

Task force talks on financial aid

By Burton S. Kaliski

"There is a growing concern at MIT about the financial aid picture," said Associate Provost Frank E. Perkins '55 at an open forum on financial aid last Wednesday. "The cost of running the financial aid system" is forcing MIT to "wonder how it can continue its present policies."

Perkins, chairman of the Academic Council task force on financial aid policy, said he is not specifically concerned with setting tuition and self-help levels for next year. Instead, his committee will consider MIT's policies of admission without regard to financial need, financial aid based solely on financial need, and uniformity in the self-help required of students receiving aid.

The task force is considering an "admit-and-deny" policy, whereby the Institute would fail to meet students' full financial need by a fixed amount, Perkins explained. The committee is also studying the "more onerous" policy of taking need into account in the admissions process.

The MIT Black Students Union and *La Unión Chicana por Aztlán* presented a statement opposing elimination of need-blind admissions at the forum. [Page 2.]

"We do not try to put a quota on the ... financial aid of a freshman class," said Leonard V. Gallagher '54, Director of Student Financial Aid. "Financial aid is awarded strictly on the basis of need."

At least twenty-five or thirty students leave MIT each year because of financial problems, noted Dean for Student Affairs Shirley M. McBay.

Student financial need totalled \$21.75 million this year, Gallagher said. Grants meet 57 percent of the need, and MIT unrestricted funds provide one-third of grant payments. MIT's endowment and outside sources provide 43 percent of grants.

Financial aid must stop draw-

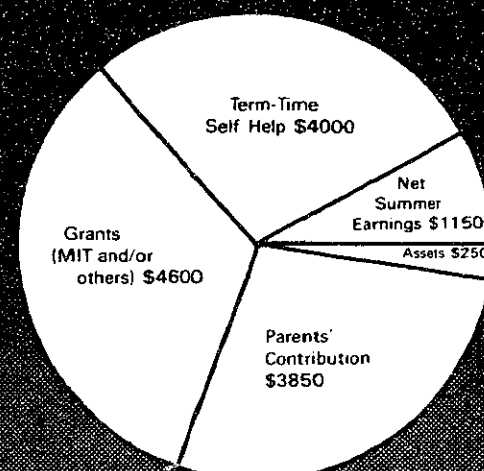
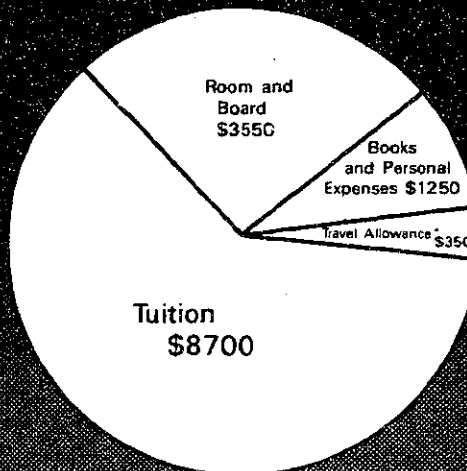
ing on MIT unrestricted funds and causing a deficit, Perkins said. MIT currently operates at a deficit of between \$4 million and \$14 million, according to Stuart H. Cowen, vice president for financial operations.

"We should try to spread money as equitably to as many people as possible," Perkins said. MIT does not have enough financial aid to meet all the need, he said.

"We are committed to meet it or help you meet it," Gallagher

(Please turn to page 2)

Undergraduate expenses and resources, 1982-83



*average for needy students

Source: Student Financial Aid Office

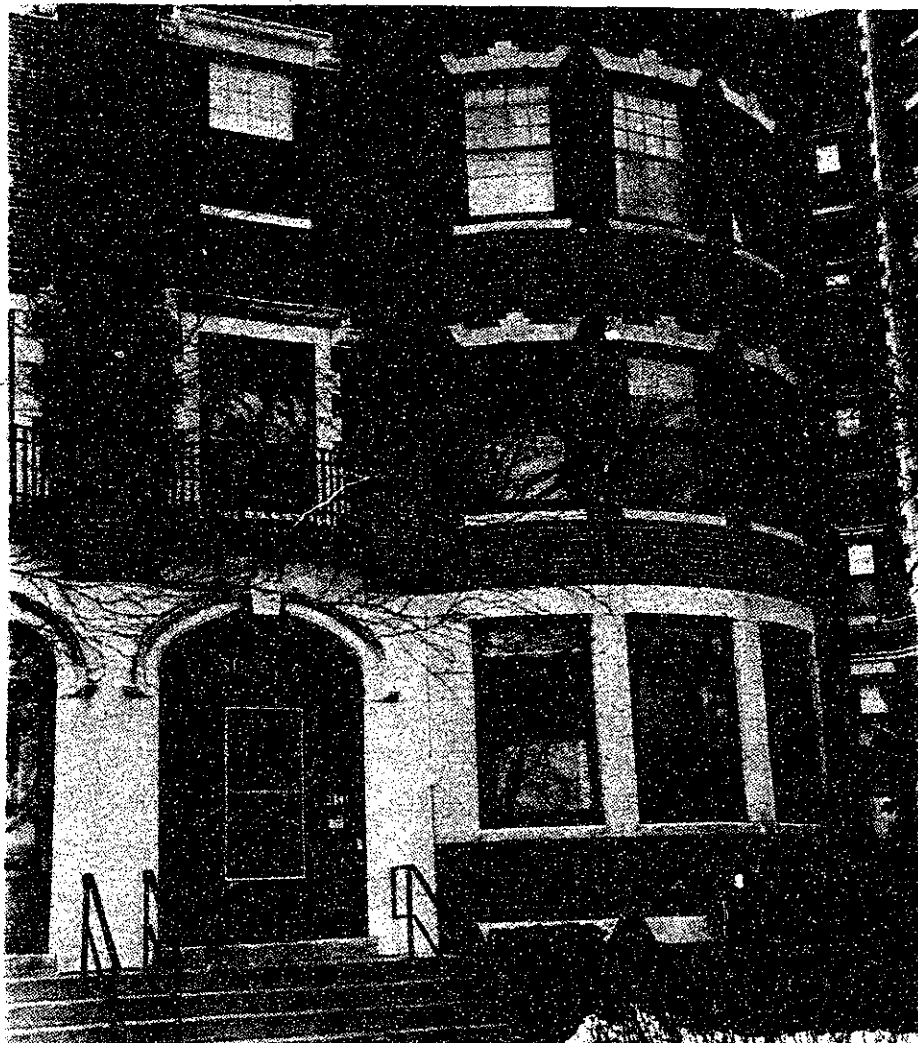
Graphic by Daniel J. Weidman and Barry S. Surman

Code violations force NRSA to close

By Ivan K. Fong

MIT officials closed Building W2, which housed the Non-Resident Student Association

(NRSA), on January 13 as a result of safety and building code violations cited by Cambridge city inspectors.



Tech photo by Laurie S. Goldman

MIT closed NRSA's building because it failed to meet safety code requirements.

The MIT Safety Office, the Office of the Dean for Student Affairs (ODSA), and Physical Plant decided to close the facility after Cambridge building inspectors found numerous safety and building code violations, including improperly grounded wiring, lack of smoke detectors, an obstructed fire escape, and poorly designed stairwells, according to Safety Office Director John M. Fresina.

The ODSA is in the process of obtaining a Cambridge approved certificate of occupancy for the 30 year old building, Fresina said, but he does not know how long it will take.

Cambridge officials inspected the building in December and informed MIT of the violations early this month, according to NRSA tutor Robert E. Piret G. He was allowed to move back a week after the building was closed, Piret indicated, and the building will soon be open for day use.

An ad hoc committee on student activity space will further

study the situation before any further renovation takes place, indicated Peter H. Brown, assistant dean for student affairs.

"Before any renovation," Brown said, the committee would like to see if NRSA is a "healthy, viable organization [to determine] whether there is any justification for this kind of expense." He continued, "NRSA will have a chance to justify its use of the space. The committee has not worked out a plan."

The chairman of the ad hoc committee, Associate Dean for Student Affairs Robert A. Sherwood, said his committee will address the status of NRSA and make a recommendation on the future use of the building. He suggested that groups such as the new sorority, international students, the Women's Resource Center, and graduate students may be interested in the use of the building.

NRSA President Julia A. Goddard '84 and Vice President Jef-

(Please turn to page 10)

IPS, JCF to move to renovated Building 11

By Daniel J. Weidman

Information Processing Services (IPS), the Joint Computer Facility (JCF), and an MIT Graphic Arts "Quick Copy Center" will move into the Homberg Building (Building 11) late this spring, according to Physical Plant Construction Coordinator William H. Combs '54.

The Homberg Building, located next to buildings 3 and 7 on the main corridor, housed the

Medical Department before the Health Services Center (Building E23) opened a year ago.

Information Processing Services is moving from Building 39 to allow the entire building to be used for research in very large scale integration (VLSI). IPS will move its terminals and printers from the second floor of Building 39 to the second and third floors of Building 11.

(Please turn to page 2)

MIT, Harvard join computer program

By Roderick A. Dick

MIT and Harvard are joining with the City of Cambridge to develop a computer education program for the city's public schools.

Cambridge Mayor Alfred E. Vellucci organized a committee to plan the program after discussing the need for computer literacy with US Senator Paul E. Tsongas (D-Mass.), the mayor said.

The United States must face the high technology challenge of Japan and other international competition, Tsongas has stressed repeatedly. "The Japanese are doing well now economically and

are still taking advantage of the US economy," he said Friday.

