



Isaac Chuang/The Tech

President Paul E. Gray '54 along with Rev. Dr. Samuel D. Proctor on his right leads a group of MIT community members to Kresge Auditorium yesterday.

## MIT program honors King Proctor urges educational opportunities for all

By Niraj Desai

"Beneath the veneer of poverty, there exist minds and creative personalities," said the Rev. Samuel D. Proctor, calling on the nation's colleges and universities to take up the challenge of providing a future for those who have been educationally and socially disadvantaged.

Proctor, pastor at the Abyssinian Baptist Church in Harlem, gave the keynote address at yesterday's Martin Luther King Jr. Celebration. President Paul E. Gray '54 also spoke at the gathering, decrying the presence of racism in the nation and the Institute and praising MIT's efforts to fight it.

Proctor recounted the story of how he heard about King's assassination in 1968. He was riding in the back of a Dallas cab, driven by a white man. The man, as

described by Proctor, was the stereotypical image of a white reed-neck — poor, unkempt, uneducated. For 15 minutes they rode in silence. Finally, the cabdriver had to stop. Choking back tears and barely able to speak, the man told Proctor of King's death. The driver was "the last man on earth one would expect [to cry for King]," Proctor said.

King was a man of intense faith in the improbability of humanity and in the power of goodwill, Proctor said, and a man who inspired such goodwill in others.

### Universities must work to improve society

A sense of grand purpose is absent from American higher education, Proctor said, claiming that universities do not strive to improve society. "If [the educational establishment] succeeded in meeting all of its objectives, what would the world look like?"

Proctor accused the educational establishment is too willing to give up on students from deprived backgrounds. Children growing up without parental support and strong community role models are not given enough opportunity to escape lives of poverty and crime, he continued.

"I am not urging that black people be given things they do not merit, but that impediments in their way be removed ... that

there be compensation for damage done," he said.

Proctor told the audience at Kresge, "It would be a great thing for universities to ... use [their resources] for the highest purposes we can design." Colleges and universities are too often mere training grounds, he said, with students interested only in high-paying jobs. Instead, he continued, universities could be used to foster a sense of community in this country. Such a feeling would help to break down the racial and religious barriers against which Martin Luther King Jr. fought, Proctor said.

### Civil rights are one step towards making a great society

"Why do all those nations in the UN vote against us?" Proctor asked. "Why must the rest of the world despise us?" If the United States could honor its promise of fairness for all people, he asserted, America would have the "envy of the world."

Moreover, Proctor argued, America could ultimately become a great society. He said the civil rights movement of the late 1950s and 1960s was one large step in that direction.

Tracing the roots of the movement, Proctor assured the audience that before Rosa Parks and the Montgomery bus boycott launched the modern civil rights

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## Forum to address divestment

By Michael Gojer

The MIT Colloquium has scheduled an event addressing US institutional actions in South Africa, according to Travis Merritt, chairman of the committee.

The South Africa colloquium, which is only one of the committee's spring offerings, had originally been planned for last term by the Corporation Joint Advisory Committee but was not held.

The colloquium, entitled "Ending Apartheid: Actions for Africa, America, and MIT," is scheduled for Feb. 4, co-sponsored by CJAC.

Keynote addresses will be given in Kresge by Neo Mnzana, the chief African National Congress representative to the United Nations, and David R. Claire '45, president of Johnson and Johnson Corporation and a member of the MIT Corporation. Johnson and Johnson decided, after much deliberation, not to divest of its South African holdings, according to Merritt.

Two panel discussions in the

Student Center will follow in the afternoon, Merritt continued. Mnzana will head a panel discussing the politics of opposition to apartheid in South Africa and the neighboring states, he said. Claire will head a panel discussing options for American institutional response to apartheid.

A number of living groups are hosting corporation members for after-dinner discussions which are open to the public, Merritt said. The Colloquium made efforts to ensure the participation of MIT Corporation members "in significant numbers," Merritt noted.

Undergraduate Association President Brian R. Moser '87 in September blamed the colloquium's delay on a "lack of commitment by the corporation." But Merritt and Vice President Constantine B. Simonides blamed the delay on a lack of time and on communication problems between CJAC and the Colloquium Committee.

### Colloquia on imaging and hazardous materials planned

The second colloquium, entitled "Image Makers: Scientist, Engineer, Explorer" will take place on Feb. 24, Merritt said. It will explore technological image-making, he explained. "The Great MIT Image Contest" will be held in conjunction with the

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## 517 have yet to complete Phase II

By Andrew L. Fish

Over half of MIT seniors have not completed Phase II of the Institute Writing Requirement, according to Bonnie J. Walters, chairman of the Committee on the Writing Requirement. As of Jan. 7, 517 still need to complete the requirement in order to graduate.

"The numbers are not quite what I hoped for," Walters said. Walters did note that the 517 students included some who will not graduate this year (such as VI-A internship students). She also noted that results from a Course VI cooperative writing class (6.111) had not been received.

Students face a deadline of Mar. 1 for submitting Phase II papers. The paper must be 10 pages long and relate to the student's major.

Walters did not anticipate an extension in the deadline. "I know the Academic Council will stick to Mar. 1," she said. If the Institute extended the deadline it would be an insult to those students who completed the requirement on time, Walters said.

In many cases students have submitted papers, but they have required rewriting, Walters said. The deadline for such rewrites will be Apr. 1, she said.

In addition to papers, certain classes which involve technical writing may also be used to fulfill Phase II of the requirement, she noted.

The Class of 1987 is the first required to fulfill the Institute Writing Requirement. Walters expected that future classes would not be so late in fulfilling it. "I would imagine that if 100 seniors didn't get their degrees the juniors would work harder," she said.

But students do not bear the entire blame for not completing the writing requirement, Walters said. Some departments do not

require students to write until late in their junior or senior year, Walters said. Some do not even require a course which can complete Phase II, she added.

Departments are beginning to offer lower-level subjects which can satisfy Phase II, Walters said. The departments are now taking a greater interest in the requirement, she claimed. Eventually, administration of Phase II will be turned over to the faculty of the individual departments, Walters said.

Many engineering students have completed the requirement through cooperative writing subjects, Walters said, noting that over a third of the students who completed Phase II since Nov. 30 did so through a chemical engineering cooperative class. The cooperative subjects exist only in

the School of Engineering, she said.

But there have been efforts to place courses similar to the cooperative writing subjects into the School of Science, Walters said. The mathematics department is offering a writing seminar, and writing faculty will be working in the spring semester of physics junior lab (8.14) and with the biology department, she explained.

Walters felt the writing requirement had adequate publicity. "Some students are tired of hearing about it," she said. Several departments and the Writing Center are currently having workshops to help students complete Phase II. But "in the long run it is up to the students" to fulfill the requirement, Walters said.

## Researchers use radar as meteorological tool

### Feature

By Honor Jones

Two large "golf balls" sit atop the Green Building, dominating the Cambridge skyline. In reality, each is a shell-like "radome" which protects an MIT Radar Facility radar antenna from strong winds. Last Wednesday Professor Earle R. Williams PhD '81 of the Radar Facility introduced several areas of research which use these radar devices during a one hour talk and a tour which followed.

Radar is the "most important single tool in observational meteorology," Williams said, explaining the two major types of radar and their applications in weather forecasting.

The more advanced Doppler radar determines velocity in addition to measuring the reflectivity of objects, Williams said. The radar station sends a polarized microwave pulse in a certain direction, he explained. If the beam strikes an object, it is reflected back to the station. The paraboloid receiving dish inside the radome then focuses the reflected waves onto the antenna, he said.

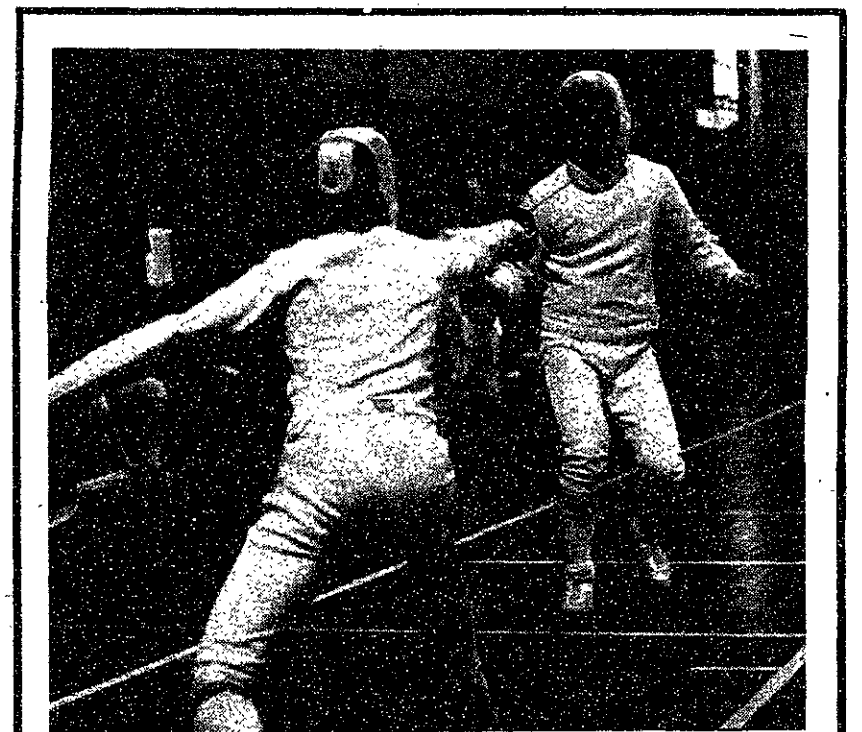
Because the radiation's speed is known, the object's range can be calculated by timing the pulse's absence, Williams said. By comparing the frequency of the pulse of the exiting beam with that of the reflected beam, the velocity of the target can be determined.

One of the applications of radar, the prediction of floods, is currently under study by the facility. Williams' group is attempting to predict the rate and level of water flow at the outlet of a drainage basin site. Precipitation rates over the area — as measured by radar — along with data gathered in the basin are used to make predictions, Williams said.

Another application of radar technology is the study of lightning. Specifically, the Radar Facility group is trying to understand the anomalous winter storm lightning which originates in the top half of a cloud rather than bottom half, as normal. The locations of the strange strikes are being recorded and studied along with details of their source storms, Williams explained.

