

Residence Midway Tonight



The Weather
Today: Pleasant, 75°F (24°C)
Tonight: Cloudy, 66°F (19°C)
Tomorrow: Clearing up, 83°F (28°C)
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Volume 118, Number 33 Cambridge, Massachusetts 02139 Friday, August 28, 1998

Speakers Introduce Freshmen To Life and Academics at MIT

By Frank Dabek
NEWS EDITOR
A slew of speakers were on hand to introduce freshmen to a slice of life from MIT at the President's Convocation held yesterday morning in Kresge Auditorium.
President Charles M. Vest opened the convocation with his traditional welcome, tweaked to apply to the class of 2002.
Following Vest's remarks, which included the equally traditional reassurance that freshmen were "not admitted by mistake," the students heard addresses from Nancy H. Hopkins, a professor of Biology, Dean of Students Rosalind H. Williams, and Undergraduate Association President Paul T. Oppold '99. Professor of Geology

Kip V. Hodges PhD '82 closed the morning proceedings with an audiovisual presentation entitled "Contact MIT."
Hopkins presents her research
Vest introduced Hopkins as a researcher into embryonic development and cancer research. Hopkins told students that her wish for them was to "fall in love... with an intellectual vision of the future."
She told the story of the beginnings of her own interest in biology which were sparked by attending a lecture given by James Watson, co-discoverer of the structure of DNA.
Hopkins, who had intended to study mathematics, had "fallen in love with DNA." She changed her major and is now conducting a large

scale experiment to pinpoint the genes responsible for the development of the zebra fish. The fish were chosen, Hopkins said, since "humans are not volunteering for the types of experiments we are conducting."
During her lecture she outlined the five day development of the zebra fish embryo and demonstrated genetic modifications to animals including a zebra fish with fluorescent blood and a sheep whose coat falls off without shearing: genetic tricks that Hopkins called "child's play really."
Hopkins ended her address by attempting to explain what drives her to undertake an experiment that has taken years of her time and entails the cleaning of over 4,000

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Dean for Undergraduate Curriculum Kip V. Hodges PhD '82 introduces the Institute to freshmen during "Contact MIT," held yesterday in Kresge Auditorium.

Frosh Explore MIT Athletic Options

By Brett Altschul
NEWS EDITOR
Yesterday afternoon, freshmen received tours of MIT's athletic facilities as part of a new addition to Orientation — Sports and Wellness at MIT.
The activity began in Kresge Auditorium, with presentations about athletics and health at the Institute.
Partially introduced as a replacement for Project Move Off Your Assumptions, the activity was designed as an integrated introduction to athletics and health activities at MIT.
Cheerleaders performed in

Kresge. Later, they were joined by members of the women's crew and field hockey teams for a ragged rendition of the MIT cheer.
After the performance, William M. Kettyle, associate director of MIT Medical, spoke about student health at MIT. His talk focused on "the five S's": sleep, sustenance, sweat, stretch, and shower.
Kettyle presented the freshmen with data showing how errors by car drivers, airplane pilots, and in reaction time increase during periods when people are normally asleep.
He went on to emphasize the importance of regular meals, exercise, and stretching for MIT stu-

dents. "Fanny fatigue" can be a problem at the Institute, he said.
Kettyle then introduced Stuart Schmill '86, head coach for crew at the Institute. Schmill provided an introduction to the athletic system at MIT. He also announced that the athletic facilities would be open free to freshmen through the first week of the semester.
More students participate in various athletic activities at MIT than at almost any other college, Schmill said.
That may be because MIT stu-

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Online Writing Exam Tests Frosh at Home

By Zareena Hussain
NEWS EDITOR
While their counterparts take the written form of the Freshman Essay Evaluation this morning, over five-hundred freshmen have already taken the test online via the world wide web for the first time this summer.
Twenty-nine percent of those taking the FEE online passed, according to Leslie C. Perelman, associate dean and director of the writing program. Fifty-six percent did not pass and an additional 15 percent did not pass with a writing subject recommended. Last year, 21 percent of students passed the FEE.
"This had been an experiment that had been proposed for a number of years," Perelman said.
In previous years, all students who had not satisfied the phase one writing requirement by receiving a five on the Advanced Placement Examination in Writing and Composition would sit down for a timed test that lasted three hours and

consisted of two writing tasks. Students taking the FEE today will see the same format.
Online form differs significantly
In contrast, the online evaluation gave students a total of 48 hours to write their essays. In addition, one of the essays was passage based.
Students could access the passage on one of three designated Wednesdays in May, June and July at 5 p.m. On the following Saturday morning, they were posed an essay question based on the passage. Essays were due Monday morning.
Students were also allowed to consult additional resources in writing their essays.
"We didn't prohibit them," Perelman said, "We encouraged them not to."
The passing rates for the online version of the test and the written test from last year are similar, however. "What is interesting is the dis-

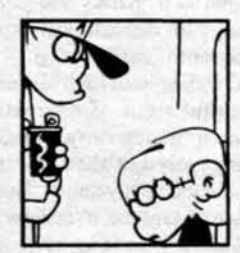
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Miki Havlickova '02 displays her juggling skills during the freshman barbeque yesterday at the barbeque pits.

The Class of 2002 participated in cultural training yesterday through "Ba Fa Ba Fa."

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"The Future of Science" was the topic of a symposium held for the freshman class yesterday in Kresge Auditorium.

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WORLD & NATION

Small Bomb Injures 21 in Israel

LOS ANGELES TIMES

TEL AVIV, ISRAEL

A small bomb packed with nails exploded during morning rush hour near a busy intersection here Thursday, injuring 21 people, one of them seriously.

The explosion shattered windows and sent debris flying into traffic, but police said most of the injuries were relatively light. The bomb, concealed in a garbage bin outside a candy shop, blew up just after a city bus dropped off a number of people at a nearby stop, but police said that most of the passengers had dispersed.

One woman remained in intensive care late Thursday at a Tel Aviv hospital, where she was being treated for burns, officials said. Other victims, including a pregnant woman and a 17-month-old baby, were treated for shock or cuts from flying glass.

There were no immediate claims of responsibility. But police officials said a preliminary investigation pointed toward the involvement of Palestinian militant groups, which recently have renewed threats to attack Israelis.

Hours after the blast, Prime Minister Benjamin Netanyahu visited the injured in Tel Aviv's Ichilov Hospital and called on the Palestinian Authority to intensify its fight against terrorism or risk what remains of the faltering peace process.

Arms Inspector's Resignation Puts White House on Defensive

LOS ANGELES TIMES

WASHINGTON

The noisy resignation of a senior U.N. arms inspector put the Clinton administration on the defensive Thursday, as it sought to explain an Iraq policy that critics assail as a new soft line toward a dangerous regime.

Faced with deepening divisions on the U.N. Security Council, the administration in recent months has tried to reduce conflicts over the inspectors' intrusive forays into suspected Iraqi weapons sites. The goal has been to deprive Saddam Hussein of a key propaganda point while shifting the world's attention to the Iraqi president's increased flouting of U.N. resolutions that ended the 1991 Persian Gulf War.

Hussein has permitted no inspections of possible sites since early August; he had agreed to the access last February as he faced the threat of a U.S. military strike.

But even as administration officials claimed to be seeing signs that their new approach might be working, frustration was growing among U.N. inspectors who complained they were being held back by the United States — and the Security Council — from ferreting out Hussein's secret arsenal.

The angry resignation letter submitted Wednesday by inspector Scott Ritter left administration officials scrambling to explain their nuanced approach and worrying that public opinion could turn decisively against them.

Top Air Safety Officials Rip FAA Over Comair Commuter Crash

LOS ANGELES TIMES

The nation's top safety officials leveled another blast at the Federal Aviation Administration on Thursday, blaming the FAA for last year's fatal crash of a Comair commuter plane during a snowstorm near Detroit.

The report focused on procedures for aircraft in icing conditions. "The probable cause of this accident was the FAA's failure to establish adequate aircraft certification standards for flight in icing conditions, the FAA's failure to ensure that an approved procedure for the accident plane's de-ice system operation was implemented by U.S. carriers and the FAA's failure to require the establishment of adequate minimum airspeeds for icing conditions," the National Transportation Safety Board said.

WEATHER

Pleasantly Mistaken

By Greg Lawson
STAFF METEOROLOGIST

The stationary front which was to have brought us rain yesterday turned out not to be so stationary — its movement to just seventy miles south of us brought us one of the prettiest days in recent memory. This should continue through most of today with pleasant temperatures in the mid 70's. Sometime this afternoon the stationary front will begin to actually move northward, thus becoming a warm front since the warm air will then be the advancing air mass. As the front passes over us again, we should see the cloudiness increase, wind speeds pick up, and maybe even a few scattered showers. The greatest chance for rain is sometime Friday night. Sunshine will return Saturday morning as temperatures return to the mid 80's.

Saturday morning also marks the time when Massachusetts will feel the effects of Bonnie. Bonnie has been demoted to a tropical storm, and she continues to weaken further. Still, there are tropical storm watches on the coasts of Cape and the islands. The official National Weather Service local statement for Massachusetts states these areas may experience flooding and winds of up to 40 mph with gusts of up to 70 mph. Here in Cambridge, we should be safely out of the way. Meanwhile, Hurricane Danielle is strengthening and is being forecasted to follow a similar path to Bonnie, riding her wake so to speak. Hurricane season does not officially end until November 30th.

Friday: Pleasant morning and afternoon. Increased cloudiness and wind late afternoon. High 75°F (24°C).

Friday Night: Cloudy and windy with possible showers. Low 66°F (19°C).

Saturday: Cloudy through the morning with sun in the afternoon. High 83°F (28°C).

Embassy Bombing Suspects to Stand Trial After Confession

By Michael Grunwald
THE WASHINGTON POST

WASHINGTON

Two suspects with alleged ties to international terrorist Osama bin Laden will stand trial in New York for the bombing of the U.S. Embassy in Kenya, a major breakthrough after just 20 days of the largest overseas investigation in American history, officials said Thursday.

Mohamed Rashed Daoud Al-Owhali, a Yemeni national who allegedly rode on the explosive-laden truck that destroyed the American embassy in Nairobi on Aug. 7, was flown in from Nairobi Wednesday night, officials said. He was arraigned Thursday in a Manhattan courthouse on 12 counts of murder, one for each American killed in the attack, plus one count of conspiracy and one count of using weapons of mass destruction.

Mohammed Sadiq Odeh, a Palestinian engineer who allegedly helped plan the bombing, was hustled out of Nairobi on Thursday and is expected to arrive in New York on Friday, sources said. Odeh, who has told Pakistani authorities that he was part of an Islamic terrorism team recruited and financed by bin Laden, will be arraigned on similar charges, the sources said.

After meeting last week with FBI director Louis J. Freeh, Kenyan authorities made the surprising decision to allow the suspects to be tried in the United States, even though the vast majority of the 247 people killed and over 5,000 people wounded in the bombing were Kenyan. A simultaneous bombing of the American embassy in Tanzania claimed 11 lives, none of them American, and injured 86 people, including two Americans.

Thursday, just a week after U.S. cruise missiles struck targets associated with bin Laden in Sudan and

Afghanistan, Freeh held a triumphant news conference in Washington to announce the rendition of Al-Owhali. Freeh said the suspect had confessed to FBI agents that he was trained in Afghan camps affiliated with bin Laden, that he had attended meetings and conferences with bin Laden and that he had expected to die as a martyr in the bombing.

In a gathering of top law enforcement and national security officials, Freeh was joined by Secretary of State Madeleine K. Albright, National Security Adviser Sandy Berger and Attorney General Janet Reno, along with representatives from Kenya and Tanzania. All of them emphasized the unusual level of cooperation in the case: among American law enforcement, intelligence and diplomatic agencies, as well as among American and African investigators.

"Seldom has such an international effort been so productive so quickly," Freeh said. "From our perspective, this stands out as a shining example."

President Clinton also hailed the arrest and rendition of Al-Owhali as a milestone in the struggle against terrorism, and vowed to continue that struggle on several fronts.

"We will continue to use all the tools at our disposal — law enforcement, diplomacy and, when necessary, America's military might," Clinton said.

An FBI affidavit unsealed Thursday gives an outline of the case against Al-Owhali, whose alias is Khalid Salim Saleh Bin Rashed, as well as his links to bin Laden, a renegade Saudi financier described by Freeh as a "primary subject" of the investigation.

The affidavit suggests that Al-Owhali was part of a wide-ranging terrorist conspiracy led by bin Laden, although it does not specifically accuse bin Laden of anything

but extremist views. So far, bin Laden has not been charged in connection to the East Africa bombings, but a Manhattan grand jury has returned a sealed indictment implicating him as a "ringleader" in earlier terrorist attacks, sources said.