"Tsongas's message is clear," stated Vellucci in a proposal for the Cambridge school system. "Either America faces up to the high technology challenge of Japan and others or we face the future unable to compete."

Vellucci's committee — which includes representatives of Tsongas's office, the city, the two universities and private industry — is forming a non-profit organization to develop a prototype program for the Cambridge public schools.

Although details of the program are still being discussed, Vellucci said, students will be given exposure to both software and hardware before graduating from high school.

MIT and Harvard will contribute educational and technological expertise, and state and federal government and private grants will help pay for the program.

If the program proves successful, other cities in Massachusetts and throughout the nation may begin similar programs, Vellucci said.

MIT representatives to the committee include Walter L. Milne, special assistant to the president for urban relations, John P. Terry of the Office of the Provost, and Professor Judah L. Schwartz.

Gerald Indelicato represents Governor Michael S. Dukakis on the program committee. Executive Assistant to the Mayor Richard McKinnon, Superintendent of Schools William Lannon, and Vellucci represent the city government.

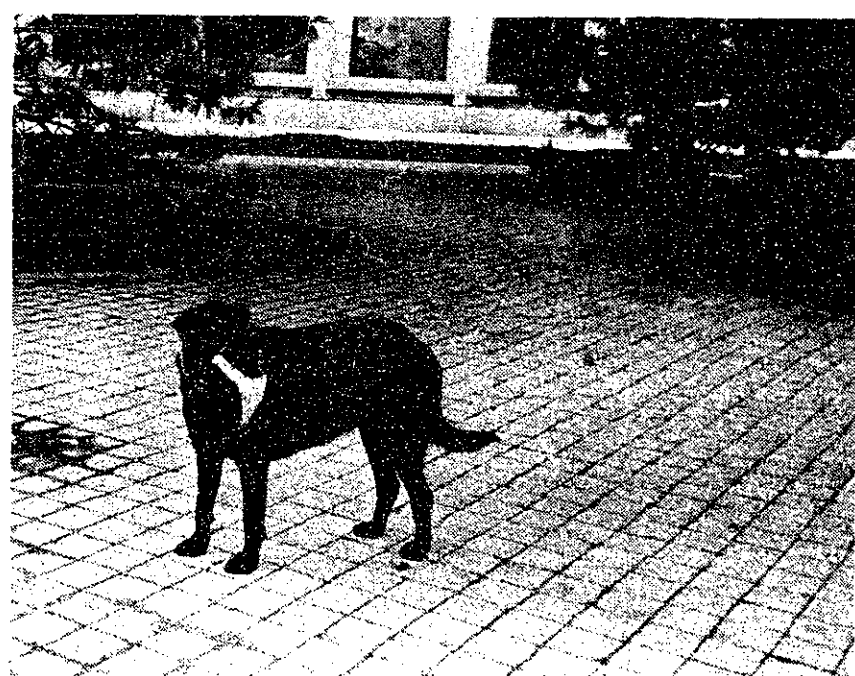
inside

Are you a freshman?
Should you start your thesis tomorrow? See Ivan Fong's column and find out.
Page 4.

Arts department gets lost in space. Page 7.

It's raining pink and green.
Page 10.

The track team is back on track with the first win in four games. The next meet is this Friday.
Page 11.



Pup prefers pepperoni pizza.

Tech photo by Laurie S. Goldman

Task force holds open forum

(Continued from page 1)

said. MIT is constrained by federal regulations such that a student's aid cannot exceed demonstrated need. "I don't like these regulations but they do exist."

A student receiving an outside scholarship, Perkins noted, will have aid reduced in another area. For this reason, he indicated, some groups will not award a scholarship to MIT students and some students avoid applying for scholarships.

MIT would change the policy if the incentive to apply for scholarships would then increase, Perkins claimed, but he said he does not think that likely. MIT students presently receive \$2.5 million in outside awards.

Financial aid is "a zero-sum game," Perkins commented. "You don't have any way of getting luxuries," he added, and there is no incentive for summer earnings.

Summer earnings are based on a student's year, Gallagher said, not on figures reported by the College Scholarship Service (CSS). An increase in summer earnings, he said, will decrease Pell Grant eligibility, but if need is high enough, MIT will supplement the grant.

Faculty salaries are driven up by competition from private industry, Cowen added. Endowment income and unrestricted income are not keeping pace with inflation, he said.

A science and technology education is more expensive than one in the humanities, Perkins said. "Giving levels here are low," and the cost of the educational program has gone up much faster than inflation.

The total academic budget is \$140 million, according to Vice President Constantine B. Simonides. Tuition payments total \$72 million, and unrestricted funds provide the difference. The endowment of other top schools is

considerably larger than MIT's, he continued.

"There is a real problem: People who are prepared to donate" would rather give money for a new program than for financial aid, Perkins said. The last major donation for financial aid, he said, was made by Katharine McCormick '04 in 1968.

The Office of the Dean for Student Affairs (ODSA) and the Undergraduate Association (UA) sponsored the forum, which was attended by approximately fifty students and fifteen faculty and staff members. Another open meeting will be held February 23 from 3:30 to 5:30pm in room 6-120.

Minority student groups present statement on MIT financial aid policies

By Barry S. Surman

The MIT Black Students Union and *La Unión Chicana por Aztlan* (formerly the Mexican-American Students Association) issued a statement last Wednesday opposing changes in MIT's "need-blind" admissions policy and increases in the equity level, or minimum amount of self-support, not including summer earnings, required of students receiving financial aid.

Such changes, the two groups claimed, would "discriminate on the basis of income, specifically against those minority groups that have lower incomes than majority Americans," thus decreasing the diversity of the MIT student body.

"More efforts should be made to develop alternative sources of funds," the groups stated. "Financial aid should be the first priority when determining the allocation of unrestricted funds."

The equity level for the current academic year is \$4000, or 28.9 percent of the Institute's estimated undergraduate student budget and average travel expenses of \$13,850.

IPS, JCF plan to move user facilities

(Continued from page 1)

IPS will also use a conference room in the penthouse above the Homberg Building's fourth floor. The IPS MULTICS computer system will be moved from the third floor of Building 39 to Building W91 at the far west end of campus, Combs said.

The Joint Computer Facility will move from its present location in Building 1 to a more visible location on the first floor of

Building 11, Combs said.

Graphic Arts will move its copy center from the basement of Building 3 to the basement of Building 11.

The Admissions Office and Building Services department have expressed interest in the space that will be vacated when the JCF and Graphic Arts move their operations.

The Industrial Liaison Program (ILP) will also move from

Building 39, taking up new quarters on the fourth and fifth floors of the Suffolk Building (Building E38) at Main and Carleton Streets, said Combs. The ILP, which serves as a liaison between MIT and private industry, is presently located not only in Building 39, but also in Buildings 4 and 10.

Although the Suffolk Building is farther from the center of campus than are the ILP's current of-

fices, the move will consolidate the program's offices in one building, said ILP Administrative Assistant Katherine K. Allen. The Kendall Square/Cambridge Center area is becoming "quite desirable," she said.

The second and third floors of Building 11 are now in the final design stages. The first floor designs are still preliminary, and the basement design is not yet underway, Combs said.

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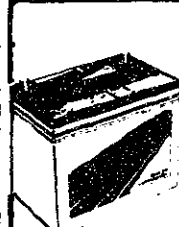
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news roundup

World

Chinese willing to open talks with USSR — The People's Republic of China has indicated willingness to reopen negotiations with the Soviet Union on demarcation of their common border by denying any claim to Soviet territory acquired from China under 19th and 20th century treaties with Czarist Russia. The positive signs came in an article published in the *People's Daily*, and significantly excluded a number of prerequisites which have prevented such negotiations for over 10 years.

OPEC rift widens — The Organization of Petroleum Exporting Countries is facing increasingly serious internal troubles, as ministers representing the nations of the cartel failed to agree on lower production quotas in Geneva this week. A quota proposal discussed Sunday would have restricted OPEC member country exports to sustain world oil prices. Saudi Arabia, Kuwait, Qatar, and the United Arab Emirates have refused to accept the quotas, however, arguing instead for an accord making their own light oil more competitive with North African oil.

Soviet spy satellite swims — Cosmos 1402, the Soviet nuclear-powered satellite, broke up on entering the atmosphere and fell to earth in the southern Indian ocean, some 1900 km from the closest land, the island of Diego Garcia. The satellite's nuclear reactor remains in orbit, and is expected to reenter the atmosphere the second week of February.

Israel refuses to withdraw — Israel still refuses to withdraw its estimated 30,000 troops from Lebanon, saying it has not reached a formal agreement with Lebanon on "normalization" of relations. Israel also insists it be allowed to retain 750 troops in "early-warning stations" in southern Lebanon, a plan US envoy Philip Habib reportedly described as making a mockery of the concept of complete troop withdrawals from Lebanon.

Terrorists sentenced in Rome — Thirty-two men and women, members of the Red Brigades terrorist organization were sentenced to life imprisonment Monday for crimes including the kidnapping and murder of former prime minister Aldo Moro. In all, 23 people were convicted of kidnapping and murdering Moro, and 40 other defendants with a total of 11 murders, 11 attempted murders and 4 kidnappings between 1976 and 1980. Five bodyguards were killed when Moro was abducted in Rome in March 1978. The former prime minister's body was not found until 55 days later.