The facility also studies whether lightning is associated with

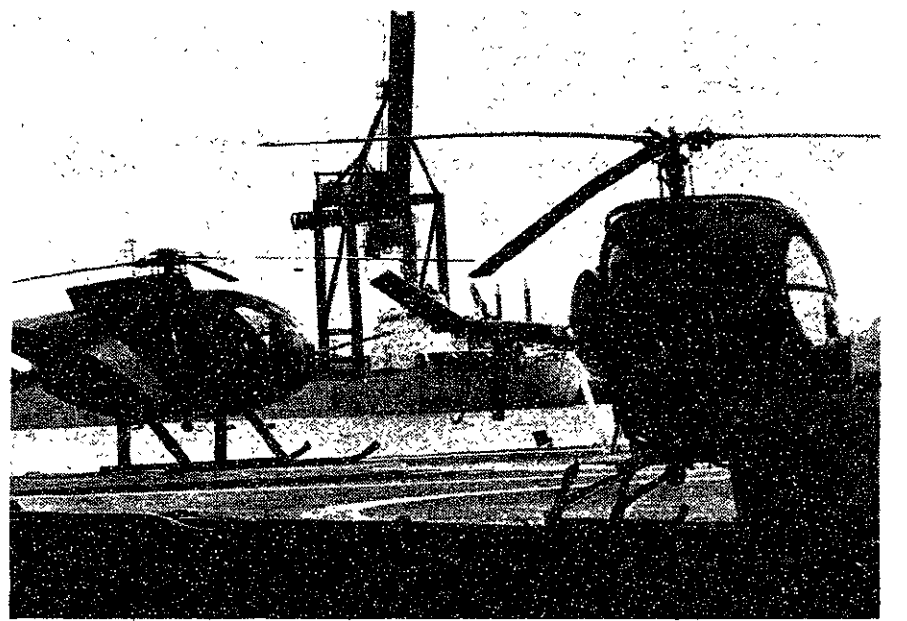
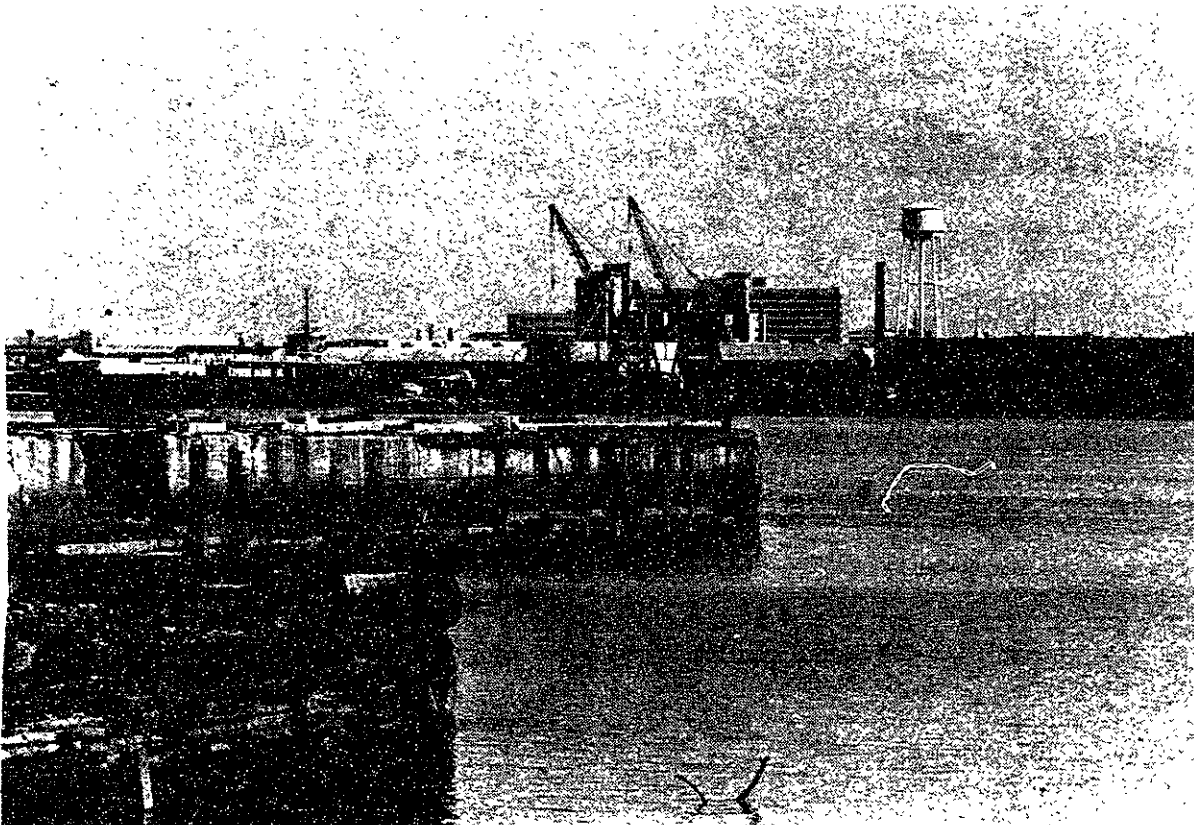
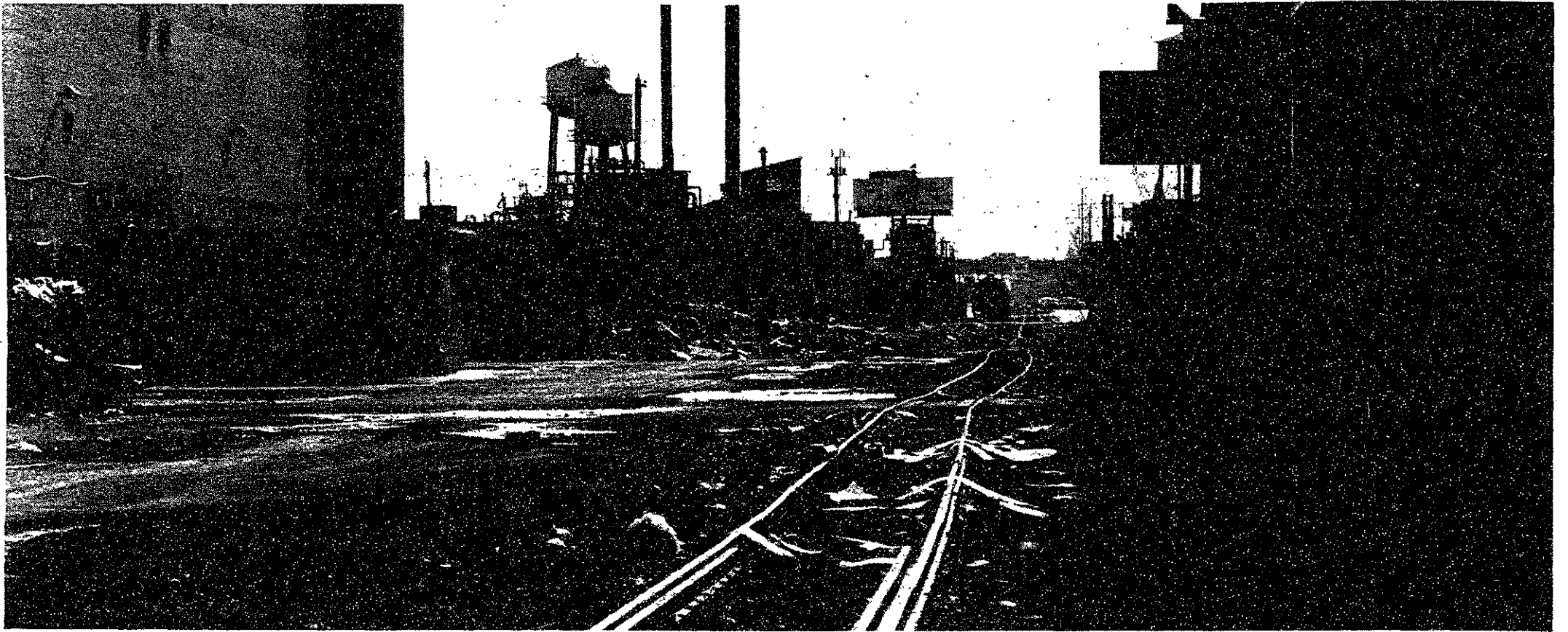
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Salma Saeed/The Tech

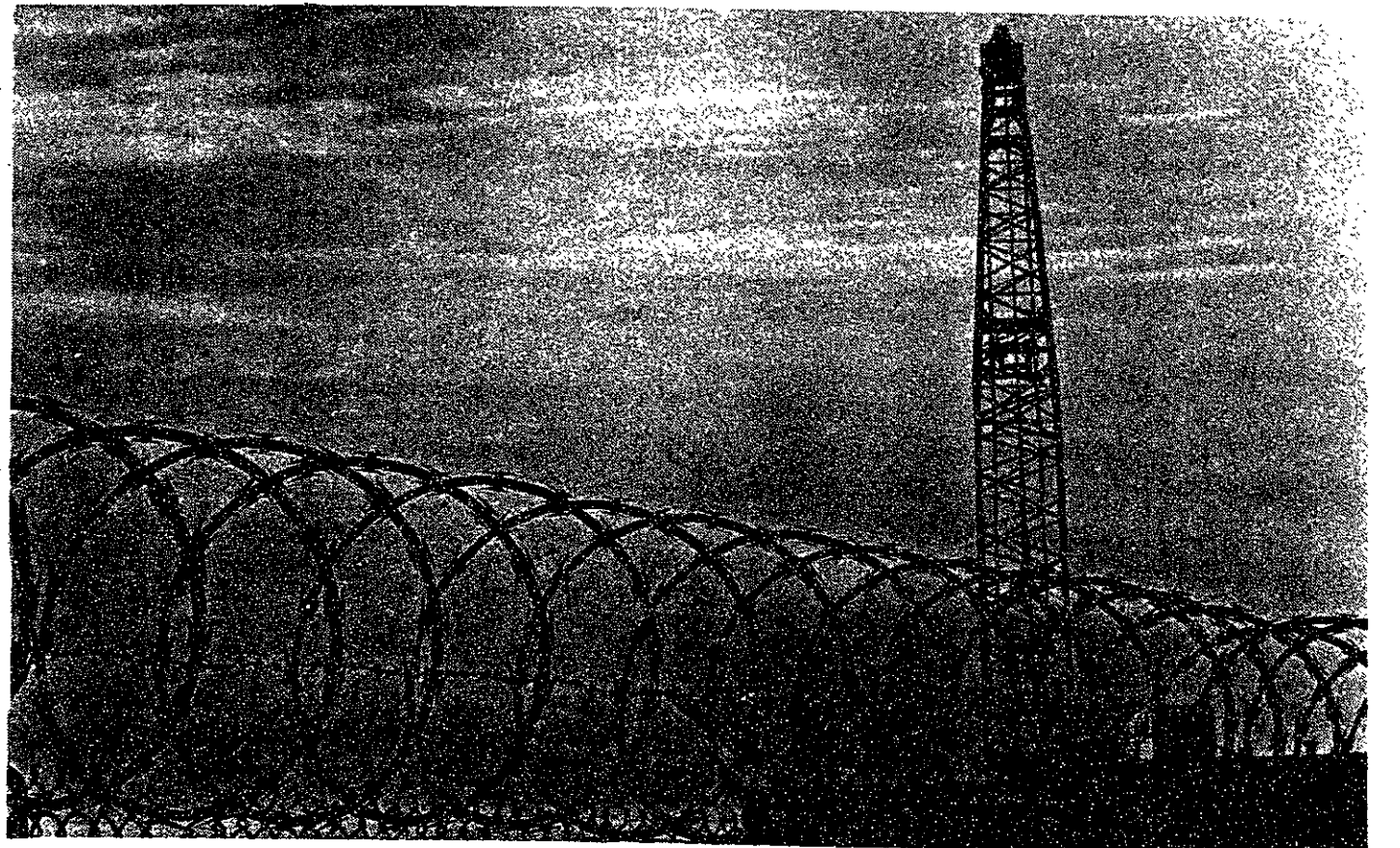
MIT's John Burroughs '87 lunges at Jae Sang '88 in a bout during last weekend's New England Intercollegiate Fencing Tournament. The Engineers hosted 25 other university fencing teams from around the country.

