated professor friend thought the book "copped out" in sending the heroine back to mend her marriage and adopt a black child.

"Doesn't she see a woman like this (heroine) would never give up her marriage easily?" she asks. "She has an adherence to people she loves and her husband's one of them. Her lover gave her a new lease on life, to try one more time to get through to her husband and make it work."

A little dazed by her new literary success, Eliza has developed a temporary mental block against writing, and now occupies her time with volunteer political work, "shlepping" her book on radio and TV shows, and sporadic bouts with the typewriter.

"I used to expect when I died they'd say, 'She was the oldest living unpublished author in the world, certainly in Massachusetts,' "she laughs. "No one took my writing seriously. I knew I was writing for myself and the drawer.

"But now I have unavoidable evidence other people have read what I wrote," she kids. "And it scares me. I have the feeling someone is looking over my shoulder when I write"

With typically dry Scottish humor and detachment, she spoofs her success—and some of the reviews she's collected.

Holding one self-importantly at arm's length she reads, "''Yery witty, clear-eyed, soul-shrivelling' says the Daily Telegraph. Ta ta!

"Publishers Weekly writes 'The problems of color and age are handled with grace and wit.' Those must be the two old people related to frank and earnest," she kids.

"The Glasgow Herald says 'She writes with ironic detachment. This is a delightfully American book, a WASPishly delightful one.' What the hell does that mean?" she asks.

She's gotten a few bad reviews, including one with a "misquotation" from the New York Times critic. (She'd like to "shake him 'till his teeth fall out.") The most resounding one, in the Philadelphia Bulletin, likened her to J. D. Salinger—"I think that's going overboard," she says.

Luckily, only one person has mistaken the book for a true story, Eliza says. An old roommate wrote saying, "How could you & $\frac{1}{4}\frac{1}{2}$!? Bernard must hate you. If I had done this and written about it I wouldn't be living with my husband still."

Another friend accused her of writing her into a minor character, Eliza says, forgetting that the book was written before her problems had started. "I couldn't have copied her unless I was clairvoyant," Eliza says.

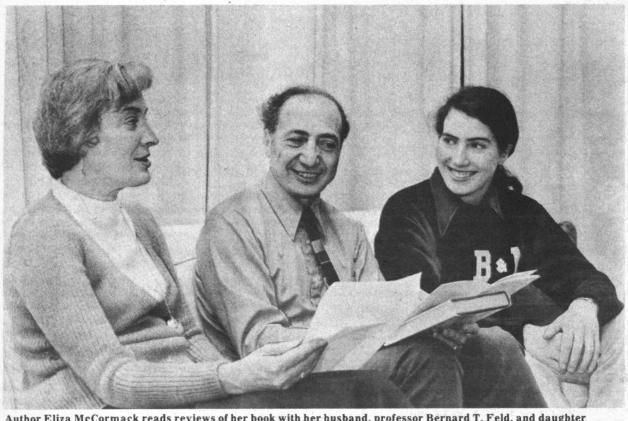
Getting serious, she adds, "My family is so pleased I published a book. You'd think my husband would be so bored with it, but I found he's stuck up a review in his study. I find that very touching. He's always been kind and supportive.

"My younger daughter encouraged me to go on TV talk shows," she adds. "I was scared to death. But by and large people who call are very nice. They usually want to talk about what they think love is and how they have it or lost it.

"Only once did they cut off a caller on a radio show who started to scream 'You sound like a fat, slobby, loud-mouthed Irish...' I don't know how he got past the screener," she said.

Despite the strain of post-publication interview commitments, she says, "I'm damned glad to get published; don't get me wrong. I get down on my knees and thank old Random House every day!

"But now I hope to get back to my private affair with putting down my views of the world," she says. "I never will be Dostoevsky or Chekhov, but I don't mind saying I think I'm better than Irving Wallace."



Author Eliza McCormack reads reviews of her book with her husband, professor Bernard T. Feld, and daughter Ellen, 16, in their home in Cambridge. Boston Herald American photo, reprinted with permission.

