

The Tech.

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MIT, CAMBRIDGE, MASSACHUSETTS

FIVE CENTS

Draft boards to grant petitions for I-A status

Students who wish to drop 2-S draft deferments in favor of I-A classifications may still do so. Local boards will continue to grant these requests even though the students continue to meet the conditions for which the deferments were granted.

This policy was instituted in late 1970 and was of particular interest to young men with random sequence (lottery) numbers above the highest RSN called for induction. By dropping their deferments at the end of the year, they became part of that year's prime selection group. On January 1, they were placed in a second priority position. Because of this, they are not subject to induction until the manpower supply in the first priority selection group is exhausted, a development likely only if a major national emergency occurs.

The policy was reaffirmed in a Local Board Memorandum sent this week by Draft Director Curtis W. Tarr to all 4000 local draft boards. Registrants who desire to take advantage of this policy in 1971 must have been born in 1951 or earlier, have RSN's of 126 or above, and not be a member of the extended priority group. Moreover, they

must submit their request in writing. To be considered as part of the 1971 prime selection group, the requests must be postmarked no later than December 31.

RSN 125 has been set as the year-end ceiling for 1971 draft calls. Unlike 1970, when the year-end ceiling was not necessarily reached by all local boards, the authorization in the 1971 draft amendments of a Uniform National Call insures that all eligible registrants will be considered for induction if they: (1) are in class I-A on December 31, (2) are 20 years of age or older on that date, and (3) have RSN's of 125 or below. If young men meet these criteria, but are not inducted in 1971, their liability for induction will be extended into 1972. They will be prime candidates for induction during the first three months of the year along with other men who are now in the extended priority selection group.

Commenting on the continuation of the policy which allows the dropping of deferments, Dr. Tarr said: "Men holding lottery numbers of 126 and above can effectively limit their vulnerability to the draft by being classi-

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Photo by Sheldon Lowenthal

Wiesner maps fiscal plans

By Lee Giguere

The MIT administration is "quite serious about trying to take four million dollars" out of the 1973 operating budget, President Jerome Wiesner told Wednesday's faculty meeting, but he added that the administration is also "quite serious" about not damaging any ongoing programs with the cuts.

He assured the faculty they won't find anything "which will stop completely."

Wiesner asserted that he was "trying to give you [the faculty] some indication of our motivation," and "how we're trying to go at it [the budget cut]."

The meeting, attended by approximately 80 faculty mem-

bers, also heard a brief report from Associate Professor of Civil Engineering Richard DeNeufville on the activities of the Committee on Curriculum, a report from the Nominations Committee, and an explanation of both the CEP and Faculty meeting agendas in upcoming months. Dean of Engineering Alfred Keil presented a discussion of Engineering Education at the close of the meeting.

Professor of Mathematics Hartley Rogers, Faculty Chairman, reported that in December, the faculty will review pass-fail in the freshman year and the report of the Special Task Force on Education, while 1972 faculty meetings will consider the

recommendations of the Commission, general Institute requirements, a report from the Special Committee on Libraries, and the question of academic credit for work done at other universities. Rogers suggested that there might be a need for an additional or a continued meeting in December.

The Nominations Committee reported the appointment of Associate Professor of Electrical Engineering Joseph Weizenbaum to replace Professor of Mechanical Engineering Thomas Sheridan on the Discipline Committee for the spring of '72, and Associate Professor of Urban Planning Mary Potter to succeed Associate Professor of Civil Engineering Russell Jones on the Committee on Student Environment.

Discussing what he termed the "budgetary prospects," Wiesner stated that the budget problem could be divided into two pieces: "creeping overhead," which in the last few years has been climbing at the rate of 1/2 to 1%, resulting in a shift of between 600 and 700 thousand dollars from research to the general budget; and the ever-increasing gap in the operating budget, which has been growing for the last few years.

The so-called "operating-gap" is the difference between MIT's regular income and expenses which must be met by drawing on unrestricted funds. This year, in addition to an operating-gap of four million dollars, there were expenses categorized as "demand on unrestricted funds" (largely funds used to match foundation grants that didn't meet the usual overhead charges) and a loss in federal fellowships; together, these expenses imposed a six million dollar demand on unrestricted funds. These demands, Wiesner confessed, are "not so slowly chewing up" MIT's budgetary flexibility, pre-empting funds that in previous years "were available to do those things we always wanted to do."

In '67-68, Wiesner said it was clear the research funding had begun to fall off, but the administration wasn't "as sensitive as we should have been to the falling off."

Wiesner asserted that MIT could "meet the situation in several ways." The first is the proposed four million dollar cut in the 1973 budget. He explained that only one-fourth of

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Photo by Sheldon Lowenthal

Exec. Council bridges stu-administration gap

By Norman Sandler and Walter Middlebrook

On Tuesday, more than sixty students met in an informal gathering of the Undergraduate Association (UA) in the Student Center. The meeting, sponsored by the Executive Council of the UA, brought students together with student leaders and MIT administrators in discussions of student problems and Institute-wide affairs.

"The meeting," according to John Krzywicki, Undergraduate Association Vice President, "was designed in hopes of allowing students to come and meet the administrators, especially those students who hadn't had a chance to get to the administrators' offices individually. It was for this reason that after I made the initial introductions of the administrators present, small discussion groups formed around them."

Answering students' questions were J. Daniel Nyhart, Dean

for Student Affairs; Robert Holden, Associate Dean for Student Affairs; Kenneth Browning, Assistant to the Dean for Student Affairs; Professor Richard De Neufville, Associate Professor of Civil Engineering and Chairman of the Committee on Curricula; Jack Frailey, Director of Student Financial Aid; and Jon Hartshorne, Assistant to the Dean for Student Affairs. Each talked about the areas of Institute affairs he had the greatest expertise in: Frailey: financial aid; Browning: student housing; De Neufville: curricula, particularly physical education; Holden: student activities; Hartshorne: the Student Center, its possible use and other goodies; and Nyhart: all student affairs.

Because of the confiscation of a small quantity of marijuana by Campus Patrol in MacGregor House Saturday, considerable debate has arisen on campus. At the UA meeting, students were

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Bleak job opportunities confront MIT alumni

By Pete Mancuso

During 1970-71, recent MIT graduates experienced a distinctly lower unemployment rate than their contemporaries across the nation.

Final statistics found 1.5% of MIT graduates with Masters degrees unemployed, as compared to 2% nationwide. About 2.9% of MIT PhD's are unemployed, compared to 4% for the nationwide population. For Bachelors degrees, the figures were 7% for MIT and 9% nationwide.

These differences can be attributed to a group of factors, chief among which is the reputation MIT holds with businesses as well as government. Through this, MIT graduates have been able to weather the storms of unemployment somewhat better than the remainder of the nation's technological community.

Unemployment figures for older graduates are higher on a numbers basis than for recent MIT graduates. Some 800 alumni returned to the Placement Office for assistance in finding new jobs during 1970-71. The percentage of unemployed alumni, however, is remarkably close to that of recent graduates, with both standing at about 2%.

The worst-hit fields for both recent graduates and other graduates of MIT during this period were physics and chemistry. None of the recent graduates with PhD's in chemistry found jobs in industry. Environmental engineering, bio-engineering, and ocean engineering also faced limited job prospects, though

they are fields of great interest at MIT.

Some of the more favorable fields at this time are management and information systems, insurance, and public utilities; however, the latter two are of limited interest at MIT.

Small interest has been shown by MIT graduates in such companies as Westinghouse, Amoco, and US Steel. Apparently, these firms are avoided because people feel that they might be sent to some undesirable locale to work.

Employment prospects are poor for pre-medical and pre-law students who may be well-qualified and might be in demand. There are simply insufficient facilities to train such people.

The Engineers Mutual Benefit Association (EMBA) was formed recently in response to the present unemployment situation in technological fields. EMBA is composed of un- or partially-employed engineers and scientists, who hope to benefit both themselves and the community.

EMBA is to perform scientific and engineering studies, investigations, researches, report writing, and detail work for customers, with attendant advisory and consulting services included. Special emphasis is to be placed on safety, reliability, excellence of design, economy, human needs, and human effects. The hope of the organization is that it will be able to become a social group, meeting its members' social needs and supporting its members in time of need.

Is the "selling of the President" too simple?

By Debra Deutch

"Americans vote as they do for many complex reasons that have kept the art of politics a mystery to baffle not only candidates but also scholars who analyze public opinion. To such scholars the suggestion that a candidate can be sold like toothpaste must seem naively simplistic," argued Dr. Frank Stanton, vice chairman of the board of CBS as he defended television's role in American elections.

Speaking in a series on "Freedom of Expression - Foundation of American Liberties" at the Boston University Law School Auditorium, Stanton lashed out at critics of journalism who depict the United States as "a nation of docile voters beguiled by television and voting sheeplike for the most attractively packaged candidate."