# photo essay



**Winter morning,  
Philadelphia Ship Yards**

Photo essay by  
Simson L. Garfinkel



# news roundup

from the associated press wire

## World

### Alleged arsonist charged

Murder charges were filed yesterday in connection with the New Year's Eve fire at the DuPont Plaza Hotel in Puerto Rico. Federal officials have charged Hector Escudero Aponte with 96 counts of murder. They said he spread flammable material in the ballroom of the San Juan hotel and ignited it, causing the inferno that killed 96 and injured more than 170 others.

Aponte was a maintenance worker at the hotel and is a member of the teamsters union, which was involved in a bitter labor dispute with the hotel in the hours leading up to the fire. It was suspected that the dispute had something to do with the blaze, but the union has denied involvement and has not been charged so far. Union officials refused to comment on yesterday's arrest, the first in the case.

A justice official in Puerto Rico says Aponte did not act alone, but the official refused to say who else may have been involved because the case is still under investigation. (AP)

## Local

### Audit report withheld

A state auditor's report says the Massachusetts Lottery Commission may have lost over \$108,000 by failing to keep funds in an interest-bearing account. The audit was completed by last May, but wasn't released until after the November elections. The campaign manager for defeated Republican candidate for treasurer Joyce Hampers yesterday criticized auditor John Finnegan for withholding the report. (AP)

### Sentences given to crime bosses

The top bosses of the Columbo, Genovese, and Lucchese organized crime families received prison sentences yesterday of 100 years each. The men were among eight defendants convicted at a federal racketeering trial in New York. They were members of a commission that oversaw the nationwide operations of the Mafia since Prohibition. (AP)

### Industrial complex destroyed by fire

The Kerr Mill Complex in Fall River was destroyed by a fire Monday, leaving 650 people without a job. Governor Michael Dukakis went to Fall River yesterday for a first-hand look at the damage. A spokesman for Mayor Carlton Viveiros yesterday increased damage estimates to \$20 million to account for equipment and possessions lost in the blaze. (AP)

## Weather

### A January thaw

Today and tomorrow will have a definite feel of spring as temperatures average more than ten degrees above normal for this time of year. Today will probably have more sun than tomorrow, but both days will provide a good chance to get outside. Enjoy it because a cold front will move through late Thursday and bring with it more winterlike temperatures to start the weekend.

**Today:** Some clouds early, then mostly sunny, breezy, and mild with highs in the upper 40's. Winds SW 10-20 mph.

**Tonight:** Clear early, cloudy late. Lows in the upper 30's.

**Thursday:** Clouds and a slight chance of an early shower, then partly sunny and mild with highs in the mid 40's. The cold front will swing through late with a shower or snow flurry.

**Friday:** Partly sunny and colder, high in the mid 30's.

Forecast by Chris Davis

Compiled by Mike Niles

## Nation

### Budget committee warns Pentagon

The head of the Senate Budget Committee is warning the Pentagon it won't just rubber-stamp its spending requests for fiscal 1988. Lawton Chiles (D-FL) told Defense Secretary Caspar Weinberger yesterday his panel will give intense scrutiny to any budget requests. President Reagan wants to increase military spending nearly eight percent to \$312 billion next fiscal year. (AP)

### Court rules for working women

Feminist organizations have mixed feelings about yesterday's Supreme Court decision on job protection for pregnant workers. The justices ruled that states may require that employers make sure pregnant workers can keep their jobs after taking maternity leave. The Court's decision also upheld a federal law which would allow a father to get the same job protection as a mother when a child is born. But both the National Organization of Women and the Women's Legal Defense Fund say the laws do not do enough. (AP)



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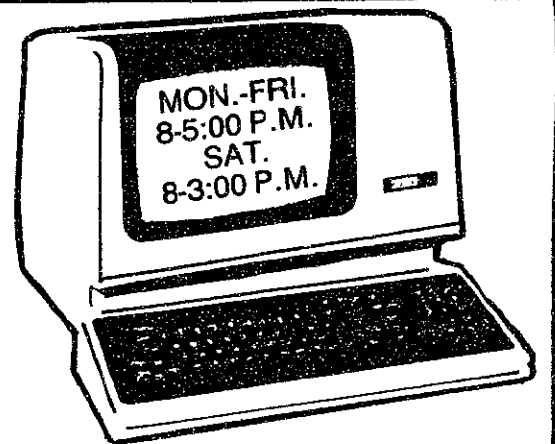
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# opinion

Guest Column/Marie Gilles-Gonzalez  
and Fred Foreman

## Martin Luther King: A dream deferred

In *Where Do We Go From Here: Chaos or Community?*, published one year before his assassination, Martin Luther King Jr. wrote: "When the Constitution was written, a strange formula to determine taxes and representation declared that the Negro was 60 percent of a person. Today another curious formula seems to declare that he is 50 percent of a person. Of the good things in life he has approximately one-half those of Whites; of the bad he has twice those of Whites. Thus, half of all Negroes live in sub-standard housing, and Negroes have half the income of Whites. When we turn to the negative experiences of life, the Negro has a double share. There are twice as many unemployed. The rate of infant mortality (widely accepted as an accurate index of general health) among Negroes is double that of Whites. The equation pursues Negroes even into war. There were twice as many Negroes as Whites in combat in Vietnam at the beginning of 1967, and twice as many Negro soldiers died in action (20.6 percent) in proportion to their numbers in the population."

On Martin Luther King Jr.'s birthday, we are sure to hear many speeches about the greater equality of blacks and whites since he wrote those words. Now, let's examine this progress. Here are the facts from the publication *Statistical Abstracts*:

In 1967, the income of black households was 0.59 that of white households, while in 1984 it was 0.56. Over the same period, the unemployment rate of blacks changed from double to two and one-half that of whites. Infant mortality among blacks,

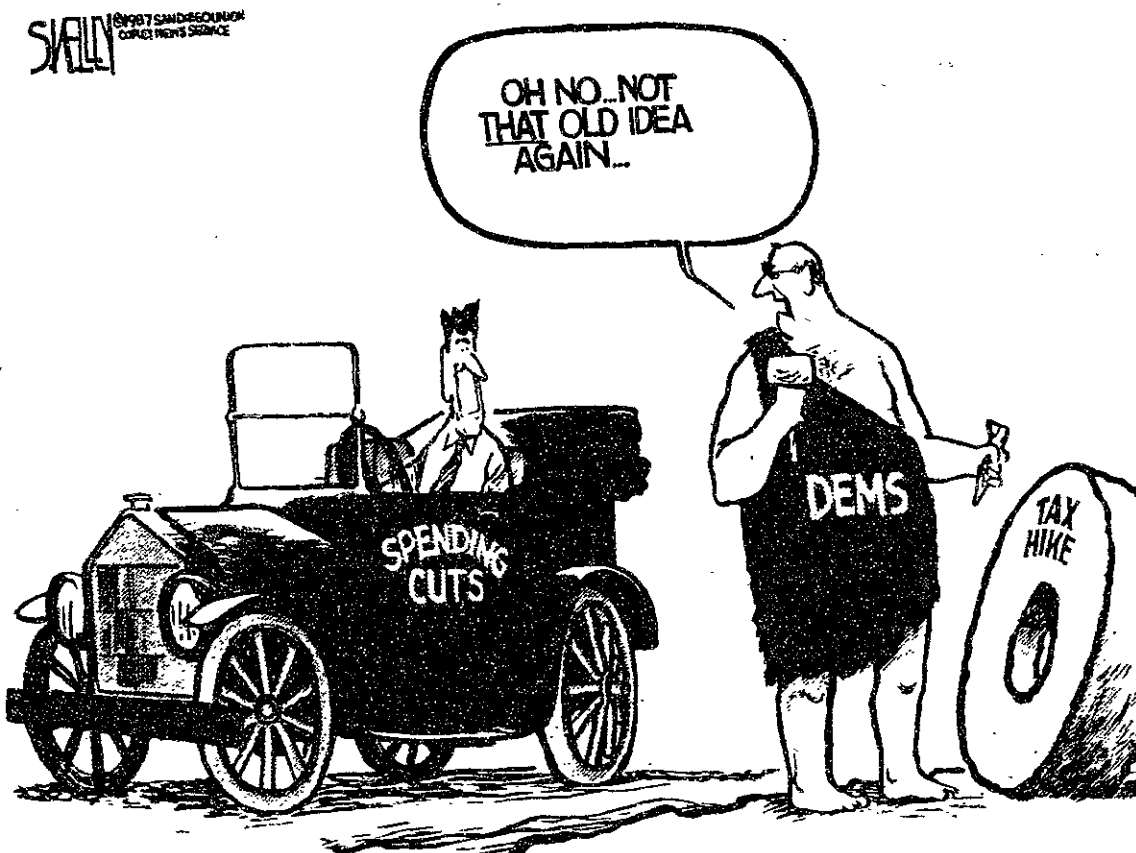
which had been 2.1 times that among whites, plummeted, after more than a decade of similar dramatic advances, to a mere 2.0 times the 1984 rate for whites.

We are currently between wars, but there is every reason to believe that the body bags which may return from Central America will also contain a disproportionate number of African-Americans, since there were 1.5 times as many black servicemen as whites in proportion to their numbers in the population in 1984. Moreover, the life expectancy of blacks in 1970 was seven years less than that of whites. Even if he doesn't go to war, a black man today can expect to live seven years less than a white man. In spite of all the talk, inequality haunts the Afro-American from his birth to his grave.

