

The Weather

Today: Mostly cloudy, 72°F (22°C)
 Tonight: Rain likely, 60°F (16°C)
 Tomorrow: Cloudy, 68°F (19°C)
 Details, Page 2

Frosh Receive Housing Spots

By Sarah Y. Keightley
 EDITOR IN CHIEF

The Student Center Athena cluster was bustling with activity yesterday evening as small groups of freshmen gave out happy cries and disappointed groans. They had just received their dormitory assignments through electronic mail.

About 760 students have received assignments, and another 44 will have to wait until the second round of the housing lottery, according to Assistant Dean for Residence and Campus Activities Andrew M.

Housing, Page 7



The MIT Physical Plant Confined Area Rescue Team removes the hack which had hung in Lobby 7 during the week. The Team, scheduled to practice today, was instead employed in lowering the panels for preservation in the MIT Museum.

THOMAS R. KARLO—THE TECH

New Student Housing Assignments

Dormitory	New students 1993*	1994**
Baker House	87	98
Bexley Hall	N/A	35
Burton House	110	90
East Campus	113	103
MacGregor House	62	74
McCormick Hall	64	88
New House	52	49
Next House	N/A	116
Random Hall	30	25
Senior House	47	57
Special assignments		
Chocolate City	10	7
French House	6	7
German House	6	2
Russian House	5	5
Spanish House	5	6

*Unofficial results after third round lottery. Statistics compiled from housing, room assignment, and dormitory rush chairs.
 **Statistics from Residence and Campus Activities.

Math Test Scores Drop, while Essay Rises

By Stacey E. Blau

Forty-eight percent of the freshmen who took the Freshman Essay Evaluation received satisfactory scores, up by 9 percent from last year, according to Coordinator for the Writing Requirement Leslie C. Perelman. However, the number of students passing the Pre-Calculus Mathematics Diagnostic Exam dropped by 9 percent to 49 percent, according to Peggy S. Enders, associate dean of undergraduate academic affairs.

"The general consensus was that [the math exam] was harder, reflected in both the lower scores and the increased length of time students needed to complete the exam," said

Professor of Mathematics Arthur P. Mattuck, who wrote both this year's and last year's mathematics exams.

The exams, administered each year to freshmen and transfer students, are used as gauges of students' abilities in expository writing and pre-calculus skills.

Essay topics: difficulty, diversity

Of the 1032 students who took the essay evaluation, 48 percent, or 495 students, passed the exam, Perelman said. Thirty-six students, or 3 percent, passed conditionally — meaning that they will have to attend a two-hour workshop to review the minor flaws in their essays.

An additional 401, or 39 percent,

received a score of "not acceptable" because they did not show proficiency in expository writing. The remaining 100 students, or 10 percent, received a score of "not acceptable — subject recommended," meaning that the students could benefit immediately from taking a writing subject but are not required to do so.

The two-hour essay test consisted of a narrative and an argumentative essay, the same format as last year. The narrative essay offered students the choice of two topics: to describe a situation in which they encountered a difficulty with bureaucracy and how they resolved it, or to tell about an experience they had with people different from

themselves and what they learned from it.

The argumentative question, which only had one possible topic, focused on the issue of pirated software on computer networks.

"Designing these questions is not an easy task given the constraints we have," Perelman said. "The questions must be accessible to 1100 diverse students. I am always on the lookout for questions for next year."

Trigonometry worst area

The math diagnostic exam highlighted weaknesses that students may have with pre-calculus skills,

Tests, Page 7

GSC Orientation Introduces New Students to MIT, Boston

By Hyun Soo Kim
 NEWS EDITOR

Unlike the glitzy, fast-paced undergraduate orientation, the student-run graduate student orientation began quietly yesterday with an information booth and campus walking tours.

One highlight of the Graduate Student Council Orientation Week is the picnic Thursday at noon, where President Charles M. Vest, Dean of the Graduate School Frank E. Perkins ScD '55, and GSC President Roger G. Kermod G will speak.

"This is the best opportunity to get to know other graduate students before you get entrenched in your lab," said Joe J. Bambenek G, co-chair of the Orientation Committee.

"I like [MIT]. I'm excited about meeting new friends in the activities during the orientation program," said Flavia Sparacino G, a first year graduate student at the Media Laboratory.

Orientation events include information sessions, trips, and tours. Some of these activities will be held after Registration Day.

Several new events have been added this year, Bambenek said. These include a trolley tour, the Puzzle Rally, which is a scavenger hunt around Boston, and GL 001, an introduction to graduate life presenting faculty and students' views.

"We've had an overwhelming demand for tours," Bambenek said.

"I'm really impressed by all the things going on at MIT — all the activities," said first year graduate student Chris M. Cacioppo.

Cacioppo added that graduate students "are not provided with as much documentation as the freshmen who are handed much information."

Volunteers organize GSC orientation

"The GSC orientation is a totally volunteer-based project," said Yingying Li, administrative assistant to the GSC.

"I am really pleased with all the people who have worked extremely hard to organize this," Kermod

GSC, Page 7

8.01 Changes Format To Smaller Lectures

By Daniel C. Stevenson
 ASSOCIATE NEWS EDITOR

Physics I (8.01), a course taken by approximately 600 freshmen in the fall term, was extensively changed this past summer, according to Professor of Physics Wit Busza, designer of the new course. The lecture and recitation system was restructured, and a new 300-page study guide was written by Busza and Professor Susan Cartwright of Sheffield University in England, to reflect a model used by Princeton University.

Instead of three large lectures and two recitations each week, students will attend two small lectures of 16 students and one large lecture for all of the students. Busza will teach the large lecture, which will include demonstrations and provide "a little bit of a global philosophical outline" for the course, he said.

Another difference is that the new

course will not have any graded homework problems, Busza said. "Instead, we monitor your progress through short weekly quizzes which contribute to your final grade," he said.

"The basic idea is that you are in charge of your own learning, while we provide you with the help and resources you will need," Busza said. This way, students can structure the course to take maximum advantage of what they already know and concentrate on material that is new and difficult, he said.

