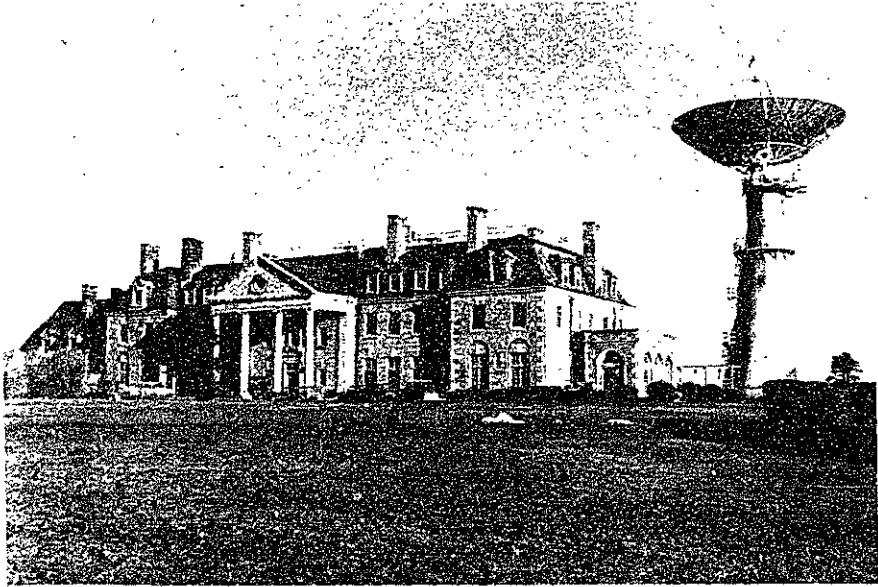


New England Jesuits purchase Round Hill research center



A radar tower stands near the summer house on the Round Hill facility. The 277-acre estate, given to MIT in 1948, was sold last week to the New England Jesuits, who will take over the property next year for a retreat.

The Round Hill Field Station, MIT property since 1948, was sold last week to the Society of Jesus of New England.

The 277-acre estate in South Dartmouth, Mass. was the summer estate of Col. H. R. Green; his sister gave the property to MIT.

The Jesuits will use the site, which borders Buzzard's Bay, as a retreat for men of all ages.

In announcing the sale, Treasurer Joseph J. Snyder commented that "the cost of maintaining a little-used facility of this size could not be justified in view of the pressing needs of the educational program of the Institute in Cambridge."

In recent years the property

and equipment at Round Hill has been assessed by the Institute at \$175,000.

Col. Green first made the site available to MIT researchers in 1925. Among the first to direct the program there was President Julius A. Stratton '23.

Recently, Provost Charles H. Townes and Prof. Ali Javan have used the wine cellar of the Round Hill estate for delicate maser experiments, designed to test part of the theory of relativity by measuring beat frequencies.

The wine vault was chosen for the experiment because it was cut into rock and virtually vibration-free.

(Please turn to page 6)

MIT to continue limited program for special Harvard course study

MIT is continuing its limited experimental program with Harvard through which certain undergraduates may take an undergraduate subject at Harvard, receive credit towards a degree, and incur no additional financial cost.

Students desiring to follow this program must normally be seniors with an overall record equivalent to a cum of 4.5 or better (exceptions will be entertained at least down to 4.0); a 4.5 cum is nearly always required in the field in which the student wishes to study. The subject must be a constructive part of the student's program, acceptable toward an MIT degree, and not offered by MIT. In addition, the student must be acceptable to the Harvard instructor as a registrant, and he must be a regularly enrolled full-time student at MIT.

The procedure to follow for a student who is interested includes arranging a personal interview with Prof. H. R. Bartlett and presenting written evidence of the following: a brief statement of reasons for taking the Harvard subject, an overall record at least through first term of junior year, a record of the student in the field in which he wishes to register at Harvard, specific indication of number, title and instructor of subject he wishes to take at Harvard, and certification from

the appropriate MIT authority (usually departmental faculty counselor or, in the case of general education subjects, the humanities adviser) that the subject will be accepted for credit and is in the line of study leading to the degree.

If requirements are met, the student obtains from the Harvard instructor in charge a letter to Prof. Bartlett saying that the student has the necessary prerequisites, that there is room for the student in the subject, and that he is willing to accept him.

Following this, Prof. Bartlett confirms the registration with Dean Andrews, the Harvard contact, with a letter and copies to the appropriate MIT officers (registrar and counselor).

Lichtheim lecture gives reasons for progress of Communist Party

By Chuck Kolb

Mr. George Lichtheim, Visiting Scholar, Research Institute on Communist Affairs, Columbia University, addressed approximately 100 students and faculty members on 'Leninism and Modern Revolution' Monday night in Room 54-100.

A noted British scholar and author, Mr. Lichtheim spent most of his lecture probing into the characteristics of Communist ideology and history which enabled the Communist Party to

seize control of Russia and transform it into a world power.

Mr. Lichtheim stated at the beginning of the lecture that "people today are more interested in current affairs than intellectual background." He went on to show, however, how a grasp of the intellectual basis of Leninism and Stalinism can clarify current Communist actions.

The Communists were able to seize control in Russia because, under Lenin, they came to realize the importance of political activity and control; Lenin felt that a vanguard of intellectuals must seize political control and direct economic revolution from above, according to Mr. Lichtheim.

Among other works Mr. Lichtheim is the author of 'Marxism—An Historical and Critical Analysis,' an authoritative work in its field.

Railroad air rights sought

The Institute is actively negotiating with the New York Central railroad for air rights above the Grand Junction tracks that run along the north side of campus.

A railroad official told the Boston press last week that consummation of the sale was imminent. Ownership of the rights would allow MIT to build above the tracks, with a minimum 22 feet of clearance. The tracks and associated right-of-way are 83 feet wide.

The railroad official stated that the deal would cost MIT "over \$1 million."

Currently the Institute has no definite plans for construction above the tracks, but Treasurer Joseph J. Snyder stated that any structures built would be for "academic or research purposes."

But MIT's plans for the air rights, which run almost a mile from the BU bridge to Broadway St., are complicated by plans of the Massachusetts Department of Public Works.

One of three planned routes for the long-awaited 8-lane Inner Belt expressway, which will run in a small circle through Boston, Brookline, Cambridge and Somerville, is along the Grand Junction tracks from the BU bridge to a spot near Kendall square.

This route was once eliminated by the DPW as too expensive. The department now favors a route along Brookline and Elm Streets in Cambridge.

However, the railroad recently announced that it would discontinue use of all but one of the five tracks. This change would eliminate the need for a double-level thruway; no re-estimate of the cost of construction under these conditions has been made by the DPW.

Snyder again expressed the opposition of MIT to the railroad

right-of-way route for the Inner Belt, saying it would take away "vital parts of the MIT campus."

The Brookline-Elm Sts. route, which is currently favored by the DPW and was approved by the Federal Bureau of Public Roads, is strongly opposed by the City of Cambridge.

The Brookline-Elm St. route would destroy about 300 homes and displace about 950 families. The City Council has gone on record as opposing any routes for the Belt through Cambridge that would destroy private homes.

ISC cancels Friday's Ball

The International Students Council's proposed Winter Wonderland Ball, planned for Friday, has been cancelled.

Insufficient advance ticket sales at the established \$4 per couple price caused the cancellation, according to James Taylor '65, Finance Board chairman.

The decision to withhold Finance Board funds came last Friday, following an informal poll of the Board.

Contractual payment of about \$300 to reserve a ballroom at the Statler Hilton hotel would have fallen due on Monday.

The International Student Association of Greater Boston will hold a semiformal dance in Boston, Friday; this competition apparently hindered ticket sales.

Students with ISC Ball tickets may receive a refund from the Incomm secretary, Betty Hendricks, in Litchfield Lounge.

Total loss on the project, including a partial payment for the Harry Marchard Orchestra, was estimated by Taylor at about \$200.