Here, too, at MIT we've seen our share of improvements. In 1970, 58 black undergraduates entered MIT; sixteen years later this number had soared to 59. It must be remarked that this startling increase is partly accounted for by a larger student body. The number of black faculty members at MIT is half what it once was, and the Black Studies Program has vanished. Such setbacks are not confined to MIT. The few gains achieved through new legislation or court decisions in the sixties have either been reversed or unenforced.

Why then is there a popular impression of change? Any changes that do not affect fundamental statistics can only be cosmetic. There is now a very small but very visible black middle class. For example, on news teams that include dozens of people on the production crew, a

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# The Tech

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Guest Column/Tom Legg

## Education reform ignores individuals

Once upon a time there was a school that believed it was on a mission. Its mission was to go where no one had gone before and bring its students along for the ride. The school was, of course, MIT, the mission was to provide an education that produced top-flight engineers and scientists with a social conscience, and the ride was curriculum reform.

MIT found itself in its current jam when enrollment skyrocketed in the Department of Electrical Engineering and Computer Science. Unable to find a politically acceptable way of restricting enrollment, the administration decided to change the admissions process so that more well-rounded students would come to MIT, students who would of course be less interested in majoring in electrical engineering or computer science (only nerds do that).

So now the Institute has a lot more diverse ("peachy" is the word the admissions office gave my high school counselor) student body with more diverse interests. The disillusioned, though, feel concern for the incoming students. They are more diverse, but in general the place and its programs are not.

MIT produces excellent professionals; this cannot be done with-

out an overbearing focus upon the students' fields of study. These fields of study now are only a small section of these new students' fields of interest. A lot of students give up extracurriculars and elective curricular study because the students' concentrations must be upon pre-professional academics.

Curriculum reform will not take care of this problem, at least not in the near future. The reason is that our reformers have no real interest in the students as individuals. They speak of making

the MIT education broader and making students more socially aware; these may be worthy goals, but they will do very little to solve the problem of students needlessly disillusioned by the lack of insight of the Institute Committees.

The reforms currently being discussed concerning the humanities distribution (HUM-D) requirements reflect this. Professor of History Pauline Maier, the chair of the Humanities, Arts and Social Sciences (HASS) committee

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**Columns** and **editorial cartoons** are written by individuals and represent the opinion of the author, not necessarily that of the newspaper.

**Letters to the Editor** are welcome. They must be typed double spaced and addressed to *The Tech*, PO Box 29, MIT Branch, Cambridge MA 02139, or by interdepartmental mail to Room W20-483.

Letters and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. No letter or cartoon will be printed anonymously without express prior approval of *The Tech*. *The Tech* reserves the right to edit or condense letters. We regret we cannot publish all of the letters we receive.

# opinion

## King's legacy must be action

(Continued from page 4)

negligible fraction of whom are black, blacks often make up one-third of the people reciting the news in front of the camera. Though there are only a handful of us at MIT, photographers somehow manage to find us whenever they need a picture for the front cover of the MIT bulletin. Out of a few prosperous blacks, many find that they can win easy victories by promoting white positions but have a very hard hill to climb if they try to advance minority interests. There actually exist at least two black men who would consider a position as Reagan's ambassador to South Africa!

In 1970, MIT had large investments in South Africa; in 1987, those investments are larger. Last December a British newspaper, *The Independent*, reported that the United States had sent 60 tons of arms to Pretoria via Switzerland. Though concrete support for apartheid is stronger than ever, verbal support has noticeably decreased.

You have heard of Martin Luther King Jr.'s Nobel Prize, his meetings with heads of state and the Civil Rights Act. And you probably now view his life's work

as an attempt to enact various legal changes in the official status of blacks. You have seen pictures of Martin Luther King Jr. in deep introspection or in similarly respectable postures. In fact, Martin Luther King Jr. was arrested thirty times and spent a good deal of his time either marching or in jail.

Because the conditions which he protested have not changed, we can assume that, if he were alive today, he would be continuing with his methods of civil disobedience and direct action. His most concrete contributions to the civil rights movement were his methods. The reason that blacks can vote in the south today is not because a law was passed (the Voting Rights Act) that stated their right to do so. There was already a law (the Fifteenth Amendment) guaranteeing this right.

And if one law by itself was not enough, there is no reason to believe that another dozen to the same effect would have been enforced simply because they had been passed. It was the marches and the jailings that brought about a commitment to enforce and reaffirm this already existing right in the form of the Voting

Rights Act. The media has tried to make him a saint because saints are intangible and difficult to emulate. As members of People Against Racism (PAR), we believe that the only fitting tribute to King is not to congratulate him and ourselves for what he has achieved but to complete his program and learn from his methods.

His ultimate goal was real equality, not legal equality. In fact, he wrote: "The Negroes of America had taken the President, the press and the pulpit at their word when they spoke in broad terms of freedom and justice. But the absence of brutality and unrenegade evil is not the presence of justice. . . . The limited reforms have been obtained at bargain rates. . . . The real cost lies ahead. The stiffening of white resistance is a recognition of that fact." Martin Luther King Jr. wrote these lines just a few months before an assassin's bullet interrupted his plans to convert legal equality to actual equality. The clock has been stopped ever since.

(Editor's note: *People Against Racism (PAR) plan to submit a series of weekly pieces dealing with the issue of racism.*)

## Don't take away students' choices

(Continued from page 4)

mittee, agrees that "the current distribution is simply not functioning well. Some changes need to be established." ["Faculty divided over HASS proposal," *The Tech*, Nov. 25, 1986.] The article also stated, "The HASS committee stressed that the present requirements . . . bypass large areas of knowledge."

To combat these oversights of large areas of knowledge, the HASS committee suggested limiting the choices that we, the students, would be allowed. The committee proposed restrictions on the humanities distribution requirement. This means students would be herded into classes that would be the backbone of a "common experience" for those herds, taught by professors who would be required to grudgingly teach those herds.

Remember, though, that MIT admitted those herds as individuals, who had broad interests. So instead of viewing them as individuals, the committee has decided the proper breadth of everyone's education and the proper experiences that everyone should share.

Of course, there are voices of reason to be heard. The dissenting committee members, John Hildebidle and Louis Menand III, expressed my opinion pretty well: a proposal such as this cannot really guarantee that a student will leave MIT with "meaningful breadth."

"All that is done unto compulsion is bitterness unto the soul."  
— Bergk

The students do not necessarily have to be commanded to take courses, if the courses look interesting in the first place.

Since the proposal came under

fire by half of the Humanities staff on the HASS committee, it has been put on a back burner. As an interim measure, Dean of Humanities and Social Sciences Ann Friedlaender is going to reduce the number of HUM-D's offered at MIT by half. After asking the departments which classes they want to keep as HUM-D's, her committee will decide which of the remaining classes will be HUM-D's. Her interim measure should be criticized just as much as the original proposal.

Wake up and smell the roses! MIT students are pretty broad and diverse individuals. If given the opportunity, they will satisfy their curiosity and develop the "meaningful breadth" for which the HASS committee screams. So the opportunity should be given to MIT students to control the direction of their education.

A selective knife should be taken to the glaring overlaps and the weak or uninviting classes. To counter this elimination of options, some other classes of general interest should be beefed up to create new and interesting HUM-D's. This should help cure some of the complaints of the committee, and it will be far less destructive than the proposed interim measure.

As for the "common experience" that the committee seeks, it

comes more from living together than sharing the same HASS distributions. A lot of the education any college student receives comes from outside the classroom, especially in the area of understanding humans and society.

Besides, MIT students already spend most of their freshman year sitting in classrooms sharing the same experiences. After freshman year they will probably see the same people again and again in their departmental courses. The humanities classes should be an opportunity to go beyond the common to the more personal experience. Away from the large introductory classes, students can achieve some personal growth through discussion on a level impossible in a large class.

Sometimes it seems as if this place really is a meat grinder intending to turn out a homogeneous product and restrict personal growth, even though I cannot seriously think that this is anybody's real intent. So I ask the committee on behalf of the current and future students that will be affected by curriculum reform in the Humanities, Science and Engineering Schools to open its eyes and remember it is dealing with individuals and not just theories of educational reform.

### "VISA STATUS AND HOW IT AFFECTS EMPLOYMENT OF FOREIGN NATIONALS IN THE UNITED STATES"

A discussion of factors affecting the ability of foreign nationals to work in this country, as well as discussion of F, J, and H visas and how to interact with potential employers.

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## French Canadian film deflates human relationships

### THE DECLINE OF THE AMERICAN EMPIRE

Written and directed by Denys Arcand.  
Starring Dominique Michel, Dorothee Berryman, Louise Portal, Genevieve Rioux, Pierre Curzi, Remy Girard, Yves Jacques, Daniel Briere, and Gabriel Arcand.  
At the Nickelodeon and Harvard Square.

By PETER DUNN

**A**FTER WINNING SEVERAL MAJOR awards at the Cannes and other film festivals, the French Canadian film "Decline of the American Empire" has finally made its way to Boston, despite playing in theaters north of the border for several months now.

In spite of what the title might bring to mind, namely some gentle or not so gentle

poking by Canadians at American culture, "Decline" is far from suggesting that the United States is falling a major force in world affairs. Far from it, this new film from veteran French Canadian writer/director Denys Arcand deals more with the decline of the value of relationships in the American "empire," of which Canada (although on the outskirts) is also considered a part.

"Decline" has often been labelled by film reviewers as "The Big Chill" for intellectuals but, although similarities exist, the differences seem a total reversal of roles. Whereas the latter film defined its characters by who they once were (flowerchildren of the sixties) and what they had become (yuppies, to put it bluntly), "Decline" defines its characters by who they are (mostly professors and students from the history department of the University of Montreal) and where they believe they are going.

But more importantly than by *what* its characters are defined, it is *how* its characters are defined that makes "Decline" different from "The Big Chill." Although "The Big Chill" was very much an internal film, chronicling the weekend of a group of university chums brought together by the suicide of a mutual friend, the problems faced were very much external. "The Big Chill" concerned itself with how its characters had coped with a cold, cruel world and with showing how much friendship played a part in dealing with the characters' confusion about their own futures. "The Big Chill" told the story of a small lifeboat of comrades engulfed by an immense sea of troubles.

In stark contrast, the characters in "Decline" define themselves. It is no trivial matter that the majority are history professors and hence have a distinct sense of destiny, particularly their own. Again the setting of the film is a gathering of friends, but the feeling is far more internal, the troubles which plague the characters being motivated by the deception and distrust within their own group. The characters of "The Big Chill" were confused by where they were going but if they had had any of the insight of the characters of "Decline" they would have been no less pleased.

