

Conspirators in Senior Week's "Liberation from the Institute" drive gird themselves for the pattle ahead. Entertainment featured above is rumored to be but a drop in the bucket compared to that awaiting graduating class.

Blasting off on the "Liberation from the Institute" theme, the festivities of Senior Week will begin with the Stag Banquet in Rockwell Cage and are scheduled to climax with a Formal Dance at the Sheraton-

The options for the departing seniors' activities will go on sale in building 10, starting Monday. Priced at five dollars, options will be sold from 10:30 to 2:30 Monday through Friday and will be redeemable for senior week tickets later in the term.

The first 200 option-holders who turn their options into block tickets will be admitted to all the senior week activities, including the Dixieland Jazz night at Storyville.

The night at Storyville will feature Buck Clayton, PeeWee Russell, and Vick Dickerson with the tickets allowing the first three liquid refreshments free

An option for the activities can be exchanged for any number of individual events of the senior week activities or a complete block ticket, which will cost twenty dollars. After the op-

tion sales are over, block tickets will cost twenty-two dollars and individual tickets to each activity will sell for four to six dollars depending on the event.

The Mystery Night promises to be a real liberation from MIT. The Senior Week Committee intends to spirit the class to some lonely spot where the mystery will be unveiled and the class can jubuilate far from the "grim grey pile."

Precedent was cast aside Wednes-

day night when an MIT honorary

elected non-Institute students to its

roster. In their spring election meet-

ing, the MIT Pi Kappa Chapter of

Pi Tau Sigma, the Course II honor-

ary society, chose eight Tufts Seniors

and eight MIT Juniors for member-

Scholastic Standings Show Higher Averages in Non-fraternity Groups

With Student House high and Women's Dorm low on the freshman scholastic totem pole, MIT's overall average based on February grades showed no great departure from that of past years.

Seven fraternities placed above the overall average of 3.4, as did three of the four dorms. Freshmen averages, as usual fell below that of the entire student body, but ranged far more widely.

Leading the living groups in general standings was Student House, with a 3.67 average. Close behind were Beta Theia Pi, 3.61, and Phi Kappa, 3.54. East Campus, Baker House and Burton House placed among the first ten, and Theta Chi was low with 3.03.

Delta Upsilon led the Freshman pack with a 3.71, besting Pi Lambda Phi which had a 3.70. Only two of the four dorms placed on the top ten among Freshmen living groups, Senior House with 3.56 and Baker House, 3.55.

The general average of non-fraternity groups, Institute-wide, was 3.43. The fraternity average placed below this mark at 3.283.

Precedence Goes: Pi Tau Sigma

Elects MIT And Tufts Students

The Freshmen general average, 3.451, bested the Institute mark by .08. However, fraternity Freshmen did not do as well as their brothers, their result, 3.244, falling short by .059.

Freshman Standings

r resuman Standings			
	Average		
	Term Rating		
Delta Upsilon	3.71		
Pi Lambda Phi	3.70		
Alpha Epislon Pi	3.67		
Alpha Tau Omega	3.63		
Senior House	3.56		
Baker House	3.55		
Sigma Nu	3.51		
M.I.T. Student House	3.50		
Theta Xi	3.487		
Phi Sigma Kappa	3.483		
East Campus	3.46		
General Average—			
Non-fraternity groups	3.451		
Phi Beta Epsilon	3.450		
Sigma Alpha Ensilon	3.43		

Student Productions Given this Evening in Little Theater

Survival of the fittest in a bomb shelter and the bewilderment of contemporary man: these are themes of two plays written by MIT students to be presented by Dramashop tonight.

"No Grass to Walk On," by Irv Rinard, portrays the struggles and emotions of a group in a bomb shelter, and is directed by Mike Padlipsky '60.

The second play of the evening, "Men Above, Men Beyond," by Jean Pierre Frankhenuis '61, focuses on the confusion of standards and ideals in the modern world. Jean Pierre will also direct his play.

Theatre-goers should plan to arrive at the Little Theatre by 8:30. Admission will be free, and refreshments are to be served.