According to the affidavit by FBI special agent Daniel J. Coleman, Al-Owhali traveled to Nairobi on July 31 from Lahore, Pakistan. A week later, while riding in the truck that was carrying the bomb to its destination, he threw a flash grenade at an embassy guard, officials said.

Al-Owhali later told the FBI that "the operation was supposed to be a martyrdom operation," but he ended up in a Nairobi hospital with lacerations on his hands and face and a large wound on his back, the affidavit said. He was interviewed there two days after the blast by Kenyan police, who later arrested him. At the hospital, Al-Owhali discarded two keys that fit a padlock on the rear of the truck used in the blast, and three bullets from a gun he had left in the truck. Hospital employees later found the keys and bullets, the affidavit said.

On Aug. 12, Al-Owhali gave his first interview to the FBI, saying he had been standing in a bank near the embassy at the time of the explosion. He also claimed he was still wearing the same clothing as on Aug. 7, "despite the fact that his clothes bore no traces of blood," but later admitted he had lied, the affidavit said.

On Aug. 20, Al-Owhali gave the FBI a detailed confession, saying he had been trained in explosives, hijacking and kidnapping in a number of camps in Afghanistan. Some of the camps were affiliated with al Qaeda, "an international terrorist group led by Osama bin Laden, dedicated to opposing non-Islamic governments with force and violence," the affidavit said.

Dow Drops 350 Points Following Turmoil in Many Global Markets

By Sharon Walsh
THE WASHINGTON POST

NEW YORK

Bad economic news ricocheted around the globe Thursday, from Japan to Russia to Europe and then to Latin America, finally exploding in U.S. stock markets and sending the Dow Jones industrial average plunging more than 350 points to close at 8,165.99. The 4.2 percent drop was the largest since October's dive of 7 percent.

Markets around the world were battered before U.S. traders were at their desks. Foremost among the concerns of analysts and economists was Russia's financial crisis. The economy there is in massive disarray. The Central Bank has suspended trading of rubles for dollars, the country has stopped repaying foreign loans, and the stock market has essentially evaporated.

Asked to sum up the distress in the market, Carol Stone, deputy chief economist at Nomura Securities International, replied: "Well, there's Russia, and then there's Russia, and then there's Russia."

Russia's economic crisis has been growing steadily worse since President Boris Yeltsin's government allowed the ruble to be devalued on Aug. 17. The ruble, which was trading at 6.3 to the dollar as recently as two weeks ago, was being traded on the street Thursday for nearly twice that much with Russia's major currency trading system shut down.

While U.S. exposure to Russia's economy is not large in terms of exports, investors and analysts expect the crisis will spread to other economies, including emerging markets and important U.S. trading partners such as Latin America, and ultimately hurt the United States.

Investors, including European banks who bought Russia's high-risk short-term debt because of high returns, now face the prospect of huge losses. Many of those investors were highly leveraged and are having to sell U.S. stocks to cover their foreign losses.

"Russia is basically gone as an investible area," said John L. Manley, an equities strategist at Salomon Smith Barney. "The problem with this market is that there are no secrets. One day, the Russia problem isn't even on the radar screen, the next it's in your face."

The fear in the markets is that Russia is the first domino in a line of troubles. With Russia essentially defaulting on its debts, investors in emerging markets like Latin America will demand higher rates to compensate for risks there, pushing fragile economies deeper into crisis. Then U.S. banks and U.S. companies with international exposure will see profits suffer.

Other world indices showed painful signs of international economic uncertainty. Japanese markets closed at their lowest level in more than six years as Japanese officials disagreed over how to fix the country's banking system. German

markets were down 4.5 percent and London markets, Europe's largest, were down 3.2 percent.

No U.S. market and no sector of the market was left unscathed Thursday. Dow Jones stocks that declined outnumbered those that gained by 2,872 to 360, and a hefty 934.6 million shares traded compared with 671.9 million Wednesday. Thursday's loss took the market to levels more than 10 percent below its July 17 high, making it an official "correction" in the parlance of Wall Street.

The Nasdaq composite index, heavily weighted with technology stocks, took a beating, losing 81.72 points to close down 4.6 percent. The Standard & Poor's 500 index plunged 41.60 or 3.8 percent.

The market drubbing that has occurred in the last several weeks left the Dow, once up 18 percent, up just 3.3 percent for the year. The average stock on the New York Stock Exchange is down 32 percent from its highs, said Manley.

Analysts who only weeks ago were suggesting that Federal Reserve chairman Alan Greenspan raise interest rates to head off an overheated economy now predict that the Fed may soon lower rates.

"I think the Fed will be forced to lower rates," said Anthony Conroy, chief equities trader at Bankers Trust Investment Management, whose comments were interrupted by his shouts of "I want to sell as much as I can! Sell it! ...It's unbelievably hectic here," he said.

Bonnie Now a Tropical Storm, Heading North After Landfall

By Sue Anne Pressley

THE WASHINGTON POST

JACKSONVILLE, N.C.

Downgraded to a tropical storm, Bonnie lumbered northeast toward the Atlantic on Thursday, apparently having spared North Carolina's coast the extensive damage authorities had feared. It left disappointed vacationers, fallen trees, scattered flooding — and a lot of relief — in its wake.

A tropical storm watch, meaning the risk of sustained winds of 39 to 74 mph, remained in effect from the New River Inlet in North Carolina to Sandy Hook, N.J., including sections of the Chesapeake Bay and Potomac River. But officials in southeastern Virginia joined their Carolina neighbors in the relief, dismantling emergency operations and buckling down for a storm like many others they have weathered.

The lingering storm dumped as much as 14 inches of rain on some North Carolina coastal communities, flooding waterways and washing out roads. Shingles and siding

were ripped from homes and piers were damaged by winds estimated at 115 mph as they moved ashore on Cape Fear at midafternoon Wednesday, howling at a decreasing pitch through the night during their slow drift north. At one point, more than 1 million people were out of power Thursday because of lines torn down by the Category 3 storm.

The hurricane, with gusts still reaching 100 mph, shook the trees in Morehead City like feather dusters as morning broke. By late morning, however, as the winds wound down and moved on, the first motorists ventured slowly through sheets of rain onto Route 24, dodging tree limbs and debris. By afternoon, worried residents in New Bern and Wilmington left motels and shelters and returned to check for damage to their homes.

At day's end, the skies were still dark and menacing even though the worst of the storm had passed. But in early assessments, officials said, Bonnie did not seem so bad — not nearly as bad as Hurricane Fran two

years ago, which also packed 115-mph winds, but left \$5.2 billion of damage and 24 people dead. Hurricane Bertha, two months earlier in July 1996, caused nine deaths and an estimated \$250 million in damages.

No serious injuries or deaths have been reported since Bonnie blew ashore.

President Clinton declared a disaster area in North Carolina, allowing federal funds to be used to repair the damage. And Gov. James Hunt (D) cautioned residents, many of whom received more than a month's worth of rainfall in two days, that they would have to be "vigilant about flooding for days to come." Hunt said nearly 17,000 people spent the night in emergency shelters.

Tropical Storm Bonnie was expected to continue its slow northeast crawl up the coast, drifting back into the Atlantic sometime during Thursday night around the Virginia line if it maintains its current course, forecasters predicted.

Rebels Fight Government Forces As Full-scale War Engulfs Congo

By Lynne Duke

THE WASHINGTON POST

KINSHASA, CONGO

Full-scale warfare erupted inside Congo's capital Thursday, as Rwandan-backed rebels fought government troops and their allies in several neighborhoods close to the city center.

President Laurent Kabila's army, along with troops from Zimbabwe, Angola and Namibia, appeared to be waging a stiff defense against what officials now concede is heavy, well-armed rebel infiltration around this city of more than 5 million people.

The rebels took up positions in the most heavily populated sector of the city, nicknamed "China" by local residents because of its traffic and congestion, on the city's east side near the airport. Officials Thursday were attempting to clear civilians from rebel-held pockets, apparently to make it easier to attack them.

"Our armed forces are progressing with much caution, which means that the operation is lasting longer than first thought," said Gaetan Kakudji, Kabila's minister of state, as he spoke to reporters at Ndjili International Airport.

The government flew some for-

eign journalists to Ndjili in a Zimbabwean helicopter gunship to show that the airport was unscathed and still in government hands. From there, the reporters could hear echoes of mortar and automatic weapons fire from the fighting that raged just five miles west, toward Kinshasa's downtown.

It had appeared earlier in the week that Kabila and his allies had the Rwandan-backed rebels on the run. Warplanes had hit rebel positions in the southwestern province of Lower Congo, and the government reported that it had stopped a rebel column attempting to move on Kinshasa.

But the rebels apparently slipped around government defenses. Instead of entering the city from the southwest, they managed to move to the city's southeast side and filter hundreds, perhaps even thousands of troops into the China area. Officials say they believe that some rebels had been in place in Kinshasa but undercover for several weeks, awaiting the moment to strike.

Thus, the battle for Kinshasa is on, with armed forces of as many as seven African countries fighting in the heart of the continent for control of a vast, fractured nation that is

struggling through its second military conflict in less than two years.

The fight, which has caused a regional rift between several African leaders, threatens to degenerate into a humanitarian catastrophe, with reports of massacres in the eastern war zones and refugees fleeing the fighting there. Here in the capital, food, water and gasoline shortages have become epidemic. Rebels control the main port through which supplies are imported, as well as the country's main hydroelectric dam, where they apparently have cut off power to the city, leaving it with only limited electricity for 11 straight days.

Kabila is fighting the same forces that brought him to power 15 months ago: Congolese from the Tutsi ethnic group, along with troops from Rwanda's Tutsi-dominated army. Though Tutsis had been the core of the military force that overthrew dictator Mobutu Sese Seko and installed Kabila to power, they turned against him because of disputes over how to deal with the ethnic violence that plagues Congo's border with Uganda, Rwanda and Burundi. They launched the current rebellion in that eastern border area on Aug. 2.

Diplomats also believe that

Clinton Makes Public Reappearance In Worcester; Gets a Warm Reception

By Ceci Connolly

THE WASHINGTON POST

WORCESTER, MASS.

In his first public appearance since telling Americans he misled them about his 18-month affair with Monica S. Lewinsky, President Clinton attempted to change the subject Thursday to safe schools, terrorism and Hurricane Bonnie.

Everywhere he went in this blue-collar Democratic stronghold, Clinton was greeted enthusiastically by supporters. A smaller, but vocal, contingent of protesters held signs with foreboding messages such as "Liar," "Cheater," "Resign" and "Impeach." One waved a scarlet A.

Despite earlier hints from aides that Clinton might use Thursday's break from the first family's vacation to again address the Lewinsky scandal, he made no mention of the controversy.

The stated purpose of the event was to announce a \$30 million scholarship program for aspiring police officers and to release a teacher's guide for detecting trou-

bled youth.

Clinton's political team regarded the day as something of an experiment, a tentative step toward normalcy after weeks in which the Lewinsky investigation has been a near-total preoccupation. It came amid signs that the bleeding of support Clinton has suffered has begun to stabilize.

In recent days, Clinton has phoned what one aide estimated were about 20 members of Congress, mostly Democrats, including Senate Minority Leader Thomas A. Daschle of South Dakota and House Minority Leader Richard A. Gephardt of Missouri, but some Republicans as well. The message, as one senior adviser described it, was one of "apology, explanation, and taking responsibility."

Since Gephardt's Monday comments refusing to rule out the possibility of impeachment, he and Democrats have begun to speak more positively of the president. Daschle, who was reported to be

furiously at Clinton, urged Democrats to shift their focus from scandal back to policy. "We've got to get back on the agenda, not to change the subject but because that is what the American people want," Daschle said in a telephone interview Wednesday night.

A new poll, meanwhile, found Clinton's approval ratings still holding steady, and that the controversy has done no noticeable damage to Democratic prospects this fall. But Clinton's personal ratings took another beating in the survey by the Pew Research Center, with 62 percent saying they do not like the president, compared with 53 percent in February.

Still unclear is when Clinton plans to go ahead with what aides expect will be a further explanation to the public. The president had discussed making some passing reference to his personal problems and his effort to recover from them at Thursday's event, but he decided late Wednesday night to avoid the subject.

Russian Economy Weakens as Does Yeltsin's Grip on Presidency

THE LOS ANGELES TIMES

MOSCOW

President Boris N. Yeltsin, increasingly isolated and under pressure to resign, remained secluded Thursday at his rural estate as the Russian stock market plunged to a record low and government negotiators hammered out a power-sharing agreement designed to reduce his authority.

Longtime Yeltsin supporters said the president is now so politically weakened that he may be unable to survive the collapse of the ruble, the fall of the stock market and the economic chaos that grips the country.

"Yeltsin was never such a weak player as he is these days," said Vyacheslav Nikonov, a former presidential adviser. "Yeltsin is not in public view. It raises the question of who is in charge."

