

Air Force Secretary Widnall Leaves Post, Returns to MIT

By Katharyn Jeffreys
and Douglas E. Heimbarger

Secretary of the Air Force Sheila E. Widnall '60, a former associate provost, announced last week that

she plans to leave her post and return to MIT as a professor of aeronautics and astronautics on October 31.

"As I have planned all along, I will return to MIT," Widnall wrote in a letter to President Clinton. "I

am proud to have served you and our nation, and I sincerely thank you for this opportunity you've given me."

Widnall took a leave of absence from MIT to become Secretary of the Air Force in August 1993.

Widnall served as leader of the Air Force during a period marked by problematic incidents. Among these were the adultery case of 1st Lt. Kelly Flinn and the fallout from the bombing of a facility housing U.S. troops in Saudi Arabia during 1996.

"Four years is quite a long leave of absence at any institution. MIT has been more than generous," Widnall said in an interview.

The White House has so far made no announcements regarding who will be nominated to succeed Widnall.

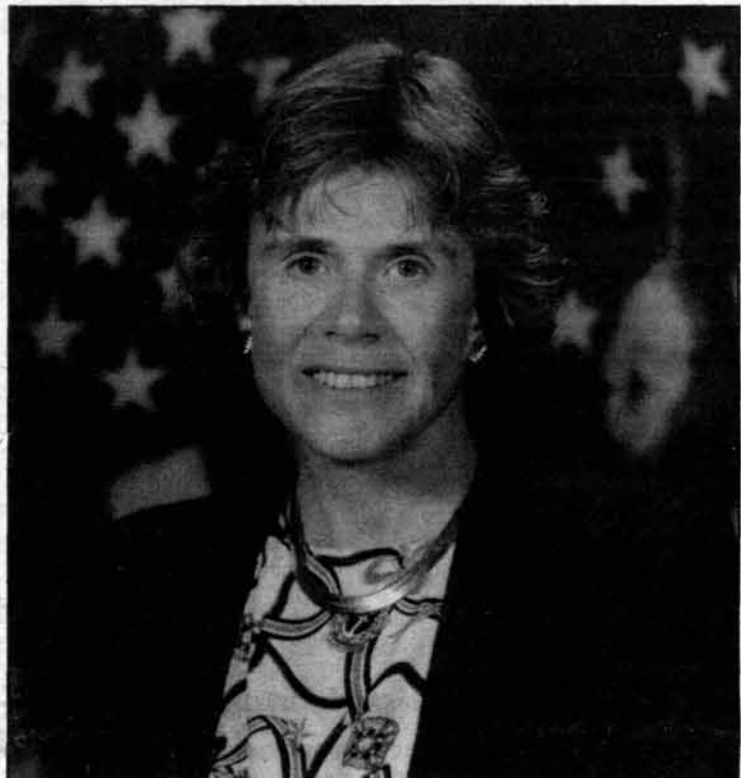
Widnall's role at MIT undecided

While Widnall's return to campus is anticipated by the administration, her full role at the Institute has not yet been determined.

Widnall resigned from her administrative duties at MIT to become Secretary of the Air Force. However, her leave of absence allows her to return to her position as a professor of aeronautics and astronautics, Widnall said.

Widnall is "looking forward to

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COURTESY OF THE MIT NEWS OFFICE

Secretary of the Air Force Sheila E. Widnall '60 announced her plans last week to return to MIT from a four year leave of absence.

Many Freshmen Taking More Advanced Classes

By Yvonne Lai

Calculus I with Theory (18.014) and the more theoretical version of Physics I (8.012) witnessed 30 percent enrollment increases this year.

The size of the 8.012 class increased in part because MIT changed the way in which it awards incoming freshmen credit for Physics I (8.01).

In previous years, a score of 4 or 5 on both parts of the Advanced Placement Physics C exam, both Mechanics and Electricity and Magnetism earned students credit for 8.01. But recently, the professors teaching Physics II (8.02) in the fall have been disappointed with their students' proficiency with fundamental physical concepts such as basic mechanics, said Professor of Physics Daniel Kleppner, who is teaching 8.012 this term.

Since 1987, there has been a 95 percent increase in the number of students scoring a 3 or above on all AP exams.

"The AP is inadequate," Kleppner said. The physics department felt that most students who took 8.02 were doing so because they had earned 8.01 credit.

Consequently, the department boosted the requirements to a score of 5 on both parts of the AP Physics C exam, coupled with a score of 4 or 5 on the AP Calculus exam.

"The 5 on Mechanics and E&M represents dedication," Kleppner said. "The Calculus score ensures mathematical prowess."

The physics department also recommended that those students with AP credit for 8.01 take 8.012. "In a sense, the enrollment increase is what we expected," Kleppner said. This year's fall 8.02 enrollment decreased from last year.

Only five of 60 students this year taking the 8.01 Advanced Standing Exam passed.

MIT is not alone in deeming the AP Physics C a faulty indicator for class placement. In an American Institute of Physics educational meeting this year, other top schools voiced their concern for the difficulty level of the exam.

Math changes not as significant

In contrast, "The [Calculus] AP exams are stable," said Joanne E. Jonsson, the academic administrator of the department of mathematics. "It's still a pretty reliable indicator of the level of incoming students," she said.

The 51 students enrolled in 18.014 this year makes it the largest class in five years. Two years ago, when the mathematics department created the new version of Calculus

Classes, Page 17

Bldg. 2 Classrooms Receive Face-Lift

By Carina Fung

ASSOCIATE NEWS EDITOR

MIT recently finished renovating 10 heavily-used classrooms on the first floor of Building 2. The renovations, which began shortly after Commencement, modernized the outmoded rooms.

"These renovations greatly improve the teaching and learning environment for faculty and students," said Mary R. Callahan, the associate registrar for facilities and scheduling and leader of the design team for the project.

The renovations also added several new technologies to the ordinary classroom setup. These include an Athena terminal located in front of some classrooms and overhead projection equipment which can be linked to laptop computers in others, Callahan said.

Each classroom also received a VCR, an overhead projector and an MIT Cable connection.

The renovations mark a rebirth of Project 2000, a plan to renovate all Institute classrooms by the year 2000, initiated by the late Margaret L. A. MacVicar ScD '65, MIT's first dean of undergraduate education, Callahan said.

The impetus behind the Building 2 renovation came from Provost Joel Moses PhD '67, Callahan said. The project also received support from the Committee on the Undergraduate Program, the Faculty Planning Committee, and Dean for Undergraduate Education Rosalind H. Williams, she said.

New features added to classrooms

Physical characteristics of the rooms were also updated. All the interior finishes and mechanical systems, such as ventilation, heating, and cooling systems, were replaced in the classrooms, Callahan said.

"Anyone who has endured the physical discomforts of these rooms previously — too hot in the fall and spring, too cold in the winter" will benefit from the renovations, Callahan said.

The old furniture was replaced with new tables and chairs, while new chalkboards and lighting were also installed, she said.

"Eight of the 10 classrooms which were renovated make provisions for carry-in use of laptop computers to freely utilize the over-

Construction, Page 9

NASA Sets Up Control Site in Cambridge

By Jennifer Lane
EDITOR IN CHIEF

On Friday, NASA Administrator Daniel S. Goldin officially opened the Advanced X-ray Astrophysics Facility Operations Control Center, located at Draper Laboratory.

The event marked the first time that NASA has transferred control over mission management to a research center at the outset of the project. In this case, the control flowed from NASA's Marshall Space Flight Center in Huntsville, Ala., to the Smithsonian Astrophysical Observatory in Cambridge.

"NASA has a new philosophy," Goldin said. The change was motivated by the need to slim down NASA's budget. The center in Cambridge "will be a lower cost operation, because we have the scientists closer to their machines," he said.

Control of the AXAF project is now in the hands of the new Director of AXAF, Harvey D. Tannanbaum from the SAO, and Associate Director Claude R. Canizares, director of the center for space research.

In June, the SAO received a five-year, \$63-million addition to an existing contract to establish the OCC as part of the AXAF Science Center under the direction of NASA's Marshall Space Flight Center.

Control Center monitors missions

The AXAF space observatory will be launched aboard the space shuttle in August 1998. Once in orbit, the craft will be monitored, managed and maneuvered by flight engineers in the OCC, who will also process the data it relays to Earth.

Commands will be transmitted from the OCC in Cambridge to one

of three stations comprising NASA's Deep Space Network in Spain, Australia and Owens Valley, Calif., then relayed to the orbiting spacecraft.

The center will be staffed at all

times, said Bruce Twambly, a spacecraft systems engineer. "The flight operations team will perform round-the-clock support."

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GABOR CSANYI—THE TECH

NASA Administrator Daniel S. Goldin signs the plaque officially giving control of the project to the Smithsonian Astrophysical Observatory. The instrument is scheduled to be launched in 1998.

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WORLD & NATION

Albright Comments On Mideast Peace

THE WASHINGTON POST

BEIRUT

Secretary of State Madeleine K. Albright said she was coming to the Middle East to administer a "reality check" to Arabs and Israelis alike, but she also got one herself.

The anger and recriminations she heard on her first swing through the region as secretary of state indicate that the situation "is probably even worse than I thought," she told reporters aboard her plane.

Albright, who concluded her week-long Middle East tour Monday, said she achieved "small steps," such as agreement by Israel and the Palestinians to send cabinet-level officials to Washington next week. But she added: "I am not going to overestimate what's going on here. We've got a long way to go."

If the region's leaders are not prepared to make the "hard choices" required to achieve peace, she said, she has other things to do and will not allow the Middle East to dominate her attention.

This message that a U.S. secretary of state is prepared to let the Middle East stew in its own juice for a while capped a tour that was aimed at shaking up the psychology of the Middle East. She said things U.S. officials rarely say, in language diplomats rarely use, in what aides described as an effort to overcome the pessimism and cynicism that have overtaken once-bright prospects for peace.

President Takes Action Against Medicare Fraud

THE WASHINGTON POST

WASHINGTON

President Clinton Monday took an unprecedented step to curb Medicare fraud, placing an immediate moratorium on all new home health care companies seeking to provide services until the government creates better ways to protect itself against "scam and rip-off artists."

The moratorium represents the first time in its history that Medicare, the vast government insurance program for the elderly and disabled, has stopped admitting an entire segment of the nation's health care industry. It erects a sudden dam in what has become by far the fastest-growing part of Medicare, with nearly 100 new companies signing up each month.

As part of a broader effort to crack down on fraud in the program, Clinton also announced that all existing home health companies will have to reapply periodically to remain eligible for Medicare payments.

Through the moratorium on new companies and the new reviews of existing ones, the president is responding to recent evidence that the government is wasting billions of dollars on home care, a part of the health care system that has proliferated as elderly patients have been released from hospitals sooner and sicker than in the past.

About 4 million Medicare patients, about 10 percent of all beneficiaries, receive some type of care at home, ranging from cancer treatments to help in bathing and getting out of bed. Yet federal investigators estimate that \$4 of every \$10 that Medicare pays for such services are unwarranted, because of accidental overbilling or outright fraud.

Right-Wing Vote Apparently Topples Ruling Party in Norway

THE WASHINGTON POST

OSLO, NORWAY

Norwegian voters drove the governing Labor Party from power Monday and gave a right-wing populist party its strongest showing yet, according to partial vote tallies.

Prime Minister Thorbjorn Jagland, in office only since last October, gambled the future of his minority government by promising repeatedly during the election campaign to resign if his party's popular-vote total in Monday's balloting did not match the 36.9 percent it received in national elections four years ago.

With results in from 89 percent of Norway's polling places, Labor had 35 percent of the popular vote.

Early Tuesday, Jagland said he would resign after he submits the state budget on Oct. 13, news services reported.

The voting results suggest that a new centrist government will be formed in the coming weeks, probably in a coalition of the Liberal, Center and Christian People's parties—which even as a bloc would have just 43 of parliament's 165 seats. The Labor Party will have 64.

