"Continuous News Service Since 1881"

The Tech

VOLUME 93 NUMBER 37 MIT, CAMBRIDGE, MASSACHUSETTS TUESDAY, OCTOBER 9, 1973 FIVE CENTS

In this Issue

Fairchild building dedicated

By *The Tech* Staff

The Sherman Fairchild Buildings, new home of the Electrical Engineering Department and the Research Laboratory of Electronics, were officially dedicated in ceremonies held in Kresge Auditorium Friday.

President Emeritus Julius A. Stratton spoke at the ceremonies, where the $18.5 million complex – Buildings 36 and 38 – was presented to the Institute by Walter Burke, president of the Fairchild Foundation. The Foundation made a gift of $4M to the Institute last spring for the completion of the complex.

Stratton's address, like many of the events of the two-day dedication program, dealt mainly with the past history of the EE department and RLE.

Stating that the complex "represents one more great step in the continuing progress and evolution of MIT," Stratton discussed the start of the department "as an option in physics" in 1882.

Speaking slowly, the former president recounted the development of the Institute's largest department, through "an intensively practical period" early in the century, to the days of "highly creative innovators," such as Vannevar Bush, Edward Bowles, and Harold Edgerton.

In these days, "as never before," Stratton said, "there was a recognition of the import of research for the advancement of engineering."

Stratton, who was the first head of RLE, spoke of the foundation of that laboratory in 1946 on the base provided by the Radiation Labs of World War II.

Stratton deviated substantially from his text only once in the 25-minute speech. Addressing himself to "the special relation of teacher to student," Stratton added, "This is not a casual opinion; it is one I have given much thought to. I have read the editorial in today's *Tech*, and I think it backs me up in my contentions. I admit the system is not perfect."

The editorial referred to was published in Friday's (10/5) issue of *The Tech;* it criticized the EE department, among others, for failing to involve students in its deliberative processes.

Presentation and Acceptance

Burke, counsel to the late Sherman M. Fairchild and head of the Foundation established by Fairchild, spoke next, and officially presented the complex to the Institute.

Burke stated that he felt the ceremonies had "brought a touch of joyousness to MIT," and that the project was "a real tribute to the Institute." The completion of these facilities, Burke added, was "a fine example of the American system – a system that doesn't always work, but is nevertheless a fine system – bringing all these donors together for a single project."

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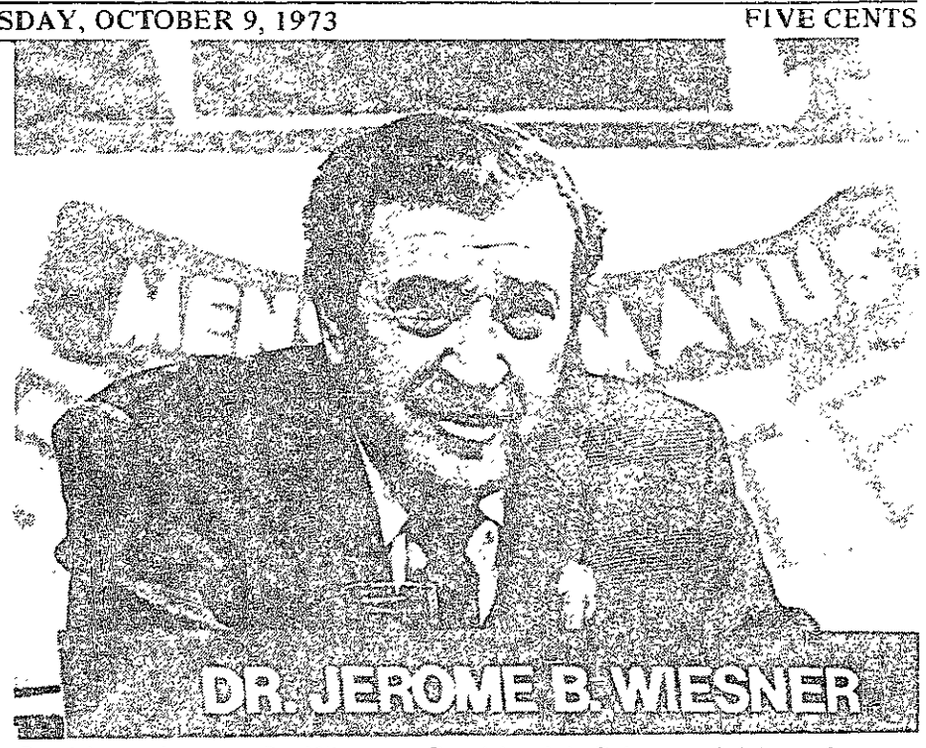

President Jerome B. Wiesner, Presidential Science Advisor from 1961 to 1964, participated in a symposium Thursday night with five other former Science Advisors. The symposium was held in connection with the dedication of the Sherman Fairchild EE Complex. For more dedication pictures and articles, see pages 6 and 7. *(Photo by Roger Goldstein)*

Wynne outlines AA plans

By Paul Schindler and Sandy Yulke

MIT's Equal Employment Opportunity Officer is John Wynne, Vice-President for Administration and Personnel, who recently told *The Tech* that MIT has no formal plans for disciplinary action in case of violations of the Institute's Affirmative Action plan.

In a lengthy discussion, Wynne stated that "disciplinary action is an HEW term. This is not the army." He added that "failure to follow policy results in action, depending on the circumstances."

When questioned, he admitted that a faculty or staff appointment or promotion "might" be affected if it were shown that the Affirmative Action effort made was insufficient. Possible examples were proposed, but Wynne said, "It is almost never black and white," when there is dispute over the "good faith" of a search effort.

Wynne said there is no "detailed code of laws," but rather the same kind of spirit that operates any time a faculty member or department "deviates from Institute policy."

One example discussed was the case of a deviation from MIT's policy on conflict of interest or excessive professional activity. Such cases are reviewed by the Department Head involved, and sometimes by a faculty committee.

Such a process, Wynne noted, is carried on in an atmosphere in which it is assumed that all involved are acting in good faith. The Institute's administrators have to make this assumption, according to Wynne, because people work together best when they feel they are trusted to be "responsible and creative."

Any questions about the seriousness of the Affirmative Action effort are raised in the Academic Appointments Sub-Group of the Academic Council, which Wynne said "is no rubber stamp."

"Evidence is hard to come by and harder to evaluate," Wynne believes. "Alleging, validating, and proving discrimination in the process of making an appointment is very difficult."

The group might raise such questions as whether or not the search was realistic; whether, perhaps, the job definition was more narrow than it needed to be.

The Academic Appointments Sub-Group consists, Wynne said, of Wiesner, Gray, Rosenblith, the deans of the schools, and the Vice-President for Research.

Facilities

Part of MIT's Affirmative Action plan, Appendix E, page 3, Affirmative Action Plan April 6, 1973, "the use of MIT athletic facilities will continue to be made equally available to all..... regardless of.... sex."

The meaning of this statement, in terms of the priority set on any necessary changes in MIT's athletic facilities is unclear. At the present, women have only limited access (2hrs. per week) to the trainer, and there are no locker or shower facilities for women at the boathouse. It does not appear however, despite the particular reference to them in the plan, that these situations will soon be remedied. Wynne said, "the statement's presence in the Affirmative Action plan adds to its level of priority," he did not say how soon modifications had to be made.

The plan itself is a commitment in spirit as well as in letter, according to Wynne, and its eventual goal is self-destruction, when its goals have been achieved. No one claims to know how long it will last.

Departmental Plans

MIT became the first university in the country to have its Affirmative Action plan approved in mid-summer of this year. At that time, part of the plan was made public.

The part of the plan kept secret was the individual departmental level, where most of the implementation will take place.

Under Affirmative Action, each department is to analyze its relevant pool of potential faculty, and the representation of minority groups in that pool. It is then to strive for that level.

When one field, which grad-

(Please turn to page 3)

Research and engineering employees to join OCAW

By Barb Moore

A division of the Oil, Chemical and Atomic Workers Union (OCAW) has been formed to protect scientists and engineers in industry.

Formed last summer by Frank Collins, Professor of Physical and Environmental Chemistry at the Polytechnic Institute of New York, this union hopes to protect the "intellectual freedom" of professional workers in industry by providing them with the job security found in unionized laboritories, but lacking in a non-unionized job situation.

When contacted by *The Tech*, Collins explained that he is primarily interested in plants where the blue collar workers are members of OCAW. "The atmosphere in an industrial lab is quite different than in a union lab," and there lies the need for the white collar workers as well.

The formation of this union division, which is a part of the AFL-CIO, brought many letters of support for Collins. Professor of Biology Salvador Luria has expressed strong support for the plan, as well as Harold Urey from Stanford University. Luria stated that he wrote a letter to Collins in support, and was consequently mentioned in an article in the *Chicago Tribune* about the union.

Collins is now taking a leave of absence to continue his work as Director of the Professional Employment Division. He set up the division last August.

According to Collins there are 200,000 blue collar members of OCAW and an additional 200,000 white collar employees in industry. He stated that the professional division should have been formed 5 years ago, concurrent with the Research and Development recession.

Solow, Randers debate on limits of growth study

By John Kavazanjian

Recently appointed Institute Professor Robert Solow and Professor Jorgen Randers, one of the authors of the controversial *Limits to Growth* study were two of the leading protagonists last Wednesday night in the opening discussion in the Cambridge Forum series. The discussion on the study also included Rose Frisch of the Harvard Center for Population Studies, and Marc Roberts, Professor of Economics at Harvard.

Limits was a study commissioned by the Club of Rome, a group of influential businessmen who awarded a grant for the study to members of Jay Forester's Systems Dynamics group at the Sloan School. The study found that the world was destined to run out of certain non-renewable resources in the near future, some before the end of the century. Though opinions ranged from strong agreement to violent disagreement, the report definitely was provacative.

