

Saturday's score: MIT 1, Harvard - Yale 0

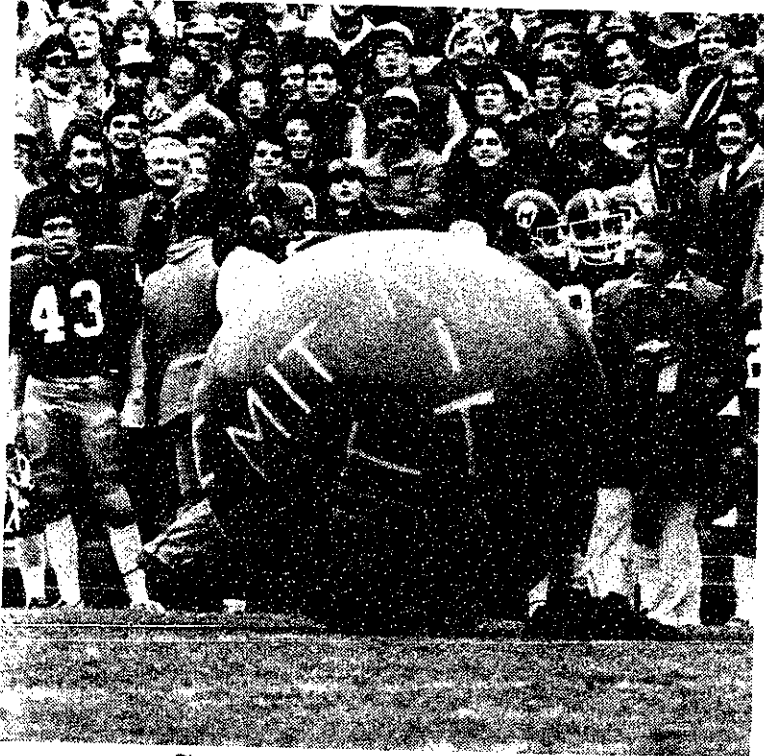


Photo courtesy The Harvard Crimson/Nevin I. Shalit

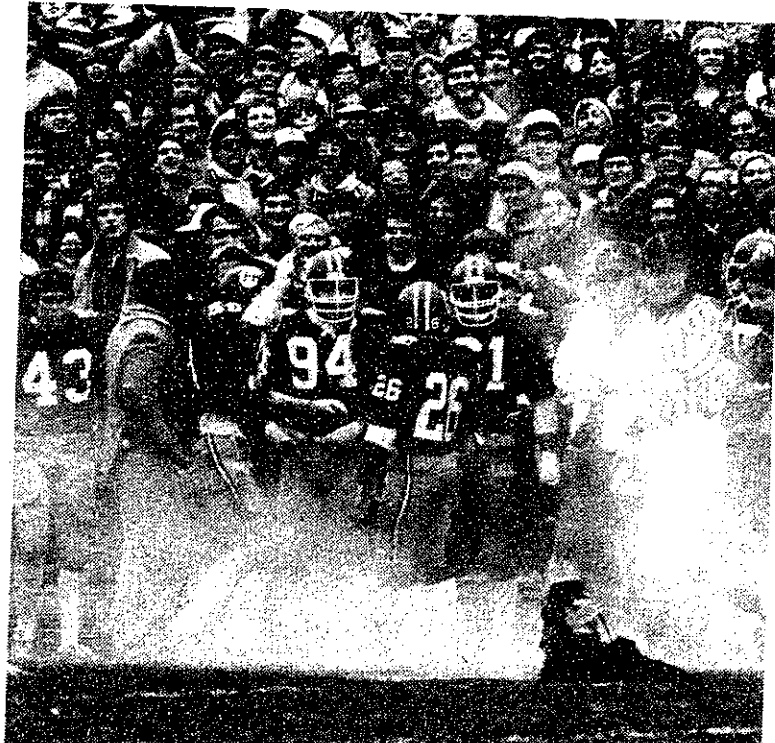


Photo courtesy The Harvard Crimson/Nevin I. Shalit



Tech photo by Omar Valerio

By Katie Schwarz
and Bill Coderre

In a news conference held yesterday evening, Delta Kappa Epsilon (Deke) President Bruce Sohn '83 admitted his fraternity was responsible for Saturday's balloon prank at the annual Harvard-Yale football game.

With 7:45 remaining in the second quarter, just after Harvard scored the second of six touchdowns, a black weather balloon with the letters MIT painted on it emerged from the ground and began to inflate.

Fans, players, and officials were surprised, and, as the balloon inflated, became increasing-

ly nervous; some thought it might be a bomb. When it had reached six feet in diameter, it burst. No one was injured, but play was delayed for several minutes as officials buried the balloon.

The balloon was pushed out of the ground by a hydraulic ram driven by freon gas, according to Sohn, and was filled with air pumped by a vacuum cleaner motor.

Harvard President Derek Bok commented, "Balloon? What balloon? If there were such an event, it was such a brilliant feat of technology that whoever might have perpetrated it deserves great

credit." He refused to accuse MIT students of responsibility, however, noting, "It might have been CalTech students trying to incriminate MIT."

MIT President Paul E. Gray '54 commented, "There is absolutely no truth to the rumor that I had anything to do with the

planning or promoting of [the stunt], but I wish there were."

Deke alumni spent several years designing and constructing the device, Sohn noted. Wires were laid during eight separate trips to the playing field, and the actual device was installed on Tuesday, November 16.

The device was designed so that it would pose no threat to players, officials, or spectators, Sohn said.

Deke waited until yesterday to claim responsibility for their actions because they were unsure whether Harvard Police planned

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Shuttle bus service to resume

By Tony Zamparutti

The Undergraduate Association (UA) Finance Board decided Friday the UA will reassume liability for the MIT Shuttle Bus Project on November 29.

The shuttle bus should reassume service on that date, according to Noelle Merritt '85, chairman of the project. Merritt said one bus will operate for two weeks, until the end of classes.

The company which operated the shuttle, William S. Carroll, "wants at least a partial payment" of the project's debt before it signs a contract with the MIT Shuttle Bus Project, according to David Libby '85, Finance Board liaison to the project. "People are working on that right now," he noted.

The organization owes Carroll more than their assets, Libby said. The Finance Board could lend money to pay the company, but this year's budget is tight. The board could lend money from its invested reserves, but such a loan would require approval by the Activities Development Board (ADB).

"They [Carroll] really shouldn't require prepayment," Merritt said. "If they do, it might be a problem."

The Finance Board withdrew UA liability for the project October 29, and warned the organizers any debts the shuttle bus accrued thereafter would be the personal liability of the bus organizers.

Service for the next two weeks

of service will cost \$2800, Merritt said.

Before October 29 the shuttle bus project sold \$2000 worth of tickets to students and \$1500 to the Student Center Committee's Coffeehouse for resale. Service cost \$3800 before the Finance Board revoked UA liability, \$1920 for the two and half weeks the bus was operating without UA liability, and should cost \$2800 in the next two weeks' operation, according to Merritt. The bus project should have a gap of \$4000 between its revenue thus far and its total expected expenses, Merritt said.

We are "trying to get 50 percent of that" in ticket sales, she said. "If we can get that, it will at

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Cheating not a problem at MIT, professors say

By Laura Farhie

Academic cheating does not appear to be a major problem for most departments at MIT, according to individual interviews conducted with faculty members in thirteen academic departments.

Most cheating incidents never reach the Committee on Discipline (COD), but are handled within the individual academic departments. The punishments administered for cheating varies widely, because instructors exercise discretion in the disposition of cheating cases.

Cheating on tests seems to occur mostly in large classes such as freshman core courses, some faculty members reported.

Misunderstandings between students and teachers sometimes

arise because each instructor has a different view of how much collaboration should be allowed on problem sets and take-home assignments.

Departments do not maintain files on cheating incidents, so no one person has a view of all alleged cheating in a department or in the Institute.

In five years, three instances of cheating on examinations arose in the Department of Chemistry, according to Professor James L. Kinsey, former head of the department. In all the cases the students were confronted with their tests by the professors, who told the students they could either take F's in the courses or face further action. All the students involved chose to receive the F grades.

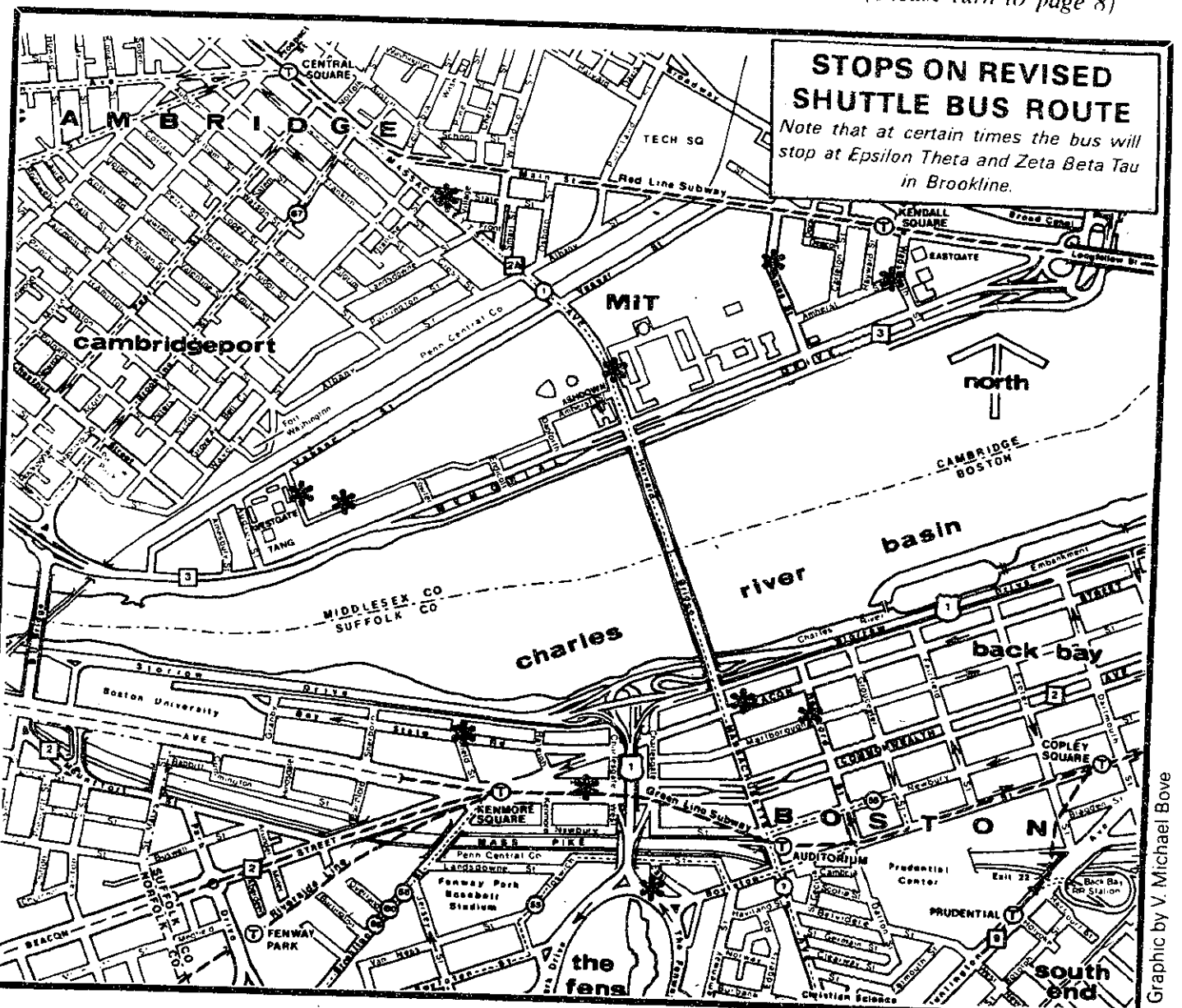
Kinsey said no cases were taken to the COD because "the Institute disciplinary committee has a reputation of being bureaucratically cumbersome."