"Television, particularly when it can be used for face-to-face discussion by opposing candidates, has helped to make our elections far more thoughtful, issue-oriented, truly representative and truly democratic than they ever were before."

Stanton cited the elections of 1920 and '24 as examples of this thesis. "Despite women's suffrage, not even half of the Americans of voting age - in fact only 43.5 percent - went to the polls in 1920. The man they elected, Warren G. Harding, had been chosen in the first place not in an open convention but in a 'smoke-filled room.' And even when the election campaign was over," Stanton went on, "only a small proportion of the nation's voters had had any opportunity to learn what the man, who was destined to be one of our weakest Presidents, was really like."

By the time of the next Presi-

dential campaign in 1924," Stanton stated, "circumstances had changed drastically. There were now some radio links between certain cities, and the number of receivers in American homes had grown at a fantastic rate. For the first time, many Americans were privileged to listen in on the actual workings of a Presidential convention... Party conventions were no longer the private domain of the delegates. They were now public property of all who had discovered the marvels of electronics."

Noting that the number of eligible voters who cast a ballot rose from less than half in 1920 to 61.8% in the last Presidential race, Dr. Stanton concluded that broadcast journalism has had the beneficial effect of getting more voters, better informed, to the polls.

Equal time

Stanton attacked section 315, the equal time provision of the Federal Communications Act, as being detrimental to journalism and the election process. "I think it is more than mere coincidence that 1960 was the one Presidential election where it was suspended, permitting us to broadcast face-to-face debates between the two major candidates. That year, voter turnout reached a modern high of 64 percent." Stanton called for the abolition of 315.

He gave, as an example of its drawbacks, a documentary that CBS had prepared on George Wallace which was never aired because CBS would then be forced to give similar coverage to every candidate, from the Prohibition Party to the Vegetarian Party. The same provision of the Federal Communications Act had forced CBS, in 1952, to give an hour of nation-wide coverage

to a candidate for the Republican nomination who had garnered six votes in the New Hampshire primary. When it came time for the convention, held in New York's Madison Square Garden, the aspirant was not even allowed to enter.

What is journalism?

Returning to journalism's critics, Stanton held that "Journalism is more than an open microphone in a public square. It is diligent reporting and analysis by skilled professionals who cull the substance of the news and provide the necessary news judgment. Some critics," he continued, "including a few who hold public office, want to brush

aside this journalistic function of television in favor of having every station freely available to prospective candidates for all the time they want on the air to wage their campaigns. They want to expand what is now political advertising time, usually paid for at minimal rates, into a limitless and free broadcast forum in which anyone could participate, as often and as long as he liked." This, Stanton asserted, "flies in the face of the most fundamental facts of democratic life." He quoted Walter Lippman as saying that, "The theory of a free press is that the truth will emerge from free reporting and free discussion..."

Stanton went on to try to apply the free access principle of a newspaper. He chose the Chicago Tribune, since it has a large circulation, not only in its home city, but in the tri-state area surrounding Chicago, just as television station's broadcast would carry.

"And what would happen to the democratic process in the area around Chicago? No reader of the Tribune would have time to study all the political statements. He would give up the attempt; he would stop reading. A newspaper can add more pages, but a broadcaster cannot add more minutes to the hour or hours to the day.



Draft boards to grant petitions for I-A status

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fied into I-A by the year's end. Since the law allows them to apply for deferments, we believe that these men granted deferments should be able to drop them if they desire."

"Our purposes," Tarr added, "are to achieve fairness to all registrants in determining their priority status on January 1 of the new year and to limit the uncertainty that men with high random sequence numbers face. Registrants with student, occu-

pational, paternity, agricultural, and hardship deferments will be eligible to take advantage of this policy."

The Memorandum also amends Selective Service policy on allowing record changes in birthdates upon submission of adequate evidence. Starting December 10, if a birthdate change is submitted after the registrant has received a lottery number, the records will be changed, but the registrant will retain his original lottery number.

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Senator scores US hunger

By Bert Halstead

Senator Ernest Hollings of South Carolina was the speaker at the Nutrition and Food Science Seminar last Tuesday evening.

Around fifty students and faculty members came to 9-150 to hear about "Fighting Hunger in America - The Sad Political Realities."

Senator Hollings, the assistant majority whip of the US Senate, is a strong advocate of legislation to wipe out the hunger problem, and is the author of a book, *The Case Against Hunger*.

He began by stating that attempts at solving the hunger problem are complicated by the political situation. Most politicians (and voters) are not aware of the magnitude of the problem, and that is why there has been no national policy on fighting hunger. "Another common misconception," he pointed out, "is that the hunger problem can be equated to the poverty problem." Though they are clearly related, what he means by "hunger in America" is mainly malnutrition. This is not undernourishment, the classical idea of "hunger." Many of America's hungry are not undernourished, but are just not getting anything resembling a balanced diet. A recent survey showed that there are fifteen million malnourished (or "hard-core hungry" as he called them) in the United States.

The Senator went on to tell of the consequences of not addressing ourselves to the problem. He said that a malnourished young child is a prime candidate for mental retardation. He presented a typical scenario in which, because of having been fed improperly as an infant, a child falls behind in school, eventually drops out, gets into trouble and sooner or later into jail. Senator Hollings then gave some statistics about the cost of

caring for convicts and retarded children, and pointed out that it would have cost less to feed these people properly than it is now costing to care for them.

Why is nothing being done? Hollings cited several political reasons, typified by what a farmer in a small South Carolina town said to him one day: "If you feed 'em, they'll never work." Feeding programs are just not politically popular. Vice-President Agnew said, "You've seen one slum, you've seen them all," and was elected, while Hubert Humphrey who said, "If I were them, I'd start a riot, too," lost. Senator Hollings

said that most of the programs to alleviate hunger which are now in existence were designed mainly to solve other problems, such as surplus disposal.

The talk was followed by a question and answer period, during which Hollings clarified his position on various issues. Notably, he mentioned his feeling that a successful fight against hunger will have to be supervised locally, and not by some bureaucracy in Washington. He also stated that he did not see a guaranteed annual income as a solution, because people would not, by and large, use the extra money to improve their diets.



Presidential hopeful Paul McCloskey (R-Calif.) spoke Monday evening at Harvard's Sanders Theater. McCloskey is conducting an active campaign for the Presidency.

Photo by Dave Tennenbaum

Wiesner outlines plan to handle budget pinch

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was to be pared from the academic budget. In addition, MIT is now trying to raise funds "generate some sources of new income." Underway are efforts to raise ten million dollars for student aid, and eight million for new projects. The administration, Wiesner added, is also trying "to find ways of attracting two or three million a year" of new research.

"There are resources which are not challenging at this point," Wiesner asserted. Continuing, he argued that some of the economies should come from within the departments and major laboratories rather than from the top administration.

"I don't know what to say about it," Wiesner commented on the question of the Draper laboratories. MIT, he stated, is negotiating with the Department of Defense. Estimates on the costs to MIT of divestment, he noted, range from one-half to four million dollars per year, making budgetary planning difficult.

Year-by-year salary and tuition increases were also foreseen by Wiesner, although he reiterated his desire to keep down tuition. He pointed out that comparison of tuition figures with the country's median income revealed that MIT's tuition has held steady at about 10% of median income since 1950. In addition, he reported that the "total cost" of education has been decreasing compared to income. Wiesner concluded, however, that these facts don't "justify tuition increases."

In his report on engineering education, Keil focused on two areas: perspectives on the past, and a "roadmap" for the future.

After a brief review of engineering history, which closed on the note that the value structure in the profession "was technical feasibility and cost," Keil advanced that "engineering must add a new dimension." He argued that engineers "must see the whole system in which a component will operate." Examination of cost factors, Keil continued, must be shifted from components to the overall system. Keil foresaw the development of "concepts to decide what to design," and charged that engineers must look at real instead of illusory needs.

"Impact analysis" of the type now required of federal agencies by the Council on Environmental Quality should examine not just environmental effects of a system, but all its effects, including those in the economic sector.

In his "roadmap for the future," Keil advanced that engineering "must build on a strong engineering-science base." However, he stated that this base is "not sufficient in itself." In addition, engineering education must "develop a capability of synthesis, and a familiarity with technology." He stressed the importance of understanding the interface between technology and society, and an ability to "identify and define problems." Keil recognized a need for the continuation of basic research projects in engineering science. He concluded with the wish of seeing a greater effort "in the area of systems studies."

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WE GIVE RESULTS

Exec. Council bridges stu-administration gap

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particularly interested in the Institute's position vis a vis the narcotics situation on campus and they pointed these questions at Nyhart.