The self containment of "Decline" is further emphasized by the recursive structure of the film. While history is undeniably defined by life, life as seen by the characters emulates history. Again and again words spoken by these professors of history as matters of intellectual discussion come back to haunt them in life.

The film opens with a subjective camera shot as one of the professors eyes a female student while matter-of-factly stating that, "History is not a moral science." The subtle link with the second major rallying point of the characters in the film is here quickly established through vision and sound: "Sex/lust/love is not a moral relationship." With this brief introduction establishing history and sex as two of its main topics, the film segues into a long tracking shot down a particularly im-

mense but barren corridor with a solitary rollerskater traversing its length to the tune of Handel. The shot and music convey the austerity of massive but decrepit Roman architecture with the rollerskater putting these into the context of a society too hurried to notice the decaying beauty around it. This long solemn sequence is at once impressive and unnerving.

This sense of fascination mingled with uneasiness continue through the entire film beginning as Dominique (Dominique Michel) discusses her theory espoused in her new book as to the decline of the American empire. We are at once intrigued by her thesis and the proofs she uses to back it, but are also unsettled when we consider that we, as an audience, are actually living the decay which she describes. Again the circularity of the film is demonstrated as the audience itself is drawn into the internal mechanations.

One of the indications of the decline which Dominique brings up in her theory is that love and marriage are no longer considered means of sustaining the human race (as once exemplified by arranged weddings) but are now considered means of self-fulfillment (hence the increasing rate of divorce with the disillusionment in love). This point is brought up very humorously during the first half of the film as the women, working out at a gymnasium at the university, discuss (quite graphically) their sex lives, while the men, at home preparing the sumptuous dinner for the evening, discuss (quite graphically) their own sexual exploits.

One of the most humorous moments comes as the men "shadow" disco while blurbing out in mock *Franglais* all the inane one-liners that must be used to pick up young women at dance clubs. The scene leaves the audience rolling in the aisles, laughing so hard their bellies hurt, although unless one is bilingual some of the subtle, humorous transitions between English and French/Québécois are lost in the subtitles.

Just as the history defines the charac-

(Please turn to page 7)



The women discuss sex and men while relaxing in a sauna.

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The Bejart Ballet, an electrifying and provocative blend of sheer spectacle with profound expression, will present a program including "Dionysus Suite," "Cantate no. 51" (J.S. Bach), and "Ce que l'amour me dit" (Mahler). At the Wang Center on Friday, Jan. 23 at 8 pm. MIT price: \$8.00.

Tickets will be sold by the Technology Community Association, W20-450 in the Student Center, on Thursday Jan. 15 and Thursday Jan. 22 from 11 am to 3 pm ONLY. If nobody is in, please leave your order and your phone number on the TCA answering machine at x3-4885. You will be called back as soon as possible.

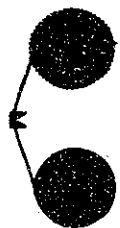


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A R T S

Movies on the town



Seymour (Rick Moranis) in the Frank Oz film "Little Shop of Horrors."

★★ **Blue Velvet** — David Lynch's weird tale of sexual perversity is interesting in its presentation of the seedier side of life, but the humor flaws the film in its incongruity

with the serious subject matter. At the Nickelodeon.

★★★ **Children of a Lesser God** — A beautiful, moving love story between deaf pupil (Marlee Matlin) and teacher (William Hurt) with fabulous acting performances by the principals. At Harvard Square.

★★★ **The Color of Money** — Martin Scorsese directs and Paul Newman and Tom Cruise star in this excellent sequel to the 1961 "Hustler." Cruise is a hotshot pool shark being stakehosed by Newman but the film is less about pool than it is about deception and personal redemption. At Pi Alley.

★★ **Crocodile Dundee** — Paul Hogan is likeable as the Australian from the Northern Territories who is invited by a beautiful female reporter to visit the big city. The scenes in the outback are gorgeous but the story bogs down once it moves to New York. At Beacon Hill and Assembly Square.

★★ **Heartbreak Ridge** — Another gung-ho military film that tries to be all brawn and no brains. Unfortunately Clint Eastwood tries to show just enough brains and "feelings" to bog down the film. Stick with what you are good at Clint. At Pi Alley and Assembly Square.

★★★ **Little Shop of Horrors** — Rick Moranis stars in this remake of the cult classic, B-grade musical about an insatiable plant that requires human blood to grow. With appearances by Jim Belushi, John Candy, Bill Murray, and Steve Martin. At the Charles and Assembly Square.

★★★ **The Mission** — Jeremy Irons and Robert De Niro star in this film about the transfer of South American land between Spain and Portugal and its affect on a Jesuit mission above the Iguazú waterfalls. Splendid location photography and excellent character acting. At the Nickelodeon and Harvard Square.

★★★ **Peggy Sue Got Married** — Kathleen Turner and Nicolas Cage star in a Francis Ford Coppola film about what a woman wishes she had done when she was eighteen. Not unlike "Back to the Future" but with less humor and more feeling. At Copley Place.

★★★ **Round Midnight** — Great bebop jazz in Paris during the late 50's is the theme of this wonderful film, an uplifting story of a jazz saxophonist's rise from secluded, lonely greatness to eventual fulfillment. At Copley Place and Harvard Square.

★★★ **Sid & Nancy** — About the life and times of Sid Vicious, bass player for

the Sex Pistols, and his groupie girlfriend, Nancy Spungen, this film manages to rise above the standard "docudrama" genre in presenting an emotional account of an unusual romance born of the destructive punk culture. At the Nickelodeon.

★★ **Something Wild** — Melanie Griffith is the hot vixen decked out in black and Jeff Daniels the square, boring vice-president of a tax consultancy waiting for the rebel within him to emerge. The two make for a fun-filled weekend but the film drags when it tries to get serious and violent. At Copley Place.

★★★ **Star Trek IV: The Voyage Home** — All your favorite space voyagers return, all with gray hairs, quite a few more pounds around the waist, and many years the wiser. Not all of the magic of the television series is there but, unlike the three previous movies, this film takes a much lighter approach to the subject matter. At Cinema 57 and Assembly Square.

★★★★ **True Stories** — David Byrne's funny and absurd vision of life culls unlikely stories from a weekly tabloid to deposit them in the town of Virgil, Texas. The black and white characters from these stories are molded into real, likeable people. At Harvard Square.

Compiled by Peter Dunn from Tech reviews

Sex and history dominate "Decline of the American Empire"

(Continued from page 6)

ters, so too does the discussion of sex put all the characters into context. How we feel about the characters — how much we dislike them or how much we feel they are emotionally naive — is determined by how they relate to, how much they deceive or are deceived by, their partners. But as with all other aspects of "Decline" the topic of sex/love, although perhaps humorous or at other times moving, in the end only proves how much the relationships of these people have decayed. This all comes to a head as the males and females finally gather together in the second half of the film for the communal dinner.

The family life of these people has been reduced to practically nothing, sex and love only for personal gratification. So complete is this that although it is often mentioned that these history professors have families and children, those seem surprisingly absent. The one notable exception is when a ten-year-old child barges in on her mother in the act of fornication to demand that her lover leave immediately. The message is clear: the family is nothing but an intrusion on personal gratification.

So just as the history which these professors teach comes back to haunt them,

so too does the sex/love affairs. Inevitably the sexual promiscuity and deception does nothing in the end but disrupt the relationships between the characters.

While both "The Big Chill" and "Decline" consider people's relationships, pointing out the problems of living in the 80's (though approaching the topic quite differently), "Decline" ends more dishearteningly and ultimately more realistically. "The Big Chill," although considering the external problems of the world affecting a small group of people was ultimately closed in overall structure: it had a beginning, a middle, and an end. The film begins with a funeral, progresses through several developing relationships, then at the end of the weekend resolves most of those relationships.

But in real life, human relationships are not so simply resolved but continue developing. So "Decline" chooses not to end anything, nor even to begin anything. We feel as if we jump into the characters' lives, seeing and feeling what they see and feel for one day. There is no beginning, no end, just a long middle which we know existed before the movie began and which we know will continue after the movie is over. Thus the circularity of the film is again

laid down as we see the lives of these people continuing round and round, never ending. In this sense we relate better to "Decline" in that we realistically can see our own lives in it. Thus, by making this closer link to its audience, "Decline" makes all the more potent its message of decay of relationships in our modern day and age.

The most revealing scene of the film comes towards the end as the various characters bed down for the night, alternately finding love or being broken by it. Earlier in the film Claude (Yves Jacques), an art history professor, lectured to his class about how several painters use nightfall to display a sinister world but how few painters, a notable exception being Caravaggio, use dawn to create even more subtle and more haunting visions. As the characters of "Decline of the American Empire" go to sleep, several stunning shots of the Quebec countryside are shown but these are not shots of sunset — we are shown instead shots of the dawn. The sequence is at once beautiful and disconcerting, haunting in the extreme.

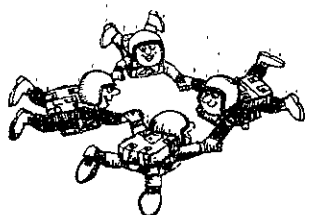
The film, appropriately enough, ends not here as the characters go to sleep but rather as they all begin to wake up. The



Dorothee Berryman as Louise.

message of this incredible, stunning film is that the trials and tribulations of life will not end as our heads touch our comforting pillows, but that each day we must awake to a world that is no better than the day before.

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1pm-1:40pm	Panel Discussion I
1:45pm-2:25pm	Economics Speaker: David Friedman
2:30pm-3:10pm	Society, Technology & Policy Speaker: TBA
3:10pm-3:25pm	Break
3:25pm-4:05pm	Thought and Intelligence Speaker: Marvin Minsky
4:10pm-4:40pm	Concluding Points Speaker: Eric Drexler
4:40pm-5pm	Panel Discussion II

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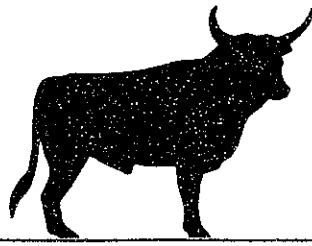
**Dr. Robert Mabro**, Director of Oxford University's Institute for Energy Studies, will speak on "The Price of Oil": January 15, 5:00 pm, 7th floor, Cabot Center, Tufts Univ., Medford MA. Dr. Mabro is a highly-acclaimed analyst of the politics and economics of oil. His published works include *OPEC and the World Oil Market* and "Oil Revenues and the Costs of Social and Economic Development." More info: 628-7010, ext. 2734.