Another difference is the amount of help available for students, Busza said. Along with the extensive hints and solved problems in the study guide, "every Thursday from 7 p.m. to 9 p.m. a horde of teaching assistants and faculty will be available to help" students with any questions, he said. Students are also encour-

8.01, Page 7

WORLD & NATION

Calif. Supreme Court Ruling Could Affect O.J. Simpson's Trial

LOS ANGELES TIMES

SAN FRANCISCO

In a case that could affect the admissibility of DNA evidence in the O.J. Simpson murder trial, the California Supreme Court began deliberating Monday whether to give trial judges greater flexibility to allow scientific evidence at trials.

The high court, hearing oral arguments in a Huntington Beach, Calif., drunk driving case, has been asked by California Attorney General Dan Lungren to broaden the state's evidence rules to allow controversial DNA testing. Under current law, scientific evidence can be admitted if it is generally accepted by the scientific community.

Members of the court, however, provided little insight into their thinking on the DNA issue, dwelling largely on questions about a common field sobriety test in which police officers check the eye movements of suspected drunk drivers.

The drunk driving case comes before the court on the heels of a U.S. Supreme Court decision adopting the broad standard advocated by Lungren that would give trial judges more discretion in the kinds of scientific evidence they admit.

But some prosecutors — as well as public defenders and corporate defense attorneys — worry that such a standard would open the door for all kinds of "junk science" that could be difficult for trial judges to sort out.

Lockheed, Martin Marietta Agree to Form Defense Colossus

LOS ANGELES TIMES

WASHINGTON

Lockheed and Martin Marietta, the nation's second- and third-largest defense contractors, disclosed late Monday an agreement to merge the two companies, creating an aerospace colossus with \$23 billion in annual sales.

The deal dramatically accelerates the pace of defense industry consolidation, which is concentrating arms-making in the hands of a few major contractors and boosting the industry's efficiency — but at the cost of thousands of jobs across the country.

The deal, described as a "merger of equals," will involve a stock swap valued at \$10 billion and create a company with 170,000 employees, making this by far the biggest in a series of successively larger defense industry combinations.

The new company would control as much as 20 percent of U.S. defense spending, leaving rivals struggling to match its unparalleled financial, technical and political power.

A combination would give the company market power in virtually every major high technology market segment, dwarfing such traditional high-tech giants as Hughes Aircraft Co., Northrop-Grumman Corp., Loral Corp. and TRW.

World Religions Split Deeper Before Population Conference

LOS ANGELES TIMES

UNITED NATIONS

Religious battle lines tightened Tuesday for the upcoming International Conference on Population and Development in Cairo, Egypt, as Saudi Arabia and Sudan withdrew and two other Muslim states downgraded their missions.

The Roman Catholic Church has mounted a spirited attack on the conference's draft proposals for several months, castigating the discussions of birth control and abortion as immoral. But the chorus of derision also has swelled in recent weeks from Muslims who insist that the subjects are abhorrent and contrary to Islamic faith.

Critics have accused Pope John Paul II of seeking an alliance with Islamic extremists to oppose the conference, but the Vatican has denied it.

U.N. Secretary-General Boutros Boutros-Ghali, an Egyptian who belongs to his country's Coptic Christian minority, professed a lack of concern over the withdrawals from the conference. He told reporters U.N. member states "are free to come or not to come" to such conferences.

Muslim distaste for the conference is so great that some faithful filed a lawsuit trying to force its cancellation, accusing the U.N. of organizing a conference that ran counter to Islamic beliefs. But an Egyptian court, after a 30-second hearing, rejected the suit Tuesday, stating Egyptian President Hosni Mubarak had the right to invite the conference to Egypt.

WEATHER

Rain Expected

NATIONAL WEATHER SERVICE

A high pressure system will move out to sea to our south this morning. Low pressure from the Tennessee and Ohio valleys will approach western New England late today, then track through southern New England tonight and tomorrow.

It will be mostly cloudy today, and rain is likely across the region tonight and early tomorrow, followed by clearing late tomorrow.

Today: Mostly cloudy with a 40 percent chance of light rain towards evening. High 70 to 75°F (21 to 24°C). Wind becoming southwest 10 to 15 mph (16 to 24 kph).

Tonight: Rain likely. Low near 60°F (16°C). Chance of rain is 70 percent.

Thursday: Light rain or drizzle likely in the morning, mostly cloudy in the afternoon. High 65 to 70°F (18 to 21°C). Chance of rain is 60 percent.

Friday: Sunny and cool. Highs in the 60s (18°C). Lows in the 40s (7°C).

Clinton Wins Caribbean Support to Invade Haiti

By Norman Kempster and Stanley Melsler
LOS ANGELES TIMES

WASHINGTON

The Clinton administration won rhetorical backing from Caribbean republics Tuesday for an invasion of Haiti, but came away virtually empty in its attempt to sign up allies for military action to restore ousted President Jean-Bertrand Aristide to power.

"Our governments are equally united in their determination to take all necessary means to carry out the (U.N.) Security Council mandate to restore the democratic process in Haiti," U.S. and Caribbean officials said in a joint statement issued after a meeting in Kingston, Jamaica.

But only four of the 11 member countries of the Caribbean Community agreed to contribute troops and they said that together they could supply only a single company — 266 soldiers — to a U.S.-led invasion force that is expected to total 10,000 or more, according to news agency accounts from the Jamaican capital.

Although U.S. officials say they still hope to resolve the issue peacefully, they admit that an invasion is becoming increasingly likely. At the United Nations, Secretary-General Boutros Boutros-Ghali admitted failure Tuesday in a last-ditch attempt to persuade the military government of Lt. Gen. Raul Cedras to step aside in favor of Aristide, who was deposed in a bloody coup in September 1991.

Boutros-Ghali informed the Security Council in a closed meeting that his special mission had failed and that he would do no more for now. "The initiative has not been successful," he told reporters

afterward.

The U.S. government sent a high-ranking delegation, led by Deputy Secretary of State Strobe Talbott and Deputy Defense Secretary John Deutch, to Kingston in an effort to assure the United States of at least token international participation if it decides to go ahead with an invasion.