In the case of problem sets, "copying is so universal as to be the norm," Kinsey asserted. "There is no way it can be effectively policed."

Freshman physics courses produce about one cheating case a year, estimated Physics Professor Anthony P. French. He did not remember any cheating incidents in upperclass courses.

Cheating occurs in about one examination out of 800 - or one test per class - in Physics II (8.02) second term, according to 8.02 coordinator Paul C. Joss, Associate Professor of Physics.

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Graphic by V. Michael Bove

inside

The yearbook revises its Technique. Page 2.

General Assembly passes a new constitution with its eye on class. Page 2.

Eating ice cream and Eating Raoul. Page 7.

Basketball and Fencing open their seasons at home tonight. Page 11.

Technique expects to solve cash problems

By Sam Cable

Technique is having cash flow problems, according to Business Manager Jason Weller '83, but the organization expects to earn enough from yearbook sales to pay a publishing bill and a loan payment which will be due early next year.

Technique does not have the money at the moment.

The long delay in delivering *Technique* '82 and criticism of that book prompted the yearbook staff to make several improvements in production for this year's edition, according to Kirsy Allison '84, Editor in Chief of *Technique* '83.

Technique borrowed \$11,000 from the Undergraduate Association Finance Board, according to Weller, and should repay \$5500 February 1.

"There is a remote potential for problems," Weller said, but if sales are normal *Technique* should make enough to pay all bills. "When we borrowed the money, we expected to be able to pay it back on schedule and we still do," he said.

"Because of some criticisms of the 1982 edition, we're concerned that people will equate the two

books," said Jason Weller '82. "We're concerned that if we don't get the message across that there have been changes made, sales may suffer."

Allison said the staff is aware of criticism of *Technique* '82. "We are doing our best to be responsive in the '83 edition. We hope to create a book people will really like."

She also said she is concerned that students will equate the '83 edition with the '82 edition and

that sales will suffer. Criticisms of the '82 edition included the cropped senior portraits, no reference to athletics, and its late release, Allison said. "That does not mean there were not things people did like about it," she said.

The publisher of *Technique* '82 was a "real" book publisher, Allison said, and was not well-equipped to deal with problems unique to yearbooks. This year's

publisher deals mainly with yearbooks, she noted, and he published the 1981 edition and several editions before that.

A yearbook publisher would be able to adjust for missed deadlines, a common problem with yearbooks, Allison noted. Several production mishaps delayed *Technique* '82 last year, she said: The *Technique* staff missed its deadline by two weeks; once at the printers, the yearbook was

printed with the wrong ink and a large portion had to be reprinted; finally, the *Technique* staff was informed of a binders' strike, which delayed arrival of the yearbook until this October.

Technique now has a schedule of five deadlines, Allison said, instead of one deadline at the end of the year. She said *Technique* met the first two deadlines and turned in approximately 40 per cent of the book to the publisher.

GA passes new class constitution

By Burt Kaliski

The Undergraduate Association General Assembly (GA) amended the Uniform Class Constitution at its meeting Thursday, adding guidelines for selection of ring committees and class officers, according to Secretary-General Katherine Adams '84.

Each class is governed by the uniform constitution, but class governments can petition the GA to amend their class's constitution.

Twenty-seven representatives attended Thursday's meeting, Ad-

ams said.

Richard Cowan '84 proposed guidelines to require ring committee members pay for their class rings. GA members modified the original proposal, Cowan said, and passed that version by a vote of 18 to 9.

Under the final version, each class will vote on whether to give committee members free rings before selecting the members, Cowan explained.

"I think [revisions] were needed," said UA president Kenneth Segel '83. "The part about the ring committee was a good com-

promise," he continued. "Guidelines are important."

The class council becomes the standard form of government under the revised class constitution, Cowan continued. Each class will elect a president, vice president, secretary, treasurer, and social committee and publicity newsletter chairmen.

The UCC requires each class to contribute \$200 to a Lobby 7 donut stand renovation fund, Cowan added. The GA approved the fund and class council proposals separately from the ring committee proposal, according to

Adams, and passed both almost unanimously.

The GA formed a need-blind admissions task force and a tuition riot committee, Cowan added. The annual spontaneous tuition riot will be held on March 1, he said. "To make our viewpoint known," the GA will invite US President Ronald W. Reagan to attend, Cowan said.

"Everybody will vote in March on whether they want a . . . fee" to finance student activities, Cowan added. He estimated if there were a fee, it would be roughly thirty-five dollars.

MIT professors find little undergraduate cheating

(Continued from page 1)

The cheating, he said, is usually in the form of a test being handed in with no name or a falsified name.

Cheating may occur in 8.02, Joss speculated, because a student may enter the large examination room, panic, leave his name from the test paper, and call later in the day to say he was ill. Students can also plan to take the test in both the 10am and 11am sections of the course, he said.

This "low level of cheating" could be stopped by policing the examination room, Joss said, but that would create a "police state mentality."

A student copied part of an examination from another student in Physics II (8.021) last spring, according to Professor June L. Matthews PhD '62. "The temptation to cheat was greater because the room was more crowded," she said.

Matthews considered awarding the student a zero on the test, an F in the course, or bringing him before the COD and giving an F. She "decided to take the least severe option" because "we were prepared to believe it was an isolated incident."

There have been three recent "verifiable attempts at cheating" in the large, predominantly freshman Introduction to Solid-State Chemistry (3.091), said Professor August F. Witt of the Department of Materials Science and Engineering (Course III).

The cheating incidents involved "a clear attempt of the student to get visual access of particular numbers," said Witt. Test proctors admonished the students, but they continued to look at other students' papers. In two 1978 cases the proctors moved the students, Witt said, but he did not know what further action was taken in the third case in 1979.

Problem sets for 3.091 are largely done in groups, said Witt. He does not like the practice, and would prefer students work individually.

Witt said he has not experienced any cheating among upperclassmen.

Two or three Course III "cheating" cases in problem sets were misunderstandings when instructors took take-home assignments seriously — almost like quizzes

— and two students worked on the problems together, said Professor Bernhardt J. Wuensch '55.

Cheating matters are not handled by the Course III Undergraduate Committee but rather by individual instructors, Wuensch said. "The faculty [members] are torn; they do not want to do nothing, but they do not want to bring [cases] to the COD."

Very little cheating goes on in the Department of Electrical Engineering and Computer Science (Course VI), according to Associate Department Head Peter Elias '44 and Associate Professor John G. Kassakian '65. Cheating is so rare, Kassakian indicated, that there is no department-wide procedure for handling cases; discipline in cheating cases is "up to the individual professors."

Plagiarism is the most common form of cheating in humanities subjects, said history Professor Richard M. Douglas. Plagiarism is also a problem in the Department of Economics, said Department Chairman E. Cary Brown.

These incidents in the humanities and economics departments are usually discovered through a dramatic change in the student's writing style, both Douglas and Brown noted. Douglas said he has not encountered plagiarism in three years, however.

Brown reported some cases of cheating on economics tests in subjects such as Introduction to Microeconomics (14.01) and Introduction to Macroeconomics (14.02), but not as many cases as cheating on papers. In one cheating case, a student copied the wrong answer from another student's test; the instructor therefore lowered the cheater's grade, Brown said.

Professor David G. Wilson, Undergraduate Officer of the Department of Mechanical Engi-

neering, commented that in the sixteen years he has been in the department, he cannot remember a cheating incident on an examination.

He does remember, however, one case of cheating on project designs for Introduction to Design (2.70) two years ago and two instances of cheating in Design Projects (2.73) five and eight years ago. "A student will turn in an identical copy of a project done by a student in another section of the class," he said. The two subjects typically include twelve to fifteen sections.

"There is a temptation on the part of people falling behind to borrow someone else's design," Wilson explained.

While the students involved probably received only F's in their courses, Wilson said, he would ask for expulsion if he caught a student cheating in his 2.70 class this year.

Professor Charles M. Mohr '55, Undergraduate Officer in the Department of Chemical Engineering, remembered five or six suspected examination cheating incidents in the last seven years.

In each case, the student was suspected of altering answers

once a graded test was returned, so he could argue the instructor's "mistakes" and get a higher grade on the examination.

One instructor, suspicious that an undergraduate had altered an examination, photocopied the student's next graded test before returning it. The student altered the examination, and the instructor, having evidence of cheating, gave the student a zero on the test.

"Mostly with problem sets I do not worry too much about cheating," Mohr said.

An undergraduate student turned in identical papers for two different courses at the Sloan School of Management last spring and later claimed she did not realize it was against the school's policy, according to Esther Merrill, administrative assistant for the undergraduate program. One professor accepted the paper; the other professor made the student write a paper on a different topic.

Professor Allan F. Henry could not remember any undergraduate

cheating incidents the fifteen years he has been in the Department of Nuclear Engineering. There are only thirty-five undergraduates in the department and classes are small, he noted.

"I do not know of specific incidences of cheating on exams," said Professor Emmett A. Witmer '51, undergraduate chairman of the Department of Aeronautical and Astronautical Engineering. "Implausible and identical calculations on problem sets" sometimes appear, he noted. He does not know any specific punishments, he said, because they are handled on a case by case basis and vary from instructor to instructor.

Professor Leon B. Groisser '48, executive officer of the Department of Architecture, said students do not cheat on design projects probably because they are done in a design studio where students have their own desks and work area and know each other. "When people know each other, it is hard to cheat," noted Groisser.

notes

Announcements

The I. Austin Kelly III Competition in humanistic scholarship is now open. The award is two prizes of \$250.00 each for the best scholarly or critical papers in any of these fields: Literary Studies, History, Musicology, Anthropology, Archaeology. All full-time MIT undergraduates are eligible, except previous winners. Papers must be at least 4000 words long (14 standard typed pages). Papers may be written expressly for the contest, or papers from classes may be submitted, either as they stand or in revised

and expanded form. Students are encouraged to consult with faculty. The deadline is April 29.

Lectures

Hans Guggenheim, Director of the Wunderman Foundation, will speak about "A Conflict in Values: Artists in Search of Identity in New Nations" at 5:15pm, November 29, in room 3-133.

Daniel Yergin, Harvard professor and author, speaks on "Our Energy Future: Global Insecurity?" on Wednesday, December 1, 8pm, at Cambridge Forum, 3 Church Street, Harvard Square. Free.

Errata

In the picture run on Friday's sports page, women's cross country coach Chris Lane was incorrectly identified as the coach of the men's cross country team.

Credit to Laura Perlman for her work on the drop date photograph in the Friday, November 19, issue was inadvertently omitted.

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news roundup

World

Andropov urges détente — Yuri V. Andropov, the former KGB chief who succeeded Leonid I. Brezhnev 11 days ago as general secretary of the Soviet Communist party, said in his first major speech yesterday, "the future belongs to détente." The USSR will not, however, make any concessions to the US to achieve it, he said.

Nation

Dense pack plan gets Reagan nod — President Ronald W. Reagan announced yesterday his support for placing the first 100 MX missiles in a dense pack formation. The plan calls for the superhardened missile silos to be concentrated in a 15 mile long, one mile wide strip of land in Cheyenne, Wyoming. The plan is based on the theory that the blast, debris, and radiation from Soviet warheads would cause them to destroy or deflect each other, enabling many of the American weapons to survive for a retaliatory strike.

Interest rates fall again — The nation's ten largest banks lowered their prime rates to 11½ percent yesterday, following the Federal Reserve Board's action to lower the discount rate to 9 percent Friday. The discount rate, which is the interest the Fed charges member banks, reached a peak of 12 percent in July.

Sports

Pro football returns — The National Football League returned to the field Sunday for the first time since September 20. The 57-day player strike clearly dampened fan enthusiasm as none of the day's 13 games drew a capacity crowd.