Randers led off the discussion by summarizing the study as a study of the limit of the carrying capacity of the earth for waste thermal pollution, agriculture, etc. He said that most critics read too much into the study and that "we just say that you shouldn't have more kids before you have more food." He separated critics into 5 catagories. Technology people say that technology will solve the problems and price people say that the price mechanism will cause substitution of cheaper and more plentiful resources. Equality people say that slowing

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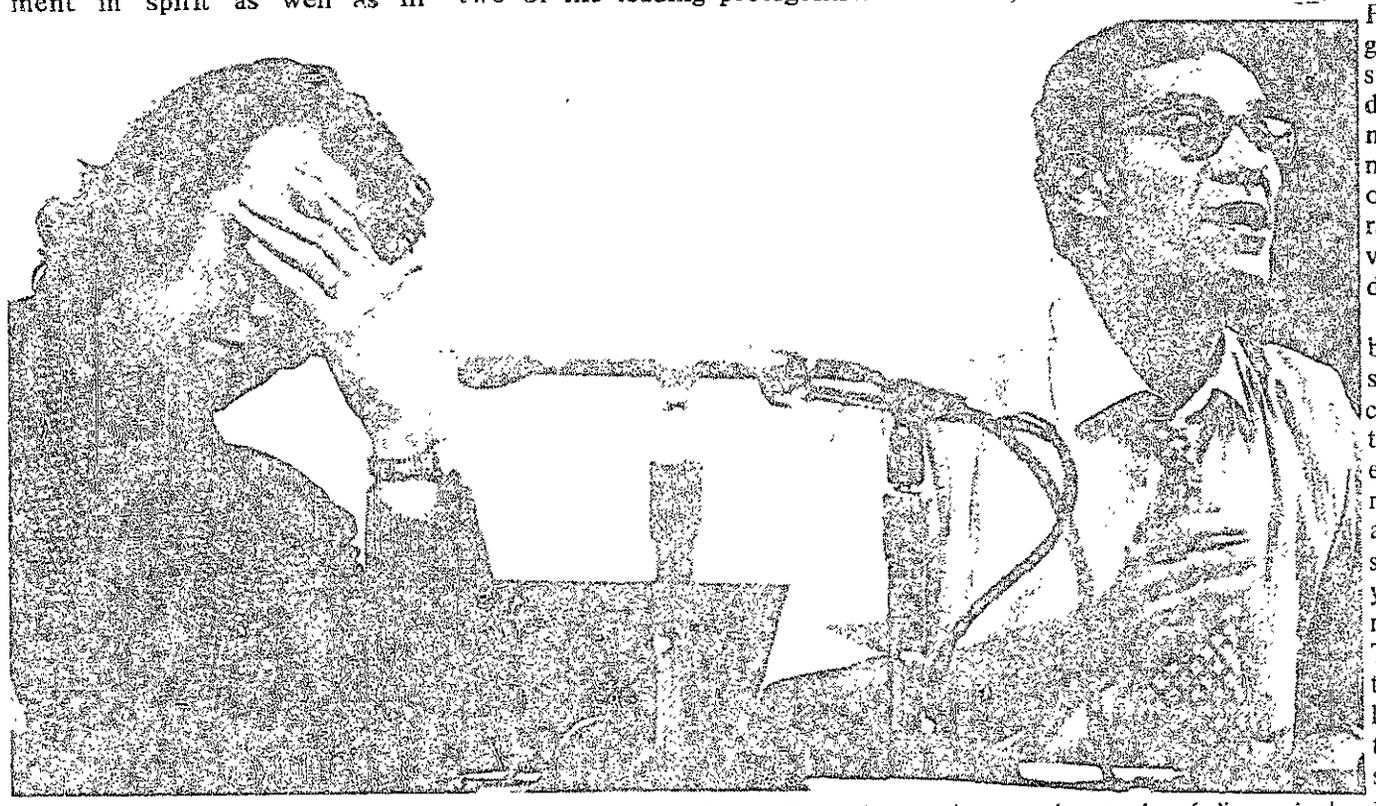
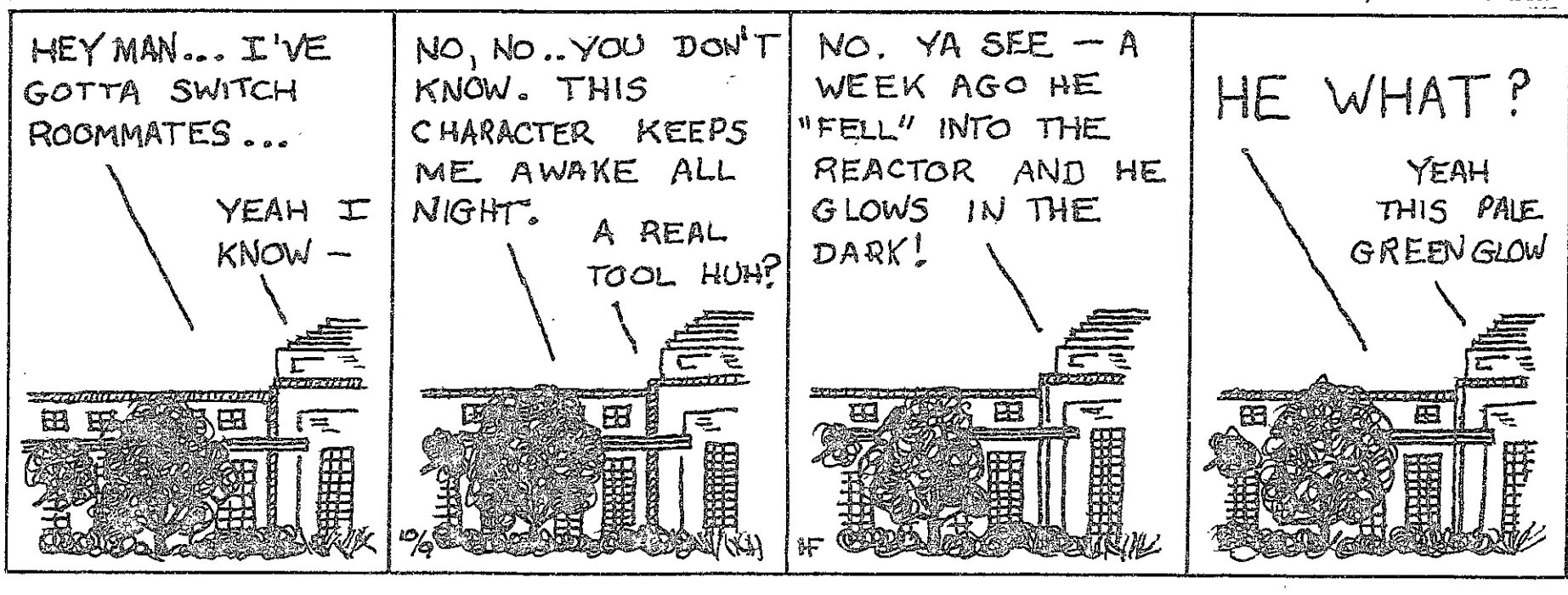


The controversial MIT-Club of Rome study, *The Limits to Growth* was the opening topic of discussion in this years Cambridge Forum lecture series, with one MIT professor on each side of the discussion: Sloan School's Jorgen Randers and Institute Professor Robert Solow *(Photo by Tom Vidic)*

NUTS & SCREWS

By Fred Hutchison



MIT tackles solid waste

By Fred Hutchison

If half of the items that Americans throw away each and every day could be recycled, a half billion pounds of valuable glass, paper, and metal could be recovered and the solid-waste problems of the US would be reduced be fifty percent. Such potential was the inspiration behind a four year project of the mechanical and electrical engineering departments described at a seminar on Tuesday.

A prototype of the computerized solid-waste separation and reclamation plant was outlined by the two principal investigators, David Gordon Wilson, Professor of Mechanical Engineering and Stephen D. Senturia, Associate Professor of Electrical Engineering, at the meeting held at the Center for Advanced Engineering Study.

The research program was sponsored under a grant of the Environmental Protection Agency's Solid-Waste Management Division and was directed at the design and construction of model sections of a refuse reclamation plant. The prototype plant is able to sort upwards of a ton of raw garbage an hour, which is equivalent to two items a second.

The seminar also included the showing of a film of the construction of the several components of the model plant, and showing the operation in a working mode.

Professor Wilson said that the recycling process being developed at MIT "offers alternative to solid-waste incineration," and could be "competitive or even less expensive" than current methods of waste disposal being used in the United States.

The system as described by Wilson: Trash is dumped directly from the municipal packer trucks into the plant. The refuse is then passed under a series of presorters which remove plastic and

(Please turn to page 9)

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7 & 9:30 — Kresge

Saturday, October 13
Sleuth
7 & 10 — Kresge

Sunday, October 14
The Caine Mutiny
8 — 10-250

Monday, October 15
"In Search Of Dracula"
FREE Lecture
8:15pm — 26-100

FINANCE BOARD ELECTIONS

will be held

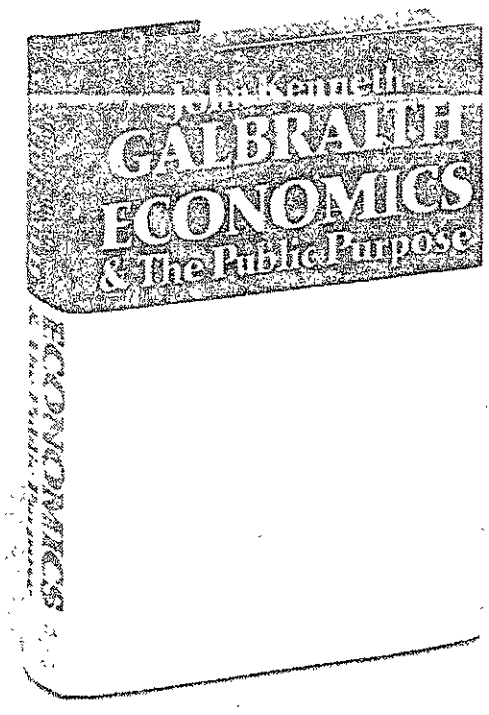
Monday, Oct. 15

7:30 pm Room 400

Student Center

"...required reading for stumbling, bumbling policy-makers in Washington."