Vol. 84, No. 26 Cambridge, Massachusetts, Wednesday, December 2, 1964 Five Cents

December 18: last day for dropping subjects Seven appointed to faculty

The Registrar's Office has announced that Friday, December 18, will be the last day in the fall term that subjects may be dropped with only advisor's approval.

After that date, a petition to the Committee on Academic Performance will be needed for all schedule changes. The date follows the thirteen-weeks-into-the-term policy established two years ago.

Seven new faculty appointments were announced last week.

Dr. John W. Cahn has been named professor of metallurgy; Captain Patrick Leehey has been named an associate professor in the Departments of Mechanical Engineering and Naval Architecture and Marine Engineering; and Dr. Morton Gordon, Dr. Willard Johnson, Dr. Paul Kay, Dr. Stephen Marglin, and Dr. Karl Shell have been appointed assistant professors in the Department of Economics and Social Science.

Professor Cahn joins the faculty from the staff of the General Electric Research Laboratory; in addition he has served as an adjunct lecturer in metallurgical kinetics at Rensselaer Polytechnic Institute since 1958. He received a B.S. in chemistry from the University of Michigan and a Ph.D. in physical and inorganic chemistry from the University of California at Berkeley.

Captain Leehey was a naval officer until his appointment to the faculty, serving most recently as the head of acoustics and vibration laboratory, David Taylor Model Basin. He received a B.S. from the U.S. Naval Academy and a Ph.D. in applied mathematics from Brown University.

Dr. Gordon graduated from Wesleyan University, received an M.A. from Harvard and a Ph.D. from MIT. Dr. Johnson received a B.A. from the University of California at Los Angeles, an M.A. from Johns Hopkins and a Ph.D. from Harvard. Dr. Kay graduated from Tulane University and received a Ph.D. from Harvard. Dr. Marglin graduated from Harvard, studied at Cambridge University and returned to Harvard for his Ph.D. Dr. Shell graduated from Princeton and did his graduate work at Stanford.

Luria receives new Professorship, established in honor of Sedgwick—first head of biology

The Department of Biology recently announced the establishment of the William Thompson Sedgwick Professorship, honoring the first head of MIT's biology department.

Dr. Salvador E. Luria, a member of the faculty since 1958, has been named the first Sedgwick Professor. Dr. Luria has gained international recognition for his work on the genetics of bacteria and the genetic influences viruses exert over the bacterial cells they invade.

As Sedgwick Professor of Biology, Professor Luria plans to continue teaching undergraduate, graduate and postdoctoral students and to set up microbiology research laboratories in the new Center for Life Sciences, which is under construction.

The late Dr. Sedgwick became the first head of the Department of Biology in 1889, after joining the faculty in 1883. Until his death in 1921, he exerted a strong influence over the development of public health measures in the United States.

Christmas Oratorio planned for Dec. 12

The MIT Choral Society will present a performance December 12 of J. S. Bach's 'Christmas Oratorio' at 8:30 pm in Kresge Auditorium.

The Kresge organ and the Cambridge Festival Orchestra will accompany the singers, who will be conducted by Prof. Klaus Liepmann.

Reserved seat tickets at \$1.50 and \$2.50 are available in Building 10 or from Kresge at X2910.

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Ticket profiteering: a student problem

The Mitchell Trio concert last Tuesday was presented by LSC at a fraction of its cost, as a means of distributing to the Institute community the profits from the film series. Each \$1.00 seat cost LSC about \$2.25. At such a low price the concert was very much a public service.

It was a pity, then that some individuals decided that the concert could be a private service. Some amateur entre-

preneurs resold tickets for \$5.00 or more. Other enterprising souls have been selling the originally free tickets to the NYC Ballet.

This sort of profiteering is reprehensible, but we can only appeal to the conscience of the student body to discourage such activities. The problem of preventing profiteering and dealing with offenders rests on the shoulders of student government.

The situation is currently not unbearable; but it is within the power of the Judicial Committee to look into the matter and perhaps determine whether more serious, large-scale ticket resale might occur. Certainly student government should make an attempt to halt unethical student conduct long before official administrative notice is taken.

Jurisdiction in such cases, where both financial and individual judicial action may be involved, is another problem to be faced in the reorganization of student government being planned. Increased self-discipline by the undergraduates needs a clearer blueprint for fast and efficient action than is currently used. The understandable hesitation of some student leaders to "meddle" in vaguely defined areas of responsibility could be ended by clear definition.

The present problem is not unbearable; but strong action now could set a valuable precedent discouraging further profiteering and outlining future organization.



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Unsigned editorials in The Tech are the opinion of The Tech's Board of Directors, not that of MIT. The Tech welcomes letters from its readers. Space permitting, such letters will be printed in whole or in part, if deemed by the editor to be of sufficient interest or benefit to the community. Brevity increases the chance of publication. Anonymous letters will not be printed, but names will be withheld upon request.

Inside Inscomm

Class officer revisions planned for Inscomm meeting Thursday

By Bill Samuels, UAP

The first reorganization proposal will be presented this Thursday night at an Inscomm meeting. It involves a minor change in the class officer system. This particular proposal is being discussed earlier than the other general and all-encompassing student government reorganization changes because it affects the Junior Prom elections which are usually held at this time of year.



The proposed changes would:
 1) Eliminate class vice presidents and sec-treasurers.

2) Eliminate the special election for Junior Prom.
 Under the new proposed system, each class president would have a class executive committee under him. These committees would vary with the class: Sophomore Executive Committee, 3; Junior Executive Committee, 6; Senior Executive Committee, 3. These committees would be elected at large.
 There are various advantages to this new system. First of all, there would be only one election period. There would be no need for a special Junior Prom election since the Junior Executive Committee would now be in

charge of JP. The JP election is usually held in December and it may be argued that the March class committee election will cause a time delay in the planning process. But as a former JP chairman, I can say that this extra time is not needed.
 Also, I feel that the change will put the job in the proper perspective. Being on the class committee has a different connotation than being class vice president. Another point is that many good men that run for top office and lose are left out of class government. This way we will be sure of getting the men the class wants most. The highest vote getters will be the men chosen.
 Also, this eliminates the problem of JP committeemen running later for class offices. Finally, the whole system is simpler. There is only one election period and only two offices for each class, president or Executive Committee.

Kibitzer

By Mark Bolotin

NORTH
 ♠ Q 2
 ♥ 10 9 8
 ♦ 10 9 8
 ♣ K Q J 10 9

WEST
 ♠ 6 4 3
 ♥ A K Q J 7
 ♦ 6 4
 ♣ 7 5 4

EAST
 ♠ 10 9
 ♥ 5 3
 ♦ Q J 7 5
 ♣ A 8 6 3 2

SOUTH
 ♠ A K J 8 7 5
 ♥ 6 4 2
 ♦ A K 3 2
 ♣ none

Both vulnerable, South dealer

South	West	North	East
1♠	Pass	1NT	Pass
3♠	Pass	4♣	Pass
4♦	Pass	4♠	Pass
Pass	Pass		

After some thought, East is able to deduce that South's 13th card must also be a heart. East knows that West knows how many hearts East has by his high-low signal, how many hearts are in dummy, how many hearts he himself has, and, therefore, how many hearts South has by simple arithmetic. However, if West knew that South was out of hearts, he would either switch to another suit or lead other than the Queen, probably the Jack, to tell his partner that South was void. Thus, declarer has one more heart.

Trump partner's trick

Now, East knows how to assure that the contract is set. As long as dummy has only one entry and as long as neither West nor East lead either minor suit, declarer can neither finesse diamonds nor set up clubs for two diamond discards. East should trump his partner's good Queen and lead back a spade! Then, he can sit back and wait for his eventual trick in diamonds.

Think it out

West leads his King of hearts, followed by the Ace, on which East completes his high-low signal, and continues with the Queen. Before playing to the third trick, East must remember to think. South is marked with six spades and four diamonds by his bidding sequence and has already played two small hearts.

The reason he must trump the heart is to keep his partner from making the wrong guess. Even though West should realize that he cannot lead a club or another heart, he has no way of knowing whether to lead spades or diamonds. If he guesses wrong, he finesesses his partner and gives declarer his needed trick.