Weather

A warm, gray day — With high temperatures between 52 and 56, the weather will be warm and cloudy today, with gusty easterly breezes and a chance of a shower. Tonight, rain will be likely, with lows ranging from 46 to 50. Skies will clear tomorrow, getting windy and cooler with temperatures in the 40's. Thanksgiving Day will be partly sunny and cold.

John J. Ying

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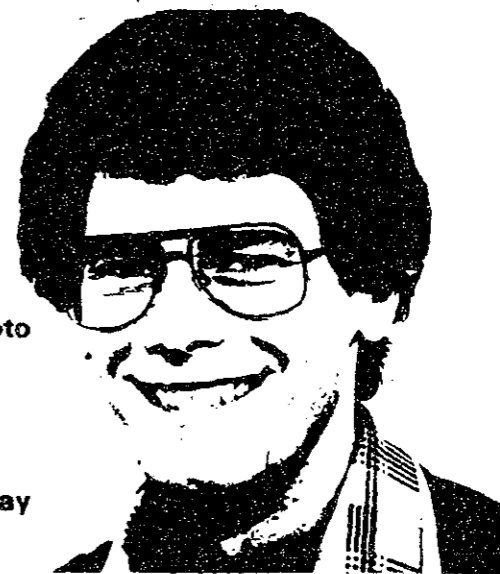
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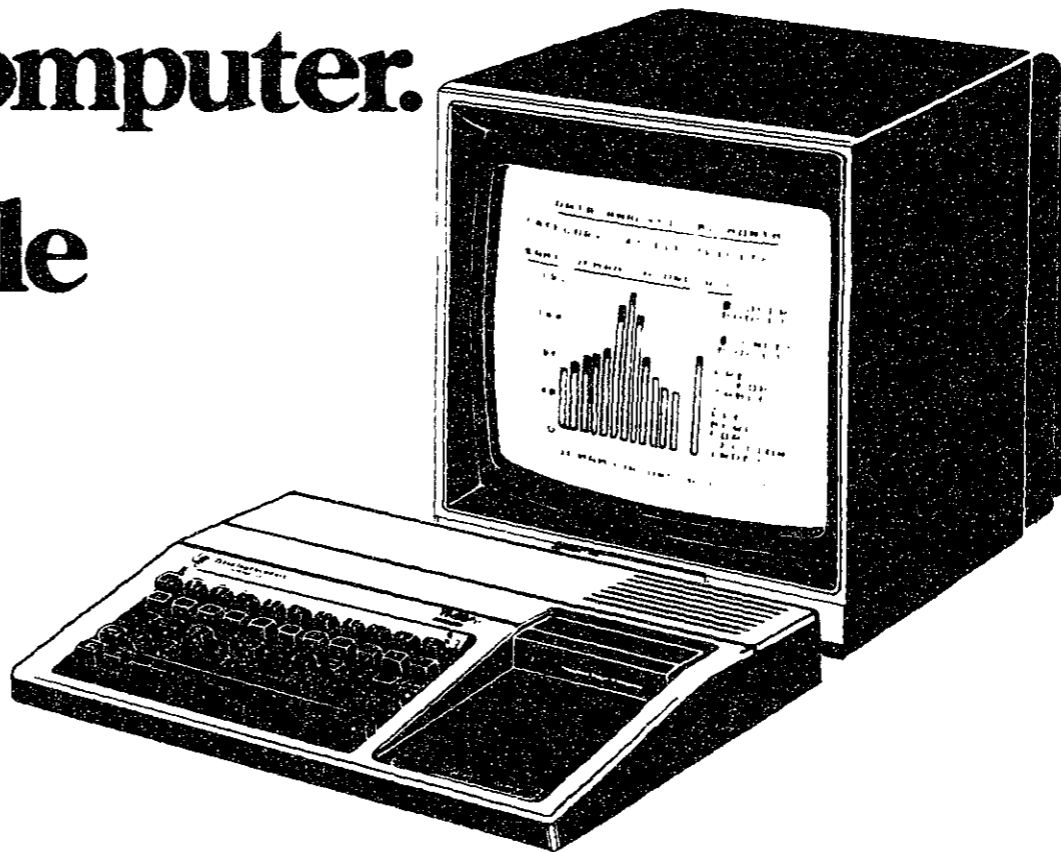
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opinion

Editorial

Avert holocaust!

As members of the staff, faculty, and student body of MIT we share the concern of most Americans over the accelerating nuclear arms race between the two superpowers, and over the increasing danger of nuclear weapons in the hands of other governments.

We therefore urge all members of Congress to move toward reducing the risk of nuclear war in any part of the world, and toward the eventual abolition of nuclear weapons, by accepting and implementing the following proposals.

1. The United States should vigorously negotiate, with the Soviet Union and other nations, and subject to appropriate verification: first, a mutual moratorium on the testing, production, and deployment of nuclear weapons and of missiles and new aircraft designed primarily to deliver nuclear weapons; and following that, a substantial reduction of existing weapons systems.

We accept the view of most experts, including the Department of Defense, that "the United States and the Soviet Union are roughly equal in strategic nuclear power."

2. The Congress of the United States should in the interim refrain from appropriating funds to the testing, production, and deployment of nuclear weapons and of missiles and new aircraft designed primarily to deliver nuclear weapons.

3. The United States should join the Soviet Union and other nuclear powers in declaring a mutual policy of no-first-use of nuclear weapons, in any circumstances and in any part of the world.

4. The United States should resume negotiations with other countries leading to a comprehensive nuclear test ban in accordance with the provisions previously agreed upon by the United States, the Soviet Union, and the United Kingdom.

5. The United States and the Soviet Union should work vigorously with other nuclear powers to prevent the spread of nuclear weapons to countries that do not now possess them.

The MIT Faculty Disarmament Study Group, chaired by Professor Aron Bernstein, and its student counterpart are seeking to collect 5,000 signatures to the preceding statement by December 6, 1982. The letter will be sent to Congress before final action is taken on Defense Department appropriations. MIT organizers are circulating the letter at other colleges, and are coordinating their actions with United Campuses to Prevent Nuclear War, an organization that claims contacts at 5,000 schools.

The statement addresses concerns relating to freeze and ultimate disassembly of all nuclear weapons. The prospect of nuclear war is at once terrifying and incomprehensible. Our nation should lead negotiations toward ending the inexorable increase in worldwide stockpiles of nuclear weapons before we destroy ourselves. If elected representatives fail to take such steps, massive public outcry must convince them otherwise.

The first of the letter calls for ceasing production of additional weapons along with reducing stocks of existing armaments. Rather than accepting the Reagan Administration's escalatory rhetoric, Congress and the American people should look to the 1982 Department of Defense Annual Report that states "the United States and the Soviet Union are roughly equal in strategic nuclear power."

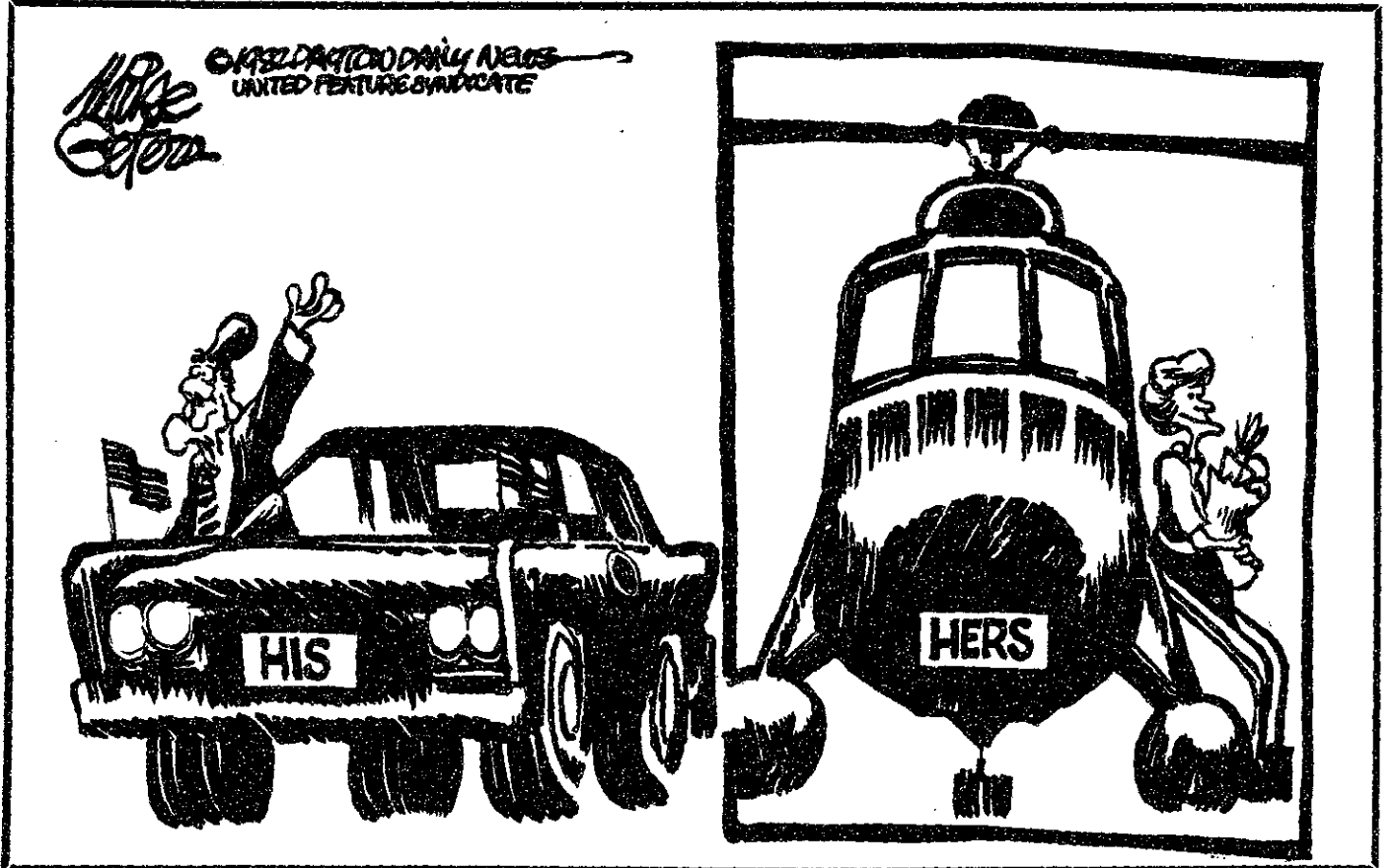
The second section calls upon Congress to stop funding production of nuclear weapons. While it may not be possible to cease all such financing immediately, Congress should be encouraged to look carefully at US nuclear policy specifically and defense spending in general. The present Congress should not approve the Defense Department's budget request for the upcoming year; necessary current expenditures can be met by a continuing resolution and substantive action should be delayed until a new Congress arrives in January. Defense Department requests for the next two fiscal years could then be considered simultaneously. With a projected budget deficit approaching \$185 billion, weapons expenditures, and particularly nuclear weapons spending, can no longer be sacred cows. For the financial stability of the United States and the welfare of future generations around the world, these problems must be solved.

The third section calls for the US and USSR to declare a no-first-use policy on use of nuclear weapons. While the USSR claims to be committed to such a policy, the latest official pronouncement of the US government, via Secretary of State Alexander Haig last summer, is that the US will not renounce the possible first-use of nuclear weapons because it would constrain policy options. Section four calls for resumption of negotiations toward a comprehensive nuclear test ban treaty, which the Carter Administration acted upon but which the Reagan Administration has ignored. Section five addresses nuclear weapons proliferation, recognizing that any nuclear nation can unleash nuclear holocaust.

In the coming weeks, students everywhere and members of the MIT community especially must contemplate these and similar issues. Signing this letter is just one of many steps demonstrating conviction that nuclear holocaust is a nightmare that must be banished from our future.