New UROP Listings

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

United States Coast Guard New England Region

The USCG has funded a proposal for ocean-related research by undergraduates and MIT faculty supervisors. Several undergraduates might begin UROP projects for credit (or perhaps pay) during the spring term at MIT and then continue the work as a summer UROP project for pay at MIT, the Maine Maritime Academy in Castine, Maine, Avery Point, or the USCG installation in New London, Connecticut in one of the four project areas listed. In addition, arrangements may be made for the use of USCG equipment for instrumentation, overflights, cruises, etc.

For ideas and information in the four research areas contact the faculty members listed below or Keatinge Keays, Room 5-228A, X3-4330.

(1) Oil Pollution—Detection, Measurement and Removal. Students might investigate physical and remote ways to measure the extent of harbor and ocean oil pollution quickly and accurately. Another interest is the "tagging" of oil cargos or the efficient deployment of oil collection equipment following a spill. Contact Prof. David P. Hoult, Room 3-252, X3-2174 or Dr. James C. Weaver, Room 26-317, X3-4194.

(2) Small Boat Safety and Stability and (3) Safe Powering of Recreational Boats. Each year many recreational boats swamp or sink at sea because of poor design, improper operation, or operator ignorance. The USCG must soon establish standards for powering and safety to minimize the loss of human life and the number of rescue missions run. Project possibilities include everything from computer modeling to instrumentation or to a testing program. Contact Prof. Douglas A. Carmichael, Room 5-222B, X3-4316.

(4) Acoustical Standards for Recreational Boat Noise Emissions. Excessively noisy recreational boats cause disruption of nearby people or communities. The USCG must establish standards for noise emission, and would like MIT students to help in the development of these standards and measurement procedures. In addition, excessive noise may contribute to the "sense of disorientation" experienced by many operators after a period at sea. Contact Prof. Patrick Leehey, Room 5-222A, X3-4337, or Dr. Frank Aldrich, Room 20B-238, X3-5360.

Class of 1970 - UROP Research Grants

The Class of 1970 has created as its class gift to the Institute a fund to support socially-oriented research projects undertaken by undergraduates. Limited funds will be awarded to cover research expenses by a Board on the basis of merit of proposals submitted by undergraduates. To be eligible for consideration, proposals must (1) demonstrate substantial student initiative in choice of subject matter and formulation of problems; (2) address a socially significant problem in either a technological or non-technological fashion; (3) demonstrate that the proposed activity is an integral part of the student's overall educational and professional objectives; and (4) have an MIT faculty supervisor. Guidelines are available from UROP coordinators, or the UROP office. Deadline for proposals is January 30, 1973.

Eloranta Summer Fellowship Program

A number of summer research fellowships for MIT undergraduates will be awarded this spring under the Eloranta Fellowship Program. The fellowships support unique research of study projects under the guidance of responsible agencies or individuals in the United States or abroad. The summer program may involve research or study experience at a university or at an industrial or government laboratory. For more information contact Leonard Gallagher, Room 5-119, X3-4971. Note the application deadline for proposals is February 19th, 1973.



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 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. The deadline is noon Friday

For Sale, Etc.

Refrig, works well, \$10 & remove from 4th fl. Dorm X0-457.

Sony 355 tape deck, 3 head stereo w/sound-on-sound, exc cond, 3sp, gd freq resp, \$110; bonus Sony demag & 9-1800' Sony PR150 tapes, free. Jerry, X3-2422.

Pr radial tires, 5.60 x 15, 5K, \$40. Pat, X3-1822.

GE undercounter dish washer, working, free to anyone who removes it. Eykamp, X3-5685.

GE elec stove, 40", w/push but, v gd cond, timer, deep-well cooker, 3 storage dr, nds new thermo, \$30 or best. X3-6392, Wed only.

Mahog Sheraton 5dr dresser, \$45; same style corner desk/vanity, \$30; cof tbl, \$10; 21" Magnavox tbl TV, nds new pic tube, \$10; 2 lamps, \$5 ea. Joe Vittek, X3-7572.

Tires, 6.95x14, regular. Tom, X3-3120.

Pr girl's skates, boy's skates, sz 2, gd cond, \$4/pr. George, X7213 Linc.