In the past, many students felt that while living in the dorms and attending MIT they were exempt from prosecution for possession or use of narcotics. However, Nyhart reiterated his policy, "the Institute will not condone the use of narcotics... and students are not protected by 'Mother Institute'."

Over the past two years, there have reportedly been fewer seizures and drug busts at MIT than at many other colleges, leading many students to believe that they are safe while affiliated with MIT. When asked whether the Institute is aware of the narcotics situation on campus, Nyhart responded, "we are not in the dark," and "we don't take it upon ourselves to enforce the laws, but if the Cambridge Police wanted to clean out a dormi-

tory, the Dean's office would cooperate."

There are still conflicting reports about Saturday's incident. However, Nyhart relates that the Campus Patrol received a call from an anonymous student (presumably a MacGregor resident) stating that there was a "pot party" in progress and warning that if the CP didn't break it up, he'd call the Cambridge Police.

The Patrol then acted accordingly, seizing a quantity of marijuana and breaking up the party. When asked about future Institute policy, Nyhart repeated that the Institute is not in the habit of enforcing the laws themselves, but "if they receive a complaint, the Campus Patrol will act."

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NOTES

* The Medical Scientist Training Program at the University of Washington Medical School, Seattle, Washington, has extended its application deadline to December 15. Washington State residency is not required for admission to the combined M.D./Ph.D. program. Call Dr. George Martin, Program Director, collect for further information and application. 206-543-1142.

* The Advanced Studies Program of St. Paul's School in Concord, New Hampshire is offering teaching internships to qualified students who have completed their junior or senior year and who have a major in one of the fields taught in the program. Additional information and applications are available in the Student Employment Office, 5-120.

* Scientific research experience in US Virgin Islands: A team of 10 undergrads will study the effects of pollution on coral reef ecology around St. Croix, USVI, during summer of 1972. All expenses paid by National Science Foundation. Physical, chemical, geochemical, biological oceanographers and economics majors needed. Research experience preferable. Call Mitch Dong or Dave Kenigsburg, 498-3944 (G-21 Wigglesworth, Harvard) any time after 10 pm.

* The MIT Community Writers' Cooperative will be holding its first Reading Party on Sunday, November 21, at 8 pm in Room 20C-105. Admission: a story, play, poem, or other piece you have written. All welcome!

* LOUIS FONT: first West Point graduate in history to request discharge as a conscientious objector; honorably discharged from the army in April, 1971 due to his work in the GI rights movement and his opposition to the Vietnam War; will be the guest for informal conversation at the MIT Hillel brunch, Sunday, November 21 at 11 am, Bush Room (10-105).

* Dance Experiment '71: presented by the MIT Dance Workshop. Thursday-Saturday, December 2, 3, 4, 8:30 pm, Kresge Little Theatre.

* Class of '73: Brass Rats will be delivered, and new orders taken on Friday, November 19 and Tuesday, November 23 in the Building 10 lobby. Bring your balance due or deposit.

* All students should obtain an examination schedule at the Information Office, Room 7-111. Examinations not listed or a conflict in examinations (such as two exams in the same time period) must be reported to the Schedules Office, E19-338, by Wednesday, November 24.

* The Julliard Strung Quartet will perform at a memorial concert for the late Professor Gregory Tucker in Krésgé tomorrow (Saturday) at 8:30 pm. Admission free - no tickets are left, but those without tickets will be let in on a first-come, first-served basis to fill empty seats.

* "Goodbye Maya, Hello God," a musical play in praise of Meher Baba produced by the Society for Avatar Meher Baba, will be performed in Paine Hall, Harvard tomorrow (Saturday) at 7:45 pm. Admission free.

UROP

The United Nations Economic Commission for Africa has several ideas for possible jointly sponsored projects, both engineering and economic, in the area of technology transfer to assist developing nations. A project might include the analysis of petroleum utilization in an African country. For further information, call or visit D. Burmaster, x4849, Room 20C-231A.

A development agency in Ecuador seeks good ideas and hard work. Possible topics include: construction techniques for low cost housing, design of a small tractor, or nutrition. For further information, call or visit D. Burmaster, x4849, Room 20C-231A.

Deficit II: who gets cut how much

By Paul Schindler

When is a cut not a cut? When it only affects a small portion of the total funding of a school. And when is that the case? It all depends...

Even when you are talking about cuts by school it's not quite that simple. As Chancellor Gray put it, "It would be very easy to oversimplify this story."

Let it be known from the outset that this story is not being "played" the way the officials who released these figures want it played. In all fairness to them, their point of view is included under the heading, "The other side," at the end of this article.

Our side

The facts and figures presented here, as approximate as they are, can be of some value to the community. Intelligent input to the decision-making process can be made only on the basis of some knowledge of the overall situation.

In a time of budget crisis, everyone is getting cut back, and some areas get cut more than others. The decisions what to cut and how much are being made right now, and will be in a state of flux until sometime around next February, when it is hoped the budget will have "shaped up." (Budget time is normally over in March, but high echelon administration officials are asking for faster input to facilitate a more leisurely pace of final decisions.) Community input in defense of, or opposition to, current plans must be made now to have any effect.

That is why *The Tech* has chosen to reveal as much information as we have been able to obtain at this time about the relative cuts that each portion of the Institute can expect to receive.

It must be emphasized that all figures in this report are approximate. Requests for more significant figures were typically met with the answer, "That's part of the internal budgetary process, and should not be made public." Even *The Tech's* attempts to have Chancellor Gray confirm our "cutting order" were rebuffed: "That's getting too close to the kind of internal information whose widespread publication would not be beneficial to the Institute, in my opinion."

There comes a point at which the journalistic judgement must part from that of the bureaucracy. This is one of those points. As approximate as they are, these figures are better than nothing.

Budget process

The budget information at MIT is circulated in gray folders (for the color, not the Chancellor) which start in the budget section of the budget and fiscal planning office. They are sent out to department heads, who fill in the appropriate figures, and send them on to their deans. The deans then go to Wiesner and Gray, and several other top officials, who make the final decisions and send the folders back to the budget office. During the ensuing fiscal year, the budget office keeps track of things to assure that the actual figures stay close to the budgeted ones.

Meanwhile, in another part of town, the fiscal planning office is taking the current budget figures and doing some advance planning: "Suppose costs go up, and salaries go up, and tuition goes up and gifts go up, who gets how much?" This office examines present conditions and future prospects, and prepares reports upon which Wiesner-Gray can make decisions.

That's how it works, and it's all done with a fairly small staff. All the sweating is done in the dean's offices, and in the presidential-chancellor suite, where the real cutting is done based on the composite cuts filtered up through the system.

In the past, the task was a little easier: it was a decision of who got how much of the ever-increasing supply of money. It's always easier to raise one school's budget a little more than another if both are going up: it's much harder to drop one more than another if they are both going down.

It has been decided at this point that an across the board cut would be grossly unfair; each school has its individual needs, and some can take cuts better than others. So, some will feel the axe more, others less.

Thus the memos which went out from the Chancellor's office two weeks ago to the deans were not identical. Each one

suggested different cuts, in wording something like, "submit a budget which shows how x (in dollar terms) can be cut from the budget you had last year. List your possible cuts in priority order, showing what you can afford to lose with least effect."

What do these cuts really mean?

Funds

Each school has several sources of funds. Among these are: endowed chairs, specified endowment funds, research money, and general funds. General funds are those supplied by the Institute, and are the funds which are cut when the budget is cut. The other funds are not affected directly, but when the economic climate is such that general funds are decreasing, the chances are good that the research funds will go down at the same time.

Specific, school by school numbers for sponsored research are almost impossible to come by. All that can be said with impunity is that the numbers are larger in Science, Engineering and Management than they are in Architecture and Urban Planning or Humanities (although the departments of Economics, Political Science, and Linguistics do get some monies). It can also be stated without fear of contradiction that a large number of teaching professors have the majority of their salary paid not by general funds, but by directly sponsored research.

Endowment and endowed chairs

Endowed chairs and endowment are independent, non-cutttable sources of general use funds for a school or department and help separate those schools which can afford cuts from those which cannot.

Controller S.H. Cowan released the following rough figures to *The Tech*. They have been given to the deans of each school, and approximate the amount of endowment which that particular dean has working for him and him alone.

School	\$ thousand
Engineering	12,057
Management	7,000
Science	6,009
Humanities and Social Science	3,007
Architecture and Urban Planning	1,647

Supplied by S. H. Cowen, controller.

This is the endowment capital which each school has under its control, for a variety of reasons (usually, the endowment was specified when it was contributed: either to a school or to a specific department).

To determine the income which any school receives from its endowment, multiply the figure by about 4%. This is roughly the return on endowment as a whole, and while it results in some distortion, it can be used as a handle on the proper figure.