The Tech
 Ivan K. Fong '83 — Chairman
 Jerri-Lynn Scofield '83 — Editor-in-Chief
 V. Michael Bove '83 — Managing Editor
 William L. Giuffre '84 — Business Manager
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Column/David C. Lingelbach

Quality of MIT education drops

The last five years have been unkind ones to MIT students concerned about the educational quality of their school. Beginning with the attempts during 1977 and 1978 to abolish freshman pass/fail grading, and concluding with the approval last week by the faculty of an experiment that destroys the spirit and intent of pass/fail, it is becoming very difficult for a prospective MIT student to understand what precisely is the educational intent of the Institute. The combination of a Humanities Distribution requirement that does not breed literacy, a Science Distribution requirement that has resulted, by departmental subterfuge, in a narrow and career-oriented education in the sciences, and the general attitude at MIT toward the educational efficacy of anything that one is not personally interested in has corroded MIT's self-proclaimed position as the American leader of scientific and technological education, and legitimately so.

There have been serious attempts over the years to create at MIT an educational environment that would be regarded by all its students as an ideal. The most revolutionary movement was the attempt by the faculty Committee on Educational Policy during 1980 and 1981 to overhaul large sections of the educational philosophy of the Institute. Under the direction of former chairwoman of the faculty Sheila Widnall, the CEP attempted to improve the quality of life for the average MIT student, while making more relevant to after-Institute lives and careers some of the General Institute Requirements.

At that point in time, President Gray had not yet settled into the predictable patterns of a post-Compton MIT President, and he was receptive to the scepticism that the members of the CEP directed at the undergraduate educational program. The committee itself was peopled with scientists and engineers who had recognized the value in their own lives of the arts, literature, and politics, and with humanists and social theorists who comprehended the importance of a non-trivial technological education for all those who were serious about leadership roles in future American society.

The opportunities of 1980-81 were, in a word, blown. Current Chairman of the Faculty Felix Villars has not shown the same willingness to court change that Widnall did. President Gray has wandered off into the world of lost the respect of the CEP, the

Corporation Executive Committee, and President Gray by their inarticulate advocacy.

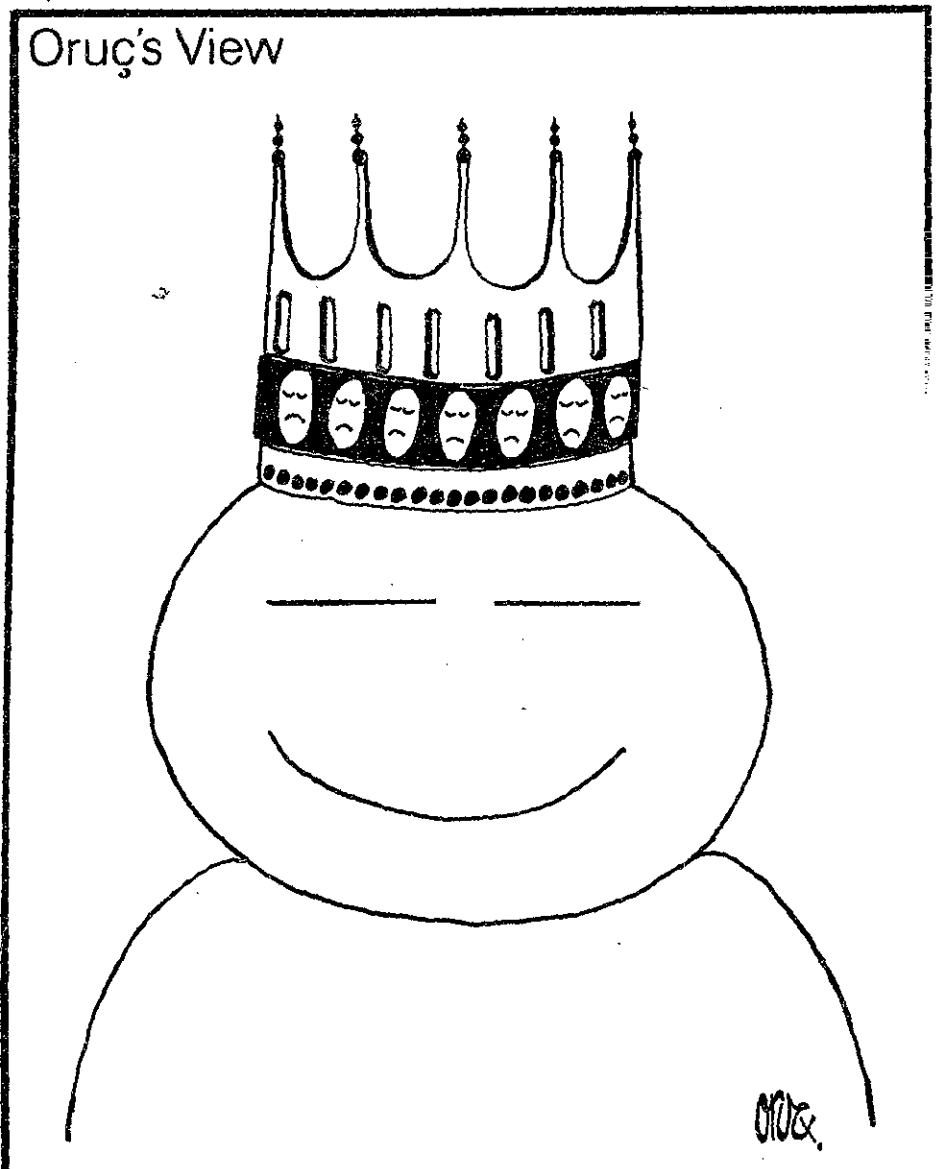
Three general proposals can be made that would go part of the way toward bringing MIT into the forefront of American university education. First, undergraduate instruction could be based in residence halls and independent living groups. Each dormitory could maintain a staff of tutors — either the cream of the graduate students or exceptionally talented junior faculty — who would be responsible for designing in consultation with his advisees their MIT curricula, and independent living groups could maintain one or two MIT-financed faculty members who demonstrated a capacity for interdisciplinary thought and talents in a number of fields, not just vortex flow or the macroeconomics of the British welfare system. Professors could then devote more time to research, which undergraduates should participate in to the same extent as they do now, and to informal talks at each of the living groups. A variation on this theme might have each residence group adopting a number of academic disciplines.

A second improvement in MIT undergraduate education would be to make all formal evaluation of a student's performance take place at the end of his or her fi-

nal year. Evaluation probably should not take the guise of testing: the test and the problem set, more than any other institutions, are the mark of the quantized, and therefore wrong, approach to learning peddled at MIT. Thesis preparation, already required by ten departments, could be made a mandatory part of all student's programs, and supplemented by oral examination, cooperative group projects, and intensive colloquia. Civil engineering degree candidates might, for example, be asked to design an alternative to an existing construction project in the Boston area, including realistic economic and legal analyses.

The undergraduate degree, it should be remembered, is a faculty approval of competence of a student in a particular discipline; it is certainly hard to believe that this mastery is best demonstrated in Walker Memorial or 26-100 during exam week. A necessary by-product of evaluation at the end of the undergraduate years is that it would free up a student's time for exploration of topics of personal interest; any program that would accomplish increased intellectual freedom would find great favor among our mature student body. The desire of the MIT faculty to have their hand on the academic pulse of students

(Please turn to page 5)



Opinion

Guest Column/ Joseph J. Romm

Debunking myths about US nuclear policy

The current debate over the nuclear freeze is marked by many factually incorrect statements. I will attempt to examine the strategic balance and the effects of nuclear weapons in an attempt to clear up some popular misconceptions.

Consider the detonation of a single one-megaton nuclear bomb near the Earth's surface over a city. Within a circle of radius 4.0 miles around ground zero the blast will destroy most frame houses; winds in excess of 100 miles per hour will create flying debris that will wound many people. Everyone exposed to the initial flash of light from the explosion in this 50-square mile region will suffer third degree burns. The heat will be so intense over most of this region that standard

building materials will ignite spontaneously, making conditions optimal for generation of a firestorm, a massive fire that would either suffocate or roast everyone within this 50 mile region — even those in fallout shelter.

Thus the blast and thermal effects alone would be sufficient to kill most people within this 50 square-mile area, even if their immune systems had not been weakened by the radiation received in just the first few hours following the blast. Within this region, the radiation received in one day would be about 2000 rems — five times the lethal dose.

If 50 square miles is then considered to be the lethal zone of a one-megaton ground burst inside of which almost everyone dies and outside of which almost ev-

eryone lives (a conservative estimate since the heat and radiation from the detonation will still prove fatal to a large fraction of the people inside an area 10 to 100 times the size of this lethal zone) the strength of the United States' strategic arsenal can easily be seen.

The Soviet Union's urban population of about 125 million people, together with much of its industry, is concentrated on some 7000 square miles and therefore can be annihilated by an attack of only 140 megatons, which can be delivered by about 20 percent of our submarines — 7 — or about 6 percent of our bombers — 20 B-52s — or about 15 percent of our ICBMs — 150 missiles.

The tremendous destructive

power of nuclear weapons would suggest that nuclear superiority is a relatively meaningless concept, and yet a close examination of the strategic balance reveals that our nuclear arsenal is more secure than that of the Soviets.

The United States has the advantage in the least vulnerable leg of the strategic triad, the SLBMs (submarine-launched ballistic missiles), with about 4,800 warheads on 580 missiles in 36 submarines versus about 1,900 warheads on 950 missiles in 62 Soviet submarines. Because strategic nuclear submarines are virtually undetectable once they are submerged in the ocean, the SLBM warheads are considered to be largely invulnerable to an enemy attack.

The United States has a further advantage here because our submarines are quieter and therefore harder to detect than Soviet submarines. More importantly, the United States maintains 55 percent to 75 percent of its strategic submarines hidden in the ocean at any given time, while the Soviets usually have only about 15 percent of their strategic submarines at sea all the time. This gives us, at the very least, more than a nine-to-one edge in invulnerable nuclear warheads on submarines at sea.

Warheads on strategic bombers are also fairly secure because bombers can be put in the air during an enemy attack. The United States has more than a 8-to-1 advantage in bomber warheads with 2,600 warheads on 350 highly sophisticated B-52 jet bombers versus about 300 warheads on 150 obsolescent Soviet bombers, most of which are propeller driven. We keep 30 percent of our B-52s, with about 750 nuclear warheads, on alert at all times. According to the latest Department of Defense annual report by Caspar Weinberger, "At the present time, we are confident that a large portion of our bomber force could survive a surprise Soviet attack and penetrate Soviet airspace to accomplish its mission."

The Soviet Union deploys 75 percent of its warheads in land-based intercontinental ballistic missiles (ICBMs). Because ICBMs are kept in fixed silos in the ground and can, in theory, be destroyed by accurate enemy nuclear weapons, ICBMs are considered potentially vulnerable to attack. For this reason, the United States has deployed only about 20 percent of its warheads on ICBMs. The Soviet Union's advantage in ICBM warheads.

(Please turn to page 6)

CEP drops ball on policy

(Continued from page 4)

has bred less real learning and more depression and trips to the infirmary than could possibly be required.

Finally, if MIT wishes to change its educational color, the type of person that is courted by our admissions office must be changed. The subconscious attitude of MIT Educational Counselors is to attract mostly hard-core engineers and scientists and then lure a few well-rounded types, mostly for the purposes of public relations. Any successful educational reform would have to be founded primarily upon the quality of the student body, just as MIT's declining position in the real world is primarily dependent upon the ambivalence of the average MIT student toward the

larger consequences of his or her instruction.

I do not expect that significant educational reform will take place at MIT. The absence of any major dissension at last Wednesday's faculty meeting on the pass/fail proposal is evidence enough of the lack of sustained thought about MIT's importance to America and the rest of the world. Nor do I hold that a large number of people at the Institute are committed to the same sorts of intellectual goals that I am — cultivation of individuals who can educate themselves, who know what they do not or cannot know, who retain a flexibility

with respect to their career and personal relationships, and who recognize how necessary the preservation of intellectual creativity is. I do, however, believe that, absent significant movement toward a different environment at the Institute, common people will begin to recognize what the powerbrokers and elites already know: MIT educates the troglodytes.