——Hobart Rowen
Washington Post



Economics and The Public Purpose
John Kenneth Galbraith
Houghton Mifflin $10

In this elucidation of the principles of economics, John Kenneth Galbraith presents his ideas and solutions to a number of today's most urgent economic problems.

After summarizing the theories of the conventional "neoclassical" economists, he gives a realistic statement of today's economic state and the unsolved problems of unequal distribution of power and wealth, recurring monetary crises, government intervention or nonintervention, pollution and multinational corporations. The final third of his book is devoted to specific recommendations for reform.

Robert Lekachman, Professor of Economics, says, "This is a book for any serious student of public affairs troubled about contemporary America and its prospects." This is Galbraith at his best!

the Coop

M.I.T. STUDENT CENTER

Affirmative Action

(Continued from page 1)

uates almost 30% women yet has no female MIT faculty, was mentioned, Wynne said the analysis is made "in terms of those people normally hired," and would thus exclude schools whose graduates do not meet MIT standards.

Wynne said he could not release any departments's analysis of their relevant pool, but suggested that department heads might be willing to do so.

He also said that his office would soon have a computerized update of the status of minorities and women at MIT, and that such an update would be released to *The Tech*.

Salary Analysis

An analysis of salary disparities at MIT is now "susceptable to generation," Wynne stated, and he and his staff do make use of such a document.

He continued that it was not likely to be made public, except possibly in broad categories. "It requires careful analysis explanation to avoid conclusions that can be drawn but are wrong."

Action being taken

Wynne said that the nature of the interview being conducted was to overlook the "size, scope, and scale," of the overall plan, noting that Affirmative Action is now a factor in every MIT hiring decision.

Wynne also cited the Positions Available listings in *Tech Talk* and career and personal development classes, which will soon accept their second group of 70 students, as examples of MIT's committment to progress.

MIT films to air

By Jules Mollere

MIT has been chosen as one of six Massachusetts universities and colleges to present a new film and drama series for television.

According to Mr. Paul Rich, Director of Public Relations for WCVB-TV, MIT, Boston University, Brandeis University, Emerson College, Harvard and the University of Massachusetts at Amherst will each be responsible for presenting "original half-hour programming on a rotational basis."

The intent of this series, entitled "Nightshift," is, as expressed by Rich, "to fully involve the student in the creation and development of television programming which he feels to be meaningful and effective."

Rich also stated that "Nightshift" is intended to be an extension of "Nocturnal Transmissions," a 1972-73 series involving Boston University exclusively and, as such, would have the same producer, Mr. Greg Lange of Boston University's School of Public Communications.

When asked who would make the final decisions about the program's content, the production manager of Channel Five, replied that "As 'Nightshift' is intended to be a student experimental program, the actual content will be decided by the people involved at the various universities and then we [the production staff of Channel Five] will just professionally produce it."

He added, however, that "Of course we may have to make a few revisions in the material here and there."

Exactly what MIT will present hasn't been determined yet. Richard Leacock, Visiting Professor of Cinema, said that this is partially due to "various legal problems."

"On one particular film the lawyers wanted to check with everyone involved first which would have taken a cageful of maniacs years."

He mentioned that the two people directly involved in the shooting of the film were Edward Pinkus, Associate Professor of Cinema, and Arthur Lee, a third year mathematics student. Leacock stated that he didn't know what topic they would choose for the film but that he did know that a documentary on Boston Harbor was being considered.

"In any case, we have any number of already made films which we can use for the first few time slots."

He said that the fact that the program is to be broadcast between 2:10 and 2:40 am didn't overly bother him. "You get the same problem with educational television, in that you're trying to measure low density viewing. The television ratings just aren't made for that and so they tell you that no one is watching. I tend to think though that 'nobody' can really mean a lot of people."

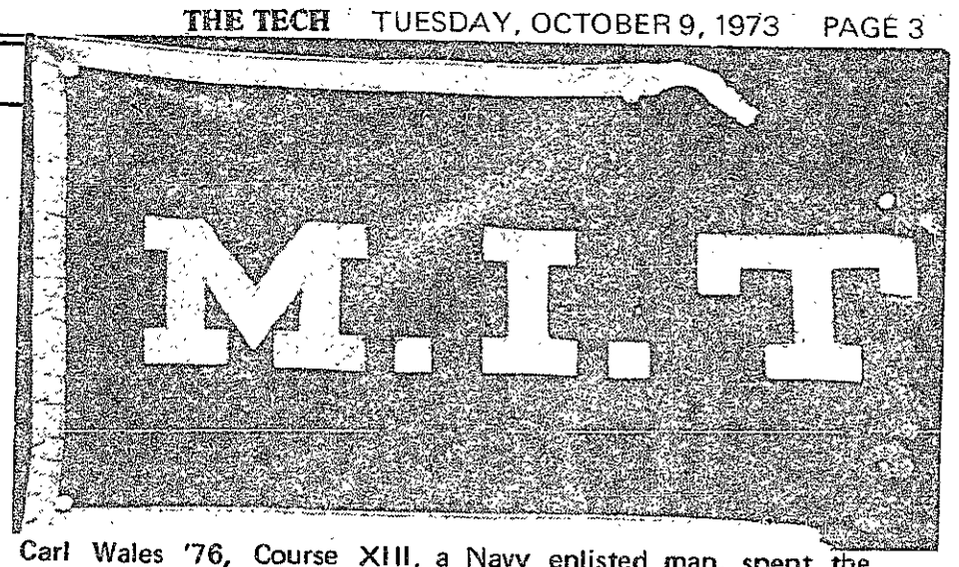
"Nightshift" is scheduled to premiere in Mid-October and will then be broadcast on every other Monday.

NOTES

* LSC and UA are presenting a joint lecture series, entitled "Unsolved Mysteries of the Universe." The first lecture is "In Search of Dracula." 8:15pm, Mon, Oct. 15, in 26-100. FREE

* Student Committee on Educational Policy work meeting on Degrees, Grading, Requirements, and Units, Wed., Oct. 10, 7:30 pm, W20-400.

* A group is preparing to sue Massachusetts Blue Cross/Blue Shield for non-payment of sterilization operations. Anyone who has had difficulty in this regard should contact Steve Keese at x3-2980 or 734-2822.



Carl Wales '76, Course XIII, a Navy enlisted man, spent the summer on Fletchers Ice Island T-3 in the Arctic Ocean. He planted this flag, sent to him by News Director Bob Byers, on the island.

Photo by David Relman

Science advisors left issues unresolved

By Norman D. Sandler

Last week's dedication of the new $18.5million Sherman Fairchild Electrical Engineering and Electronics Complex was at best a disappointment in all respects.

The most obvious disaster was the failure of the event to draw the anticipated crowd to Kresge Auditorium for Thursday's symposium featuring all six men who had ever served as special assistants to the president for science and technology.

Then, there was also the general lack of interest in the dedication itself, in the planned tours of the new building which houses the Electrical Engineering Department and the Research Laboratory of Electronics (but predominantly the latter) as well as a number of contributing factors which spelled disaster for the gala events associated with the dedication.

However, the most striking aspect of the two-day affair was the lack of attendance and general disinterest in the science advisors' discussion of "High Technology for a Liveable World."

Originally billed as the keynote event of the dedication, Thursday's symposium failed to fill more than one-fifth of Kresge Auditorium, much less draw people to Kresge Lobby or Lobdell, where closed circuit color television monitors were installed to allow throngs of non-existent people to view the historic gathering of former presidential science advisors.

In addition to the poor attendance, the symposium lacked a great deal substantively. Although these six leaders of national science policy from 1957 to 1973 were gathered together for the first time, they chose to relate stories of the past, rather than discuss the current or future relations between science and government policy making.

Honorary chairman of the MIT Corporation James R. Killian displayed little contempt for President Nixon, who earlier this year dismantled the science advisory staff Killian had labored to create in the late fifties during the administration of President Dwight D. Eisenhower.

Also showing little displeasure over Nixon's actions was Dr. Edward E. David Jr., currently vice president for research and development of Gould, Inc., and science advisor to Nixon from 1970 to 1973.

David was the last man to serve as director of the White House Office of Science and Technology (OST), and head of the President's Science Advisory Committee (PSAC).

Last January Nixon dismantled the White House science advisory system, after expressing displeasure over criticism of his direction of science priorities form scientists on the two White House advisory units.

Rather than discuss the White House's attitude toward science and scientists, David chose to attribute the demise of OST and PSAC to a decline in military research and development, which in the past kept the science advisory staffs busy with evaluations of proposed programs and recommendations to the President.

David's explanation of the decision to disband with the White House science advisory staff, in addition to his optimistic view of the nation's scientific and technological future, made the symposium seem unattuned to the current problems the nation actually faces with regard to scientific priorities and policies.

A similar criticism can be made of the other five participants in the pannel discussion. Many chose to limit their contributions to anecdotes about the past, rather than discuss the current state of affaris (which cannot be said to be unworthy of criticism) or make predictions of the future.

However, Thursday night's event cannot be discussed without some comment on the other people in attendance—the audience. Comprised largely of electrical engineering department senior faculty and invited VIP's, the question and answer session following opening remarks by Killian and David also proved to be disappointing.

The gathering of all six men who served as presidential science advisors failed to precipitate more than a handful of students, whose interests in the matters discussed seemed to be at best self-serving.

A number of MIT administrators with whom I spoke the day following the symposium said they were shocked that the climate on campus had changed so much during the past few years to not only allow the symposium to be held without protests, but to draw a mere two dozen or so fairly interested students.

National priorities for science and technology are of understandable concern not only to working researchers, but also to students who at some future time will join the ranks of employable scientists, engineers and technicians.

However, the students who showed up for the symposium were interested less in the direction of national priorities than in expanding the science and technology job market.

As a number of unbelieving observers watched and listened, one young MIT student queried as to when the government would begin another full-scale space program, apparently unaware of the problems created by that which ended with Apollo 17.

At this point, one almost expected another student to rise and demand to know when MIT could take on more military R&D or when the Institute would regain possession of the Draper Laboratories.