Ventilating fan, 30", mtd in 36" frame, ¼hp, \$50 or best offer. X8-3425 Draper.

Lthr coat, new, fur trim, 14-16, price nego; blue braid rug, 3x6, \$5; asstd posters & cassettes. Pat, Dorm X8-790 or 8-819. lv msg.

Nice card tbl w/4 chrs, \$30. Jain, X3-5348.

Stud snows, lk new, Sears best, G78-15, pr \$50; new wheel rim for Jeep Wgner, \$10. Jerry, X8-1343 Draper.

GE port prof, hard hood, hair dryer, exc cond, \$20. Helen, X3-2957.

Std SR-A1000S AM/FM rcvr, 20 w, rms/channel, \$120 or best. Mike, \$19629 Dorm

Upright piano, asking \$200; violin, asking \$300; hockey skates, 11, \$10. Andy, X3-3161 lv msg.

Boots, fem 9½, fully waterprf & wrm, bl w/high heels, \$10 or best. X 3-7902.

Ice skates: boy's hockey, 7, \$10; women's figure, 8, \$10; Army boots, 9, \$3; Taylor Tot infant jumper wlkr, \$9. X8-4095 Draper.

Bedsprd, fake fur, rich 2" acrylic pile, lynx fur, wh-beige-lt br, polyester lining, \$30. Diane, X0-584 Dorm.

Ski boots, fem lace-up, lk new, 7½-8, \$15. Moore, X3-2038.

Snows & rims, 2, blncd, H78-15 or 8.55 x 15, used 1 winter, \$10 ea. Rod Corlin, X3-3161, lv msg.

Hoover port washer, seldom used, must sell, moving, best. Carol, X8-2473 Draner.

Stud snows, 6.85 x 15 on VW sqbk rims, 2, \$25. X3-5094.

Radiant elec heater, \$4. Fritz,

X3-3911.

RCA b & w TV, working cond, \$25; 2 26" bikes, one lady's, one man's, old but usable around town, theft resistent, \$15 ea. Ray, X3-4657.

Man's hockey skates, 11, CCM, exc cond, recently sharpened, \$15. John, X3-4174.

Kent elec guitar w/case; guitar amp, 140 watts; Shure PE51 mike w/stand; new Remington recharg shaver; new Panasonic port cassette player; best offers. Peter, X8-623 Dorm.

Monroe elec calculator, \$40; buckle ski boots, 8, Lange Pro, \$75, Kastinger, \$25; hockey skates, 8, \$10; Sony 630 tape rcdr, \$285. Scott, 933-2030. SB-301 80 thru 10 meter ham revr incl CW crystal fltr, \$200: slide rules, all types, w/cases, cheap. Jean Ward, X3-3161 lv msg.

Ski Boots: fem Reicker 6½ w/Allsop boot tree, exc cond, \$25. Liz, X3-7402.

Hand-crocheted belts, hdbnds, vests, etc, made to order, reas. Helen, X3-2958 or X3-4889.

VW rims, 4 hole for sq backs and recent bugs, \$8 pr. X5430, Linc.

Sofa, 90", Ital prov, gld & bronze tone uphol, ex cond, \$100. Carole, X8-1261 Draper.

Skates: boy's hockey, 12 & 13, ex cond, 1, nvr used; boy's Hyde figure, 2, ex cond; girl's Hyde figure, 3, v reas. Ed Friedman, X3-3730 lv msg.

RCA color TV, 8 yr old, w/o cabinet, best offer. Fred, X3-6035.

'67 GE 40" range, used one yr and stored, asking \$200 or best. Call 272-7186.

Kastinger fem 5-6 4 buckle ski boots, 2 yr old, \$15 or best. Eva, X3-1618.

Matching couches, 2, gd cond, \$50 both or best. Call 354-0807.

Zildgian cymbals, other drum acces, no drums, gd cond. Jim, X3-4175.

Roberts 720-A tape rcdr. Chris, X3-5550.

Dbl bed, gd cond, yr old, asking \$50; wdn dresser w/mirror, \$20. Tse Wei Wang, X3-4901.

