

The Weather

Today: Sunny, hot, 90°F (32°C)
Tonight: Partly cloudy, 74°F (23°C)
Tomorrow: Late rain, 92°F (33°C)
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Friday, August 27, 1993

President, Speakers Welcome Freshmen

By Eric Richard

ASSOCIATE NEWS EDITOR

The Class of 1997 was welcomed to MIT, warned of the rigors of MIT life, and inspired to achieve by President Charles M. Vest, Professor Woodie C. Flowers PhD '73, Undergraduate Association President Hans C. Godfrey '93, and Arthur C. Smith, dean for undergraduate education and student affairs, during yesterday's convocations speeches in Kresge Auditorium.

With each speaker giving his own personal advice to the Class of 1997, the new students were urged to reap all they could from their experiences at MIT and told that while MIT may seem trying at times in the end their experiences would prove to be an enormous benefit.

Vest, the first to congratulate the entering class, gave new students the traditional assurance that they "were not admitted to MIT by mistake." Vest also said each student will "have the intellectual capacity, the energy, the imagination, and the will to succeed, both in meeting [his] personal goals and in contributing to

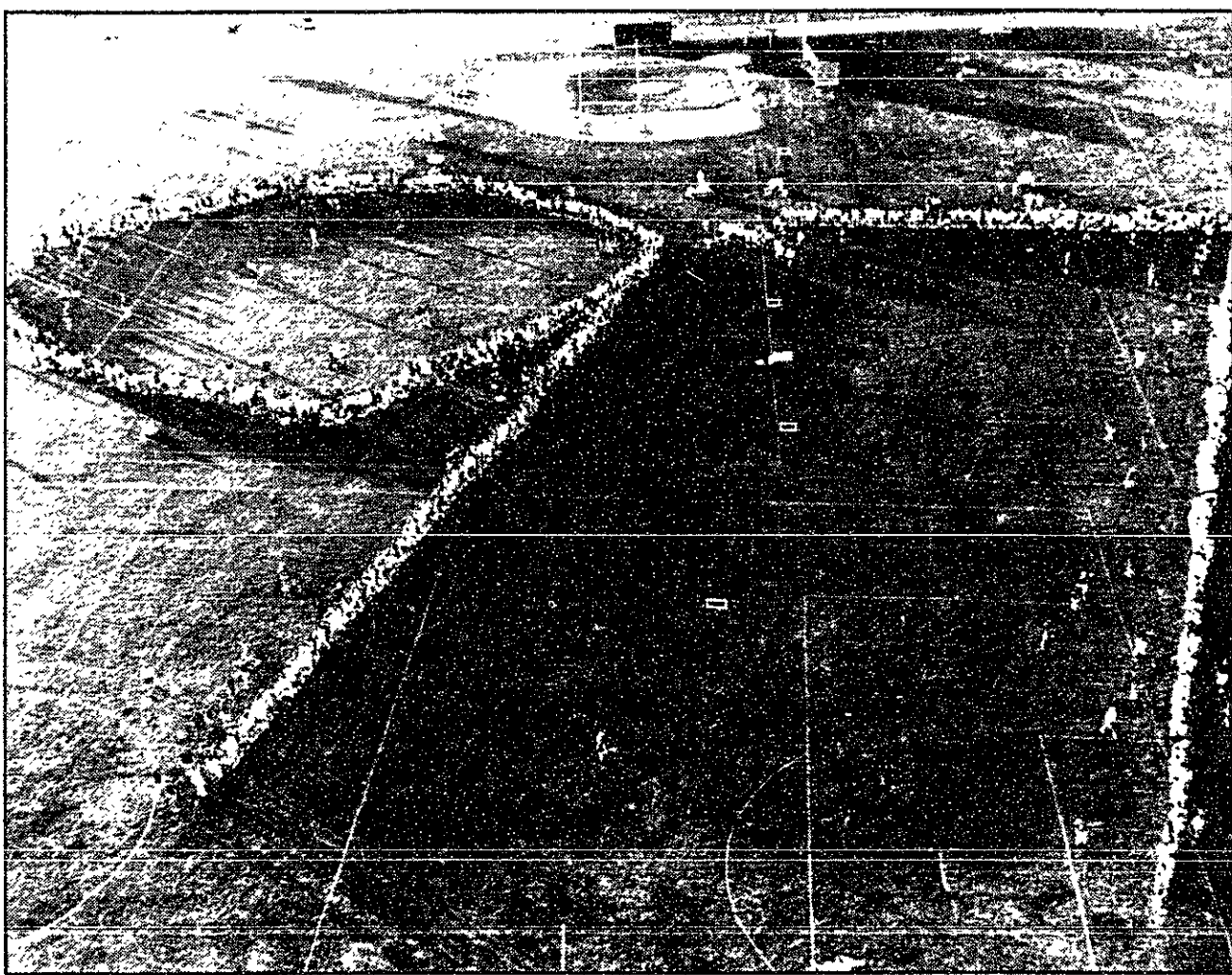
this unique academic community."

Vest then lauded MIT for being a truly exceptional educational institute, touting nine Nobel Prize laureates, where "students, faculty, and staff of every conceivable race, ethnicity, and background have come together from around the world to pursue our common goals of learning, discovering, creation, and invention."

"Wherever you come from," Vest said, "and wherever you go after your four years here, you will find that your MIT education will serve you well." He added that while the next four years will be rigorous and full of pressure, "After you've gone through this remarkable place, you will know that you can do virtually anything."

Vest told the students to celebrate their diversity, saying, "Don't be afraid of your differences, but acknowledge them. Don't try to erase them; learn from them. Men and women together create a more balanced discourse and world view."

Convocation, Page 6



YUEH Z. LEE—THE TECH

The freshman class form the numerals '97' in their class lap sit as a part of Project MOYA. Over 1100 people participated in the lap sit. Other activities included trust-falls, cat and mouse, electric fence, and name games. These activities were designed to promote trust and cooperation among the new class.

Frosh Break the Ice at MOYA

By Peter Y. Park

BUSINESS STAFF

Freshmen jumped right into the third annual Project Move Off Your Assumptions after the President's Convocation yesterday afternoon. MOYA leaders, who were eagerly awaiting them on Kresge Oval, then brought them to the athletic fields for the activities.

MOYA activities were designed for freshmen to get to know their fellow classmates through ice breakers, trusts, and problem solving initiatives. Although they emphasized cooperation between students, the leaders did not push students to participate if they did not feel comfortable.

"It brings different kinds of people together," said Alan E. Coronado '96, one of the MOYA leaders.

"I got to meet a lot of different people," said freshman Brian Bilello.

Marcy Ammer '97 was less enthusiastic, complaining that the subgroups had too few people.

Examples of these activities included the name game, trust fall, and electric fence. In the name game, participants toss a ball around in a circle while calling out the name of the recipient, quickly learning each other's names.

As demonstrated by Dean for Undergraduate Education and Student Affairs Arthur C. Smith during the convocation, freshmen had the opportunity to

participate in the trust fall. In this event, a person stood at the edge of a table and fell backwards into the arms of the other members of his group.

In the electric fence game, students needed to figure out how to cross over an imaginary electric fence while maintaining constant physical contact with other members of the group.

The final event and the climax of the MOYA activities was the Lap Sit '97. After much practice and anticipation — and many rounds of the "wave" — the freshmen sat on each other's laps and formed the number 97.

"It was very organized. Everyone knew where to stand," said Sarah L. Masiulewicz '96, a MOYA leader.

Mike Marguetz '97 described it by saying, "I was strangely stimulated."

Dehydration was a concern

With the temperature reaching the mid-90s, dehydration was a concern. The activities took place on the athletic fields, where there are no trees that create shade from the hot sun.

"The freshmen were not very enthusiastic at first because of the heat," Masiulewicz said. But the

MOYA, Page 7

Widnall Sworn In As Air Force Head

By Eva Moy

NEWS EDITOR

Professor Sheila E. Widnall ScD '64 was officially sworn into office as Secretary of the Air Force by President Clinton Aug. 6, according to Captain Kathleen Cook, an Air Force spokeswoman. Widnall is the first woman ever to head one of the military branches.

At MIT, Widnall is professor of aeronautics and astronautics and served as associate provost. She has been on the MIT faculty for 28 years.

Clinton announced his intention to nominate Widnall July 2. The full Senate confirmation took place Aug. 5 — one day before closing session. The Senate Armed Services Committee approved had her nomination earlier that week.

Widnall is currently traveling, and will start her duties in Washington when she returns next week, according to Cook.

A committee to search for a new associate provost at MIT has not yet been appointed.

Although Widnall has never served in the Air Force, she has been an adviser on various military boards. Widnall was also the fifth woman president of the American Association for the Advancement of Sciences. As president and chairman of AAAS, she testified on numerous occasions to Congressional committees dealing with issues of research, science education, and research faculty funding.

At MIT Widnall has also been a strong force in these issues. As associate provost since January 1992, she has dealt with the issues of MIT's policies and procedures for promotion and tenure policies, a study on mandatory faculty retire-

ment, MIT's international relationships, and the Council on Federal Relations.

Widnall also had a strong interest in academic integrity at MIT, both with students and researchers. She was a chairwoman of the Committee on Discipline and supported the idea of having an honor code for students. She was also the first woman to chair the faculty.

As an engineer, Widnall also holds many distinctions. She was the first alumna appointed to the faculty in the School of Engineering, and received the 1986 Abby Rockefeller Mauzé Professor of Aeronautics and Astronautics Award.

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

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YUEH Z. LEE—THE TECH

The Class of 1997 participates in Project Move Off Your Assumptions. Students are shown here attempting to stand up all at once in a circle.

WORLD & NATION

New Haiti Premier Begins Task of Rebuilding

LOS ANGELES TIMES

PORT AU PRINCE, HAITI

Robert Malval, Haiti's first legitimate prime minister in nearly two years, left for Washington Thursday to receive the blessings of exiled President Jean-Bertrand Aristide and begin the difficult task of rebuilding this shattered nation.