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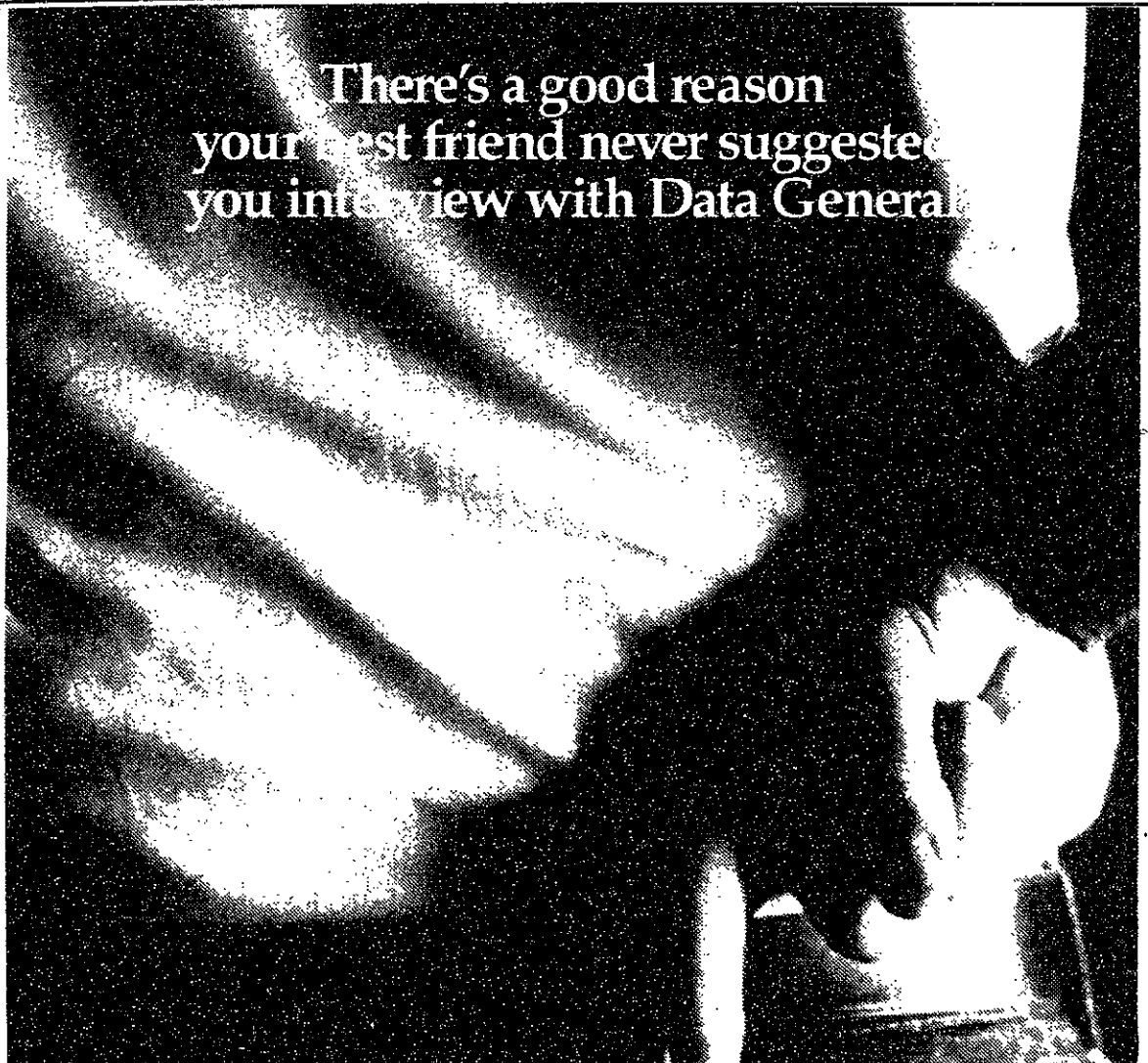
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# Gray talks at King memorial

(Continued from page 1)

revolution, black people were not without dignity. He told of how he had grown up in an all-black community in Virginia, seeing "black people perform competently" as teachers, ministers, delivery men, and physicians. "My parents and grandparents certainly had dignity," he proclaimed.

Following the World War II, the GI Bill created a whole new class of educated blacks, Proctor said. That is where the civil rights movement was given birth, he claimed. The activities of Adam Clayton Powell, the decolonization of Africa and Asia, and the 39 Supreme Court victories of the NAACP all gave impetus to the quest, he said.

## Gray comments on racism

President Paul E. Gray '54 preceded Proctor at the lectern. He spoke out against the presence of racism in the nation, on college campuses, and at MIT itself.

"Racist behavior is scary. . . . Some of us prefer to believe that it does not occur here. I wish this were true, but I know otherwise," Gray said.

Gray cited the recently released study on "The Racial Climate at MIT" when he recounted the Institute's problems. Faculty and fellow students are too often willing to denigrate the abilities of their black colleagues, Gray said. It is an unfortunate problem that MIT is striving to correct, he claimed.

At the same time, Gray expressed the hope that people will not ignore the remarkable strides made to improve the situation.

Gray did not believe MIT could do much more to help minorities. He lauded such activities as the Minority Summer Science Research Program, Upward Bound and MITES as examples of ways in which MIT is seeking to improve minority life.

MIT is handicapped in its efforts to bring more minority faculty and students to the Institute by the limited number of qualified applicants, he said. Gray expressed hope that information campaigns and innovative programs will gradually improve minority prospects.

The blame for the delay rests not solely at the university level, but is spread throughout the educational system, Gray said. He labelled the problem a responsibility of the whole society, not just of the universities.

Memorial activities began at

noon in Building 7 with readings of selected excerpts from King's writings and a choral selection. Participants, who numbered over a hundred, then marched to Kresge Auditorium. In addition to speeches by Proctor and Gray, Charles P. Coleman '87 spoke on

"The Occasion" the community was celebrating, the life of King and the struggle for equality. The audience at Kresge, led by the MIT Gospel Choir, sang "Lift Every Voice and Sing" by James Weldon Johnson.



Isaac Chuang/The Tech  
Rev. Dr. Samuel Proctor (left), Charles Coleman '87, and Fr. Bernard Campbell prepare to address the members of the community gathered in Kresge Auditorium yesterday.

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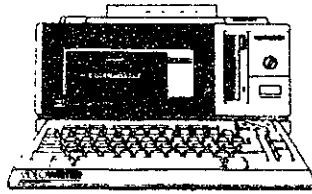
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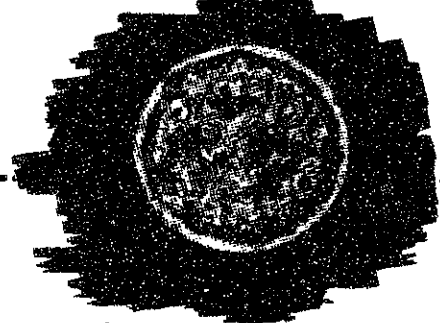
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**January 12-16, 1987**  
**1:00 - 4:00pm**  
**January 12,13,14,15 M.I.T. Room 66-110**  
**January 16 M.I.T. Room E51-329**

## MANAGEMENT OF THE HIGH TECHNOLOGY COMPANY

### BARRY UNGER, COURSE DIRECTOR

A series of seminars featuring individuals experienced in starting and managing high-technology companies. These sessions will cover business planning and practical strategy, marketing and sales, finance, the management team and other aspects of the technology-based business. "War stories" will be used to illustrate points.

Dr. Unger '69 is Vice President and Director of Datacube, Inc. He is also co-founder and vice-chairman of the M.I.T. Enterprise Forum and has been a founder/officer of several technology-based companies.

- Monday, January 12      Room 66-110**  
*STARTING AND RUNNING A COMPANY: THE INSIDER'S VIEW*  
 1:00pm -Dr. Robert J. Shillman '72, President and Founder, Cognex Corp., and former M.I.T. faculty member  
 2:30pm -Betty F. Kadis, President, J. L. Clark Associates, and Cofounder and Ex-CEO, Wakefield Software Systems, Inc.
- Tuesday, January 13      Room 66-110**  
*PLANNING AND FINANCING THE BUSINESS*  
 1:00pm *Venture Capital and Other Financing Alternatives for the Startup Company*  
 -Robert J. Crowley, Vice President, Massachusetts Technology Development Corporation, and former President, Neponset Valley Bank  
 -Laura C. Morrisette, Consultant, Massachusetts Technology Development Corporation  
 2:30pm *The Business Plan: Both a Blueprint and a Sales Document*  
 -Stanley R. Rich, Co-author of "Business Plans that Win \$\$\$," and founder of numerous companies.
- Wednesday, January 14      Room 66-110**  
 1:00pm *MARKETING AND SALES FOR TECHNOLOGY BASED PRODUCTS*  
 -Ralph E. Grabowski '63, Marketing Consultant  
 -James H. Geismann, President, Market Share Inc.  
 3:00pm *JOINT VENTURES AND OTHER FORMS OF BUSINESS AND MARKETING RELATIONSHIPS BETWEEN SMALL AND LARGE COMPANIES*  
 -Richard C. Lufkin '68, Enterprise Development Associates, and former Manager of Business Development, Johnson and Johnson Co.
- Thursday, January 15      Room 66-110**  
*RESOURCES FOR THE ENTREPRENEUR:  
 FINDING GOOD PEOPLE AND ADVICE*  
 1:00pm *Recruiting, Compensating, and Effectively Using A Board of Directors*  
 -Arthur C. Parthe Jr. '66, Director of Marketing, Aerodyne Products Corporation  
 2:00pm *Formal and Informal Resources Within the M.I.T. Community*  
 -Paul E. Johnson, National Director, MIT Enterprise Forum  
 3:00pm *Finding and Motivating Business Partners, Employees, and Consultants*  
 -Dr. Judith H. Obermayer, President, Obermayer Associates
- Friday January 16      Room E51-329**  
*LAW AND THE TECHNOLOGY BASED SMALL BUSINESS*  
 1:00pm *General Considerations in Organizing and Financing the Company*  
 -Steven M. Wallman '75, Attorney, Covington and Burling  
 2:30pm *Patents, Trade Secrets, Relationships with Previous Employers, and Other Issues Concerning Intellectual Property/Protection of Your Technology*  
 -Barry D. Rein '60, Partner, Pennie & Edmonds

**For further information, contact the MIT  
 Enterprise Forum.  
 (Room 10-120, Alumni Center, 253-8240)**

## Learn what it takes to become a High-Technology Entrepreneur

# Williams explains uses of radar in forecasting

(Continued from page 1)

areas of heavy precipitation, Williams said. The group has found that the edge of a rainstorm generates lightning, he said, but cautioned that radar cannot be used to substantiate the theory that an area of intense precipitation is itself a source for lightning. Heavy rain and lightning look the same on radar scopes, Williams explained.