Nikonov and others said part of the proposed power-sharing pact with parliament is an agreement to grant Yeltsin immunity from future legal action against him and to ensure the financial security of his family — measures designed to protect him if he resigns.

The Kremlin denied reports that Yeltsin, tenacious but ailing, would quit. But that did nothing to halt speculation that the 67-year-old president is likely to resign before year's end, prompting new presidential elections early next year.

"It is clear that his physical and mental performance is deteriorating every day," said analyst Andrei Piontkovsky. "My perception is that he is politically finished."

Pakistanis Studying Fallen U.S. Missile for Weapons Secrets

THE WASHINGTON POST

KARACHI, PAKISTAN

Pakistani scientists and weapons experts are studying components salvaged from an American cruise missile that fell to earth last week in southern Pakistan, security sources said Thursday, expressing optimism that they can unlock technological secrets that will advance Pakistan's missile program.

Officials said experts associated with Pakistan's civilian and military missile programs were inspecting the guidance system, onboard computer and propulsion system of the Tomahawk missile, which was fired Aug. 20 in the U.S. attack on terrorist camps in Afghanistan but fell short of its target.

Some sources indicated that information from the missile might be shared with China, Pakistan's ally, but officials refused to comment on the possibility.

A Pakistani official speaking on condition of anonymity said the find was "a jackpot" that included the satellite's global positioning system and other technological improvements made to Tomahawks since the 1991 Persian Gulf War. "We have missile experts who would most certainly demonstrate a remarkable job of reverse engineering" and develop technological know-how that the Pakistanis currently lack, the official said.

Pakistan reported earlier this week that it had recovered the missile Saturday near Kharan, about 370 miles south of the targeted camps. Pentagon officials have declined to confirm that a missile had landed in Pakistan or to comment on the implications to Pakistan's and China's desire to acquire cruise missiles.

Judge Orders Iran to Pay \$65 Million to Hostages, Families

THE WASHINGTON POST

WASHINGTON

A federal judge Thursday ordered the government of Iran to pay \$65 million in civil damages for its role in kidnapping three Americans who were held hostage in Lebanon by Islamic extremists during the late 1980s.

The ruling by Judge Thomas Penfield Jackson was the latest action in a series of civil cases filed in Washington against Iran on behalf of Americans who say they were victims of terrorism. It remains to be seen, however, if Iran will pay the awards. The Iranian government did not take part in the court proceedings.

The former hostages — Joseph J. Cicippio, Frank H. Reed and David P. Jacobsen — were among 18 Americans held in Lebanon between 1982 and 1991. Cicippio was held the longest of the three, shackled for much of 5 1/2 years. Reed was held for three years and eight months. Jacobsen was held 17 months.

The judge awarded \$20 million to Cicippio, \$16 million to Reed, and \$9 million to Jacobsen. He awarded \$10 million apiece to Cicippio's wife, Elham Cicippio and Reed's spouse, Fifi Delati-Reed, for anguish during their husbands' captivity.

Nobel Prize Winning Physicist Frederick Reines, 80, Dead

LOS ANGELES TIMES

Frederick Reines, a University of California, Irvine professor whose discovery of the subatomic neutrino particle earned him the 1995 Nobel Prize in physics, has died after a long fight against Parkinson's disease.

Reines, 80, died late Wednesday at UC Irvine Medical Center in Orange, Calif.

"He started a whole new field of physics ... one of the most exciting fields of physics," said UC Irvine physics professor Hank Sobel.

Martin Perl, who shared the Nobel Prize with Reines, called his colleague "an energetic man with a fresh view of looking at things."

Reines was born in Paterson, N.J. He received bachelor's and master's degrees at Stevens Institute of Technology in New Jersey and a doctorate from New York University.

Reines said that the first time he remembered being interested in science "occurred during a moment of boredom at religious school, when, looking out of the window at twilight through a hand curled to simulate a telescope, I noticed something peculiar about the light; it was the phenomenon of diffraction. That began a fascination with light."

He is survived by his wife, Sylvia; a son, Robert G. Reines; a daughter, Alisa K. Cowden; and six grandchildren.

OPINION

Letters To The Editor



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The Tech (ISSN 0148-9607) is published on Tuesdays and Fridays during the academic year (except during MIT vacations), Wednesdays during January and monthly during the summer for \$45.00 per year Third Class by *The Tech*, Room W20-483, 84 Massachusetts Ave., Cambridge, Mass. 02139. Third Class postage paid at Boston, Mass. Non-profit Organization Permit No. 59720. **POSTMASTER:** Please send all address changes to our mailing address: *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029. Telephone: (617) 253-1541, editorial; (617) 258-8324, business; (617) 258-8226, facsimile. Advertising, subscription, and typesetting rates available. Entire contents © 1998 *The Tech*. Printed on recycled paper by MassWeb Printing Co.

An Apology from SAE

At the end of the last semester, Sigma Alpha Epsilon was placed on suspension by the MIT administration. For the events which caused this action and the detrimental effect which they had on the reputation of MIT and its FSILGs, we would like to apologize.

As the term came to a close last year, the brothers of SAE examined our attitudes towards MIT and our fellow students. We have realized that with the environment in which we live being so closely watched by outsiders, fraternity members and indeed all students must present themselves in the best manner possible. For this reason, we decided to make many changes within our house, which would have positive effects not only on our own behaviors and attitudes, but on MIT students as a whole.

With the strong support we have found from our alumni, we believe that the changes which have begun this summer will continue throughout the year. This fall we plan to hold several events on campus aimed at bettering student life. Realizing that this is a time for control and moderation, we have chosen to be alcohol free. This was in fact sanctioned by the Interfraternity Council last fall, but SAE plans to remain dry past the June 11 deadline set by the IFC.

We had hoped to have had our suspension lifted in time to hold rush events. Earlier this summer, we were led to believe that because of the programs installed by our alumni and the changes occurring within our brotherhood, this

would likely happen. Our pledge program has been reorganized in order to focus on building true gentlemen, good students, and campus leaders. Due to incidents at other fraternities in the past months, we have been informed it will not be possible to have the suspension lifted before the upcoming rush weekend.

We still view our pledge program to be a vital part of the new house that we are trying to create. Therefore, we will be doing all that we can to have the suspension lifted by the second term, at which time we may extend bids and invite freshman to live with us.

The rules have certainly changed for MIT FSILGs. We at Sigma Alpha Epsilon are making changes to fit these new rules. We sincerely hope that other houses can observe the things that have occurred at our house, and learn the same lessons that we have so that the fraternity system can survive and retain its strong tradition at MIT.

We appreciate the positive support that the IFC has given us. We look forward to the events we have planned for this fall and to meeting the freshman class.

Wesley T. Harrington '99
President, Sigma Alpha Epsilon

Housing Decision Insulting to Students

President Vest's announcement to house all freshmen in dormitories starting in the fall of 2001 infuriates me. I hope MIT's students understand how gravely they've been insulted. Requiring freshmen to live in dorms is tanta-

mount to saying, "These people are not mature enough to be trusted to make a decision about their housing." You didn't come to MIT in order to be treated like children or to have decisions made for you.

I hope this year's freshmen make the most of the opportunity they've been given, and make a choice taking into account all of their options. Soon, many of those options will not be available.

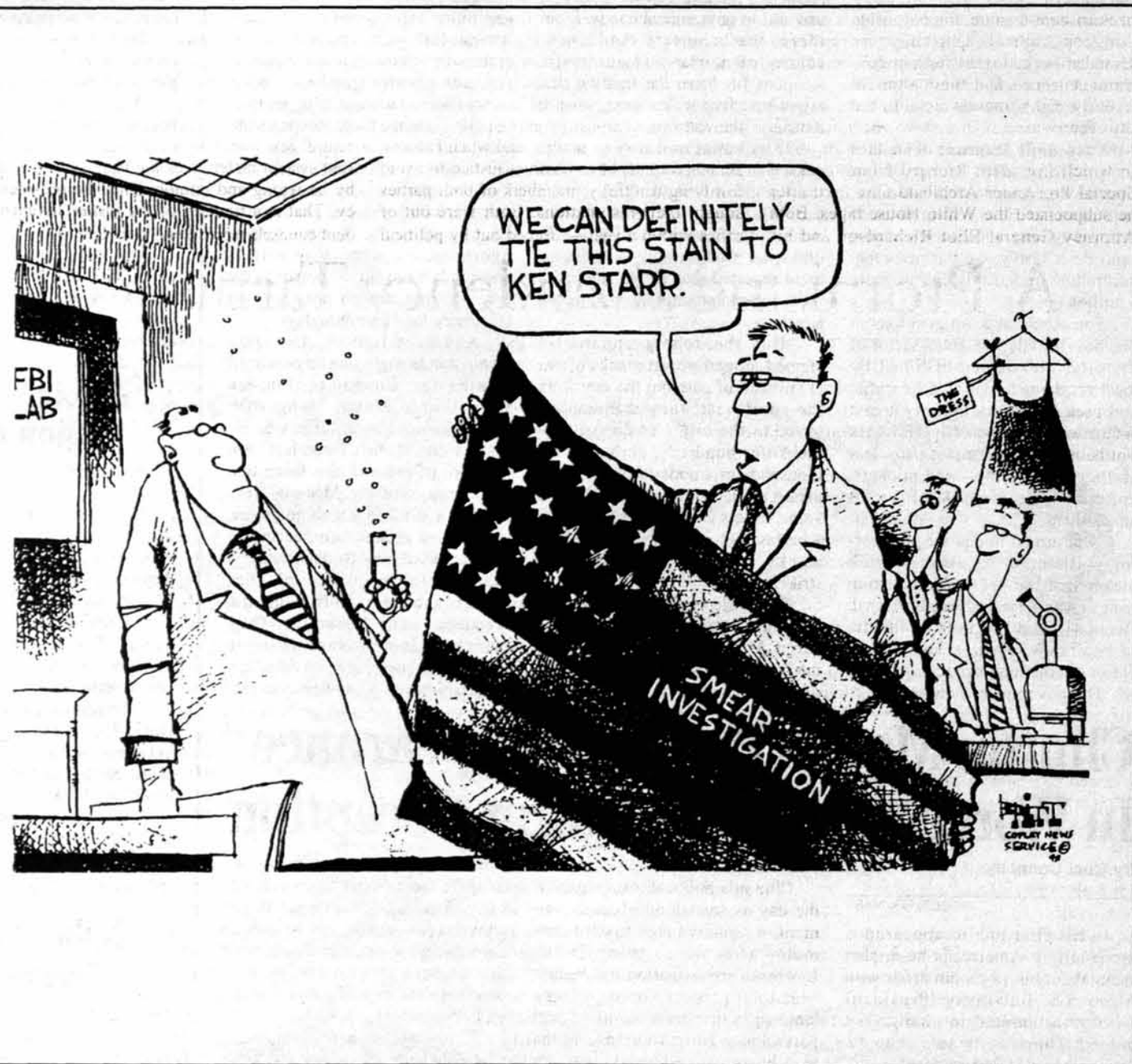
Aneel N. Nazareth '98

Errata

An article in yesterday's issue of *The Tech* ["Past Year Replete with Numerous Alcohol Incidents"] incorrectly stated that Beta Theta Pi's charter was suspended. In fact, BTP's national fraternity decided not to suspend the local chapter.

Additionally, two stories ["CPs Explore Policing Options Across River," Aug. 27; "Licensing Board Bans Alcohol from BTP," Aug. 26] both stated incorrectly that Boston University police officer James Barry was injured by bottles thrown from the roof of BTP. Barry was injured while attempting to avoid the bottles.

An article yesterday ["Welcoming Events Help Frosh Unwind"] incorrectly spelled the name of Professor of Linguistics and Philosophy Emeritus Samuel Jay Keyser.



Opinion Policy

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Dissents are the opinions of the signed members of the editorial board choosing to publish their disagreement with the editorial.

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

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Letters and cartoons must bear the authors' signatures, addresses, and phone numbers. Unsigned letters will not be accepted. No letter or cartoon will be printed anonymously without the express prior approval of *The Tech*. *The Tech* reserves the right to edit or condense letters; shorter letters will be given higher priority. Once submitted, all letters become property of *The Tech*, and will not be returned. *The Tech* makes no commitment to publish all the letters received.

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Unwise Counsel

How to Rein in the Next Ken Starr

Anders Hove

By this time we've all heard enough about the Monica Lewinsky scandal. Most Americans don't want to hear any more about the topic, and a large majority would like Ken Starr, the independent counsel, to end his investigation. Many Democrats and Republicans in Congress have expressed the wish that Starr would at long last deliver his final report to Congress.

I am tired of the investigation as well. Starr has shown the president to be a liar and a philanderer. Whether or not his actions were private, Clinton seems to have gotten what he deserves.

The biggest revelation of the Starr probe has nothing to do with Clinton, however. Ken Starr has proven that the independent counsel system is broken. It is fundamentally at odds with the balance of power system set up in the Constitution, and it creates an incentive for the independent counsel to continue investigations long after they should have been concluded.