"The rough road for Malval still lies in front of him," said one Haitian political expert, despite Malval's ratification by the National Assembly and the promise of a quick end to the international economic boycott that has left the country's infrastructure in tatters.

By the unanimous accounts of diplomats and Haitian experts, the first priority for Malval, a 50-year-old publisher and political moderate, will be to insure that Aristide, who was overthrown by the military in September 1991, returns as scheduled Oct. 30.

The military and much of the wealthy Haitian business and social elite have spent the interval trying to prevent his restoration, using murder and general terror to repress the majority of people, who want him back.

But under extreme pressure from Clinton administration and the rest of the world, including the highly effective petroleum boycott, the military high command agreed on July 3 to resign their offices and allow Aristide back.

Study Says Only 1 Type of HIV Can Be Spread Sexually

NEWSDAY

NEW YORK

Potential vaccines now being developed to prevent AIDS may be targeting the wrong types of AIDS viruses, a leading New York City research team is to report today.

AIDS-infected people are known to have a mix of human immunodeficiency viruses in their bodies. In a study of seven New Yorkers, the researchers found that only one class of the viruses could pass to another person by sexual contact. Once inside the recipient's body, however, most of these viruses mutated into a non-infectious, but more deadly form of HIV that actually caused illness.

All AIDS vaccines currently under development are designed to stop the later stage viruses — not the infectious types, according to Dr. David Ho, who discovered this pattern of viral mutation.

That might be good for therapeutic vaccines, intended for use by people who are already infected. But it's bad news if the goal of vaccination is to prevent infection in the first place, Ho said.

Ho said the finding, to be reported in the journal *Science*, has strong implications for treatment as well. Nearly all test tube experiments with potential AIDS drugs have been performed on the later stage viruses because they are the only ones that grow rapidly and multiply in the laboratory. Drugs have been tested to see how well they slow that growth.

Boy Says He Shared Bed, but No Improper Contact, With Jackson

NEWSDAY

One of Michael Jackson's young friends came to his defense Thursday, saying the pop superstar never abused him although Jackson often hugged and kissed him and the two slept in the same bed at Jackson's Neverland ranch in Santa Ynez, Calif.

Brett Barnes, 11, told KNBC-TV in Los Angeles that he and Jackson often shared friendly hugs and kisses since the two met 18 months ago after Jackson responded to a fan letter years before.

"It's like I've known him all my life, and in a past life," Brett said. "He, like, loves you like he is your own father or brother or sister or mother."

On visits to Jackson's ranch, Brett said, Jackson let the boy sleep in his bed and never did anything improper. "I was on one side (of the bed), and he was on the other, and it was a big bed," said Brett, who's from Melbourne, Australia.

WEATHER

Hot Weather to Continue

By Michael C. Morgan

STAFF METEOROLOGIST

A ridge of high pressure over the northeastern U.S. will remain in place over the next several days. The resulting weather for the period will remain much as it has been the last few days — sunny, very warm days and partly cloudy warm nights. Haze and humidity will slowly increase as well. Immediate coastal areas may get a slight break, as winds turn onshore with afternoon seabreezes. Temperatures there may stay in the mid-80s (27–31°C). Relief, in the form of cooler, drier air, will arrive during the weekend.

Meanwhile, out in the Atlantic we find Hurricane Emily. As of late yesterday afternoon, Emily was located at latitude 27.4°N, longitude 62.5°W or about 365 miles (590 km) south-southeast of Bermuda. The minimal hurricane was moving to the west at 6 mph (10 kph). Top winds with Emily were 75 mph (120 kph) and further slow intensification was anticipated over the next several days. The cyclone may threaten the eastern U.S. as early as the first half of next week.

Today: Mostly sunny and very warm to hot. Winds west-southwest 10–15 mph (16–24 kph). High 88–93°F (31–34°C).

Tonight: Partly cloudy and warm. Low 74°F (23°C).

Tomorrow: Partly cloudy with late day showers and thunderstorms — especially to the west and northwest. Highs 88–95°F (31–35°C).

Tomorrow night: Scattered showers and thundershowers. Lows 68–73°F (20–23°C).

NATO Preparing for Possible Troop Deployment in Bosnia

By John Lancaster and Daniel Williams
THE WASHINGTON POST

WASHINGTON

With Bosnian peace talks reaching a critical point, NATO military planners have begun to prepare for the possible deployment of roughly 50,000 peace-keeping troops, including thousands of U.S. infantry soldiers and Marines, according to senior NATO officers.

If a peace agreement is reached, the U.S. troops and their NATO counterparts would arrive in Bosnia by rail, road and air, then spread out across the countryside to help maintain order while the country is rebuilt. The size of the U.S. contribution has yet to be determined but could reach 20,000 or more, the officers said.

The planning is still in its preliminary stages, since neither the United States nor its NATO allies want to commit specific numbers of troops until there is a viable settlement among Bosnian Serbs, Croats and the country's Muslim-led government.

Even then, U.S. and NATO troops could be in for a long and dangerous stay if the warring parties resume hostilities. That could prove politically damaging for the Clinton administration, already struggling to map an exit for U.S. soldiers in Somalia and preserve its focus on domestic policy.

Nevertheless, President Clinton intends to live up to the commitment he made in February to provide U.S. ground troops in support of a peace settlement, administration officials said. The administration has embraced with reservations a plan brokered by European Community mediators in Geneva that would carve the country into three ethnically distinct republics.

Peace talks are scheduled to reconvene Monday in Geneva, with the possibility that Bosnia's Muslim president, Alija Izetbegovic, could sign the peace plan. While Bosnia's Serbs and Croats have already endorsed the proposed solution,

Izetbegovic and his followers have criticized it as tantamount to the destruction of an internationally recognized state and a reward for aggressive Serb nationalist forces.

The Muslims face pressure from U.S. and European governments, which have warned them that demands that would derail the talks could undermine a NATO pledge to protect Sarajevo and other Muslim population centers.

U.S. officials said that in addition to reaching agreement, all three warring parties would have to take concrete steps — such as impounding heavy weapons and ceasing hostilities — to show they intend to abide by the terms of a peace accord. The United Nations would then authorize the peace-keeping mission, paving the way for deployment of NATO troops.

At the same time, U.S. officials do not want to wait too long to judge the effectiveness of any peace accord, fearing that Serb forces might take advantage of the delay to resume their attacks. U.S. officials thus expect a phased insertion of NATO troops, area by area in Bosnia, as the Serbs withdraw.

The bulk of the planning is taking place at the Naples headquarters of Adm. Jeremy M. Boorda, who commands allied forces in southern Europe. Boorda had something of a head start, having already commissioned detailed peace-keeping plans in anticipation of an earlier proposal, the so-called Vance-Owen peace plan, which would have divided the country into ten semi-autonomous cantons.

That proposal fell apart in May when the Serbs refused to sign, but Boorda ordered his staff to continue the planning effort through late June in anticipation that some military intervention might be needed, NATO sources said. Two weeks ago, Boorda ordered his staff to resume their planning efforts as negotiators reported progress in the Geneva talks, a senior NATO officer said.

"If NATO gets called upon to do

the job, it just makes good sense to be ready to do it because the planning is very complex," the officer said.

NATO officers said planners have come up with a slimmed-down version of the earlier peace-keeping plan, which called for deployment of 25,000 to 30,000 U.S. troops out of a total NATO commitment of 77,000. They added, however, that because Boorda's staff received its copy of the Geneva draft agreement only this week, planners have yet to determine how many troops the new mission would require; several put the ballpark figure at 50,000.

The NATO officers said that Army Gen. John Shalikashvili, the top NATO commander in Europe and soon-to-be chairman of the Joint Chiefs of Staff, wants to move in quickly and secure heavy weapons with the goal of establishing security early in the mission. That way, the officers said, the operation could make a swift transition to a smaller security force and avoid the costs of a prolonged stay.

The officer said the planners are devoting considerable attention to logistics: tens of thousands of troops would have to be housed, moved and fed in a country whose infrastructure has been gutted by two years of war. One unique aspect of the plan calls for creation of a separate, U.S.-run "logistics command," which would coordinate support to U.S. and allied troops. That operation would likely be commanded by Army Lt. Gen. William G. Pagonis, the logistician for U.S. forces during Operations Desert Shield and Desert Storm which routed Iraqi forces out of Kuwait in 1991, military sources said.

In addition, Clinton could end up having to defend a Bosnian peace agreement clearly weighted against the Muslim-led government, which has been vastly disadvantaged on the battlefield. Putting U.S. troops on the ground could be interpreted as, in effect, endorsing Serb gains won in part by a terror campaign against civilians.

'Urban Terrorism' Suspects Enter Not Guilty Plea in NY Bomb Plot

By Robert L. Jackson

LOS ANGELES TIMES

NEW YORK

Their hands manacled behind them, radical Muslim Sheik Abdel-Rahman and 14 followers stood silent in a heavily guarded courtroom Thursday as a judge entered in their behalf pleas of "not guilty" to conspiring "to levy a war of urban terrorism against the United States."

As the suspects made their court appearance, State Department officials in Washington took note of threats from Abdel-Rahman's followers abroad and warned American tourists to be "conscious of their own security and safety" as they travel.

The department's warning was in response to a statement signed by three radical groups in Egypt which said, "We will take revenge on all U.S. interests and citizens, either in Egypt or outside, if any harm occurs to Sheik Omar."

The blind cleric, dressed in his trademark red and white Islamic cap, dark glasses and light blue prison clothing, sat through much of the court proceeding with his head bowed, listening to an Arabic translation through headphones. Asked about his view of events, Abdel-Rahman's attorney, Harry Batchelder, quoted his client saying, "The struggle begins."

Most of the defendants accused

in the government's new indictment had appeared in court this summer to claim they were innocent of charges they tried to bomb United Nations headquarters and two New York commuter tunnels.