Dynaco comp: stereo 70 amp, \$75; PAS-3X preamp, \$40; dual 1218 trntbl w/ M91E cart, \$130. Phil Mandel, X3-3161.

Std box spring-mattress, \$40; sofasleeper, \$45; mahog oval tbl 30", \$40; coff tbl 6'1 w/drwrs, \$40; antique rd wicker tbl w/ shelf 29" dia, \$45; pr brass lamps, \$8.50; more. Kitty, X3-6466.

Sheared raccoon coat, 10, \$100. Dr. Buyrn, X3-4155.

Vehicles

'63 Rambler Classic, 6 cyl, auto, r & h, 60K, beaut body, ailing heart, comes w/spare parts car + another comp eng. X3-2433.

'63 Corvair van, 100+K, runs fine but looks lousy, gd trans, \$175 or best. Hank, X3-1721.

'63 VW, sunrf, new batt, runs but nds work, \$175 or best. Dorm X9-495.

'64 T-bird, as gd as '66, loaded, 98K, \$550. Landsman, X5862 Linc.

'65 Ply Barracuda, R & H, exc cond, asking \$350. Pete, X3-5272.

'65 Chevy Carry All, Custom C10, comp reblt eng, body, new clutch, br, all gauges, painted met blue, \$900 firm. X3-5274.

'66 Mustang, 61 K, gd body & eng, \$350 nego. Guido, X3-3356.

'67 VW, reblt eng, guar, \$900. Bob, X3-2701.

'68 Corvair, 48K, 110hp, std, r, polyglass tires, stud snows, yel w/bl int, \$300. W. R. Ditzler, X3-1471.

'68 Volvo 122S, wh, exc int, reclin buckets, 4 band r, Michelin X radials, new gen & exhaust, 50K, \$900. David Chan, X0-308 Dorm.

'68 Opel Kadett wgn, 45K, r & h, v gd cond, \$675. Kwan, X 3-4620.

'69 Fiat 1240 red sports Spider, 39K, steel radials. X8-3591 Draper.

'69 Dodge camper ski van, fully insul w/sink, stove, refrig, bed, htr, etc. \$2200. X3-2018.

'70 Fiat 850 Spider, 14K, 4 new radials, orig ownr, exc cond, \$1350. X3-3637.

'70 Toyota Corona Mark II wgn, exc cond, all opt, auto, rf rack, a.c., 2 extra tires on whls, 2K on new motor, must sell, lvng country, \$1700 or best. Rob, \$3,700.1

'71 Sno-Jet 20 hp Yamaha eng w/sled, exc cond, \$450. Gary, X 366 Linc.

Housing

Brkl 4 BR, LR, DR, mod K, 1¼ B, access to univ & T, low tax, potential income on 3rd fl, move-in cond, asking high \$30s. Catalan, X7285 Linc.

Camb, Harv St nr Harv Sq, attrac mod 1 BR apt, a.c., \$260/mo, incl pking, bus to MIT, avail 3/1, sublet or lease; tbl, 2 capt chrs, lamp, twin beds, elec broom, for sale cheap. Lise, X3-1539.

Camb, Inman Sq, 1 BR sublet 2/1/73-9/1/73, \$195, mod bldg w/pking, w/opt. Steve, X3-5743.

Grenoble, France, 3 BR hse in exchange for same in Lex, 9/73-6/30/74. Hedy, X3-7719.

Jam PI, furn rm in priv home, \$17.50/wk. Nancy, X3-7426.

Medford, mod 2 BR apt, AC, dish-disp, w-w, top flr, ht & pking, avail 2/1/73, \$245. Ellen, X8-1385 Draper.

Newt, 7 rm 3-4 BR house for rent, nr Rte 128, 9 & T, school & shopping, lg yard, some furn, washer, dryer, dish avail. X3-4791.

Northgate 2 BR apt, spac, w-w, dishdisp, a.c., \$240 + elec, lease from 2/1-8/31, MIT fams only. Rosalind,

W Som, College Ave, 7 rm col w/3 rm income suite, mod cab K, lav tile B, rose tile B, 220 wiring, 2 car gar w/lg stor, nr Tufts, on T. Call 625-8543.