Jean and Irv have written several plays for the Dramashop before; and Jean writes regularly for Brazilian

Phi Delta Theta	3.30
Dover Club	3.277
Beta Theta Pi	3.275
Theta Chi	3.266
Chi Phi	3.261
Theta Delta Chi	3.244
General Average—	
Fraternity groups	3.244
Fraternity groups ambda Chi Alpha	3.241
Cau Epsilon Phi	3.20
hi Kappa	3.18
Sigma Alpha Mu	3.16
Kappa Sigma	3.13
Sigma Chi	2.94
Phi Mu Delta	2.909
Delta Kappa Epsilon	2.906
Phi Kappa Sigma	2.89
Phi Gama Delta	2.84
Delta Tau Delta	2.81
Delta Psi	2.666
Freshman Women's Dorm	2.664
	4.004
General Standings	
I.I.T. Student House	3.67
Beta Theta Pi	3.61
Phi Kappa	3.54
Sigma_Chi	3.49
'heta Delta Chi	3.47
Alpha Epsilon Pi	3.468
Sigma Nu	3.460
last Campus	3.45
Baker House	3.448

Senior House 3.441 General Average-Non-fraternity groups Pi Lambda Phi 3.43 Burton House 3.39Phi Kappa Sigma 3.37Sigma Alpha Mu
Dover Club
Delta Upsilon
Bexley Hall—Women's Dorm
(Soph., Jr., & Sr. only)
Phi Sigma Kappa
General Average—
Engloyees 3.3484 3.342Fraternity groups Alpha Tau Omega 3.2833.268 Sigma Alpha Epsilon 3.265 $\frac{3.24}{3.227}$ Delta Tau Delta

 Belta Tal Belta
 3.22

 Phi Delta Theta
 3.22

 Lambda Chi Alpha
 3.22

 Tau Epsilon Phi
 3.20

 Sigma Phi Epsilon
 3.20

 Sigma Phi Epsilon
 3.18

 Kappa Sigma
 3.18

 Delta Kappa Epsilon
 3.15

 Phi Mu Delta
 3.00

 Chi Phi
 3.09

 Phi Gamma Delta
 3.07

 Delta Psi
 3.04

 Theta Chi
 3.03

 General Average—

All undergraduates

Ambassador from State of Israel

To Talk in Kresge Next Thursday

Machine-Grading of Tests Might be Used in Math

Machine-graded tests are on their way to MIT. According to Dr. Richard Franklin, of the math dept., after a somewhat successful experiment this semester in course M12 where three parts of a recent hour quiz were multiple-choice questions, serious consideration is being given to the generalization of the system in the next couple of years, provided the facilities become available.

How come this change-over? The math department is becoming crowded. It seems that the latest technological feats have awakened a strong desire — not only at MIT but all over the country — in mathematics. However it is not that more freshmen now major in mathematics,

Athletic Association Wants Frosh, Sophs To Work Publicity

Positions are now open on the publicity division of the MIT Athletic Association to members of the freshman and sophomore classes.

Work involved will be that of increasing interest, both spectator and participant, in intercollegiate and intramural athletics. Persons with experience in publicity, writing, and athletics are invited to contact Gene W. Ruoff '61, recently elected AA Publicity Director, at ext. 3206 or CI 7-8691 for information and to arrange for interviews. This should be done within the coming week.

but that a greater number of upperclassmen — because of a demand in industry — are now interested in having more math training. This has boosted the number of students in class, thus making more jobs for the already overworked professors. Up to now the exams were subjec-

tive, and the professors with a little bit of goodwill and sacrifice of coffee-breaks managed to get the grades in on time. But now it seems the picture is changing and the profs will have great difficulty in making the deadline. So to avoid bottlenecks and complaints from the administration, the Math department thought it could afford to experiment.

Results? According to Dr. Franklin, even though students did not
care for the system very much, the
faculty thought the results very satisfactory. On the average, the one
part complemented the other, and
gave a more uniformity in grades,
than previous exams did. As for the
students complaints that the loss of
part-credit was a bad thing, Dr.
Franklin observed that with the multiple choice system more questions can
be added to make up this deficiency.