WEATHER

Foreshadowing Autumn

By Chris E. Forest
STAFF METEOROLOGIST

What should we expect for a pleasant week in September? Pretty much what we'll see for the next few days. As the transition to winter begins officially this Sunday, we can expect storm activity to increase soon. Luckily, it won't be happening just yet. We are caught on the ridge between two low-pressure systems for Tuesday and Wednesday and should expect pleasant weather with mostly sunny skies and light winds. To our west, the next system will develop and approach later in the week providing an interesting weekend outlook. We'll let the next forecaster take care of that one but we should expect some clouds in advance of the system late Wednesday and into Thursday.

Today: Clearing skies. High 75°F (24°C)

Tonight: Low 57°F (14°C)

Wednesday: Mostly sunny with high clouds advancing. High 74°F (23°C). Low 59°F (15°C)

Thursday: Partly cloudy and possible showers late. High 73°F (23°C). Low 56°F (14°C)

Fed Up With Washington, Weld Quits Fight for Post

By Tyler Marshall

LOS ANGELES TIMES

WASHINGTON

Former Massachusetts governor William Weld gave up his fight Monday to become ambassador to Mexico, issuing a caustic, highly sarcastic attack on Washington and its politics as he bowed out.

"I asked President Clinton to withdraw my name from the Senate so I can go back to New England where no one has to approach the government on bended knee to ask it to do its duty," he said bitterly during a 10-minute statement to reporters in the White House press room.

Weld also used the occasion to outline his differences with Sen. Jesse Helms and the far right wing of the Republican Party — a position many believe is calculated to enhance his prospects for national elective office.

Weld's comments marked the final act of a very public Washington summer drama in which the liberal Republican sparred defiantly with Helms, a conservative whose post as chairman of the Senate Foreign Relations Committee gave him the power to block the nomination single-handedly.

While his withdrawal was not unexpected, the timing apparently caught the White House by surprise. He had scheduled courtesy calls Monday on Capitol Hill to build support for his nomination.

But Monday morning, Weld reportedly telephoned Clinton and then met briefly with the president in the early afternoon at the White House before facing the news con-

ference.

Clinton expressed "great disappointment" in Weld's decision. "The American people have not been well-served during this process ...," Clinton said in a statement read by White House Press Secretary Mike McCurry.

McCurry said no new nominee is waiting in the wings for what he called "arguably one of the most important ambassadorial postings that we have anywhere in the world."

"In a sense, our review process is back at the starting point now," McCurry added. The United States has been without an ambassador in Mexico City since last June.

The popular, aloof governor gave up his job to pursue the ambassadorship, yet he failed at the first hurdle mainly because he trampled on congressional feet and ignored the unspoken rules that guide politics in the nation's capital.

Admitting as much Monday, Weld said: "I met a lot of people who are experts in the way that government in Washington works, and they said, 'We can't just have a hearing. First you have to go on bended knee and you have to kiss a lot of rings.'"

"Well, my mother and father taught me that I'm no better than anybody else, but also that I'm no worse," Weld said.

"So I said I wouldn't go on bended knee and I wouldn't kiss anything."

During his comments, he referred to Helms as "that man," labeled Washington "a funny town," and implied that a majority of senators had buckled under to what he

termed "a miasma of fear" spread by Helms.

The Foreign Relations Committee passes initial judgment on all ambassadorial appointments made by the president before sending them on to the full Senate. But as chairman, Helms refused even to convene a hearing on the nomination, accusing Weld of being soft on drugs and thus an unsuitable candidate as ambassador to the country of Mexico.

Helms made his pronouncement even before Weld's nomination was formally announced last spring and, despite months of pressure, he never budged from that position.

Finally forced last Friday by a majority of committee members to hold a meeting — though not a confirmation hearing — Helms used his considerable powers as chairman to attack his opponents and prevent any debate on Weld's nomination. Then he simply declared the meeting adjourned.

"The spectacle that we witnessed in the Senate Foreign Relations committee hearing room last Friday was very bad government indeed," Weld said.

Although Weld gave every indication Monday he planned to remain active politically, he said he would initially take a job in the private sector.

"I intend to remain an active, involved and vocal member of my party, (but) I do plan to go right back to the private sector now," he said.

"And I think many of you will probably believe me when I tell you that I've had enough of Washington for the next little while."

Sinn Fein Goes to Peace Talks, Says it Is Independent of IRA

By William D. Montalbano

LOS ANGELES TIMES

BELFAST, NORTHERN IRELAND

It was a day of history with an asterisk Monday in the elusive and frustrating search for peace in Northern Ireland.

The political arm of the outlawed Irish Republican Party came to substantive peace talks for the first time, but there was no substance to discuss because their Protestant foes stayed home.

After day-long cajoling by Britain and Ireland, and by George Mitchell, the American chairman for the talks, the largest Protestant party was still weighing Monday night when and in what fashion it would attend future sessions.

Even if they attend Tuesday, the prospect is for a long-shot, gritty and outwardly unspectacular slog between now and May 1998, the British deadline for agreement.

Sinn Fein, political wing of the IRA, has long sought full acceptance as a political player in its drive to end British control of Northern Ireland but, having won it, walked into a wasp's nest of hostility on Monday.

The British government and four moderate parties attending the talks demanded clarification of Sinn Fein's links to the IRA.

By most accounts, Sinn Fein President Gerry Adams' assertion that they are two separate organizations proved neither credible nor mollifying.

For its big day after violent decades as a political outsider, Sinn Fein mustered nearly two dozen negotiators and support personnel to accompany Adams to a nondescript office building on the grounds of Stormont Castle, the British govern-

ment's headquarters in the embattled province.

"This is a historic day. We moved into the first stage of negotiations but nothing much happened," said Sinn Fein delegate Francie Malloy. "We hope the unionists will come so that we can keep the situation moving."

David Trimble, leader of the Ulster Unionist Party, the largest Protestant party, met with Mitchell following a joint declaration by Britain and Ireland supporting unionist demands for the surrender of weapons as a parallel requirement to political talks.

Preface to Monday's session had been 16 months of going-nowhere preliminary talks without Sinn Fein, which got 16 percent of the provincial vote in the last election here but was banned from talks without restoration of an IRA cease-fire. That cease-fire came in July.

Opening sessions Monday afternoon were adjourned to allow Mitchell to meet with Trimble.

"This problem has been going on for 800 years, so you can understand an hour or two's delay," a determinedly upbeat Irish Foreign Minister Ray Burke told reporters.

Mitchell, the former U.S. Senate majority leader, said his encounter with Trimble was "constructive." But there was no sign Monday night that the impasse — with the main party representing the 60 percent Protestant majority that wants Northern Ireland to remain British — had been broken.

"It was a tetchy day inside the conference, and uncertain one outside," said Seamus Malloy, deputy leader of the moderate Social Democratic and Labor Party, the largest party representing the 40

percent Roman Catholic minority in the province.

Trimble and leaders of all other unionist parties were furious last week after Sinn Fein signed a commitment to democratic principles but the IRA promptly disavowed a commitment about submitting any political settlement to a provincial vote, and said it would not surrender any weapons until talks had ended.

At Trimble's prodding, British Prime Minister Tony Blair and Irish Prime Minister Bertie Ahern issued a statement Monday saying that Mitchell's demands for democratic commitment and phased weapon surrender remain the foundation for the talks. They also specifically upheld the right of the Northern Ireland electorate to ratify any settlement.

The IRA argues that the province should belong to a united Ireland, so all residents of the island of Ireland, north and south, should vote; that would mean a Catholic majority.

Lord John Alderdice, the psychiatrist leader of the centrist Alliance Party, was the only prominent Protestant leader present Monday. He said he had pressed Adams on Sinn Fein's relationship with the IRA.

Protestant parties, the British government, the Irish government and the United States believe them to have a common leadership.

"I asked Adams a number of crucial questions, noting for example that if Sinn Fein and the IRA are not one body, then any agreement with Sinn Fein will not be guaranteed," Alderdice said. "If, on the other hand, Sinn Fein does represent the IRA, we could look with confidence to agreements."

Three Jewish Families Settle In Arab Neighborhood

THE WASHINGTON POST

JERUSALEM

Protected by scores of heavily armed police, three Jewish families settled into an Arab neighborhood of East Jerusalem Monday, stirring outrage among Palestinians who see their presence as a betrayal of the Oslo peace accords. The move sparked fears of a new crisis in Palestinian-Israeli relations just days after the departure of Secretary of State Madeleine K. Albright. The Israeli Jews moved into homes purchased from Arabs by Irving Moskowitz, a wealthy Miami developer who plans to build a Jewish housing complex on the hilltop known as Ras Amoud, which is situated between Jerusalem's Old City and the massive Jewish burial site on the Mount of Olives.

The controversy over the new arrivals, whose neighbors greeted them late Sunday night with curses and showers of stones, erupted just as some had dared hope that relations between Israel and the Palestinians might finally be on the mend. Amid signs that the Palestinian Authority, with Albright's prodding, has begun to cooperate with Israel on security matters, the Jewish state Monday eased travel restrictions on Palestinians stemming from suicide bombings in Jerusalem in July and earlier this month that killed 20 victims.

Citing national security, Prime Minister Benjamin Netanyahu '75 has said publicly that he will not allow Moskowitz to proceed with the new development, a pledge he reiterated Monday. But Israeli officials said Netanyahu has no legal authority to evict the new tenants from homes purchased legally by Moskowitz from willing Arab sellers.

Call for Review of Tianamen Crackdown Stirs Up China

LOS ANGELES TIMES

BEIJING

The political ghost who surfaced to haunt the key national Communist Party congress here Monday reminded everyone that the memory of the army's brutal crackdown in Tiananmen Square eight years ago has not been erased.

At the center of the controversy — just as he was in 1989 — is former Communist Party secretary general Zhao Ziyang. A letter purportedly written by Zhao, an avid reformer who was removed from the party's top position after he opposed using the army to crush the Tiananmen student demonstrations, appeared in Hong Kong newspapers Monday and quickly made the rounds of the capital, stirring up the tightly controlled 15th party congress.

The typed three-page letter called for a "reassessment" of the June 4, 1989, incident in which army tanks and soldiers killed hundreds of civilians. "While the military suppression calmed the situation down," the letter stated, "we cannot but say that the people, the army, the party and government and our country all paid a great price."

Sign up for

Links

At the Open House:

Tuesday Sept. 16th and Wednesday Sept. 17th
4-6 PM
Mezzanine Lounge (3rd floor Student Center)

At the Lobby 10 Booth:

Thursday, Sept. 18th and Friday, Sept. 19th
9-4 PM

On the web after Friday, September 19th:
<http://psc-vcc.mit.edu/links>

Volunteer in Cambridge Elementary Schools
Teach Science
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Impact a child's life.



Graduate Student Council

Walker Memorial, 50-220 (617)253-2195 gsc-request@mit.edu www.mit.edu/activities/gsc



Friday Social

5:30 PM, Friday, Sept. 19
GSC Lounge, 50-220.

Fun event where you can socialize and relax while enjoying snacks, drinks, and conversation.

*Proper ID is required.

September Calendar

- 16 Extracurricular Activities and Athletics Meeting *
- 17 Activities Meeting *
- 18 Career Fair Meeting *
- 19 Friday Social *

* at 5:30 PM in Rm. 50-220. All graduate students are welcome. Food is provided.

Graduate students, get your free Student Advantage Card (\$20 value) this week at the Graduate Student Council!

Sign-up for:
Soccer B-league,
Tennis A-league,
Ice-hockey A, CC,
D+, D league.



Contact the GSC Extracurricular Activities and Athletics Committee. Come to our meeting or email jglively@mit.edu / arhom@mit.edu.

Become a GSC Representative

The Graduate Student Council is composed of voting members from Institute departments, programs, each graduate living group on campus, and representatives living off-campus.

To become a representative, just collect the signatures of 20% or 20 members (whichever is less) of your constituency. Application forms can be found outside the GSC office in Walker Memorial (50-220), or on the GSC web page. For more information, email gsc-vice-president@mit.edu. Applications are due by 9/30.