But Wednesday's indictment marked the first time Abdel-Rahman had been charged. In addition, the new charges accused him and the others of being members of a ring that also planned the World Trade Center bombing, an event last February that killed six persons and injured more than 1,000.

State Department spokesman Michael McCurry said he knew of no "specific, credible" threat from followers of Abdel-Rahman, who has lived in the United States since 1990. But the threat is serious enough, he said, that diplomatic posts abroad also are being asked "to review their security procedures and determine if any changes are needed."

The crowded courtroom was ringed by more than 40 federal marshals, and dozens of New York policemen were stationed outside the courthouse behind police barricades. Officials said they were concerned that other members of the terrorist cell may be at large.

"Whether or not we've identified the major players, obviously there's a concern that there may be others out there that we don't know about," federal prosecutor Matthew

Fishbein said.

To speed their arraignment, U.S. District Judge Michael B. Mukasey chose not to ask all 15 defendants to state a plea. Rather, he asked if anyone pleaded other than not guilty, and hearing only silence, entered innocent pleas for all.

A defendant who appeared in the case for the first time was El Sayyid Nosair, who has been serving a long sentence in New York's Attica State Prison on weapons charges related to the 1990 assassination of militant Jewish rabbi Meir Kahane.

Although he was acquitted of state murder charges in 1991, Nosair was charged in the latest indictment with "violence by racketeering" in connection with Kahane's death, indicating that federal prosecutors have new evidence of his involvement in that offense.

The indictment alleged that Kahane's killing was part of the "war of urban terrorism" waged by Abdel-Rahman, Nosair and others in the ring. Additionally, the defendants were accused of planning to assassinate Egyptian President Hosni Mubarak on a visit to the United States last April.

Egypt is still pressing for Abdel-Rahman's return on charges that he instigated anti-government riots there in 1989. But McCurry, the State Department spokesman, told a briefing that the sheik will have to "face justice here first."

Thousands Plan March on D.C. To Retrace March Into History

By DeNeen L. Brown
THE WASHINGTON POST

WASHINGTON

Russell Williams rode all night from New York to get to the 1963 civil rights March on Washington. He would like to tell people now that he was there, that when Martin Luther King Jr. told a quarter of a million marchers, "I have a dream," he heard it and wept.

But when King rose on that hot August afternoon to give the speech of the century, Williams was in the bathroom.

"Sometimes I have this practical mind. I thought, 'This speech I can read. Everybody will be listening to it,'" Williams said. "Now is my chance to go."

Thirty years later, he regrets not waiting.

Williams, now a 50-year-old schoolteacher who lives in Hagerstown, Md., plans to be among the thousands who are expected to return to the Lincoln Memorial Saturday to mark the 30th anniversary of the march. Out of a sense of

"reunion, a sense of history," he will return with the poster he carried in 1963.

The official commemoration begins today with a People's University on the Mall, a '60s-style teach-in with sessions on racism and other topics. The march will start at noon tomorrow from the Washington Monument to trace the steps of those earlier marchers to the Lincoln Memorial.

This time, the rallying cry is "Jobs, Justice and Peace," not just for blacks but for Latinos, Asians, women, American Indians, homosexuals and laborers, to name only several of the 500 interest groups sponsoring the event. Participants in the first march recall a more basic demand: equal rights and jobs for blacks.

On Wednesday, Aug. 28, 1963, people poured into the city by foot, car, bus and train. The March on Washington for Jobs and Freedom would be the biggest demonstration the city had ever seen. That was evident from the traffic-clogged highways and from out-of-towners tele-

phoning District relatives and friends to find a place to rest after the march.

Williams remembers that buses coming from New York, Philadelphia and other northern cities were parked on the Baltimore-Washington Parkway, waiting their turn to inch into the city. When his bus finally arrived at the Mall, "I got out and started counting buses. I got up to about 1,000. There were buses everywhere."

Williams started toward the Lincoln Memorial to get as close to the stage as he could. He hung his sign — "Higher Minimum Wages, Coverage for All Workers" — around his neck with string. "They had told us not to use wood because wood could be used as a weapon, and we didn't want to be arrested carrying a weapon around," he recalled.

But despite warnings that the march might explode into violence, many people who were there remember the unbelievable calm that swept over the city and the pains people took to be polite.

Martin Marietta Management Copes With Satellite Disasters

By John Mintz
THE WASHINGTON POST

Five months ago, when Martin Marietta Corp. bought GE Aerospace for \$3 billion in one of the defense industry's biggest acquisitions, the Bethesda, Md.-based firm was widely praised for brilliant and forward-thinking.

Now, some are having second thoughts.

That's because the GE Aerospace factories that recently joined Martin Marietta built both of the U.S. satellites that lost contact with NASA ground controllers and got lost in space in the last week — the \$1-billion Mars Observer and a \$100-million weather satellite. Those snafus followed the Aug. 2 explosion of a Martin Marietta Titan 4 rocket 101 seconds after liftoff in California.

"This is a real management and image problem for Martin Marietta," said Jerry Grey, director of aerospace and science policy for the private American Institute of Aeronau-

tics and Astronautics. "It requires some careful re-examination" by the company's chairman and chief executive officer, Norman R. Augustine. "There's no question Congress will have a bunch of things to talk about with NASA and Martin."

It's impossible to know what the financial impact on the company will be until the accidents' causes are determined. All three contracts contained incentives and penalties. Many Martin Marietta employees have helped NASA try to re-establish contact with the satellites and will assist in untangling the mystery of their failures.

Most people in the aerospace industry and space policy circles call the accidents a coincidence, and say they are unaware of a systemic problem with Martin of the sort found with Morton Thiokol Inc., the Utah firm whose faulty solid-rocket boosters were blamed in the shuttle Challenger explosion in 1986.

Martin has a long history of successful space work, including on

"one of NASA's most successful missions," the recent Magellan program mapping Venus, said John M. Logsdon, director of George Washington University's space policy institute.

Scientists at NASA's Jet Propulsion Laboratory in Pasadena lost contact with the Mars satellite Saturday; they don't know why.

The government's headaches worsened that same day, when controllers from NASA last heard from the weather satellite.

Some people speculate that meteorites or space debris collided with either or both satellites. Most think we'll never know the cause of the Mars craft's problem.

Air Force officials have made a preliminary finding that the Titan 4 rocket — carrying a cluster of spy satellites worth about \$800 million — blew up earlier this month because of a "burn-through" on the side of one of two solid rocket motors.

U.S. China Sanctions May Hit American Firms First

LOS ANGELES TIMES

BEIJING

The Clinton administration's imposition of trade sanctions against Chinese aerospace and defense industries was intended as a slap against China for allegedly violating an international arms accord by supplying missile components to Pakistan.

Among the first likely to suffer from the sanctions, however, is not the Chinese government but the Los Angeles-based Hughes Aircraft Co. and its subsidiaries, which over the past two years have built a several-hundred-million-dollar business selling communications satellites to China and launching them into space on Chinese rockets.

It is precisely this satellite trade that was the focus of the narrow, two-year sanctions imposed Wednesday on China by the administration. State Department spokesman Mike McCurry said the sanctions would primarily affect sales of satellites — possibly worth \$400 million to \$500 million — and transfers of satellite technology, both areas dominated by Hughes and other American companies.

"This is not going to help our business," complained Michael K. Sun, the Beijing-based vice president of Hughes Network Systems, a subsidiary with several major satellite communications contracts pending with the Chinese. "I have a big contract that I could lose because of this. Every time I meet with Chinese officials they give me a 15-minute lecture complaining about American policy. I support the American government, but sometimes you have to ask the question why you as an American company get hit more than anyone else."

Sun was not the only member of Beijing's American business community to complain.

"What I regret most," said another American attracted to China by the booming business climate, "is non-commercial issues spilling over and affecting our commercial environment."

The partnership between Hughes Space and Communications, the world's largest producer of commercial satellites, and the state-owned China Great Wall Industry Corp., which makes the Long March 2-E rocket used to launch the satellites, is a great source of national pride for the Chinese.

Germany Reports Rise in Racist Violence, Number of Neo-Nazis

LOS ANGELES TIMES

BONN, GERMANY

Racist violence and membership in neo-Nazi gangs has hit a deadly new high in Germany despite a crackdown against the militant right, the government said Thursday.

The number of attacks by mostly young right-wing extremists jumped 74 percent last year, to 2,584, according to the Interior Ministry, and the upward trend continues this year, with about 1,300 incidents recorded in the first six months, roughly twice the rate for the comparable 1992 period.

But public outrage over the arson attacks, beatings and harassment has faded considerably since the nationwide protests and candlelight vigils last winter after a neo-Nazi firebombing left a Turkish grandmother and two young girls dead.

Interior Minister Manfred Kanther warned against a lapse into indifference.

"... Citizens must get into the act here. You can't simply unload society's job on the politicians," Kanther told a news conference.

Although the government banned four neo-Nazi groups last year, the number of extreme right-wing groups rose by six to 82, and their membership swelled by over 5 percent to 41,900. Of these, 6,400 are considered "militant."

The figures do not include the approximately 800 militant neo-Nazis not linked to any group, the report said, nor do they count the 25,000 members claimed by the far-right political party, the Republicans.

Seventeen people died in right-wing attacks last year — the highest death toll since right-wing violence began to surge after German unification three years ago. Another seven people have been killed since January.

U.S. Acts to Ease Export Controls On Computers

THE WASHINGTON POST

WASHINGTON

The Clinton administration moved Thursday to ease Cold War-era controls on exports of high-powered U.S. computers to the former Soviet Bloc and other countries, fulfilling a campaign promise President Clinton made to the Silicon Valley executives who supported him last year.

Computer and semiconductor executives said it was a welcome first step, but falls far short of what the industry needs. U.S. industry officials said controls on computer exports cost them billions of dollars in lost sales.

Export controls on computers are based on how fast they can process information. Thursday's decision by the Commerce Department will lead to removal of national security export controls on computers rated at 67 million operations per second, five times the current ceiling for such exports. Foreign-made computers operating at that speed are readily available, and holding back U.S. exports penalizes American firms needlessly, Commerce concluded.