Personally, Dr. Franklin is more optimistic about the whole deal than he was fifteen years ago when it was proposed that entrance examinations be changed over to the multiple choice system. He recalls that then he was dead-set against them. But now, he says with a smile, after the success of the entrance examination program he feels very optimistic about the future of the system.

(Continued on page 4)

The move came as a result of a petition recently sent to the National Council of Pi Tau Sigma requesting a charter for a chapter on the Tufts campus. Inasmuch as there were no undergraduate members of the fraternity at that school, the MIT Chapter chose eight seniors to be the nucleus of the new group if and when the charter is granted. Emil A. Battat '59, president of the MIT group, hopes that in doing so, "the Pi Kappa Chapter has thus made a step forward towards the promotion of better understanding and closer cooperation among the students of MIT and neighboring schools."

The Juniors elected from MIT were:
Charles R. Conn II Robert L. Shelton
Edward J. Hyann
Charles A. Negin
Robert H. Plause
Christopher D. Witze

The Tufts Seniors elected were:

Clark R. Baker
Carl W. Bengtson
Richard A. Sederquist
Henry W. Brandli
David F. Doyle
Chester F. Young

The MIT men represent the top 25 percent of their class, while the Tufts students are in the top 20 percent of theirs. Election was based not only upon scholarship, but also on the basis of sound engineering ability, personality, and extra-curricular activities.

Nautical Activities Begin This Month

The MIT Nautical Association will kick off its 1959 season with an election of officers at a general meeting next Thursday, with the Sailing Pavilion scheduled to open on March 30.

Next week's meeting, to be high-lighted by a showing of films from the America's Cup Races taken by Mr. Jack Wood, MIT's Sailing Master, is open to all current members of the Nautical Association and any interested members of the MIT Community. Only regular members will be allowed to vote in the officers' election or constitutional changes under consideration. The meeting is scheduled for 5 p.m. in room 2-390.

Shore School, a function of the Association, will be held in room 2-390 beginning Monday, April 6 and will avail all new comers to the sport of sailing a chance of learning the fundamentals without seeing water

The Ambassador of the State of Israel to the United States and chief Israel delegate to the United Nations the Abba Eban will speak in Kresge Auditorium at 5:05 P.M. Thursday, point March 26. Presented by the Lecture Series Committee the ambassador will deliver an address entitled "Science and Statesmanship — The Challenge tall

Mr. Eban, now 43 years old, appeared before the Political Committee of the United Nations General Assembly in the spring of 1949 to plead for Israel's admission to the United Na-

in the Middle East," to which admis-

sion will be free.



ABBA EBAN

tions. On Israel's admission he became Permanent Representative of Israel to the United Nations. In September 1950, at the age of 35, he was appointed Israel Ambassador in Wash-

At Cambridge University, England, Mr. Eban specialized in Oriental languages. He was later appointed to the Cambridge faculty as an authority on Hebrew, Arabic and Persian lierature.

During World War Two Mr. Eban served as Liaison Officer of Allied Headquarters with the Jewish population. His task was to secure the participation of Jewish volunteers in special missions for the Allies. Later he became Chief Instructor at the Middle East Arab Center in Jerusalem. During this period he travelled widely in the countries of the Near East, lecturing in Hebrew and Arabic to Jewish and Arab audiences and contributing in those languages to learned journals.

Remaining in Jerusalem after the war, Mr. Eban served with the Jewish Agency. He participated in the staff of the delegation which secured the vote of the United Nations General Assembly in favor of establishing the State of Israel. After establishment of the State in May 1948, Mr. Eban was appointed Israel's Representative in the United Nations, one of the posts he now holds.

Mr. Eban has received honorary degrees from Boston University, the Jewish Theological Seminary, and the University of Maryland.



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a fable

We received an interesting letter recently concerning our comments on the MIT chapel. The letter recounts a story from times long past and was written by Mr. Paul Chalmers, Associate Director of Admissions.

To the Editor:

I have just chanced across an ancient fable which may interest some of your readers.