Talbott and Deutch are scheduled to return to Washington Wednesday after an overnight trip to the Dominican Republic to inspect the porous Dominican-Haitian border and to urge the authorities in Santo Domingo to crack down on cross-border smuggling. Haiti and the Dominican Republic share the island of Hispanola.

Jamaica, Trinidad-Tobago, Barbados and Belize agreed to contribute troops, although Jamaican Foreign Minister Paul Robertson told a news conference that the total Caribbean contribution would be "a light company, approximately 266 troops."

Robertson said Bahamas and Guyana were considering joining the force but had made no final decision.

Despite the tiny size of the Caribbean contribution, Talbott called the meeting "a watershed" because it guaranteed the United States at least some foreign participation. The four countries were the first to make a firm commitment to send troops.

Deutch said the Pentagon will begin at once to give the Caribbean contingent U.S. logistic support.

"The time for action has arrived," Deutch said. "There can be no doubt in anybody's mind that the multinational force is going to Haiti."

Southeastern Cubans Flee In Larger, Organized Groups

By Gabriel Escobar
THE WASHINGTON POST

SANTIAGO, CUBA

While attention has been focused on rafters leaving Havana for the United States, scores of Cubans have been fleeing the southeastern part of the island to head directly for the U.S. naval base at Guantanamo, 40 miles away, according to residents here.

Unlike the chaotic exodus from the capital, which thousands have fled on makeshift rafts, residents here described a much more organized effort involving dozens of fishing boats, many of which were stolen or commandeered from marinas here and in surrounding towns.

Although comparatively small in numbers, the steady migration from this historic city — Cuba's second largest and one that prides itself on being the cradle of the revolution — is a sign that the crisis has quietly spread beyond Havana and into areas long admired for their commitment to communism and to President Fidel Castro in particular.

Indeed, the national silence that has greeted the flight from the eastern provinces is seen by some here as a calculated effort to lessen a potentially serious moral blow to the government.

It is difficult to assess how many people have left from here or other seaside towns in the southeast over the last two weeks. But the fact that those who ventured out apparently have chosen the base at Guantanamo as their destination is evidence that detention camps there are more a magnet than a deterrent, and

that the base itself, at least for some residents in the southeast, is seen as a viable option.

Despite heavy security and a minefield, concern that Cubans will storm Guantanamo by land has been expressed by both governments from the onset of the crisis. On television last Wednesday night, President Castro said he had ordered that no Cubans be allowed to approach the base by land to seek refuge because that might ignite local conflict. Waterborne arrivals were not addressed.

Residents of Guantanamo City say police now are restricting entry to the town to people who prove they live there.

With access by land cut off, residents said waterfront areas such as El Cangrejito, a marina by the bay here, and other coastal towns just east of here, became major launching areas about two weeks ago.

Residents said police were constantly present, inspecting boats, settling disputes, controlling the crowds and confiscating the identification cards of those who were leaving. As was the case in Havana, warnings from U.S. officials that Cubans faced lengthy detention and no chance of migrating legally were discounted.

Late Monday night, two boats were moored at El Cangrejito and apparently were set to leave with a full complement of passengers. Reports of pirating are common, and owners have become guarded because people have been known to board by force at the last minute. Near one of the boats, where the

Those words seemed to predict an imminent invasion but Deutch explained that a multinational army will be needed in Haiti in any event, either to invade and force out Cedras or to help maintain order if the military government gives way peacefully.

But U.S. officials said that with the failure of the U.N. effort, the chances of a peaceful resolution of the crisis were fast running out.

^(Optional add end)

Boutros-Ghali had dispatched an aide, Rolf Knutsson, to meet with intermediaries in the Dominican Republic last week to find out if the Haitian officers would accept a high-level U.N. mission to discuss their departure and the return of Aristide, the winner of the only internationally certified free and fair election in the republic's history.

But the intermediaries, according to Alvaro de Sota, a senior political adviser to the secretary-general, informed Knutsson that such a mission would be allowed to meet only with the civilian officials installed by the military as a puppet government.

De Sota told reporters that the Haitians also proposed a far different agenda for a meeting. They wanted to discuss a variety of issues, but not their resignations.

Boutros-Ghali told reporters that he will suspend his initiative unless he receives orders from the Security Council to do otherwise or he is informed of a "drastic change" in the attitude of Cedras.

Cedras had agreed to give up his command of the army under an agreement that he and Aristide signed on Governors Island off the tip of Manhattan more than a year ago. But he later reneged on the deal.

crew and passengers reportedly numbered 14, a man holding a butcher knife emerged from the dark and retreated hastily without answering questions.

For those who are in favor of the exodus, these are the comprehensible acts of desperate men facing desperate situations. And for those who are fervent believers in Castro and the revolution — and they are not hard to find here — these are the damnable acts of a minority that the country is better off without.

"The revolution is stronger here in Santiago, and Fidel has always said so," said Jose Betancourt, 25, a dancer who was sitting with friends across from the city's cathedral. "There are people who are leaving here, I have no doubt about that. But these are people who don't work, who don't study, who don't apply themselves to anything. Let those people go, and leave behind only those who are worthwhile."

But even in this crowd there is a recognition that the quality of life in Santiago, as in the rest of Cuba, has greatly diminished. And even though they, like the government, say the U.S. trade embargo is the main cause of the dire economic situation, they concede there is a domestic contribution.

To make matters worse, parts of eastern Cuba were devastated by heavy rains in May. Here and in the town of Guantanamo, several hundred homes were lost, thousands of people had to be evacuated, and the principal source of income for many, the sugar harvest, was a principal casualty.

Trade, Human Rights Benefit From 'Commercial Diplomacy'

By David Holley
LOS ANGELES TIMES

BEIJING

U.S. Commerce Secretary Ronald H. Brown said Tuesday that a new U.S. emphasis on "commercial diplomacy" toward China is not only producing big trade deals but also progress on human rights.

A formal U.S.-China dialogue on human rights issues, suspended in the spring, will resume in late September when Chinese Foreign Minister Qian Qichen visits the United States, Brown announced at a news conference in Beijing.

While resumption of talks will not automatically benefit Chinese dissidents, Brown treated renewal of the dialogue as a significant step forward.