Save A-Ball

It has been a source of considerable pride at MIT that an annual white-tie formal is held on campus. The Assemblies Ball has been a social event matched by few other colleges, even in the East. It would be a shame to see this tradition ended

Unfortunately A-Ball is in danger of being dropped this year unless someone comes to the rescue. A serious shortage of manpower — and consequently of funds — on the Walker staff, the traditional hosts, has made it all but impossible for that group to finance and run the ball by themselves.

This is a real opportunity for some student groups to move into action and offer their services. Inscomm might look into the feasibility of offering both services and funds and perhaps devising an invitation system to include all the leaders in campus activities.

There are a number of different possibilities now open: the ball could be included as an annual event under the student government reorganization; tickets might be sold; a set weekend might be chosen. But it is important to start work immediately for this year's presentation.

There are people on the Walker staff who have expressed a desire to see an A-Ball this year; the job need not be started from scratch. What is needed is someone to assume the responsibility and start organizing this year's ball now.

Footnotes

By Bill Byrn

6. The Constitutions division of Secretariat is currently reviewing constitutions of all activities, at the request of the Dean's Office. They are seeking: membership discriminatory clauses, possible affiliations with groups on the Attorney General's list, and irregularities in MIT status of officers.
 7. The faculty was not able to come to a vote during their November meeting on the Committee on Educational Policy recommendations about the core curriculum. Information about the content of the core courses did not reach faculty members soon enough for full discussion.
 In original form the motions would eliminate sophomore physics, sophomore math, and 5.02 from the General Institute Requirements. Students would take 8 humanities subjects, 3 science electives, and 1 lab elective. All students not in ROTC would take 6-hour engi-

neering elective during their first two years.
 The thesis requirement would become departmental.
 All prospects indicate a favorable vote on most measures on December 16. They will be first applied to next year's freshmen.
 8. Harvard has asked for \$1.5 million in NDEA loan funds for next year — but is actually hoping to receive only \$800,000. Wallace McDonald, director of their financial aid office, said that an important factor in determining the size of their grant was whether or not MIT applied for funds.
 The amount of NDEA grants depends on the number of students and schools in a geographic region. Harvard got \$350,000 this year; MIT got about \$650,000.
 An average of \$8 million is available for all of Massachusetts in each of the next 4 years.
 Surprise for Harvard: MIT has asked for almost \$1 million for next year's loans.



PEANUTS appears daily and Sunday in the Boston Herald.

Harvard starts drive to obtain \$11 million for science center

Harvard University has announced a drive to raise \$11 million for construction of a new undergraduate science center.

A vote of the Harvard faculty in October budgeted \$1 million from current funds for the center, which is expected to cost \$12 million.

Departments of Physics, Chemistry, Mathematics, Geology, Natural Sciences, Statistics, Biology, and Astronomy will be housed in 250,000 square feet of floor space.

Use of federal funds, which might come from the National Science Foundation or the National Institutes of Health, will be avoided, according to a dean of the Faculty of Arts and Sciences in a recent Harvard Crimson article.

Christmas Convocation scheduled for Kresge

Classes will be suspended from 11:00 am to 12:00 noon on Wednesday, December 16 while the annual Christmas Convocation for the faculty, staff and students is held in Kresge Auditorium.

Dr. George R. Harrison, Dean of the School of Science, Emeritus, will be the principal speaker according to Gerald Tomanek '67, chairman of the Convocation Sub-committee. Professor Victor H. Mattfeld will serve as organizer for the convocation.

There will be refreshments and caroling following the convocation.

MAC revision

Prof. Fano anticipates project changes

By John Blankinship

Project MAC, short for Machine Aided Cognition and Multiple Access Computer, is scheduled to undergo several revisions and improvements in the next few years.

Last week the new equipment and the multiple uses of the project were discussed; this week the actual types of changes are noted.

Regarding the future of Project MAC and the computer industry in general, it is Prof. Fano's belief that "every good thing must come to an end, or transform." He did say that MAC would be

around for a long time to come, but could not specify how long.

MAC presently operates on a three million dollar annual budget from the Advanced Research Projects Agency and is accordingly funded until August of 1966. Prof. Fano anticipates that in three to four years, systems programming will be chiefly a project for industry, whereas activities and applications will continue to be one for the university.

Probably nothing clears up as many questions and creates as many new ones as seeing MAC in operation. All communication between the operator and the computer is handled by the teletype machine.

To begin with, no operations can be carried on without first giving your name to the computer. You can either give your own name, if you are actually registered with the computer, or give someone else's name, inasmuch as the computer is certainly not going to know the difference.

The computer's reply is in effect, "Big deal. So your name is Fano, but what is the password?" No doubt many observers have been disappointed, finding that the printer is turned off automatically as the password is typed out.

Once the operator and the computer have come to terms, commands may be typed out on the teletype. Before and after each command, ready and wait signals are given by the computer.

The ready signal indicates the running and lost time of the immediately preceding operation and signifies that the computer is ready for another command. Once the command is given, the wait signal acknowledges the given

command and records its time, i.e., 0900.

As the signal implies, there is a brief lapse before the command is actually executed, due to other teletypes being used at the same time.

One particular series of operations proceeded as follows: The LISTF command was given which listed the operator's files and how long they were. Two files on twenty-one tracks were indicated.

The PRINTF PRIME MAD command was given which printed a twenty line MAD program for prime numbers. After a sequence of other commands the computer requested that the range be printed on two lines. Ten and thirty were printed and the prime numbers were immediately given as 11, 13, 17, 19, 23, and 29.

In another similar set of commands, the range was printed as (Please turn to page 5)

Princeton 'quad' named for Compton

Princeton University has honored three brothers, Karl Taylor Compton, Wilson Martindale Compton, and Arthur Holly Compton, by naming a new Quadrangle in the Princeton Graduate School the Compton Court.

Karl T. Compton was president of the Institute from 1930 to 1949. He received his doctorate from Princeton in the 1910's, as did his two brothers.

Mrs. Karl T. Compton was present at the dedication ceremonies.

Peace Corps test

The next Peace Corps placement test will be given Monday, December 7, at 3 pm.

It will be administered at the Brighton High School, 25 Warren St., Brighton.

Further information concerning this placement test is available at the Placement Office, 24-211.

Awards offered for lab projects in Course VI Open House display

Three \$25 prizes are being offered by electrical engineering student groups for the best student laboratory projects for Course VI display at Open House.

Projects offered for consideration should be electronic in nature, however competition will be open to students from all departments. There will be one \$25 prize

in each of three categories. One area of competition will be open to projects from 6.70, 6.71, and 6.342 laboratories.

The second group will consist of projects developing from 6.72 and 6.73 laboratories.

The last category will be open competition for all entries not covered by the above classifications.

This year's prizes are being offered jointly by Eta Kappa Nu and the electrical engineering Student-Faculty Committee.

Further information can be obtained from Dean Hubbard '65, at X3784.

IV-B hears Kates on 'Behavior insights'

Dr. Robert W. Kates, assistant professor of geography at Clark University, will address the Department of City and Regional Planning on 'Behavioral Insights into the Two Cultures of Planning' today at 8 pm in 7-403. The talk will draw on Kates' studies of land use in areas of natural hazard.

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Movie Schedule

ASTOR — 'Youngblood Hawke,' 1:00, 4:00, 6:30.
BEACON HILL — 'Topkapi,' 1:15, 3:30, 5:25, 7:30, 9:30.
BOSTON CINERAMA — Mediterranean Holidays, evenings 8:00, matinees Wed., 2:00 Sat. and Sun. 2:00 and 5:00.
BRATTLE — Through Saturday: 'The Devil Strikes at Night,' 5:30, 7:30, 9:30 daily, matinee Saturday at 3:30. Starting Sunday: 'Hallelujah the Hills,' plus 'Night and Fog,' 5:30, 7:30, 9:30 only.
CAPRI — 'Party Girl,' and 'The Candidate,' 2:00, 3:50, 5:45, 7:40, 9:35.
EXETER — 'The Finest Hours' 2:00, 3:50, 5:45, 7:35, 9:30.
GARY — 'Mary Poppins,' 9:00, 11:30, 2:00, 4:30, 7:30, 9:30.
KEITH MEMORIAL — 'Kitten With a Whip,' no times available.