"Once upon a time in a far country, the people, after many years of thinking and talking and experimenting, agreed on a set of ideas and ideals, which they called a religion. This embodied for them their deepest wisdom and their noblest aspirations. Over the years it was natural that from time to time, groups of the people should meet together to re-examine their ideas and to re-affirm their ideals. Gradually it came to be thought proper that a special building should be set aside for these religious meetings.

"It required several centuries for this religious building to acquire a definitive form. This was largely an unconscious process. The form evolved was that of a cylinder, simple, plain, and unadorned. After its general acceptance, it came to symbolize many things about the people's religion, its strength, its purity, its simplicity. It was hard to remember which came first, the form or the ideas.

"A small community in that country decided to build a religious meeting-house and asked an architect to take a fresh look at the problem, and to design a structure, at once suitable, beautiful, and practical. His building was in the shape of a rectangular box with sharply-pitched roof, surmounted at one end by a rather ornate steeple. This, he alleged, symbolized for him the four-square, solid strength, and the up-reaching aspirations of religion.

"The result could have been foreseen. Most of the people were naturally outraged. The architect's 'reasons' were obvious rationalizations to conceal an effort simply to do something different. Letters to the Editor were written. Writers soon discovered that the most effective criticism consisted in finding a short-hand label that would identify the new building with an object of low repute. It was called 'the dog-kennel with a steeple'. This was enough to convince most people that the new building lacked the beauty of the cylindrical meeting-house which had come to mean so much to them."

Paul M. Chalmers

profile

Dr. Charles Stark Draper

Every day about noon it is not an uncommon sight to see a short, stocky professor hurrying down the steps of Building 33, crossing Vassar Street, and determinedly entering MIT's famed Instrumentation Laboratory. The professor is Dr. Charles Stark Draper, and his walk takes him from his position as Head of the Department of Aeronautical and Astronautical Engineering to his position as Director of the Instrumentation Laboratory. His morning is usually filled with the conferences and administrative decisions that are part and parcel of the work load of the head of an academic department. Once Dr. Draper reaches his fourth floor Instrumentation Laboratory office though, he hurriedly removes his tie, reaches for his green draftsman's visor, and gets right down to work. From then on until sometimes very early in the morning, Dr. Draper's pugnacious enthusiasm envelopes the attitude of the entire laboratory staff of 738, pushing them forward to meet the stringent specifications which today's technology requires.

Dr. Draper's first acquaintaince with MIT occurred quite by accident. He had just received his A.B. degree in psychology from Stanford University and decided to travel eastward with a friend who was going to study at Harvard. His eyes wandered down the river a bit and soon he found himself taking courses at the Institute to justify his staying in Cambridge. Electrochemistry was Dr. Draper's first course of study, although he could never really be restricted to just one course. In fact, Dr. Draper has a legitimate claim to the title of MIT's original "whole man." Popular opinion has it that Dr. Draper took more courses for credit than anyone else in MIT's history. Scornful of specialization, he took courses in mathematics, chemistry, physics, metallurgy, and aeronautical engineering. After studying for 22 years, Dr. Draper got his last degree, a Doctor of Science in Physics.

During his years of study at MIT, Dr. Draper was dissatisfied with the available instruments used to measure the performance of engines, so he developed better ones. Instruments again aroused the curiosity of Dr. Draper in 1929, while he was serving as a second lieutenant in the United States fledgling Air Corps. After returning to MIT the professor laid the groundwork in 1934 for what was to develop into the Instrumentation Laboratory of today. Under his direction Dr. Walter Wrigley, then a graduate student and now educational director of the Instrumentation Laboratory, began work on a thesis on inertial guidance in 1938. Out of this work and later research sponsored by the Sperry Gyroscope Company developed the Mark 15 gunsight, badly needed by the Navy at the time to deal with Japan's speedy fighters. In 1942, the first time it was used in battle, the gunsight enabled the U.S.S. South Dakota to shoot down 32 Japanese kamikazes, an unprecedented anti-aircraft record. Dr. Draper's work on improved models of the gunsight continued, and, during the Korean War, his A-4 gunsight enabled our Sabrejets to establish a 14-1 kill ratio against the Russian MIG-15, which was superior in many other respects. As the complexity of Dr. Draper's instruments grew, so did his Instrumentation Laboratory staff. At the present time his staff of 738 is engaged in developing a highly sophisticated inertial guidance system for Polaris, the ballistic missile designed to be launched underwater from submarines.