Since his arrival Saturday, executives of leading U.S. corporations traveling with him have "already signed agreements with a total value of almost \$5 billion," Brown said.

The overall tone of Brown's remarks Tuesday, both at the news conference and in a business lunch speech, was the warmest by any top U.S. official since the 1989 crackdown on the Tiananmen Square pro-democracy demonstrations.

President Clinton severed the link between human rights and trade issues in May. But Brown went further in his comments Tuesday, stressing that while the United States wants to see human rights progress here, threats are of no use.

The mood of exhilarated optimism, reminiscent of attitudes often

shown by high-level U.S. delegations to China in the 1970s and 1980s, also was evident among the 24 chief executive officers of leading U.S. corporations traveling with Brown.

"I've been extremely pleased with the dialogue, with the opening up," said Leslie McCraw, chairman and chief executive officer of Fluor Corp. "The attitude of the Chinese has been exceptionally positive. We view China as clearly one of the great emerging market opportunities for a company like ours."

Brown's visit marks a shift of the main focus in U.S.-China relations "to business issues, commercial issues, rather than philosophical issues," McCraw said. "I think these other agendas can be addressed if we are engaged commercially."

U.S. Grants IRA Members Visas To Help Negotiate Cease-Fire

By Thomas W. Lippman
THE WASHINGTON POST

WASHINGTON

Anticipating an announcement that the Irish Republican Army will proclaim a cease-fire, the Clinton administration Tuesday allowed two prominent IRA members to enter the United States on a diplomatic mission to sell the new strategy to the U.S. Irish community.

U.S. officials said reports from Ireland of an imminent cease-fire are apparently accurate, and confirmed the Clinton administration is considering an increase in the annual U.S. contribution to an Irish economic development fund once the cease-fire is in place.

Diplomatic reports and news accounts from Ireland and Britain said the IRA is planning to announce within the next day or two a cease-fire in its long-running guerrilla campaign against British rule in Northern Ireland. The announcement would cap a two-year effort by London and Dublin to persuade the IRA to give up bombings and assassinations in exchange for a seat at the negotiating table where the future of British rule in Northern Ireland would be determined.

If the IRA is sincere in its reported commitment—and if it can deliver on its promises to end the violence that has been its chief weapon—the cease-fire could

mark a major turning point in Irish history. But it also could ignite a new round of terrorism, this time from Protestant extremists fearing Protestant domination of Northern Irish life would be threatened by IRA gains in political negotiations.

If there turns out to be a near-miracle of negotiating skill that would satisfy the militants of Northern Ireland's Catholic minority without jeopardizing the British status of the Protestant majority, the Clinton administration might be prepared to increase its contributions to an international Irish economic development fund, officials said.

The current U.S. contribution is \$19.6 million a year.

Year-long FBI Case Ends in Capture Of Most-Wanted Computer Hacker

LOS ANGELES TIMES

LOS ANGELES

An FBI agent caught one of the nation's most-wanted computer hackers in a foot chase Monday in West Los Angeles, where the fugitive was sighted about two blocks from the FBI's office after spending nearly a year on the run.

Justin Tanner Petersen, who has claimed that he worked undercover helping the FBI track down other criminal hackers, had been sought by federal agents since he fled while awaiting sentencing on a conviction stemming from the hacker underground's most sensational scam—hijacking radio station phone lines in Southern California to win contests with prizes ranging from new cars to trips to Hawaii.

Petersen, who faces up to 40 years in prison and fines of up to \$1.5 million, was caught after a short foot chase that began outside an apartment building where an agent saw him getting out of a BMW, just blocks from the FBI's offices in the Westwood section of Los Angeles.

"It was superb police work by some very dedicated agents," said Assistant U.S. Attorney David Schindler, who would not reveal any other details of the capture.

Fighting Dashes Hopes of Peace In Afghanistan

THE WASHINGTON POST

NEW DELHI, INDIA

Fierce rocket and artillery duels have killed more than 800 people in Kabul this summer, demolishing hopes that two international peace missions launched this past spring can lead to a cease-fire and an end to Afghanistan's civil war.

Shifting alliances among feuding warlords have led to intensified fighting that this year has claimed almost 5,000 lives, wounded more than 25,000 and forced 600,000 people to flee Kabul, the capital.

And despite clear evidence that Afghanistan's people are terribly weary of war, fighting in recent months has spread to areas of the country that have not seen battle in years, including Mazar-e Sharif in the north and Herat in the west.

The faltering peace efforts demonstrate the difficulty of resolving the crisis in Afghanistan, which began when the Soviet Union invaded the country in 1979. After joining forces for 13 years to expel the Soviets and topple its communist successor regime in 1992, Afghanistan's warlords have been unable to agree on which of them should run the country. The dispute has degenerated into a brutal power struggle based on centuries-old religious, ethnic and tribal rivalries.

The renewed fighting has dashed slim hopes that peace missions by the United Nations and the Organization of Islamic Conference, both of which sent special envoys to Afghanistan this past spring, will succeed.



CAMBRIDGE OFFICE FURNITURE

A family owned local tradition

We specialize in quality used and new furniture:

- chairs – in abundance
- desks – the best for less
- file cabinets – rugged and ready to go
- bookcases – superior savings and storage



Your best equation for savings
High Quality + Low Cost =

The Best Value for Your Money

Chosen by "Mr. Cheap's Guide" as the cheapest in New England.

10% discount with MIT ID!
Now thru November 1

Cambridge Office Furniture

113 Richdale Ave., Cambridge
876-6614

Office Furniture Liquidators

519 Broadway, Somerville
625-7060

OPINION



Chairman

Jeremy Hylton '95

Editor in Chief

Sarah Y. Keightley '95

Business Manager

Pradeep Sreekanthan '95

Managing Editor

Michelle Sonu '96

NEWS STAFF

Editor: Hyun Soo Kim '96; **Associate Editors:** Ramy Amaout '97, Ifung Lu '97, Daniel C. Stevenson '97; **Staff:** Trudy Liu '95, Ben Reis '95, Nicole A. Sherry '95, Kevin Subramanya '95, Charu Chaudhry '96, Deena Disraelly '96, Michael A. Saginaw '96, Abhilash R. Vaishnav '96, Roopom Banerjee '97, Lawrence K. Chang '97, A. Arif Husain '97, Matt Mucklo '97, Gabriel J. Riopel '97, Rishi Shrivastava '97, Andy Stark '97; **Meteorologists:** Yeh-Kai Tung '93, Arnold Seto '96, Marek Zebrowski.