The office of the independent counsel is a legal anomaly in America. Unlike all other prosecutors, the independent counsel is free of budget constraints, political supervision, and requirements for prosecutorial discretion. The job itself was created by the 1978 Ethics in Government Act. Every president (including Jimmy Carter) has opposed the law because it creates an executive office with no accountability to the president, Congress, or any other official authority. Once an attorney general authorizes an investigation, the only way it can end is by Congress refusing to budget money for its continuation, or for the independent counsel to choose to conclude it him- or herself.

Why did Congress establish the office? The law was a response to the notorious Saturday Night Massacre of October 20, 1973, in which President Richard Nixon ordered Special Prosecutor Archibald Cox fired after he subpoenaed the White House tapes. Both Attorney General Eliot Richardson and his

deputy, William Ruckelshaus, refused to comply with the president's order, and were fired as well. The phone passed to Robert Bork, who agreed to carry out Nixon's order.

The Saturday Night Massacre was central to undermining Nixon's claim of innocence and candor, and led directly to the filing of the first articles of impeachment in the House of Representatives. The public reaction was also vehement: Nixon had crossed the line.

Unfortunately, the lesson learned after the Cox firing was the wrong one. The system wasn't broken — Nixon was. When Nixon was removed, the system righted itself.

Before Watergate, the system had worked reasonably well. Special prosecutors were appointed by the attorney general, and were accountable to the Justice Department, which was in turn responsible to Congress and the president. Executive authority over the prosecutor rested with the attorney general, a presidential appointee who is typically subjected to a high degree of public accountability.

The Saturday Night Massacre demonstrated how that accountability worked in practice. When Nixon tried to tamper with the Cox probe, the attorney general and his deputy did everything they could to block him, including refusing a direct order. They had promised Congress that they would not interfere with the investigation, and would not allow the president to do so. When they were fired, Congress and the public reacted strongly and appropriately.

Teapot Dome also demonstrated the strength of the system in the face of an even greater challenge: a corrupt attorney general. President Warren Harding's attorney general, Harry Daugherty, was a political appointee and friend of Harding's from his days as an Ohio pol. Daugherty was heavily implicated in the cover-up of Interior Secretary Albert Fall's bribe-taking in connection with the Teapot Dome Naval oil reserve in Wyoming. (The word "cover-up" was invented to describe their activities.)

Both Fall and Daugherty tried to stymie and block a congressional investigation into the Harding administration. Congress has the power of subpoena as well, and when Fall and Daugherty sought to obstruct justice to avoid testifying truthfully, members of both parties sought their resignations. Both were out of office within a year — forced out by political

pressure they had initially tried to withstand. A special prosecutor was appointed and Fall wound up in jail. If Harding had lived, he might have been impeached as well.

The problem with the independent counsel is that the presidency is a political position, and investigating him is an inherently political act. Congress and the Justice Department are responsible for seeing that the laws are carried out, but the independent counsel arrangement abrogates that responsibility. In its place we have an unaccountable office that is not checked or balanced by any branch of government. As *The New Republic* pointed out this week, "No normally constrained prosecutor would be convening a grand jury to investigate alleged perjury about adultery in a deposition in a civil case that had been dismissed."

Before the Starr investigation, only Republicans had discussed the dangers of the independent counsel arrangement. Partisans of George Bush have argued that Lawrence Walsh, who spent six years investigating Iran-Contra, timed his indictment of Caspar Weinberger to embarrass Bush right before the 1992 election. Whether that was Walsh's intent, his timing was offensive and reprehensible. But, hey: in our system, independent counsels can do that.

Attorney General Janet Reno and the members of the three-judge "oversight panel" bear some responsibility for agreeing to let Starr expand his probe into the Lewinsky matter. But it is time for us to recognize that the system itself is broken.

All of the prosecutors who have served since the law was written, with the exception of Ken Starr, believe it should be revised to make the independent counsel accountable. If this is not done, it seems there will never be a time when an independent counsel investigation is not underway, dragging the presidency and the national agenda down with it.

Once Bill Clinton is out of office, it will be time for Congress to quietly revise the independent counsel law. Whether or not we like it, independent counsels have come to play a central role in our political structure. The present system undermines the balance of power by besieging and immobilizing the presidency. That is a travesty of the justice independent counsels were intended to defend.

A Promising Presidency Tarnished

Navèen Sunkavally

If sex in the Oval Office with a 21-year-old intern were the end of it, Bill Clinton would not be in the predicament he is in now. In the

grand scene of American politics, presidential sex scandals are nothing new. Ever since the days of the founding fathers, we have had adulterers for presidents. First there was Thomas Jefferson, who apparently kept company to his slave, Sally Hemmings, for 38 years. Then, Andrew Jackson, James Garfield, Grover Cleveland, and Warren Harding engaged in affairs as well (although Jackson's affair was not much of an affair — he married Rachel Jackson before her divorce proceedings were complete). Later, John F. Kennedy, Lyndon Johnson and two of America's most morally respected presidents, Franklin Roosevelt and Dwight Eisenhower, were also believed to have had affairs.

That's nine out of forty-one, or almost 25 percent of our past presidents, who have led affairs. Our forty-second performer, Clinton, has carried the torch on well in what may be almost termed an American tradition. Even before his election in 1992, Clinton's dalliance prompted *The Nation* to write, "Clinton is in front of the pack and perhaps unstoppable except by an obstacle of his own erection." Since then, not once but twice has Clinton admitted to extramarital involvement.

In a way, Americans, it seemed, elected Clinton president for his sexual drive. Clinton's idol was Kennedy, and Clinton's baby boomer upbringing and youthful vitality offered a pleasant change from the conservative George Bush and an economy in recession. He must have charmed Americans in 1992 when he said, "Bush is always comparing me to Elvis in sort of unflattering ways. I don't think Bush would have liked Elvis that much, and that's just another thing that's wrong with him."

But sex is not the end of it. Bill Clinton,

plain and simple, is also a liar, and that's the sad part, the part that will tarnish Clinton like no other president involved in a sex scandal before him. With his hand on his first gear, Clinton has dragged the American people around for seven months like Achilles did Hector on his personal joy ride. He put his advisors and wife out on a limb, and, after they had crowed praise for him for a while, Clinton sawed off the limb. And if that wasn't enough, Clinton's four-and-a-half minute supposed apology on August 17, which came only when forced by all the elements surrounding him, was pathetic. The classic "I smoked but didn't inhale" statement appeared in rejuvenated form; in his speech he never really confessed to lying but only to giving a "false impression" and "misleading" everyone, and then he went on a two-and-a-half minute assault on the independent counsel.

More significantly, Clinton also, in the strictest sense of the word, is a criminal. While Starr's report is not in yet, one has to doubt how Clinton can continue to maintain that his testimony in the Paula Jones deposition that he didn't have sexual relations with Lewinsky is anything close to "legally accurate." Clinton's defense is that he answered truthfully under the court definition of "sexual relations," which stipulated that any sort of sexual contact with the groin, anus, and other areas constitutes sexual relations. That definition is rather broad. Who does Clinton think he's fooling? Are we to believe that while Lewinsky was doing whatever she was to Clinton that Clinton did not in any way reciprocate or return the favor, so to speak? Clinton speaks adamantly about his privacy, but he has made his private matters public, and there is no way to determine if Clinton is telling the truth unless he divulges the seamiest of details.

Clinton's proven perjury would set a dangerous legal precedent in our country. Why

should anyone in a court of law tell the truth if the chief law enforcement officer of the country himself gets away with lying? How can any judge convict anyone in this country if Clinton were let loose? Never mind whether Kenneth Starr is on a witch-hunt or whether Clinton is the subject of what Hillary Clinton terms a "vast, right-wing conspiracy" — the fact would still remain that Clinton lied in court.

It's a sad way to end such a promising presidency. Following his first year in office, Clinton boasted, "When historians look at this first year, they will be hard pressed to find many first years of presidencies equal to ours." Clinton continually speaks of the twenty-first century, but in all this judicial mess he has set back the power of the executive branch several years, if not decades. Currently, Clinton's advisors are encouraging him to re-apologize, but it remains to be seen how much damage Clinton can repair. Always a stickler for games of semantics, Clinton's denials are vehement, and his admissions flakier than Frosted Flakes.

A noble and self-effacing president would resign under Clinton's circumstances. Personally, I would be pleased to see his resignation. I would not, however, like to see him impeached over a tawdry "sexcapade," as Maureen Dowd of the *New York Times* called it. But Clinton is neither noble nor self-effacing. He has lost much respect from both Americans and a foreign community that includes a Saddam Hussein with a knack for the waltz. The next two years of his presidency run straight uphill. A leader who can't be trusted is no leader at all.

Twenty years from now, barring any extraordinary turn of events during Clinton's presidency, Clinton's name will have met the same fate as another before him. As Richard Nixon's name will always be tied to the word "Watergate," Bill Clinton's will always be strapped to the word "liar."

U. S. Strikes Hasty and Provocative

Michael J. Ring

If President Clinton had any credibility left after his embarrassing performance last Monday, surely his actions of last Thursday

have wiped it away. In the wake of his grand jury testimony, Bill Clinton is struggling to maintain order in his presidency. His decisions to bomb Afghanistan and Sudan, however, have the opposite, chilling effect. At best, they were a poorly calculated, dangerous series of maneuvers that endanger America rather than protect it. At worst, they were a real-life "Wag the Dog" scenario, explicitly designed to avert attention from the White House sex scandal.

The administration, of course, denied that connection, saying these attacks had been planned for over a week, since shortly after the United States embassy bombings in Nairobi and Dar es Salaam that prompted this retaliation. But as Clinton had also known for several weeks of his impending testimony about Lewinsky, this excuse rings hollow.

Even rejecting this motivation, these attacks are still highly irrational and potentially very damaging. The strikes last week were completely out of character for Clinton. He had previously followed a tempered, thoughtful foreign policy approach. While reserving the right to use our military power, he had given every effort to find a diplomatic solution to conflicts in the world's hot spots, and failing that, undertake joint military actions with other nations. Our work with the United Nations to resolve the conflicts in Iraq, and the North Atlantic Treaty Organization in Bosnia are examples of this beneficial approach.

Last week, however, the United States stood alone in attacking a pharmaceutical plant outside Khartoum that was believed to be manufacturing chemical weapons and suspected terrorist camps in southern Afghanistan linked to Saudi millionaire Osama bin Laden. Our actions were not under the auspices of a multinational political or military alliance. They were provocative unilateral actions.

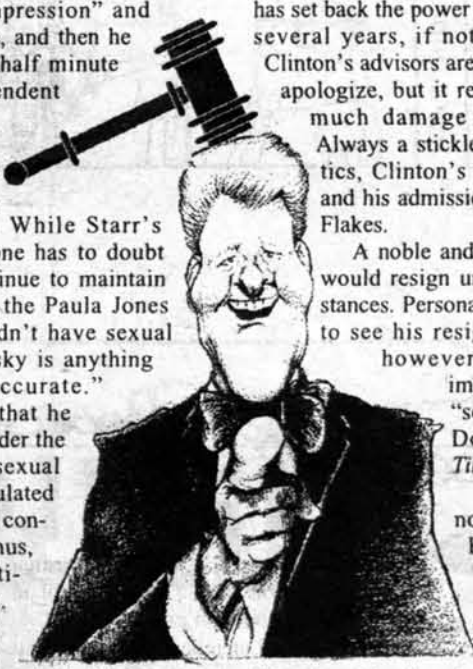
Perhaps these bombings were necessary and the targets attacked were actual terrorist sites. But if these facilities were known to have been a danger to American security for a long time, then why were they not bombed months or even years ago?

While our close allies issued supportive statements after the bombings, they were only words, not deeds. Many of the world's leaders were furious. Russian President Boris Yeltsin was particularly enraged that Clinton did not even have the courtesy to inform him promptly that these military actions were to occur. Given Russia's tenuous grip on free government and the thousands of nuclear warheads still at its disposal, any action which causes our relationship with Russia to decay is very, very serious.

Clinton's actions were greeted with equal abhorrence and disdain in much of the Muslim world, especially Pakistan. That nation, which has lodged a formal complaint over U.S. actions, justifiably feels its sovereignty was violated as American-launched, Afghanistan-bound missiles cruised through its airspace without its assent. Clinton's hasty actions have angered another nation in a delicate international conflict and could further destabilize South Asia in the wake of the Indian and Pakistani nuclear tests.

What shall the United States reap for its actions against bin Laden? These attacks have done more to endanger America's security than stabilize it. When we took similar action against Libya in 1986, we were met with retaliation when Pan Am Flight 103 burst in the Scottish sky. Already, United Nations workers have been injured in Kabul, the Afghan capital. The bombing of a Planet Hollywood in South Africa may indicate terrorists will not be cowed by U.S. attacks. Israel, the state least timid about using counterstrikes and assassinations as counterterrorist measures, only continually sentences itself to more retaliatory attacks as a result of its actions. Counterterrorist strikes are only effective when done as a multinational, thoughtful effort. These bombings clearly do not pass that test.