Although the Instrumentation Laboratory has produced all these guidance systems, Dr. Draper feels that the laboratory has played an equally important role as an educational institution. He points out that his staff includes 6 professors and 110 students from several courses. It is the impetus of the Instrumentation Laboratory, according to Dr. Draper, which has caused many new courses to be added to the aeronautical engineering curriculum. Courses in inertial guidance and weapons system analysis are just two examples. The weapons system concept, which originated at the Instrumentation Laboratory, exemplifies the approach which Dr. Draper feels modern engineering and engineering education must have to meet their latest and most critical challenge. As Dr. Draper outlined in a recent speech at Harvard University:

"New ways of organizing the country's resources in science, engineering, and materials have been required in the struggle to hold the position of our country in its technical competition with Russia . . . Technical education must be adapted to provide the additional coverage of science and mathematics needed for space technology without neglecting any of the information that remains essential for a well-rounded engineer."

The doctor's choice of automobiles is not quite as advanced as the guidance systems he is developing, however. His 18 year old green Mercury still serves as the faithful family chariot, though, asserts Dr. Draper. After the completion of the usual afternoon bull-ession in his Instrumentation Laboratory office, the professor his Mercury to his Victorian home in Newton and finally gets to see his wife and four children. Dr. Draper also has a farm in his home state of Missouri, but admits that his program allows little time for him and his family to enjoy their farm retreat. When asked whether his children shared their father's curiosity and enthusiasm, Dr. Draper only replied that his son Jim was enrolled as a freshman at MIT in aeronautical engineering.

Dr. Draper has received countless awards and citations for his outstanding work. While being presented with one of these many decorations, Dr. Draper's only comment was, "If I contributed anything, it was in being stubborn."

—Henry R. Piehler '60

half notes

This year is the tercentenary of the birth of Henry Purcell and, in celebration, many musical organizations throughout the world are performing his works. Tomorrow evening the Glee Clubs of MIT and Mount Holyoke, accompanied by our concert orchestra, will join forces to present a performance of Purcell's "Fairy Queen" in Kresge at 8:30 P.M.

This concert is being given because of the tremendous response to the Choral Society's performance in December. "Fairy Queen," an anonymous adaptation of Shakespeare's A Midsummer Night's Dream, is abounding in humor. In addition to the choral passages, there are numerous arias, duets and trios which will be performed by notable professional artists, not to mention the jocular Baroque orchestra music.

This is a concert not to miss. Tickets are available in Baroque orchestral music.

Ernst Levy — composer, pianist, professor of music, and East Campu faculty resident — will give a recital on Sunday at 3:00 P.M. in Kresge. The is the conclusion of the 1958-59 Humanities Series.

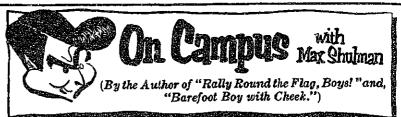
His program is as follows:

F0	
Ballad in B minor	Lizt
Sonata in F minor, op. 57 ("Appassionata")	Beethoven
Sonata No. 38 in D major	
Sonata No. 8 in A flat minor	
Variations and Fugue on a Theme	
by Handel, op. 24	

Professor Levy is a native of Basle, Switzerland, where he attended the Conservatory and the University. He first taught piano at the Basle Conservatory; later in Paris he founded and conducted the outstanding Philharmonique. He came to this country in 1939, and from 1941 until 1945 taught at the New England Conservatory. He also taught at Bennington College and the University of Chicago before coming to MIT in 1954.

Throughout his career Professor Levy has combined composition with teaching and performing. He has written thirteen symphonies, a cello concerto, works for organ, chamber music, piano music, and an operetta buffa. His eleventh symphony received the Fromm Music Foundation Award, and under the same sponsorship seven piano pieces have been published. He has made three records of Beethoven's piano sonatas, and has given concerts both in this area and other parts of the United States.