The action will make U.S. firms "more competitive abroad without impairing U.S. national security," said Barry E. Carter, acting head of Commerce's Bureau of Export Administration. Computer sales to China were not restricted by the trade sanctions announced this week by the State Department, an administration official said.

J. Richard Iverson, president of the American Electronic Association, said the administration's action was "only a down payment."

"Because technology advances so quickly, this policy will be obsolete within five months," said Iverson.

"I'm disappointed but hopeful," said attorney Eric Hirshhorn, a former Commerce Export Administration official who represents Compaq Computer Corp.

Outside Study Challenges Findings Of Internal Pentagon Study on Gays

By Thomas W. Lippman
THE WASHINGTON POST

WASHINGTON

A Pentagon team set up last spring to evaluate the impact of lifting the ban on homosexuals in the military reported deep and widespread antipathy to homosexuals, from foxhole to latrine to Little League field. But a parallel study by a private group found most of the concerns to be unfounded.

Both reports, commissioned by Defense Secretary Les Aspin to help him and President Clinton formulate a new, more lenient policy on gay men and lesbians in the military, were released Thursday by the Defense Department.

In effect, the two reports mirrored the public and political debate on this emotional subject: deep-seated hostility to homosexuals within the military, offset by findings from outside indicating that the potential problems, while real, would be less than feared and manageable with competent leadership.

From these opposing perspectives, both studies recommended the policy that Clinton eventually adopted last month. Gay men and lesbians are no longer to be barred from serving solely because they are

homosexual, but homosexual conduct remains grounds for discharge.

The in-house report was submitted by a military working group of about 50 members, headed by five officers: Army Maj. Gen. John P. Otjen; Air Force Maj. Gen. William B. Davitte; Marine Brig. Gen. Gerald L. Miller; Navy Rear Adm. John S. Reed; and Coast Guard Rear Adm. James M. Loy.

Based on meetings with military personnel, consultations with scholars and a review of "available literature," this group concluded that "all homosexuality is incompatible with military service."

Because homosexuals are perceived to have lifestyles "contrary to those of the unit," they could not be effective leaders, the report said.

But because the president's instructions precluded retention of the outright ban, the panel concluded reluctantly that there was only one way to end discrimination while maintaining readiness. "Sexual orientation will be considered a personal and private matter," the group recommended. "The armed forces won't ask and servicemembers will not be required to reveal their sexual orientation," but they "will be discharged if they are found to have

engaged in homosexual conduct."

By contrast, a 518-page report prepared by the Rand Corp., a Santa Monica, Calif., think tank, offered little support for the views of the military panel.

Based on studies of foreign armies and domestic police and fire departments that accept homosexuals, Rand found that relatively few homosexuals enlist, those who do generally adhere to the norms of their units. Potential problems can be averted by effective leadership and clearly stated rules of conduct.

Overall, the Rand study validated the argument of those who supported the admission of homosexuals into the armed forces by concluding that behavior, not attitudes, is what counts.

Rand researchers went to Canada, France, Germany, Israel, the Netherlands and Norway, all of which permit "known homosexuals to serve in some capacity." They found that openly gay service members in those countries "were appropriately circumspect in their behavior while in military situations; they did not call attention to themselves in ways that could make their service less pleasant or impede their careers."

OPINION



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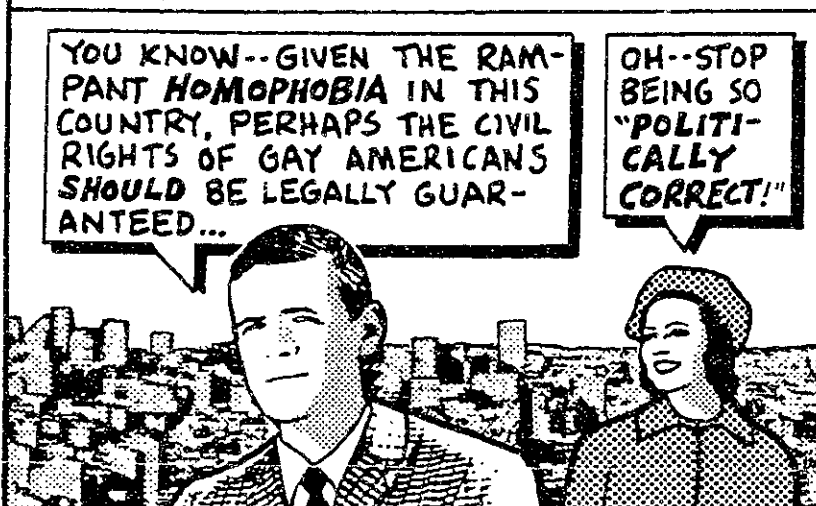
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"I know who's going to end up paying for national health care . . . WE ARE!!!"

THIS MODERN WORLD by TOM TOMORROW

IF YOU EXPRESS SYMPATHY FOR THE DOWN-TRODDEN... IF YOU HOLD OPINIONS AT VARIANCE WITH THE STATUS QUO... WELL--WE'VE GOT TWO SIMPLE WORDS TO PUT YOU IN YOUR PLACE...



YOU SEE, WE'RE JUST NOT INTERESTED IN OTHER POINTS OF VIEW! WE DON'T CARE! WE'VE GOT OUR OPINIONS--AND WE'RE NOT GOING TO LET ANY TROUBLESOME FACTS GET IN THE WAY...



WITH THIS VAGUE YET DENIGRATING PHRASE, THOSE WHO ATTEMPT TO UNDERSTAND THE VIEWPOINTS OF OTHERS CAN BE EASILY DIS-MISSED AS LEFT-WING CRANKS...



BUT DON'T YOU TRY TO LABEL US AS INTOL-ERANT OR BIGOTED...BECAUSE IF YOU DO...WELL, RUSH LIMBAUGH HAS TAUGHT US HOW TO RESPOND TO THAT...



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Dissents, marked as such and printed in a distinctive format, are the opinions of the signed members of the editorial board choosing to publish their disagreement with the editorial.

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Vest Welcomes Freshmen

President Charles M. Vest made the following remarks at yesterday's President's Convocation.

I would like to welcome MIT's Class of 1997.

Now, it may surprise you, but actually, I know what you are thinking, and I am going to answer it. Let me tell you right off: You were not admitted to MIT by mistake. You are not the result of a computer glitch. You are not here because we needed more architecture majors or people from Idaho, or what have you.

Each of you is here because we know that you have the intellectual capacity, the energy, the imagination, and the will to succeed, both in meeting your personal goals and in contributing to this unique academic community. Your high school teachers knew this, your parents knew this, the MIT admissions committee knew this, and our faculty know this. So relax.

All of us that are new to this place have that question some time, and I certainly have. Last spring, I decided, despite the fact that I've only been here three years now, I really do belong here. Because at 12:30 one morning, or late night depending on your perspective, I was working on my computer, and an e-mail message came across and said, "President Vest, we are a group of students over in one of the dormitories, and we are all sitting here heretaking something called a Nerd Test. We wonder if you'd take it."

Of course I said yes, expecting to get three or four questions. Well, it was about 120 questions as I recall. It began with things like, "Have you ever worked or studied all through the night?" The answer is yes, as a matter of fact, I did it this summer once. "Have you ever programmed in at least three different computer languages?" "Can you write Maxwell's equations?" "Do you wear glasses? If so, are they broken? If so, are they held together with scotch tape?" You got the idea.

So, I took the entire test and anxiously waited and bit my finger nails and about four days later another message came back and said, "We finished the scoring, and you scored 51 on our scale. And that classifies you as a moderate nerd, and we just want you to know we think that is about right for the president of MIT." So I belong here; you belong here. But now that you are here, exactly where are you?

MIT is an institution like no other. It is a university that attracts many of the nation's and the world's most talented students; especially of course, the Class of 1997.

MIT is an institution that counts nine Nobel Prize laureates amongst its faculty and staff in economics, physics, medicine or physiology, and peace.

It is an institution that provides unparalleled opportunities for you as undergraduates to take part in research — working and learning together with faculty and graduate students.

It is an institution which just a few days from now will host over 600 of the world's highest level leaders of industry, government, and scholarship to discuss together fundamental issues facing industries in today's highly competitive post-Cold War economy and the new challenges that we all face.

MIT, as well, is a place where science and engineering students participate in a remarkably rich set of activities in the visual and the performing arts. It is a community that believes that the creative mixture of teaching and research together provides the best environment for a modern education.

It is a place where we work and study very hard, pursuing our activities with both intensity and passion. At the same time, we really do enjoy working and living together with our colleagues.

MIT is a place with a great sense of humor. A fact that has been celebrated in books and in the national press, and a fact which I hope you will learn a lot over the next four years.

It is a place where students learn from each other. In study groups, and across the Athena computing network.

It is a cosmopolitan campus, where students, faculty, and staff of every conceivable race, ethnicity, and background have come together from around the world to pursue our common goals of learning, discovering, creation, and invention.

Wherever you come from, and wherever you go after your four years here, you will find that your MIT education will serve you well.

The next four years will be intense, and they will be challenging. MIT will teach you to think. It will teach you to solve problems. It will teach you to persevere. And after you've gone through this remarkable place, you will know that you can do virtually anything.

Now where do you come from, however, and who are you? First of all, there are 1086 members of the great Class of 1997. That's a far cry from MIT's first class — a group fifteen, young, all-white males who gathered together in Boston at the end of the American Civil War to study the practical arts and sciences which serve the needs of a rapidly industrializing society.

You however are much larger in numbers, and you come from every state in the United States, and 8 percent of you come from some 40 other countries around the world. You come to study everything from molecular biology, to computer science, to music composition. Over a third of you are women; 6 percent are African American; 30 percent

Asian American, 10 percent Hispanic Americans, six of you are Native Americans.