OPINION

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R/O, Sorority Rush Need Retooling

I came back to campus early this year to work during Residence and Orientation Week, both as an R/O worker for my dormitory and as a Dormitory Council Judicial Committee worker. I experienced enough of R/O's subtle flaws to nearly give up my resolve not to murder. Since I could not place blame on any specific person I guess this was a moot point anyway.

The largest problem I see with R/O, and the one which has prompted me to write this letter, is the rather questionable status of female freshmen at the beginning of R/O. They miss out on the real point of R/O's biggest event, Killian Kick-Off.

The Women's Convocation is kind of a consolation prize, but the inconsistency does not end there. The main point of the Women's Convocation seems to be to convince female freshmen to attend sorority rush. Indeed, I have met with female freshmen who thought it was mandatory to attend sorority rush and they were not happy about it. For Friday night and Saturday morning perhaps this is okay, but not after dormitory R/O begins, when freshmen need to put some effort into finding out where they will live, seeing as sororities are a non-residential option, at least for freshmen.

At this point sorority rush becomes parasitic to the main intent of R/O: acquainting freshmen with living options with the goal of having them happily housed within the week. As an R/O worker for my dormitory, I actually gave a tour to the parents of one female freshman. Their explanation was that their daughter did not have enough time to see all the dormitories. My knee-jerk reaction was to snap back, "There are at least 1,000 other freshmen in the same position and I don't see their parents here." But I said nothing, and later it caused me to think more carefully. I'm sure a lot of parental influence goes into living group choice, but it should not have to be this direct.

R/O is a hectic time and sorority rush just

makes it more so. To alleviate this problem, I believe sorority rush should be moved. Move it to Independent Activities Period, to sophomore year, to the middle of term, to activities week during R/O, whenever, but away from residence selection.

What are female freshmen to do Friday night and Saturday afternoon before dormitory R/O begins? We already have a few living options that are coed or all female. I personally spent my time touring them. We should probably concentrate on adding to this small number. Since MIT seems loath to create more dormitories, independent living groups are one way to fill the gap in housing. Since I am happy where I live now and am going to graduate soon, I'm not really a candidate for starting this effort, but I am sure there are others who would like to. Those who do not want single-sex living or socializing (both male and female) have little to do Friday night. More coed options would alleviate this problem.

Or, we could actually open up dormitory R/O Friday night. In my duties as a Judcomm worker I ran into several female freshmen who were tentatively exploring dormitories Friday night and Saturday afternoon. When I asked them about sorority rush they professed to be uninterested in it. I also encountered male freshmen in the same position. People touring dormitories during this time get an unfairly incomplete picture, because dormitories are not really prepared to entertain freshmen.

An additional problem I have with sorority rush is in the happenings within it. While I was sitting in the the main lounge of my living group I watched one of my housemates enter the room wearing more than a normal amount of make up caked upon her face. This is a person I have never seen wearing make up before. When I questioned her she replied that it was mandatory for sorority rush.

I think it is sad that such falsification is part of one of the first activities to which many female freshmen are subjected to at MIT. We need to move sorority rush away from R/O, where it does not belong, and open

up more options on Friday night for female freshmen and freshmen who do not want single-sex housing.

Christa R. Ansbergs '98

Bender Column Missed Point of 6.915

In reference to the column by J. Ryan Bender, "Taking on God in Course VI" [Sept. 9], I recommend that anyone concerned about my course, 6.915, God and Computers, see the syllabus at <http://www.ai.mit.edu/people/annef/syllabus.html>.

The purpose of the course is to help artificial intelligence pursue its goal by making researchers aware of their unscientific biases. I personally think that religion is a worthwhile attempt to approach the world! I am just as convinced that religion has nothing to offer AI; since it does not deal with mechanistic explanations of humankind, it cannot offer any insights for the construction of intelligent machines. I am absolutely convinced that any religion — and it doesn't matter if it calls itself "Scientism," "Objectivism," "Lutheranism," "Judaism," "Buddhism," etc. — should be rejected as soon as it displays its theories in a fundamentalistic, dogmatic and absolutistic manner. I am finally convinced that the more clearly scientists recognize and try to eliminate the religious elements within their own research, the better their research will become; in this sense course 6.915 will support AI in reaching its goal to finally create a fully intelligent machine.

Finally, I would like to draw readers' attention to an associated public lecture series on "God and Computers," where a variety of atheists, agnostics, Buddhists, Christians and Jews will discuss the relationship between religion and cognitive science or computer science. Here, people will have the opportunity to discuss questions like the ones raised in Bender's column.

Anne Foerst
Postdoctoral Fellow

THIS MODERN WORLD

by TOM TOMORROW

SOMETIMES, WORKERS SEEM TO PUT CORPORATE AMERICA'S INTERESTS AHEAD OF THEIR OWN... IT'S REALLY SORT OF--WELL--PERVERSE...

GIVING YOU A RAISE COULD LEAD TO INFLATION! YOU'LL TAKE STAGNANT WAGES AND LIKE THEM, DOG!

YES, MASTER! WHATEVER YOU SAY!



IN FACT, I MIGHT EVEN HAVE TO DOWN-SIZE YOU-- JUST TO ENSURE THAT MY STOCK OPTIONS REMAIN VALUABLE! WHAT DO YOU SAY TO THAT, YOU MISERABLE WORM?

I'LL GLADLY SUBMIT TO YOUR WILL, SIR!



AND I DON'T WANT TO HEAR ANY WHINING ABOUT WELFARE CUTS, EITHER! I'M SICK AND TIRED OF BIG GOVERNMENT HANDOUTS TO SNIVELING, UNEMPLOYED LOSERS LIKE YOU!

IT'S TRULY A DISGRACE!



THEN AGAIN... PERHAPS I'LL ALLOW YOU TO KEEP WORKING FOR NOW -- BUT I COMMAND YOU TO STAY AWAY FROM THOSE UNION TYPES!

THEY WON'T TAKE CARE OF YOU THE WAY I DO!

I'LL NEVER LET THEM COME BETWEEN US, MASTER-- I PROMISE!



OH WELL! WHO ARE WE TO JUDGE WHAT GOES ON BETWEEN CONSENTING ADULTS...?

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Hearing Weld Out

The Nomination Debate Shifts From Personality to Process

Anders Hove

In a very real sense, Bill Weld's battle for the ambassadorship to Mexico was never about his qualifications for the office. First, it was a clash of personalities: the suave, intellectual Weld versus country bumpkin Helms. Second, it was an ideological skirmish over Weld's liberal stance on marijuana. Finally, the nomination represented a test of political stamina: Who would cry "uncle" first

— Bill or Jesse?

Just as prairie flames shift with the wind, so has the fight over Weld's nomination. The initial smoke of clashing personalities has begun to clear, and political analysts and pundits have begun to see that the fight transcends Weld, Helms, and even President Clinton. The nomination has become a struggle for basic due process in our national political institutions. Ours is said to be a government of laws, and the law says the president appoints ambassadors with the Senate's advice and consent. Custom has so twisted this guideline to the unacceptable point where federal officials serve at the whim of a single senator.

The Weld fight has been fraught with ups and downs. There was the initial happy announcement, which the local press met with everything from shock to mild derision. (One local television broadcast showed an animated jumbo jet carrying the governor to Mexico on its back.) Then came Helms' opposition, with its attendant alarm and confusion. Undeterred, our happy governor sallied forth against his newfound foe, only to be muzzled by an irate president. Then came Weld's dramatic departure from the statehouse, a moving event marred by continuing despondency among pundits as to the governor's daily odds.

This last week, however, the local press, which initially heaped scorn on Weld's every move, has switched to an entirely new tack. *The Boston Globe* has gone so far as to use feature-style news stories to highlight the historical egregiousness of Helms' position. Never before has one senator been allowed to so blatantly stand in the way of U.S. foreign policy.

Last Friday, at a committee hearing that was not a committee hearing, Helms struck back at the *Globe* and others who find his behavior uniquely despotic. Displaying charts listing hundreds of blocked nominations, Helms fairly begged his pursuers to cast the first stone.

Many are content to treat the Weld case as a political sideshow. Ambassadors are said to

be political appointees, pretty faces sent to appear at foreign photo opportunities and frequent meaningless diplomatic ceremonies.

This view is certainly true in many cases, and would be true in Weld's case as well had the nomination not taken on such symbolic value in the Mexican press. Foreign policy is not just a matter of cool deliberation among insulated organs of state. Foreign policy is often deeply embedded in the public feeling and popular will. In this sense, Weld has become a diplomat already; in the Mexican press, he is cheered as all that is good and friendly in America, whereas Helms is condemned as the prototypical Ugly American, a gringo whose only knowledge of Central America comes from Taco Bell.

Helms and the Republican leadership, however, are loath to admit that the nomination might have some importance beyond their retrospective views about Weld's support of medicinal marijuana. Friday, when Republican Senate Majority Leader Trent Lott called on Clinton to withdraw the nomination, he again called the appointment "political," and implied that dropping the nomination would improve relations with Mexico.

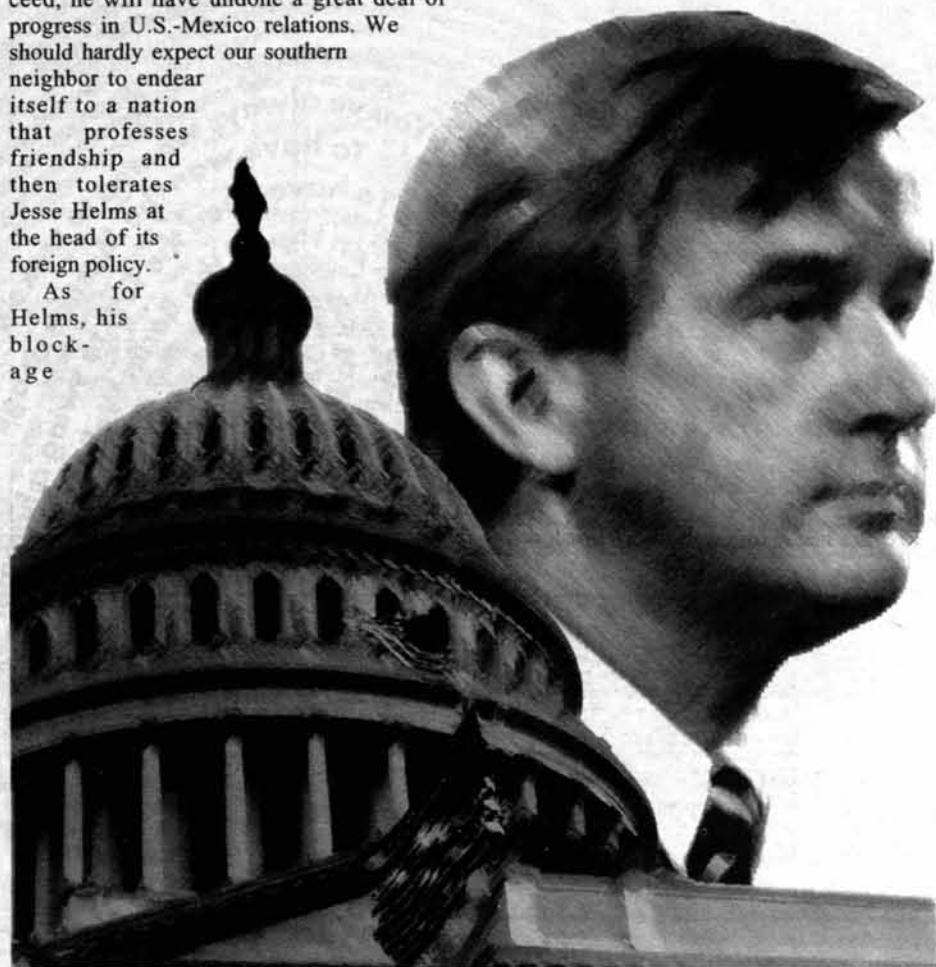
For Mexico, the Helms-Weld confrontation has symbolic meaning far beyond the ambassadorship. If Helms is allowed to succeed, he will have undone a great deal of progress in U.S.-Mexico relations. We should hardly expect our southern neighbor to endear itself to a nation that professes friendship and then tolerates Jesse Helms at the head of its foreign policy.