PRODUCTION STAFF

Editors: Matthew E. Konosky '95, Teresa Lee '96; **Associate Editor:** Ernst Smith '97; **Staff:** Ling Liao '95, Geoff Lee Seyon '97, Joo Youn Park '97, Christine J. Sonu '97, Jimmy Wong '97, Gilbert Kim '98.

OPINION STAFF

Editor: Anders Hove '96; **Staff:** Michael K. Chung '94, Matt Neimark '95.

SPORTS STAFF

Associate Editors: Eric M. Oliver G, Daniel Wang '97; **Staff:** Mike Duffy G, Andrew Heitner G, Thomas Kettler G, Ognen J. Nastov G, Bo Light '96, Koichi Kunitake '97.

ARTS STAFF

Editors: Ann Ames '92, J. Michael Andresen '94; **Associate Editor:** Scott Deskin '96; **Staff:** Thomas Chen G, Dave Fox G, John Jacobs '94, Gretchen Koot '94, Adam Lindsay '94, Christopher Chiu '95, Craig K. Chang '96, Robert W. Marcato '97, Anne Wall.

PHOTOGRAPHY STAFF

Editors: Sharon N. Young Pong '96, Thomas R. Karlo '97; **Associate Editor:** Helen Lin '97; **Staff:** Jason Fleischer G, Simson L. Garfinkel '87, Mark Bockmann '94, Dan Gruhl '94, Rich Domonkos '95, Delano J. McFarlane '95, Sherrif Ibrahim '96, Lenny Speiser '96, Justin Strittmatter '96.

FEATURES STAFF

Christopher Doerr G, Pawan Sinha G, Mark Hurst '94, Steve Hwang '95.

BUSINESS STAFF

Advertising Manager: Anna Lee '97; **Accounts Manager:** Oscar Yeh '95; **Staff:** Diana Bancila '95, Jeanne Thienprasit '95, Jin Park '96, Syed Abid Rizvi '96, Mary Chen '97.

TECHNOLOGY STAFF

Director: Garlen C. Leung '95.

EDITORS AT LARGE

Contributing Editors: Vipul Bhushan G, Josh Hartmann '93, Yueh Z. Lee '95, Eric Richard '95.

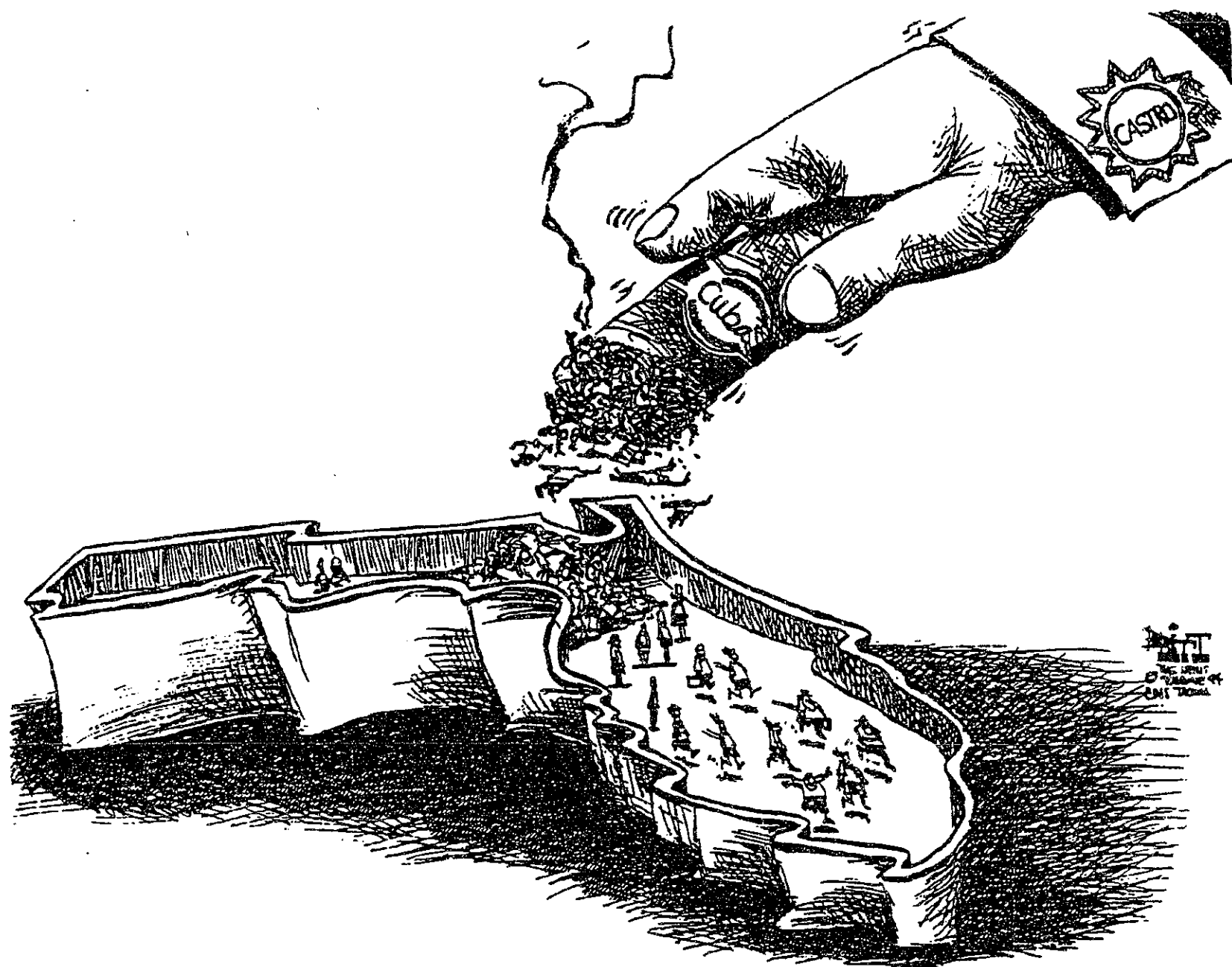
ADVISORY BOARD

V. Michael Bove '83, Robert E. Malchman '85, Thomas T. Huang '86, Jonathan Richmond PhD '91, Reuven M. Lerner '92.

PRODUCTION STAFF FOR THIS ISSUE

Night Editor: Jimmy Wong '97; **Staff:** Jeremy Hylton G, Sarah Keightley '95, Garlen C. Leung '95, Teresa Lee '96, Michelle Sonu '96, Daniel C. Stevenson '97, Gilbert Kim '98.