The amount of specified endowment roughly equals the age of a school: the newer ones have less because they have a smaller pool of faithful, contributing alumni. Thus, no great significance can be read, for example, into the "last place finish" of Architecture. It's not that MIT grads don't care about Urban Planning, it's just that there aren't that many graduates of this particular school.

What this graph does, in a crude way, indicate, is how well any school as a whole can survive a cut in general Institute funds. Those with money of their own can absorb a bigger cut with less effect than schools like Architecture and Urban Planning - more reason for the avoidance of blanket cuts.

Another indicator is the number of endowed chairs in each school.

School	Chairs
Engineering	20
Science	11
Architecture and Urban Planning	3
Humanities and Social Science	3
Management	3

Again, age of the school is a factor. But these monies, along with sponsored research, are the alternative sources that can be called up in a crunch. Some have 'em and some don't, and their unequal

distribution affects the cut distribution along with some other factors listed below.

The cuts

The following information was gathered by personal interview with officials of individual schools. Those administrators with an overview of the entire budget process refused to comment when given a chance: they will neither confirm nor deny the cut percentages or the motivations listed by the individual deans. The range, source, and probable accuracy of each source is given here: to the best of our knowledge, the figures are a good guide.

Budget Reduction Targets

(all figures approximate)

School	% of Institute general fund
Management*	
Science	
Engineering	
Humanities and Social Science	
Architecture and Urban Planning	

*Special case - see explanation in text

Sloan School of Management

Associate Dean Hill of the Sloan School had the budget memo in front of him when we called, and calculated the Sloan cut during the conversation, with pencil and paper: his figure was a little under 6%.

This must be tempered quickly: the funding of the Sloan School is unique. A 6% cut in general Institute funds has less effect here than in any other school of the Institute, due to the unusual nature of the school's funding.

When the Sloan School was set up (it grew in a way from the department of business engineering) the Sloan foundation earmarked funds for the exclusive use of the school. MIT agreed to continue contributions at the same level as those made to the former department. Most budgetary increases over the years were made with outside funds.

The amount of MIT money has increased over the years, but the dichotomous funding has remained. The exact relation, in percentage terms, between Sloan funds and general Institute funds is a closely kept secret: the amount of Sloan funds each year is subject to negotiation which is still in progress for this year's budget.

Hill assured *The Tech* there will be "no significant modification of the Sloan School program" if the cuts are no more than Gray asked for. "We've been pruning a bit," Hill noted, "cutting fat before this so that now we can absorb a cut without damage to the educational process."

School of Engineering

Dean Alfred Keil, head of the School of Engineering, told *The Tech* that his budget target cuts were "between 4 and 5%," but that he had yet to complete negotiations with all of his eight department heads as to who gets cut where.

Keil stated that his school was in the midst of an intensive need analysis, in order to determine the fairest distribution of cuts. He refused to state which departments might be cut more heavily, as "this has not yet been firmed up." He did say that there would be every effort made to make meaningful, non-detrimental cuts which would, above all, "not affect the teaching process."

He hoped that the budget cut would not mean the loss of people, and felt confident that cuts could be made in other areas, or that resources could be increased (new outside income, above and beyond Institute general funds). Keil confidently looked to the future, noting that above "five times" as many proposals are going out from his departments to various research organizations as was previously the case. He pointed to a long standing effort, intensified in the last two years, to increase sponsored research funding in all the departments of his school.

Although he would not comment on likely cut targets, he did note that aeronautics and astronautics has the highest research volume (it is strongly connected with the D-and L-Labs), followed closely by civil engineering. Thus, it can be deduced that these departments will absorb larger cuts with lesser effect,

leaving a smaller cut for those departments which are not so self-supporting.

School of Science

Robert Alberty, dean of the school, would do no more than confirm that 5% was "the right order of magnitude" to describe his budget reduction target.

In general, Alberty's attitude towards requests for specific information paralleled the central administration's: he noted that revelation of hard figures or specific budget cut areas was "difficult to do, and not very important at this point in time." He stressed the extreme complexity of the situation, pointing to endowed funds, endowed chairs, and one-shot money, as well as curriculum development funds as other and sometimes equally significant fund sources besides Institute general funds (in fairness, inclusion of most of these items in this analysis is the result of his lucid commentary on funding).

Alberty would admit to a departmental variation of cuts within his school, dependent on need, to be worked out in what he saw as "month-long" negotiations with his department heads. "Personnel, computer time, supplies, all are considered as areas to cut, with the least damage possible, dependent on need," he said.

Alberty also mentioned one department in his school, biology, which is known to be the fastest growing undergraduate department at the Institute. "Due to the enrollment increase in that department, we will try to add to their budget," he noted, as an example.

School of Humanities and Social Science

Robert Bishop, dean of the school, said his target budget cut was "greatly less than 5%," when first asked; later in the interview, he admitted to a figure more in the area of 3%, the one used in the table.

Bishop was the only dean to refer to personal meetings which all five deans had, in addition to their written notification from Chancellor Gray. The point of the meetings was the same: try to propose cuts that can be done without major damage.

Bishop split his school into two parts: psychology, economics, political science and the linguistics program, which get considerable sponsored research; and humanities, philosophy, and language and literature, which do not. He noted that such research money, coming mainly from NSF, NIH and other government departments, allows a larger department and more non-sponsored research than would be possible without it. He did not draw the general conclusion that the departments with more outside funds would take larger cuts; he would neither confirm nor deny such an hypothesis.

Architecture and Planning

William Porter, dean of the school, stated that he has been "asked to come up with a cut too, of about 3%." Some had speculated that, due to small endowment, low outside funding, and increasing enrollment, this school might not be cut at all.

Porter noted that reports of enrollment increases might be premature, as other departments in the Institute begin to compete with urban planning for the urban-oriented engineer. However, he noted, the enrollment in undergraduate urban planning might increase considerably if CEP changes its status from experimental to full-fledged.

Porter noted that he had "not yet spoken with my two department heads," but that it seemed offhand that his cuts would have to be "more than paper clips."

He then begged off on further details, noting that he was "new at this job of being a dean," and didn't feel he had the perspective needed to put the facts of the situation in their proper light.

The other side

As noted at the beginning of this article, and at key points throughout, the administration of MIT asked that this story not be played the way it is being played. None of it is from confidential sources: everyone quoted here was clearly informed that his statements were for attribution. Almost all of them asked that the "figures be downplayed." In particular, Vice-President Simonides advised against an "obsession with figures." Chancellor Gray would not review the chart marked "Budget Reduction Targets," because, he said, "that's not the point."

Dean for Student Affairs Dan Nyhart (who, as noted last week, is in line for cuts in his office as part of the general cuts in general and administrative personnel) wouldn't comment on the cuts he had been asked to make, and noted that, "The numbers are not the story. The story is that we have a problem, and the whole community has to pull together to solve it. We have to reverse the trend towards higher deficits, and we have to do it now from a position of strength."

Speaking for attribution, President Wiesner noted that "budget cutting is not a pleasant process for anyone. But the best way to destroy any institution is to develop the attitude that the cuts should come out of someone else's hide."

When asked if the budget problem at MIT was a crisis, Wiesner responded, "That depends on what you mean by a crisis, but I don't think so. A crisis is when you have no choice, a position we might have gone to in two or three years, if we had let things go. To do so would be irresponsible. We have to fight the problem now, while we are still flexible, to avoid the problems others have had."

Mixing ages over IAP

By Lee Giguere

Personal development requires a supportive, loving environment in which to occur; face-to-face encounters with people willing to accept a person as he is are essential. In a hostile, overly-critical environment, growth is stunted — the self resorts to presenting "false-selves" to the world to ward off the attack. This means that an individual's living group is vastly more important in his growth than his formal academic "education" (for a further development of this argument, see this writer's column on page 5 of *The Tech*, Tuesday, November 16). The January Independent Activities Period, with its lessening of academic pressure, seems to provide an ideal opportunity to explore new modes of living.

One area which merits further experimentation is the mixing of age groups to form a more realistic environment.

MIT's policy of mixing all classes in the dormitories and fraternities, of supporting house masters and tutors, and the general aims of the Freshmen Advisory Council, as presented by Executive Officer Peter Buttner, all support the hypothesis that contact between generations is desirable. Yet no one has attempted to carry this hypothesis to its logical conclusion and test it: no living group has yet attempted the complete integration of several widely-separated age groups. While the house master system in the dormitories is a step in this direction, it fails to approach total integration.

During the IAP, however, it might be possible to come much closer. Many living groups will find that with members returning home for the January period, they have extra space. Instead of simply allowing the space to sit idle, why not invite a faculty member and his (or her) family to live with the group for the IAP? By sharing commons rooms and dining together a much closer interaction could be achieved.