As for Helms, his blockage

sets a precedent not so much in terms of senatorial rules but in terms of the proper conduct of national government. As Weld himself put it after Friday's non-hearing, "It seems like the chairman [Helms] set up to prove that the United States Senate is a despotic institution."

Arcane rules that appear to stifle popular and presidential will are almost a senatorial tradition. The filibuster and senatorial privilege represent infamous pitfalls for majority rule in the body. Committee chairmen have played an even bigger role in stifling legislation, bottling up bills at leisure. In many cases, however, the Senate has successfully combated its worst excesses — for example, by reducing the number of votes needed to end debate.

Senator Helms' behavior has crossed the line of decorum to where the situation can no longer be shrugged off as obscure senatorial tradition. That Helms could find 154 cases where nominees were denied hearings does nothing to prove the rightness of his position. Instead, it serves to underline the systemic nature of the problem. The Senate should do itself and the people a favor. Overriding Helms now would go a long way toward giving the Senate back its now tarnished dignity.



Time, The Great Enemy

Guest Column
Seth Bisen-Hersh

"Time is of the essence," says an old proverb. And it's undeniably true. There is always stuff to do but never enough time to do it, and that's just plain annoying. If it weren't for restrictions on time, students could have it all — time to sleep, eat, do homework, and participate in all the activities one wants to do. Most importantly, of course, students would be left with plenty of time to party.

According to Webster's, time is "a continuous measurable quantity in which events occur in apparently irreversible order." Let's examine this definition. Continuous is it? I suppose so, although, it always seems as if the hours spent sleeping are skipped. Before one knows it, the alarm clock is ringing and it's morning again; that does not sound continuous to me. Measurable? That one seems fine in theory. But there always seems to be more time per hour during a calculus lecture than there is during an hour when you're checking e-mail. The final requirement for time is its "irreversible order." Well, until time machines become a reality, that one appears to be true for now.

There are only 24 hours in each day and seven days in each week. And that is just not enough. Wouldn't it be nice if we could vote to extend each day by an hour or two and add a day to the week? Unfortunately, even

*It seems very unfair:
Here we're the
brightest people
in the country,
and we can't do
everything we want to do
because of a silly,
insignificant factor
called time.*

if we added more time, there still would not be enough of it. As my former English teacher once said about assignments, if one's given a week, one will take a week and if one's given a month, one will take a month. Although I'd like to fantasize about extra time, it would backfire; with more time, there would be more stuff to do. The amount of stuff to do is therefore obviously proportional to the lack of time one has to do it in.

Here at MIT, also known as "Majorly Impaired Time," there is never enough time for anything. How many activities can one do? Everything meets at the same time, which brings up another favorite concept, conflict. A conflict is when more than one thing goes on at the same time, and one cannot do both. This is because splitting oneself in half is not possible; perhaps cloning will eventually alleviate this problem. There's a similar problem with classes meeting at the same times. And of course homework from these classes seems to always take more time per week than they originally tell you that it will take. So between extraneous homework to do and tons of activities to get involved in, an MIT student's time is seriously impaired. It seems very unfair: Here we're the brightest people in the country, and we can't do everything we want to do because of a silly, insignificant factor called time.

What is the solution to this problem of time? Some people would point to time management as a solution, but does time management really work? Say I leave myself exactly 4.5 minutes to do each physics problem: if I find I need more time than what I allotted, it could screw up my entire schedule for weeks. Another solution is to concentrate completely on school work and forget about activities, but then again our high school activities are part of what got us in to MIT in the first place.

At MIT, time is the ultimate enemy. We fight our watches. Unfortunately, it is a race that is hard to win.

Seth Bisen-Hersh is a member of the Class of 2001.

Around the World In Ten Minutes

Guest Column
Andrew J. Kim

Originally, I intended to base this column upon the ranking of colleges that the *U.S. News & World Report* puts out year after year. I saw it as an excellent chance to dismiss the rankings and the methodology used by the magazine, and then go on and criticize all the low quality journalism used by many of the weekly news magazines such as *Time* and *Newsweek*.

I mentioned this idea to an upperclassman at dinner one night, and he simply responded, "That's silly."

"What's silly, the rankings or the column?" I asked.

"Both," he said. "The column is silly because you're writing about a topic and a magazine that are worthless."

I spent the rest of the night trying to qualify that assessment, but I finally realized in the morning that I actually like and read these magazines. Sure, they've made plenty of mistakes over the years. *Time* got in trouble several years back for altering the cover picture of O.J. Simpson. *Newsweek* columnist Joe Klein, anonymous author of *Primary Colors*, lied when asked point blank on his authorship, causing people to doubt his journalistic credibility. Military men I know always say that articles on the armed forces are misleading, and I've even noticed that *Time* and *Newsweek* have articles in the culture sections on the same topics with identical pictures on

frequent occasions. I also find it quite humorous that a magazine like *Time*, which only seems to care on a weekly basis, actually has the nerve to anoint a "Man of the Year" every December.

This brief case history is all the fuel that critics of these magazines need. The critics tend to be those who feel that the only quality journalism left on newsstands today are the likes of *The New Yorker* and *Scientific American*. I admit that the caliber of these magazines is far beyond that of *Time*, *Newsweek*, and *U.S. News*, but in my mind, there are some crucial points that are overlooked. *The New Yorker* and *Scientific American* are flat out boring and require great amounts of time to actually read and digest.

With the tremendous time crunch that MIT puts on us students, I don't know how anyone has enough time to block out a solid hour or more on a weekday evening to sit down and read *The Atlantic Monthly* cover to cover. For people like me who struggle to finish even the easiest of problem sets, it's inconceivable to give up that much time.

This is where *Time* and *Newsweek* actually play a decent role in my frenzied existence. I'll come home after a day of classes, and see someone else's issue of *Time* tucked in their mailbox. I take the magazine and flip through it for about ten minutes. During that short period, I manage to catch up on world events, national news, and what's happening on the national movie and music scene. For instance, only by reading *Time* did I find out the details of Princess Di's tragic death. Last Tuesday, I

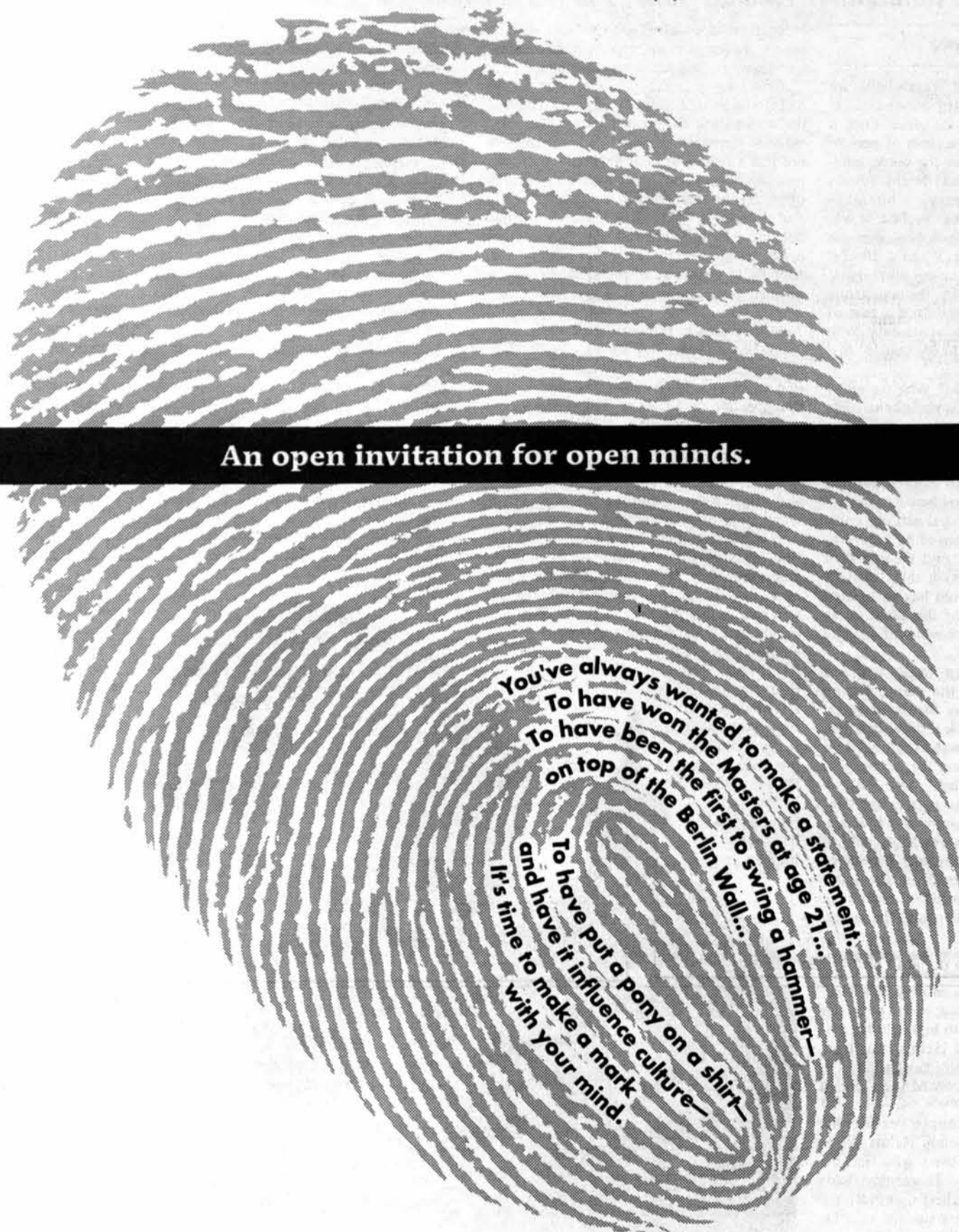
once again borrowed a copy of *Time* and it happened to be the commemorative issue on Princess Di. I thumbed through half of it before I learned that Mother Theresa had also passed away the previous week. This discovery greatly shook me with the realization that I probably would have gone the rest of the year without knowing that she had passed away.

On a lighter note, an upperclassman had told me the week before that MTV's video of the year was "Virtual Insanity." This week's regular issue contained an article on music video directors, including the one who choreographed the award-winning video. I spent a little more time skimming through this article, and I was able to pick up that these directors had had no hit videos until this year. That information is quite useless in the big scheme of the world, but it's a little fact that I consider nice to know and even a little uplifting. "Quality" magazines wouldn't bother writing about such trivial matters, but in my meager position in life, that's the kind of information that interests me.

Weekly news magazines take a lot of unfair criticism. They play an important role in the lives of busy people. Granted, the articles in these magazines are not as eloquent or refined as those found in classier magazines aimed for the educated, but they keep us informed without testing our short attention span or draining the limited resources of our brains.

Andrew J. Kim is a member of the Class of 2001.

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Java's Out in 6.001, Welcomed in 6.170

By Steve Lim

This semester, Structure and Interpretation of Computer Programs (6.001) has returned to Scheme as the sole instructional language, while Laboratory in Software Engineering (6.170) is being offered in Java for the first time.

Experimental changes in 6.001 will affect the presentation of object-oriented programming. The new presentation will use object-oriented code entirely in Scheme, the standard language for 6.001.

"We're not changing Scheme, but are revising the problem sets on the object-oriented programming and using a new, more polished and clear, implementation of the Scheme OOP system," said Professor of Electrical Engineering and Computer Science Albert R. Meyer, the lecturer for 6.001.

Last year, some concerns were raised about the experimental use of Java in 6.001. Students who didn't have a computer with Microsoft Windows had to share resources to use Microsoft J++, he said.

Java will not be used this term and perhaps not at all this year.