This should not be read as a condemnation of science and technology, nor of government support for work at MIT. However, it is undeniable that the six science advisors who sat on Thursday's panel were thrown soft questions — "underhand pitches" — by a largely uninterested audience. Questions of President Nixon's misguided scientific priorities went asked, although Nixon advisors David and Dr. Lee A. DuBridge admitted in a session with the press following the symposium that reports of contempt for the scientific community displayed by Nixon staffers were accurate.

It is unfortunate that the science advisors' symposium did not turn out to be as "high powered" as it certainly could and should have been.

The men on the panel spanned the 16 years of the White House science advisory mechanism's existence, and had surprisingly little to say about the dismantling of OST and PSAC by a president who has little love for academia, and whose interest in science and technology has been summed as "Midas like."

The scientific community should look past much of what was said by David and NSF Director H. Guyford Stever, and be more concerned that the President is phasing scientists out of the decision making process in formulating science policy and setting national priorities.

US becoming world empire?

(The following essay was written by Humanities Prof. George de. Santillana for The Tech *on April 15, 1949. At that time de Santillana predicted the US was becoming an empire. His prediction, although made almost 25 years ago, seems very timely – Ed.)*

Reprint by George de Santillana

We have all been told that world leadership has been thrust upon us. This means that we have to develop a set of ideas to face the test. If they are not the right ones, they will be the wrong ones. If we don't learn quickly to develop the right ones, we shall have no time in which to change our mind later on.

The fact is, we have found ourselves compelled to become an empire. Most real empires happen that way. There comes a stampede of small powers seeking the protection of a big one, and the big one has no choice. We may call it a commitment instead of a conquest. It is an imperial commitment none the less, because in the last end what we say goes.

Three Main Points

Which are the points on which we are most apt to give the wrong commands?

I see three main points. One, that we have not yet evolved an economic interdependence with our satellites, and that, on the other hand, we cannot afford to let them go their own way.

The second point concerns public opinion more directly. Fear is always a blind counsellor. The blind fear of communism is bound to lead us into dangerous pitfalls. A nation cannot stand in a position of leadership, and yet look to all the world like an agitated spinster feebly waving her umbrella at an inquisitive billygoat. Instead of looking for communists under our beds, and going into dim speculations about the Thirteen Bad Men in the Kremlin, we might ask ourselves how come that millions of people inside our zone of influence, not all of them fools, are willing to accept their leadership.

America and Race Problems

The third point is that three-quarters of the people of the earth do not happen to own a white skin. It is an unfortunate fact that the American is not at his best – in fact, he compares unfavorably with any other nation except South Africa – when it comes to color problems. Now three-quarters of our world are bound to join one camp or the other within the next few years. If we handle things as we handled them in China, we know which camp they will join.

The Unemployed Intellectuals

What the British did in the 19th century was to establish contact with the ruling classes in each country, and a network of influences which led to the use of a restricted but powerful business class. This, in itself, meant already the Liberal Revolution. But there was a corollary to that, with which the British did not know what to do. With the Liberals, came education, and with education, a new social layer of unemployed intellectuals, socially displaced because they could fit into the old society and because there was no outlet to their ambitions, except in their bureaucracy. This was the situation at the outset of World War II. That system has run its course.

Our time is of mass production. Unlike the British, we are facing competition from the start, for the rival empire is also based on mass production.

But in this game, it is no longer the merchant middle classes who are our partners, it is the working masses themselves. Mass production involves widespread technical skills on one side, and on the other, a majority of the population taking part in the game or prosperity as adequate consumers.

Our Mass Civilization

But here we fall victims to an unfortunate delusion. In this country, by a phenomenon of prosperity, the masses and the middle classes are practically all one. We are a true mass civilization, whose organ of expression happens to be the Chamber of Commerce. Therefore, we also approach the world in this way. For every other country of our orbit, however, and since the beginning of time, the masses have had little to do with the Chamber of Commerce, which express the views of a small privileged business minority. This minority talks superficially like us, but means entirely different things. For instance, they are much more preoccupied with political command and privilege than any are with general prosperity.

Marshall Plan Aid Will End

The impression that I got from clever business leaders and diplomats in Europe was of some such view as this: "The Marshall plan has gotten things going again, but it cannot last for ever. We must get back to normal business." The logical course is to lower wages and living standards, and start again at the level which sound business commands.

THE WIZARD OF ID

The Wizard of Id appears daily and Sunday in *The Boston Globe*

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Since 1881

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EE building dedicated last week:

(Continued from page 1)

Burke characterized Fairchild as "an outstanding man . . . he wasn't after knowledge for its own sake, but was constantly looking for new ways to solve big and little problems." It was "fitting," he concluded, that these buildings be named after such a man.

President Jerome B. Wiesner accepted the presentation for the Institute. Wiesner pointed out that 216 individuals, 5 foundations, 44 corporations and 2 government agencies had donated for the facilities, making these "gateways to the future" available to the Institute.

Wiesner, who served as head of the EE Department in 1959-60, and head of RLE in 1952-61, pointed out that he had always felt that "Electrical Engineers could do anything. I used to claim that EE's were the technological equivalent of lawyers in this respect, but I have become somewhat uncertain of that simile."

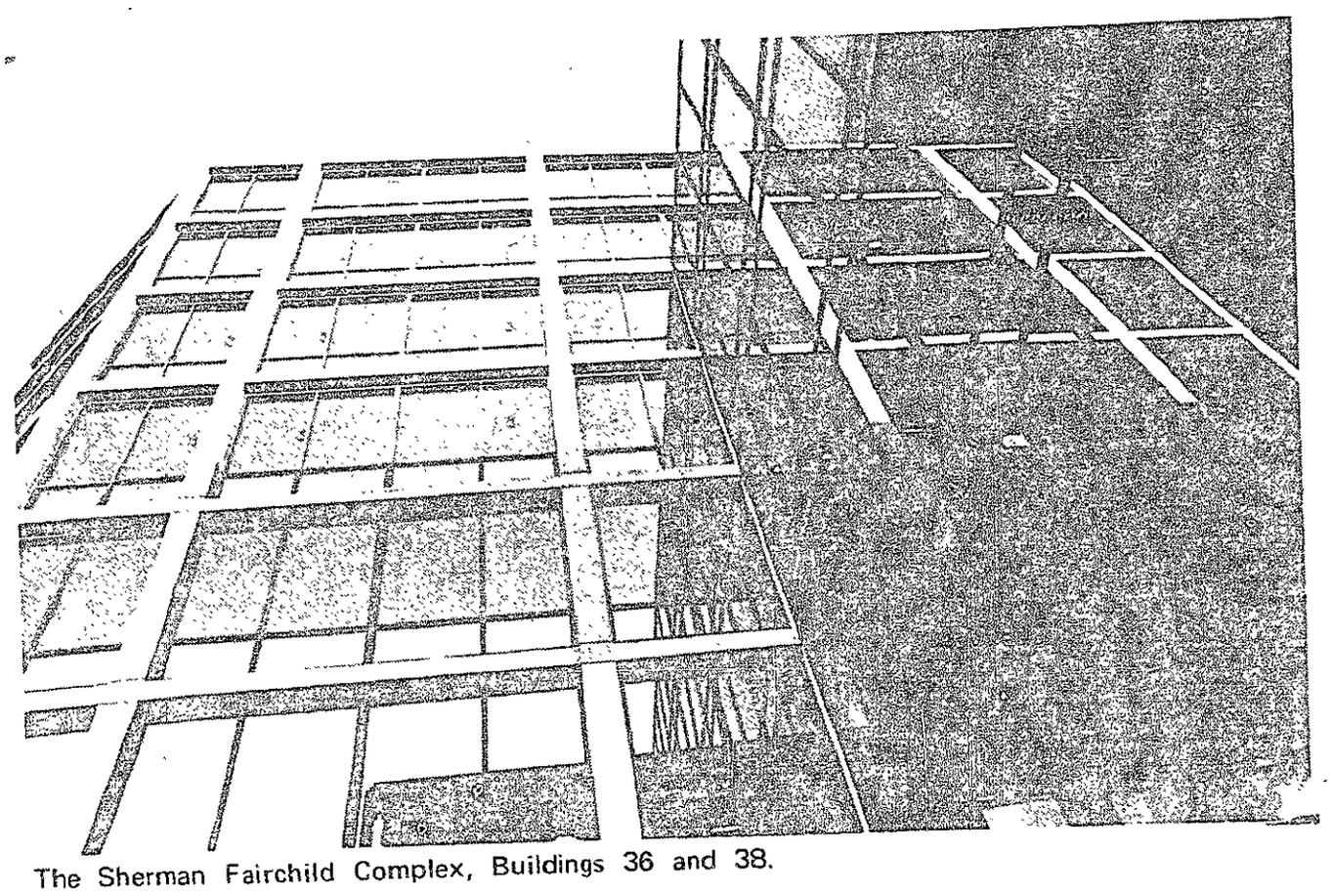
Student Reaction

After the ceremonies, Open House was held in the new buildings, where student members of the department's Student-Faculty Committee were serving as guides and ushers.