Both Doppler and conventional radar map storms, but conventional is the one used for television weather reports, Williams said. To map, the beam is rotated

through a full circle, he explained. The resulting graphics plot shows differing precipitation density areas and their ranges in two dimensions. With two stations mapping the same storm, a three dimensional picture can be produced, Williams said.

Because heavy rain is dense, it registers visibly on the radar scope. A light drizzle, however, because of its low density, rarely registers, Williams explained. Doppler radar displays additionally the storm's velocity and direction of travel, he said.

Unfortunately, both mapping

methods are accurate only to a radius of 150 kilometers, Williams said. This upper limit on range cannot be surpassed even by an infinitely powerful beam because beyond that distance, the curved earth and the storms which hug its surface "fall away" from the straight beam, he said.

From the roof the radomes look like huge golf balls sitting on tees. The larger, a full 25 feet in diameter, rests on a "tee" about 15 feet high. It protects a paraboloid receiving dish 16-18 feet in diameter at the widest point.

# Merritt discusses spring colloquia

(Continued from page 1)

colloquium and entries will be displayed in Kresge during the events, he added.

Robert Ballard, head of the Deep Submergence Laboratory at Woods Hole Oceanographic Institute and photographer of the sunken ship *Titanic*, will speak in Kresge along with Steven Benton '63, associate professor of media technology and creator of the first free-standing hologram.

Living groups will be hosting faculty and members from government and industry to discuss

"special issues ranging from medical imaging to espionage and surveillance," Merritt said.

The third colloquium, entitled "Hazardous Substances: Challenge and Response," is scheduled for later in the term, on Apr. 17. John Ehrnfeld of the MIT Center for Technology Policy, the assistant to the program chair for the hazardous substances colloquium, cited three goals of the colloquium:

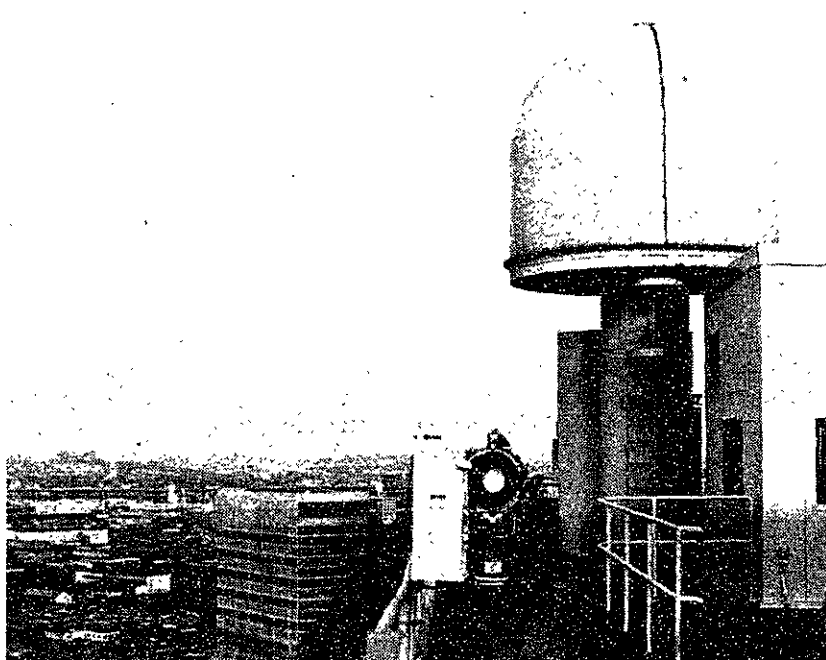
- to present a set of views on the importance of the problem of hazardous substances and some

of the applications that are available to cope with it.

- to forward the context of technology in this kind of problem as both a creator and remedy.

- to engage the MIT community in the problem.

The Institute Colloquium Committee was formed last year to sponsor large-scale events of interest to the entire MIT community, Merritt said, with the intention that they would "radiate out from a planned event in two directions," reaching into both living groups and classrooms.



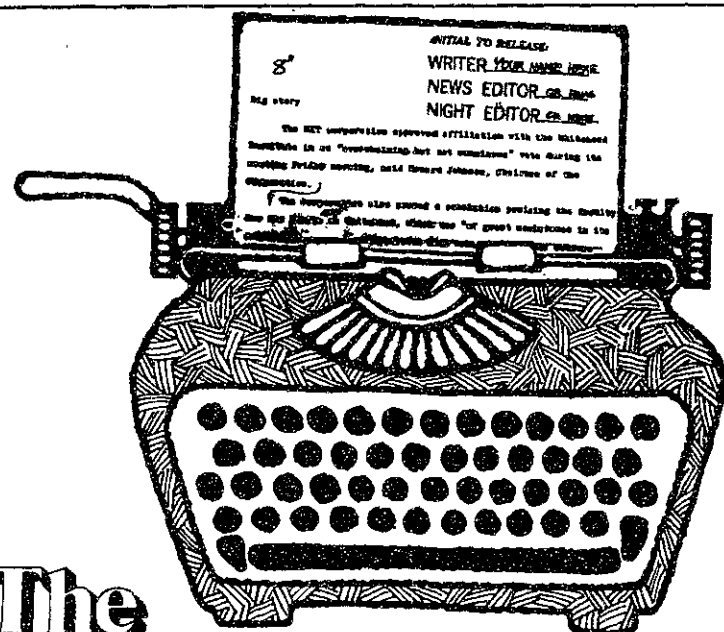
Tech File Photo  
One of two "radomes" atop the Green Building protects an MIT Radar Facility antenna while dominating the pre-development Cambridge skyline.

## Erratum

An incorrect statement was attributed to Leonard V. Gallagher '54, director of student financial aid, in "Student debt triples in decade" (Jan. 7). The statement should have read, "... in the last 15 years the average annual repayment owed by the graduating class has not exceeded five percent of the average expected salary."

This space donated by *The Tech*

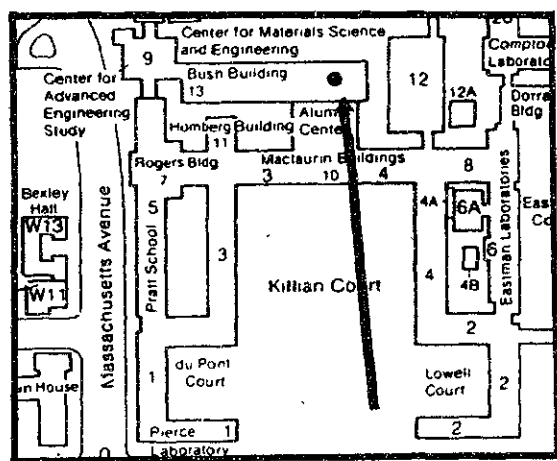
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# sports

## Power plays help MIT team raise record to 5-1-1 Beavers skate by Gordon 11-2

By Peter Dunn

The MIT men's hockey team began the new year by adding another win to its sparkling 3-1-1 record, handily defeating Gordon College last Wednesday by a score of 11-2. Although the second half of MIT's hockey schedule is supposed to be more difficult than the fall term, Gordon could hardly be considered a worthy rival. The team came into the game with only one win to show for its four games this season.

The game began rather slowly, neither team checking particularly hard. The tempo seemed leisurely paced, the two teams feeling each other out.

As with many of their previous games, the Beavers scored early on a shot from close in by Michael Foley '87 at the 1:46 mark. The lead was later extended to 2-0 on a slow, rising slap shot from deep in the slot by Brian Balut '87. Unfortunately, Gordon College evened the score late in the period with a pair of quick goals only two minutes apart.

Not to be outdone, the Beavers scored with only 31 seconds left in period. The Gordon goaltender had trouble covering his own rebound and allowed Richard Zermani '87 to stuff the puck into the net. The Beavers left for the locker room having played a rather mediocre first period, nursing a slim one goal lead.

One can only guess what coach Joe Quinn said to the team during the first intermission, but it was enough to add spark to the Beavers' offense and consistency to their defense.

Again the pace of the period started slowly, but it gained momentum as one goal was quickly followed by another and another and another. A great deal of the credit must be attributed to Alex Jessiman '88 who scored two of the four goals during the period and assisted on the other two.

The pattern which was to repeat itself for the rest of the period began as a Gordon player was assessed a penalty for slashing. Just over a minute later Balut put in his second goal of the evening with a shot from the left faceoff spot. In the second period MIT proved its power-play abilities as Gordon was assessed six minor penalties which the Beavers managed to convert into three goals.

Jessiman scored at the 6:35 mark, again with the Beavers on

a power play, by jamming the puck into the net despite the crowd at the Gordon goaltender's crease. Four minutes later Jessiman took the puck rink long to put it into the lower right of the net. Then again, with only one minute left in the period and the Beavers a man up, Jessiman passed the puck from behind the net to Zermani who put it in for his second goal of the game.