Meyer said. This year, 6.001 students should be able to do all their work with Scheme in Windows, on Athena, or in the 6.001 lab, he said.

The presentation of inheritance and classes has been modernized to reflect new developments in computer languages, said Professor of Electrical Engineering and Computer Science Rodney Brooks. "The semantics correspond very well with Java," he said.

Abstraction still deemed important

Also, others wondered if the integration of Java would mean that 6.001 would not remain as a course to teach abstract programming concepts which could be applied towards many languages, Meyer said.

"The goal of 6.001 has never wavered from teaching programming concepts rather than any particular language," he said.

"We continue to believe that the most important programming concepts, which center around abstraction and modularity as a means to

Java, Page 12



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Fresh Flavors of Asia

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Workhorse Classrooms Get Computers, Projectors

Construction, from Page 1

head projector," Callahan said.

Student, faculty opinion included

Members of the faculty were actively involved in deciding how to renovate the out-of-date classrooms. Professor of Materials Science and Engineering Donald R. Sadoway, Assistant Professor of Chemistry Bruce Tidor, and Professor of Mathematics David A. Vogan PhD '76 were part of the design team, Callahan said.

Students were also consulted as to what renovations would be the most useful to their classroom experience.

Students who were taking classes in Building 56, in which renovations were completed last semester, were polled about the furniture in the classrooms. The design team was interested in using the same type of furniture in Building 2, Callahan said.

In addition, other student and faculty concerns were addressed in the renovations. "A student came to us asking for voice amplification, and this was also something we had heard from one of our faculty members, so that feature has been incorporated into the rooms," Callahan said.

The Registrar's Office will be running training programs for interested faculty on how to take advantage of the updated facilities, as well as to help faculty learn about the possibilities that technology might bring to their teaching,

she said.

"I think the new Building 2 classrooms are terrific," said Professor of Urban Studies and Planning Lawrence E. Bacow '73, a former chair of the faculty. "When I was a freshman in 1969, my 18.02 recitation was taught in one of these rooms. The room was in need of work back then, and had not changed at all until the renovations began this summer."

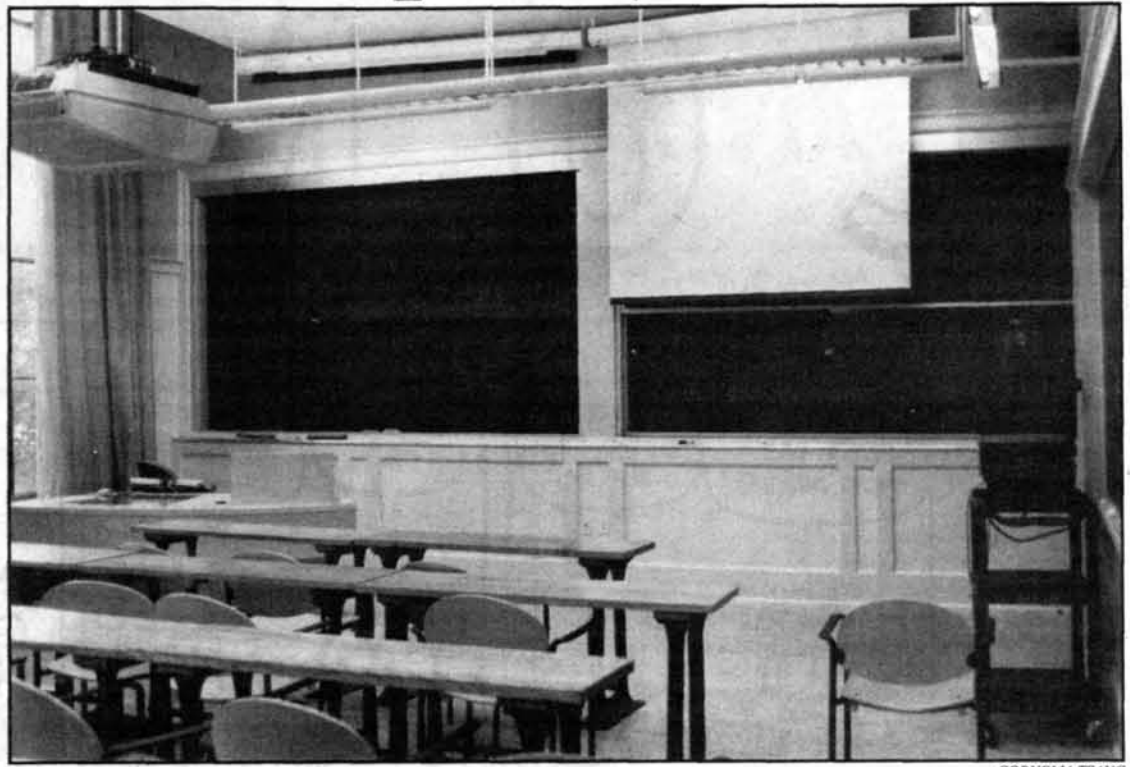
Classes make use of new features

One class which relies heavily this semester on the new features placed in the recently renovated classrooms is Introduction to Linear Algebra (18.06). The 11 recitation sections for 18.06 are held in the new computer classrooms, 2-131 and 2-132.

"The computer in each of these rooms is an Athena workstation, with a monitor whose display can be projected onto a large screen for everyone to see," said Visiting Professor of Mathematics Steven L. Lee, a lecturer for 18.06.

During recitation, the instructors use Matlab computer software projected onto an overhead display to help teach new concepts, build intuition, test conjectures, or solve some of the time-consuming subproblems that may arise, Lee said.

"I think this method of teaching, especially in the setting of small



CORNELIA TSANG

A recent face-lift of classrooms in Building 2 has added new furniture and audio-visual facilities.

recitation groups, is a valuable way to complement what students learn from the lectures, textbook, and problems sets," Lee said.

More buildings await renovation

Similar renovations are planned

for selected classrooms in buildings 1, 3, and 5, Callahan said.

"The Building 2 classroom renovations mark a commitment on the Institute's part to respond to one of the faculty's and students' primary concerns, which is the necessity of

excellent teaching facilities," she said.

"I am delighted that the Provost has committed to renovating all the remaining workhorse classrooms in the main building," Bacow said.

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COMICS

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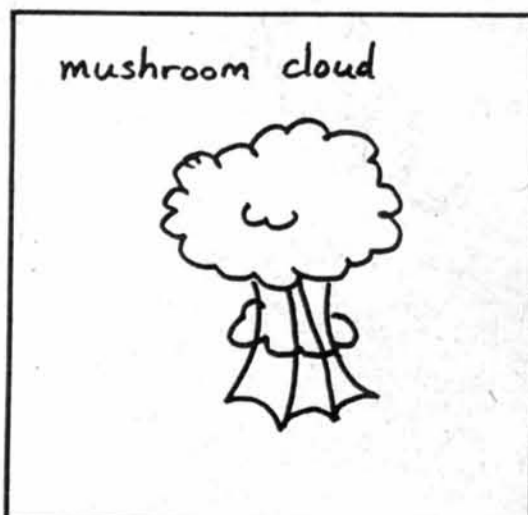
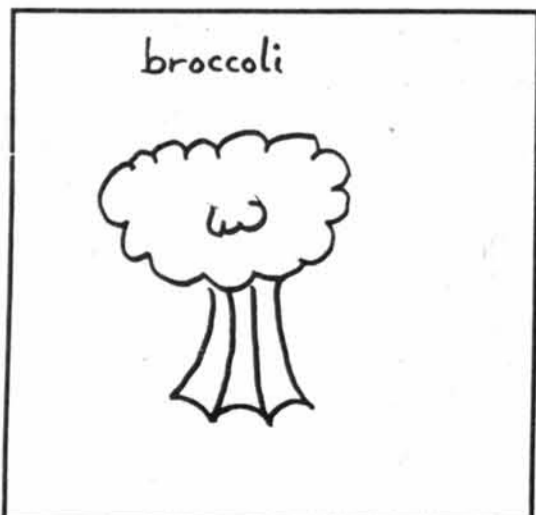
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THE STORY SO FAR: In France, Cupid meets Mr. G, the man who hired him to kill Rhino-Man for his head. Cupid reveals that Rhino-Man is alive, albeit drugged and unconscious, because the burns he suffered made him imperfect as a trophy.

by Zachary Emig



Noun Poetry
by Katy-Cat



Next Issue: Things get rough.

F U N

THE TECH PAGE 11

CONNER TRIVIA ?

Last Words

by Scott Adams

"I've had eighteen straight whiskeys. I think this is the record."

These words were not spoken by a college student, but rather by the Welsh poet Dylan Thomas. They were the last words he spoke, as he promptly fell into a coma and died of alcohol poisoning on November 9, 1953.

What Union general's last words were "Why are you dodging? They couldn't hit an elephant at this dist-?"

This week's winners will each win two LSC movie tickets, two sodas, and one large tub of popcorn.

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Batman and Robin/Hercules

Send your answer to trivia@the-tech.mit.edu by 3 p.m. Wednesday. Two random drawings from all of the correct entries will be held to determine this week's two winners.

This feature was brought to you by the CAC Program Board. Today's factoids are by the MIT Quiz Bowl team. Members of the quiz bowl team are not eligible.

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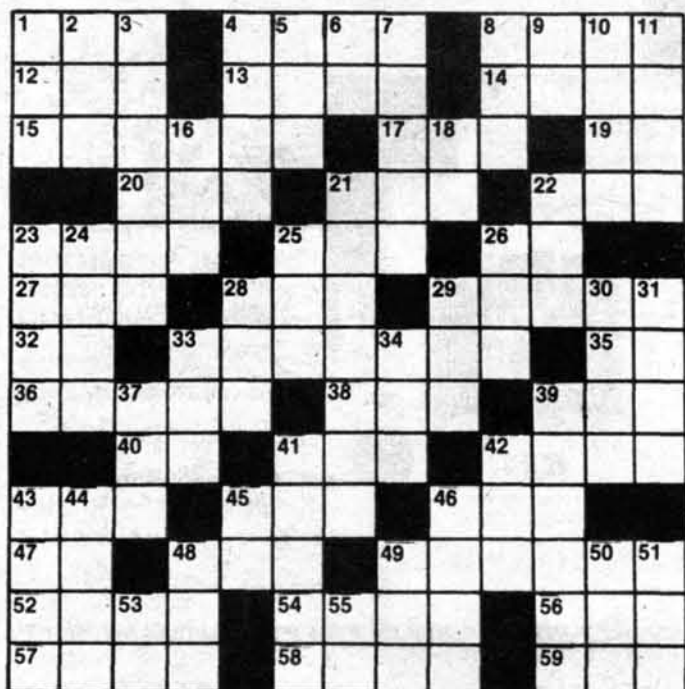
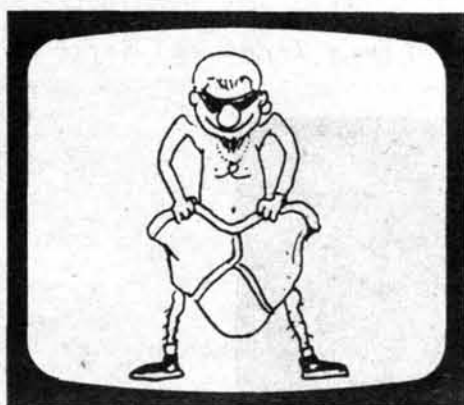
tumbleweed garden pawan sinha

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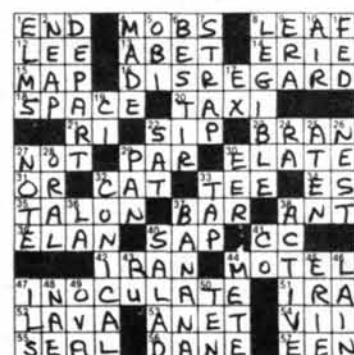
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 4. Pipe
 8. Battle vehicle
 12. Eggs
 13. — Johnson
 14. Medicinal plant
 15. Book of memories
 17. Skin disease
 19. Verb
 20. Ban
 21. Preposition
 22. Snake
 23. Absent soldier (abbr.)
 25. Place
 26. Article
 27. Bounder
 28. Play on words
 29. Make one
 32. NW state (abbr.)
 33. Freedom
 35. News gatherers (abbr.)
 36. Devil
 38. Fish eggs
 39. Mined mineral
 40. Part of Bible (abbr.)
 41. Feline
 42. Music
 43. Chasm
 45. Friend
 46. Day (abbr.)
 47. Near
 48. He
 49. Chaos
 52. Horse gait
 54. Other; different
 56. Winglike
 57. Top
 58. At the head
 59. Damp
- DOWN
1. Mother
 2. Avenue (abbr.)
 3. Push through
 4. Ambush
 5. Make a mistake
 6. Time zone (abbr.)
 7. Station
 8. Levy
 9. — Jolson
 10. Door openers
 11. Keep
 16. Grease
 18. Either
 21. Burial
 22. Black bird
 23. Sharp attitude
 24. Walk in water
 25. Saloon (Brit.)
 26. Some
 28. Peg
 29. Utah Indian
 33. Empty property
 34. Decay
 37. Scrub floor
 39. Habitual criminal
 41. Desert animal
 42. Small boy
 43. Festival
 44. On top
 45. 16th Greek letter
 46. Sow
 48. Jinx
 49. Boy's group (abbr.)
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PUZZLE SOLUTIONS FROM LAST ISSUE



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6.170 To Be Taught With Java This Year

Java, from Page 7

manage program complexity, are more clearly illustrated in Scheme than most other languages, which is why we use it," Meyer said.