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Opinion

Column/Jack Link

Which came first, the pre-med or the doctor?

I heard an interesting story a few weeks ago in church. It was about a pre-med whose friends were complaining that he never had any time for them. "Of course not," he retorted. "I'm trying to get into Medical school. Just wait till I'm a doctor. Then I'll start being a real person again."

That story was told by one of

the MIT chaplains, the Reverend Robert Moran, CSP. He pointed out the irony of the story by wondering whether "someone who could separate himself from humanity for four years is really the type of person you'd want to have caring for you." "They seem to feel that MIT is just a phase to be gotten through," he continued, "and that suddenly they will

start being warm, caring sensitive human beings once they get through medical school." "It's true!" shouted one of his listeners. "Brother, my message is for you!" responded Moran.

As a some-time pre-med myself, majoring in computer science, I can really identify with that feeling, as can others to

whom I've talked. "I just couldn't give up my soul for four years" to get the grades expected from a Medical School applicant, said one student who decided early on he wasn't cut-out to be a pre-med.

True, it may be that us frustrated pre-meds are simply not brilliant enough to make the grade and still have some time left for socializing. After all, I have one pre-med friend who has time to take off from classes and travel around the country participating in model United Nations conferences; no one doubts that he will get into a top medical school. Another friend who had time to triple major, party frequently and be the business manager of this paper is happily enrolled in a medical school (although he decided not to get all three degrees.)

But the fact remains that there are a lot of warm, concerned students out there who want to doctor people, but aren't quite talented enough to make the grade without disengaging themselves from society for many years and are unwilling to do so. They want to practice medicine, not for the money — they will make plenty as engineers graduating from MIT — but for the satisfaction that comes from seeing their work benefit others directly. Unfortunately, there are many pre-meds like the anti-social one in Moran's story, who will eventually become doctors instead.

What drives those who can cut themselves off from society for four years?

Perhaps the answer was displayed on one pre-med's memo board that read "Do not disturb Greasy PreMed at work--who will some day make lots of money."

Of course, it's not necessarily the pre-med's fault. Moran mentioned encountering the same attitude among certain other MIT students as well. It's the fault of a system which would reject someone as technically unqualified who had the intelligence and drive to gain admittance to MIT. Of equal concern should be a prospective healer's other, more personal qualifications.

One problem is that the system is self-perpetuating. Doctors decide who gets into medical school, and all doctors were once pre-meds. Perhaps other members of society should have a stronger voice in the selection of those who are to be entrusted with the physical care of others.

The selection problem is not limited to the medical profession. As technology affects society in an increasingly direct fashion, all members of the MIT community must ask themselves whether we are training engineers and scientists who care, or whether the pace in some departments is too quick for that.

A friend who did his undergraduate work at Harvard and is now a graduate student in engineering at MIT is of the opinion that "the intellectual atmosphere is about the same strength at the two schools. The difference is that Harvard gives you time to think."

US nuclear policy explained

(Continued from page 5)

5,500 to 2,100, thus turns out to be a liability.

Moreover, Soviet ICBMs are not accurate enough today to present a realistic threat to the bulk of our hardened Minuteman ICBM silos. Because improvements in Soviet accuracy in the next 5 to 10 years may increase the threat to our ICBMs, the United States should immediately support any arms agreement that does not allow the Soviet Union to improve the accuracy of its ICBMs. The nuclear freeze is such an arms agreement.

One argument commonly given against the Freeze is that it would stop the US from improving its submarines and bombers, but would allow the Soviets to improve its air defenses and its anti-submarine warfare (ASW) technology. Yet, Soviet ASW is so far behind US ASW that the Soviets are unlikely to pose a major threat before the next century, and in the mean time, the US will have many years to develop countermeasures against ASW.

And even if the Soviets improve their air defenses, the nuclear warheads from just one of our submarines could be used to blast dozens of corridors into the Soviet Union. Since the B-52s carry nuclear warheads on supersonic missiles that have a range of 90 miles, the B-52s could blast their own corridors through Soviet air defenses. Into the foreseeable future, the B-52s should thus retain their ability to penetrate Soviet airspace in the event of a nuclear war.

Another argument often raised against the Freeze is that it is not verifiable. In the age of satellite cameras that are said to be able to read license plates on cars, however, verifying the production and deployment of bombers, submarines, and huge missiles is easy. Moreover, in view of our large edge in bombers and submarines, the Soviets could not gain any advantage without production on a massive and hence very visible scale.

As for missiles, the Soviets

cannot improve the accuracy of their ICBMs without testing them in the atmosphere. Our spy satellites and listening stations already monitor all Soviet missile tests and can assuredly determine if the Soviets are testing an ICBM.

All three legs of the strategic triad — the ICBMs, the bombers, and the submarines — would remain verifiably secure under a nuclear freeze agreement. It is vital that the nuclear freeze proposal be negotiated quickly, before the new generation of highly accurate and destabilizing missiles, like the MX and Trident II, are deployed.

I urge all MIT students to write to Congress in support of the nuclear freeze, or, at the very least, to sign the open letter to Congress to stop the nuclear arms race. This letter is currently being circulated around MIT and it has already been signed by Professors Bernard Feld and Philip Morrison, among others. If you support the nuclear freeze, the time to act is now.

HELP!

The MIT Musical Theatre Guild is looking for a production staff

Interviews will be held for **Director, Music Director, & Choreographer** for **Tech Show '83** on 11/30 and 12/1; and the **IAP show, Jaques Brel is Alive and Well and Living in Paris** on 12/2. For appointments: Call 253-6294 or step by our office (Student Center room 453).

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UA NEWS

Balloon? What Balloon?

30 valiant MIT students were crushed at Saturday's Harvard-Yale Game. Suspects include a mob of instrument-carrying yahoos masquerading as a marching band. One survivor noted, "At least our bodies spelled out 'MIT', and the bloodstains should last until the next rain." The UA News will keep you informed as further developments are made up in this tragic case.

Real Ears Don't Drink Beer

The Thirsty Ear Pub opens for business on Thursday, Dec. 2nd. The pub features a variety of draft beers and bottled beers, as well as wine and munchies. To prevent outraged graduate nuds from attacking well-meaning drunkards, the management requests that the Memorial Drive entrance to Ashdown House be used for entrance and egress. The pub will be open on Thursdays from 8pm to 12pm and on Fridays from 4pm to 1am.

Join the Few, the Proud, the Trampled

The (MIT non-approved) Yale Precision Marching Band is holding tryouts. Please leave your name and phone number taped to the bottom of the US Mail box near Bexley. Next meeting will be November 19, 1983.

Sound System Re-wiring Course

If you have found your hacks on the Harvard Stadium sound system removed by other MIT students, please attend a short informational meeting in the UA office this Thursday. We will discuss protocols and standards for hacking public address systems to prevent future interference between groups. By the way, the UA would like to know who used the purple, magenta, and turquoise wires.

MTG Needs You!

The Musical Theater Guild will be holding interviews for Tech Show '83 Director, Music Director, and Choreographer on December 2nd. Scripts are available in the MTG office (W20-453). Stop by or call x3-6294 for an appointment.

Juniors, This is Your Lucky Day

The Class of '84 is holding a Bush Room Break today from 11am to 1pm. Where? (If you need to ask, go to Jail and do not collect \$200) Admission will be free for Juniors, but others may be able to bribe the bouncer. Doughnuts, beverages, and class surveys will be served.

That's All, Folks

Have a nice Thanksgiving weekend. Don't do any work and beat your smaller siblings. Above all, remember to enjoy yourself and don't talk to Harvard Crimson reporters.

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Whose ice cream is the very best?

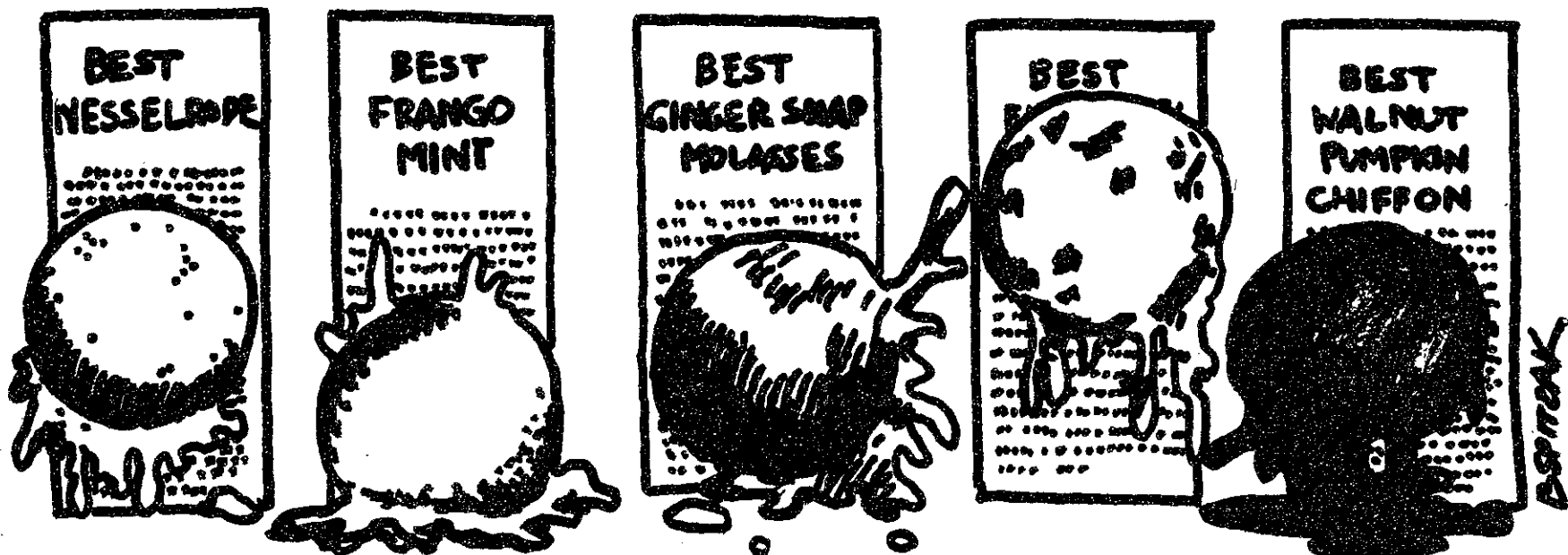
arts

The Very Best: Ice Cream and Where to Find It, by Carol T. Robbins and Herbert Wolff; *The Very Best: Publishers, Inc.*, \$8.95.

I scooped my way through this summer, serving countless cones and sundaes to the hordes that daily swamped Toscanini's in Central Square. Through my conversations with the customers I learned of other havens for the ice cream connoisseur: Bob's Famous in Washington, DC, Gelato Classico in San Francisco, Creamed Again (formerly Mother Bucket's) in New York, and Vivoli in Florence, Italy. As I listened to these mouth watering encomiums I fantasized about the ultimate ice cream overload: a countrywide trek to investigate the country's best ice creameries.

My fantasy was quashed in mid-flight by a pair of enterprising Bostonians with the resources I lack. Carol Robbins and Herbert Wolff discovered, in the course of their cross-country business travels, a multitude of gourmet ice cream establishments, either by word of mouth, familiarity, or fortuitous accident. Eager to share their discoveries with a legion of addicts, they chose to publish their findings, but found themselves faced with a problem. Any attempt to select a single "best" store would instigate an all-out feud, as would any other form of store ranking. Their solution was to make everyone happy by listing stores by their best flavor. Every one of the 203 stores Robbins and Wolff investigated is mentioned by flavor in *The Very Best: Ice Cream and Where to Find It*.