I fear Bill Clinton has lost control of his rational decision-making process and has endangered American security and lives in an attempt to save his presidency. Resignation suddenly seems a very palatable option.



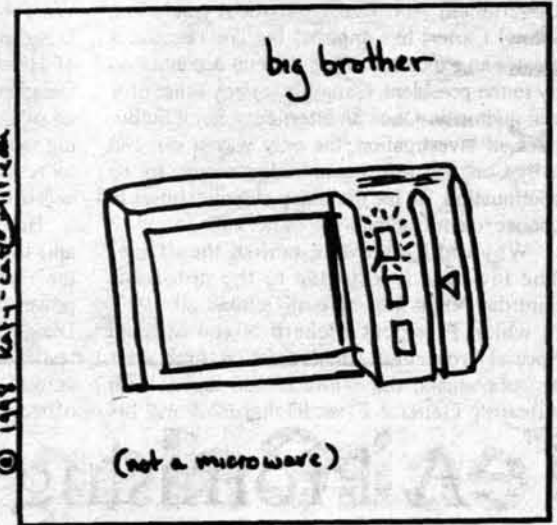
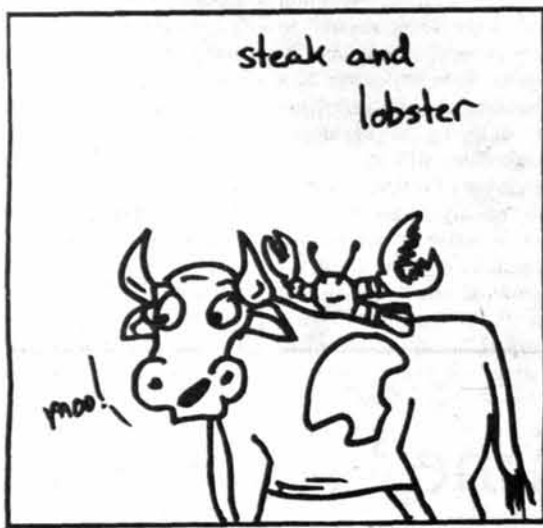
damned for life

by Jessica



Noun Poetry

by Katy-Cat



Dilbert

by Scott Adams



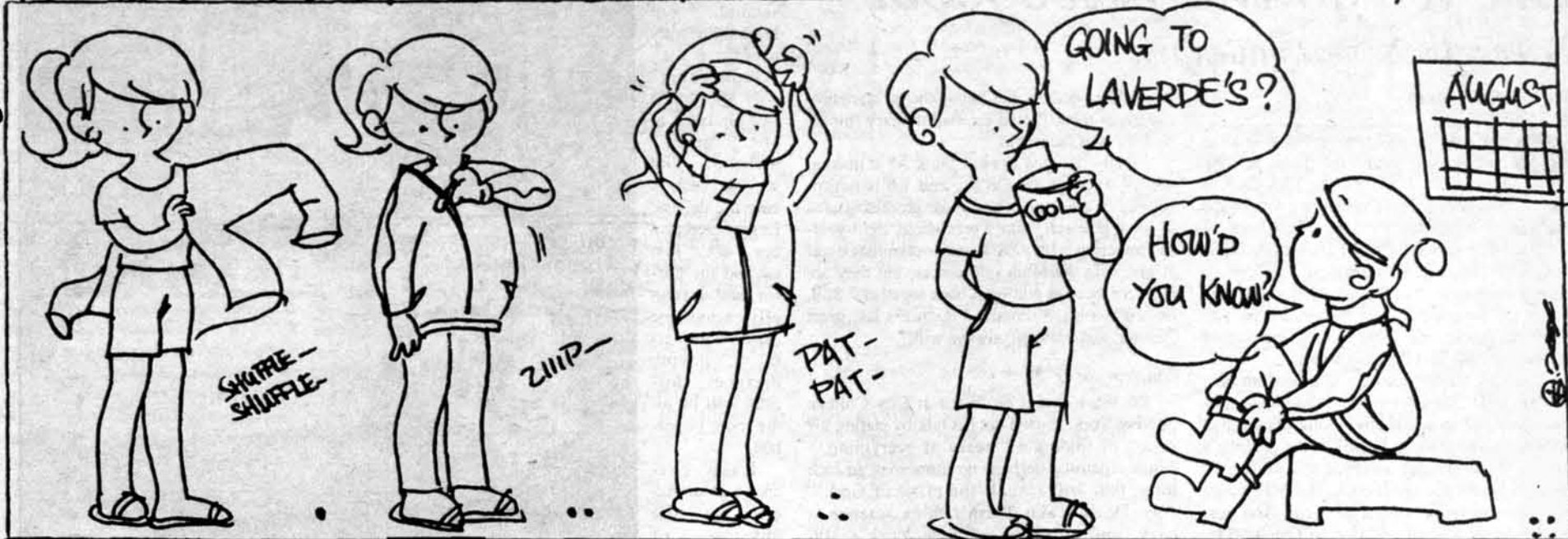
Down with Science

by Jennifer DiMase



Randomland

by xiD



Fox Trot by Bill Amend



TechCalendar

TechCalendar appears in each issue of *The Tech* and features events for members of the MIT community. *The Tech* makes no guarantees as to the accuracy of this information, and *The Tech* shall not be held liable for any losses, including, but not limited to, damages resulting from attendance of an event. Contact information for all events is available from the TechCalendar web page.

For further information on any of these events, visit <http://tech-calendar.mit.edu>.

Visit the TechCalendar web site (<http://tech-calendar.mit.edu>) to add information on events to be included in the print and online versions of TechCalendar.

Friday's Events

8:00 - 9:30 p.m. - **MIT Masters Swimming Workout.** Do you find that Alumni Pool is too crowded during open swim? Try MIT Masters Swimming. Alumni Pool.

8:00 p.m. - **Into the Woods.** Musical by James Lapine (book) and Stephen Sondheim (music and lyrics). \$3 admission for freshmen; \$6 for MIT students, various prices for others. Kresge Little Theatre. Sponsor: Musical Theatre Guild

Saturday's Events

8:00 p.m. - **Into the Woods.** Musical by James Lapine (book) and Stephen Sondheim (music and lyrics). \$3 admission for freshmen; \$6 for MIT students, various prices for others. Kresge Little Theatre. Sponsor: Musical Theatre Guild

Sunday's Events

8:00 p.m. - **Into the Woods.** Musical by James Lapine (book) and Stephen Sondheim (music and lyrics). \$3 admission for freshmen; \$6 for MIT students, various prices for others. Kresge Little Theatre. Sponsor: Musical Theatre Guild



EAPS Fall Courses

12.002 Physics and Chemistry of the Solid Earth

Prerequisite(s): 8.02, 18.02
3-1-8 REST
Prof. Chris J. Marone
Meets MWF 1:00 - 2:00

Earth



12.102 Environmental Earth Science

Prerequisite(s): None
3-0-9 REST
Prof. Sam Bowring, Prof. John Southard
Meets TR 11:00 - 12:30

12.003 Physics of the Atmosphere and Ocean

Prerequisite(s): 18.02, 8.01, 5.60
3-1-8 REST
Prof. Alan Plumb
Meets MWF 10:00 - 11:00

Atmospheric



12.300J Global Change Science

Meets with 1.11J
Prerequisite(s): 18.03 or 5.60
3-0-9
Prof. Peter Stone, Prof. Elfatih Eltahir
Meets TR 2:30 - 4:00

& Planetary Sciences



12.421J Physical Principles of Remote Sensing

Meets with 1.761J, 12.621
Prerequisite(s): 8.03
3-0-9
Prof. Rick Binzel
Meets TR 2:00 - 3:30

IT CAN KILL YOU IF YOU DON'T RECOGNIZE IT.

Depression strikes millions indiscriminately. Depression is MOST dangerous when it goes unrecognized. Always be aware of the threat, and don't always believe everything you feel.

UNTREATED DEPRESSION

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<http://www.save.org>

This space donated by *The Tech*

These are just a few of the EAPS courses available this fall - check out <http://registrar.mit.edu> for a complete listing. If you have questions or need more information about EAPS, send email to sewell@mit.edu.

THE ARTS

SYMPOSIUM REVIEW

Are we gonna have jobs?

Science in the next millenium

By Joel Rosenberg
ARTS EDITOR

Back it in, everybody—science is at an end. At least that's the thesis of John Horgan's 1996 book, *The End of Science*. After interviewing lots of the big names in science for Scientific American — Dyson, Penrose, Crick, Dawkins, Gell-Mann, Hawking, to name just a few — Horgan began to wonder whether there was much left to explore, now that relativity and quantum mechanics seem to have accounted for the very big and the very small.

Dean of Undergraduate Curriculum Kip Hodges PhD '82, after reading the book, gave Horgan a call to see if any young people had been asked what they thought about science's future. When Horgan admitted that none had, Hodges posed the question to the MIT community in an essay contest last year. And yesterday, as a great addition to Orientation, Horgan, along with theoretical physicist Michio Kaku, Director of the Artificial Intelligence Lab Rodney Brooks, and three of the winners of the contest, addressed only the class of 2002, unfortunate considering how interesting the symposium would have been to the entire MIT community.

"If I Only Understood a Brain"

Horgan thinks the basic questions have been answered, and now it's time to start understanding how we ask questions at all. The future of science lies in the mind, which we know almost nothing about. His next book, *Why Freud Isn't Dead*, investigates what's going on today in mind research, and formed the basis of his speech.

Freud's baby was psychotherapy, which sent millions to the couch and put millions in the pockets of psychiatrists. But Horgan cited a study which found no correlation between the amount of time spent in therapy and the benefits to the patient. Instead, therapy is merely a psychosomatic placebo, depressing to those who have spent an hour a week and a small fortune on a sugar cube. Additionally, Horgan is concerned with the 35 million people who rely on Prozac, the 75 percent of those who suffer sexual side effects, and the increasing tendency to prescribe it to children under 12, even though the long term studies haven't been done yet.

While psychotherapy's imperfect, Horgan informed the audience that we're still performing lobotomies, renamed "cingulotomies," and a million people a year still receive shock therapy, even though 90 percent relapse within four months. Behavioral genetics, a more "scientific" investigation, believes we're gonna be able to solve all our mental defects with gene therapy. So far, none of our efforts in this area have been successful.

Evolutionary psychology, which views mental problems in terms of Darwinism, has generated some interesting ideas. Horgan explained that one of his favorites is the notion that "human self-deception may be adaptive, because the most effective bullshitters are those who believe their own bullshit." The crowd applauded. "Perhaps this principle explains some of the recent success of evolutionary psychologists." Agreeing with Stephen Jay Gould, which Horgan doesn't like to do, they denounced this field as "pure guesswork in the cocktail party mode." Understandable, considering an example of

the field's work is the belief that schizophrenia gives the afflicted an evolutionary important view of the world.

Finally, Horgan doesn't think AI is making the advances it should be, and while neuroscience is the coolest and most promising area of brain research, "like a precocious eight-year-old tinkering with a radio, neuroscientists excel at breaking the brain into pieces, but they are not very good at putting it back together." Still, the human mind remains "science's last great frontier, and probably always will."

Thinking of Q

Michio Kaku, a professor at City College in New York, started out his talk by stating his dream of finding a "theory of everything, a single equation, perhaps no more than an inch long, that will reveal 'the mind of God.'" Apparently Kaku doesn't think science is over, and he's one of New York's 100 Smartest People — but so is Madonna, he jokingly pointed out.

Kaku's best-selling book, *Hyperspace*, addresses superstring theory, which I don't understand, but has something to do with the tenth dimension and the absolute basic building blocks of the universe. His newest book, *Visions*, is a cross between Horgan's *End of Science* and Media Lab director Nicholas Negroponte's *Being Digital* — a survey of future technology based on interviews with top scientists. The book formed the basis of his speech as well.

After a joke about how theoretical physicists perhaps know too much, he told a story of British Prime Minister William Gladstone's visit to Michael Faraday's lab, filled with strange, seemingly useless machines.

"What use will these contraptions be to anyone?" asked the politician.

"I know not what use my machines will have," Faraday answered, "but I know you will tax them." Kaku pardoned Faraday's uncertainty about his machines citing Yogi Berra: "Prediction is hard, especially about the future." And while Lincoln warned against opening one's mouth and proving one a fool, Kaku said to hell with Lincoln and proceeded to describe his vision of the future.