The class continues to be improved as weak areas of the Scheme language are refined and new programming trends are addressed, he said.

6.170 to feature Java instead

While 6.001 will be taught sans Java this semester, 6.170 is utilizing the language this term, said Professor of Electrical Engineering and Computer Science Barbara H. Liskov, who is teaching the course.

The new language seems to be working out fine, she said.

"There's been a desire to move 6.270 to a language that people will actually use on the outside," Liskov said. The course was moved into Java because the language has fairly

clear mechanisms that correspond with the concepts taught in the course, she said.

These features include "complete compile-time type checking and garbage collection make it easier to explain concepts."

However, the version of Java used in 6.170, PolyJava, will not be usable on PCs, Liskov said.

"That translator doesn't run on the PCs yet," she said.

In the spring, there should be version that runs in any environment, to make it easier, Liskov said. We would "like to let students who have their own PCs be able to do at least portions of the problem set at home."

In the past, 6.170 has been taught in a variety of languages. Last fall, the course was in C++, and in the spring, it was taught in Clu.

Jennifer Lane contributed to the reporting of this story.

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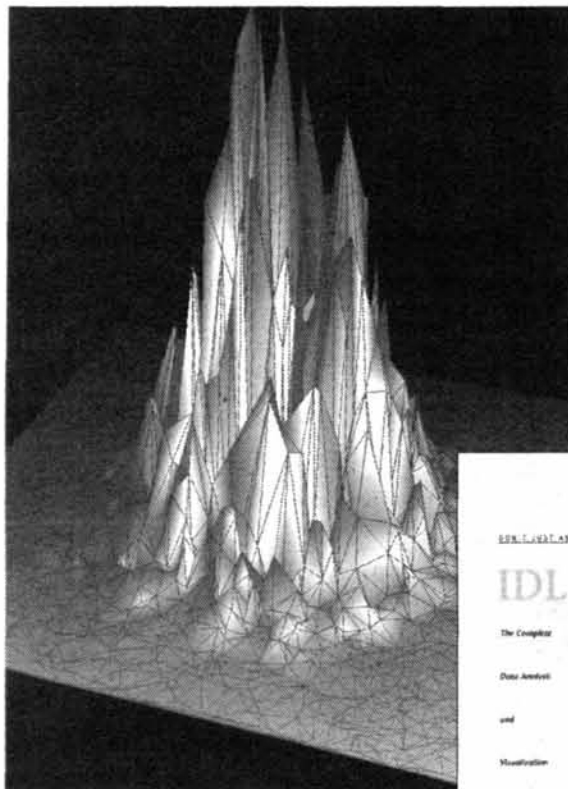
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Made by Hong Kong

a China Forum

Co-sponsored by the MIT International Science and Technology Initiative
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The term "Made by Hong Kong" describes the production network that Hong Kong industry has extended into China and elsewhere in the region. This Forum will be a presentation by the interdisciplinary team of MIT researchers who investigated questions of Hong Kong's industrial future in a year long study of Hong Kong industry from the micro to the macro level.

Presenting researchers include: Suzanne Berger and Richard Lester (Researchers and Editors), Andrew Bernard (Finance), James Leung (Biotechnology), Victor Zue and Helen Meng (Information Technology) and Rafael Reif and Charles Sodini (Electronics).

Does industry have a future in Hong Kong's high wage society? All those interested in industry in Hong Kong and China should attend this presentation of this provocative and pioneering report.

Location: MIT Bldg. E38, 292 Main St., 7th flr. conference room (next to the Kendall/MIT (T) stop, above the MIT Press Bookstore). Friday, September 19, 1997. 2:00-4:00pm. The Forum is free and open to the public.

Questions? Call Scott @ 253-7731 or email china@mit.edu.

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AXAF Control Center Will Find Cambridge to Be A Fitting Home

NASA, from Page 1

For most of that time, the staff will consist of only two engineers, Twambly said. "We should be able to handle it."

The OCC is housed in space which SAO rents from Draper Laboratory.

Cambridge site offers advantages

Choosing Cambridge as the site for the center has added historical significance, which Goldin outlined during his address.

"Cambridge was the birthplace of X-ray astronomy on planet Earth," Goldin said.

In 1962, Riccardo Giacconi, working for a Massachusetts research firm, and then-Professor of Physics Bruno Rossi discovered SCO X-1, the first known X-ray source outside the solar system.

The discovery came despite intense skepticism at the time about the existence of X-ray sources. The expectation at the time was that Giacconi and Rossi's probes would "pick up absolutely nothing," Goldin said.

Instead, their discovery changed "our understanding of the universe," Goldin said.

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With the advent of AXAF, state-of-the-art X-ray astronomy will return to Cambridge and "find a home at Hampshire Street," wrote Senator John F. Kerry in a letter which Goldin read at the ceremony.

The support of Senator John F. Kerry "went a long, long way towards getting the program started," Goldin said. The senator had intended to be at the opening ceremony, but was retained in Washington by hearings of the Senate Foreign Relations Committee.

Placing the control center in

Cambridge, at a research institution and away from a major NASA site brought unique challenges.

For instance, the engineers staffing the center will need to be able to do a significant amount of troubleshooting on their own. They "can't go next door to someone who's been doing flight dynamics for 10 years," Twambly said.

Consequently, a significant amount of human engineering was factored into the systems that engineers staffing the center will use. We tried to present "data points coming from the spacecraft in a way sensible to the engineer," said Myles Walton G who has been working since June on the interface.

AXAF gathers important data

AXAF itself is "crucial to the understanding of the universe," Goldin said. "It's an amazing machine."

With it, scientists will be able to glean more information on the age of the universe and the building blocks of stars. They will be able to investigate black holes, exploding stars, and colliding galaxies.

"Some discoveries will build on what we know, and others will turn everything we know upside-down," he said.

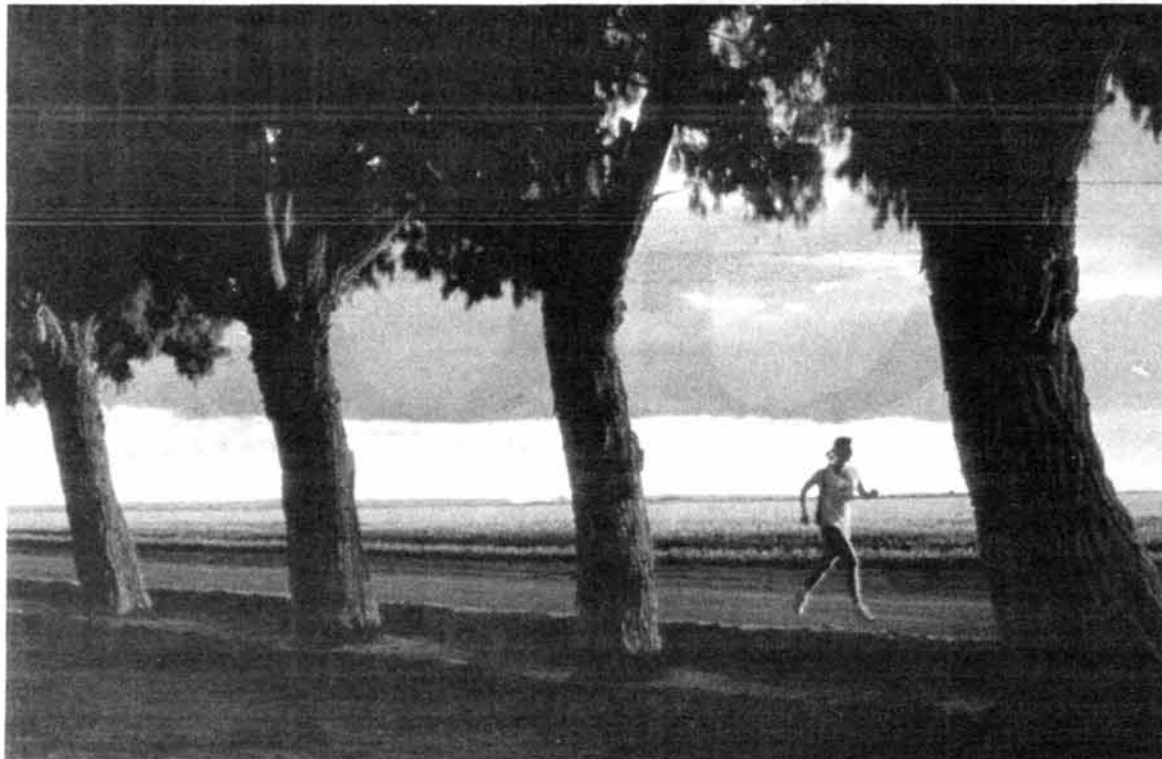
Once AXAF is launched, it will take its place with Hubble Space Telescope and Compton Gamma Ray Observatory as part of NASA's fleet of great observatories.

The staff of the ASC includes scientists, engineers and technicians from SAO, MIT, and AXAF prime contractor TRW, who have been directly involved with the design, construction and testing of the telescope and its scientific instruments.

SAO is a research institute of the Smithsonian Institution based in Cambridge, where it is joined with the Harvard College Observatory to form the Center for Astrophysics.

The SAO is the site of the AXAF Science Center, which will receive, analyze, and archive observational data from the spacecraft. SAO scientists were also responsible for the design and fabrication of AXAF's special X-ray-focusing mirrors and one of its primary imaging instruments, the High Resolution Camera.

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Widnall's Devotion To Academia Hailed

Widnall, from Page 1

coming back" and being able to "interact with students," she said.

In a letter to Secretary of Defense William S. Cohen, Widnall said she was departing to teach and to perform "duties in the senior administration of MIT."

"We are expecting Dr. Widnall to return to the MIT faculty and have discussed a variety of possible leadership roles with her," said President Charles M. Vest in a statement. "No firm plans have been made at this time."

Widnall said she is prepared to assume any administrative position that Vest deems appropriate. However, because a conflict of interest exists due to her role in the military, Widnall will not be able to work to implement the modified Reserve Officer Training Corps program. The ROTC has come under fire recently for procedures barring openly homosexual individuals from full participation in the program. This conflicts with the Institute's policy of non-discrimination.

Love for academia applauded

Government officials and MIT community members alike say they respect Widnall's decision to leave her government post.

"I can appreciate your desire to return to the challenging world of academia at MIT," Cohen said in his response to Widnall's letter of resignation.

"She decided to come back to MIT, which shows she has a real love for academic life and the Institute," said Edward F. Crawley, professor of aeronautics and astro-

nautics and head of the department.