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 \$20.00 per year. Third Class by *The Tech*, Room W20-483, 84 Massachusetts Ave., Cambridge, Mass. 02139-0901. 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) 258-8324. FAX: (617) 258-8226. Advertising, subscription, and typesetting rates available. Entire contents © 1994 *The Tech*. Printed on recycled paper by Mass Web Printing Co.



The Plight of UROP: Live and Let Die?

Column by Raajnish A. Chitaley

Even if you were hibernating in a Course VI laboratory last term, you heard about the crisis with the Undergraduate Research Opportunities Program. Unlike most events that wax and wane at MIT, this one captured our attention. Ask the average undergraduate about the Center for Materials Research in Archaeology and Ethnology closure dispute or the sudden death of Constantine B. Simonides '57, and you're likely to receive a blank stare.

The UROP crisis was different — it was our bread and butter issue. But I think most of us have probably put UROP aside since last year. There hasn't been much news, and we've been away for awhile. And UROP is admittedly more stable now than at the end of last term. Let me tell you why you should still care about UROP.

For the freshmen and those with their heads in their nerd kits last year, let me give you a brief history. Last fall, MIT was told that an important set of government accounting regulations (commonly referred to as *Circular 421*) would be implemented beginning in July of this year. The regulations are far too complex to be explained here, but they essentially "tax" government research spending. Despite a concerted lobbying effort, the administration was unable to reverse the harmful treatment of UROP under this rule.

One indirect consequence of this accounting change was that the cost of hiring undergraduates for research with government funds more than doubled. More recent developments have reduced the impact of this "tax," but it still remains at about 60 percent or so. (For precise rules, contact the UROP Office.) The situation was most bleak before the beginning of the summer. When the situation became intractable, the Provost at last pledged one million dollars from the Institute's endowment to save UROPs for the summer.

As part of the brouhaha last term, three UROP students (yours truly included) went to Washington, D.C. (thanks to money from the Provost's Office), and lobbied the government to revert the accounting treatment of UROP. We were startled by the response to our junket; people were surprised and pleased to see actual living, breathing undergraduates — particularly those doing research.

The fact of the matter is that many people in Washington seemed tired of seeing faculty and administrators acting for undergraduates. They were happy to see undergraduates who weren't whining about everything all the time — not that MIT undergraduates ever whine. And with the unflinching support of the MIT Washington Office, we were to leave a positive impression about government support for undergraduate research.

With this advantage, we were able to make

some headway with "the players" on this issue. Our victory, unfortunately, was a small one, especially because the follow-through on the administration's part was lost in the fray of other MIT lobbying. In a nutshell, that's what happened to UROP: It was lost in the fray. For those in the senior administration, UROP was only one priority on a long list of priorities, and those in the UROP Office or the Office of the Dean for Student Affairs cannot always converge their attention on UROP when necessary.

If that's not enough of a problem, MIT itself (often through the well-intentioned but conservative Comptroller's Office) often interprets rules in a way detrimental to UROP. And only recently has UROP been allowed to fund raise aggressively.

When push comes to shove, UROP is our program. We share in a legacy passed down 25 years ago by a dean unknown to most undergraduates. We cannot continue to rely on the President, Provost, Comptroller, or even the Dean's Office to protect UROP — from the federal government or MIT itself. If this means going to Washington and making our case, or — God forbid — going to faculty meetings and making noise, we'll have pick up the ball and run with it. As undergraduates, our responsibility to UROP can be nothing less.

Opinion Policy

Editorials, printed in a distinctive format, are the official opinion of *The Tech*. They are written by the editorial board, which consists of the chairman, editor in chief, managing editor, executive editor, news editors, and opinion editors.

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.

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

Letters to the editor are welcome. They must be typed, double-spaced and addressed to *The Tech*, P.O. Box 397029, Cambridge, Mass. 02139-7029, or by interdepartmental mail to Room W20-483. Electronic submissions in plain text format may be mailed to letters@the-tech.mit.edu. All submissions are due by 4 p.m. two days before the date of publication.

Letters and cartoons must bear the author's 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. We regret we cannot publish all of the letters we receive.

To Reach Us

The Tech's telephone number is (617) 253-1541. Electronic mail is the easiest way to reach any member of our staff. Mail to specific departments may be sent to the following addresses on the Internet: ads@the-tech.mit.edu, news@the-tech.mit.edu, sports@the-tech.mit.edu, arts@the-tech.mit.edu, photo@the-tech.mit.edu, circ@the-tech.mit.edu (circulation department). For other matters, send mail to general@the-tech.mit.edu, and it will be directed to the appropriate person.

It's not just a job...

News

Production

Photography

The Arts

Sports

Opinion

Business

...It's more free food.

Join us at our **OPEN HOUSE** on Saturday, September 10, at our offices in the Student Center (room 483).

We'll have free Tosci's Ice Cream too!

MIT Computer Connection



Back-to-School 1994

Great Buys on Computers and Software!

 Special back-to-school pricing

on Apple, IBM, AT&T, Dell, Claris, WordPerfect, and MORE!