HARVARD SQUARE — 'Lilith,' 1:45, 5:40, 9:35; 'Sunday in New York,' 3:45, 7:45. Sun.-Mon.-Tues.: 'The Pink Panther,' 1:45, 5:40, 9:35; 'The World of Henry Orient,' 3:45 and 7:45.
LOEW'S ORPHEUM — 'Good-bye Charlie,' 9:50, 12:15, 2:35, 4:55, 7:16, 9:30. Sun., 1:00, 3:05, 5:20, 7:30, 9:45.
PARAMOUNT — 'The Outrage' no times available.
PARIS CINEMA — 'Lili,' 2:00, 4:00, 6:00, 8:00, 10:00.
SAXON — 'My Fair Lady,' evenings 8:30, matinees Wed., Sat., and Sun., 2:00.
WEST END — 'Seduced and Abandoned,' 1:15, 3:15, 5:20, 7:20, 9:20.

Theatres

CHARLES PLAYHOUSE — 'The Rivals,' Tues.-Fri. 8:30, Sat., 6:30, 9:00. Sun., 3:00, 7:30.
HOTEL BOSTONIAN PLAYHOUSE — 'Him,' Tues.-Fri. 8:30, Sat., 6:00, 9:45, Sun., 5:00, 8:30.
SHUBERT — 'The Merry Widow,' 8:30 evenings, matinees Wed., Sat. 2:30.

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movies...

Wouk novel makes bad movie

by Jeff Stokes
 If you happen to like literature and have read Henry James' 'The Death of a Lion,' you have read, in capsule form, 'Youngblood Hawke.' A writer, beguiled from his hermitage by admirers and parasites, finds himself quickly robbed of the solitude upon which his art depends.

Unlike James, who set his novelle in the English countryside and more or less kept it there, Herman Wouk has decorated his work with every modern twist imaginable — literary critics, lawsuits, suicide, adultery, business. I suppose this fragrance makes Wouk best-seller material. Yet I had best not be too bold in generalizing about the author. The movie clearly does nothing to help sell the book. Wouk should never have let the hounds get hold of it. What might very well be a potential classic is hidden beneath the inevitable mascara called Hollywood film art.

Dripping with television cliches, the film roars out at you with the pseudo emotionality the public likes. If I were a businessman, as someone in the movie managed to point out through his Hollywood makeup, I should be delighted to find the mass paying its money to see it; actually, I should be just as delighted to find the public not paying a cent. But a movie is a one-shot affair: once you are taken you are taken. You walk out with the feeling that your brain has been overused, chewing the bad puns, feeling funny about the sex scenes, vowing never to read the book. Unconsciously, you blacklist the author for all time.

You don't realize that the movie and not the book is responsible for your stomach ache. The Hollywood style is disgustingly familiar. Picture those hot-blooded scenes where the hero, hearing for the first time the tragic news, begins to shake like an epileptic; his lips twitch, his jaw drops, his eyes widen so that you can see the blood veins. He drops the receiver to the floor and breaks out in tears. James Franciscus, who plays Youngblood, does it quite well. Then there are the 'cheated' women who start to saw away at each other and at everybody else

YOUNGBLOOD HAWKE, based on a novel by Herman Wouk; starring James Franciscus, Genevieve Page, Susanne Pleshette, and Mary Astor; now playing at the Astor Theatre.

compare with Susanne Pleshette, who plays the third corner of the triangle.

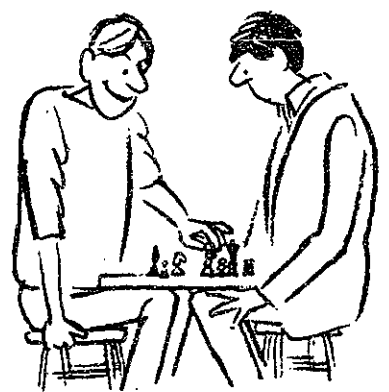
The book, for all I know, might be realistic and profound. Here and there in the film there are hints of an underlying unity to the work, unity which the director obviously doesn't care about. He wants to sell the movie.

On occasion Herman Wouk peeps through, and what he says, through the medium of his novel and in spite of the medium of the film, leads me to suggest that you read the book instead.

Were the Mitchell Trio tickets worth the black market price?



Photo by John Torode
 Opinions vary. But most of the audience reacted favorably to the Trio's songs and satires at the November 24 performance in Kresge Auditorium. Along with the usual folk songs, Mike Kobluk, Chad Mitchell, and Joe Frazier belted out their famous 'John Birch Society,' and the 'Twelve Days of Christmas,' a song inspired by the hero's welcome given certain released ex-Nazis.



1. Check and mate. How about another game?
 I'd like to, Fred, but I have to get set for a job interview.



2. Let's act it out. I'll be the boss. Try and sell me.
 Okay.



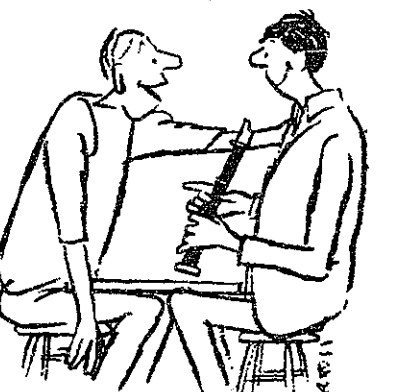
3. "Good morning, Mr. Fishwick."
 "Hi there, Freddie boy, buddy, old pal."



4. "Just give me the facts."
 "Well, sir, I took Quine's course in mathematical logic, got a B in Wittgenstein's linguistic analysis, and I'm a bug on 16th-century Flemish painting."



5. "You seem well rounded. What's your major?"
 "Musicology, cum laude. But I'm getting my M.A. in experimental psych."



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Gallery rooms fit the exhibits

By H. Meriden Wallingford
At the foot of Quincy Street stands one of the area's best little museums, the Busch-Reisinger Center for the Germanic Arts. It is small enough and convenient enough to qualify as a twenty-minute stop whenever there is time to kill in Harvard Square.

The most striking thing about the building is the careful attention to setting which all exhibits have received. For instance, the first major exhibition-space is a "Romanesque Gallery," a tall, barrel-vaulted room housing plaster casts of church statuary from that period. Like a church, the room lighted from windows high on the walls, so that instead of direct glare, a soft glowing light

filters everywhere. The room even sounds like a church, because the echoes from a stone floor rebound from bare walls and ceiling, and the statues themselves add to the effect.

Entrance to the next hall is through a plaster reproduction of a portal from the Cathedral of Freiberg, including a "Last Judgment" above the pediment. And to pass from this hall (the "Gothic Gallery"), one passes through a Rood Screen from Naumburg Cathedral, in which even the centuries of wear on the stone door-sill has been mimicked. Last in this procession is a room in the shape of an apse, dominated by a complicated altarpiece of carved, polychromed wood.

Everywhere, the architectural details of display have been considered in laying out the museum. The series of rooms displaying twentieth-century paintings, for instance, are much smaller than those already described, with lower ceilings (well, actually with higher floors), and blank pastel walls. The large "Renaissance Gallery" has wood floors, dampened with rugs, and a timbered ceiling which is almost an exhibit in itself.

The museum's collection, though small, is quite varied: ornate Gothic tankards, delicate, porcelain figurines, furniture, and polychrome woodcarvings both large and small; all in addition to the usual paintings and graphics.

The twentieth century German artists are fully represented here. The museum collection is especially rich in examples from Art Nouveau (called "Jugendstil" in paintings, prints, and publications from the "Brucke" and "Blau Reiter" groups, from the Bauhaus, and from practitioners of Art Nouveau... called "Jugendstil" in Germany. Usually, some of the museum's vast collection of works by the American-German Lyonel Feininger, including sketches, letters, and comic-strips, are on display.