Jay Peak, Vt, 4 BR hse, slps 8, fully equip, cathedral LR, views, garage, fams pref. \$250/wk. X3-3127.

Jay Peak, Vt, lakeside ski lodge on 200 acres, all util, plowed, slps 15, \$180/wk. Den'ny, X3-5606.

Lock Mills, Me, A-frame, 3 mi from Mt Abram, slps 10, elec ht, frpl, \$75/ wkend, \$175/wk. Brenda, X8-4486 Draper.

NH ski chalet for rent. X8-4415 Draper.

N Conway, NH, whend rentals, 8 ski areas, 3 lodges, slp 20, 13, 9. Ruth, X8-2476 Draper.

N. Woodstock, NH, chalet, secl, ideal for ski touring, 20 min from Loon & Cannon Mts, wkly or wkends. X3-5760.

Skiers: Arch design ski hse w/sauna, 15 min from Waterville Valley, NH, avail mo of Feb, slps 12, ideal for 2 families. X3-2533.

Animals

M Siamese nded for stud, bluepoint or sealpoint. Dick, X8-1376 Draper.

Free to gd homes, 4 guinea pigs, 2 m, 2 f, asst colors & sizes. Elisabeth, X8-978 Dorm.

Pls adopt healthy, affec b & w m cat fnd freezing at our door, incompat w/our m, vet checked, distemper injection, Try him you'll love him. X3-2029.

Free: v cute tiger gray kitten, f, hsetrnd, 6 wks old. Call 321-8150.

Lost and Found

Lost: pr glasses, lt br rims, Jan 8. X3-1553.

Found: MIT ring nr Fairfield Drug & Newbury St, wk ago, call to identify. Pam, X3-1782.

Found: glove, belongs to MIT pre-med bio student hitching w/Dale Brandt of DEC. X3-6081.

Wanted

Bicycle, 26". X3-1439.

Fem rmmate, mid-late 20s, to share Bcn Hill apt w/2 others, walk to MIT, \$87 plus util. Charlotte, X3-3210.

Fem rmmate for lg Camb apt, own rm, share w/2 others, \$80. Celia, X3-3151.

Fem rmmate for lg Brkl apt, own rm, on T, \$117 ht. incl. Jane, X3-6732.

Fem rmmates, 2, for Camb 3 BR apt, own rm, unfurn, 10 min walk to MIT, 5 min walk to Central Sq, avail Feb 1, \$76.67 inc. ht. Irene, X3-4728.

Male or fem rmmate for coed coop nr Porter Sq, own BR, \$77 + util. Susan, X3-4547.

Rmmate for own rm in 2 BR apt nr Harv Sq, \$105 inc ht, furn. X3-5239.

Rmmate for own rm in 3 BR apt on Bri-Brkl line, new, paneled, w-w, near stores, bus, T, pking avail, part furn, \$108 inc ht, elec. Barry, X3-5054.

Rmmate for own rm in 2 BR apt bet Harv & MIT, \$93/mo inc ht water, fully furn, mod appli, lg porch, yard, male or fem, fem pref. X3-5763.

Hide-a-bed sofa. Linda, X8-3591 Draper.

Rides for 2, day trips to ski areas, wl share expenses. X0-437 Dorm.

F silky terrier to mate w/my m 1½ yr old AKC reg silky terrier. X3-7254.

Gerbil, pref m. Don, X3-6369 lv msg.

'67 or '68 Chevy AM car radio, nd not work. Rick, X5845 Linc.

Singer sew mach. X3-2659.

Miscellaneous

Ski wk, Jan 19-Feb 2, Sugarloaf, Me, \$95/person covers lifts, lessons, food, lodging, trans. Bill, X3-3229.

WI do gen typing on SCM elec. Ron, X3-7273.

Gen & thesis typing. Ann, X3-1713.

Positions Available

BIWEEKLY

Secretary IV to two professors involved in research and teaching. Responsibilities will include making appointments, arranging meetings; typing of correspondence, class material, and scientific manuscripts for publication; audit monthly accounts; set up and maintain student files and class rolls; answer student inquiries. Ability and experience necessary to work on your own are important. Initiative, organization and excellent skills (dictaphone) are required.