September 1

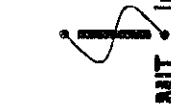
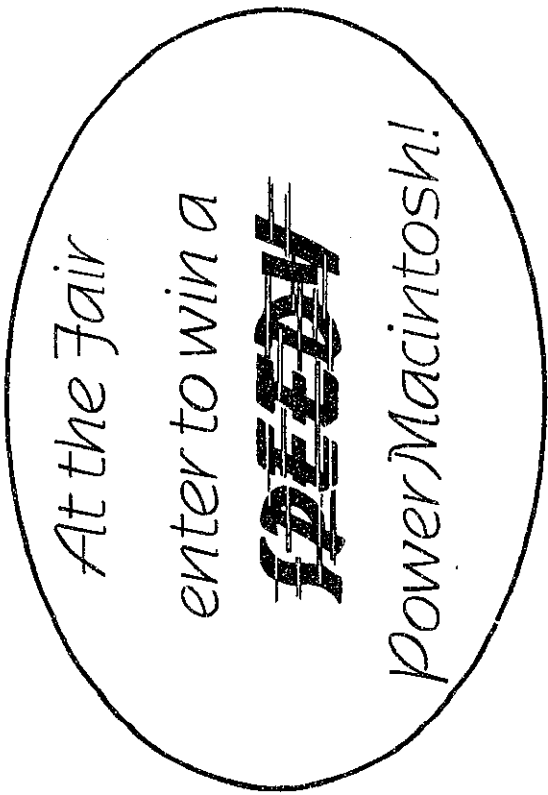
Everything you always wanted to know about buying a computer but were afraid to ask!

Bush Room, 10-105
10am, noon, 2:30

September 2

MCC computer Fair

Apple, AT&T, Claris, Dell, IBM, SGI, SuperMac/Radius, Symantec
10am -5pm
Bush Room, 10-105



Information Systems
All product names are trademarks of their manufacturers.

Price • Convenience • Service

MIT Computer Connection
Student Center, W20-021
253-7686, <mcc@mit.edu>
Monday, Noon - 4:30pm
Tuesday - Friday, 10am - 4:30pm

49 Percent Did Well On Math Diagnostic

Tests, from Page 1

Enders said. The test consisted of four five-problem sections in the areas of algebra; geometry and analytic geometry; trigonometry; and logarithms, exponents, and complex numbers.

About 49 percent, or 535 of the 1090 students who took the exam, received satisfactory scores. That means "they have adequate pre-calculus and problem-solving abilities," Enders said.

Another 382 freshmen received unsatisfactory scores, meaning that they showed weaknesses in two or more areas on the test, and 174 students performed poorly in only one area, Enders said. This year's freshmen took an average of 87 minutes for the test; students last year took only 70 minutes, she said.

Of all the areas tested, "trigonometry was definitely the worst" in terms of freshman performance, according to Enders. "A lot of these students understand the stuff. They've just forgotten."

"Students with weak backgrounds in pre-calculus tend to do worse, particularly in Physics I (8.01). About 15 percent get a D or F," Enders said. "Students really need to have this material at their fingertips. They need to be fluent in it for both calculus and physics."

Unlike last year, students with unsatisfactory scores will not be required to pass a second diagnostic. Instead, study guides in each of the four areas were produced for students, Enders said.

Ifung Lu contributed to the reporting of this story.

Despite Slight Delay, Housing Lottery Goes Smoothly

Housing, from Page 1

Eisenmann '75.

This year students entered their housing preferences using the Athena Computing Environment. Eisenmann processed this information using software on his Macintosh. The results were then e-mailed to the new students.

The new system seems to have alleviated problems that came up last year. Last year's freshmen had to wait in long lines to receive their dormitory assignments. Also, about 100 students had to wait for a second lottery, and 55 had to wait again for a third lottery.

Yesterday's messages were scheduled to be sent out by 6 p.m., but there was some delay. The program's creator S. Anders Oakland had to deliberately slow down the way the program sent mail because he did not want to clog the mail server. Still, he had planned to have the messages sent by 6 p.m.

Most students were happy with their permanent housing assignments.

Priya Bhargava '98 took some time before logging in to learn her housing assignment. She said she was really nervous because, "You have no idea where you're going to end up." She later found out that she received her first choice, MacGregor House.

Still, some students were upset by the lottery results.

Gina Ferrante '98 was assigned to Burton House, which was her fifth or sixth choice. "I blocked with a friend of mine," she said. "I'm very upset because everybody was telling me you get your first or second choice."

Lottery has full participation

Oakland said that they were "delighted by how well the numbers added up." The total number of students with dormitory assignments and students who have pledged fraternities or agreed to live in independent living groups seems to equal the number of freshmen in the class, he said.

Eisenmann said that no one seems to have missed out on the lottery. He did say that three or four students missed Monday's 3 p.m. deadline for particular reasons, and they entered their preferences manually in the Residence and Campus Activities office.

The second round lottery assignments will go out today by 6 p.m., Eisenmann said. This still enables students to attend possible in-house dormitory rush events. The second round is necessary because pledging is a continual process, Eisenmann said. As students accept bids from fraternities, some sororities, and other independent living groups, new spaces are opened up in the dormitory system, he said.

Several dormitories, including Baker House, MacGregor, and McCormick Hall will be doing room assignments before the freshmen actually move in on Thursday, Eisenmann said. This means that students will be able to move directly into their final dormitory room.

In previous years, all freshmen started moving into their permanent dormitory assignments after the lottery results were released. They were then placed in temporary rooms before in-house dormitory rush, and had to wait a few days before getting their final room assignments.

Hack assignments

Prior to receiving the actual mail from housing lottery officials, some freshmen received messages telling them that they had been given "a less traditional housing assignment." For example, Eric M. Nielsen '98 was assigned to W15-103, the Chapel, and Piyush Bharti was assigned to 51-201, the Sailing Pavilion.

The letter read: "Some of you at this point may notice that you have been given a less traditional housing assignment. ... You are one of the lucky few randomly chosen to have their requests withdrawn from the normal housing lottery to allow you to participate in this innovative new housing experiment." It is signed Jack Florey, a common pseudonym for hackers.

Oakland said that his office was aware of these messages. They decided not to try to remove them from the system because they were "amusing." He hopes that not too many freshmen were confused by the "hack" message.

In response to the joke, the real letter starts off: "No, you haven't really been assigned to live in a police cruiser, a freight elevator, or the chapel."



RICH FLETCHER—THE TECH

Members of Club Chem demonstrate the 'proper' way to mix ammonia and bleach at last night's Activities Midway held in the Johnson Athletic Center.