Admittedly there could be some difficulties. Not many faculty members may be willing to move out of their homes for one term. In addition, there might be a question of whether the faculty resident should pay a housebill (especially if he's already paying rent or a mortgage on his own home). Yet there could be many benefits, both immediate and long range, resulting from such an arrangement.

For the students involved, there would be the opportunity to meet and live with adults on a more even level than they probably enjoyed with their parents. Also, they would be able to join in family life, and learn what it's like to live in an environment where there are children. They would be exposed to the kind of

conflicts — between family and occupation — they will have to face after graduation, and will have some basis for planning how they will deal with such competing demands on their time.

There would also be benefits for the faculty family involved. For the teacher, there would be the opportunity to see how his students live, and hopefully to gain a better understanding of how living environment affects learning. The family could benefit from an expansion of its horizons. Much has been said of the failings of the nuclear family, and such an arrangement, by enlarging the range of their immediate home environment, might serve to foster the personal development of the children in the family.

In broader terms, such an experiment would serve to explore a new mode of living which would, in a sense, be an expansion of the coed living arrangements already widely accepted. Rather than just expanding the living group to the other sex, such an arrangement expands it across generations — bridging the gap that has developed with the rise of the nuclear family in a mobile society. If the January experiment proved a success, it might open up the possibility of a new alternative living style at MIT, one which could expand and complement the range of alternatives already offered.

The kind of program that this experiment might presage would be an integration of the college community with that of the city community around it. Rather than being segregated, students might be integrated with the "permanent" population they so often seem to be at odds with. Such an integration would open new possibilities to both groups. The kind of intellectual sophistication that the college community supposedly has in abundance would be available to the community at large. For example, rather than trying to set up tutoring programs to help local and elementary and secondary school students, the college population would be immediately available.

The students would gain from the mixing of generations. But they could also benefit from exposure to points of view far different from their own. By encouraging them to look at things in new ways, this new environment could even assist students in their formal education.

The problem of integrating different generations may seem formidable, but with the nuclear family showing so many failings, and with dissatisfaction in traditional college living groups growing, it would seem wise to explore new possibilities. This January could be an ideal time.

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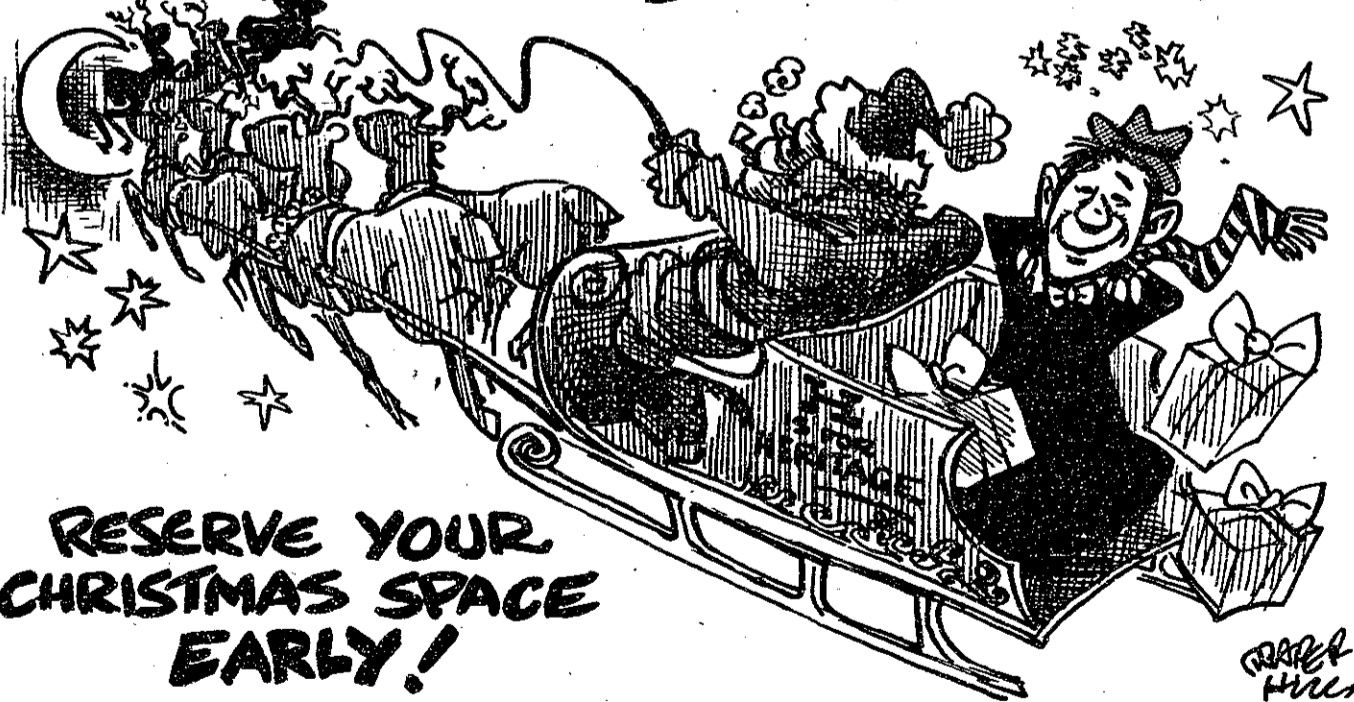
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BRIDGE

By Daniel Reinhardt

Bond's heart sank as he stared at his cards. His impassive face, however, revealed nothing as he turned to his left and said: "one heart."

The mocking visage of Ernst Stavro Blofeld changed not a single iota as he took in his adversary's psychic bid.

"One spade," he overcalled.

In the North seat sat Felix Leiter, James Bond's staunch (but less charismatic) American ally. He felt somewhat relieved when he heard his partner's bid, for he understood 007's predicament.

After months of thorough searching the Secret Service had caught up with Blofeld in the Vulnerable Redoubled Casino, a little-known haunt of an elite group of rich and inveterate bridge gamblers. Blofeld, a master of psychological tricks and devices, had managed to gradually replenish his previously-dwindled treasury. True to form, M had decided to send Blofeld's nemesis, secret agent 007, to the casino to meet him head on in a do-or-die struggle.

The stakes were set at ten pounds a point at the outset, and the play proceeded rather evenly for a while. Slowly, however, Blofeld managed to create an ever-increasing dent in Bond's bankroll, until finally, when the adjacent hand was dealt, Bond was down to his last wad of bills.

What Blofeld doesn't know won't help him, thought Leiter, and he bid three hearts, confi-

dent that the hand was a sure winner for the good guys.

Blofeld's wife, sitting East, jumped to four spades.

Bond, sweating slightly, dabbed his face with his handkerchief. Cursing himself for his show of inner emotion, he blurted: "five hearts."

Blofeld chuckled as he doubled, which was his first mistake. For Bond, at hearing his enemy, regained his composure. He was fairly seething with calm when his quiet — "redouble" — brought the auction to a close, despite the fact that house rules required that a redoubled vulnerable contract be played to ten-fold stakes.

The opening lead was the ace of spades, which was ruffed in dummy. Bond realized that there was not much hope, but his initial play was clearly defined: he led the ace of hearts.

Hallelujah! The king fell. A low heart was led to the nine, and a low club was taken by Blofeld's ace. When he led back his other club, and Bond's king dropped the last outstanding club, blessing number two had been bestowed. Bond began to feel that the fates were on his side.

The only remaining obstacle was the guess in diamonds, so a low heart was led to the ten and a low diamond returned.

And then Blofeld committed his final mistake. He actually laughed as he played the two of diamonds. This set Bond thinking, and he reasoned as follows:

Blofeld had to have one of the two honors, for otherwise he would not have known that a guess was needed. Furthermore, had he held the ace he would have understood that the only chance was to play low and to make his adversary sweat by laughing. A psychological genius, however, would laugh holding the queen, in order to make declarer believe he held the ace.

Bond therefore gambled on Blofeld's superlative craftiness, played the jack, made his contract, won over a million pounds, and was back on his feet in the continuing struggle to-the-death.

NORTH			
♠	A Q 8 5 3		
♥	K J 7		
♦	K 9 5 3 2		
WEST			
♠	A 9 8 5 3		
♥	K		
♦	Q 9 6 5 2		
♣	A 10		
EAST			
♠	K Q J 10 7		
♥	7 6 4		
♦	A 10 8		
♣	Q J		
SOUTH			
♠	6 4 2		
♥	J 10 9 2		
♦	4 3		
♣	8 7 6 4		

South	West	North	East
1 heart	1 spade	3 hearts	4 spades
5 hearts	double	pass	pass
redouble	pass	pass	pass

Problem No. 3

Dummy You
QJxxx A9
What is your best play for (a) 4 tricks, and (b) 3 tricks?
Answers: (a) lead small to the nine (50%), and (b) lead small to the nine (93%).