—Kent Kresa '59
—Tom Farquhar '60



HUSBANDS, ANYONE?

It has been alleged that coeds go to college for the sole purpose of finding husbands. This is, of course, an infamous canard, and I give fair warning that, small and spongy as I am, anybody who says such a dastardly thing when I am around had better be prepared for a sound thrashing!

Girls go to college for precisely the same reasons as men do: to broaden their horizons, to lengthen their vistas, to drink at the fount of wisdom. But if, by pure chance, while a girl is engaged in these meritorious pursuits, a likely looking husband should pop into view, why, what's wrong with that? Eh? What's wrong with that?

The question now arises, what should a girl look for in a husband? A great deal has been written on this subject. Some say character is most important, some say background, some say appearance, some say education. All are wrong.

The most important thing—bar none—in a husband is health. Though he be handsome as Apollo and rich as Croesus, what good is he if he just lies around all day accumulating bedsores?



The very first thing to do upon meeting a man is to make sure he is sound of wind and limb. Before he has a chance to sweet-talk you, slap a thermometer in his mouth, roll back his eyelids, yank out his tongue, rap his patella, palpate his thorax, ask him to straighten out a horseshoe with his teeth. If he fails these simple tests, phone for an ambulance and go on to the next prospect.

If, however, he turns out to be physically fit, proceed to the second most important requirement in a husband. I refer to a sense of humor.

A man who can't take a joke is a man to be avoided. There are several simple tests to find out whether your prospect can take a joke or not. You can, for example, slash his tires. Or burn his "Mad" comics. Or steal his switchblade. Or turn loose his pet raccoon. Or shave his head.

After each of these good-natured pranks, laugh gaily and shout "April Fool!" If he replies, "But this is February nineteenth," or something equally churlish, cross him off your list and give thanks you found out in time.

But if he laughs silverly and calls you "Little minx!" put him to the next test. Find out whether he is kindly.

The quickest way to ascertain his kindliness is, of course, to look at the cigarette he smokes. Is it mild? Is it clement? Is it humane? Does it minister tenderly to the psyche? Does it coddle the synapses? Is it a good companion? Is it genial? Is it bright and friendly and full of dulcet pleasure from cockerow till the heart of darkness?

Is it, in short, Philip Morris?

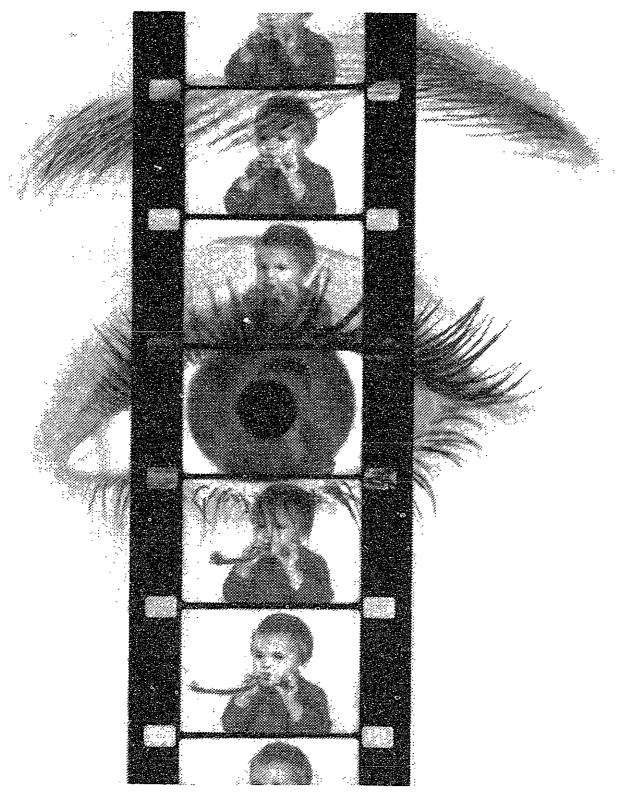
If Philip Morris it be, then clasp the man to your bosom with hoops of steel, for you may be sure that he is kindly as a summer breeze, kindly as a mother's kiss, kindly to his very marrow.