Nation

Dodd opposes Salvadoran aid — US Senator Christopher Dodd (D-Conn.), returning from a fact-finding trip to El Salvador, said he opposes US military aid to the Central American country. The Senate Foreign Relations Committee begins hearings next week to decide whether to approve the \$25 million in military aid the Reagan Administration wants to provide. The President recently claimed military aid to El Salvador is justified, because the human rights situation in the country has "improved." Dodd estimated between 200 and 250 civilians are killed monthly in the continuing guerilla war.

High court rejects Reagan appeal — The US Supreme Court turned down a Reagan Administration appeal to revoke its 1971 decision allowing courts to order busing to achieve desegregation. The court let stand a decision by the US 6th Circuit Court of Appeals in Cincinnati which required Nashville, Tenn., to continue using busing to desegregate the city's schools.

New Jersey redecorates governor's mansion — The wife of New Jersey Governor Thomas Kean has asked that furniture in the governor's mansion be removed and sold. The house, recently restored by the state's historical society, was reportedly described as "not very tasteful."

Richard Mlynarik

Weather

Cold weather continues — We'll have sunny skies today with temperatures just above freezing. Clouds will begin to move in this afternoon or this evening, raising the possibility of overnight snow flurries; the low will fall into the middle 20's. Clearing and colder tomorrow, with a high near 30 degrees.

Barry S. Surman

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opinion

Ivan Fong

Controlled ambition enticing to students

Motivation. The word strikes fear in the hearts of those who practice "Controlled Ambition" — the philosophy that entices students to begin problem sets the night before they are due and tempts them to think, "Why study now for the exam when I can save time by cramming later?" It is the philosophy whose central tenet is "Don't do too much today, because then you'll have nothing to do tomorrow."

I have found many MIT students, myself included, succumbing to the practice of such an anti-work ethic. Why such a work-only-when-under-the-gun philosophy? On the surface, it would seem that MIT students develop this masochistic attitude in response to severe pressures on their time — starting a problem set the week before it is due is the toughest thing in the world to do, especially when one is already a week behind. There is more to Controlled Ambition, however, than mere procrastination. It points to an inherent characteristic of an MIT undergraduate education.

"Whom do you admire more, the student who learns his stuff but doesn't get good grades, or the student who doesn't learn the material as well but manages to get good grades?"

The freshman who asked me that question was perplexed. With hidden grades second term, he felt he would probably work harder than he did first term, but still concentrate on learning the subject material, as he did first term.

"I take it you didn't feel you did very well first term," I said.

"Right," he said, "I didn't. But that, I thought, was the main purpose behind freshman pass/fail. I didn't have to worry about grades."

I agreed, but, to help answer his question, offered a simple-minded analogy. "Which company do you admire more," I asked, "the one that serves its customers by making a quality product, or one that maximizes its profits?"

He thought for a moment, and answered that while he characterized most companies as having a single-minded pursuit of profits, the company that built the better

product would probably succeed more in the long run.

"Well," I observed, drawing on my business acumen, "might it be that just as grades should be a reflection of one's understanding of the course material, profits are a company's way of measuring how well they are serving their customers?"

I sensed he was not convinced. "Yes, but in an ideal world, if a company builds a better widget or whatever, then the assumption is that profits will come. Similarly, and in theory, if one learns the material, one can expect good grades. But experience does not always show this to be true," he argued.

"Then," I replied, "it boils down to the purpose of an education: is it to get good grades or to learn something? Does a company want to make a profit or to serve the community? How does one measure success?"

"In any case," I continued, "I really don't admire either of them. Both are cheating themselves in one way or another — whether it be not getting the grades one deserves, or not getting the education the other deserves. Besides, there are other factors, such as study habits for the student, or advertising and marketing strategies for the company, that can make a difference and make the question much more complicated."

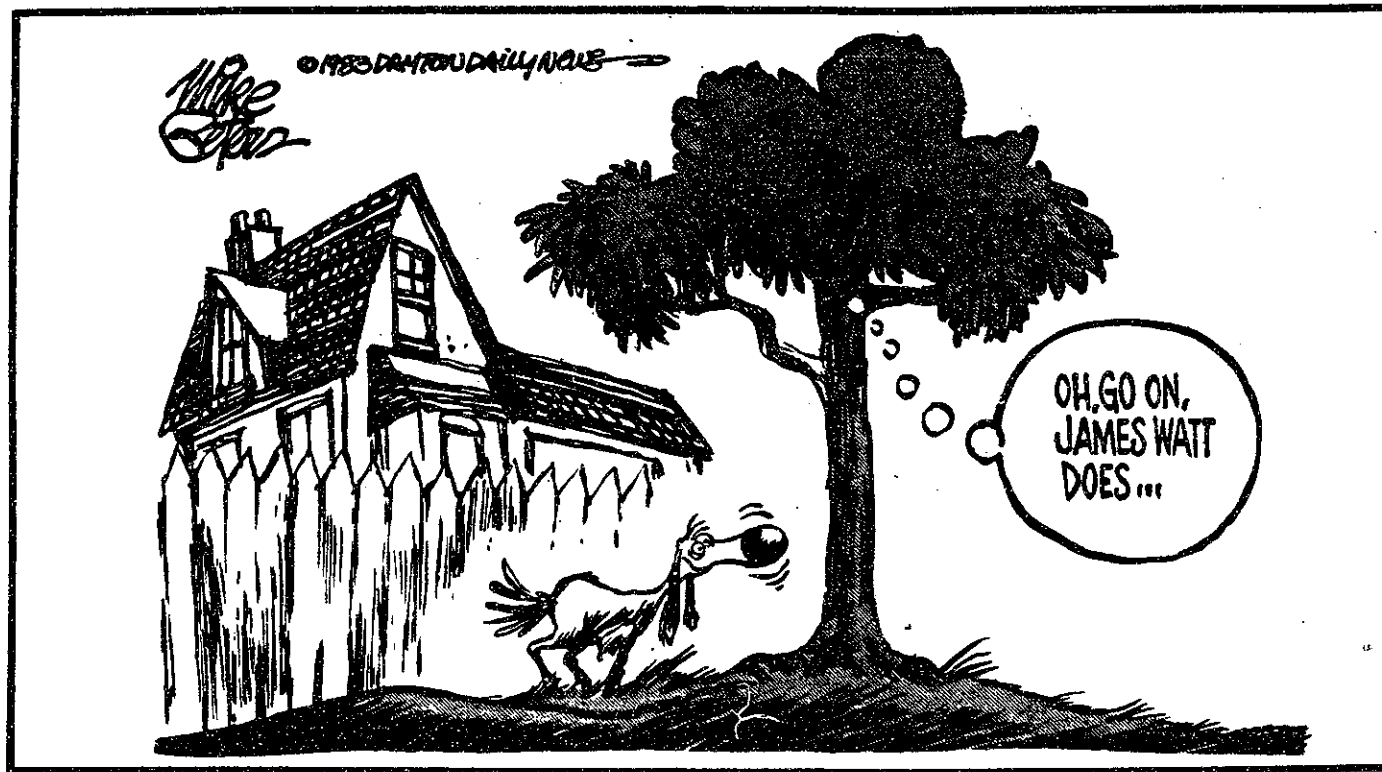
The pressure on college students for good grades can be strong. Graduate schools, employers, parents, peers, and self-motivation all compete to add fuel to the fire. But who is fooling whom? Does a corporation have an obligation to make profits to keep its share of stockholders happy? More often than not, it's the tangible goals, like grades or profits, that motivate people.

Nevertheless, I complimented this freshman on his noble attempt to place learning before grades.

"Just wait until next year," he said with a smile.

With the first phase of this year's trial writing requirement completed, many freshmen will be forced to confront their inability to write. I say "forced," not because I want freshmen to disregard the fact that this year's test

(Please turn to page 8)



Column/Mark Templer

Khmer violence boggles the mind

Less than two weeks ago, many of us saw *Apocalypse Now*, shown by LSC. Many of us would agree that the violence shown in this film was very shocking and frightening. We all left 26-100 quite disgusted with

the horrors we saw — but also quite ready to forget them, with the realization that *Apocalypse Now* was, after all, only a movie.

Well, *Apocalypse Now* was just a film, but the suffering and fear it portrayed have been all too

real in the twentieth century. The mass atrocities committed in Stalin's Russia, Hitler's Germany, and Mao's China were astonishing in their brutality and totality. And although we have always vowed, "Never again," we have once again seen an entire nation engulfed by unspeakable terror.

The nation is Cambodia, one of the dominoes in the much-maligned domino theory. Through the accounts of refugees, government and United Nations studies, and investigative journalism, we have learned about the wretched fate of that country.

Back in April of 1975, Pol Pot's Khmer Rouge Communist insurgents captured Phnom Penh and destroyed the remaining fragments of the Lon Nol regime. Then they turned Cambodia into Hell on Earth.

The Khmer Rouge evacuated all of Cambodia's cities, forcing everyone — including hospital patients — to march into the countryside. Those who resisted were shot. Phnom Penh, a city of three million, became a ghost town overnight. Many people died of illness, exhaustion, or starvation during the arduous march from the cities.