While Widnall could have taken a senior position in government or industry, she instead decided to return to MIT, a reflection of her enthusiasm, Crawley said. "I think [her return] will be fabulous for the Institute."

Widnall is vocal about her commitment to academia, and specifically the Institute. "I've enjoyed my time at MIT and my opportunity to make contributions," she said. "MIT is my home."

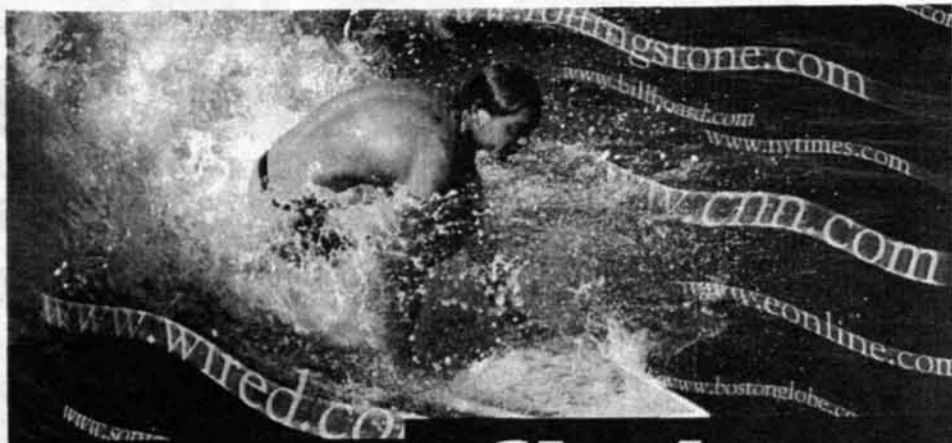
Recognized for achievements

After receiving her doctorate in Aeronautics and Astronautics from MIT, Widnall held many positions, most recently serving as a professor of aeronautics and astronautics and as an associate provost. In her own words, Widnall has spent her "entire adult life at MIT."

Widnall was involved heavily in student affairs and academic integrity at the Institute. After serving as the chair of the Committee on Discipline during the Introduction to Computers and Engineering Problem Solving (1.00) cheating scandal of 1990 ["COD Rules on 1.00 Students," Feb. 5, 1991], she called for an honor code for students.

Internationally, Widnall is well-known for her expertise in fluid dynamics, specifically in the areas of aircraft turbulence and vortices created by helicopters. She also holds two patents, one of which is on an aerodynamic device for either water or air vehicles.

Widnall was the first female to serve as the chair of the faculty at MIT and the first female secretary of the Air Force.



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toilet, the shower and the sink you can use up to 55 gallons a day.

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you're shaving. And just because your shower sounds like an opera hall, don't feel the need to sing one. Shorter songs make for shorter showers. And for the biggest culprit of them all, the toilet, try putting a weighted jug in the tank. It will help save water every time you flush. Plus, don't forget to turn out the lights when you leave. You'll be helping to conserve electricity.

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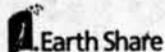
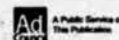
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Larger Classes Create Logistical Problems

Classes, from Page 1

that covered the first semester material in six weeks (18.01A), approximately thirty students took 18.014. Between 1992 and 1994, approximately forty-five students took 18.014 each year.

"The mathematics classes here usually fluctuate," Jonsson said. "Comparing statistics of two consecutive years says nothing, because of the variation."

"Class size depends more on what students have been saying to each other," she said.

Large 8.012 class causes problems

Last September, there were 140 students in 8.012. By the end of the semester, 90 remained. Most of the fifty who dropped elected to take 8.01, and dropped within the first few weeks. This year, the enrollment began at 190, and increased to 204 by the second week.

The physics department scheduled their original five recitations based on previous years. Kleppner began the first 8.012 lecture by a survey of students' free time. Based on these numbers, three more recitations were scheduled.

The average class size then

became approximately twenty-five. Eighteen is ideal size for the recitations, and 20 is the nominal number, Kleppner said.

One of those recitations had to be cancelled, as the same professor had been scheduled to teach both at the same time. Kleppner hopes to schedule yet another recitation.

To make up for the lack of recitation professors, the physics department hired graduate and post-doctoral students. "These students are advanced," Kleppner said. "I'm quite comfortable with them doing the job," he said.

Textbooks in short supply

The MIT Coop stocked too few 8.012 and 18.014 textbooks. Along with classroom handouts, Kleppner made available copies of the first chapter of the textbook.

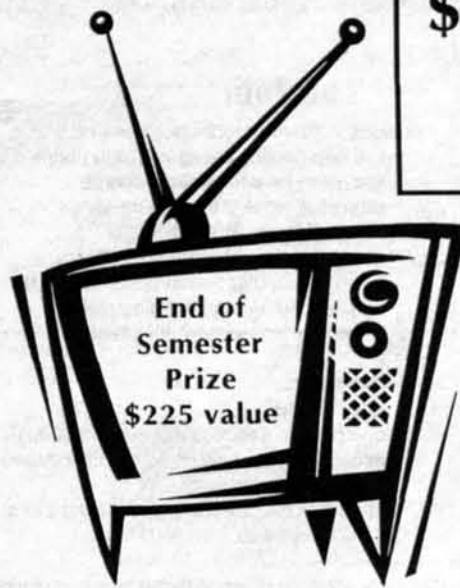
By the first day of 18.014, 12 students out of 51 had not been able to purchase textbooks. The first problem set had assigned several textbook problems.

To ameliorate this situation, Professor Haynes Miller distributed copies of the first chapter during lecture. Not until last Thursday did the first of the 12 students buy the textbook.

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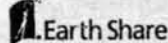
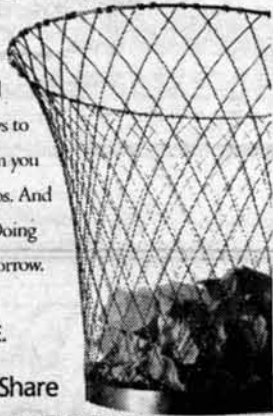
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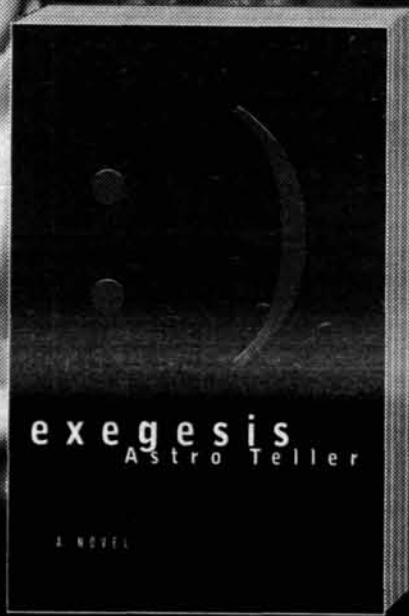
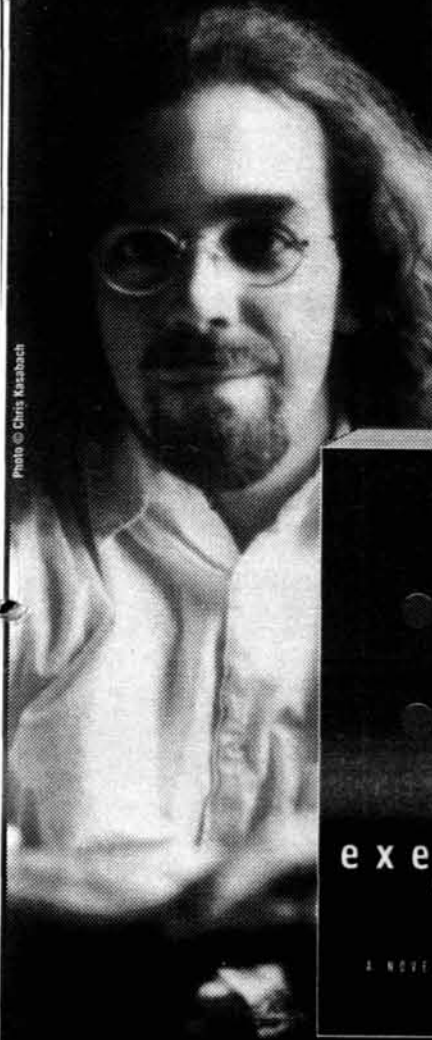


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Photo © Chris Marabach



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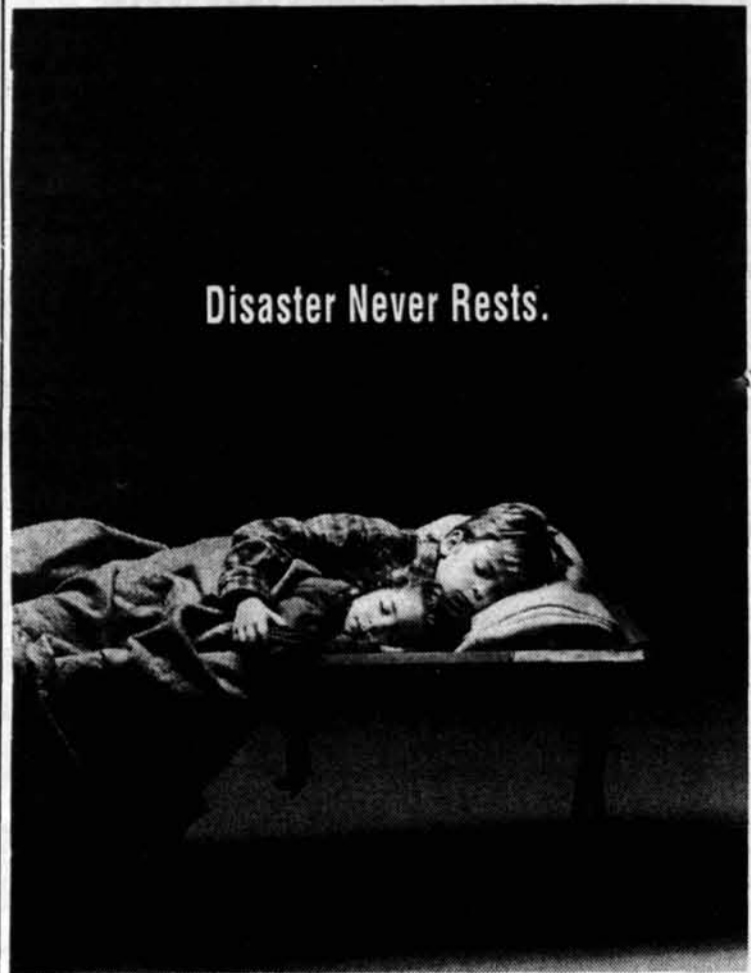
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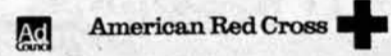
- 1.) Your name, contact info (phone numbers, address, etc.), and date of graduation.
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Direct any questions to Alicia Allen, helpsuper@mit.edu



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POLICE LOG

The following incidents were reported to the Campus Police between Sept. 2 and 11:

Sept. 2: New House, harassing phone calls; Bldg. E52, 1) suspicious activity, 2) bicycle stolen, \$100; Bldg. E39, annoying mail; Briggs field, waist pack containing wallet stolen, \$90; Bldg. E17, unauthorized use of telephone; Bldg. 1, male juvenile arrested for trespassing.

Sept. 3: Burton-Conner House, bike stolen, \$1,300; Johnson Athletics Center, unauthorized use of facilities.

Sept. 4: Bldg. E53, area broken into and \$70 cash stolen; MacGregor House, backpack stolen, \$30; Ashdown House, bicycle stolen, \$188; Burton, bike seat stolen, \$40; main parking lot, malicious damage to vehicle.

Sept. 5: Zeta Psi, wallet stolen; Ashdown, attempted larceny of bicycle; McCormick Hall, ring stolen, later recovered.