And now, having found a man who is kindly and healthy and blessed with a sense of humor, the only thing that remains is to make sure he will always earn a handsome living. That, fortunately, is easy. Just enroll him in engineering. © 1959, Max Shulman

For filter smokers the Philip Morris Company makes Marlboro, the cigarette with better "makin's." New improved filter and good rich flavor. Soft pack or flip-top box. A lot to like!

ESSO RESEARCH works wonders with oil

Oil helps preserve today for tomorrow



The high points in life keep their warmth in movies made at home. Baby's first bath . . . first step . . . first birthday party—and all the other firsts to come. They're captured for keeping on safety film made with an oil-based chemical. Esso Research helped provide the process for making this important chemical directly from oil. In film, as in fuel, ESSO RESEARCH works wonders with oil

Dr. George Sutton Speaks on Space Propulsion Methods

Ion rockets, magneto-plasma rockets, solar heating rockets, radioactive isotope decay rockets — these were some of the exotic new methods for propelling future interplanetary space vehicles discussed Wednesday by Dr. George Sutton of MIT at Kreege Auditorium.

Little known today outside research laboratories, the methods are among those that will replace or supplement the presently known liquid and solid propellant rockets for interplanetary flight, Prof. Sutton explained in delivering the fourth annual Minta Martin Lecture.

Emphasizing that new propulsion systems are needed before actual interplanetary travel is practical, Prof. Sutton said: "The use of different materials, novel propulsion concepts, new fabrication techniques, or new failure detection methods, will result in engines that will look very different compared to present day devices."

Prof. Sutton came to M.I.T. last summer from the position of Manager of the Advance Design Section at North American Aviation's Rocketdyne Division. He will become Chief Scientist of the Advance Research Projects Agency of the Department of Defense next May. One of the nation's leading experts on rocket propulsion, he has served this year as Jerome Clarke Hunsaker Professor of Aeronautical Engineering in M.I.T's Department of Aeronautics and Astronautics.

In his lecture, titled "Rocket Propulsion Systems for Interplanetary Flight," Prof. Sutton furnished a detailed explanation of both current propulsion systems and more sophisticated systems on which research has just started.

Liquid and solid propellant rocket engines, similar in principle to those used to boost such giant missiles as Atlas, Thor and Titan from Cape Canaveral, Fla., were compared with future systems that involve nuclear, electrical and solar energy devices.

Prof. Sutton's conclusions: Much more research and development is needed before man can safely and accurately propel vehicles through the outer reaches of space and assure himself of getting where he wants to go, and back. Present chemical rocket engines are adequate for flights to Venus and Mars, but are not suffi-

(Continued on page 4)

Do You Think for Yourself 2 (ANSWER THESE QUESTIONS) AND YOU'LL FIND OUT!*



 If you get stuck on a crossword puzzle, do you (A) finally refer to a dictionary, or (B) leave the puzzle unfinished?



5. Would you prefer to play tennis with an opponent you know to be (A) not quite so good as you, or (B) a slightly better player?





2. Would you rather be (A) the designer of the first successful space vehicle to the moon, or (B) the first man to ride in it?



6. In deciding whether to see a movie, are you more influenced by (A) what

a casual friend tells you about it, or (B) what you know of the cast and story?





3. If you were faced with two tasks, one pleasant and the other unpleasant, would you first do (A) the unpleasant task, or (B) the pleasant task?



В

7. If you were a multimillionaire, would you rather have (A) everyone know it, or (B) only a very few know it?

A	8	



4. If you find you aren't doing well in an activity, do you (A) concentrate on it to improve your performance, or (B) devote your attention to things in which you do excel?



8. Do you take more notice of someone's (A) good looks, or (B) good manners?



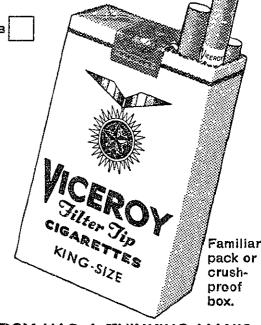


9. When making your choice of a filter cigarette, do you (A) act on the basis of what someone tells you, or (B) think it through for yourself?