The exhibit opening this season is a general survey of the museum's resources, as shown best in a large collection of recent acquisitions. Later shows, it is hoped, will continue a policy of clarity and thoroughness which has made every show informative as well as pleasant.

Operator and machine work with time-sharing plan for MAC studies

(Continued from page 3)

from 1000000 to 10000100 and the primes that instantly followed were 10000019 and 10000079. The LISTF command was again given and due to the two files just recently added, four files on twenty-three tracks were indicated.

The FILTER DESIGN command was next given, after which the operator answered questions presented by the computer regarding the circuitry around the filter. Oddly enough, when the word NO was purposely misspelled, the computer reproached PLEASE TYPE YES OR NO.

The solution finally given completely described the circuit qualitatively and quantitatively in terms of capacitors and inductors. In this case, the filter design program had already been on file in the memory core for some time.

The time lost in the computer was therefore relatively large

(almost four seconds), due to the time lost in the circuitry to and from the memory core. A long range objective of Project MAC is to reduce this lost time to practically nothing.

The operator finally deleted the two prime number operations from the files and the computer relisted the files as the original two files on twenty-one tracks.

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9:35; "The World of Henry
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13	14	15				

THIS WEEK

MUSIC
Chamber Music — New England Conservatory, Dec. 2, 8:30. Jordan Hall: Brahms' Trio in A minor for cello, clarinet and piano and Mozart's Quintet in A major for clarinet and strings; free.
Rudolf Serkin — Dec. 4. Symphony Hall, 8:30: Schumann's F-minor Sonata, Beethoven's A-major Sonata, Mendelssohn's Variations series, Brahms' Four Clavierstücke, Chopin's Barcarolle, Bolero; \$5.50, \$4.50, \$2.75.
Chapel Concerts — James M. Weaver, Maple Street Congregational Church, Danvers, Mass., Dec. 6, 4:00. free.
Hermann Frey — German Lieder singing, Jordan Hall, Dec. 6, 3:00 works of Schubert, Schumann, Wolf, Strauss.
Peter Nero — John Hancock Hall, Dec. 5, 8:30: \$4.50, \$3.95, \$3.50.
Igor Stravinsky — conducting some of his own works, Symphony Hall, Dec. 9.
Boston College University Choral — Dec. 6, Roberts Center, 8:00 Orff's Carmina Burana and Vivaldi's Gloria; \$2.00, \$1.00.
Trehonians Concert — Dec. 4, Kresge Auditorium.
Jackie Washington — Jordan Hall, Dec. 5, 8:30: \$3.50, \$2.50, \$2.20.
Chapel Organ Concert — James Weaver, Maple Street Congregational Church, Danvers, Mass., Dec. 6, 4:00; free.
Gardner Museum — Harvard Glee Club and Radcliffe Choral Society, Dec. 6, 3:00; free.
Cambridge Civic Symphony — Sanders Theatre, Dec. 7, 8:30: Dvorak's Othello Overture, Prokofiev's Romeo and Juliet, Shostakovich's Incidental Music to Hamlet, Tchaikovsky's Romeo and Juliet Overture.
Chamber Orchestra — New England Conservatory, Jordan Hall, Dec. 8, 8:30: Haydn's Symphony in D-minor, Henze's Apollo et Hyacinthus, and Mozart's Serenade for Thirteen Instruments; free.
LECTURES
Louis Untermyer — LEC Lecture.

Dec. 2, 8:00, 26-100; free.
Turn Toward Peace — Vietnam — A Time for Decision, Dec. 3, 8:00. Stebbins Audit., panel discussion.
Prof. Everett Mendelsohn — Harvard 'Problems of Disarmament,' Dec. 6, 8:00, International Student Association; free.
John M. Goddard — 'Borneo and the Philippines,' with pictures, Dec. 6, 4:00. Rindge Audit., free.
Ford Hall Forum — Ge. SLA Marshall, 'Hot and Cold Wars Around the World — from Israel to Viet Nam,' Jordan Hall, Dec. 6, 8:00; free.
THEATRE
Mozart's 'Così fan tutte' — Leveret House Opera Society, Leveret House Dining Room, Harvard, Dec. 2-3, 5-6, 8:30, \$1.75, \$2.25.
'Cock-A-Doyle Dandy' — by Sean O'Casey, Tufts Arena Theatre, Dec. 4-5, 10-12, 8:30; \$2.00, \$1.50, \$1.50.
Anouilh's 'Antigone' — Wellesley College, Alumnae Hall, 8:00, Dec. 4-5; \$1.50.
'The Face of War' — Brattle Theatre, Dec. 6, 3:00, \$5.00.
'The Firstborn' — by Christopher Fry, Chapel Players of Boston Dec. 4, 8:00, Dec. 6, 4:00, Old South Church, Copley Square.
'Finian's Rainbow' — Boston Conservatory, Dec. 3-5, 8:30, matinee Dec. 3, 2:30.
NEXT WEEK
MUSIC
Jeanne Greathouse — mezzo-soprano, Jordan Hall, Dec. 10, 8:30; works of Schubert, Schumann, Majler, Milhaud; free.
'The Messiah' — Handel and Haydn Society, Dec. 11 8:15, standard Version, Dec. 13, 2:30. Uncut \$4.00, \$3.50, \$3.00, \$2.50, \$2.00, \$1.50.
MIT Choral Society — Bach's Christmas Oratorio, in German with the Cambridge Festival Orchestra, Kresge Audit., Dec. 12, 8:30; \$1.50, \$2.50, \$4.00, \$3.50, \$2.50.
LECTURES
Ford Hall Forum — Edward J. Logue and Nor'on Long, 'The New Boston Look,' Jordan Hall, 8:00, Dec. 13.
THEATRE
MIT Dramashop — Dec. 9-12, Kresge Audit.
'The Beaux Stratagem' — by George Farquhar, Boston University Theatre, Dec. 10-12, 8:30.

ROTC honors three cadets for leadership, achievement

Three senior Army ROTC students received badges and certificates recently marking them as "distinguished military students."

Cadet Major James Dochnowski, Cadet Captain John Murray, and Cadet Captain Bernard Nordmann were cited for "displaying outstanding qualities of leadership, high moral character, noteworthy achievement and exceptional aptitude for military service."

The ceremony took place in the Armory, with Lt. Col. James Gililand, professor of military science, presenting.

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LECTURE SERIES COMMITTEE CALENDAR

<p>Contemporary Series</p> <p>CAT ON A HOT TIN ROOF</p> <p>Friday, Dec. 4 7:00 9:30</p> <p>26-100 50c</p>	<p>Entertainment Series</p> <p>THE WRECK OF THE MARY DEARE</p> <p>Saturday, Dec. 5 5:15 7:30 9:45</p> <p>26-100 50c</p>	<p>Classic Series</p> <p>ARSENIC AND OLD LACE</p> <p>Sunday, Dec. 6 8:00 10-250</p> <p>50 cents or subscription ticket</p>
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A Lecture by LOUIS UNTERMAYER
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Labs, text revised

New 5.01N course stresses theory

The Department of Chemistry's new experimental freshmen course, 5.01 N, is arousing interest in chemical theory among the 53 students enrolled, according to course director Professor William R. Moore.

With the Institute's academic methods changing the pilot course was designed to test a new approach to the core courses 5.01 and 5.02 and to deal in greater depth with the topics covered.

Much of the traditional empirical cataloging of elements and

their properties has been de-emphasized, and the instructors have planned to develop in detail the concepts of kinetic theory, crystal structure, and the theory of liquids as a base for later study in descriptive chemistry.

Professor Moore believes that, since high school courses are improving the freshman's preparation and ability to handle chemical arithmetic, the stress upon machinery and calculation can be kept at a minimum.

The new course stresses correct

operational techniques both in laboratory and in the use of theory in such traditional areas as chemical equilibrium. The laboratory for 5.01N has been a substantial revision of the 5.01 laboratory and has been conducted with higher precision equipment and different experiments. According to Professor Moore, these labs have proven very successful.

The course sequence 5.01N-5.02N was first proposed last June as a model one-year course. At present, it is given in three lectures, one recitation, and one lab per week. The textbook chosen has not been published yet but has been distributed in note form as a reference on lecture material.