We are moving from a phase of being "passive observers of the dance of nature to choreographers of it," he explained. Moore's Law predicts that computer chips will cost a penny by the year 2020, and at that point, instead of 100 people to one computer, as existed in the early days of computers (and which IBM thought would last forever), or even the one person to one computer ratio we have now, it'll be one person to 1,000,000 computers. Using books and paper as an analogy, Kaku reminded us that what was once invaluable papyrus is now used to wrap fish. Soon, our watches will communicate globally and call us stupid, and our walls will talk back — apparently Kaku doesn't get along all that well with his machines now. He pointed out that the Media Lab is already going to start putting chips in toys, creating the contradiction in terms "smart Barbie," like "military intelligence" and "Microsoft Works."

When the limits of silicon are reached, quantum computers (in part discovered by Neil Gershenfeld of the Media Lab) will kick in, with almost unfathomable computing power. Entertainment on the web will remain insatiable, and robots will finally start gaining some

intelligence, approaching the 500 terabytes per second our brains currently process. "Genalyzers" will spit out a full analysis of our genetic makeup, and we'll get shots to cure the defects. Engineered livers are just around the corner, and eventually, when we achieve immortality, having designer children will be all the more important.

Kaku covered a great theory on the physics of extraterrestrials. A type one civilization can control the energy of a planet, including the weather, while type two harnesses the power of a star, and type three the power of a galaxy. We're approaching type one, evidenced by the unification that is going on in language (English), politics (democracy), and culture (*The Terminator*, which perhaps shows James Cameron is King of the World). But we still get our energy from dead plants — 'nuff said. Drawing on *Star Trek*, the Federation is an emerging type two, the Borg are type three, and beyond that, the Q are type four. Kaku added, "If you don't understand what [was just said], get with the program."

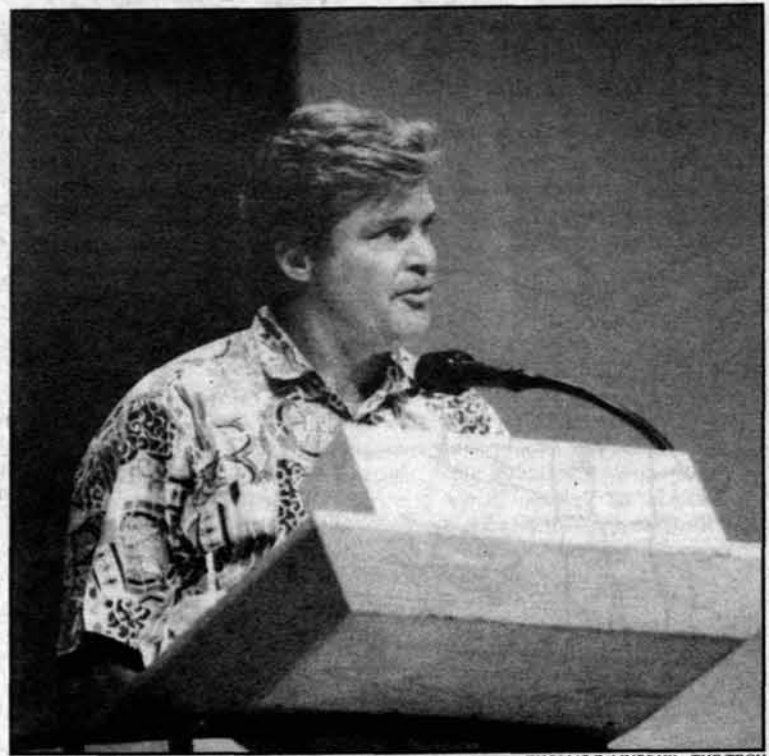
A standing ovation followed Kaku's speech, to which Dean Hodges, also Professor of Earth, Atmosphere and Planetary Sciences, remarked, "He's just a theoretical physicist." Professor Hodges was just bitter that nobody mentioned geology in the future of science.

Fast, cheap, out of control UROPs

Professor Brooks told the story of the Mars Rover and the role his students played in doing (surprise) a much better job than the government ever could have, cutting the cost from \$12 billion to \$22 million for the entire mission. Makes you think Brooks should be overseeing more government projects.

Arthur C. Clarke has a theory that "any sufficiently advanced technology is indistinguishable from magic." Brooks argued that in the last century, we have evolved some magical technology, from flight to e-mail, and the future holds similarly fantastic discoveries. The advances, however, only stop being ridiculous as they start to become possible, comparing widespread space travel to slowing down time. But even computers aren't totally magical yet, as Brooks' slides hadn't printed correctly from the Microsoft program he used to make them.

In 1989 Brooks published a paper which discussed space exploration using robots that are "Fast, Cheap, and Out Of Control." The title of the paper ended up the title of a great documentary that came out last year (and just came out on video) which intertwined Brooks and his robots with a lion tamer, a topiary gardener, and a mole-rat specialist (you have to see it to understand it). Pushing for an invasion of the solar system by autonomous disposable robots, Brooks' idea didn't mesh well with NASA and the Jet Propulsion Lab, who are fond of large,



THOMAS E. MURPHY—THE TECH

John Horgan, author of *The End of Science*, speaks to freshmen in Kresge Auditorium about the future of science yesterday afternoon.

expensive, human-controlled bots — particularly ones with gold foil on them.

Brooks' students went out to JPL and designed a robot using MIT-donated parts, amazingly enough. One model, the Rocky 3, used an old Macintosh computer case for the body, and sported a Sony Handycam on top (covered in gold foil). The idea was to have the mission pay for itself through the Hollywood/Media Lab tradition of product placement — sell replicas of the robot at Radio Shack, spawn a Mission to Mars children's cartoon, and even put Nikes on Rocky's feet. Seeking someone to launch this private venture, Brooks looked to Reagan's Strategic Defense Initiative, who had been working on Star Wars before the cold war ended, and who were looking to get back on the map by outdoing NASA (apparently easier than you'd think).

And as the story goes, the mission was in fact successful, although before it was completed NASA had its name back on the project. It was an inspiring talk on how students, even undergrads, can get involved immediately and make a difference in the world of science in a more than reasonable time span.

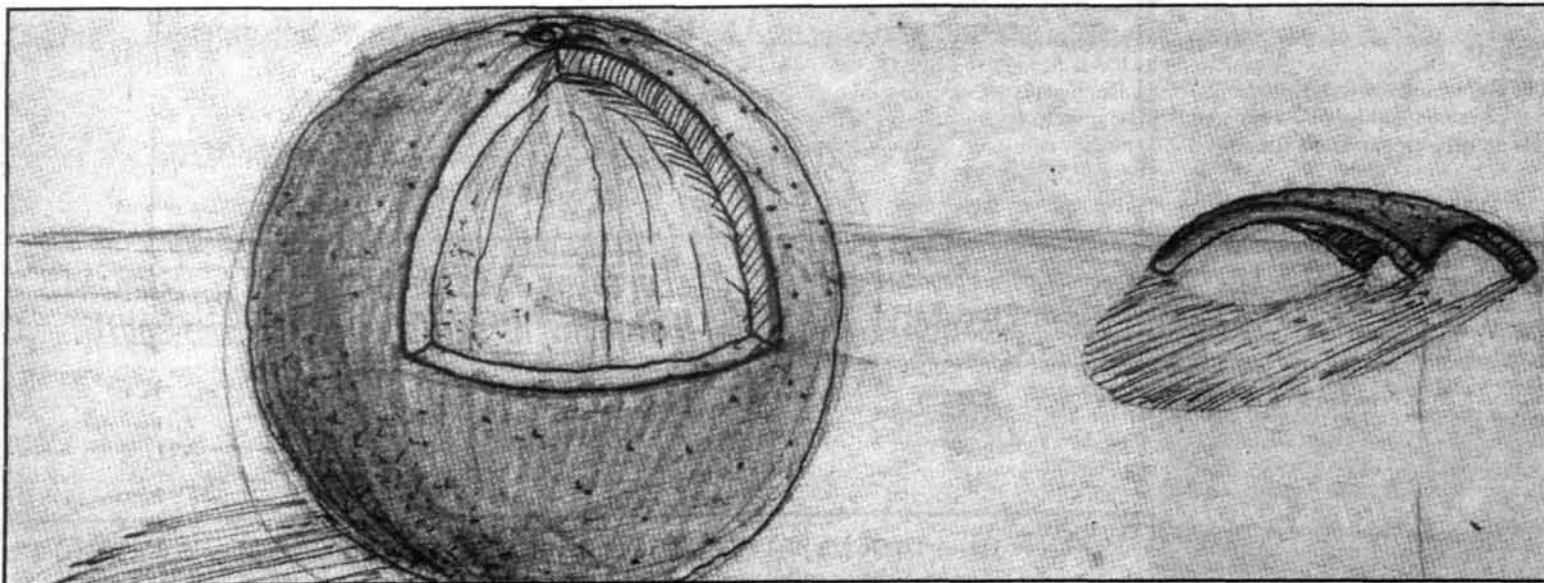
The end of undergrads?

The student speakers were compelling in their presentations as well. Anna M. Dirks '99 spoke after John Horgan. Citing the greed with which industry is currently run, Dirks expressed her concern with the exploitation of Malaysian and Indonesian women in computer chip manufacturing. She rightly stated her disappointment with the lack of ethical education at MIT, and urged the incoming class to question their professors about what is being taught, why, and what the implications are — good advice for all students.

David Hamby '99 followed Professor Kaku, and showed an image of a beached whale to start his speech. The whale was a metaphor for how overwhelming science can get, especially given the ever increasing amount of stuff there is to know. The question is how to keep the whale in water, and Hamby suggested the answer is through better scientific education. Relating the impact of seeing a caterpillar turn into a butterfly while in elementary school, Hamby argued that visual representation of concepts can and should — must, in fact — improve in order for science to be accessible to the general population.

A great diagram showed how Kresge Auditorium, the location of the symposium, was designed as an eighth of a sphere, and how simple it would be for an ordinary orange to convey that same conceptualization. Other diagrams were equally insightful, and made Hamby's point that better visualization will enable better understanding, and from there allow more time for companies and universities to "play," and for the public to perhaps take advantage of "public labs," which could become as widespread as libraries.

Amy K. Strickert '01 completed the list of speakers. She brought up her concern for what questions really remain in science, how those questions might be funded, and how to encourage the next generation of scientists.



DAVID HAMBY

David Hamby '99 believes that the future of science lies in improved communication, such as this demonstration that Kresge Auditorium was designed as an eighth of a sphere, as he explained to the freshman class yesterday in that same building.

President Vest Welcomes Students at Convocation

The following was the complete text of President Charles M. Vest's Welcome Address to the Class of 2002.

Welcome to the future — your future. I am Charles Vest, president of MIT.

And you are the MIT Class of 2002!

Now, I know what you are thinking, and it's not true. You were not admitted by mistake. You are not here as the result of a computer glitch, or the report of an incompetent educational counselor. You are not here because we needed more architecture majors or people from Montana or because someone misread your SAT scores.

You are a member of the freshman class at MIT because we believe — we know — that you have the intellectual capacity, the energy, the imagination and the personal will to succeed here. We are very proud and excited to have you as students — and I hope you are proud and excited to be here.

Two years ago, arriving freshmen took special pride in being the first class of a new millennium. Last year, the Class of 2001 took pride in being the Class of 2001, a year which, thanks to Arthur C. Clarke and Stanley Kubrick, will always have deep resonance in the worlds of science, technology, and the popular imagination.

Who would have thought that, by the time you reached MIT, the 21st century would already be old hat? But don't be downhearted. Careful statistical analysis suggests that the Class of 2002 will be as historic, as impressive, and as remarkable as its predecessors. Plus — you're better looking.

Inventing the future

One of the oldest clichés about MIT is that this is the place where the future is invented — and, like most clichés, it is true.

That affects you in two important ways:

In one sense, MIT and other great research universities invent the future because our students are the future. You are the legacy we pass on to a world which urgently needs your creativity, intelligence and expertise. We care deeply about you; indeed, our success is measured by your success.

The other — and most immediate — way that the future is invented here is through the work done every day by our faculty and, to a remarkable extent, by our students — including our freshmen. Including you.

Freshman year at MIT is not a rehearsal, or a dry run. This is as real as it gets.

By the work you have already done, in your schools and in your home communities, you've proven that you can make a difference in the world around you.

The next four years aren't preparation or training for your career. Your career has already begun.

This fundamental truth about MIT is reflected in the fact that many of our most accomplished faculty members began their life's work as MIT undergraduates. It is also reflected in the way that undergraduates — including freshmen — not only participate in serious research, but also contribute actively to the process of their own education.

Here at MIT, we all learn together, and we all solve problems together.

It is a self-evident reality of modern life that — whether as a small academic community in Cambridge, Massachusetts or as a global society making its way on a fragile planet — the challenges we face are so daunting and complex that we cannot hope to solve them without collaboration.

Making a contribution

You, the members of the Class of 2002, are an important and valued part of the MIT collaboration — so don't be shy about plunging in.