That's one kind of measure of who you are, but there are many other indicators of the ways you are both alike and different from each other.

Now let me see just a brief show of hands to try a couple of things. How many of you are the oldest among your brothers and sisters? How many of you are only children? How many of you come from a large city? How many of you come from the country or a small town? (I've got to hold up my hand on that.)

Now, as the Dean of Engineering Joel Moses will tell you this is a really important question, how many of you are left-handed? Oh, look at that. This is going to be a creative class. How many of you speak more than one language? That's excellent.

Now this is a totally unscientific poll, and of course it gives us just a surface picture of both your differences and similarities. There are much deeper ones as well, a variety of interests, backgrounds, and perspectives that you bring here will be one of your greatest strengths, and one of our greatest resources.

They'll also be from time to time the source of tension, that you will experience while you are here. Now, tension is not necessarily a bad thing. It can be a tremendous source of growth and learning, but whether or not it is will of course depend on you. You have come here to pursue your individual academic and career goals. We know that you have worked hard to get here, and I'm very confident that you will continue to work hard now that you are here.

Most of you are probably already wondering — perhaps even a little anxious about — the challenges that will face you in your studies as you strive to meet the standards that you have set for yourselves. But there are equally rigorous challenges that come from joining any community. As you seek your place here, you may find it more comfortable at first to seek out people who are more like you than not. But I would encourage you to get to know people who bring a different cultural background, a different way of viewing the world, different ways of expressing themselves.

This is really an extraordinary opportunity of your college years, one that you will never have again in exactly the same way. So as you begin to get to know your classmates, don't be afraid of your differences, but acknowledge them. Don't try to erase them; learn from them. Men and women together create a more balanced discourse and world view. Black and white, brown

Vest, Page 7

Godfrey Emphasizes Challenges Ahead

The following is the speech delivered by Undergraduate Association President Hans C. Godfrey '93 at the President's Convocation yesterday. The text of the speech was provided by Godfrey.

On behalf of the undergraduate student body, welcome to MIT, our concrete paradise by the Charles! Thousands of us have been eagerly awaiting your arrival and you should prepare yourselves to experience one of the more interesting episodes of your lives. You have arrived in Cambridge at a time unique not only to MIT but to the world at large. Like the world, MIT is in a period of transition which will present great challenges for every member of our community — especially you. These challenges and changes are what I'd like to talk to you about today.

When I came to MIT in August of 1989, four long, grueling years ago, the world was a much different place. The Cold War was still in full swing and very few people would have believed that the Soviet Union was nearing collapse. Despite the anxieties and fear created by the Cold War, the world (and particularly MIT) was ironically a much more certain and dependable place — in large part because funding from the defense department was plentiful and steady. Now, on the other hand, MIT must expend a great deal of energy defending itself from the federal government — at one time one of its staunchest allies. Today's world is much more complicated — and therefore more complicated for MIT — and as a result your individual futures — like that of MIT — have become much more uncertain.

Although the world is no longer as dangerous a place to live in, it still has many problems that loom larger than ever. Today the world is confronted with the challenges of nations redefining themselves after the Cold War, how to confront human rights issues in Bosnia and elsewhere, how to reinvigorate the world economy and how to protect the environment. Like the global community, MIT has no lack of its own challenges and problems, and now you as its newest members have inherited them — let me tell you about a few.

During the last fiscal year, the Institute posted a deficit of over \$20 million — a problem that will almost certainly require fiscal sacrifices across the board — including student services. You and your parents will soon (if not already) become familiar with deficits and sacrifices of another sort — the personal and family ones required to finance an education whose price continues to sky-rocket. And what are you getting for your money? You are paying for a faculty (with

all due respect) who are regularly described as uninterested in undergraduate teaching — and not responsive to the often rigorous pressures of undergraduate academic life. Undergraduate student life is filled with a host of problems all its own. Housing annually presents a crisis — whether it be the problem of not enough or the question of who will decide how freshman will be housed. And how many times a week can you eat "Chicken Supreme" at Lobdell (actually with a little bit of salt it's not too bad)? Week — after week — after week, the "Chicken Supreme" is always the same — somewhat like the Institute, which has a reputation for being monolithic and bureaucratic. Unfortunately not all problems at MIT can be fixed with a little salt: poor race relations within our community is one of those things that doesn't seem to be improving as quickly as we'd like; and although race relations on our campus are in general better than in the rest of society, tolerance of a diversity of cultures and ideas is a conviction to which we should all subscribe — whether in the academic community of MIT, or in the greater community in which you will shape the future.

The future — your future — lies ahead; and even with its problems, I can think of no better place to prepare you than MIT. The problems I mentioned earlier may at times prove daunting. The urge to shrug and say, "I can't do anything about it," may prove to be overwhelming at times; but you must not allow yourselves to become apathetic to the situations around you. In every disaster or crisis there is always an opportunity to make progress despite the odds and adversity. Every situation can be a learning experience and the problems of which I've spoken present tremendous opportunities to not only develop yourselves personally, but to improve the community well after you've left it.

Let's talk about the personal challenges you'll face here. As Dr. Vest stated there is no doubt that MIT is one of the premier academic institutions in the world and your presence here is by no means a mistake. You have been given a great chance prove just how good you are. I not only challenge you to take advantage of the almost limitless curricular and extracurricular opportunities on campus, I want you to exploit every last resource that this place has to offer. I want you as individuals to not only do the expected academic workload, but I want you to get out there meet your classmates, join activities outside of your living group, schmooze with your professors, and who knows,

Godfrey, Page 6

Smith Describes MIT Culture

The following is a transcript of a speech given by Arthur C. Smith, dean for undergraduate education and student affairs, at yesterday's President's Convocation. Because of a recording error, the transcript represents only the first section of Smith's remarks.

I don't know why they didn't tell those other guys to dress up.

Let me repeat part of the message you've already heard. Class of 1997, you are really welcomed at MIT. Let me also repeat another part of the message: You're important, you belong, and you will succeed. If you measure success by graduation, it may only be true for 92 percent of you, but most of you certainly will graduate from this place, and I hope you all feel that when you leave here that you have succeeded in what you set out to do.

The reason I want to emphasize that is because that's what I think my job is: To make this a place where it is more likely you will succeed, to try to help you where we can to those things that get in your way, and to try to create an environment within which you can work, study, play, and learn and become what you want to be.

For me to stand up and try to give you a lot of good advice after you've heard from Chuck and Woodie — in fact, why anyone would stand up and try to talk to you after they've addressed you so eloquently is perhaps mysterious — but I have been around MIT for a long time. I have been a professor of electrical engineering for something over 30 years, and dean for only a few.

I just want to pose a few observations and questions for you, and let you find out the answers as you go along through this place.

So let me make a few points, and then we'll get on with some activities that you can take part in. The first point I want to make is that MIT is different. Let me say in what ways I want you to look for that. It's different, I think, from most other universities. It's different in our expectations — you'll find out what those are — it is different in our requirements — all of you will have the opportunity to learn some physics, some calculus, some chemistry and some biology. That doesn't describe every university in the world, certainly.

We have a different culture. If I had to describe it in a sentence fragment, it would be that we are more

Smith, Page 6



Arthur C. Smith, dean of undergraduate education and student affairs, talks to the freshmen about things to watch out for in the future.

Flowers Talks About Nerd Pride

Woodie C. Flowers PhD '73, professor of mechanical engineering, gave the following speech yesterday at the President's Convocation. Flowers used several slides during his speech; the slides are noted in the text at the time they were shown.

Let me add mine to the long list of people who will congratulate you. That is a very sincere statement. Some time ago there was a roll of the DNA dice, and you ended up with a nice high score, and you get to play with the big guys. So congratulations.

I'm going to talk fast for about fifteen minutes, so I decided to give you an outline. I'm going to give you some advice and say some things that you've heard from other people, and that you already believe, and then give you some more advice, and then set you free.

When I started thinking about what I was going to say, and went over it in my mind, I realized that I was going to give you your last spring's graduation talk all over again. But maybe I'll say it in a different way. And at the risk of being redundant, let's do it.

I am proud to be a teacher. It is a big deal. It is easy to be proud to be a teacher when you are at MIT, it was probably a hell of a lot harder for your high school teachers, but this is a great place to be a teacher. The point I want to make is that you guys need to be proud to be freshman. Don't say, "I'm just a freshman." You are the lifeblood of this place. You are the annual breath of fresh air. You are the reason that we are here, so remember that. Do not go up to a professor's office and say, "I'm just a freshman." Say, "I'm proud to be a freshman."

Now, that's all good news, but there is other good news. As teachers and students, we are part of a big crisis. In particular in this country, and all around the world, there are lots of folks who will not be lucky to learn enough to be productive members of society. And that generates a whole list of problems that we must share together.

So, I think the Clinton administration was almost right. The economy is part of the problem, but one of the underlying issues is ignorance, and lots of folks are not getting the chance to learn. And to make it even worse, the people that do get a chance to learn don't necessarily apply what they know cre-

atively. So all of us share a common responsibility for trying to do creative, pro-active things starting today. Big challenge, lots before your life.

One of the things that makes that hard is that no one wants to change. We are all fairly comfortable the way we are. You are going to go through lots of changes in your life. You're probably going to change careers several times. There will always be resistance to that.

One of the other things that is amazing to me is that technophobia is worn as a badge of courage by many people. They are proud of not trusting someone who can program a VCR or deal with a computer. That is really a silly attitude. We've got to help change that.

And no one else is going to do that. It's us. And you are in one of the most important places in the world in that regard, so please accept that it is part of your responsibility. We are our own public relations agency. We've got to do a good ethical job in our professional lives.

We've got to have some good, solid nerd pride. Too bad there's a shortage of that here today. We've got to be proud about understanding things.

Now, all of that has to be part of leadership. Please, while you are here, learn to deal with your colleagues. Learn to, as President Vest said, understand many different societies. The problem is not just the universe, it's the people in the universe.