According to Professor Moore, the course is designed on the level of the average student, and he feels that student performance so far has been from fair to excellent.

He hopes to bring to his students the fundamental chemical principles that emphasize chemistry as a logical discipline.

Thirsty Ear to open for grads; Oscar Brand to appear Dec. 5

By Bill Mack

Oscar Brand, the bawdy folk singer, will be the guest of the Thirsty Ear at its opening night, December 5.

The Thirsty Ear, the Graduate House pub, located in the basement buttry, had extensive re-decorative work done to prepare for its new opening. During the redecoration, a stage, curtains, a sound system, and acoustic baffles were added, and the lighting was changed.

Eventually it is hoped to get a new bar with what was termed "a beer first, coke second appearance" to replace the current, reversed situation.

Entertainment such as Carolyn Hester, the Blue Notes, the Argonauts, Pete Seeger, Peter, Paul & Mary, Joan Baez, and Judy Collins may appear in the future.

The pub, open every night of the week except Tuesday, will have activities every night. On Fridays and Saturdays, local and amateur bands and special big name entertainers are planned.

Open to graduate students of MIT, the Thirsty Ear will provide entertainment at lower than average prices.

Round Hill researches include Van de Graaff

(Continued from Page 1)

The apparatus measured the beat frequency of two maser beams propagated in perpendicular directions. As the earth moved, any small change in the distances traversed by the two waves could be precisely measured.

In 1932, a 2 million-volt Van de Graaff generator, 43 feet tall, was built at the blimp dock of Round Hill by Prof. Robert Van de Graaff. It was the first large generator; now obsolete, it is in the Boston Museum of Science.

After Lincoln Laboratory was established in 1950 the Round Hill facility was used by Jerome B. Wiesner, now Dean of Science, for work in scatter transmission of microwaves for long distance radio communication.

MIT workers will remain on the site until early next year.

WHAT'S NEW IN THE DECEMBER ATLANTIC?

"Why Europe Fears Us" by Raymond Aron: Misunderstandings regarding the use of nuclear weapons have led Western Europe and Russia to fear the United States and to doubt its sincerity.

"Are Movies Going to Pieces?" by Pauline Kael: A lively criticism of the New American Cinema where there is no plot, no sensible meaning, and no recognizable form.

"The New Sportswriter" by C. Michael Curtis: How sportswriters now use the scholarly approach with a touch of Freud and emphasize the motivation of players instead of straight reporting.

PLUS AN ATLANTIC EXTRA: Edwin O'Connor: "One Spring Morning": An 11,000 word preview of the author's new novel on which he is now at work.

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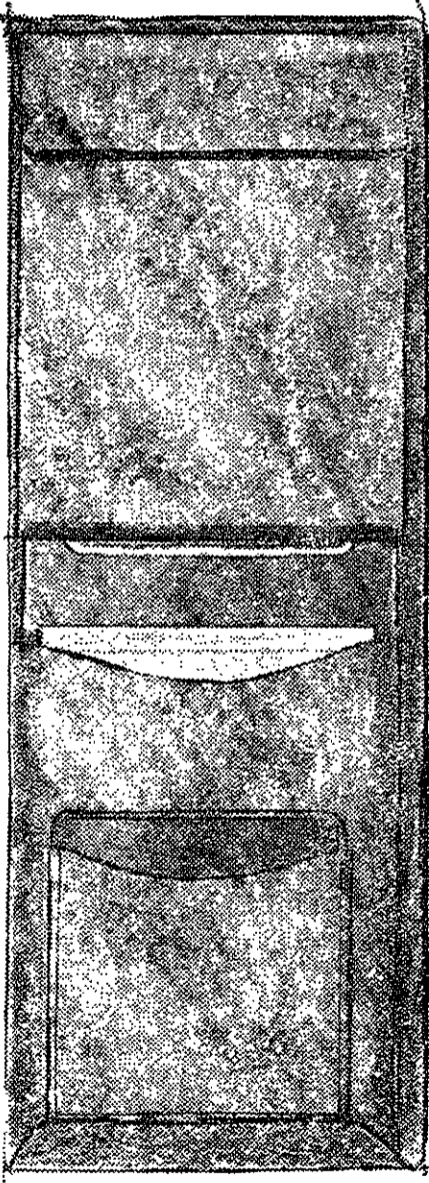
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Prof. Smullin at work on fusion; hot plasma produced in magnet lab

By Barry Mitnick
 What's the "biggest thing you can do with a laser?" Professor Louis D. Smullin of the Department of Electrical Engineering answered his own question some time ago by bouncing a laser beam off the moon. The experiment served as a confirmation of the inverse square law and the velocity of light. Perhaps not as spectacular, but certainly more fundamental, has been Professor Smullin's recent work on developing a method for attaining controlled nuclear fusion. Various methods of doing this are being worked on throughout the country.

The basic object of the work has been to create a very hot plasma which is entirely contained in some sort of evacuated tank. The plasma cannot be allowed to touch the walls of its container because of the tremendous differences in temperature involved. Powerful magnetic fields have generally been used to accomplish this, and so the problem has come down to one of developing feasible methods of injecting and heating the plasma.

One way in which this has been done has been to squirt accelerated ions into the magnetic field. The ions and their energy are trapped until the necessary conditions have been reached. Another method begins with a cold gas in the tank and uses a rapidly changing magnetic field to ionize the gas and inject the necessary energy.

Professor Smullin emphasizes that the "rule is that there has to be no hands" because the plasma is so "enormously hot." In Professor Smullin's work the gas is contained in a "magnetic bottle." A high-powered electron beam directed along the axis of the magnetic field ionizes the gas and delivers the huge amounts of energy needed.

The plasma is extremely tenuous, being of the order of a millionth of an atmosphere. The direct current of the electron beam is converted in the plasma to an oscillating one, as the result of the conversion of the beam energy to heat.

Professor Smullin is now working on his fourth "machine;" he has moved into the National Magnet Laboratory after outgrowing older facilities.

On the future of nuclear fusion, Professor Smullin says that, as with any new development, "people will have to learn what it's good for."

Present power sources will not be exhausted in the near future. Certainly, however, "it would find a place."

Frosh sports

Basketball team to open Saturday at Bowdoin

After nearly four weeks of getting into shape and working on both fundamentals and patterns, Coach Arnold Singal's freshman basketball team will open up its 1964-65 season with a game this Saturday against Bowdoin College. Three practice games were scheduled purposely against tough opponents such as Boston College and Salem Teachers College in order to be sure that the team would be ready once the regular season began. Although they were the weaker team in the games, the frosh showed good shooting potential and the ability to scrap for rebounds off the boards — two factors which are essential for winning basketball.

Nearly all of the players have had previous experience. Among them is 6'4" Dave Jansson from a high school which won the Wisconsin state basketball championship. Two 6'5" front court men, Alec Bash and Bill Chotkowsky, are expected to see a lot of action, giving the frosh an unusual amount of height. On the back line are 6'2" Dave Altmann, a fine shooter, and 5'10" Steve Derodeff, an excellent floor man.

Track

The freshman indoor track squad has good prospects for nearly every event but perhaps lacks the depth necessary to have an outstanding season. Steve Sydoriak has already proven himself to be an excellent pole vaulter, having vaulted over twelve feet.

Tom McGovern is a versatile runner, being a middle distance racer as well as a hurdler. The standout sprinter is Steve Silverstein, and Dan Hoban, who was a superb cross country runner this past fall, is the number one long distance man. The trackmen have their first meet against Bowdoin on Saturday.

Squash

The squash team had an extremely fine turnout of forty-five freshmen. Although their experience with the game is limited, their overall depth and enthusiasm make Coach James Taylor feel that this will be MIT's finest frosh squad team in several years. A great deal of practice time remains before their first match against Middlesex on January 7.

Swordsmen open Saturday

The MIT varsity fencing team begins its season this Saturday with an away meet Brandeis University.