Once the people had reached the countryside, Angkor, the Communist Party of Cambodia, stripped them of their belongings — even their cooking utensils. They executed those who had had any standing before the revolution — writers, engineers, teachers, merchants, monks. They put everyone, children included, to work at forced labor, cutting down trees, sowing rice,

(Please turn to page 6)

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feedback

Aid forum discussion disappointing

To the Editor:

I attended the financial aid task force open forum last Wednesday afternoon. I was disappointed with the showing on both sides, but I was most ashamed by the type of discussion that the students present were most interested in pursuing. Instead of a discussion of the long-term financial problems facing MIT and the student community, or even an interest among the students for a better understanding of how the alumni's and government's money is distributed among MIT students, the main topic of conversation was in my view irrelevant and absurdly selfish. Students wanted to know how they could get around the federal law governing how much extra money students can make before they have to start giving financial aid back. One vocal student stated that he would like to

have a car; it would be "no sweat" to earn enough extra cash to pay for one, but he felt no incentive to do so because the Institute would then reclaim part of his financial aid. If indeed it is the case that most students on financial aid at MIT find themselves disadvantaged because the government will not give them free money and a car too, then perhaps there is something wrong with the system — unfortunately, I know too many students receiving little or no financial aid who don't have so many troubles.

Leonard Gallagher and the financial aid people who ran the meeting were more polished than the students, but not necessarily better prepared. When asked how many students leave MIT every year for financial reasons, Gallagher and his entire staff drew a complete blank. Surely they are

not so confident in their appropriations that they do not even bother to check the results!

Why can we not have a meaningful dialogue with the administration about subjects that are so important to us both? I would like to discuss and hear discussed subjects of a more pertinent nature. What about the number of people forced to leave? Is it possible that there are inequities in the way the existing monies are distributed? How is it that MIT students could refuse to generate income for the financial aid system by seeking outside monies and scholarships that could easily be theirs? And, most importantly, what can we do to help insure that the policies of aid-blind admissions and merit-based financial aid be preserved in the future?

Joseph Izatt '84

Opinion

Column/Stewart Cobb

Beverage price hike due to bottle bill

You may have noticed that, since you left for Christmas vacation, the price of a soda from one of the Coke machines that dot the Institute has jumped twenty-odd percent, from 35 to 45 cents. You might, at first, think that Sal Lauricella, who runs all those machines, had suddenly decided to triple his profits, but it turns out that he's making no more money than he did before. In fact, if you voted in the Massachusetts election last November, the odds are better than even that you have no one but yourself to blame.

On the ballot last November was a referendum on the so-called bottle bill. It provided for a five-cent deposit on most drink containers, to be returned when the container is turned in to a collection center. The bottle bill is intended to reduce the number of drink containers discarded in the environment by, essentially, forcing people who drink most beverages to pay to have the containers cleaned up. (Does anyone hear the word "Puritan" echoing softly in the background?) The Massachusetts voters approved the bottle bill referendum last November, to become effective this month.

What does that mean? Well, at first glance it means an instant five-cent rise in the price of drinks. The distributors can't absorb the cost of redeeming the deposits, so they pass it on to the consumers. Actually, it's worse than that, because the distributors have to pay two more cents per can to the "redemption centers" to make redeeming containers worth their while. In addition, the distributors have a whole new problem of transportation and record-keeping, which adds still more to the cost of the can. From the distributor's point of view, a ten-cent rise in the cost of a drink is not only reasonable, but necessary.

So you're paying ten cents more for every soda. If you're a dedicated penny-pincher, you can get half of that back by hanging on to your can until you get to a redemption center. For most of us, however, that's not cost-effective. I'm not going to carry an empty soda can through three hours of classes for a lousy nickel — I'm going to pitch it in the nearest trash barrel, just as I've

always done. Thus, for me the cost of a soda has gone up ten cents, and for no good reason. And even if you do take your cans to a redemption center, you only get half of the price increase back — you're still out an extra nickel for each can.

Where do all those nickels and dimes go? Several cents per can simply disappear, to cover the distributors' increased costs which are a direct result of the bottle bill. Two cents go to the operators of the redemption centers. (The residents of East Campus, being quick on the uptake, are trying to get their dorm declared a redemption center, so that they can recycle a bit more of the price hike.) Some of the remaining nickels go to the thrifty few among us who save all of their cans; the rest are discarded along with the cans that the rest of us throw out.

If the cans remained in the trash, Lauricella would effectively get a gift of five cents for each one. However, they probably won't. The Central Square indigents are not likely to let such an opportunity pass them by. At five cents a can, if you have a lot of free time and a good source of cans, you could probably make a good bit of money (by their standards, anyway). I predict that, before too long, we will find people rummaging through MIT's trash barrels to find the valuable cans that the rich and careless students have discarded. But they won't roam the streets cleaning up cans, because the cans are generally spread too thinly; it's essentially a mining activity, and MIT is the motherlode.

The supposed purpose of the bottle bill was to keep drink containers from cluttering up the environment. Its results, at least around MIT, turn out to be totally different. Those of us who've been dropping our cans in the trash all along are fined a dime for each drink; those of us who change our habits to include lugging empty cans around are fined "only" a nickel each time; and some Central Square bums will spend their time pawing through our trash, hoping to collect part of those fines.

The Taxachusetts eco-freaks have brought this mess upon themselves, and I hope they like it. I just wish they hadn't brought it upon the rest of us as well.

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TEXAS INSTRUMENTS

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opinion

Violence in Cambodia impossible to picture

(Continued from page 4)
clearing jungle areas. All were now equal.

Refugees who escaped told of their forced labor at gunpoint, the total lack of medicine, the lack of shelter. People who were not soldiers subsisted on rice: one eight-ounce tin per day for six, eight, ten, or more people. Families died off, one by one, from exposure, malnutrition, insanity, and rampant disease. Those who resisted or displayed "individualist tendencies" were executed. As one refugee said, "So little is allowed that you don't know what they might shoot you for." Another pointed out, "in its [Angkar's] name, the power of life and death is vested in the hands of the lowliest soldier." The terror experienced by those people is hard to imagine.

Some Cambodians managed to escape Angkar by fleeing into the jungle. I recently met one who made it to America. He said he had eaten leaves and tree bark to survive. He was lucky — he escaped, and only three of his family's ten members died under Pol Pot's regime. He had one thing to say about Communism: "Soviet, China, Vietnam, Pol Pot — they all same. Bad."

But it is really impossible to describe fully the horror of Communist Cambodia. It boggles the mind. As one escapee has said, "I lost track of the terrible things I saw there. Every article, every book I have read about Cambodia under the Khmer Communists is a pale copy of the wretched, ghastly original."

Amazingly, the American media have said almost nothing about what happened in Cambodia from 1975 until Pol Pot's ouster in 1979. Some in the me-

dia discounted the refugees' stories as "second- or third-hand rumors." In 1975, Anthony Lewis went so far as to write in *The New York Times* of our "cultural arrogance" in condemning the Khmer Rouge.

But in recent years, the truth has emerged. The mass graves have been found. The refugees are being listened to. And the demographers have been counting. It is estimated that two to three million people in a nation of seven million died under Pol Pot's three-and-one-half-year rule. Six months ago, the West was horrified at the sight of hundreds of massacred Palestinians at Sabra and Shatila. But two to three million, dead, is beyond our comprehension.

I think the people of Cambodia now understand that the price of freedom must be eternal vigilance. And I hope that we in the West realize it, too.



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2010, Odyssey Two, By Arthur C. Clarke; A Del Rey Book, 1982; \$14.95.

December was a great month for sci-fi epic sequels. Isaac Asimov finally wrote a sequel to his Hugo award-winning *Foundation* trilogy, and *2010, Odyssey Two* is Arthur C. Clarke's sequel to his 1969 classic, *2001, a Space Odyssey*.

2010's most redeeming feature is that it answers most of those questions left unanswered by *2001*. Why was astronaut Dave Bowman turned into a Star Child, and what is he going to do to Earth? What are the black monoliths? Why did the supercomputer Hal go insane, and try to murder the crew of the *Discovery*? What happened to the *Discovery*?

It is the latter question that serves as the launch point for the sequel. Dr. Heywood Floyd is also wondering what happened to his multi-million-dollar spacecraft, as is the rest of the world. So it's a race between the Russians, Chinese and Americans to see who can launch a salvage mission and reach *Discovery* first.