Medical Secretary IV for a research center will transcribe patient case histories from dictating equipment for two physicians; maintain billing for outpatients; arrange appointments and prepare project proposals. Experience with medical terminology or a certificate from a medical secretarial program required. Ability to deal with patients and physicians important.

Biweekly X3-4251



Karl A. Seeler, '75, son of MIT's medical director Dr. Albert C. Seeler, recently established a new national junior record for precision air pistol. Seeler's score of 267 over the 30-shot course at a 10-meter distance bettered the old mark by six points.

Bibliography Aims to Spur Chitin Studies

A spinoff of new water antipollution laws is a bibliography on Chitin and Chitin Derivatives aimed at stimulating research on this polymer which is produced in great abundance by marine organisms.

Authors of the bibliography are E. Ray Pariser, of Cambridge, a senior research scientist in the Department of Nutrition and Food Science and the Education Research Center, and Susan L. Bock, of West Hartford, Conn., a second-year student in the Department of Biology.

They compiled the bibliography with support from the MIT Sea Grant Program.

Impetus for the bibliography came from the U.S. government pressure on the crustacean fishing industry to stop dumping lobster, shrimp, and crab carcasses, which are primarily chitin, into the ocean.

Chitin derivatives could have many uses—in pharmaceuticals, paper, in water purification processes as a coagulant, and in insecticides. Marine copepods alone produce several billion tons of chitin each year.

Bridge Players Have Big Deal

The Student Center will be the scene of a competitive bridge tournament on Sunday, January

The top two or three winning teams will qualify for regional and national competition leading to the Intercollegiate Bridge Championships to be held in Knoxville, Tenn., in the Spring.

All members of the MIT community are invited to participate in Sunday's tournament, but only student teams will be eligible to continue to the championships. The two sessions of the competition will be held at 2pm and 7pm in Room 473

Information about the tournament may be obtained from Jeff MacGillivray, dormline 0453.

Directory Out

The Directory of Foreign Staff Members for 1972-73 is now available in the Registry of Guests, Room 7-121. Distribution of the new directories has been limited, but copies will be available to faculty members upon request.

Do Networks Skimp on Foreign News?

Is American television network news coverage isolationist?

A group from the "Politics and Television" class of Edwin Diamond, lecturer in political science, are taking a look at the percentage of coverage given to international news on American TV networks.

"Excluding the coverage of Vietnam, the American networks devote only about five percent of their news programs to foreign matters," according to Colin B. MacAndrews, a graduate student in political science from Toronto, Canada, "This compares with about 25 to 30 percent given to foreign affairs by the British Broadcasting Company (BBC)," he said.

MacAndrews, 37, who has covered South Asia as a free-lance journalist for the Canadian Broadcasting

Company and a number of Canadian and American newspapers, will be working on the analysis with Steven L. Warsof, a senior from Millis, Mass., John S. Wood, a junior from Westbury, N.Y., and Robert M. Meagher, a senior from Billerica, Mass.

"We are in the process of investigating what is covered by the networks and how and why they cover what they do," said MacAndrews. The group has already spoken to a number of television executives at local stations and in New York City.

Beginning January 28 they will be attached to NBC Nightly News for a week in which they will attend editorial conferences and go out on actual coverage. In February, the group plans to monitor and quantify television news in America and Canada and other countries.

Lab Reorganization

Duffy Named Draper Lab President-Elect

MIT contributions to the Apollo moon program—at the Draper Lab, in the Center for Space Research, at the Department of Earth and Planetary Science and elsewhere—drew a message of congratulations from the White House this week.

President Richard M. Nixon, in a letter to MIT President Jerome B. Wiesner, said:

"Few events in the history of exploration have been as dramatic as the journey of Americans to the moon, But even as we take pride in the astronauts themselves, we also join them in recognizing that these greatest of scientific explorations were made possible by the thousands of other men and women whose energy, devotion and considerable genius have brought this Nation to a position of pre-eminence in space.