Learn to make meetings effective. Accept as part of your responsibility, learning to be a leader. It is very important.

In this particular edition of *Newsweek* listing the cultural elite in America, people that understand about the universe were sadly missing in that list. And I happen to think that that is quite outrageous. It's really silly that people who can make things happen, that understand Mother Nature, are not regarded as part of the cultural elite. But I think that you guys can help fix that.

Now, I am a mechanical engineer. I love dealing with technology, and I even think, as a matter of fact, that it is fun. I really have fun in my career. But more importantly, I think that it is really satisfying.

In the years that I have been here, I've been lucky enough to work on a project that deals with micro-computer controlled artificial

legs. Fabulous machine. One of the new ones has lots of nice stuff in it and does lots of good things, and we think that it will become a great product. We are trying hard now to get some funding to get out of the laboratory and into public use. That's a nice satisfying thing to be involved with. A whole bunch of really good students participated.

Lisa, one of my recent students, did a project that has to deal with making people using computer-aided design systems able to communicate more effectively from different locations and work together.

John Barrist just finished a thesis in which he did a doctoral program to develop a system which allowed you to build on the screen rather than draw, to do design. I think it may change the way that some design is done. Exciting, wonderful think.

Working with a colleague, Mark Jakeila, David Wallace, a student in our department, just finished a thesis which automated industrial design. From a library of objects, you bring up things that just sort of get stacked up on top of each other on the screen. And then you say, "Organize them in a particular way," and the computer algorithmically places them so they make ergonomic sense — so that buttons are not above displays, and things of that sort. Makes them look okay. And then with one keystroke, you put a box around them. And then you say, "Well, I'd like to know what that would look like in, say, the high-tech style." One keystroke, and about a second later, there it is; all the geometry selected by the computer. The colors selected by the computer.

That's nice, but what would it look like if Deider Rams had done it — the guy that does a lot of industrial design for the Bordland Corporation Well, one keystroke. How's that? Maybe a little bit later, you are feeling wild, how about Art Deco?

The system works well for lots of things — calculators in high tech style or Bordland style. Really exciting projects. So, I have had the pleasure of working with students that know lots of stuff and can do things.

Lots of wild inventors come into my office and say, "Hey Professor Flowers, I saw you on television. Look what I've invented." Quite

Flowers, Page 7

Speakers Emphasize Diversity, Learning

Convocation, from Page 1

Black and white, brown and yellow, red and tan, create a campus and nation far more meaningful and creative than any of us can do alone."

Flowers stressed understanding

Professor Flowers followed Vest with a motivational speech encouraging students to "learn to learn" and denouncing "garbage in, gospel out" learning by stressing the fact that students should actually learn to understand the material they are presented and get a feel for what it actually means.

He said that students should "develop a visceral understanding of the fundamentals" while they are here and "make sure things make order of magnitude sense. Try to tie them together in as many ways you can." Flowers said that failure to do so would mean "our profession will have mis-served society."

Flowers also suggested that an education at MIT is the "cheapest opportunity you will ever have to fail," adding "you've got to learn that failing is part of moving forward. And you've got to experience it and say, 'Oof, that smarted,' and keep moving."

Flowers urged students to learn to harness their fears and anxiety and use them to push themselves even further. He warned against the perils of ignorance and technophobia and explained that we all have a job to do in dealing with their effects.

He also warned against becoming "out of balance" by becoming a "pure humanist or scientist" saying, "If this happens, everybody loses."

Godfrey focused on challenges

Godfrey, in turn, focused on the global changes taking place and emphasizing that it is these "challenges and changes" which should concern the class of 1997 as it will be a time of great transition in both the world and at MIT.

Saying that "MIT has no lack of

its own challenges and problems," Godfrey pointed to the "poor race relations within our community," the "deficits and sacrifices ... required to finance an education whose price continues to skyrocket" and the faculty's non-responsiveness to "the often rigorous pressures of undergraduate academic life" as examples.

However, he said that while these problems "may at time prove daunting ... there is always an opportunity to make progress despite the odds and adversity." Godfrey compared MIT students to the Institutes soul and said that by looking ahead to the future MIT can face these challenges and succeed. Godfrey urged students to seize every opportunity and the "almost limitless curricular and extracurricular opportunities on campus."

Godfrey challenged the Class of 1997 to "accept the responsibility as a group to take on the leadership role ... to take this place beyond any vision that I, the faculty, or the administration could ever establish."

Smith outlines dean's role

While Dean Smith resounded the same congratulatory and hopeful spirits that the other speakers presented and expounded upon MIT's uniqueness, he also emphasized the accessibility and resourcefulness of the Dean's Office. Smith informed the students of the Dean's Office's role in various campus activities including City Days, Independent Activities Period, and Residence and Orientation Week itself.

While he emphasized the fact that nearly 92 percent of those in the audience would successfully complete the MIT curriculum, he also pointed out the counseling services which the office provides for those having academic or personal problems. He said that with the students being away from their homes, they would have to rely on the experience and knowledge of others when times became trying.

Godfrey Addresses Problems at Institute

Godfrey, from Page 5

someday it might be you up here giving hell to 1100 freshman.

However, personal development cannot be your sole goal. More than ever before we are a part of a global community, and the differences that separate us are fast become irrelevant. You might as well realize this now rather than later and work towards building unity — first within your class and later in the MIT community. Your immediate predecessors, the Class of 1996, were one of the most enthusiastic classes anyone has seen in a long time. But they're old and soft now — they're sophomores. They're out of shape and you're on pass/ no record — you can take 'em. I challenge you to accept the responsibility as a group to take on the leadership role, especially from dinosaurs like me, and take this place beyond any vision that I, the faculty, or the administration could ever establish. Remember, the faculty may be the heart of MIT, they keep the place going, but you as students are its soul, you are the Institute's inspiration. Oh, what about the administration? The administration is MIT's spleen — you don't necessarily need the spleen but it helps to have one.

Alright, enough anatomy — and back to challenges. Everything you've done in life has led to your being here right now. It's now time

for you to put your high school experiences behind you and get a fresh start. Don't forget where you came from, but you can forget your SAT score. You are all more than worthy enough to be here, now prove to yourself that you are worthy enough to stay here. There will be many obstacles that you will have to overcome here and not everyone's goal is to help you. Most of you will probably make it through MIT with very few problems but for those of you who do run into trouble along the way don't hesitate to get help. The administration, especially the Dean's Office, is there to help you and if you're not satisfied with that you can bring your problems to Hans and I'll do my damn best to make sure that something is done for you and not to you.

When Dr. Vest speaks to you (and possibly me) at Commencement on June 1, 1997, he will give you his charge to graduates. Today, I want to take the liberty of giving you a charge: with high school a distant memory, look ahead to the future. Seize every opportunity — academic or otherwise — and let your passion for excellence make a difference in the future — your future and MIT's future. As individuals and together as a class, it is your turn to challenge and be challenged. Again, welcome to MIT.

Thank you and good luck.

Smith Praises Faculty, Students

Smith, from Page 5

action-oriented and less contemplative than many other universities. You will find that both an advantage and a disadvantage as you go through here. And we have our own language — what you find yourselves talking in sentences in which all the nouns can be expressed in numbers, you're part-way there. When you understand those all, you're almost all the way there, and when you stop noticing it, you're really there.

I remember that — I did not go to school here, either as an undergraduate or a graduate — so as a young faculty member, I remember riding up an elevator with a group of students, and it suddenly struck me that they were carrying on a complete conversation in which none of the nouns were other than numeric. It is interesting that that is the place where we are.

Let me also point out to you that MIT is different from where you have just been. There are a lot of you here, and you've been in a lot of different places, but I think I've just made a true statement: This is different from where you have just been. Our faculty are a world-renowned group. You may have the experience of going into a class where the person in front of you wrote the textbook. The number of Nobel Prize

winners, the number of outstanding names, people you've heard of, people you'd like to get to know, is very large. They have responsibilities, goals, and aims which are somewhat different from those of your high school teachers did. You have to learn to recognize those, and learn how to make use of it in your passage through the Institute.

It's a wonderful resource, but it's different from the high school teacher who knew your name because there were only 12 or 14 people in the class. It is different from the situation where you've been in the same school system for many years, where you're known in the town, where you're known in terms of your family and otherwise. Recognize this as a different situation. There are a lot of advantages to that, there are some pitfalls. Look for both.

There's more research going on here than went on probably wherever you have come from. It's an important part of MIT, and you need to become part of it. There are lots of ways that you can — look for those.

The students who are sitting around you right now, and the upperclassmen who you will meet later are a very select group. Most of you were somewhere, academically, at the top of your high school class. It is pretty clear that to live and work in an environment in which it is very likely that the per-

son next to you is at least as smart as you and maybe smarter is a challenge, an exhilarating experience, and somewhat different. You need to adjust to that, you need to learn how to make use of that strength without being depressed. If you have established your value system based on being better than other people, it is sometimes a little disturbing to find in fact, everybody around is at least as good as you are, and maybe better.

On the other hand, to be able to talk to people who can understand you, whose minds can move as fast as yours, and to live in that kind of environment, can be immensely rewarding. So look for the good parts of that, and make use of them.

This environment is different than the one you have come from. You will be living in groups in which the population is almost entirely between the ages of 17 and 22. These will be groups which may be as large as several hundred or maybe only 30 or 40, and all composed of people about your own age.

That's a change for most of you, that's a challenge. Living with that number of people is different from living in a family. Living with people only in that age group leads to a lot of interesting phenomena. Some of you will find it very pleasant and exciting. Other times it generates conflict. [The recording stopped here.]

Join The Tech!

Vest Extols Activities Outside Class

Vest, from Page 5

and yellow, red and tan, create a campus and nation far more meaningful and creative than any of us can do alone.