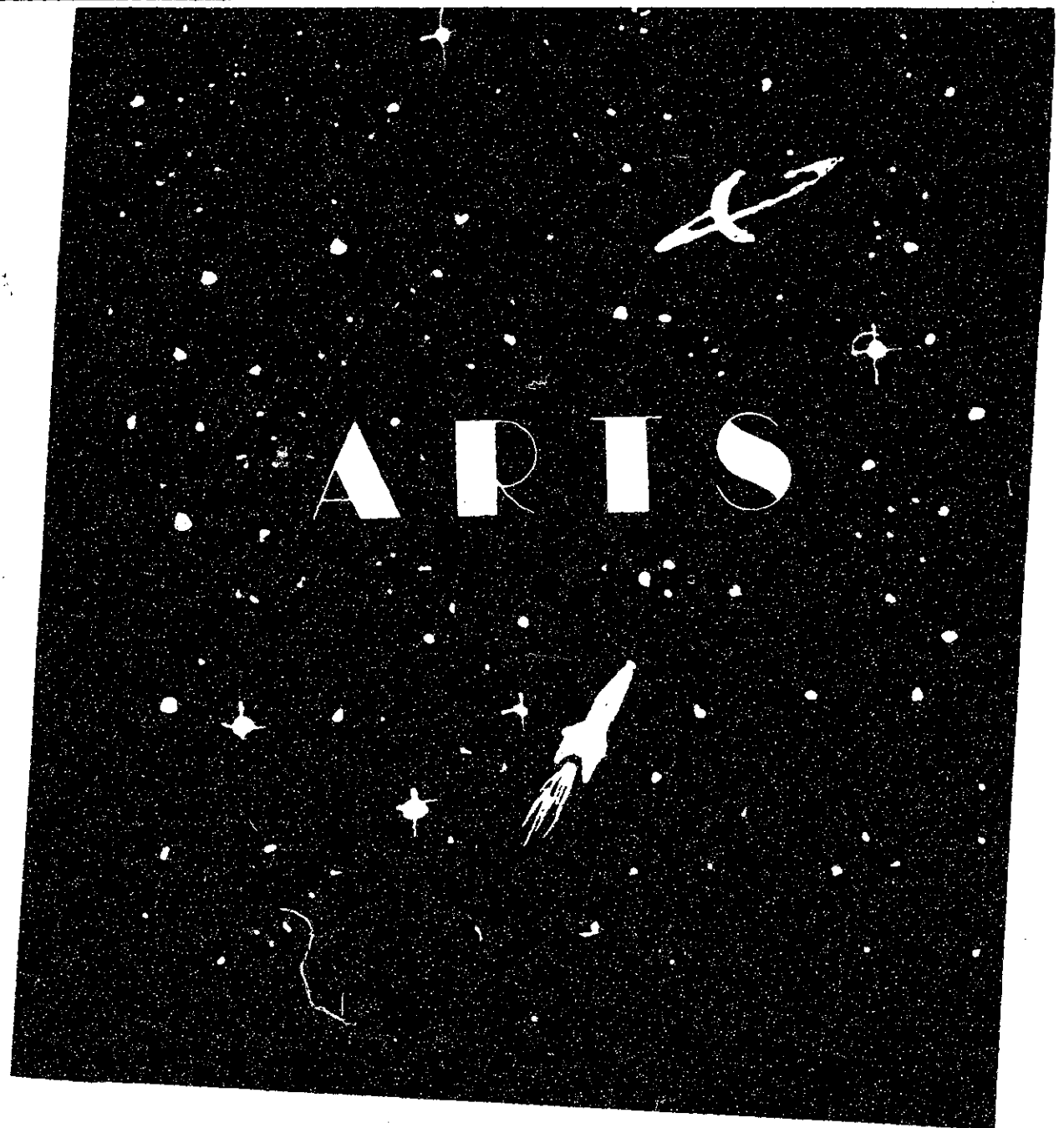
The answers to all these questions are fascinating and make good reading. The book's greatest weakness is its rather bland characterization. Even with a spaceship full of men and women and a long, boring mission to Jupiter, the subject of sex barely arises. On the other hand, the sequel does delve deeply into David Bowman's background, explaining why he was such a cold fish in the original.

When differences existed between the film version of *2001* and the novel which paralleled it, the conflict has been resolved in favor of the movie. For instance, in *2010*, it is for Jupiter, not Saturn, that *Discovery* was originally bound. So if you saw the movie, it's not really necessary to read *2001* before *2010*.

The climax is rather grandiose, but then so was *2001*. If you enjoyed *2001*, but were more than slightly confused, reading *2010* should answer most of your questions.

And yes, negotiations are under way to turn the sequel into a movie, too. **Jack Link**

ODYSSEY II



FOUNDATION IV

Foundation's Edge by Isaac Asimov; Doubleday 1982; \$14.95

In the first three books of the *Foundation* series, Asimov paints a vivid picture of the decline and fall of a galaxy-spanning empire. One man, psychohistorian Hari Seldon, foresaw the decline and the thirty thousand years of barbarism to follow. He produced a plan designed to reduce this barbaric period to a mere 1000 years, and set up two foundations "at opposite ends of the galaxy" to ensure the plan's fulfillment.

One of the foundations, the First, specializes in the physical sciences. It is generally known as simply The Foundation, since the Second Foundation, (specializing in the mental sciences) is believed to be extinct.

In *Foundation's Edge*, it is 498 years into the Foundation Era, and the galaxy is following the long dead Seldon's plan perfectly. Too perfectly, in fact, and some Foundationers are getting suspicious. First Foundationers ask themselves whether the Second Foundation was really destroyed, and the Second Foundation is wondering whether another force is loose in the Galaxy.

A Foundation Councilman sets off on a mission to find the mythical Second Foundation. As a cover, he takes along an historian who has spent his life searching for another myth, this one buried in antiquity: the planet of human origin, known in legends by the name of 'Earth'.

It is impossible to say more without giving anything away. Since *Edge* summarizes the first three novels in the series, don't read it until you've read *Foundation*, *Foundation and Empire*, and *Second Foundation*, in sequence. Reading *Edge* out of sequence will ruin the preceding trilogy.

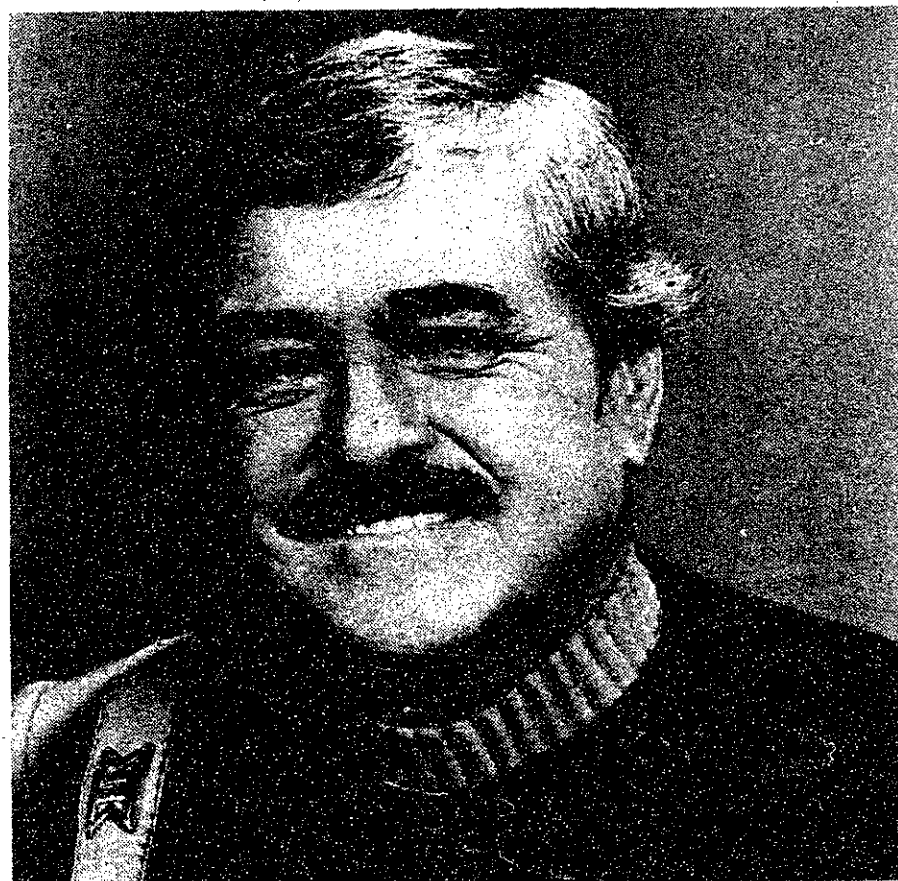
In fact, in *Edge* Asimov also introduces elements from his novels *Pebble in the Sky*, *Prisoners of the Stars*, and *The End of Eternity*. Even the robots are introduced, with the Three Laws of Robotics presented as an amusing legend. It all comes together in the last sixth of the book, and those who have not read all of Asimov's previous sci-fi are finding the ending a little unsatisfying, if not overwhelming.

My main criticism of the book is that the characters are too universally smug, and their opinions shift rather erratically at times. Asimov will probably receive a lot of criticism for trying to wrap up the fruits of a very prolific career into 60 pages at the end of *Edge*, but many fans may be left with a satisfying feeling at seeing it all tied together.

Incidentally, why doesn't somebody make a movie out of the Foundation series? It represents science fiction at its best.

Jack Link

STAR TREK III



Most amusing were Doohan's renditions, in various accents, of his famous line "But Captain, my engines just can't take that," including a Russian version that sounded surprisingly like Chekhov. Later he mentioned that the part of Scotty is no major acting feat: "Scotty is 99% Jimmy Doohan and 1% accent."

Doohan, a seemingly amiable person, is not overly fond of William Shatner, *Star Trek's* Captain Kirk. "I watched T.J. Hooker once for five minutes and never saw it again."

Concerning the executives at Paramount involved with the making of the *Star Trek* movies: "They are terrible, terrible, terrible people to deal with."

Doohan's favorite episode of *Star Trek* was "The Doomsday Machine," because of the science in it. His least favorite show was "A Way to Eden." "I like watching *Star Trek* reruns," said Doohan modestly, "they're always the best thing on TV that night." Doohan regrets the fate of the television show. "It's the Nielsen ratings which took *Star Trek* off the air, which tells you enough about the Nielsen ratings."

A few avid Trekkers in the audience had some penetrating questions about techni-

cal goofs in the show, most of which Doohan blamed the writers for. Why, for example, should the most important officers on the ship be the first to beam down onto strange planets? "They had to send the stars there." To one improbable suggestion from a fan, Doohan replied, "In a few years maybe you'll produce a science fiction movie, and you'll do it!"

Concerning the two *Star Trek* movies, Doohan had this to say: "Only 'The Wrath of Khan' came close to the series. . . With 'Star Trek: The Motion Picture' the executives really screwed up."