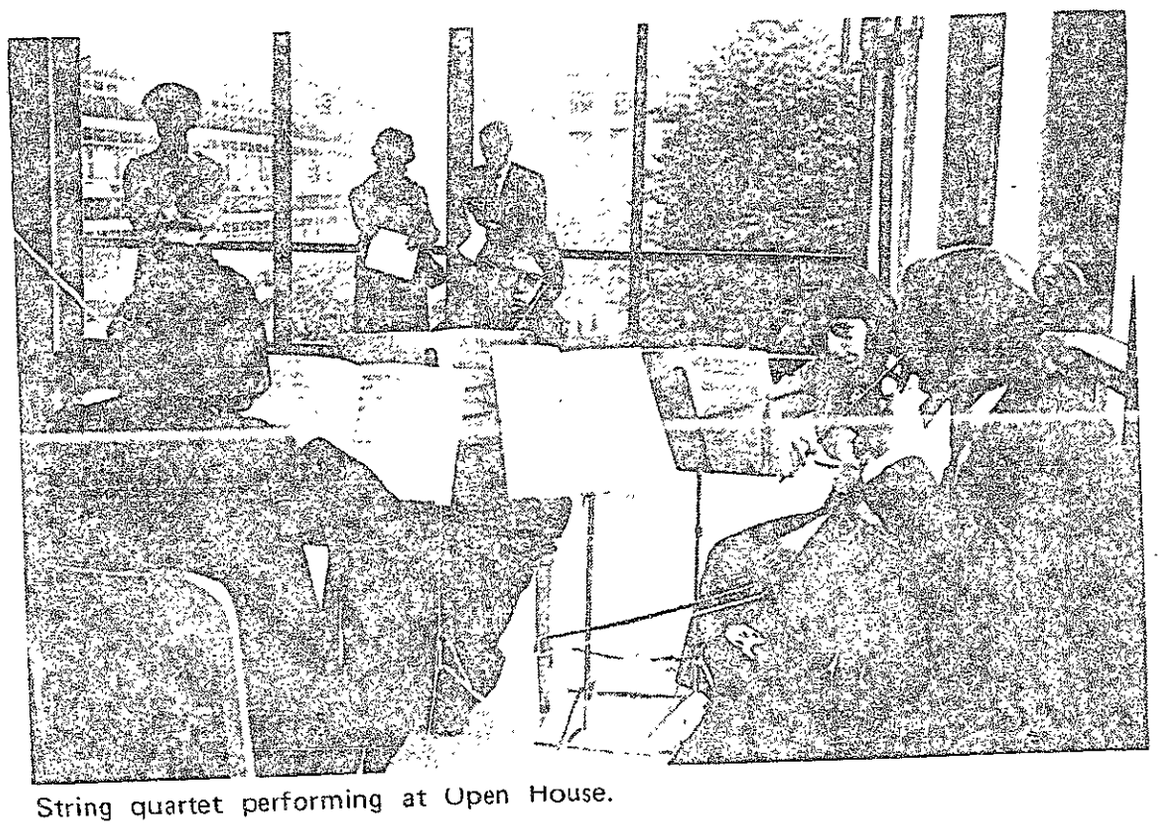
Many students questioned by *The Tech*, including some electrical engineering majors, had little conception of what was happening as the faculty, donors, and other VIPs walked through the buildings, ate cookies with punch, and listened to a string quartet perform in the halls.

The reaction elsewhere during the two-day ceremonies was similar. Although several TV monitors were set up in the foyer at Kresge and at Lobdell for the symposium of presidential science advisors Thursday night, few students were in attendance at the event.

On Friday afternoon, after the dedication was moved into Kresge because of threatening weather, few students attended the ceremonies. Most walked right by Kresge, "just sort of glancing in at all the people and wondering what was going on," as one observer pointed out.



The Sherman Fairchild Complex, Buildings 36 and 38.



String quartet performing at Open House.

President Emeritus J. A. Stratton and Chairman H. W. Johnson

NEWS analysis:

Dedications: fund-raising projects?

By Mike McNamee

"I'm really enjoying myself . . . I think this has been a great opportunity to get together with all these people who I haven't seen for so long . . .' – Dr. H. Guyford Stever, director of the National Science Foundation, speaking to reporters from The Tech *last Friday.*

As the ceremonies for the dedication of the Sherman Fairchild Electrical Engineering Complex progressed last week, it became increasingly clear that the festivities were turning around one point.

That point, which had seemed rather insignificant before the start of the dedication, was the fact that the events were scheduled to coincide with the quarterly meeting of the MIT Corporation.

This point accounted for the scheduling of a luncheon at shich Stever spoke to the corporation, and from which students (if they were aware of its existence) were excluded. It accounted for the nostalgic cast of many of the speeches and addresses delivered. It also accounted for the low amount of student interest in a symposium of six of the most influential men of science – the former presidential science advisors.

Students, for the most part, seemed to be unaware of the events that were taking place. In Lobdell and Kresge foyer, where TV monitors were set up to accomodate the throngs who would want to see the six men who advised presidents throughout the space age, the audience was painfully small. The monitors were not even necessary, however – considering that Kresge was far from being full.

Aside from members of the campus press and some EE students who were involved – as ushers – in the dedication, students were noticibly absent throughout the festivities. Many students who were in the Fairchild building during the Open House following the dedication were unaware of the events that were going on around them.

Several interesting points emerged as *The Tech's* reporters covered the festivities. Not the least important of these was the fact that the Development Office – the office that is in charge of fund-raising for the Institute – was apparently in charge of the dedication. This often resulted in poor communications and coordination with the members of the EE Department who were trying to arrange student input and involvement in the ceremonies.

As one student in the department put it, "(Department head Professor Louis) Smullin didn't know from one day to the next if he was going to have 100 alumni or 1000. In one case, he'd be inviting students as guests – in the other, he'd be asking them to be ushers."

More donations?

The significance of the pattern that emerges – the Corporation meeting and luncheon, the emphasis on history and nostalgia, the Development Office's involvement, the disregard – if not outright exclusion – of students makes one wonder what the administration had in mind as the goal of the dedication. The two days of ceremonies seemed to focus on two audiences: the Corporation and the alumni. These are the people who keep those dimes and quarters and million-dollar checks flowing in, allowing MIT to keep on having dedication ceremonies. A sideline of this massive hype was the class-reunion feeling that Stever, a former MIT man, pointed out. Neither of these goals had anything to do with the students who would be most involved with the use and care of the building.

President Jerome Wiesner, as he accepted the presentation from the president of the Fairchild Foundations, stated, "I have always been impressed by the very special significance that society attaches to the dedicating of a new academic facility. . . . doubtless a recognition of the key role that they fill in the preservation and evolution of civilization." As MIT's building program goes on, and more and more donors are needed to keep it going, one cannot help but wonder what significance the Institute attaches to such dedications, and which key role the ceremonies are intended to play.

Photos by
Roger Goldstein
Sherry Grobstein
Tom Klimowicz

cience advisors meet in Kresge

y Norman D. Sandler

topic of the symposium sge Auditorium was "High ology for a Liveable " and what better au- es could have been present cuss the direction of US and technology?

six men were scientists or ers; five had backgrounds had brought them into t with MIT at least once past. The six had served residents over a span of 16 as special assistants for and technology.

six science policy direc- rticipated in a symposium lay evening in connection he two-day dedication of airchild Electrical Engi- ng/Electronics Complex aced the devlopment and demise of the White science advisory staff.

President Jerome B. r set the stage for the our discussion appro- y by referring to the panel perts as a "galaxy of an gered species," while ary Chairman of the MIT ration Dr. James R. Killian he science advisors were us specimens to whom the nt turned" for advice on fic matters.

ian was speaking from ence. He served as science to President Eisenhower 957-1959, and is credited founding the advisory nism which lasted for 16 comprised of the Office of e and Technology (OST) e President's Science Advi- ommittee (PSAC).

The advisory staff was born out of a state of "national hysteria," as Killian put it, shortly following the successful launching of the Sputnik I satellite by the Soviets in October 1957.

The alleged missile gap and science gap that gripped the nation after Sputnik put pressure on scientists to work on advancing weapons technologies, and Killian explained that this led to the creation of an advisory staff to (then President) Eisenhower.

"There was never any difficulty in seeing the President or advising him," Killian noted. He said PSAC was an effective agency, evaluating proposals from the three armed services and presenting their recommendations to the President.

The effectiveness of PSAC and OST, however, declined over the years, and Dr. Edward E. David Jr., the last of the science advisors (1970-1973) said the issues facing the two agencies changed through the sixties leading to the ultimate dismantling of the White House science advisory apparatus earlier this year.

David resigned as presidential science advisor in January, amidst reports of frequent conflicts between staff members of OST and Nixon aides. Nixon allegedly dissolved the advisory units to stifle dissent in the White House related to his science policies.

However, in his appearance Thursday David was not bitter, and explained the dismantling of OST/PSAC as if the two advisory bodies had finally reached planned obselecense. "President Nixon wanted to see if I could commit suicide after being assassinated," David said, with obvious reference to his not-so-friendly resignation from the White House staff.

David went on to describe achievements of the White House in the area of energy policy, and said this top scientific priority of the Nixon Administration, budgeted at $772 million for the upcoming fiscal year, will become "the Apollo of the seventies and eighties."

With a shift in research and development (R&D) funding from military to civilian programs in recent years, David said. He explained when new advances in military R&D took place they opened new areas of explorations although this is not the case with civilian programs in environmental, transportation and other fields.

With the de-emphasis on military R&D, David said the role of the two advisory staffs was phased out of the White House in the early seventies, as more governmental agencies embarked on R&D programs for civilian needs.

Counter force to the President

All six former science advisors agreed that as the advisory mechanism aged, its advice was requested and heeded less by the president in power at the time.

Killian said the scientists had a constant rapport with Eisenhower, and Dr. George B. Kistiakowsky (who served as advisor from 1959-1961) said the character of the advisory staff changed from skepticism in the early sixties to an "enthusiastic force within the Pentagon" by the time it was dismantled.

Kistiakowsky, a Harvard chemist and visiting scholar at the MIT Center for International Studies, was succeeded as science advisor by Wiesner, who said between 1961 and 1964 the role of the science advisor began to diminish as Presidents Kennedy and Johnson were preoccupied with pressing matters of state.

According to Dr. Donald F. Hornig, who served as advisor to Johnson from 1964-1969, the split between the science advisory staff and the White House grew more prominent during his five years as it "became evident that the attention of the President turned to other things, and PSAC became regarded as having its own political interests."

The irreparable split between OST/PSAC and the White House finally developed during the first Nixon Administration. Nixon's first science advisor, CalTech President Dr. Lee A. DuBridge, who headed the MIT Radiation Lab during World War Two said the frequency of his meetings with the President decreased during his White House stay through 1970.