The best store for each flavor, however, is not necessarily the best flavor from each



store; this distinction will undoubtedly produce the feuding Robbins and Wolff intended to avoid. Certainly Toscanini's makes an excellent Ginger Snap Molasses, and Steve's Cinnamon Nutmeg is beyond compare, but would the owners of these stores have chosen the listed flavors as their best? Moreover, the inclusion of chain-type stores such as Brigham's (Mocha Almond), Friendly's (Chocolate Almond Chip), Bailey's (Chocolate Chip), and Breyer's (Cherry Vanilla) will outrage owners and fanatics alike. The organization of *The Very Best* doesn't promise simple resolution of an argument. Rather than provide an alphabetical listing of stores according to geographical location, the book offers a rather confusing array of flavor groupings: Basics, Chips and Mixes, Berries, Orchard and Vine, Nuts, Tropi-

cals, Confections, and Spirits. Where, then, does the University of Wisconsin's Orange Custard Chocolate Chip fall? Is it a fruit flavor? No, asserts *The Very Best*, it is a chip or mix. It's enough to send you back to Good Humor bars.

The chain store issue deserves further investigation. Robbins and Wolff, by including listings from places most people assumed made only average ice cream, call attention to the fact that a gourmet-quality product can be found anywhere, while throughout the book they support the notion that smaller, single store operations make better ice cream by virtue of their smallness. Their promotion of ice cream *chic* elevates the consumption of frozen comestibles to the level of a fashionable trend. What could have been a AAA guide to cross-country ice creaming for the com-

mon man instead reads like a Michelin guide for the ice cream dilettante

Although *The Very Best: Ice Cream and Where to Find It* is an interesting compilation of epicurean research, it fails in its attempt to settle the Great Ice Cream Feud. A friend's first reaction to the book was to exclaim "They left out Pat Mitchell's in Ithaca!" What it best succeeds at is what the authors intended to avoid: It is a reasonably comprehensive guide to the country's better ice cream parlors. Many will discover listings for stores that they never visited in their own hometowns, but part of the joy of eating ice cream lies in individual discovery. Now that a guide is available, it won't be as much fun anymore.

David Shaw

Eating Raoul not Bland fare

arts

Eating Raoul, directed by Paul Bartel, written by Richard Blackburn and Paul Bartel, playing at the Nickelodeon, Boston.

Paul and Mary Bland live in a nice apartment furnished à la 1950's modern. Paul (Paul Bartel) worked in a liquor store until he got fired for refusing to sell rotgut; Mary (Mary Woronov) spends her days coercing hospital patients to eat liver purée. They're decidedly middle class. Bland, even.

Paul and Mary have a dream. They want to escape the evil city, buy a house in the country, and open their own restaurant. With no money, no credit, and no more job in the liquor store, however, it seems "Chez Bland" will remain but a dream.

Paul and Mary are disgusted by the open sexuality of the hot tub age. Mary must continually fight off the sexual advances of her patients. Even their own apartment building is overrun by swingers in pursuit of communal kink.

One evening, an inebriated swinger tries to rape our fair heroine in her own kitchen. Paul comes to Mary's rescue, killing her assailant with a cast iron skillet. The Blands find hundreds of dollars in the deceased's wallet, and suddenly venture capital takes on a whole new meaning.

The Blands place an advertisement in a sleazy Hollywood magazine to lure wealthy "horrible, sex-crazed perverts" to their apartment, where, instead of fulfilling their wildest fantasies, Paul flattens their

skulls with his favorite frypan.

Raoul (Robert Beltran), a wolf in locksmith's clothing, catches on to their plan and gets himself into the family business — and into Mary.

Eating Raoul is a wonderfully funny film. Bartel shuns the prevailing style of comic films; *Eating Raoul* looks more for the smile and the chuckle than the constant stream of uncontrollable laughter many filmmakers seem to demand of their audiences. Everyone in this film is a straight man, tripping over the humor rather than dashing through it.

The dichotomy of the unbelievable situation and the understated comic tone is extremely effective. *Eating Raoul* lulls the audience into accepting a situation that grows progressively more ridiculous without noticing, leaving it vulnerable for a shocking comic crescendo.

This film's means undoubtedly contributed to its magic. Bartel, unable to sell the script because "it didn't fit a formula," decided to invest in two weekends of shooting to produce a twenty-minute clip. Not only did the clip not sell, Bartel said, but the apartment building in which much of it was filmed was sold and scheduled for demolition.

Faced with either reshooting the whole business or finishing the scenes in the Bland's building before the building went away, Bartel decided to press ahead. With as little cash as had the Blands, Bartel made *Eating Raoul* himself, buying left-over film stock from studios and renting



equipment for Saturdays so he could shoot all weekend for the price of just one day's rental.

Mary Woronov plays Mary wonderfully, sexy despite her revulsion to sex. She wears a clinging, nearly transparent dress to induce banker Buck Henry to approve her loan application, but her Sears Roebuck catalog standard-issue white brassiere and panties show something slightly different than the dress designer intended.

One can never quite figure out, while watching *Eating Raoul*, if Paul Bartel can,

indeed, act. One must therefore conclude that he can.

Robert Beltran's Raoul is slick and shady, but remains somehow fiercely idealistic. He is simultaneously deplorable and lovable, impervious and vulnerable. Both Raoul and Beltran are impressive actors.

Eating Raoul is one of those rare films — like *Harold and Maude* — that dare to take a sensitive approach to the absurd and end up far from being bland.

Barry S. Surman

Laser, laser burning bright

arts

Crystal Odyssey and Laserium Starship, produced by Laser Images, Inc. at the Hayden Planetarium of the Boston Museum of Science.

Since 1973, Laser Images has presented various musical laser shows throughout the world. *Laserium I*, essentially a series of abstract images with amplified rock, has grown into *Crystal Odyssey: A Classical Fantasy*, which recently began showing at the Museum of Science.

Unlike former laser shows, *Crystal Odyssey* has a plot and is set to classical music. The music includes segments of Vivaldi's "Winter" from *The Seasons*, Ravel's *Bolero*, Bach's *The Awakening*, and Holst's "Venus" from *The Planets*. The striking laser effects, presented in part by laserist Darryl Davis, combine with the music to form a beautifully striking presentation.

Unfortunately, the storyline intrudes; within the one hour feature, the producers have added an imaginary journey to the

planet Chromos. The audience, accompanied by Phosphor, seeks the Rainbow Makers. These beings reside within a crystal mirror into which the audience falls only to find Achros, who intends on trapping the unwary voyager within the mirror forever. Fortunately, escape comes quickly, and the entire audience becomes part of the Rainbow Makers alliance, spreading color throughout the universe.

The overall effect of the show, rather than enveloping the viewer, tends to leave him feeling that he is watching a second-rate science fiction thriller. Further intrusion is added when the audience cheers the admittedly excellent laser effects. The audience is encouraged to do so at the beginning of the performance.

Laserium Starship brings a return to the original philosophy of the laserium, a mind-boggling event which leaves the viewer with the feeling that he is the only one in the room. Although the rock back-

ground brings an audience which is a bit more rowdy, the din calms within ten minutes. The music for this show includes The Alan Parsons Project, Synergy, Yes, and selections from *Star Wars* (both John Williams and Meco) and *Close Encounters*.

As with the first show, the laser effects are excellent, and are enhanced with both

the star projector and strobes. Davis began working as a laserist at the Hayden Planetarium in New York in 1974 with the *Laserock* show. Since that time, he has operated three other laser shows.

The laserium effects are realized by using a 1W krypton gas laser beam which is split by prisms into four beams of red, yellow, blue, and green. These beams are then manipulated by other prisms, mirror scanners, and oscillators. Clouds of laser light are also possible through the use of a color modulator. Through the use of scan, interference, and diffraction, an infinite number of patterns can be created on the dome with the four colors.

The museum is easy to get to (Green line to Science Park); showtimes are Friday, Saturday, and Sunday night. Given a choice, I would see *Laserium Starship* again, but I heartily recommend both shows.

Stuart Gitlow



The Hack overshadows The Game

(Continued from page 1)

to prosecute perpetrators of the prank, Sohn noted.

By coincidence, the MIT Marching Band attempted another prank at the same game, although only parts of their complex plan were successful. Band members distributed 1,134 red and white cards to Harvard fans before the game, telling them the cards spelled "Beat Yale." Instead, the cards said "MIT." Many excited fans held up their cards without prompting from the band, after Harvard scored its second touchdown. The band persuaded enough of the spectators to hold their cards to form a part of the message ten minutes before the end of the game, according to Tom Galloway, an associate of the MIT marching band.

The band's most ambitious move, though, came at halftime. After Yale's marching band completed its show, about 40 MIT band members, at first accompanied by two confused students from the Yale band, ran onto the field after a signal from Galloway. "We just basically ran

out there," commented Karin Lohman '85, former president of the MIT Marching Band, "no one tried to stop us."

A pre-recorded tape was then supposed to begin playing over the stadium sound system, Galloway noted, although the prank did not proceed as scheduled. "The device just didn't work — Murphy's Law. We were in a hurry, and never had time to do a

full-scale test," according to a member of the Technology Hackers' Association, who claimed responsibility for the sound system plan.

The taped voice would have asked spectators to hold up their cards, according to Galloway and then would have announced, "As you may recall, last year MIT took over Harvard and renamed it 'Upchuck River Community

College.' Due to our recently developed tactical nuclear capability and your newly elected puppet — uh — student government, we feel safe in upgrading your status from colony to province." The new Harvard flag — a giant green parachute bearing a pink alligator — was supposed to be unfurled as the "Engineers' Drinking Song" played on the tape. Finally, 56 seconds of credits would have been listed, and

the tape would have concluded by declaring, "This hack was *not* sponsored by *Newsweek*." Despite the tape's failure, the marching band lay down on the field and formed the letters MIT. They left the field hurriedly to avoid being trampled by Harvard's band. The parachute was not deployed; it was recovered and is now hidden in the Undergraduate Association (UA) office, according to Galloway.

Finance Board gives shuttle green light

(Continued from page 1)

least prove there's some interest in the project."

"I guess that \$1920 still hangs over our heads," said Merritt. "Right now, it's the liability of the MIT Shuttle Bus Project. But if we decided to can the project, it would become a personal liability." If the bus project eventually makes a profit, Merritt indicated, it will cover that debt.

The Finance Board stated the shuttle project should sign a contract with Carroll — the project

has operated so far used purchase orders — purchase and erect bus stop signs, and print its refund and ticket expiration policies on each ticket, according to Charles P. Brown '84, chairman of the Finance Board.

From the beginning of the project, Merritt noted, "we would only be giving refunds if the service were stopped." Massachusetts law requires organizations print refund and ticket expiration policies on such tickets, Brown said.

"The shuttle bus started oper-

ating under a purchase order," Brown said. "Carroll let them operate without prepaying so far."

Merritt indicated most of the shuttle bus's \$1000 grant from the Finance Board has been spent, much of it on advertisements and the purchase of bus stop signs.

On September 15, the board allocated a loan of \$8720 to the Shuttle Bus Project. The loan must be approved by ADB, which has not yet voted on it. "I'm not sure what ADB plans

on doing with it," Brown said.

The project has commitments from students in several fraternities to buy passes, Merritt said. The new route will provide service to additional houses, she added. She said the interruption in service and the continuing good weather will be obstacles to selling bus passes.

The bus project will soon receive bus signs to mark stops, Merritt noted. "We can put them up anywhere on MIT property," she said. "The stops over in Boston are just going to have to be known."