The lecture ended with a showing of the famous "The Trouble with Tribbles" episode, in which Doohan had a sizeable role. In reply to a question about the bar scene in that episode, Doohan said "I'm supposed to be drinking Scotch, but it's colored water," and received scattered booing from the audience. Doohan also lays claim to the punchline of the show: "... they'll be no tribble at all."

In all, the lecture was enjoyable, but the only revelations one could gain concerning the true character of James Doohan were negative ones.

Joel Gluck

James Doohan, at Kresge Auditorium, Tuesday, January 18; lecture sponsored by the MIT Lecture Series Committee.

James Doohan, known to the civilized world as Chief Engineer Montgomery Scott of the U.S.S. Enterprise, arrived on the Kresge stage last week to the sound of wild and prolonged applause from an audience packed with devoted Trekkies and interested fans. Doohan, a charismatic and lively speaker, was entertaining and well worth seeing, yet many felt that the evening's program, and the man himself, had shortcomings.

Doohan launched the lecture by saying that sixteen years ago he had received a letter from an MIT senior saying that "I hope you will be here soon." Doohan's reply: "Well, I'm finally here. It's about time."

Immediately after this brief introduction, the audience was treated to an extremely dull NASA film concerning the space shuttle. The film, narrated by Doohan, who claims it won awards in Rumania and Poland, emphasized rather redundantly that the shuttle program is not just for the US, but for all mankind. After the film, Doohan resumed his talk by saying that the United States is in a technological race that it can't afford to lose, a point directly at odds with the film. One wonders if Doohan listened while he narrated.

As a matter of fact, one wonders if Doohan seriously cares about anything. In the question and answer period that comprised the rest of the lecture, Doohan continuously made it plain that the one thing that he cares about and that motivates him is money. Yes, there is more than love of money to James Doohan, including his rather puffed-up sense of patriotism and his professed fascination with all branches of science, yet when asked, for example, who was his closest friend on the *Star Trek* cast, he answered, half-jokingly, "the paymaster."

Doohan kicked off the question and answer session with a few humorous questions of his own. "What would I do if I were captain? I would limit *Ensign* Kirk to one girl a month, . . . and Bones wouldn't be allowed to say 'He's dead, Jim.' " Doohan also brought up the fact that there are no provisions for toilets in the blueprints for the Enterprise. "There may be no toilets, but we do have phasers. You set them on disintegrate. . ."

opinion

External motivation rarely gives results

(Continued from page 4)

was experimental, but because human nature is such that it takes a swift kick in the pants, or a straightforward "Your writing is abysmal," to motivate students to action. Upperclassmen may advise these freshmen, "Don't worry, it's not a requirement yet. They won't withhold your diploma. You don't have to do anything," but remember that a corollary to the philosophy of Controlled Ambition is that there is no reason to do anything until and unless you *have* to.

MIT students are supposedly highly self-motivated. Why then, Controlled Ambition? Because the system encourages it. Without a writing requirement, professors can lecture all day on the merits of effective written communication to no avail. Professors may discourage students from pulling all-nighters to finish their problem sets, but students, acting in their own interest, see it as an incredible time-saving device.

There has been some talk recently of proposals examining MIT's freshman year curriculum. While the Institute aims to remain a center of technological excellence, a re-evaluation of the first-year core curriculum is both timely and needed. MIT should deal with questions central to the purpose of freshman chemistry, physics, and mathematics requirements, and whether they adequately serve to introduce students to scientific thought. What is the proper role of freshman year courses, and where does the study of discrete mathematics, statistics, computer programming, or biology fit within these requirements, if at all?

There are complaints on both sides. The Electrical Engineering department begrudgingly re-teaches its students what should have been taught in 8.02, while majors in Economics claim 8.02 has no relevance to their course of study. External motivation, in the form of requirements, is an important facet of an MIT undergraduate education that lends meaning to an MIT diploma.

Poorly designed and implemented requirements, however, result in less-than-enthusiastic students and give them all the more reason to practice Controlled Ambition.

* * * *

It appears that the Institute fosters the attitude that an MIT education is a series of hurdles, and that the object of the game is to "get by" with the least amount of trauma. I don't blame students for feeling this way. MIT has a reputation for having high standards and a frenetic pace for both students and faculty.

I do, however, offer a suggestion for students. Do what interests you. If you have always thought Renaissance Literature would be interesting, by all means take the course. Don't worry about how much time it

will take. Be reasonable in your assessment of how much time you have, but, above all, try not to "play the game."

Perhaps I make these observations because I am a senior, "old and sedate," and find motivation

for anything academic, among my classmates, at an all-time low. Perhaps it is IAP, a time for reflection. Certainly, I do not advocate submersion in academics, for there is a limit to which one should be motivated toward one's

studies. There is so much outside of the classroom worth learning. I do think, however, that external motivation rarely produces long-term results.

Maybe I should start my thesis next week.



Junta responds

To the Editor:

We, the members of the nascent Bexley Sexual Harrassment Junta, feel that the recent *Tech* coverage of the sexual harrassment incident in Burton House was extremely poor journalism. We do not object to the withholding of the names of those involved, but withholding the facts invalidates the article. To learn more about the incident, we called *The Tech*, who refused to comment (*Editor's note: It is The Tech's policy to limit our discussion of an issue to that which is printed in our pages. We do not elaborate on stories or opinions published in the newspaper in any other way.*); we called the Burton Desk, who refused to comment; we called the floor involved, and the person who answered claimed to be a "house-cleaner" with no knowledge of the subject. Now, we realize that the Bexley Sexual Harrassment Junta is not yet well-known, but as a campus watchdog over sexual harrassment, we have a right to know the facts. It is irresponsible of *The Tech* to report the incident with none of the causes. If the student ejected was guilty of only wearing a humorous T-shirt, we would welcome him into Bexley with open arms.

The Bexley Sexual Harrassment Junta
(sixteen names)