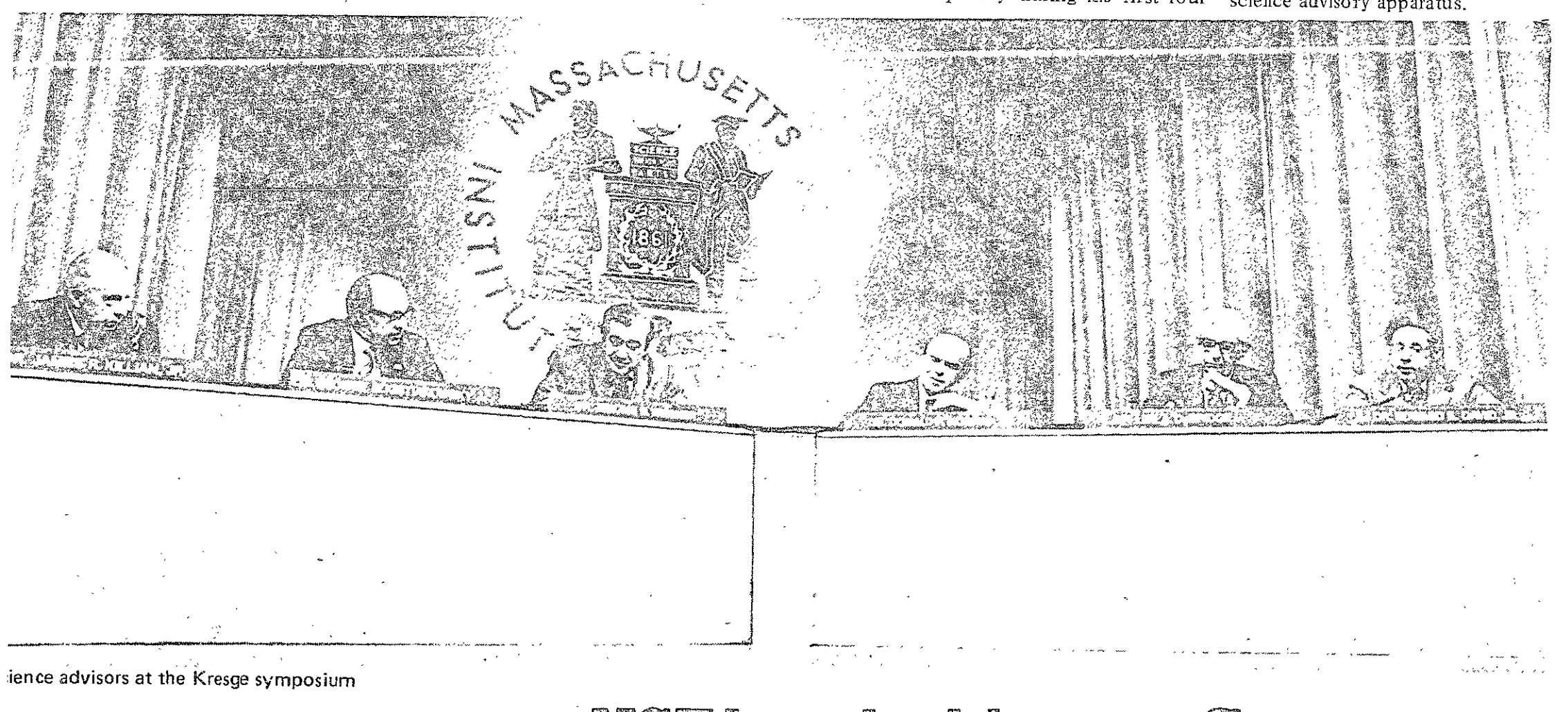
DuBridge and Nixon's final science advisor David hinted that Nixon not only saw them less frequently during his first four years, but he also relied upon them less for advice in policy matters.

The two Nixon advisors admitted relations with members of the White House staff were strained, with some of the President's aides showing outright "antagonism" toward scientists and science in general.

It was this antagonism which ultimately led to the demolition of OST and PSAC, although DuBridge and David said the advisory staff had not been disbanded, but rather had been "transformed." Under legislation passed by Congress last year the National Science Foundation will coordinate all functions previously executed by OST, and NSF Director H. Guyford Stever said NSF would "give it the old college try" in carrying on the work done by the previous advisory staffs.

However, Wiesner warned that there will be "no counter-force to the President's judgment like there was with PSAC," According to Killian, during the Eisenhower years "in respect to the President we never embarrassed him by publicly disagreeing." OST and PSAC remained effective agencies in the sixties.

However, public disagreement within their ranks did not become noticeable until the Nixon Administration where, according to DuBridge and David, staff problems combined with an increase in "protection" or isolation of the President led to a decline in the working effectiveness of the White House science advisory apparatus.



ience advisors at the Kresge symposium

's science advisor, Edward David

NSF head addresses Corporation

By Jules Mollere

Science must continue to reshape its goals away from those of the defense-oriented structure of the past towards the tackling of the human problems that confront us today, Dr. H. Guyford Stever, director of the National Science Foundation, said Friday.

Stever, who also serves as science advisor to the President, spoke at a luncheon of the MIT Corporation. The luncheon was held in connection with the dedication ceremonies of the Sherman Fairchild Complex.

In his speech, Stever referred to the inaugural address of Dr. James R. Killiam, Honorary Chairman of the MIT Corporation and President of MIT from 1949 until 1958, in which the challenge of defense work to science was noted. Stever remarked that the tremendous post-war growth that science and technology received was basically due to defense projects and "its offshoots of nuclear energy and space."

He added, however, that, "today these are still important, but there are other overriding areas."

Stever went on to comment on what he believed to be some of these areas: the problems of ecological balance, economic growth and the need for more known and readily useable energy sources.

In regard to the specific area of ecology, he emphasized that, "We will have to take closer account of the closed system nature of our planet and exercise tighter control over effects on it."

One of the problems that he said he saw in the tackling of these troubles was that, "these are not the kind that will be solved by a few singular breakthroughs but call for strategic combinations of scientific, technological, social and political advances."

"As a result there has been less certainty on the part of the public concerning the ability of science and technology to cope with these problems."

Despite this initial despondancy, Stever said that he saw "indications that a strong upswing of support for science in the civil role is only beginning. The results could be as significant as man's original transition from a predatory and nomadic existence to that of an agriculture-based civilization."

MIT: largest land owner

By Howard D. Sitzer

According to the latest available statistics, MIT is the largest land owner in the city of Cambridge, with property holdings assessed by the city at a value exceeding $55 million.

City officials last week said MIT tops the list of real estate owners in Cambridge, with the Fellows of Harvard University ranking second.

The City Assessor's office also reported MIT ranks third in total property value including underground facilities, a category topped by Cambridge Electric Power Company.

MIT was required to pay property taxes amounting to over $1.6 million in 1972. The institute received exemptions on a large percentage of its property holdings valued at almost $45 million. The exemptions were based on an "educational institution" status and related primarily to academic facilities. The property represented a loss of almost $4.1 million in tax revenue for the city.

MIT ammassed numerous parcels of land extending beyond the perimeter of the campus over the years. The property is concentrated between Memorial Drive and Central Square, and includes a vast array of structures. There are numerous office buildings, warehouses, garages, factories, houses, and undeveloped lots.

The most recent acquisition was the Simplex Wire & Cable Company in July, 1969. The school purchased the property at the time for fully-taxable commercial development rather than academic expansion.

Last week MIT Vice President Kenneth Wadleigh announced that MIT was in the process of selling the Northgate Apartment Complex. Although the Institute failed to receive tax exempt status on the property, disputes had erupted in the past over MIT's compliance with rent control. Apartment units occupied by people affiliated with the Institute were classified as dormitories and were subject to rent increases.

Several tenants reached by *The Tech* over the weekend were indifferent to the sale of the apartment complex. Larry Russell '74, a Northgate resident for two years, was confident that the transaction would not result in any relocation difficulties for him.

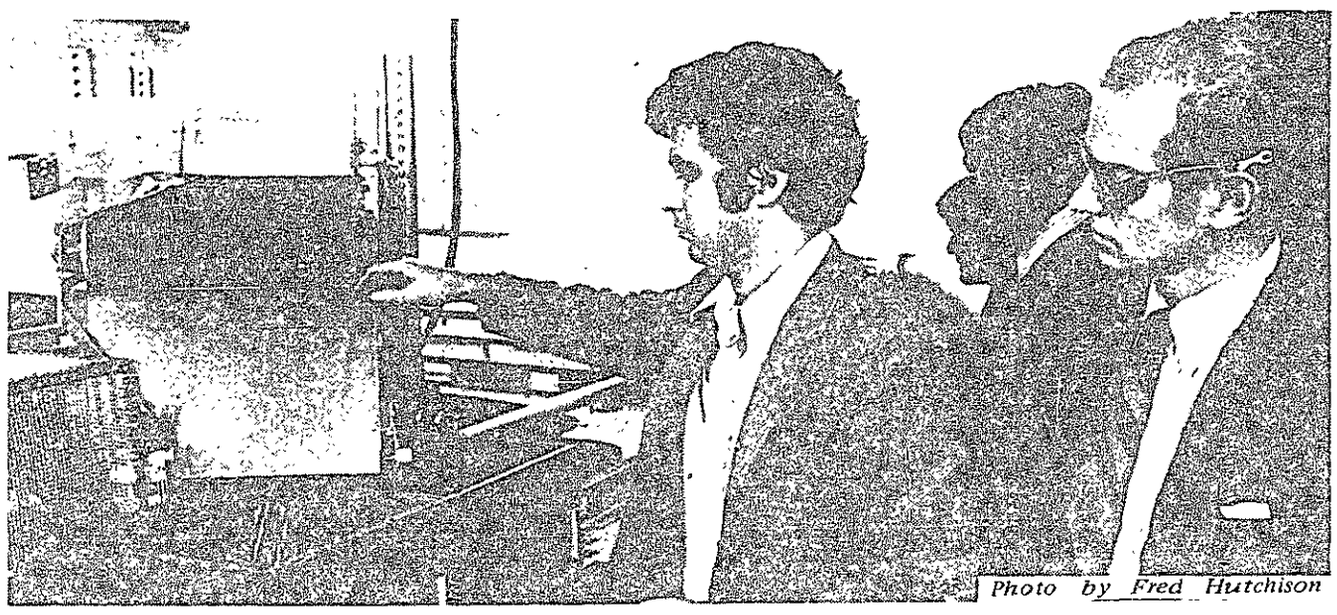


Photo by Fred Hutchison

EE, Mech E join forces to fight solid waste with technology

(Continued from page 2)

paper film and ferrous metals from the stream.