MIT offers many different ways

to integrate you into its intellectual and cultural life — but none of them is a passive experience. From the beginning, you will be asked to contribute and to interact. Let me cite just three examples:

First, the Undergraduate Research Opportunities Program (UROP).

This is a way for you to work with faculty and graduate students, as part of their research teams. Most students do this at one time or another, although usually not as first term freshmen.

Second, the Freshman Advising Seminars. Over 80 percent of you have opted to join one of these seminars — which are taught by faculty who will also be your advisors. Few students in America have the opportunity to gather for a couple of hours every week with a half-dozen other freshmen and a world-renowned faculty mentor — and spend that time talking about ideas, trying out hands-on learning, and exchanging insights about life issues.

Your freshman advising seminar is a unique opportunity to do just that. I hope you will take advantage of it from the outset.

Third, the special Freshman Programs — Concourse, the Experimental Study Group, and the Integrated Studies Program. Each of these covers the basic first-year subjects — but does so in the setting of a small and close-knit educational community. I urge you to look into these alternative programs. You may find that one of them is just right for you.

In all of this, frequently, you will be the one to help a fellow student grasp a difficult concept, or refine a promising idea. And, outside the classroom, you will have the opportunity to help your fellow students and the larger community in a host of public service, arts, and cultural programs.

In these, and many other ways during your time at MIT, you will contribute to the building and strengthening of an extraordinarily rich community of learners.

What to expect

Of course, there is an enormous pay-off for all these contributions: The more you put into MIT, the more you'll get from it.

So, as you enter MIT, here are a few things I would like you to keep in mind:

First: Learning at MIT occurs in many places and takes many different forms: learning by formal study and teaching; learning by disciplined research; learning by designing, building and operating, and working on real problems; but, above all, learning from each other.

Second: MIT is a place that values hard and effective work. I will be very honest about this. We expect you to study and work hard on things that matter. And this is true whether you major in engineering, the physical sciences, the humanities or social sciences, architecture or management.

Third: MIT thinks about and works on "big" subjects — major issues facing humankind — ranging from cancer research to industrial productivity, from global climate change to urban design, from the evolution of new artistic expressions to the refinement of political and economic philosophy.

Fourth: The power and beauty of rational thought — of science, engineering and logical analysis — permeate everything we do.

We know that the universe remains full of possibility and mystery, and that the ability to acquire and pass on new knowledge is the defining characteristic of our species. Indeed, 28 MIT faculty, graduates, and staff members have earned Nobel Prizes in the quest for knowledge and understanding.

Yet, despite the gains we have already made, consider for a moment just a few of the many things we still don't know:

- We do not know, even in prin-

ciple, which aspects of climate are predictable.

- We do not know how we learn and remember, or how we think and communicate.

- We do not know how to transform materials without creating waste by-products.

- We do not know how and why cells die, or why tumor cells migrate to new sites in the body.

- We do not know how to convert solar energy into practical, cost-efficient fuels.

- We do not know how old the universe is, what it is made of, or what its fate will be.

Orientation and community

Of course, MIT is not preoccupied solely with these large-scale areas of investigation.

The utility of logical and systematic inquiry goes far beyond the topics most people think of when they hear the words "research," "experiment," and "discovery."

For example, this year's Freshman Orientation itself is an experiment for MIT — and a very important one at that. Several aspects of this year's Orientation programs are brand new.

They include, among others, this afternoon's "Health in Sports" symposium, tomorrow's Residence Midway, and the presentation on the nature of community offered next Thursday night by Dr. Richard Keeling of the University of Wisconsin. In addition, we have, for the first time, asked MIT undergraduates to serve as Orientation Leaders and help steer you through this hectic and important week.

All of these innovations are designed to improve your understanding of the options and opportunities that lie before you in your first year at MIT.

They are also intended to reinforce your sense — and our sense — that we are in this together.

As you will be discovering throughout the next week — and in years to come — MIT is not only a collection of exceptional individuals, but also a community that can support and sustain each of you.

This university has always been very good at stressing the value of rugged individualism. We challenge our students: we tell you to think for yourselves, to question authority, to follow your instincts, and to take chances in the pursuit of your personal and professional goals. All of these aspects of life at MIT are critical to your intellectual development.

At the same time, however, we expect you to use good judgment, common sense and compassion in the ways you express and fulfill your individuality. We know that you already possess compassion, good judgment, and common sense in abundance. You wouldn't be here if you lacked them.

On the other hand, it is equally true that every year, at MIT and other colleges across the nation, students do things that hurt themselves or others. When this happens, it is often because they foolishly suspend their common sense, good judgment, or feeling of connection to a supportive community. Do not let this happen to you.

During the next week, you will be making new friends and, beginning Saturday, choosing a place to live. Once you do, cherish those friendships and become an active member of your living group. Be both a recipient and a giver of mutual support and community. Care for each other.

Some of you have already signaled your desire to do so by taking part in the Freshman Leadership Program — but all of you have the ability.

Remember also that, if you need help, advice, guidance — from your teachers, your fellow students, or from any of MIT's administrative staff, the smart thing to do is ask.

I am sure that all of you are familiar with Sir Isaac Newton's famous words of self-deprecation, "If I have seen further, it is by

standing on the shoulders of giants." No matter how smart you are, no one expects you to figure everything out on your own. If you aren't here to benefit from the wisdom, experience, and intelligence of others, then there's no point in being here.

Building on diversity

Finally, I hope you will make every effort to get to know one another — especially those who come from regions, nations, or backgrounds unlike your own. Unfortunately, "diversity" has become a catch phrase, but the fact is that diversity, in many dimensions, is essential to the infrastructure of a 21st century education. Over and over, we hear from our graduates how they benefit from — and value — the range of people with whom they lived and learned while here as students.

Indeed, your class is one of the most diverse in America:

- You come from 46 of the 50 states and from 48 nations outside the US.

- Twenty of you have transferred to MIT from other institutions. Welcome!

- Forty-two percent of you are women.

Students Explore MIT Teams and Facilities

Athletics, from Page 1

Students have more free time than students at other colleges, he said, "but I was a student here, and I don't think you'll find that that's the case."

Students tour athletic facilities

After Schmill's speech, the freshmen left Kresge and rejoined their orientation groups. Each group combined with four others with consecutive atomic numbers to participate in a cyclic tour of the athletic facilities at MIT.

The groups spent ten minutes at each stop on their tour. During that time, they heard talks by and asked questions of coaches, athletic department employees, and student athletes.

During the tour, members of many sports teams showed off for the freshmen.

As each group of new students walked through Steinbrenner Stadium, they watched the varsity football team in various stages of drills and practice.

The crew team set up an eight-man shell in front of Kresge to greet the freshmen as they emerged and answer any questions about their sport.

"I think the opportunity for people to actually see the activities, rather than just hearing or reading about them, will be positive," said Roger

• You come from an extraordinary array of ethnic, racial, economic, cultural, and religious backgrounds.

This diversity is part of the richness of MIT's learning environment.

Immerse yourself in it, be nurtured within it, and you will be a better student and a better person.

In the end, however, remember that all of you are alike in one central and critical respect: You are well-qualified to excel in one of the most demanding academic environments in the world. You've all got "the right stuff."

You are here because you have the intelligence, the talent and the drive to change the world.

You are ready to take charge of your future — and perhaps the future of the entire planet.

I know you will achieve extraordinary things, both at MIT and in the larger world while you are here, and as you continue in your careers. So work hard, have fun, and — precisely because you are so full of promise and ability — please look out for, and take care of, yourselves and each other.

Go for it!

Thank you very much.

Crossby, director of sports information and one of the presenters.

This may improve sports recruiting, or it may increase attendance at sports events, Crosby said. "If we get one more of each, that's positive."

Along the tour, many presenters continued to emphasize the health aspects of athletics. Larry Anderson, a basketball coach, quoted the Book of Proverbs, saying, "If you have a sound mind, you can also have a sound body."

Staying active physically is an important part of a healthy lifestyle, Anderson said.

Student reaction positive

Student reaction to the event was generally positive. "I found the tours very informative," said Keith A. Bonawitz '02.

"I didn't do any sports in high school, but I'm looking to get involved" in sports at MIT, Bonawitz said.

"I think it was a good idea, getting to see everything that was available," said Effy J. Klopfer '02.

Organizers also called the event a success. "I think it went great," said Interfraternity Council President Duane H. Dreger '99, the organizer of the event. "It's a lot better than the old MOYA."

The response from freshmen has been very good, Dreger said. They were happy to see all their options, he said.

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Freshmen Learn about Diversity at 'Ba Fa Ba Fa'

By Douglas E. Heimbarger
EDITOR IN CHIEF

The "surprise" in the Hitchhiker's Guide yesterday turned out to be "Ba Fa Ba Fa," an interactive cultural diversity program.

After attending a catered dinner at the Barbeque Pits, freshmen were herded into the athletic facilities by their orientation leaders to participate in the game.

The goal of Ba Fa Ba Fa was to introduce students to what it was like to be from a different culture or to be in a strange place, a situation not unlike the one faced by some of the current freshmen, said Oriana C. Hunter '99, an Orientation leader.

Once the freshmen were grouped into sets of about 40, they were again separated into two groups, the alphas and the betas.

Both groups attempted to undertake trading such that individual members would gain a set of cards. Each group was taught the "culture" of the group and the language that they should use.

The alpha society, for example, was a patriarchal society where members frequently discussed each other's paternal relatives and where women would only approach women. Members of the alpha society spoke english.

On the other hand, the beta society used a different language. They were a utilitarian culture, and communicated using hand language and a simple language using the members' last names.

Discussion reveals other culture

Members of each group were not allowed to share their group's language with others. Instead, the

group was expected to learn the language of the other side, and eventually to trade cards with it.

"Whatever they're doing, you want to do," Hunter said.

Initially, members sent over "observers" to look at the language and culture of the other side and to report to the group.

Next, the groups sent over a team of "visitors" to actually interact with the group. The language barriers initially proved difficult. "They're a bad influence, they don't want to play with us," said Grace Ng '02 after being shunned by the opposite group.

Finally, the groups merged and attempted to conduct commerce across the groups.

Towards the end, many freshmen appeared to be taking the event very seriously. "People get in the mindset of the group they're in,"

said Matt McGann '00, the orientation logistics coordinator.

A substantial fraction of the freshmen, however, had decided to walk away or leave the event. "Don't you want to play the game?" yelled one exasperated ori-

entation leader as the event was beginning.

The event was included as a surprise in the Hitchhiker's Guide because it is a "very difficult thing to explain succinctly," McGann added.

Exam Offered Three Times During Summer

Writing, from Page 1

ever. "What is interesting is the distribution is roughly the same," between the two tests, Perelman said.

However, "One of the things that we noticed is that the best students did really well," Perelman said. "The top essays were really outstanding."

Although the percentage of students passing in the online evaluation is up from previous years, the numbers may be misleading since about 70 students took the FEE online before receiving AP scores which would have exempted them from participation, Perelman said.

"In general, about 25 percent have passed [Phase 1] either through the FEE or AP," Perelman said.

Online version will be evaluated

Although there was significant participation in the online version of the FEE its first year, the program itself was a pilot — the results of which will be studied in the coming year to determine whether the FEE will be offered online permanently, Perelman said.

Perelman, who will report to the Committee on the Writing Requirement about the results of the FEE online said he will assess any disparity between those taking the FEE online and in written forms.

"We have a lot more analyzing to do," Perelman said.

However, the question of what it would take to put the FEE online for an entire incoming class has largely been answered.

"We've shown we can do that," Perelman said.

Many more freshmen participated in the pilot program than organizers anticipated.

"It worked. We had many more students than we expected," Perelman said.

One of the reasons for moving the FEE online was to improve its

validity, Perelman said.

"The kind of test we gave is called a timed impromptu. It's not as valid a measure of the kind of writing done in the real world," Perelman said.

Another reason was to decrease the pressure of Orientation by giving the students the option of not having to take a test they would most likely fail during their first few days at MIT, Perelman said.

In addition, students were in favor of the given detailed feedback from graders on what they wrote thereby "transforming it into an educational experience," Perelman said.

Student reaction to FEE mixed

Students had mixed reactions to the online version of the FEE.

"I think I do better on timed tests," said Andrew S. Crane '02, who took the FEE online in its third session.

"I realized I would have felt more comfortable doing it sitting down for two hours," said Amanda M. Bligh '02.

Others appreciated the extra time afforded them to write their essays.

"I thought it was really really valuable to take the pressure off and be able to get a reflection of your real writing skills," said Timothy M. Gorton '02. "I think I had a much better experience on the web"

"It's more realistic of the writing you are probably going to have in college," said Rayka Yokoo '02.

However, the first launch of the FEE online was not without glitches.

According to Perelman, about twenty students had trouble getting to the secure web site and could not take the test online.