"The knowledge gained through the Institute's contributions to the Apollo program will benefit humanity for centuries to come. I extend to you my congratulations and the thanks of the American people for a job well done."

Career Training Post Open

An opportunity exists in the MIT personnel reorganization for an able person to take charge of the career development and training programs for all Institute personnel, other than academic.

This position is newly created as part of the reorganization of personnel activities announced in last week's Tech Talk.

The individual in this post will have full responsibility for the organization and administration of the programs of career planning, development and training. This will include responsibility for the operation of Institute-conducted training and development courses and the coordination of those which use outside resources. It will involve assessment of the needs for further training programs and the planning and recommending of new programs to meet identified needs. The incumbent will be expected to take the leadership role in initiating and guiding the formulation of MIT's plans for career development and he or she will report directly to the Vice President, Administration and Personnel.

Any person at MIT who is interested in and feels qualified for the position is encouraged to indicate that interest to Mrs. Sally Hansen, of the Personnel Office, Ext. 3-4275. While the final selection will not be restricted to persons now at the Institute, preference will be given to an, MIT candidate. It is hoped that the selection can be made in the very near future.

Preferred qualifications include experience in organizing programs of career planning and training, and understanding acquired either through experience or formal education of organization influences on personnel development.

Obituary Roland D. Parks

Roland Dane Parks, associate professor emeritus of mineral industry at MIT, died suddenly at his home in Arlington, Va., on December 18, at the age of 72.

A graduate of the Michigan College of Mines and the University of Wisconsin, Professor Parks joined the MIT faculty in 1940. He was a specialist in mineral evaluation and had an international reputation in this field that combined aspects of geology, mining, economics, political science and international law.

Professor Parks' publications have had an important impact on the field and his book, Examination and Valuation of Mineral Property, has long been regarded as the standard text both in this country and abroad. His teaching at the Institute focused on the elements of mining, mine valuation and mineral economics, and he served for 11 years as assistant director of the MIT Summer School of Geology in Nova Scotia.

During World War II, Professor Parks was with the War Production Board, concluding this service as Assistant Deputy Vice Chairman for Metals and Minerals. After the war, he went abroad twice to help develop mining schools, first at the Indian School of Mines and Applied Geology in Dhanbad, India, and next at Assiut University in Egypt.

Before his retirement from the Institute in 1966, Professor Parks had been on leave since 1964 serving with the US Treasury Department conducting mineral evaluation for the Mineral Resources Department of the Internal Revenue Service in Washington. He served in this capacity until March of 1971.

Professor Parks is survived by his wife, Ruth D. (Martin) of Aflington, Va., and daughter, Mfs. Nancy Dane Valelly. A memorial service was held December 21 in Arlington. (Continued from page 1)

Ralph R. Ragan of Lincoln, who has headed all Laboratory work for the National Aeronautics and Space Administration, has been named director of a newlyorganized Laboratory planning staff

David G. Hoag of Medway, who directed development of the guidance system that NASA's Apollo astronauts used to steer their way to the moon and back, replaces Mr. Ragan as director of all NASA work and also will assume responsibility for work sponsored by the U.S. Army.

Roger Woodbury of Weston, who has been in charge of work sponsored by the Air Force, was named to succeed Mr. Kirk as Assistant to the President and William Denhard of Reading was appointed director of Air Force programs. Mr. Denhard formerly directed one of the Laboratory's major component development groups.

Dr. Hill said development of components—the gyros and accelerometers used in the Laboratory's control systems—will be consolidated into a single activity under the direction of Michele Sapuppo of Andover. Mr. Sapuppo has directed another of the Laboratory's major component groups.

Forrest E. Houston of Westwood will continue to direct the Laboratory's work sponsored by the U.S. Navy.

Mr. Kirk, as vice president, Dr. Hill said, will have special responsibility in the establishment of a consolidated component development activity and in the establishment of a consolidated communications and publications activity within the Laboratory.

Dr. Hill said the board of directors approved the organizational changes to accomodate the Laboratory to the changed environment that will follow separation from MIT. The objective, he said, is a management structure that will make the Laboratory "a continuing contributor on the highest scale of technical excellence to the welfare of the nation and the world."