ARTS

books:

Cookin', comix, 'cology

The French Cook Book, Julia Child (Bantam Books)

Julia Child's television series on French Cooking "The French Chef" was one of the most popular shows ever seen on educational TV. It led to her accumulating the recipes, and creating a best seller, *The French Chef Cookbook*, which has now been published in paperback by Bantam Books.

The recipes I have tried have all come out superb. The "Crepes de Pommes de Terre" (grated potato pancakes) are particularly good, coming out crisp and flavorful. Particularly useful, for those occasions when you want a good meal in a hurry are her "Dinners in Half an Hour." Assuming you have the ingredients on hand and are a reasonably efficient cook, you can produce a three course French dinner in half-an-hour which rivals the best French restaurants. **Leonard Tower**

fan who has any interest at all in the creative process of writing. And, of course, one who has sufficient funds.

The book includes segments which have already run in the Sunday strip, including Snoopy's complete *non sequiter* opening, followed by his observation "In Part II I tie all this together."

The book is in three parts: the preparation of the book, the actual book itself (published by H, R & W and complete with liner notes), and the reaction of the Peanuts community to the book's appearance. It's good clean fun, and manages to make a few satirical points about the publishing industry at the same time. **Paul Schindler**

Inadvertent Climate Modification, Report of the Study of Man's Impact on Climate (SMIC). (MIT Press, \$2.95).

This book, the result of an MIT-sponsored study in Stockholm this summer, is, at the same time, encouraging and disappointing, and encouraging, and disappointing. It is encouraging because it shows some scientists are worrying about Man's unanticipated effects on his environment; it is disappointing in that it is technical and would be light reading only for an MIT upperclassman at the least. On the other hand it is encouraging in that it shows that "ecology" scientists are getting away from demagoguery, and no longer have to popularize their work to gain public sympathy and support. Still, it is discouraging because, at the same time, they seem to feel less responsible for this new freedom the recommendations at the end of each chapter concern further investigation instead of solutions or even warnings, however hysterical. **David Searls**

Available at the Tech Coop

Snoopy, and "It Was a Dark and Stormy Night," Charles M. Schultz (Holt, Reinhart and Wilson, \$2.50)

An amusing little picture book in three parts, this latest addition to the hardback "Peanuts" is a must for the true blue

recording:

Ma Vlast on DGG

By Joe Kashi

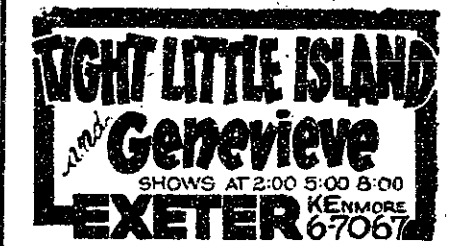
Ma Vlast (My Fatherland) by the Czech Bedrich Smetana is usually considered the apotheosis of nationalistic music: it is a cycle of six tone poems depicting the history of Czechoslovakia in sweeping movement and lush coloring.

The new 2-record Deutsche Grammophon release of Raphael Kubrick conducting the Boston Symphony Orchestra in the complete cycle is generally admirable and moving. Smetana's musical range is extensive, from the bucolic timelessness of the familiar *Die Moldau* to the frenzied violence of the betrayed maiden *Sarka* who must wreak vengeance upon all men if she is to regain her sanity, culminating in the transitory triumph of the newly freed nation in *Tabor*. Throughout, Jublik recreates Smetana images of a small, ancient nation close to its history that has never despaired, despite only fleeting moments of security and freedom, even to the present as Russian tanks occupy Wenceslaus Square in Prague.

Despite the normally high artistic competence of Kubrick, newly appointed music director of the Metropolitan Opera, and the BSO, the recording has several uneven spots. Kubrick's

tempo gives the poems, especially *Die Moldau*, a great deal of Romantic expressiveness but tends to obscure orchestral textures. Some of the crescendos lack proper body and depth while other passages are played too rapidly.

Otherwise, the new DGG *Ma Vlast* is a fine recording of wide-ranging, beautiful material that has not received the popular recognition it merits. Sound engineering is up to DGG's high standards.



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Should Science Survive Its Own Success?

Dr. Everett Mendelsohn, History of Science, Harvard University

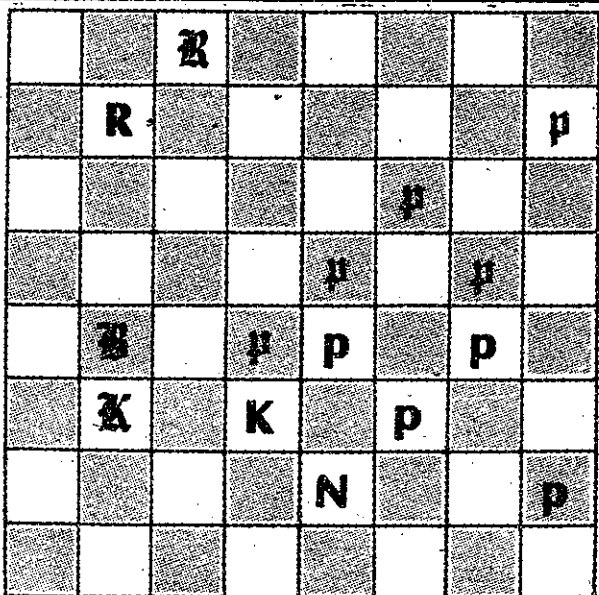
Dr. Mendelsohn will approach the question through a history of the critiques of science and evaluate the critiques of today for their validity.

There will be time for QUESTIONS from the floor and some DISCUSSION

CHESS

Irregular Opening
Argentina 1971

Petrosian (USSR)	Fischer (US)
1. N-KB3	P-QB4
2. P-QN3	P-Q4
3. B-N2	P-B3
4. P-B4	P-Q5
5. P-Q3	P-K4
6. P-K3	N-K2
7. B-K2	N/2-B3
8. QN-Q2	B-K2
9. O-O	O-O
10. P-K4	P-QR3
11. N-K1	P-QN4
12. B-N4	BxB
13. QxB	Q-B1
14. Q-K2	N-Q2
15. N-B2	R-N1
16. KR-B1	Q-K1
17. B-R3	B-Q3
18. N-K1	P-N3
19. PxB	PxB
20. B-N2	N-N3
21. N/1-B3	R-R1
22. P-QR3	Q-B2
23. Q-Q1	N-R4
24. P-QR4	PxB
25. PxB	P-B5
26. PxB	N/3xBP
27. NxN	NxN
28. Q-K2	NxB
29. QxN	KR-N1
30. Q-R2	B-N5
31. QxQch	KxQ
32. P-B7ch	K-K3
33. P-N4	B-B6
34. R-R2	R-QB1
35. RxB	RxB



Position after 58. R-QN7

36. P-R5	R-QR1	52. R-R7	B-R4
37. P-R6	R-R2	53. R-Q7	B-N3
38. K-B1	P-N4	54. R-Q5ch	B-B4
39. K-K2	K-Q3	55. N-B1	K-R5
40. K-Q3	K-B4	56. R-Q7	B-N5
41. N-N1	K-N4	57. N-K2	K-N6
42. N-K2	B-R4	58. R-QN7	R-QR1
43. R-N2ch	KxP	59. RxP	R-R8
44. R-N1	R-QB2	60. NxPch	PxN
45. R-N2	B-K8	61. KxP	R-Q8ch
46. P-B3	K-R4	62. K-K3	B-B4
47. R-B2	R-QN2	63. K-K2	R-KR8
48. R-R2ch	K-N4	64. P-R4	K-B5
49. R-N2ch	B-N5	65. P-R5	R-R7ch
50. R-R2	R-QB2	66. K-K1	K-Q6
51. R-R1	R-QB1		resigns

This game is taken from the semi-finals in the world championship. It is difficult to briefly comment on such a long and intricate endgame. For example, after 58. R-QN7, R-B7 threatens mate (59. RxP, R-Q7mate). But 59. RxB, KxR and white wins. So 58. ... R-QR1; 60. RxP, and now if R-R7 again threatening mate (61. NxPch, PxN; 62. KxP, R-Q7). But 60. N-B1ch foils this plan. After 66. ... K-Q6; 61. R-Q7ch, B-Q5. There is no comfortable way to prevent R-R8mate. **-Walter Hill**