At the same time, however, find the common threads that will enable you to work together, to learn together, and to live together successfully. I would like to suggest that the values and purposes that we hold in common are those of an institution that values broad learning, but maintains a strong and very specific focus on science and on engineering. They are those of a community of scholars, faculty and students together, who believe in the importance of rational thought and objective investigation, who believe in learning and searching together, who believe in the importance of individual fundamental scholarship for its own sake, but who also are committed to research and learning about projects that have direct application and practical significance in making a better world.

The values we hold in common are those of a community of students and faculty who believe in serving their fellow men and women in many ways. By recognizing that we are all here at MIT for the same fundamental purpose, by applying ourselves through our teaching, our studies, and our

research, we will acquire a common vocabulary and a common mission.

And this will enable us to communicate and know each other better through our working and learning relationships. There are many opportunities for pursuing our individual goals while building a sense of comradeship. In fact, working together is often the best way to find one's individual success.

Beside the common experience of your freshman year and the core curriculum here at MIT, there are a number of specific activities I hope you will look into. Just a few specific examples, I hope you will participate in the freshman adviser seminar, a really wonderful opportunity to spend a lot of time together in very small groups together with a faculty member learning about something of mutual interest, as well as finding your way through your first year at the Institute. Or the special freshman programs, such as the Integrated Studies Program, Concourse, and the Experimental Studies Group.

And of course UROP, the Undergraduate Research Opportunities Program, an activity I really encourage you to take part in at some point during your years here.

We also have something new this year. It's a program called Team Works, in which most of you taking the chemistry requirement will have

a chance to participate in small study teams, that will have a stake in helping each other do well in the course. Two versions of first-term physics will also be adaptations of the Team Works philosophy.

Outside the classroom, and indeed outside the campus, you will have the opportunity to work together to build a sense of community. One of the first such things will take place the day after Labor Day, when MIT students will host over 500 elementary school students from Cambridge here on our campus. This great program, City Days, will be the first of many opportunities for you to develop links with school children in Cambridge throughout the year. Programs ranging from community service projects, to science and math tutoring, to athletics. Well, so much for advice and information, you'll get more than your fill of that in the days and weeks ahead.

But I would like to close with a few reminders before I introduce the next speaker. First, there is no other institution like MIT in the world, and now you are a very, very important and integral part of it. The curriculum is like no other, the spirit of invention is like no other, the heritage of scientific and technological accomplishment is like no other. Learn from it, engage in it.

We have here at the Institute a

truly extraordinary faculty. But ask any professor what it is that most attracts him or her to a career at MIT. Almost invariably, the response will be the MIT students. Our faculty members are here in large measure because they gain enormous satisfaction and stimulation from working and learning with you.

So remember please, you are the best, you belong here, every one of you. But don't be afraid to ask for help, and don't think you're supposed to know everything beforehand. You don't, that's why you're here, that's in fact why we're all here. Go to class — that help's a lot. Get involved in sports, music and theater, and community activities. These kinds of things will be a great help in the years ahead as well.

And, I hope that you heard me very clearly today, accept the challenge of not just joining but of creating the community where we all can study, work, and play in an environment of mutual respect and enjoyment.

Now I expect to have the opportunity to see many of you around the campus and in the coming weeks, months, and indeed years. But the next time I will see all of you together like this will be in the Great Court, in Killian Court, when I hand you your degree in June 1997. So please have a great four years.

Lap Sit Closes MOYA

MOYA, from Page 1

activities were completed in a quick pace and freshmen became more active as the day cooled.

Water was dropped off periodically to each group in gallon bottles from a cart, and there were many water breaks.

"Our only concern is that everyone gets enough water," said John A. Benedick, the swimming and water polo coach, who helped supervise the activities.

But Phoebe Lam '97 said, "There was not enough water."

MOYA run by volunteers

Anneliese M. May '94 volunteered to work for Project MOYA for her third year because, "I always have a lot of fun and want to meet the freshmen early."

But some volunteers seemed to have had ulterior motives. Audrey C. Wu '96 said she volunteered in exchange for the early return housing. Surekha Vajjala '96 said, "The only reason I did MOYA was to get a head start on the cute freshmen boys."

Flowers Emphasizes Importance of Common Sense

Flowers, from Page 6

often, it's very creative, but violates one of the laws of thermodynamics. One of the guys invented a crash-proof car, which would survive a crash. But unfortunately, it would kill everyone inside it. He just didn't know enough to analyze the problems and make a meaningful contribution. You are going to have trump cards. You are going to be able to do that.

Getting the cup of knowledge is a big deal, but this is the real important issue. Several times in your life you will learn whole new sets of things. What I do is only based on what I learned as an undergraduate. Almost everything I do in detail, is new. That's going to happen to you at an even faster rate.

So, while you are here, pay particular attention to learning to learn. Now, we have this stupid model of life that says it is divided up. This is irrelevant. I get paid to have fun while I am learning. And I haven't thought about quitting yet. That's the kind of career that you want to have, and you can get there from here.

If while you are here, you find

yourself saying, "I'm not responsible because we didn't cover that in class," every alarm in your head should go off. That it wasn't covered in class is a clear indication that you are responsible for it. As a matter of fact, I have tried to get some of my colleagues to join me in saying to you about at least one major thing that you do here, "Go learn about this whole subject area, and come back and show that you could." Because you have to leave here believing that you can learn whole new things. That's the lifeblood of what comes after.

Pressure is a big deal at MIT. In the 2.70 Contest, for instance, students' hands shake, their colleagues are there trying to help them on, expressing a lot of empathy, there are cheering sections, sometimes there are banners supporting and the machine you built spins, crashes, and burns. And you just want to die and never be seen again. That's part of life, guys.

As a matter of fact, I think, that a good effective creative education must include pressure. You've got to learn to make friends with the knot in your stomach, cause its going to be here often.

I have one today. The main reason is because I'm standing here talking to about 1,500 bright people. I have known that knot over the years. It comes back often. The semester comes back soon. I'll be doing a new course in a new way. I worry about that. You've got to learn to feel it, recognize it, and deal with it. It's got to help you and boost you ahead rather than hold you back. So, while you are here, notice that when you are going into quizzes and things, and you feel that tension, make it serve you as best you can.

We are not as mean as you may think. In 2.70, we make sure that the contests are unfair. Because we would never design a system that says, "We will find out who is best." The kind of pressure that you have at MIT, as much as we possibly can, will be benign pressure. You will know that we will still love you even if you machine doesn't work or you blow the quiz. As a matter of fact, its really important that you understand that this is one of the cheapest opportunities that you will ever have to fail. And you've got to learn that failing is part of moving forward. And you've got to experi-

ence it and say, "Oof, that smarted," and keep moving.

Another thing that I would like for you to remember is when you go into the laboratory or the shop, don't turn your brain off. I think it is really important that you develop a visceral understanding of the fundamentals while you are here. When you see an equation, you've got to try to know what light feels like in your fingertips as much as possible. One of the reasons that I think that is really true is because of the "garbage in, gospel out" syndrome. Many of you will use very powerful computer tools. And your fingers will dance across the keyboards and you will get answers on the screen to 12 significant digits, and quite often they might be four orders of magnitude off, and you won't recognize it, because you didn't have a gut understanding of what the machine was doing or what the nature it was trying to simulate was all about.

So, please try to estimate. Make sure things make order-of-magnitude sense. Try to tie them together in as many ways you can. If you do this wrong, our profession will have mis-served society.

While you are here, make sure you get fundamentals in as many things as you can. Ever since you started in the system, its been trying to sort you in to the number people or the letter people or the humanists or whatever. You're divided. Your high school counselor says, "Well, you probably shouldn't do that because that's not your strong suite." Don't let anybody convince you of that. There's a whole bunch of things that I am very poor at that I do a lot. I'm at least mildly dyslexic, but I don't let that stop me from spending a lot of times reading things, because I've gotta do that. I'm an athletic clutz, but I do stuff all the time because its fun and its good for my body. So, don't get sorted.

Make sure that you don't let this happen. [slide: Humanists vs. Scientist.] If this happens, everybody loses. You cannot allow yourself to be a pure either one or the other. You can't let yourself get to be out of balance. One of the reasons that that is true is that you will have enormous power because. Whether you are humanist doing an analysis of ancient history because you are able to do a massive new computer search over networks and correlate