Volunteers Run Grad Student Orientation

GSC, from Page 1

said.

Kermode said that the GSC is trying to expand the program by adding more events this year. "We feel like the GSC should be able to unite graduate students and figure out what they want and need," Kermode said.

But administrative support would not be unwelcome. "Compared to undergraduate orientation, we need more support from the administration. Graduate students don't have the time," Li said. Graduate students sometimes have to ask their faculty advisers if they can spare the time away from their work to volunteer, Li said.

"It means a lot of work on our part, but I think it provides us valuable learning experiences and a sense of ownership in the Institute," Bambenek said. "Also, in a time of financial difficulty it seems that this is a good way to do it. As currently done, we provide a quality experience for new students."

All this week, students can pick up information at the GSC booth in Lobby 10. The information includes MBTA schedules and GSC activities schedules. Today's main events are the English Evaluation Test, the

MIT Fair, and various seminars such as on-campus safety. Traditionally, the GSC's most popular orientation event is the Boston Harbor Cruise, which will tour Boston Harbor Sunday evening.

One hitch this year was the trip to Fenway Park Sept. 11 to watch the Red Sox play against the Kansas City Royals. The game may not be played because of the strike. "We've purchased tickets for the game already, and if the strike gets resolved and the game is held, we'll sell them," Bambenek said.

New 8.01 Includes Study Guide With Detailed Examples, Hints

8.01, from Page 1

aged to work together.

The changes to 8.01 will "provide an opportunity for the physics department to influence the MIT experience of all the students and lay a good solid foundation for the rest of their career at MIT," Busza said.

All problems solved

The study guide is designed to help "a complete spectrum of students," Busza said. However, it is not meant to be read cover to cover, he said. The textbook will be the book used in the 8.01L version of 8.01 last year: "University Physics" by Hugh D. Young, which received very good reviews from students, Busza said.

Each unit in the study guide begins with a brief overview and a list of aims "detailing exactly what you're expected to know by the end of the week," according to the guide's introduction.

Following the aims is a set of sample quiz questions, a list of new

ideas for the lesson, and a summary explaining the lesson along with cross-references to the textbook.

A set of fully-worked example problems and a set of 10 regular problems are followed by hints for each problem. Finally, complete answers are given to every quiz question, all of the problems, and the hints.

"Every quiz, exam, and final exam problem will all be from the problems" in the study guide, with minor modifications, Busza said.

Evaluation will take the form of nine weekly quizzes and two large review quizzes. Grades will be determined by the top seven of the nine weekly quizzes (35 percent), both review quizzes (25 percent), and a final exam (40 percent), Busza said. The pass/fail mark has already been set at 55 percent, he said.

Concerns addressed

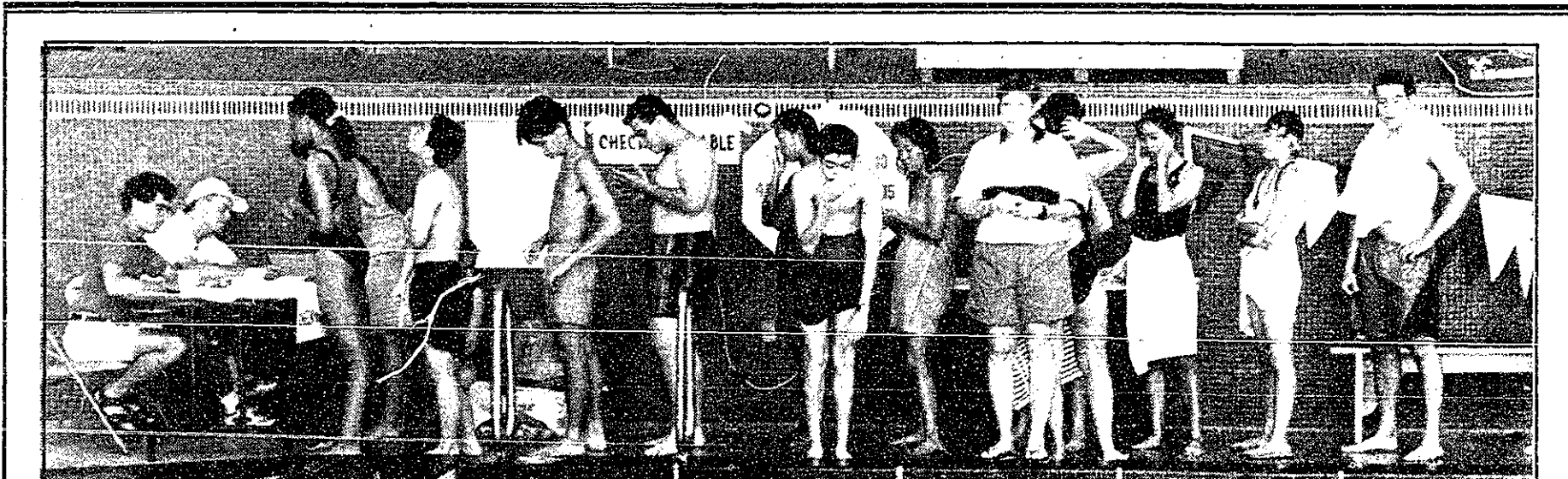
One concern with the Princeton program is that the course "has become primarily a mechanism for teaching physics problems" and that

less time is spent on discussing important concepts, said Princeton Professor Joseph Taylor in an interview last spring.

"To address that concern, we've added a lot of material which tries to explain what science is about using mechanics," Busza said. A major portion of the weekly main lecture will be an explanation of the importance and meaning of the topic in relation to physics and science in general.

A concern raised by Professor of Physics Walter H. G. Lewin, who taught the older version of 8.01 for three of the past four years, was that students would not be able to transfer between their lecture sections. "A large number of students are going to be unhappy," Lewin said in an interview last spring. Forbidding the transfers is an "insult to the students," he said.

However, the classes need to be kept small, Busza said, to make the course effective. "Because of that, there will be little flexibility in switching between lectures," he said.



Freshmen check in after successfully completing their MIT swim test Tuesday morning.

RICH FLETCHER—THE TECH