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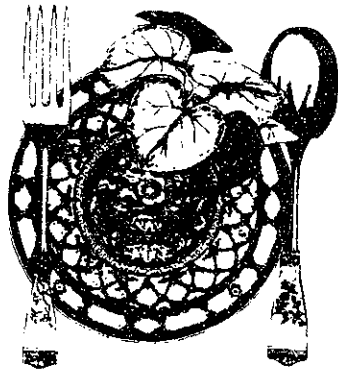
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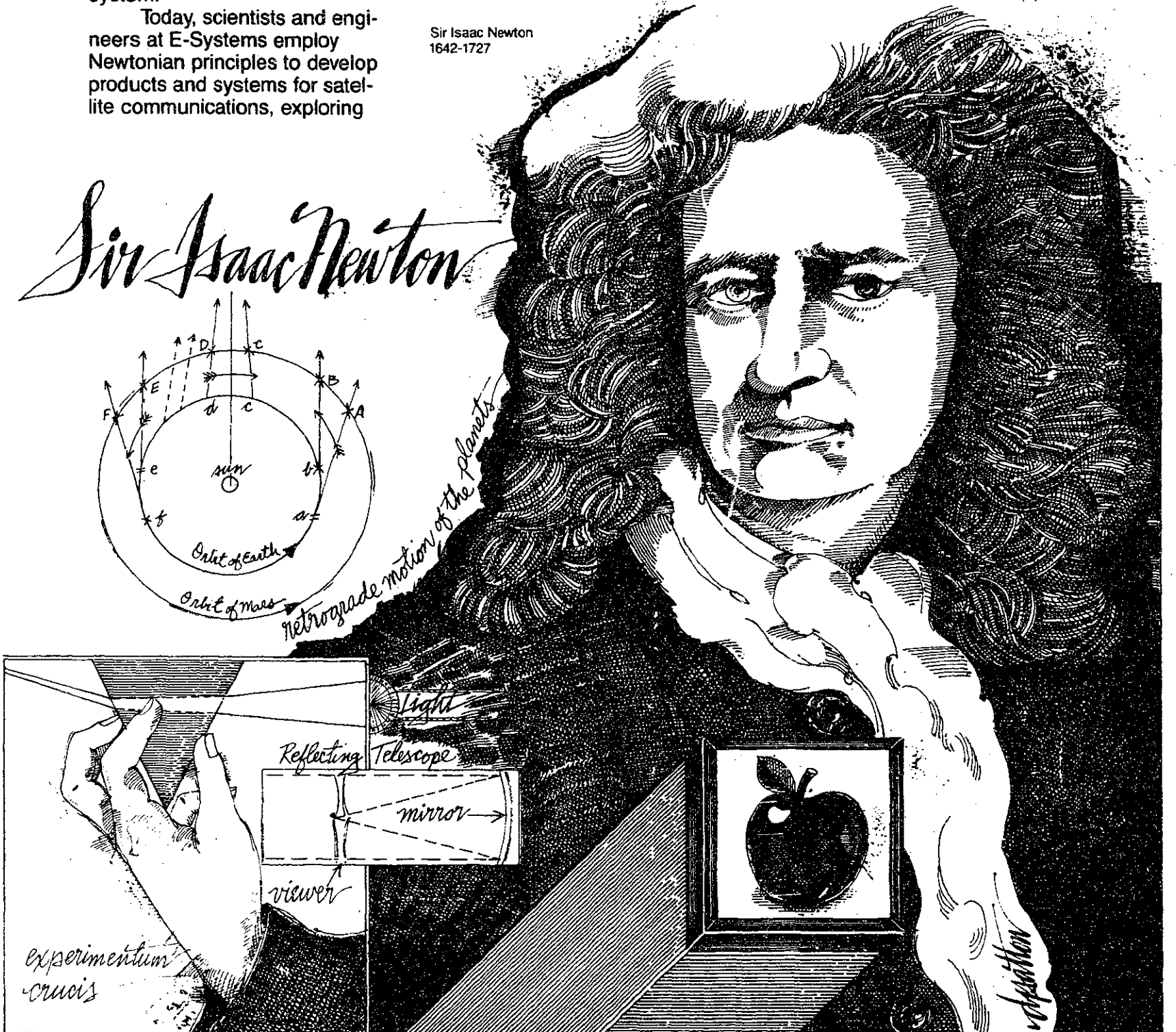
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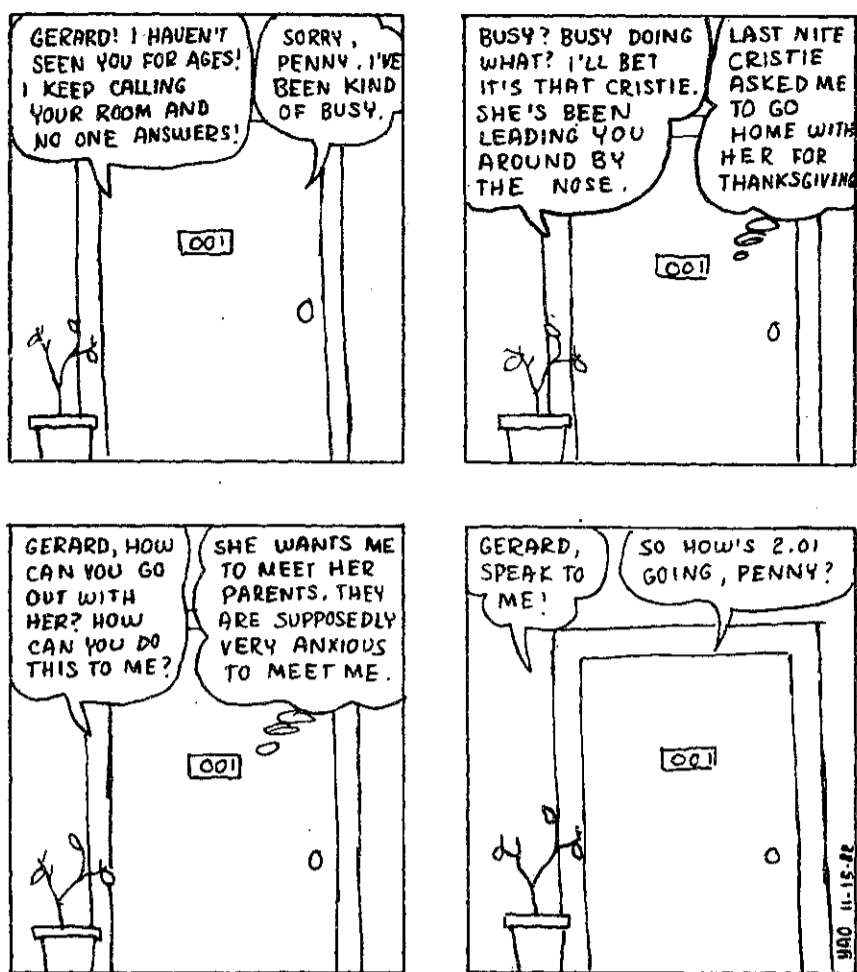
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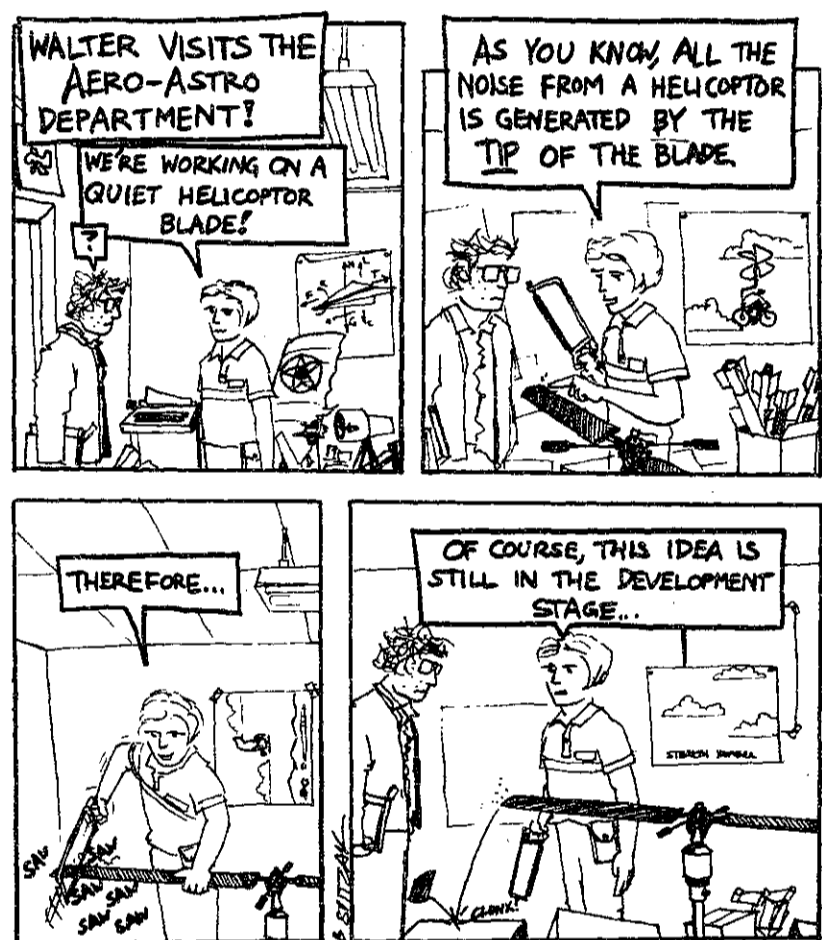
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The MIT Shuttle Bus will resume service on Monday, November 29, but we need your support . . . we are encouraging anyone who supports this project to buy our passes—\$4.00 for a ten-ride pass—which are available in the Cashier's Office in Building 10 and the SCC Coffeehouse.

The bus is running on an all-new hourly schedule, arriving at 77 Mass. Ave from the Back Bay living groups at 10 minutes before every hour and from the West Campus dorms at 5 minutes before the hour. The entire route (newly revised) covers all parts of the campus—from Tang to the Sloan school—, Central Square, Kendall Square, Kenmore Square, MIT Parking lots, and most of the Boston living groups. For more information, see our poster on the bulletin board in Lobby 7, or contact:

NOELLE MERRITT (chairman) 494-1079
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To keep this project alive, we need your support—we encourage any questions, comments, or suggestions that you may have.

We would like to thank the following groups for their cooperation:

the Finance Board TCA SCC LSC IFC ADB

And many, many thanks to these living groups for their support:

BΘΠ LCA AEΠ SAE Student House PSK ΘΞ and others

sports



Tech photo by Winston I. Smith
Phi Delt quarterback Gardell Gefke '83 drops back to pass during Octathlon football action.

Fencing faces tough schedule

By Martin Dickau

The men's and women's fencing teams open what head coach Eric Sollee calls "a very ambitious schedule" with a 7pm match against Brown University tonight in Dupont.

Of the women, Sollee feels that, in spite of the more difficult schedule, the team "should fare even better than last year."

Leading the squad will be captain Ya-Pei Chang '83. Others to watch are Paige Kolze '83, Janet Yanowitz '83, Iria Romano '83, and Vivian Wang '84, all also returning from last season.

The coach is looking for a better performance this year against Harvard, and he believes Chang stands a good chance of finishing first at the Holiday Invitational Tournament at Brown December 12.

The women fencers will face five very tough schools in January — Notre Dame, St. Mary's, Navy, North Carolina, and William and Mary. The team will begin February against Holy Cross and Hunter College, a school with one of the top eight women fencers in the country.

In spite of the proliferation of strong adversaries, Sollee expects the women to do well. He comments, "We have a well-seasoned

team, and there are three or four freshmen showing promise."

The men's team, however, is a "different situation." The foil squad will have Oscar Estell '83 and Russell Holtz '84, both veterans of last year's Iron Man Trophy team. Mitch Messer '85 and Bill Kazman '85 will vie for the other spot.

In the epee, Sollee has team captain Ray Holden '83, Dave Humphreys '83, Dan Lord '85, Jeff Rothman '84, Robert Grimes '83, and Rex Kochanski '85, all of whom will be seeing action.

Dave Weinstein '83 is coming back after a one-year layoff to join Brad Nager '83, Charles Kwan '84, Chris Schneider '83, and Alan Williams '85 on the sabre team. Says Sollee, "We have to build up the rest of the squad."