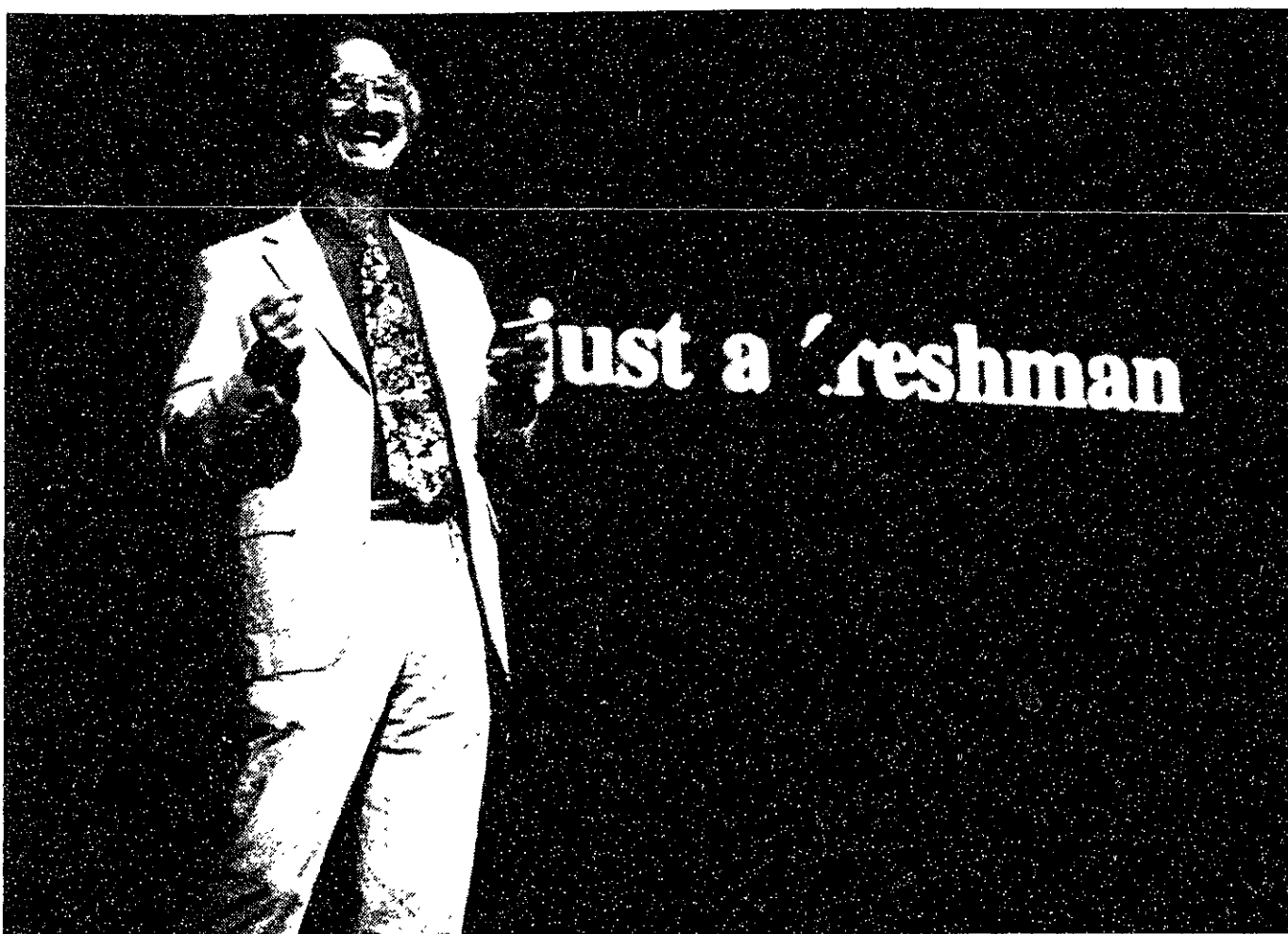
things that people have never thought about, or whether you are an engineer who is able to use powerful new tools to advance new products, you've got to do that in a balanced, ethical, moral way. You've got to understand society and humankind, though, in the whole to do that well. So, please do both.

Don't let this happen either. [slide: Jock vs. Nerd] There are not two worlds, it's all the same. MIT is a virtual supermarket of opportunities. President Vest mentioned things like theater. There are so many things like that that you can do here. This summer, I learned sculling. The MIT scuba class is the best in the world, as far as I am concerned. I can tell you what the decompression tables are like because I know some of they are some first order systems. You get the intellectual component as well as the muscular component here.

You do have to make this choice [slide: Health vs. Self Abuse]. To me, tobacco, drug, and alcohol abuse are just plain stupid. AIDS is forever. You have the intellectual horsepower to avoid getting trapped in self abuse. Please, pay attention to that.

You have the opportunity to be a source and not a sink. There is a very strong possibility that you will go through life feeling good, because, I really believe this is true, you can't make people happy by taking away the things that make them unhappy. In my world there are two things that can make you happy. One is interpersonal relationships. They are very complex. They are sometimes tough. They warrant a lot of effort, but they are really important to happiness. The other one is being creative and being a source and making new things and having people respect you because you can create. So, learn to do that.

I dare you. Have a good time while you are here. Work hard. Make your muscles and your brain both sweat. Do both. Enjoy yourself.



YUEN Z. LEE—THE TECH

Woodie C. Flowers PhD '73 tells the Class of 1997 to take pride in being freshmen and not be embarrassed by what they don't know.

THE ARTS

Sexual tensions compliment action in *Manhattan Murder*

MANHATTAN MURDER MYSTERY

Directed by Woody Allen
Screenplay by Woody Allen
and Marshall Brickman
Starring Alan Alda, Woody Allen,
Anjelica Huston, and Diane Keaton
Loews Cheri.

By Matthew H. Hersch
CHAIRMAN

Manhattan Murder Mystery isn't the best film I've ever seen. After all, I don't like murder mysteries. I think they're dull. Most drag in the beginning and end preposterously. I don't like tributes to famous old movies, either. I haven't seen most of them — and don't intend to.

Yet *Manhattan Murder*, which is both a murder mystery and a tribute to fossilized flicks, is strangely satisfying. In this, Woody Allen's latest tale of angst-ridden New York intellectuals, book editor Larry Lipton (Allen) is dragged into the investigation of an upstairs' neighbor's suspicious death by his energetic but bored wife Carol, played — of course — by Diane Keaton. The two are not alone in their vigilante quest — joining them are Lipton family friend Ted (Alan Alda), a divorced playwright, and Marcia Fox (Anjelica Huston), a black-clad, aggressively sexy author. The murder investigation provides just the spark they needed to perk up all of their lives.

As in any Allen flick, sexual tensions complement the action. Carol and Larry love each other, but their marriage is vaguely dysfunctional. Lonely Ted yearns for Carol, and Carol enjoys the attention. Marcia, an attention magnet, has targeted Larry. Larry returns the complement, and when Ted too begins to fall for Marcia, Carol is left doubly peeved.

The result is \$6.75 worth of stakeouts, soulful stares, sexual stress, and silliness. *Manhattan Murder* may center upon a rather

bland murder plot, but it also provides a tight script (co-authored with long-time Allen collaborator Marshall Brickman), savagely spastic Allen performances, and excellent supporting cast (Alda, Huston, Keaton) audiences have come to expect in an Allen film.

The film's inquisitive heroes are neither super sleuths nor professionals — they are bored, restless middle-aged folks and barely competent for the task at hand. Allen, on whom the bulk of the drama eventually falls, provides a refreshing dose of honesty in a cinematic world in which the man

MANHATTAN MURDER MYSTERY

on the street, thrust into the world of danger, reacts with a cool head and steady hand. Intelligent, perceptive, but blubbery and clutzy, Allen is the everyman detective, who battles the forces of darkness without the self-confidence with which most movie heroes are amply supplied. Fumbling a break-in, impersonating a police officer — badly — Allen shows he's lost none of the wit he harnessed in films

like *Annie Hall* and *Love and Death*.

Woody, casting this familiar Allen spin on this familiar film type, proves once again that he is one of the few writer/directors that can be relied upon to deliver in a cinematic universe filled with flops. *Manhattan Murder Mystery* isn't his best work, but it's good enough. It has its flaws, (I would have preferred more satire, more laughs) but they don't detract too much from the total enjoy-

ment. The Allen/Keaton pair, much admired for their assaults on science fiction, Russian literature, and neurotic urban relationships, make a fine tribute to the murder mystery genre, even as they dig their heels into it. Alda gives an honest, believable performance, and Anjelica Huston, as Woody's would-be temptress, provides a fresh face in Allen films that this critic hopes will return.



Carol (Diane Keaton) and Larry Lipton (Woody Allen) in a scene from *Manhattan Murder Mystery*.

Hey You!!!

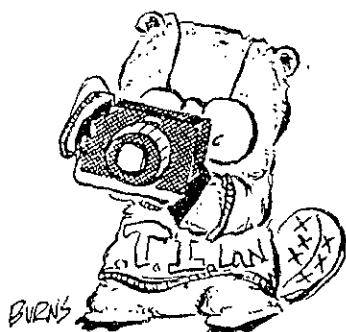
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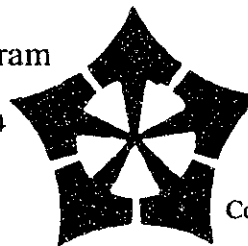
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Undergraduate Program

Every Tuesday
beginning September 14
5:15 pm Supper, W2a
6:00 pm Large Group
Meeting in the Chapel

Graduate Program

Weekly lunch program
on Wednesdays
at noon
beginning September 15
Conference room, W2a (2nd floor)



Welcomes You

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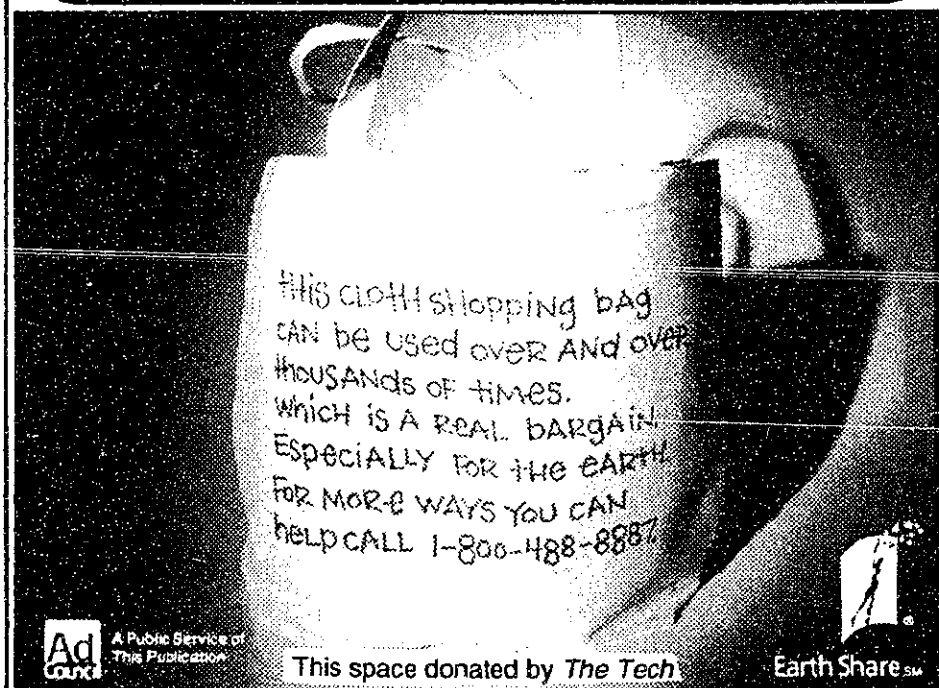
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