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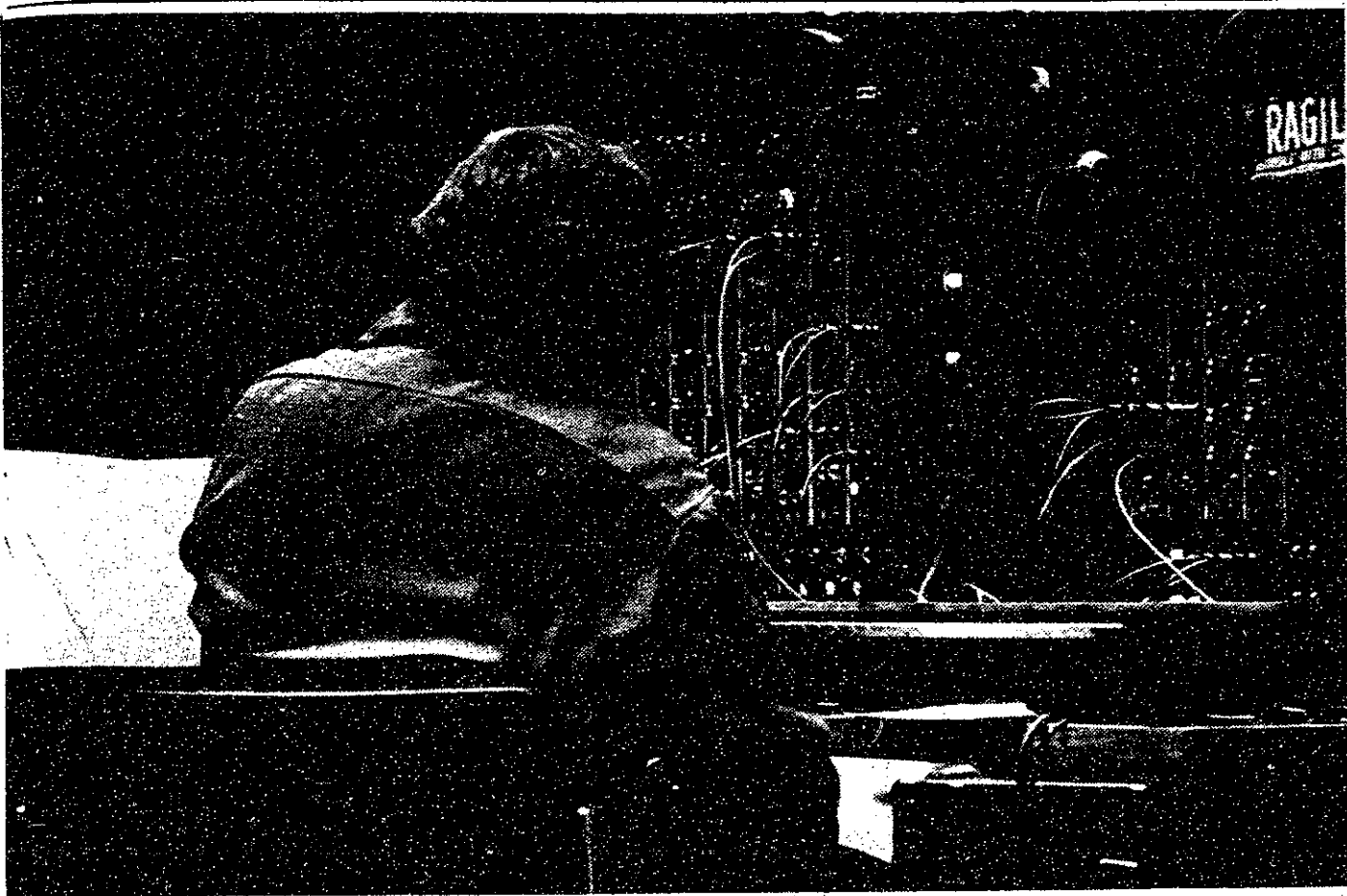
METAL WORKING

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music:

The Moog in live concert

By P.E. Schindler, Jr.

He's got it, by jove, he's got it! Gershon Kingsley has captured the Moog Synthesizer and brought it onto the concert stage.

He had a little help, of course. In spite of all the progress made in the last few years, you still get one note out of a moog at one time. Out of such limitations are electronics quartets born: so we have the First Moog Quarter (FMQ).

The FMQ, as Kingsley pointed out, is actually 8 people, only 4 of whom perform on the Synthesizer itself. The Moog performers are all keyboard artists, and besides jazz pianist Stan Free, they include Kenneth Bichel, Eric W. Knight, and Don York. Also part of the performing group are Leah Horen (soprano), Mike Redding (percussion), Richard Nanista (Fender bass). The group consists primarily of Julliard graduates, with a sprinkling of Columbia; engineering schools seem conspicuously absent.

As Kingsley explained it, "Moog players must be primarily keyboard players, and only secondarily engineers. Almost any good musician can learn enough programming to play the Moog."

Such is certainly the case with the First Moog Quartet. Playing a concert which producer-pianist Gershon Kingsley referred to as "a smorgasbord," the group moved with ease from rock to classical to original selections, perhaps doing best on the rock numbers and the original material, but doing everything most satisfactorily.

There were several outstanding selections in the group's 2½ hour concert, including one original tune ("Popcorn") and two adaptations. One adaptation, of the Beatle tune "Eleanor Rigby," made full use of the Moog's sound effects ability, starting off with a siren-effect that had the whole hall looking around for a fire engine, and running through a whole bag of audio tricks that resulted in a lengthy ovation. The other adaptation, "Patriotic Moogiana" was, to a greater extent than any other selection, an

imitation of a real band. It started with "Dixie" and concluded with a version of "Stars and Stripes" which brought such persistent cries of "Encore!" that the FMQ played a reprise, while the audience clapped and stamped in unison. Leah Horen was caught up in the spirit too, so that the audience was treated to an impromptu but well done dance on stage.

"Popcorn," while a light piece reminiscent of some TV coffee commercials done a few years back, was also given overwhelming approval by the audience. The tune featured Gershon Kingsley on a fifth Moog, which was a "Mini-Moog," playing a simple "popcorn-popping" melody while the other 4 Moogs did a jazz vamp backup.

Half the fascination of the performance was the opportunity to watch a Synthesizer in action - to see the performers continually re-tune, adjust and repatch their control panels. Since only one note at a time can be played on any one moog, it is played one handed with the other hand used to control tone, volume, or timbre.

Of note was the selection of speakers for the FMQ: they use Bose speakers exclusively, a type designed by the MIT professor of the same name. "They are a little expensive," noted Kingsley, "and in very large halls they are sometimes insufficient, in terms of power: But they repro-

duce accurately, and without distortion, exactly what it is we are playing on our Moogs."

The group already has one album out, and there was a remote engineer from another, unspecified label with which Kingsley and the FMQ are negotiating, at last Sunday's performance. Thus, the First Moog Quarter will soon have a chance to reach an ever-widening audience with the concept of "live Moog" (previous moog efforts were strictly studio work, with one player and one synthesizer, using a multi-track tape recorder to produce chords and complex musical patterns). They wouldn't have to go far to reach a wider audience than they did at this concert.

The turnout was disappointing to Kingsley, who finished off a nationwide concert tour with the performance at Harvard Business School's Burden Hall last Sunday night. At the end of the concert, Kingsley announced to the half-filled hall "maybe we will be back next year. Don't keep our arrival such a secret."

Arts Across the River, the Harvard B School group which is sponsoring this and several other concerts, did not try to keep it a secret, but they ran into budget problems and a very surprising lack of interest in concert Moog music. In spite of a reasonable ad campaign on this campus, very few MIT students attended the concert.