The solid-waste goes from there to a series of vibrating screens which sort the objects according to their size and then into the main portion of the plant, namely the so called "large item sorter."

The large item sorter (LIS) consists of an oval track, some small carts, a computer, several sensors and loading and dumping stations. The trash items pass from the vibrating screen onto a series of conveyor belts where they drop one at a time into the small carts. As the items drop into the carts, they break a light beam which in turn accelerates the carts around the track, and brings another cart to rest under the trash input shute in preparation for the next item.

The now-loaded carts pass by the sensor bank: a metal detector, and infrared spectrometer that takes four simultaneous readings of an object's surface reflectivity, and an impact-accelerometer which detects the deceleration wave form of the sound produced as the object passes over its surface.

The data obtained by the three sensors are fed into a small computer programmed with a "pattern-recognition algorithm to make a single decision based on the several sensor signals." The program currently in use enables the plant to separate the trash stream into five distinct categories: glass, metal, plastic, cellulose and other items. When the algorithm has made a decision as to what is in each cart, a series of toggle switches are set to indicate the appropriate category and the cart continues around the track to the unloading stations.

At the unloading stations, the toggle switch settings are interpreted and the contents of the cart are dumped at the proper collection point. From there, the objects (now separated into distinct categories) are bundled and either recycled or disposed of in the current fashion.

According to Wilson: "The MIT system as is currently operating is particularly effective for the separation of paper, plastics, metals and glass from mixed municipal refuse. In urban locations, such as the Boston area, a plant of this general type should be competitive with, and a potential replacement for, an incinerator, since it has lower capital and operating costs."

Wilson also bemoaned the fact that funds were not available from the EPA to continue the research during the 1973-74 academic year. He noted that several industries had expressed interest in the plant but "nothing had materialized."

Limits discussed at forum

(Continued from page 1)

growth will make the rich richer and the poor poorer. Irrelevance is a total non-acceptance and social attitude. People say that it is not possible to slow growth because people are socially geared to it.

Roberts, best known for his scathing review of *Limits* on the front page of the *New York Times Book Review*, characterized his stance in a 6th category, illogic. He attacked the model saying that "it is a difficult job to model the world" and that the 7 state variables used in the study are not enough. He also attacked the construction of the model saying that, "a model's conclusions are very dependent on the assumptions – they are an artifact of the assembly." He claimed that if you change some initial values slightly, the model does not blow up for "at least 500 years." "They have been carefully constructed, intentionally or not intentionally,... to make a crisis occur."

Interphase smoothes transition into MIT for minority students

By Stephen Keith

As the Admissions Office sifts through approximately 3,600 applications each year, it comes across students who are definitely MIT material, but may have trouble fitting into the Institute as new freshmen. Possessing the intellectual and personal attributes necessary for admission to MIT, they may lack some of the academic background simply because such preparation was unavailable to them in high school.

Project Interphase is a seven-week academic "summer school" designed for such students who are offered admission, to ease their transition into college.

James J. Bishop, Assistant Dean for Student Affairs, is director of Project Interphase. He makes it clear that Interphase attendance is not required for the students' admission. "All of these people can make it on their own at MIT; Admissions does not admit anyone who will flunk out," he comments.

Bishop explains that the program is only offered to these students to help them with special problems they might have. Goals of Project Interphase are: –

To augment the academic background, particularly the verbal, mathematical, and scientific skills, of students with personal and intellectual qualifications for MIT; – To give these students a chance to adjust to life in the MIT community; – To acclimatize them to the non-academic resources of the Institute and the metropolitan Boston area; and, – To let the people who will be working with them get to know them and help with any problems they may have.

Every summer since 1969, students invited to participate in Project Interphase have come to Cambridge to live and study at MIT for seven weeks.

Bishop explains that they attend classes in Calculus, Physics and Humanities. Those considering chemistry-related careers may also take an optional chemistry course. Interphase classes cover the first sections of 18.01, 8.01, and 5.41, plus a review and strengthening of skills already learned. The two Humanities options offered this summer were photography and art.

Students are assigned homework and take tests, and receive up to 18 elective credits for satisfactory work, according to Bishop.

Augmenting their academic load, Interphase students take part in a variety of cultural, social, and recreational activities, including parties, swimming, ball games, and tours around the Boston area.

Response to Project Interphase from students and staff has been enthusiastic. "Faculty members feel that everyone who has gone through the program has benefitted from it, and students remark that Interphase was worthwile and valuable in their transition into MIT," says Bishop.

Cost for Project Interphase is borne entirely by MIT. The Institute covers staff costs, room and board for the students, their transportation to and from Boston for Interphase, plus financial aid for their fall term equal to the earnings they lost while attending the program. The figures run to about $1,800 per student plus the summer earnings compensation.

This year 27 students from around the nation participated in Project Interphase, bringing the total since the program's beginning to 168.

Bishop states that the inspiration for Project Interphase derived from part of a ten-point program for minority educational opportunity proposed by the MIT Black Student Union in 1968.

Sports

Benchwarmer

By Fred Hutchison

With the opening of both the intramural football and volleyball seasons, it seems inevitable that the perenial conflict over open eligibility for athletes will appear on the agenda of the next IM Council meeting.

Last Tuesday's IM Council meeting saw a resolution presented by the LCA athletic chairman, Rob Colta, to remove all restrictions on the participation of individuals in IM sports, except those which prevent varsity or freshmen athletes (also previous varsity lettermen) from competing in their corresponding sports.

The controversy stems mostly from one sentence in section D, paragraph 2 of the General Intramural Rules: *"A person is ineligible for all intramural sports checked below his intercollegiate sport on the Eligibility Chart on the inside back cover of this booklet."* (MIT Intramural Sports Handbook, 1973-74.

This prevents, for instance, the participation of varsity and frosh sailors, cross country runners and soccer players from competing in the IM touch football contests.

The view of many IM Council members is that the council should not enforce what are essentially the whims of the intercollegiate coaches as to which IM sports their athletes may compete in. These same people are, however, the first to point out the great deal of cooperation they have received in the past from the coaches. They merely believe, as do I, that it should be the responsibility of the individual coach to set standards as to which IM sports his athletes may compete in and to enforce these standards as he sees fit.

As one lightweight crew member told me last weekend, "Last year one of the frosh light broke a couple of fingers in an IM football game and the coach said that he felt a guy shouldn't blow the chance to participate in the Head of the Charles by playing IM football and would the crew please not play football anymore. Everyone followed his instructions."

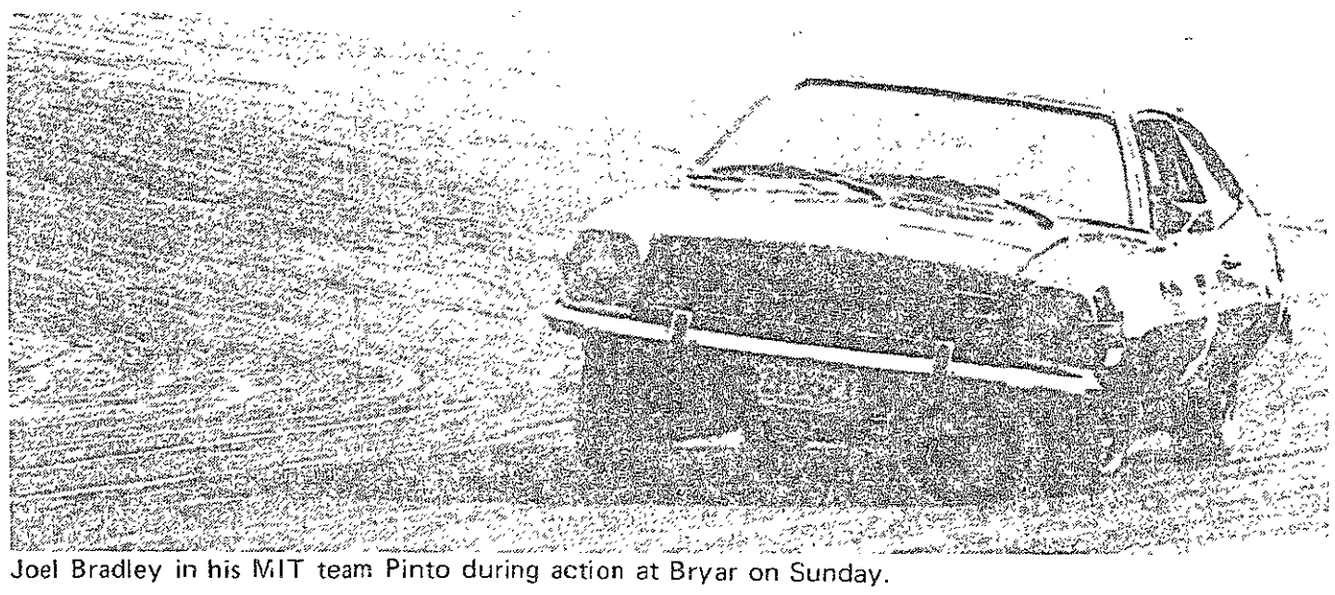
This is not too much to ask of a coach and clearly makes more sense than having a team forfeit (a team forfeits if it allows an ineligible player to compete) and consequently fined (up to $12) because one of their team members participated in a restricted intercollegiate sport.

I therefore would like to recommend that the IM Council at their next regularly scheduled meeting strike the sentence in question from section D, paragraph 2 or Article II and allow more freedom for athletes to compete in the largest single extracurricular activity at MIT.