"No one I talked to who used Internet Explorer could get it to work," said Victoria K. Anderson '02.

Internet Explorer does not support the method of obtaining personal certificates that MIT uses.

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(Next Grants Deadline: September 25!!!!)



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I applied to the Council for the Arts at MIT Grants Program!!

I stopped by E15-205, the Office of the Arts.

Just fill in this application and supply some supporting material...

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About one month after the deadline, it was time to meet with a member of the Council to talk about my project

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My site visit with a Grants committee member went well. Encouraging? And how!

Bill, I am confident that your song cycle "Problem Sets", will have a great deal of relevance for MIT students....

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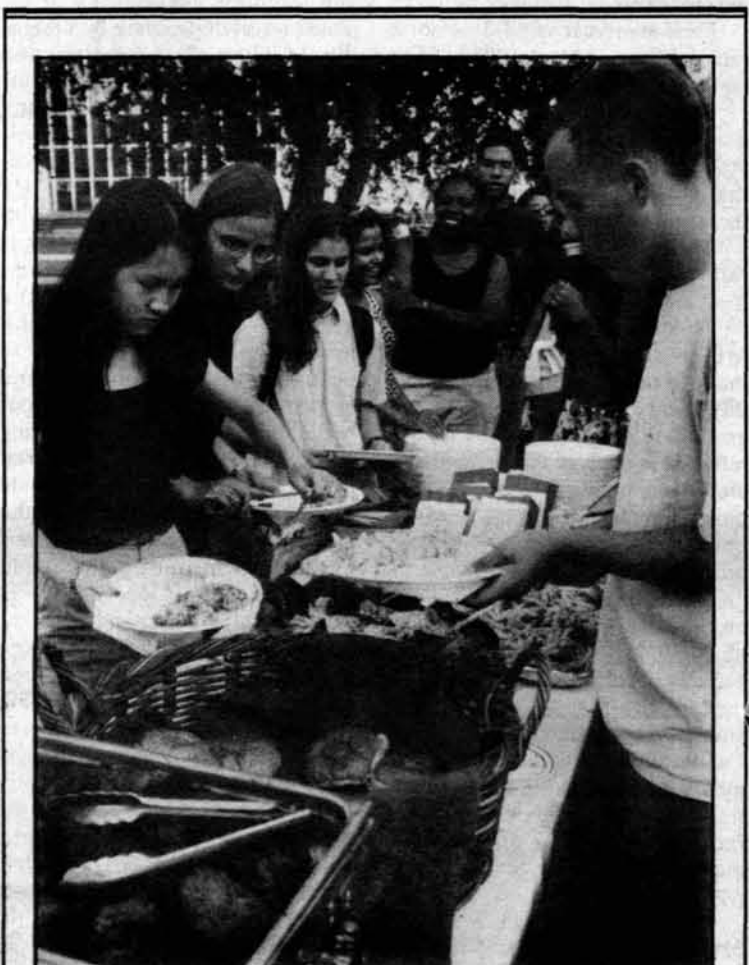
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or go to:

<http://web.mit.edu/arts/grants.html>



THOMAS E. MURPHY—THE TECH

Students from the Class of 2002 enjoy burgers at the evening's cookout at the barbeque pits.

Good Will Hunting Juxtaposed With Reality in 'Contact MIT'

Convocation, from Page 1

fish tanks. Hopkins pointed not only to the possible economic success of drugs produced from similar research but to the less quantitative "desire to answer the questions... desire to know the answer."

Hodges leads 'Contact MIT'

Kip Hodges began his engaging "Contact MIT" program by appearing in a scarf. Alluding to the recent film *Good Will Hunting*, Hodges said that freshmen should see "at least one MIT professor wearing a scarf."

Hodges played off *Good Will Hunting* throughout the presentation, using scenes "shamelessly pirated from the movie" compared to videos created by Hodges to debunk myths about MIT. One scene compared the posh office of fictional math professor Jerry Lambeau to an actual math professor's office, which more resembled an antique show than the Victorian sitting room of the film.

Recent films continued to play a role in Hodges' presentation as he presented the popular image an MIT graduate as "the smartest guy on the planet." Jeff Goldblum, he said, "holds the record for degrees from MIT." Other fictional degrees have been awarded to Steve Buscemi and Billy Bob Thornton, Hodges pointed out.

Following this exploration of popular media, Hodges presented a history of MIT focusing on the influence and vision of Vannevar Bush '16 who was key in the founding of MIT's radiation laboratory and the National Science Foundation.

Hodges presented Bush's vision of an education grounded in the basic sciences but with technical "know how." In closing remarks, Hodges told freshmen: "This is not the place for vocational training." For students that were looking for such training, Hodges said, "The

exits are clearly marked."

Freshmen enjoy program

Freshmen in attendance had positive reactions to the program. Katonio Butler '02 called the program "great" and said that it was "very interesting in a way that could relate to us."

Pavel Gorelik '02 said that it was "entertaining at the very least."

Richard Frank '02 said that it was better than the welcome dinner which took place on Wednesday night.

The only criticism the three students offered was an initial uneasiness surrounding the pounding beat and flashing lights which ushered president Vest to the stage.

Williams and Oppold speak

Following Hopkins' lecture, Vest introduced Williams as "the dean." Williams opened her short remarks by telling students "you are here for the professors, not the administrators."

She gave the assembled freshmen several points of advice, with the disclaimer that "I'm not your mom; MIT is not your parent." She told freshmen to watch their diet, to get an adequate amount of sleep, and to be careful when crossing the street. Williams also encouraged the class to explore Boston and New England. The "city around you is another university," she said.

Williams also made freshmen aware of the support structures available to them. "University is an inherently uncomfortable place," she said.

Oppold was greeted by raucous cheers from the participants in the freshmen leadership program in the audience. He attempted to describe life at MIT through the metaphor of a box which must be made to hold rocks, which represented studies and other responsibilities, and pebbles and sand which represented less important activities. You have to "make sure your big rocks fit," Oppold said.

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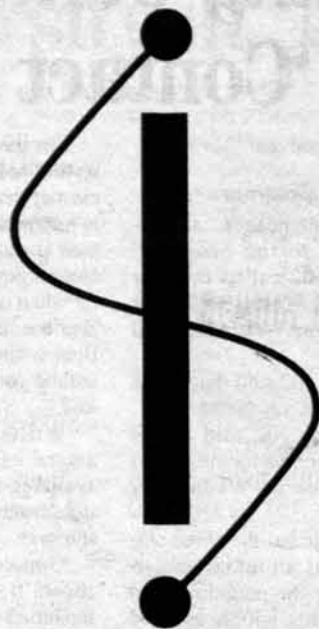
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MITnet!

it's everywhere, almost

You are here and wherever that is, there is probably a **network drop** or a **cluster** nearby ... even if you are in your dorm room. Take advantage of this connectivity.

- Come to our **Minicourses** for an introduction to **Athena**.
- Contact the **Residential Computing Consultant (RCC)** for your graduate or undergraduate dorm for help with network and other computer-related issues.
- Visit the **MIT Libraries** online.
- Check out the available **Athena software** and **keyserved Macintosh software**.



Welcome Back To School

On the Web: A Beginner's Guide to Athena — <http://web.mit.edu/olh/Frosh/>

Athena Orientation 1998 Minicourse Schedule



No fee, no registration, no reservations — just show up during Orientation Week and learn all you need to start using Athena, the MIT campus-wide computing facility.

To get an Athena Account:

- Students, Faculty, and Staff: You should already be in the Accounts database. Just attend any session of the Introduction to Athena minicourse. (Staff may need to contact Athena User Accounts, <accounts@mit.edu> or x3-1325.)

How to register for a minicourse:

- You cannot register for an Athena Minicourse.
- You cannot pay for an Athena Minicourse. Minicourses are free.
- You cannot reserve a place in an Athena Minicourse. Just show up — in 26-100 during Orientation week or 3-343 during the semester.

Room	Monday Aug. 31	Tuesday Sept. 1	Wednesday Sept. 2	Thursday Sept. 3
26-100	Introduction to Athena Basic Word Processing & E-mail	Introduction to Athena Basic Word Processing & E-mail	Working on Athena Advanced Word Processing: EZ	Working on Athena Advanced Word Processing: EZ
	Introduction to Athena Basic Word Processing & E-mail	Introduction to Athena Basic Word Processing & E-mail	Working on Athena Advanced Word Processing: EZ	Working on Athena Advanced Word Processing: EZ
	Introduction to Athena Basic Word Processing & E-mail	Introduction to Athena Basic Word Processing & E-mail	Working on Athena Advanced Word Processing: EZ	Working on Athena Advanced Word Processing: EZ
	Introduction to Athena Basic Word Processing & E-mail	Introduction to Athena Basic Word Processing & E-mail	Working on Athena Advanced Word Processing: EZ	Working on Athena Advanced Word Processing: EZ

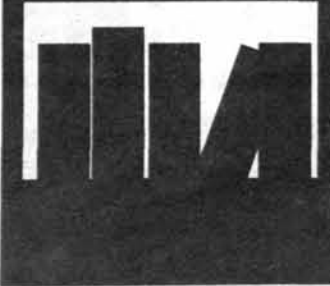
Libraries



Turn to the MIT Libraries Web page to find an array of online services and information including:

- Hours, locations and phone numbers of all the MIT libraries.
- **Barton**, MIT's Online Public Access Catalog (OPAC), with sophisticated search engines
- Online Reference Tools:
 - *Britannica Online*
 - *Merriam-Webster Collegiate Dictionary*
 - *Oxford English Dictionary*
- Internet Resource Collections, such as electronic journals and online newspapers
- ...and much, much more

See it all at <http://libraries.mit.edu/>



Protect Your Account Anywhere on MITnet

In attacks on MITnet, sniffer programs gathered usernames and passwords by "listening" to telnet and ftp packets as they traveled over the network.

If you use a computer connected to MITnet, you can take some very basic precautions to safeguard your password and your data.

- Use Kerberized applications whenever possible. Email on Athena is Kerberized as is Eudora for Windows and Macintosh. Kerberized telnet is available on Athena and for Windows and Macintoshes (see <http://web.mit.edu/is/help/ktelnet/>).
- Choose good passwords and change them regularly.

Choosing a password

Choose a password that you can remember — but others can't easily guess:

- Do use 6 or more characters, mixing upper- and lowercase letters (pass-words are case sensitive) and numbers (but no spaces).
- Do pick something obscure (mis-spell something or create an acronym, e.g., GykoR-66 for "Get your kicks on Route 66").
- Don't use your real name, username, any common name, name of a close relative, friend, or pet, or name from popular culture in any form (even backwards, or sideways).
- Don't use significant numbers (phone, office, social security, license plate, address, birthday, anniversary).
- Don't use any word in a dictionary.

Changing your password

It's a good idea to change your password regularly (e.g., at least once a semester):

`athena% passwd`

Keeping your files safe

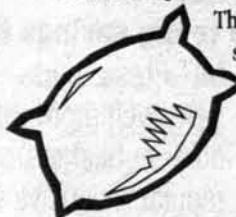
Athena machines are not completely private and secure, but you can make access to your files very difficult:

- Don't store any information that must be kept secret on Athena.
- Never "lend" your account to anyone — and keep your password secret!
- Don't change your default file protection.
- Don't leave your workstation unattended while you're logged in.
- Keep backup copies of critical files (like your thesis) on diskettes.

(For more tips, see *Managing Your Athena Account* — <http://web.mit.edu/olh/Account/Account.html#protecting>)

Connect Securely From Your Student Residence

"Cable Days" coming to your dorm September 4-6, 1998.



The Residential Computing Consultants (RCCs) will hold several sessions to help new students connect to MITnet. The purpose of these sessions is to

- distribute cables
- help you register for IP addresses
- discuss how to avoid problems on MITnet
- feed you

Sessions will last about an hour. Graduate students are welcome to attend any session, but the sessions are geared toward freshmen. In each dorm, after the Cable Days presentation, RCCs will begin to assign IP addresses for freshmen.

- Friday, Sept. 4:**
 - Burton-Conner House 3-5PM, location TBA
 - East Campus 6-8PM, Talbot Lounge
 - Senior House 6-8PM, East Campus Talbot Lounge
 - MacGregor House 8-10PM, the dining hall
- Saturday, Sept. 5:**
 - McCormick Hall 3-5PM, in the Brown Living Room
 - Bexley Hall 6-8PM, Space center or Desk
 - Random Hall 8-10PM, first floor lounge
- Sunday, Sept. 6:**
 - Baker House 3-5PM, location TBA
 - Next House 6-8PM, in main lounge (TFL)
 - New House 8-10PM, in House 3, large dining room

See the Residential Computing Home Page

<http://web.mit.edu/rescomp/>

Residential Computing Consultants (RCCs) are available to help connect your personal computer to MITnet.

BEWARE OF PASSWORD SNIFFERS ON THE 'NET!