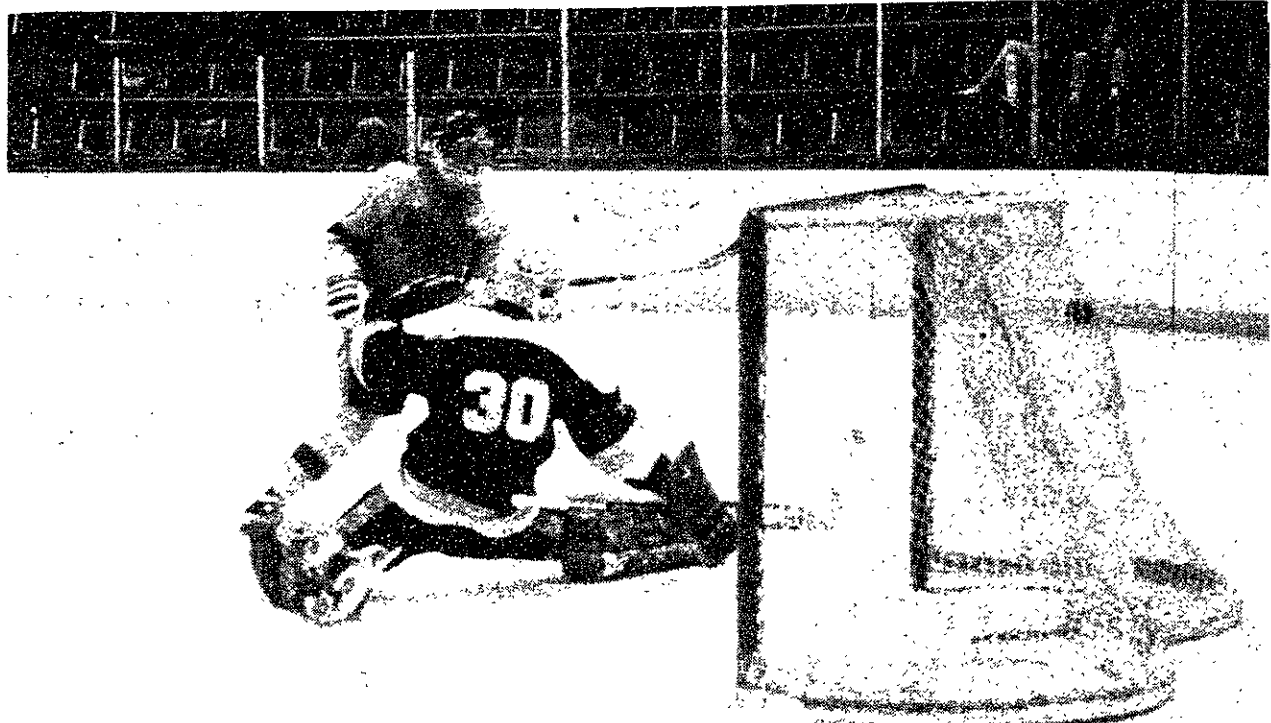
The MIT offense seemed to rattle the Gordon goaltender during the second period: he often had trouble clearing the puck out of his crease or gathering it into his pads, resulting in the Beavers getting several second chances off their own shots.

The period saw a lot of good stickhandling by the Beavers. The team outskated the Gordon players for the most part but, as with earlier games, the MIT defense sometimes found itself being caught too far up the ice and thus having to play catch-up to the Gordon forwards.

The third period turned out to be the most exciting to watch despite the Beaver victory being almost assured. Behind five goals, the Gordon players came out checking and skating harder, wanting to prove that they were no pushovers despite what the scoreboard said. MIT, undaunted by the renewed attacks of the Gordon players, simply continued with their scoring spree.

The Beavers scored early in the third period as a pass from Balut deep in the left corner aided Zermani in completing his hat trick for the game. Michael Westphall '90 scored less than two minutes later, lifting a blocked slap shot into the net. Two minutes after Westphall's goal, John Santoro '89 took a long pass on a power play, exchanged nudges with the Gordon defenseman, and put the puck high and to the right past the goaltender.

These early goals seemed to burst the Gordon balloon and MIT rolled on, scoring four unanswered goals just as in the previous period. The Beavers further frustrated Gordon as they kept them scoreless even during a long five-on-three advantage when Santoro and Brian Fabes G went to the penalty box about 30 seconds apart. The final icing on the cake came when Eric Grote '87 put in MIT's eleventh goal of the game with just less than a minute to go.



An Engineer forward fires one of the goals on the way to MIT's definitive 10-7 victory over Hawthorne during Sunday's game in the Athletic Center.

Mike Niles/The Tech

## MIT victorious over Hawthorne Highlanders

By Peter Dunn

The MIT men's hockey team defeated the Hawthorne Highlanders last Saturday by a score of 10-7, improving its sparkling record to 5-1-1. Although the final score might indicate otherwise, the Beavers held the upper hand for the entire game, the Highlanders getting behind early and being frustrated for the remainder of the game.

Alex Jessiman '88, who had a hand in all four goals during the second period scoring spree which broke wide open the previous game against Gordon College, again led the way against Hawthorne. He scored the first three MIT goals and continued on to finish the game with six goals and one assist. Jessiman was a prime force on the Beaver power-play squad, scoring four times while MIT had a man advantage.

The game started off with hard checking and fast paced skating. The stickhandling and passing were well executed by both teams, Hawthorne using long passes out of its zone effectively. Early on the Beavers sometimes had trouble getting the puck much further than the neutral zone as their rink-wide passes were intercepted by the Highlanders, but this situation improved as the Beavers became more sure of their passing.

The Beavers showed good defensive strategy, often poke checking the puck from the

Highlanders in the neutral zone. While the puck was in the MIT defensive zone, MIT showed good coverage of its own slot. But when the puck went behind the net, goaltender Doug Shukert G often wandered too far out of his crease. This led to many a dicey moment when a Hawthorne forward would sweep in ahead of an MIT player before Shukert could clear the puck into the corner.

Because of solid defense, the first period was uneventful except for two Jessiman goals, the first coming at the 5:05 mark when he intercepted a Highlander pass to the point and put in a hard slap shot from the blue line. The second goal came on the first power play of the game as Jessiman put the puck past the Hawthorne goaltender from deep in the slot.

The second period began with a bang as a rowdy bunch in the crowd spelled out in, cheerleading style, "Massachusetts Institute of Technology" in its entirety. The rowdiness must have rubbed off on the players as the rather clean play of the first period quickly transformed into an extended display of poor sportsmanship. Ten penalties were assessed (four to the Beavers and six to the Highlanders) for a total of 27 penalty minutes. The officials seemed to be losing control of the game, several fights threatening to break out. For the better part of the period the game was played much like wide open pond

hockey with several three-on-three and four-on-four situations.

MIT took advantage of its power-play situations with Jessiman and Brian Balut '87 scoring three of the Beavers' five goals while a man up. Jessiman stuffed one goal in after circling behind the Hawthorne net and later redirected a shot from John Santoro '89, while Balut redirected a shot by Brian Luschwitz '89 from deep in the slot. The Highlanders, on the other hand, only converted one of their power-play advantages although they did manage to score short-handed early in the period when the MIT power-play squad lost its composure.

The other two MIT goals came from Jessiman and Eric Brown '87, who streaked up the right wing and placed a nice shot low and left past the Hawthorne goaltender. The third Hawthorne goal came as a Highlander stole the puck near his own blue line, got a breakaway, faked the MIT goaltender into going the wrong way, and scored easily.

The third period followed much in the same vein as the second but with Hawthorne pressing harder to narrow the 7-3 gap. Again the game got rough as 14 minor penalties were given out, resulting in players sitting on the bench for a total of just under 30 minutes. MIT scored well on the power play, getting goals from Balut and Jessiman while with a man advantage. MIT's penalty killing effectively frustrated Hawthorne by giving up only one goal. Again the Highlanders managed to score short-handed.

The other two Hawthorne goals came first as a poor pass from Jessiman created a three-on-two Hawthorne breakaway and later when a shot high and to the left of the net was redirected to trickle in past MIT goaltender Peter Gasparini '88. But the most exciting goal of the game came at the 16:23 mark when Richard Russell G went rink long, split the Hawthorne defensemen, and slipped the puck underneath the opposing goaltender.

Gasparini, who replaced Shukert in goal with about ten minutes left in the game, fended off the persistent Hawthorne offensive with several impressive glove saves. Now, with only one loss to Tufts blemishing an otherwise unbeaten record, with good goaltending, a solid defense, and an incredibly productive power-play squad, the Beavers are bound to do well in the Ben Martin Tournament this weekend at the New Athletic Center.

## Men's gymnastics and wrestling win

### Sports Update

The MIT men's gymnastics team opened its winter season Saturday at Dupont Gymnasium with a 187.65-119.90 win over Dartmouth. The victory gives the team a record of 1-0.

Co-captain Brian Hirano '87, MIT's all-around record holder, led MIT with a total score of 46.05, including scores of 8.05 on floor, 8.6 on rings, 8.15 on vault, and 7.85 on parallel bars. His best moves were a double back flip on floor, an inverted iron cross on rings, and a double back flip dismount on high bar.

Several other MIT gymnasts also gave strong performances. Co-captain Matt Kaplan '87 scored 6.9 on rings and 7.2 for an artistic floor routine which included the difficult combination of a headspring into a one and a quarter front flip. Eric Reifschneider '89 scored 6.05 on pommel horse and 7.1 for a parallel bar routine with a full-twisting back flip dismount.

Norman Chen '88 and Mark Malonson '89 each did nice handspring vaults; their scores were 7.85 and 8.05, respectively. Malonson, competing in only his second collegiate meet, also scored 6.55 on floor and 6.6 on parallel bars. Jason Kipnis '87 landed a double back flip dismount out of a handstand on the rings to score 5.95. Alan Nash '89 did an Arabian (half-twisting) front flip and a side-som flip on the floor for a 6.8.

MIT's team score of 187.65 fell short of Coach Fran Molesso's goal of 190; he felt that a lack of competition hurt the team's intensity in the second half of the meet (Dartmouth was shorthanded in some events).

The team's next meet is this Saturday, January 17, at Yale. Its next home meet is Saturday, January 24 at 1:00 in Dupont Gymnasium versus the Coast Guard Academy and the University of Vermont. The women's team's first meet is also in Dupont that day at the same time.

By Eric M. Reifschneider

### Grapplers lift record to 7-1

The MIT Beavers wrestling team Saturday extended its winning record to 7-1 by soundly defeating the University of Lowell 40-4 and edging Swarthmore College 24-23 in a tri-school meet at Lowell.

MIT wrestlers scored in every weight class. At 118 pounds, Jeff A. Traub '89 scored a superior decision over Swarthmore with a 16-4 victory and received a forfeit against Lowell. Richard O. Lodewick '89 went unbeaten at 126 pounds with a 5-4 victory over Lowell and a technical fall against Swarthmore, while Scott E. Schwartz '89 outscored his Swarthmore opponent 9-2 and settled for a tie with Lowell in the 134 pound bouts.

Co-captain Peter R. Wurman '87 added a major decision to MIT's winning streak against Lowell, defeating his opponent 8-

0 at 142 pounds. At 150 pounds, co-captain Michael H. Decker '87 kept the Beaver's momentum going with a 8-3 victory. James S. Lombara '90 finished in a 9-9 tie against his Lowell opponent in his 158 pound match while co-captain Edward B. Cashman '87 received a forfeit against Lowell at 167 pounds and bested his Swarthmore opponent 8-0 at 177 pounds.

Michael D. Provance '90 turned in twin pins at 177 pounds against Lowell and 190 pounds against Swarthmore. Richard A. Hermann '90 defeated his 190 pound Lowell adversary 13-11 to add to the MIT victory. Steven C. Cherny '87 was awarded a forfeit at heavy weight to finish a very lopsided victory over the University of Lowell.

The Beavers hope to improve their dual meet record this Saturday when they face Norwich and Williams Colleges at Williams-town. The wrestling team's next home stand will be Jan. 21 when it hosts Trinity College.