Sept. 6: Edgerton House, noise complaint; Bldg. E18, wire stolen, \$1,000; Student Center, wallet stolen when person fell asleep, \$200; New House, wallet stolen and credit cards used; Student Center, attempted larceny of radio.

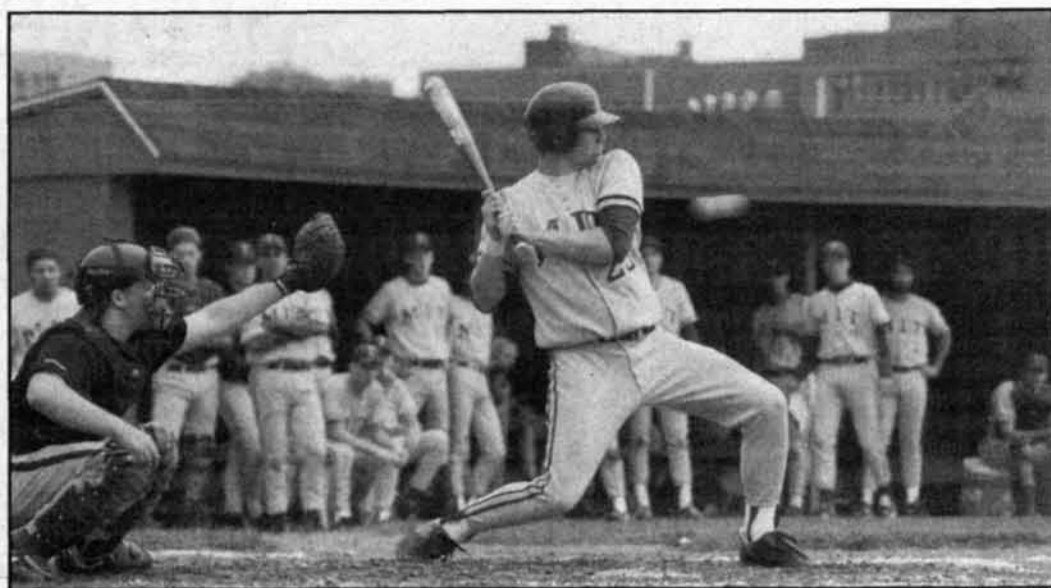
Sept. 7: Student Center, bicycle tire stolen, \$50; Hayden Library, 1) suspicious activity, 2) change stolen, \$0.50, 3) change stolen, \$3.

Sept. 8: Bldg. 5, suspicious activity; Theta Delta Chi, bike stolen, \$500; Bldg. E10, table stolen, \$175; Bldg. 10, wallet stolen, \$50; Bldg. 54, suspicious person; MacGregor, TV stolen, \$349; Bldg. E38, indecent exposure.

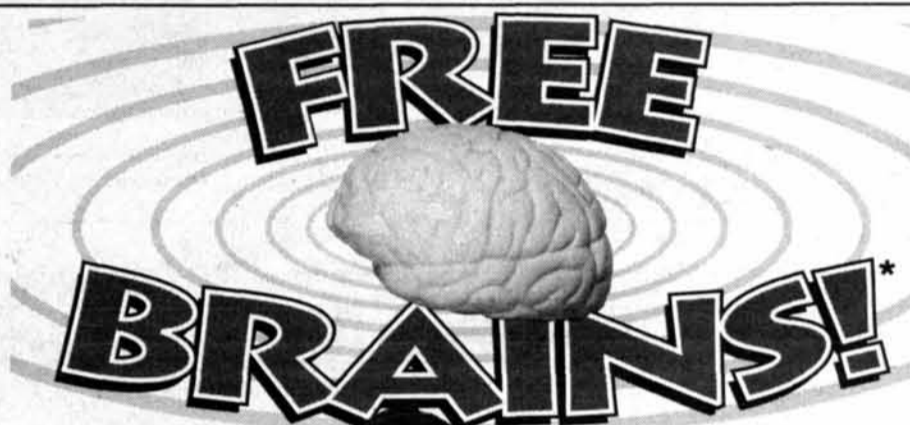
Sept. 9: Bldg. 18, 1) jacket stolen, \$150, 2) sweatshirt stolen, \$30; Bldg. 33, pocketbook stolen, \$210; Bexley Hall, tools stolen, \$195; TDC, bike stolen, \$300.

Sept. 10: Bldg. 14 bike rack, bike stolen, \$550; Bexley, musical instrument stolen, \$2,560; Bldg. N52, suspicious activity.

Sept. 11: Bldg. 68, backpack stolen, \$1,500; Bldg. 4, unauthorized use of computer; Bldg. 20, suspicious activity; East garage, malicious damage to vehicle.



Peter Gustafson '99 hits a line drive in Saturday's first game against Babson College. MIT won both games of the doubleheader 3-0 and 5-3.



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SPORTS

Women's Volleyball Defeats Tufts 3-1

By Paul Dill
TEAM COACH

The women's volleyball team opened its season with a big win over Tufts University last Tuesday. Although Tufts was heavily favored with the number five ranking in New England, MIT was able to win the match 3-1, which should propel them into the top eight in New England.

Tufts was one of the teams from the Northeast division to make it to the NCAA Division III Nationals last year.

After a slow start, down 13-2 in the first game, MIT was able to come back and score 10 straight points due to great serving and scrappy defense. Tufts was able to close out the first game 15-12, but the momentum had definitely shifted in MIT's favor.

Led by setter Alarice Huang '00 who had 39 assists on the night, the

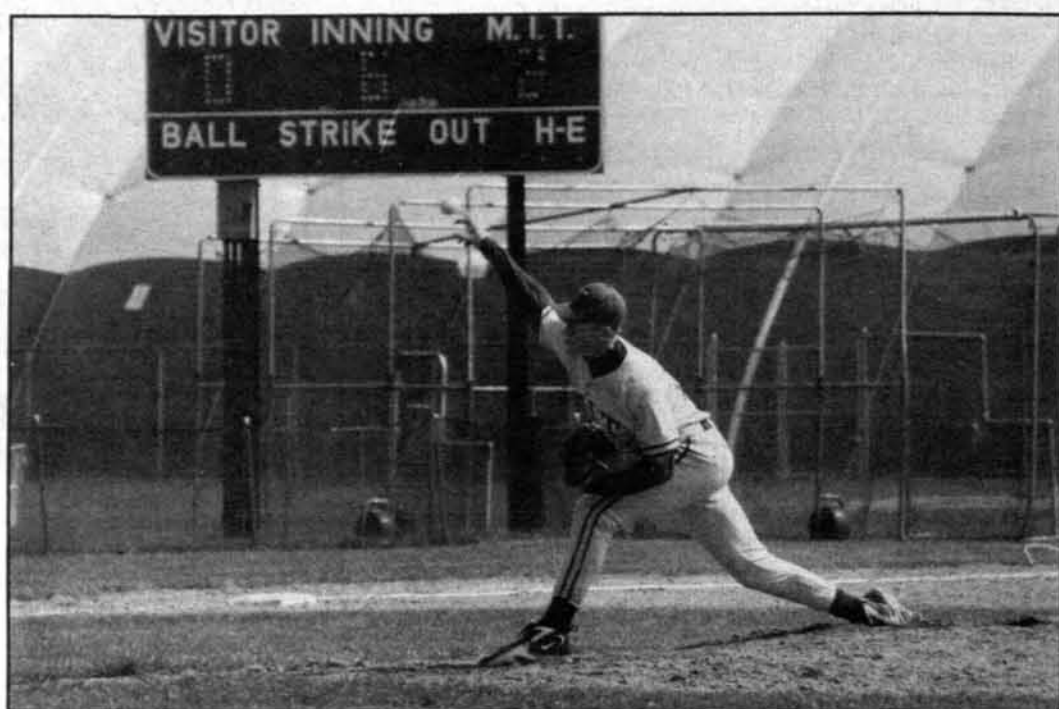
Engineers were able to take the next two games 15-10, 15-12.

The fourth game was hardly a challenge as outside hitter Jill Eich '00 and middle hitter Betsy Sailhamer '99 dominated the game with kill after kill leading to a 15-3 romp. Eich and Sailhamer ended the night with 12 and 15 kills respectively.

Sailhamer said that defeating Tufts was something that the team has strived for and that they "worked together as a team well."

"We started off slow, but we gained a lot of energy and momentum and carried that over into the next three games" to win the match, Sailhamer said.

The next match for the team is tomorrow, against second-ranked Springfield College. The match will be in Dupont Gymnasium at 7 p.m. On Saturday, the Engineers will take on Smith College at 1 p.m.



Jason Szuminski '00 pitches for MIT in the first game against Babson College on Saturday afternoon. MIT won both games in the doubleheader 3-0 and 5-3.

UPCOMING HOME EVENTS

Tuesday, Sept. 16

Women's Soccer vs. Emmanuel College, 4:30 p.m.
Field Hockey vs. Simmons College, 7 p.m.

Wednesday, Sept. 17

Men's Soccer vs. the University of Massachusetts - Boston, 4 p.m.
Women's Volleyball vs. Springfield College, 7 p.m.

Thursday, Sept. 18

Women's Soccer vs. Simmons College, 4 p.m.
Field Hockey vs. Gordon College, 7 p.m.
Men's Water Polo vs. Boston College, 7 p.m.

Men's Ultimate Concludes Season With Strong Showing in Tourney

By Mike T. Lee

TEAM MEMBER

The men's club ultimate team capped off the fall tournament season last weekend with an impressive second place finish at the Syracuse Ultimate Tournament. Though the team was initially seeded poorly, solid play from all team members took MIT to the finals of the ten-team tournament.

On Saturday, the MIT team battled through pool play against Syracuse University B, the State University of New York at Albany, Penn State University, and the Cornell Krusties, a Cornell alumni team.

The first game of the day pitted MIT against Syracuse B, which ended in a 13-0 romp. This game was the first shutout by an MIT Ultimate team in two years. With similar efficiency, MIT beat Albany 13-4, highlighted by a foot block by Jeremy Lueck '99 on the MIT goal

line which set up the game winning goal.

After a tough loss against the tournament champions, the Cornell Krusties, MIT again triumphed in the last game of the day against Penn State. Aaron Julin '98 skied three defenders simultaneously on a hanging forehand from Leon Hsu G for a score to help MIT crush PSU 13-6.

MIT ended the day 3-1 and headed into the second day with a second place finish in pool play.

On Sunday, MIT faced a tough Cornell Buds team in the quarter finals. After finishing the half on top 7-5, MIT's defense kicked into high gear and shut out Cornell in the second half to take the game 15-5 on a push pass to Keith Randall G in the endzone.

This milestone game served as the first time in recent history that MIT has defeated a Cornell Ultimate team.

The semifinal game for MIT against the hometown favorites,

Syracuse (Scooby Doom), proved to be the most exciting game of the tournament with multiple lay-outs from both teams. Level-headed zone offense led by Ajit Sarnak '98 and Thad Matuszeski '99 kept the score close. At halftime, the score was 8-6.

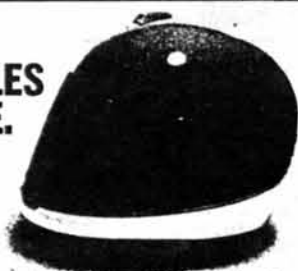
After the half, MIT went on a 6-2 run led by some intense offense by newcomer Todd Haugsjaa and lay-out defenses by Rich White G and Alex Lian '98.

The finals placed MIT in a position to fight the Cornell Krusties again, and after a hard fought battle in the rain, the Cornell alumni proved their greater experience with a triumph over MIT 13-5.

MIT finished with a 5-2 record, and went undefeated against college teams. Some bright new players showed their potential in the tournament, with freshmen Dan Roth '01 and Hunter Fraiser '01 both contributing widely to the MIT success in their first games on the MIT team.

The fall season continues for MIT next weekend as the team travels to the Division II Sectionals in Maine. A successful weekend could put MIT into Fall Regionals for the first time since fall of 1994. Other fall tournaments include the Beanpot tournament which will occur throughout the different colleges in the Boston area over the next few weeks.

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