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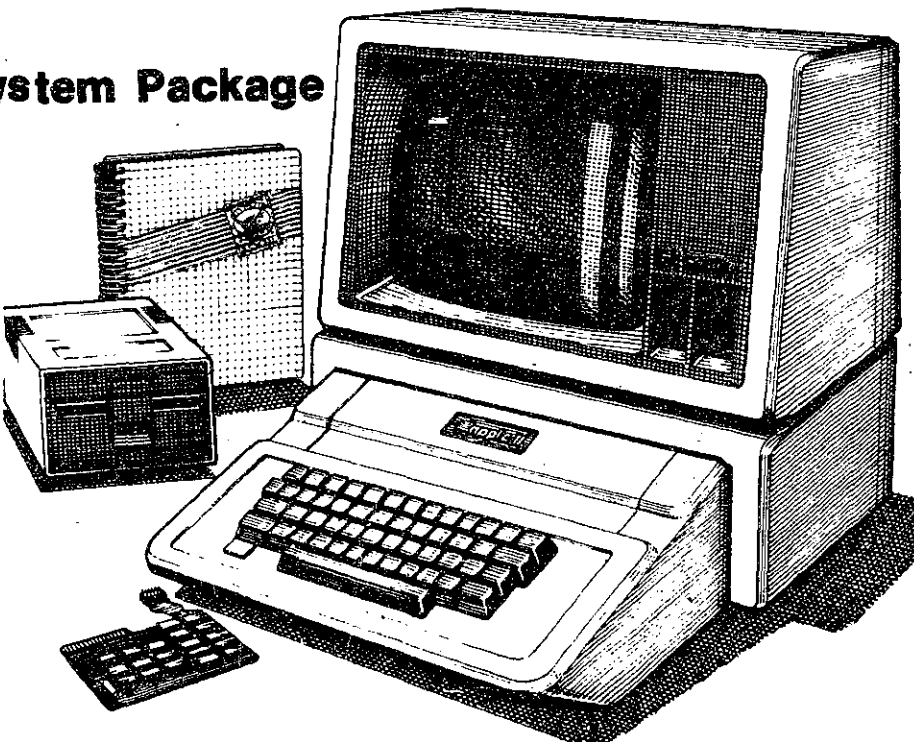
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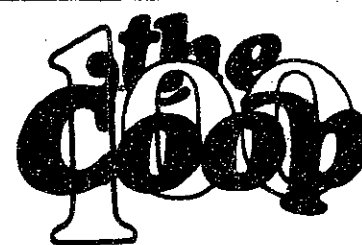
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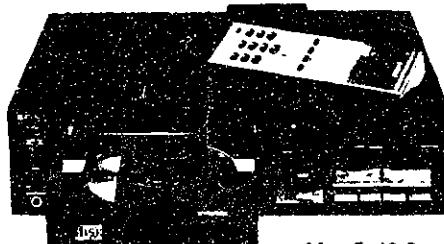
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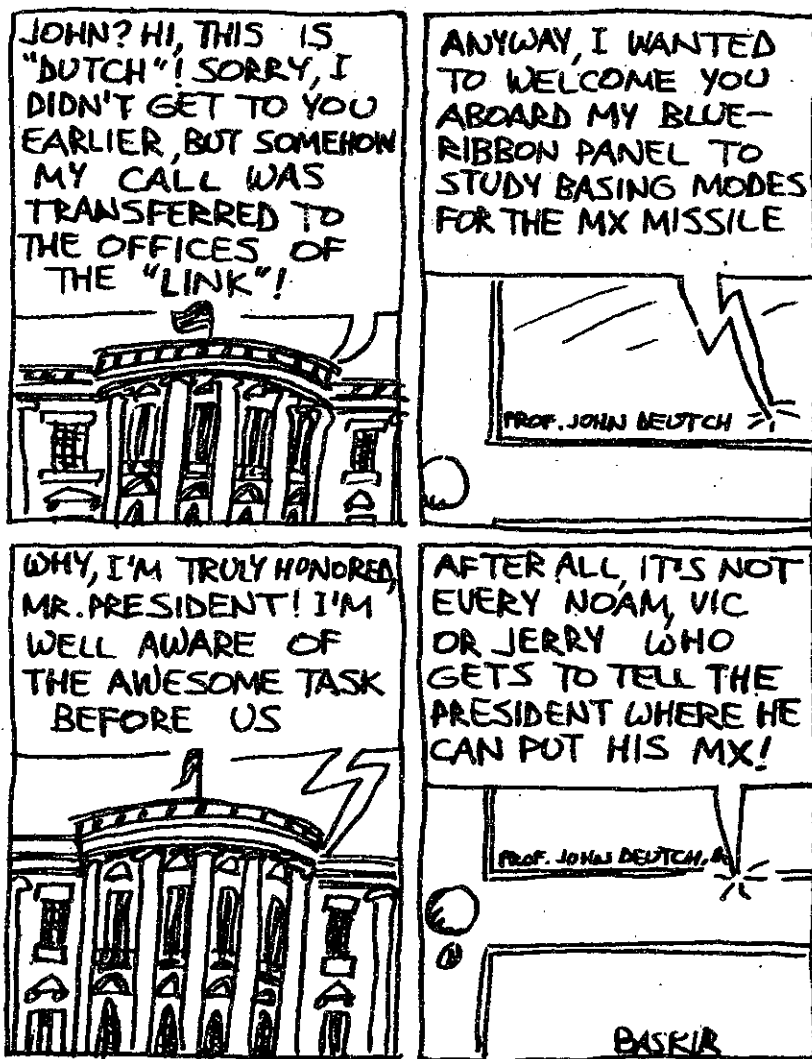
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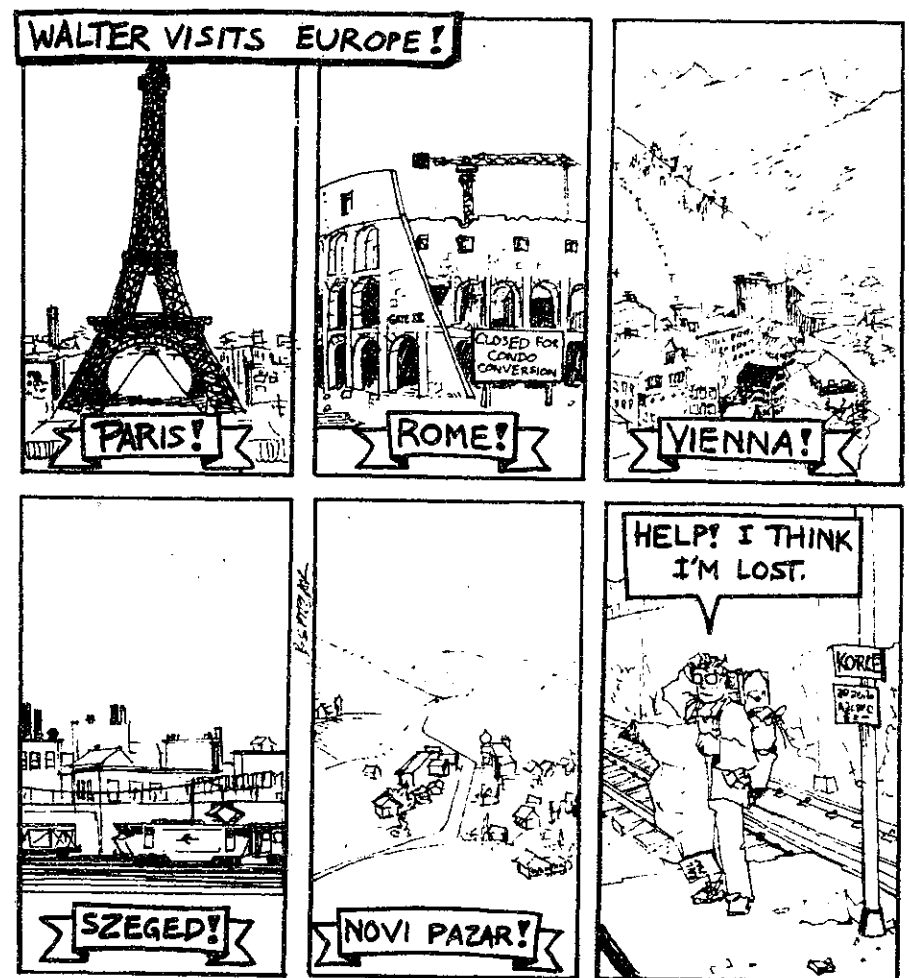
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comics

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Wine and Cheese

NRSA house fails to meet safety code

(Continued from page 1)

frey L. Caplitz '83 were unavailable for comment. One NRSA member estimated NRSA's membership to be over 70 and said he thought repairs to the building would cost about \$3000.

Physical Plant personnel have started electrical repairs to the building, said Student Center Manager Conor Moran.

The ad hoc committee includes Senior Vice President William R. Dickson, Assistant Dean for Student Affairs Stephen D. Immerman, Food Services Manager Salvatore Lauricella, and Moran, and will study the use of student activity space on campus.

Cambridge officials have been making systematic inspections of MIT buildings to enforce compliance with city building codes, Fresina said. Many Cambridge fraternities, he said, will be required to install smoke detectors as a result of new Cambridge ordinances.



Tech photo by Laurie S. Goldman

Balls fall in Lobby Seven

By Barry S. Surman

Sixteen hundred bright pink and green ping pong balls showered Lobby 7 at noon Monday.

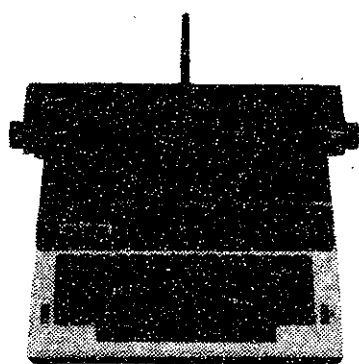
The latest in high-tech technology hacks featured a tape drive motor turning an eccentric cam; the cam vibrated the balls through a small gate in the side of a box suspended near the lobby's skylight. An unused incandescent light socket provided electricity to drive the motor, and a circuit breaker conveniently located inside the dome served as remote control.

Four MIT students plotted the prank, and claim to have another 1600 balls at the ready. The pink and green spheres, one of the protagonists said, would be ideal for an assault on an unnamed local institution rumored to be populated by preppies.

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sports

Trackmen, at 3-3, are ready for Tufts

By Martin Dickau

After three consecutive losses, the track team bounced back, defeating host Coast Guard 89-47 Saturday afternoon. In all, the Engineers won 11 events, as they raised their record to an even 3-3.

Pat Parris '86 continued his impressive performances, once again winning both the 35-lb. weight throw and the shot put. Martin Taylor '83 collected first in the triple jump with a total distance of 41'-3".

In the running events, MIT finally managed to overcome some of this season's difficulties and win. Ed Arenberg '85 took the 60-yard dash with a time of 6.6 seconds. Not to be outdone, Joe Presing '84 grabbed first place in

the 60-yard hurdles with a time of 7.7.

Dave McMullen '83 ran the 440 in 51.7 seconds to place first, and Dave Richards '86 posted a time of 1:14.4, as he bested the field in the 600. The 2:00.3 run by John Hradnansky '85 in the 880 gave him the top spot, and the 1000 went to Ken Kovach '83 with a time of 2:20.8.

The Engineers continued their strong showings in both the one- and two-mile relays, easily taking both events.

The team's next meet will be at home this Friday at 6pm against arch-rival Tufts, and MIT really wants the victory. Comments Kovach, "I'll run five events if I have to, [in order] to win."

weekend preview

Here it is, the last weekend of IAP. Don't miss your chance to get out and see some of our teams in action:

Tonight, Wrestling will host Trinity and Northeastern at 7pm in duPont.

Tomorrow, Women's Basketball will face Conn. College at 5:30pm in the Cage. The men will follow at 7:30pm against Curry.

Friday, Track will host Tufts in the New Athletic Center at 6pm. Squash will take to the courts in duPont at 7pm for a match against Stony Brook State.

Saturday will be a big day, as always. At 1pm, Women's Basket-

ball will meet Wellesley in the Cage, while Wrestling takes on Williams and UMass-Boston in duPont. At 2pm, both gymnastics teams will face Coast Guard in duPont. Hockey will skate against Stonehill, and Squash will take a swing at Amherst. Rounding out the day, Men's Swimming hosts Springfield at 4pm in the Alumni Pool.

Sunday will only see Hockey take on Rochester at 2pm.

Monday, which has no home events scheduled on it, can be the day off for everyone who went to the games on the weekend.

UA News

But I Can't Put it on my Resume?

We, the Tuition Riot Committee, are looking for dedicated individuals to volunteer their time and ideas by serving on our committee. We currently have three projects; one may be right for you! If you are interested in influencing the country, join our National Tuition Policy Committee (NITPIC), which has banded together with a University of Pennsylvania group, H.I.T. (Halt Increased Tuition), in an attempt to organize all the Ivy-league-type schools for lobbying in Washington. If interested in bringing MIT's Tuition Riot into the spotlight, join MERCY (Media Relations Coalition of Youth). And if you're looking for a way to vent your aggression, join SADDER (Subversive Aggression and Destruction DEMonstrated by Rioting).