Although the coach thinks that "Brown should be an easy win," the remainder of the schedule is far from trivial. Harvard and Yale promise to be tough, as always, but he sees Columbia as "the team to beat," along with Notre Dame.

St. John's, Rutgers, and Navy will be the more difficult independent squads, while in the South, William and Mary College and North Carolina will provide stiff competition.

In order to have another winning season, Sollee says of the men, "We need to mature rapidly." With a lot of work on the part of the fencers, however, coach Sollee is certain that, "We're going to make a fight of it."

sporting notices

The MIT Frostbite Classic Road Race, sponsored by the MIT Varsity Club, the MIT Social Council, the Department of Athletics, the MITAA, and River Rats will be held at Steinbrenner Stadium Sunday, December 5. The four-mile race is open to all members of the MIT community and will begin at 11am. The entry fee is three dollars for pre-entry, five for post-entry. Trophies will be awarded to the winners, and tee shirts will be given to all who enter. Call 253-7946 for more information.

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Basketball opens 75th season tonight in Cage

By Robert E. Malchman

Men's basketball opens its 75th season tonight at 7:30pm against Babson in Rockwell Cage with a "young, but ... aggressive, hustling team," according to head coach Fran O'Brien.

With six freshmen and six sophomores on the 18-man squad, 1982-83 appears to be a rebuilding year for the Engineers. O'Brien has nine returning lettermen, including co-captain Mark Branch '83, who led MIT's scoring attack with 16.1 points per game last season. Branch, cited as "one of the premier point guards in New England" by O'Brien, is seventh on the Engineers' all-time scoring list with 1,064 points.

Swingman Robert Joseph '83 co-captains the team with Branch. Last year Joseph averaged nine points and five re-

bounds per game. "He's ready for a big season," O'Brien said.

The pickings are slim, however, after Branch and Joseph. MIT will have to rely on Chris Wilson '84 (3.3 ppg last year), Bud Taddiken '85 (3.2), 6'9" Mark Johnson '84 (2.8), and Charlie Theuer '85 (1.5) up front. The backcourt will be staffed by John Shivanandan '83 (1.3), Jeff Bornstein '85 (1.3), and Greg Bartlett '85 (0.6).

Since all of these players saw but limited action last year, O'Brien will have to count on help from freshmen Andy Sparks, a 6'7" forward, and guards Jim Egan and Craig Poole to pick up any slack which might develop.

Despite the youth, O'Brien believes "we'll be better than last year," when the team finished with a 7-17 record. It is easy to see, though, how the squad's inexperience could militate against the coach's goal.

Harriers finish 16th in rain at NCAA tourney

By Martin Dickau

Facing rain, forty-degree cold, and winds gusting up to 70 miles per hour, the men's cross country team slogged its way through the mud to finish sixteenth among the twenty-one teams participating in the National Collegiate Athletic Association's Division I championships at Fredonia, New York Saturday.

Bob Walmsley '84 led the Engineers with a time of 27:54 over the eight-kilometer course to finish 64th overall. Team captain Paul Neves '83 had a time of 28 minutes flat, placing 74th. The other top finishers for MIT were Brian Kenwood '83 (96th - 1:17), Ken Kovach '83 (131st - 1:44), and Bill Bruno '85 (144th - 1:59).

This was the fourth straight year MIT participated in the championships, last year the team finished thirteenth overall, slipping through four inches of snow. Although first-year Engi-

neer head coach Halston Taylor thought the weather conditions might have had something to do with the team's showing, he also noted that all of the other squads had to run the same course at the same time.

The harriers will now have the winter off before resuming inter-collegiate competition in the spring.

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sports

Volleyball wins EAIAW tourney

Also takes opening round of NCAA championships

By Martin Dickau

The women's volleyball team capped off a highly successful weekend Sunday, defeating Eastern Connecticut (EConn) 3-0 to win the Eastern Association of Intercollegiate Athletics for Women (EAIAW) Northeast Division III Championship at Rhode Island College.

MIT blanked Wellesley, Bridgewater State, and EConn by identical 2-0 scores on Saturday and then edged Albany State 3-2 in the semifinals before moving on to whitewash EConn once again in the finale.

Sunday's victory came on the heels of the Engineers' Friday trouncing of Albany State to cop a victory in the opening round of the National Collegiate Athletic Association (NCAA) Division III championship.

Cheered on by more than 300 fans in duPont Gymnasium, MIT stormed through Friday's contest with a vengeance. "We never had a crowd like this," said a pleased head coach David A. Castenon. "The enthusiasm helped."

The first game saw the Engineers break a 3-3 tie, rolling off seven straight points before emerging victorious, 15-8.

In the second game, MIT pounded out six points before the visitors could manage to get on the board. Albany halted several Tech tries at game point before finally succumbing 15-2, giving the Engineers a commanding 2-0 lead in the best-of-five competition.

Albany, with its back against the wall, seemed to regroup for the third game. The visitors racked up a 4-1 lead and appeared to be in command. MIT recovered from its momentary lapse and roared back to gain the upper hand 9-4.

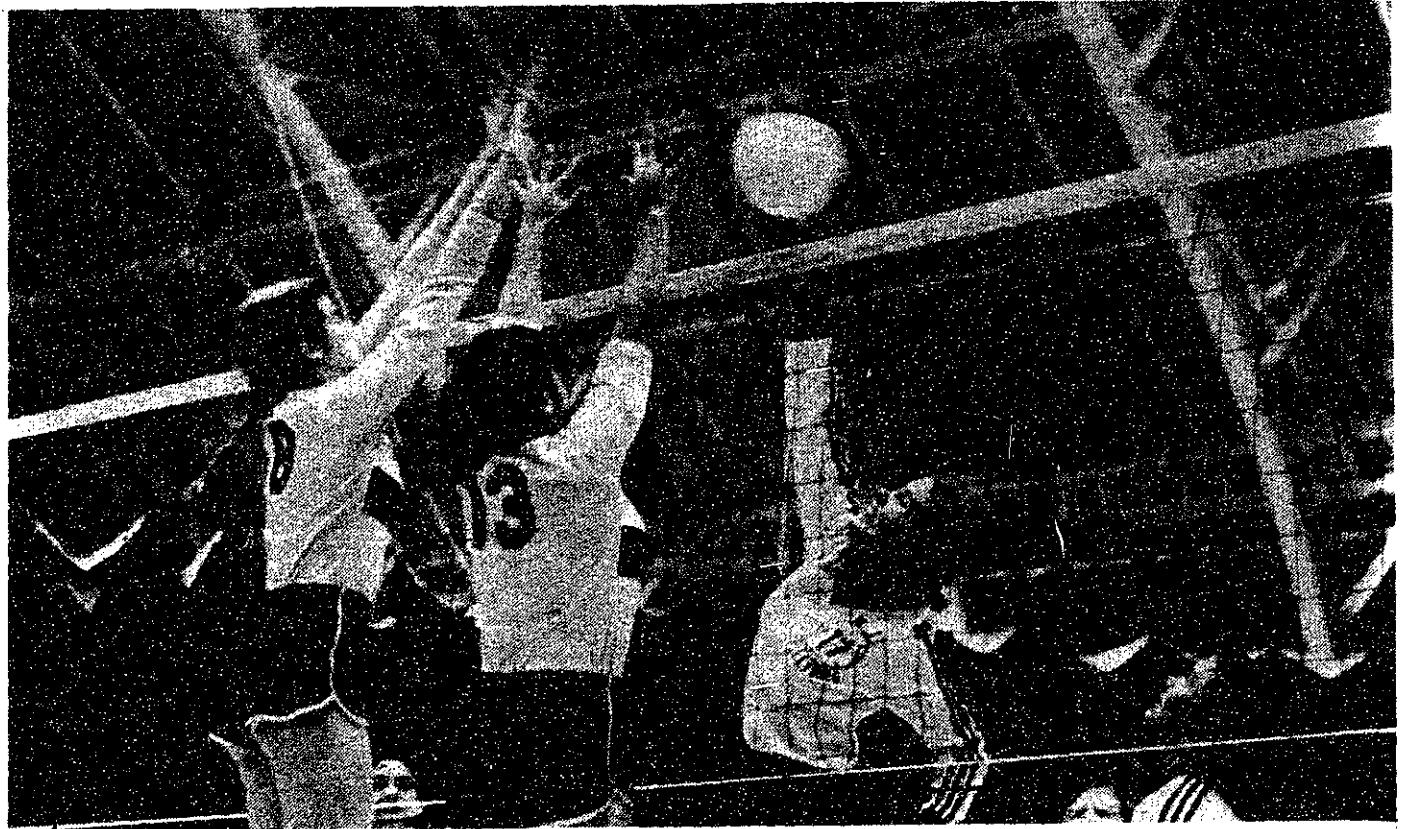
The Engineers continued to rain spikes on their beleaguered opponents, but Albany hung tough, narrowing the gap to 12-9. With the score 13-9, Jannette Kauth '85, who led the Engineers with nine kills, nailed a spike

which was misplayed by a defender to bring MIT to match point. The visitors managed one point, but gave up the serve, never to recover it, as Julie Koster '85 rejected an Albany spike for the winning tally.

Analyzing his team's victory, Castenon commented, "Our play was very uniform. Everyone contributed."

The Engineers now advance to take on Western Maryland in the second round of the championships. The site for that contest will be decided today.

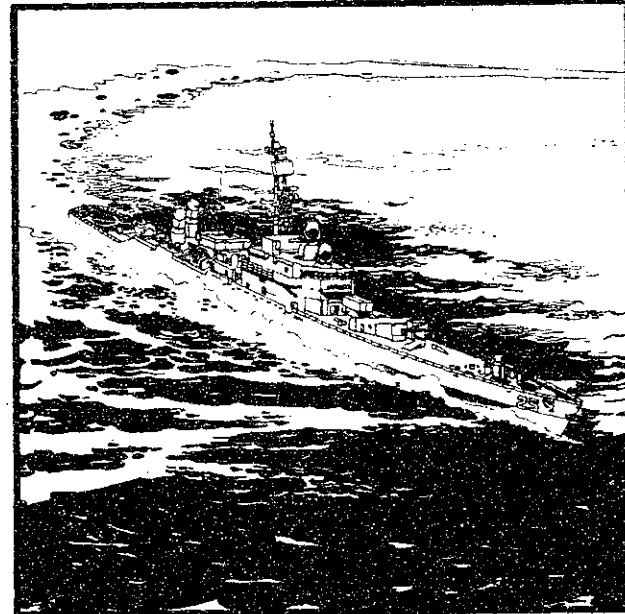
Castenon was optimistic about MIT's chances in the higher rounds. "We're as good as most teams," he declared, "and we're playing well this time of year." He added, "I hope we can continue."



Tri-captain Amy Smith '84 powers a spike over the Albany State defense during Friday's romp over the New York rivals in the first round of the NCAA tournament.

Tech photo by Omar Valerio

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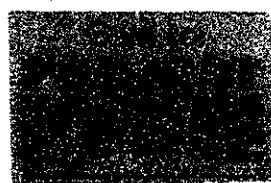
sports update

Pistol — Against Coast Guard Saturday, Jon Williams '83 led MIT to a 3148-2970 victory in the collegiate match with a score of 792 out of a possible 900.

In the air pistol, Joe Mayo '83 fired a 368 out of 400 as the Engineers defeated the Cadets 1453-1355.

Wrestling — The wrestling team opened its season at Plymouth State Saturday with a 27-17 loss. Pat Peters '85 pinned his opponent in 31 seconds to take the 167-pound weight class. Ken Shull '84 (142), Steve Ikeda '85 (150), and Brian Mannion '84 (158) were also victorious.

Rifle — Cliff Eskey '85 led the the Engineers to victories over five other teams at the New England Rifle League tournament at MIT Saturday. The team posted a final score of 2184 in raising its record to 15-0.



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