INTRAMURAL SPORTS

ELIGIBILITY CHART INTERCOLLEGIATE SPORTS

	Water Polo	Track	Table Tennis	Squash	Softball	Soccer	Sailing	Rifle	Golf	Badminton	SPRING	Wrestling	Swimming	Hockey	Bowling	Basketball	WINTER	Volleyball	Touch Football	Tennis	Cross Country	FALL
Baseball					x																	
Basketball												x		x		x						
Crew						x																
Cross Country																			x		x	
Fencing						x			x													
Golf								x														
Gymnastics												x		x		x						
Hockey												x		x		x						
Lacrosse						x																
Pistol								x														
Rifle			x																			
Sailing						x	x					x							x			
Skiing												x		x		x						
Soccer						x													x			
Squash				x								x	x	x		x						
Swimming												x	x	x								
Tennis				x		x														x		
Track - Indoor		x				x						x		x		x						
Track - Outdoor		x																				
Water Polo	x																		x			
Wrestling												x										



Joel Bradley in his MIT team Pinto during action at Bryar on Sunday.

Bradley sets mark at Bryar

By Mitchell Lewis Green

"Success in auto racing requires both skill in driving and a quick and reliable car." These words of Indianapolis 500 winner Mark Donahue found support last weekend at the SCCA Regional Races held at the Bryar Motorsport Park. Joel Bradley (G) drove his MIT Team Pinto to a new lap record at the tight 1.6 mile track eclipsing the old mark by almost one-and-one-half seconds.

Sunday was a cool, bright day in New Hampshire, and temperatures never got above 65 degrees in the dry air. These excellent conditions afforded all competitors some extra horsepower and tire adhesion.

The Showroom Stock Sedan race was the third of seven races slated, and an eleven car field rolled out of the pit lane onto the track. Both MIT entrants took full advantage of the start. Joel quickly built a three second lead over the field and set a new lap record of 1:34.0. Dave moved past four slower cars into seventh place.

At this point the tailpipe on Dave's Pinto broke loose from the muffler; Dave was black-flagged and forced to pit for the remainder of the race. On lap 7 Joel's left front tire failed. It was later determined that one of the radial tire's steel belts had sheared apart, causing a slow deflation. Joel was able to control the car but the tire prevented him from maintaining his pace. Joel nursed the Pinto to a fourth place finish behind Hacker's Colt, MacDonald's Opel, and deGersdorff's Pinto.

Sports

Soccer squad beats Trinity 5-1

Tang, Yoshida, Krups, Arboleda tally five goals for MIT win

By Glenn Brownstein

MIT won its second straight soccer game Saturday at Briggs Field, beating Trinity, 5-1.

The Tech 11 looked very sharp in simply overpowering a determined, but outmatched, Trinity squad. MIT had field control for most of the game, thanks to excellent defensive work by Mark Abkowitz '74, Neal Dowling '74, and Paul Fernandez '76. Abkowitz cleared many Trinity drives with high kicks out of the goal area, Dowling stopped Trinity chip shots with solid heading, and Fernandez created much of MIT's defensive pressure with numerous tackles.

The rest of the defense played quite well in allowing Trinity only 13 shots on goal, the fewest given up by MIT this season.

MIT scored twice in the first half. One goal came at 33:50 when Esref Unsal '75, dribbling down the right side, crossed it to the left side of the goal area, where Gus Arboleda '74 got off a weak shot to the middle that Cha Min Tang '74 put past the Trinity goalie.

The second goal came just before halftime, at 43:00, when Greg Hunter '76 sent a long pass down the left side to Shin Yoshida '76, who blasted it into the right side of the goal.

Trinity scored first in the second half, at 47:29, when Jeff Chin beat Ritchie Straff '74 on the right side with a sharply angled shot from the left.

This goal seemed to perk up Trinity, and they started a number of downfield rushes against a temporarily ineffective MIT defense.

However, MIT got the goal back at 56:12, when Unsal crossed the ball in front of the goal, leading to a scramble in which Frieder Krups '77 scored on the left. MIT then put the game out of reach in the final ten minutes, scoring at 83:05 when Straff, clearing a previous Trinity shot, kicked the ball down the left side to Lampros Fatsis '77. Fatsis dribbled into the penalty area, then crossed it in front of the goal to Yoshida, who scored.

MIT added a goal at 86:22, when Hunter passed down the left side to Arboleda, who fired a line drive that dropped under the Trinity goalie's dive at the last moment.

MIT's next game will be Saturday morning at highly ranked Middlebury. The team will then play at Brandeis and Lowell Tech before returning home October 23 against Boston College at 3:30.

Coach's Profile

Silvio Vitale

Maestro Silvio Vitale . . . fencing master . . . BA, MFA, University of Rome . . . Three weapons champion, Rome Regional Championships 1932-34 . . . former N.E. Champion three weapons . . . founder, past president and fencing master, Boston Fencing Club . . . State Archery Champion 1960 . . . 1947-48 assistant fencing coach . . . 1949-present MIT fencing master . . . Coordinator of Women's Athletics 1970-71 . . . his teams have won 8 N.E. Championships . . . APO advisor . . . Phys ed instructor; fencing and archery.

Golfers remain unbeaten

MIT finishes first in meet with Merrimack and Suffolk U.

MIT varsity golfers, undefeated so far this season, continued their winning ways this week taking both sides of a triangular meet with Merrimack College and Suffolk University at the Andover Country Club.

Captain Gordon Deen '74, playing No. 1, carded a 76 to lead MIT to a 4-3 win over Suffolk and a 5½-1½ win over Merrimack (which played only five men and conceded two points).

Dave Macartney '74, playing No. 5, also swept both his matches with an 84. Pete Wolczanski '76, No. 2, lost to Suffolk but defeated Merrimack with an 81. Jim Harrison '76, No. 3, had an 82 to defeat Suffolk but lose to Merrimack. Leo Bonnell '77, No. 4, lost to Suffolk and tied Merrimack with an 88.

The Suffolk side hung in doubt until MIT's No. 6, Bob Nilsson '76, came in with a 3-and-2 win and a round of 83. MIT's No. 7, Greg Turner '74, in the same foursome as Nilsson, lost to Suffolk with an 89.

The MIT team owns earlier wins this season over St. Anslem's College and New Hampshire's Plymouth State College. They face Boston College and Bentley College in a triangular match this Wednesday. In addition this weekend, Deen, Wolczanski, Harrison, Macartney and Nilsson are representing MIT in the annual Eastern Collegiate athletic Conference tourney at Amherst, Mass. Some fifty schools are entered.

This Sunday, the forces of the Walker Dining Staff will come head-to-head with the legions of the Student Center in what promises to be a fierce game of volleyball.

The traditional match, started this year, will determine the champion volleyball squad of the MIT student dining staffs. The match, to consist of a best of five series, will take place on Walker's home court at 2 pm.

MIT crews ready for Head of the Charles

By David I. Katz

Sunday, October 21, is the day for the Ninth Annual Head of the Charles Regatta. The Head, a three mile race upstream, draws crews and oarsmen from all across the country. In this sort of regatta, the boats get a running start at the Boston University boathouse. Spaced ten seconds apart, each boat tries to pass as many other boats as possible. In an event where all of the crews are approximately equal, one could win the race without passing another boat. The seventeen different events are separated by about fifteen minutes.

This year the MIT crew is defending the Schaeffer Trophy won last year in the Elite Fours event. Head Coach Peter A. Holland will have two chances to keep possession of the Cup as he is entering two boats in the Elite Fours. Stroked by sophomores Peter Beaman and Craig Christiansen, the only other sure bet for these boats is Dustin P. Ordway, '74, one of last years winning crew. By rowing overseas at the Henley, Lucerne, and Nottingham Regattas, he is ineligible for any event but those of "Elite" classification. Captain Andrew Kernohan, '74, is a doubtful entry this year due to an injury he sustained while walking near the Washington Elms Apartments.

Varsity Lightweight Coach Bill Miller is going all out this year to re-establish MIT as a lightweight crew power. He has put together a varsity and JV boat to enter the Lightweight Eights. With many returning from last year's squad, the odds favor a good showing in this grueling three mile event.

The freshmen, always an unknown factor until after their first race, will be entering five boats in various events. Four will go into the Junior Eights race and the other in the Intermediate Eights event.

The Head of the Charles starts at noon on the 21st. Various Tech crews will be going off throughout the afternoon. Good vantage points are available all along the banks of the Charles up to the finish line opposite the WBZ tower on Soldier's Field Road. With so many good crews from around the country coming for this regatta, this is one of the best opportunities to see rowing at its finest.

Harvard wins water polo title

The Harvard varsity water polo squad won five straight games to win the Mit water polo tournament held last weekend. MIT, plagued by bad luck from the start, only managed to come out on the winning end once.

Dan Bethencourt '75, MIT's all New England goalie, only played in two of the matches before he was taken to the infirmary with a bad case of flu and Dave Schneider '74 broke some ribs and hasn't played for a week and a half.

MIT was able to win its first contest of the tournament with Southern Conn., but short of a first quarter lead over Harvard, the squad never looked up to par. This was due in great part to MIT's lack of depth and inexperienced players. (A good portion of the squad hadn't played water polo before this season).

Final Scores:

Saturday

Northeastern 8	Exeter7
MIT 11	So. Conn. 10
Harvard 13	Brown 3
Exeter 2	MIT 1
Northeastern 11	So. Conn. 9
Brown 9	MIT 1
Harvard 12	So. Conn. 5

Sunday

Exeter 13	Brown 1
Harvard 10	Northeastern 5
So. Conn 11	Exeter 10
Northeastern 11	MIT 3
So. Conn. 8	Brown 3
Harvard 6	Exeter 1
Northeastern 13	Brown 1
Harvard 9	MIT 1

Peter Schulz '75 (in white) in action against Harvard. *Photo by Fred Hutchison*

The 1973 IM Cross Country meet will be held at Fresh pond on Sunday, October 28. The course will be the 2.5 mile course circling the pond. Team entries must be turned into the IM cross country mailbox in the manager's office in DuPont by Wednesday, October 24, at 5pm. Individual entries will be accepted until five minutes before race time.