If you feel our case is worthwhile, we seriously could use your help. To join, simply call x3-2696 (UA Office) during business hours. You probably won't be able to put it in your resume, but we feel the sheer enjoyment you will derive from membership will far outweigh your frustration in not being able to expand your resume.

Burdened by Tuition? Tool & Die

T&D Magazine (can you guess what that is?) will begin publishing in February. You (yes, YOU) can become a staffer (cartoonist, editorial writer, satirist, columnist) provided you bring your talent and creativity to the organizational meeting to be held next week. (Watch for flyers) The first issue will feature a special section on "Girls of the Silicon Valley" as well as an in-depth, first-hand report on "Setting MIT Tuition: An Academic Council Meeting as Heard from the Ventilation Duct Above the President's Office". Any questions? contact Ken at the UA Office (x3-2696). This project is sponsored by the Undergraduate Association.

The UA Trail Begins

It's UA/Class Officer Election Time! Beginning February 1, interested candidates can pick up their election materials at the UA Office (W20-401). Petitions will be due February 18 at NOON, and elections are set for March 9.

For UAP/UAVP, election procedures are unchanged. But for Class Officers the Member-at-Large positions have been eliminated, for all the the Permanent Class Officers. All four classes still will select a President, Vice-President, Secretary, Treasurer, but for the classes of '84, '85, and '86, the 2 Member-at-Large positions have been replaced by a Publicity/Newsletter Coordinator, and a Social Chairperson(s).

The Publicity/Newsletter Officer's job is communication with the class, without which, class government would have little importance. The Social Chairperson(s) organize barbeques, Ice Cream Orgies, and Jr.-Sr. Pubs with the Social Committee of the class. NOTE: Two students may run as a team for the position of social chairperson(s).

Interested? Come to the UA Office and sign up next week. Be sure to bring a fat magic marker so that you can write your name really big and intimidate other candidates from running. Any questions? Call Dave Libby, Election Commissioner at x3-2696 or d15-8739.

Credits

This UA News was produced by Rich Cowan and directed by Ken Segel. Future UA Newses will be edited by Dave Scrimshaw, the new UAVP. Please send your submissions to UA News, W20-401, or drop them in the UA News Folder (UA Office) by Noon Sunday. You have been warned.

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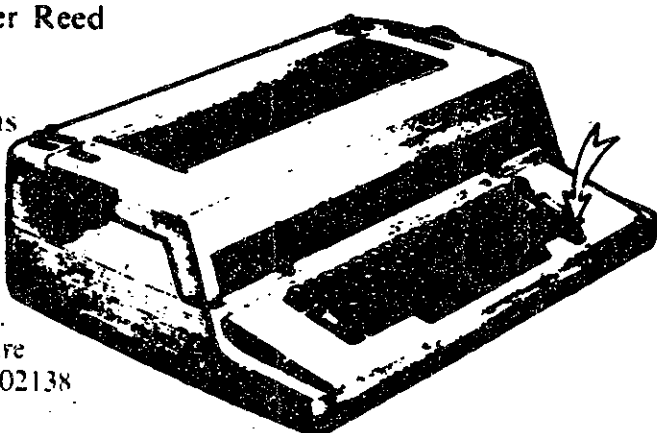
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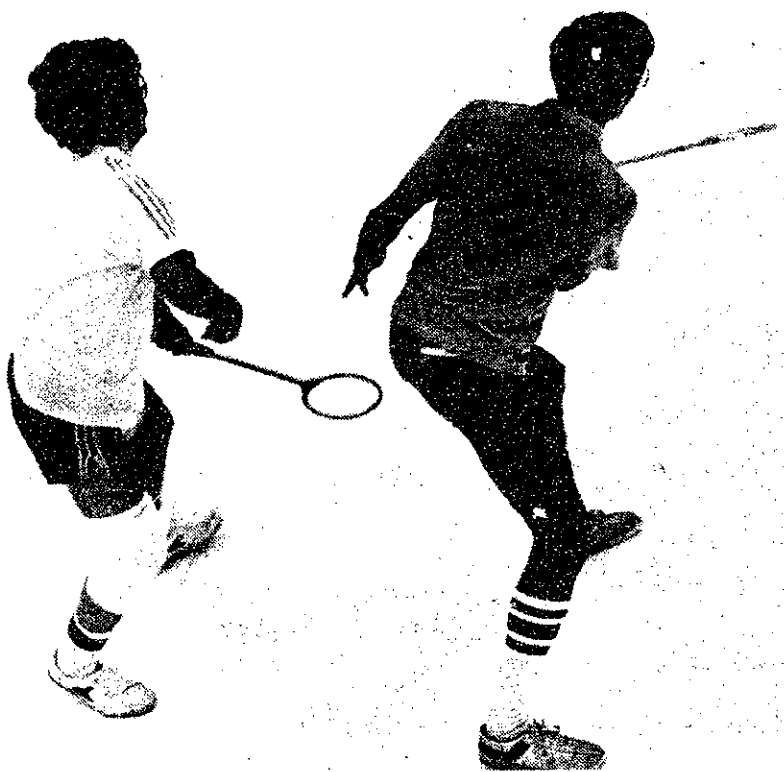
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sports



MIT's Larry Hsu (right) is narrowly defeated by Hayes Gladstone of Tufts. The MIT squash team's lost Tuesday by a score of 2-8.

Tech photo by Omar Valerio

Basketball squads find winning ways

By Martin Dickau

Both the men's and women's basketball teams continued to shake off their earlier slumps last week, the women scoring two consecutive victories to go to 5-4, while the men won two of three, upping their record to 4-7.

After a loss at Coast Guard early last week, the women edged out visiting Amherst 59-57 Wednesday. Cindy Robinson '84 led the Engineers with 17 points. Co-captain Joyce Kelly '83 had 16, and Julie Koster '85 had 10.

The squad, riding high after its win, romped over Babson in Rockwell Cage Saturday 62-46. Koster paced MIT with 12 rebounds and a career-high 19 points. Kelly chipped in with 14, and co-captain Terry Felts '84 dumped in 11. The key to the game was the Engineers' defense holding Babson's Judy Pearson, who had been averaging well over 20 points per game, to only seventeen.

A 63-46 loss at Bowdoin last Tuesday snapped the men's modest two-game winning streak, but the Engineers got right back on track, defeating visiting Wesleyan 81-76 Thursday. Co-captain Mark Branch '83 led the attack with a career-high 32 points, including an MIT-record 20 for 20 from the free throw line. The team's other co-captain, Robert Joseph '83, had 16 points.

The squad continued its winning style Saturday, thrashing host Coast Guard 51-38. The Engineers allowed the Cadets only five points in the first ten minutes of the game. The MIT defense also held all of the opposing players to under ten points, while Mark Johnson '84 and Bud Tad-diken '85 each had twelve for the visitors.

Both teams will be at home tomorrow for a basketball double-header. The women will lead off at 5:30pm against Conn. College, and the men will follow at 7:30 against Curry.

sports update

Gymnastics — The men's gymnastics team went to Long Island Saturday and dropped to 2-3, losing to both SUNY-Farmingdale and CCNY, two very strong schools. MIT's Mike Ehrlich '84 scored an 8.65 to win the floor exercise. Jiro Nakauchi '83 was second with 8.05 and went on to finish fourth in the all-around with a score of 39.10.

The women's team opened its season against highly-regarded Springfield College and lost 141.80-123.00. MIT's Missy Maxfield was first in the all-around with a 30.1, her single best performance was a 7.9 in the vaulting. Both squads will be at home Saturday when they host Coast Guard at 2pm.

Men's Hockey — The hockey team dropped to 4-2 Saturday with a 4-0 loss to Division III Curry. The icemen were in action last night against Tufts, and will host Stonehill Saturday afternoon.

Rifle — The rifle team picked up right where it left off before the break, downing host Dartmouth 2176-2101 last weekend.

Skiing — The skiing team opened its season last weekend at the Bowdoin Ski Meet in Bethel, Maine, finishing fourth among the eight schools participating. Co-captain Chris Craven '84 was seventh in the men's giant slalom, while Bill Larkens '84 was 13th. In the slalom, Cravens was again the top MIT finisher, this time in fifth place. Larkens was 12th. Co-captain Mark Bouchard '84 posted a strong fourth-place showing in the 16-kilometer cross country event. Frederik Johnson '86 finished 13th in that race.

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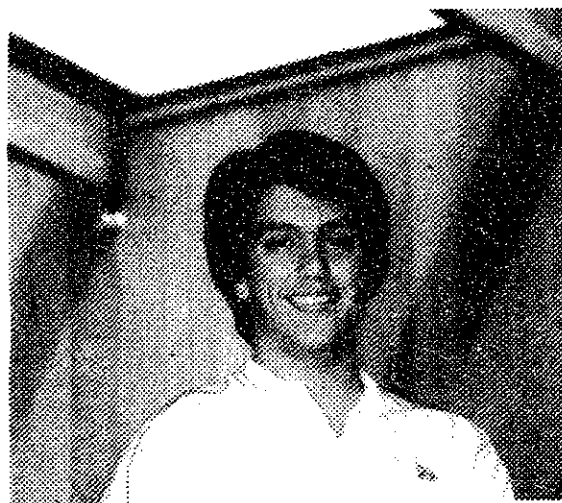
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