While the team lacks the depth that it has had in previous years, the starting line-up shows considerable strength. The epee squad has improved over its already excellent condition of last year, having lost only Karl Kunz. Returning men on the epee team are Tom Seddon '66, Lee Stratton '67, and Bill DeBonte '65.

The foil squad seems to be in better shape than ever before,

returning Craig Wheeler '65 and Al Stottlemeyer '65, while George Churionoff '67 seems to have nailed down a varsity spot in his first year. Only the sabre team shows signs of weakness, possibly due to lack of experience. Likely candidates for the three varsity spots include Bob Silverstein '65, Mike Oppenheimer '65, Tom Krause '66, and Bill Murray '67.

The team opens its season unofficially tonight at duPont against the MIT Fencing Club composed of alumni, grad students and faculty.

Hockey team expects better year; Open against UMass Saturday

By Gerry Banner

Despite a lack of experienced seniors, varsity hockey coach Benjamin Martin, Jr. predicts considerable improvement over last year's winless season. Led by Co-capt. Hank Newall '65, the team is holding daily practices on the Briggs Field rink in preparation for their opening game against U. of Mass. on December 5 at Amherst.

Three front lines planned

Coach Martin plans for three lines this year to increase the depth of Tech's scoring punch. The first line will find Co-capt. Newall at center and Pete Catto '66 and Tony Pasquale '66 at the forwards. Warren Wood '66 will center the second line with Steve Shapiro '66 at one forward and Bob Percell '66 at the other. Sophomores Pete Getting, Bob Smith, Steve Queeney, and Bud Elmer will probably compose the third line.

Defense weak spot

Defense prospects are not as hopeful. However, with star defenseman and Co-capt. Scott Bluen '65 sidelined with mononucleosis for about half the season. Bill Kosiner '66 will have to assume the brunt of the defensive

work along with Fritz Schaefer '66 and Ralph Schmidt '66.

Last year's second string goalie, Bob MacDonald '66, will probably open the season in the nets. The team's success will depend largely on the improvement of its inexperienced defensemen in the early part of the schedule.

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Wrestlers lose 1 regular; look for return to the top

The MIT varsity wrestlers opened their season last night against Harvard on the Tech mats in hopes of getting a good start on what should prove to be a very fine season. The loss by graduation of only two lettermen and one regular leaves the squad practically intact.

Last year's team fell to a 6-7 record and 13th in the New Englands in what proved to be a good example of a building season. The loss of four outstanding wrestlers from the previous season dealt quite a blow to last year's season, but the squad should return to traditional form this year.

The only graduation loss of a regular was that of Captain Mike Williams, who went 12-0-1 at 157 pounds. A sprained ankle in the last week of the season prevented him from winning a nearly sure New England championship, however. There are returning regulars at every other spot, led by senior captain Bob Wells, a two-year letterman at 167 pounds. Other returning two-year lettermen are Tom McAuley at 123 and Don Fredrickson. Also returning with letters are 130 pound Hal Hultgren '66, 147 pound Marland Whiteman '66, and heavyweight John Butler '65.

But the big boon for the squad is the addition of several sophomores from last year's freshman team which went 6-4 and took third in the New Englands. Especially helpful will be freshman New England champ Bill Thilly, who will ably fill the vacant spot at 157 pounds. Also a sure winner for a varsity spot is undefeated freshman from New England champ Dave Schramm at 177. Sophomores Larry Silverman, Brook Landis and Al Landers also appear to be sure winners for varsity spots.

A recent vote by the New England Intercollegiate Wrestling Assn. has added the classes of 152 and 191 pounds to the list, thus expanding it to ten. This should serve to help the squad, since it is at these weights that the squad appears to be strongest.

Seven squash lettermen produce bright outlook for Tech racquet squad

The 1964-65 varsity squash season will begin on December fourth. The MIT Racketmen will play Pennsylvania in the afternoon and that evening drive to Dartmouth to play the next day.

This year the squash team should do well, with seven of last year's eight lettermen back. They are Ted Cruise, Captain Tom Guillermo, Don Ward, Ken Cooney, and Wayne Wilner, seniors, and Larry King and Alan Dinner, juniors. The team features depth and experience and should improve their win record considerably.

In the past, the squash team's record has not looked good because MIT competes with several of the top teams in the country, including Harvard, Yale, and Princeton. Last year, for example, despite a 3-9 record, the squad was ranked 11th in the nation, because their losses came against teams ranked in the top ten, indicative of the competition faced. However, this year the team is strong enough to beat some of these top teams. Watch for a victory over Dartmouth December 5.

Cage season depends on Sophs

With the loss of Jack Moter '64 and Bill Eagleson '64 by the graduation route, this year's varsity basketball team has two big offensive holes to plug. Both Moter and Eagleson scored over 400 points last season and led on the boards as the Engineers stormed to a 16-8 record. Eagleson also set a career scoring record of 1058 for his three years on the varsity. This one-two punch will be missed greatly this year.

The cagers traditionally set up the shots rather than play the fast break, hit and miss brand of basketball. Over the last three years, the varsity has averaged over 40% accuracy from the field. Due to last year's potent offense, they averaged 64 points a game to their opponents 56, and won their first five in a row. This year's team can run when they get the chance, but they can also play ball control when they need to protect a slim margin.

Sophs are the key

Coach Jack Berry is starting his sixth season here at MIT and has a record of 59-43 for a .579 win record. The outcome of this season is doubtful because of the lack of experience at the forward position. The Engineers must depend heavily on the sophomores, just off the best Freshman team ever. Last year they went 14-1, with the only loss being to basketball power Northeastern. Alex Wilson '67, 6-4, 207, and Bob Hardt '67, 187, and at 6-6 the tallest man on the floor head the candidates for forward. Wilson averaged over 22 points a game to lead the Frosh last year, and pulled down an average of 17 rebounds, also high. Hardt averaged 12 points and 10

rebounds. Greg Jerrell '67, 6-3, 190; Kevin Kinsella '67, 6-3, 175, and Jim Larsen '65, 6-3, 187 also will see action.

Grady most experienced

The three guard spots in the 3-2 offense should go to Captain Bob Grady '65, 6-0, 170; Jack Mazola '66, 6-1, 180; Frank Yin '65, 5-11, 160; or Roy Talus '67, 6-0, 170. John Flick '66, 6-0, 170 will also play guard. Grady averaged almost 15 points a game last year and owns the fifth highest scoring season at MIT — 356 points last season. He has showed good rebounding strength for a small man and is effective in a press, both of which will play a key role this season. He has the most experience of the starting five, as he has been on the varsity since he was a sophomore, starting the season opener. Mazola, in his second year as a starter has shown to be effective as a scrapper on the boards and also does a fine job on offense, as his 12 points a game average for last year shows. The other starting guard, Frank Yin, who has been plagued by knee trouble the last two seasons, is looking forward to a good year after his leg has shown signs of improvement. Talus, another sophomore, averaged 16 points a game on the freshman team and hustles a lot on defense, especially at the point position in the zone. Last year this hustle brought the team many baskets as he stole the ball and went on to score.

Mazola sprains ankle

With the backcourt the same as last year, the season hinges on the rebounding and defensive play of the forwards. At present, re-

Many records to fall

Swim team counts on experience

By Neal Gillman

The MIT swimming team, coached by Charles Batterman, opens its season this Saturday, Dec. 5, against Columbia. Losing only a small number of varsity lettermen, the team has returning

veterans who hold varsity and school records. Although Coach Batterman predicts that many new records will be set this season, his expectations for the team is little or no improvement over

last year's record of 7 wins and 7 losses. According to Coach Batterman, the team shows definite signs of improvement over last year's squad, but the cold fact is that every other New England team is also improving.

The host of returning record-holders are led by Dick St. Peters '65, who holds four individual records and shares in two relay records. He has two varsity marks in the 200 yard and 500 yard free with times of 1:58.9 and 5:39.6 and holds two 20 yard pool marks in these same two events. St. Peters also shares varsity records in the 400 yard medley relay, 3:59.3, and 400 yard freestyle relay, 3:36.0, both of which were set in the New England Intercollegiate Swimming Association Championships last year. Last year's captain, Bill Brody '65, has a varsity and 20 yard record in the 200 yard butterfly and 160 yard individual with times of 2:21.9 and 1:50.0 respectively. Captain Cash Peacock '65 and Frank Mechura '65 each set 20 yard pool marks in the 200 yard breaststroke at 2:30.0 and 200 yard backstroke at 2:19.4. These four, Mechura, Peacock, Brody and St. Peters, all share the 400 yard medley relay varsity record.