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SPORTS

Gymnasts to open season

By P.J. Bayer

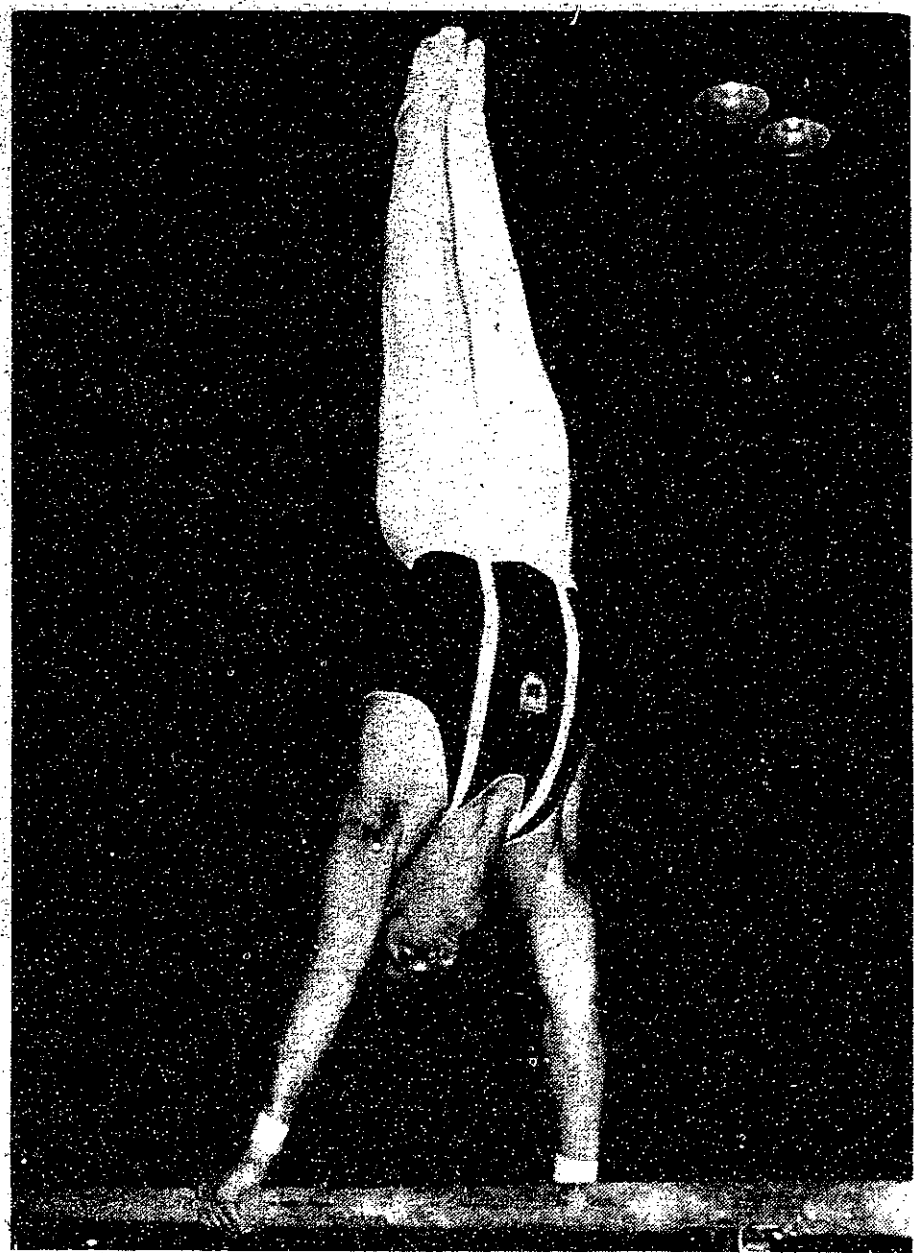
The MIT Gymnastics Team will open its fifth season this Saturday with a meet at the University of Bridgeport. Led by captain Dave Beck '72 and ten other returning lettermen, the team promises to be the strongest in school history.

As a final warmup the MIT team hosted the first annual MIT Oldtimers Meet last Friday night. The Oldtimers, made up of former college gymnasts living

in the area including two former national champions, were a bit too much for the Tech Tools, but the team showed its strength with a score of 121.0. This was only two points below the school record. The judging and the team were somewhat erratic, but there were many excellent performances. On floor exercise Beck, Bob Barret '74, and last year's high scorer Larry Bell '74 scored a 22.9 on what could be the team's best event versus the

competition. Pommel horse had a poor showing with Paul Bayer '73, Dennis Dubro '73 and Bell scoring 16.2. Ring men Dave Millman '72, Jarvis Middleton '74 and Bell performed as expected with a solid 19.5. Vaulting Horse brought the highest score of the day with 24.6 by Danny Bocek '72, Alan Razak '75 and Bell. Parallel Bars were also strong with 19.4 from Bell, Beck, and Andy Rubel '74. The final event High Bar was much improved as Neil Davies '74, John Austin '74, and Donn Wahl '72 scored 18.4.

This season the team has six dual meets and two triangulars scheduled in preparation for the New England Championships next March. After Bridgeport they meet their two toughest opponents Boston State and New Hampshire, before their home opener against Lowell Tech on December 11. The team's goals are to continue as one of the best-watched sports at MIT and to be New England Champs.



Larry Bell '74, top scorer on last year's team, holds a handstand on the parallel bars. The squad opens its season tomorrow with a meet at the University of Bridgeport. *Jetphoto*

Tech ruggers trounce Boston All-Star squad

By B.S. Shovella

There was a re-shuffling of the Tech Rugby back line before the game last weekend and the result was a thundering 27-8 upset over the rugby phenomenon known as Finn Connell's Boston All Stars.

The starting whistle had hardly finished ringing in the spectator's ears when the ruggers gained possession from a scrum on the half-way line. Immediately the backs burst into action moving the ball 50 yards downfield to put center Don Arkin '72 over for a try. The conversion by Roger Simmonds had MIT ahead 6-0. The All Stars, however, were taking no nonsense and, with a powerful forward rush they were over for their own try and it was 6-4.

This was too close, decided winger Bill Schwartz '72, and he promptly scrambled 25 yards for an inspired try. The conversion had Tech ahead 12-4. But again the All Stars replied with their own try and it was 12-8.

Then, with minutes left in the half, Percy Foot took a pass and broke through. Nothing could stop him unless he tripped over his own feet... and that's exactly what he managed to do, one yard short of scoring. So the first half ended, and at that time it was anyone's game.

Early in the second half, a penalty kick by Simmonds moved MIT further ahead, 15-8. The All Stars knew they had to score to keep victory in sight, and, finding little luck in moving their back line, pounded away in the forwards searching for that needed try. Twice they had the ball on the Tech goal-line, but twice the MIT scrum, lead by big backs Mohamed Haddadi G and Robb Loughran, heaved them away.

Then the ball moved back into the All Star half and forwards Smith and Ron Prinn G both made attempts to score. The real action, however, was to come from the back line. Gaining the ball from a line-out, the ruggers moved it out to Simmonds who found a gap. Arkin was there for the pass and ram-

bled 25 yards for his second try. The conversion put Tech out of reach at 21-8.

From there it was MIT all the way. Several times fullback LeMott joined the line to give the overlap. With a few minutes left in the game, the backs had Don Arkin over for his third brilliant try.

Frosh row well in fall races

By S. Hollinger

They're not fond of being called the "hounds" or even, as a takeoff, the "pups," but they are just as raring to go as last year's freshmen heavyweight crew. This year, Don Saer's frosh heavies have broken all precedent and have scheduled intercollegiate competition for the fall season. And they've been doing very well!

Their most recent venture was against Northeastern last Saturday morning as a prelude to the Class Day Regatta. Traditionally the day of the freshmen intra-squad race between the lightweights and heavyweights, Saer decided to row against NU also as an extra added impetus. Thus a crew of MIT oarsmen that had been rowing less than two months went the full intercollegiate distance, 2000 meters, competing with a vastly more experienced boat of NU frosh, half of which was made up of experienced ex-prep school rowers.

The finish should have been no surprise, as NU won, but there was MIT barely 1/2 length behind. The most promising fact of the race was that the Techmen led at the 1500 meter mark by about a decklength. Saer feels that his crew would have won at that shortened distance, 1500 meters, but that NU's superior conditioning enabled them to up

their pace in the crucial last 500 meters.

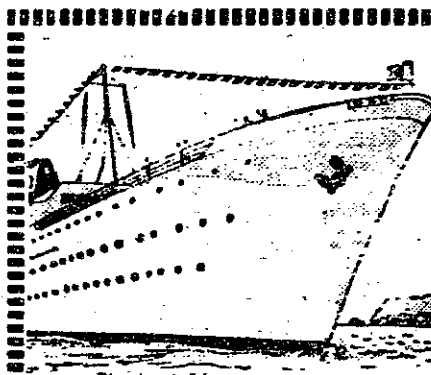
The lightweights couldn't keep up with the competition, finishing three lengths behind the heavies. This is a highly respectable finish for the lights, as they were considerably outweighed and much less experi-

enced than the NU frosh. This is the second consecutive year that they have lost to the heavies on Class Day, however.

Two weeks ago, in another intercollegiate contest, the frosh heavies trounced BU by 35 seconds over 1500 meters. That's pulling!

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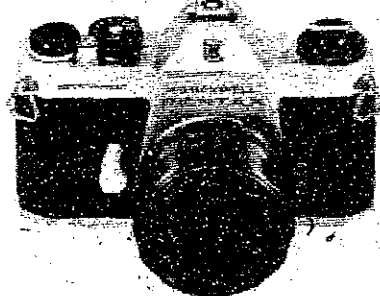
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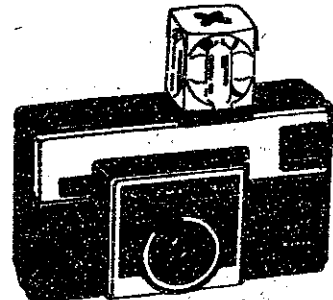
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