Marksmanship Course Planned

Members of the MIT community who wish to enroll in the Pistol and Rifle Club's basic marksmanship course, beginning January 18, should call George Sechen, on Ext. 1830, Bates Linear Accelerator. (For more information on the courses, see Tech Talk, January 10, Page 2.)



Grapefruit grows atop the Green Building. Harvesting the fruit (which "tastes good") is Miss Isabelle Kole, of Boston, a technical assistant in meteorology, who planted the seed 16 years ago in her office. When the plant grew too big, it was moved to the plexiglas radome on the roof of the building and for the last six years has been cared for by Spiros G. Geotis, of Saugus, a DSR engineer in meteorology. For the information of houseplant aficionados, the tree is potted in half of an old wine keg, takes six gallons of water a week, and was pollinated by Geotis with a small paint brush.

—Photo by Margo Foote

Symposium to Review Cardiac Assist Devices

An interdisciplinary symposium to assess techniques for improving cardiac function in the failing heart will be held January 25 at MIT.

A part of the research program of the Harvard-MIT Program in Health Sciences and Technology, the symposium will be a working meeting on the subject, "Current Status—Cardiovascular Assist Devices."

Cardiac assist devices currently in use include external pressure devices and intra-aortic balloons. Both devices assist the failing heart by increasing blood flow to the heart itself and decreasing the work load of the heart.

To be held in the penthouse of the MIT Faculty Club, the symposium will begin at 3 p.m. and continue through the afternoon and evening, with a buffet dinner at 6 p.m. Welcoming remarks will be made by Irving M. London, M.D., director of the Harvard-MIT program. Co-chairmen and moderators for the discussion will be Charles W. Urschel, M.D., of Harvard Medical School and Peter Bent Brigham Hospital, and Ascher H. Shapiro, Sc.D., head of the MIT Department of Mechanical Engineering.

Speakers will include Dr. Urschel; Herman K. Gold, M.D., of Massachusetts General Hospital and Harvard Medical School; Edward S. Kirk, Ph.D., of Peter Bent Brigham Hospital and Harvard Medical School; Thomas A. McMahon, Ph.D., of the Harvard School of Engineering and Applied Physics; Harry S. Soroff, M.D., of Boston City Hospital and the Tufts University School of Medicine; and Mortimer J. Buckley, M.D., of Massachusetts General Hospital and Harvard Medical School.

The symposium is part of an effort to develop new, collaborative research among Harvard and MIT faculty members, according to Irving Berstein, Ph.D., research and development officer of the Health Sciences Program. He said the symposium invites inquiries from engineers, scientists and physicians who wish to participate in such research.

The symposium on cardiac assist devices will be a working meeting among prospective re-

searchers and attendance will be limited. Information on registration may be obtained from Dr. Berstein in Room 26-142, MIT, or at 253-1553.

New Day Care Center Needs Toys & Games

If your children are grown and their toys are taking up unnecessary space in the attic, why not donate these unwanted playthings to the new Technology Nursery School Day Care Center?

Located in Eastgate, the TNS Center is scheduled to open in February but there is still a great need for equipment.

The following are just a few of the items needed: 40 yards of brightly colored plastic for aprons and tablecloths; mallets, molds and rolling pins for clay play; child size musical instruments; records; containers with lids; punching bag; Spring-o-lene; Tunnel of Fun; nursery trampoline; unit blocks; rubber foam; pillows; dress-up clothes; doll house, cradles, cribs, beds, rockers, carriages; puppets; cash register and play money; store kits; measuring tools; large cushions; books; puzzles; games; Tinkertoys; Attribute blocks; Invicta cubes; and child size woodworking tools.

Members of the community who can donate any of the above items by February 1 should take them directly to: Marilyn Swartz Lloyd, Room £18-320, Ext. 3-5831; Leslie O'Donnell, 2nd Floor Medical Department, Ext. 3-2972; Margaret Sand, Room E19-239, Ext. 3-1592; or Jessie Davies, Lincoln Road, Lincoln, 259-0401.