The two important newcomers this year are Sandy Blanchard '65 and Mike Crane '67. Blanchard, holder of the 100 yard freestyle with 52.8 seconds, is back this year after missing last year's season because of Co-op. Time will tell if his one year layoff has hurt him. Crane, who unofficially beat the varsity 50 yard freestyle last year as a freshman with a 23.5, will try again to emulate his unofficial record. Every event seems fairly strong, except diving. Suffering the loss of one of last year's divers, the team's remaining one, and a very good one at that, is Steve Snover '65. Snover rarely failed to gain a first place for the team during last year's season.

Eric Jensen '65 and Dick Breinlinger '66 will fill in for the other events. Jensen will most likely swim the 200 yard individual medley, 200 yard backstroke and 500 yard free. Breinlinger, sharer of the varsity 400 yard freestyle relay record, will serve as a 50 yard and 100 yard freestyle sprinter. The team's schedule will culminate at the NEISA Championships, this year to be held at the MIT Alumni Pool.

Intramural Results

Minor league basketball
ZBT 60, Grad Econ B 30
Nuclear Eng. 58, Grad House C 27
Bexley 45, Burton Fine Fifth 34
AEPi 35, PKS 26
DTD 50, PSK 27
Chem B 38, LCA B 27
DU 42, PSK 32
EC Monroe 79, PLP B 23
ATO B 42, Senior House C 20
Baker C 51, SPE C 30

IM Basketball

Grad Econ still on top

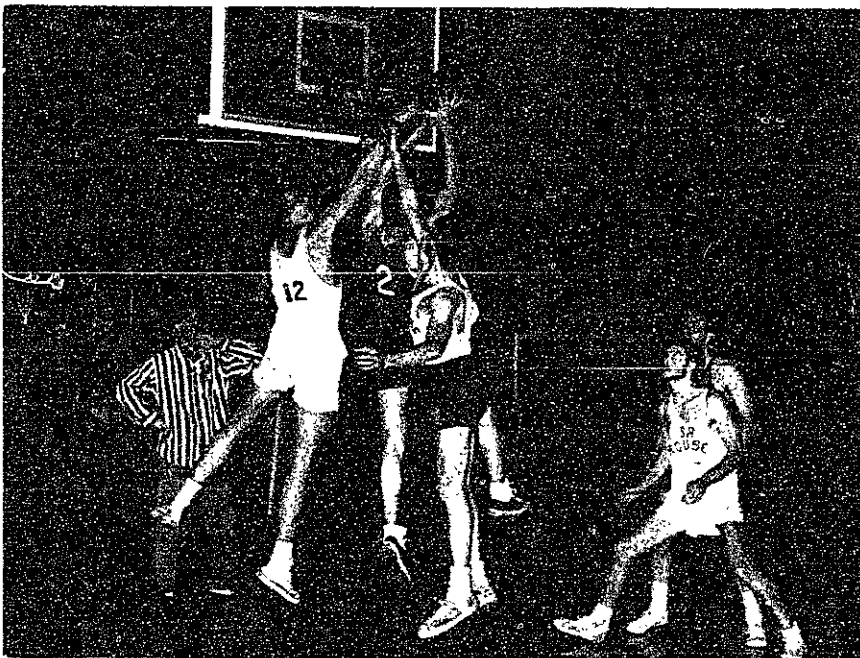


Photo by John Torode

Senior House players (l. to r.) Jim Weil '65, center, and forwards Bruce Morrison '65 and Paul Hoxie '67 defend against an unidentified Grad House player in IM action. Senior House won the contest by a 48-31 count.

By Russ Mosteller

Thanksgiving vacation limited Major League Intramural basketball action, but one of the games that was played was perhaps the most important game of the year. Undefeated Graduate Economics Association met undefeated Graduate Management Society, with Grad Econ emerging a 45-36 winner.

The Grad Econ-Grad Management game matched teams with similar styles of play against each other. Both own adequate offenses and outstanding defenses. Grad Econ's offense, led by Bill Whitelaw's 17 points, proved to be the better of the two and ultimately gave them the victory. Grad Econ is now the only team in the American League with a perfect record and seems to be in a good position to repeat last year's championship performance.

Senior House A picked up its third win of the season with a 48-31 victory over Grad House. The game was extremely close

throughout the first quarter. From that point on, however, Senior House's superior rebounding ability began to pay dividends, and they were in control throughout the rest of the game.

Burton A raised its record to 3-1 with a 47-32 conquest of Alpha Tau Omega A. A scoring triangle composed of John Hoffmeister '66 with 13 points, Jon Schafer '65 with 10 points, and Bill Petrick '65 with 10 points was the key to the Burton victory. The defeat left ATO with an unenviable 0-4 record.

The week's other game pitted Sigma Alpha Epsilon against Westgate. The Westgaters put up a much better battle than expected, but the end of the game saw them defeated, 41-34. Ted Nygreen '67 was once again SAE's top scorer and playmaker, while Jim Mahoney's 16-point contribution represented Westgate's outstanding individual effort.

Regular league play will continue for another two weeks, and all league championships should be decided by the time Christmas vacation rolls around. Unbeaten Political Science and Grad Economics seem to have the inside tracks in the major leagues, but the races are by no means over. The playoffs to determine final standings will start after vacation.

On Deck

Friday, December 4
Rifle (V) Wentworth, Here, 5:00 pm
Saturday, December 5
Basketball (V) Wesleyan, Away, 8:15 pm
Basketball (F) Bowdoin, Away, 8:15 pm
Hockey (V) UMass, at Amherst

Fencing (V) Brandeis, Away
Swimming (V) Columbia, Away
Track (V) Bowdoin, Away, 1:00 pm
Track (F) Bowdoin, Away, 1:00 pm
Tuesday, December 8
Basketball (V) Brandeis, Away, 8:15 pm
Swimming (F) Tufts, Home

bounding is the team's major problem, but as the season progresses, Wilson and Hardt will gain experience and hopefully the record will improve. Wilson and Hardt show scoring potential, but their defense still needs some work. Mazola sprained an ankle in a scrimmage against Maine and it is doubtful whether or not he will see action Saturday.

On the entire 19 game schedule, there are only two games that the cagers regularly win. Most of the rest are on pretty much of an even keel, promising some exciting contests. Then there are the tough ones. Every second year they play Harvard, always a rivalry, and last year they played Adelphi and Northeastern, the number one and two teams in the East. They only lost by 6 and 8 points respectively. This season Northeastern is back on the schedule, tough as always. Wesleyan, Saturday's opener, also looks strong. Brandeis and Trinity look like close games, but they both have the coveted home court advantage. The home season starts with Bowdoin on December 16.

1964-65 Schedule

December		
5	Wesleyan	Away 8:15 p.m.
8	Brandeis	Away 8:15 p.m.
12	Trinity	Away 8:15 p.m.
16	Bowdoin	Home 8:30 p.m.
January		
8	Colby	Home 8:15 p.m.
9	Bowdoin	Away 8:15 p.m.
11	Tufts	Away 8:15 p.m.
12	Lowell Tech	Home 8:15 p.m.
16	Iceland National	Home 8:15 p.m.
February		
3	Johns Hopkins	Away 8:15 p.m.
4	N.Y. State Maritime College	Away 8:00 p.m.
5	Merchant Marine	Away 8:00 p.m.
11	New Hampshire	Home 8:15 p.m.
13	W.P.I.	Away 8:30 p.m.
18	Northeastern	Home 8:15 p.m.
19	Coast Guard	Home 8:15 p.m.
20	Middlebury	Home 8:15 p.m.
26	Pratt	Home 8:15 p.m.
27	Bates	Home 8:15 p.m.

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