If you're the kind of person who thinks for yourself... you use judgment in your choice of cigarettes, as in everything else. Men and women who think for themselves usually smoke VICEROY. Their reason? Best in the world. They know that only VICEROY has a thinking man's filter and a smoking man's taste.

*If you checked (A) on three out of the first four questions, and (B) on four out of the last five . . . you really think for yourself!

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The Man Who Thinks for Himself Knows — only viceroy has a thinking man's taste!

MATH

(Continued from page 1) However Dr. M. W. P. Strandberg of the Physics department, and author of "Design of Examinations and Interpretation of Grades," when questioned about the above statement of Prof. Franklin, was not quite sure that the entrance examinations proved anything, if at all successful. "They mean a lot to the administration" he said "but not much to the Students."

Dr. Strandberg feels that the exam is there to help the student as much as it helps the professor. He said that as far as he is concerned, for singlelogical step questions the multiple choice system pays well. But for the multiple-logical step, the system breaks down.

SUTTON

(Continued from page 5)

ciently energetic to perimt a landing on Jupiter. For deep penetration into space a nuclear or electric type of rocket will be essential.

"All the various systems seem to offer some growth potential in improved performance, efficiency, lower engine weights, or thrust," Prof. Sutton said. "But the real need seems to be for a simple lightweight high energy source to replace an air-borne nuclear reactor. Because of the complexity and development difficulty of some of these devices, it will be a long time before they become sufficiently reliable to fly."

Ultimately, Prof. Sutton believes,

a combination of several propulsion engines will be used on the same vehicle to assure maximum performance in interplanetary flight.

"Each engine will be designed to fulfill one or more specific interplanetary maneuvers in the best possible way," the 38-year-old professor said. "Standard interplanetary stages will be designed and modified slightly for different missions. For the same basic weight in an earth orbit, the electrical systems will be capable of carrying the most payload (chemical systems will carry the least) to a given interplanetary target. For the long range outlook, they (ion and magneto plasma propulsion) are the most attractive in performance."

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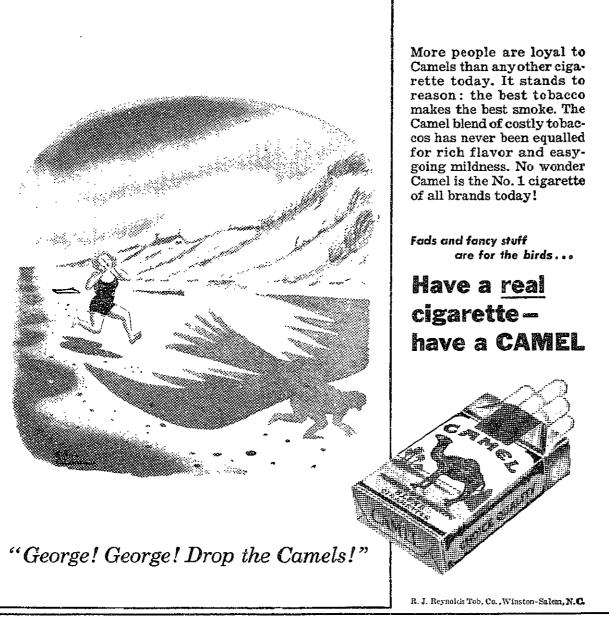
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MIT Skiers Close Season This Weekend Dartmouth Crew Riflemen Lose to NE Compete In Amherst Slalom At Hanover

The successful varsity skiing team, now noted for its bearded trademark, will make its final competitive appearance of the season this weekend in the Amherst Giant Slalom at Hanover, N. H.

Growing beards as a symbol of team unity and desire, the Techmen have parlayed this, together with a rugged "off snow" training program, into three consecutive victories in the New England Intercollegiate Ski Conference.

Coach Bob Shoemaker, Air Force Captain in the Dep't. of Air Force Science, inaugurated this training program due to lack of snow in the Boston area. He had the squad doing calisthenics in the Armory and skating on the rink.

An International Team

There is quite an international flavor to the ski team, coupled with much skiing experience. Team Cap't. Knut Hauge '59, who inspired the bearded motif, is from Oslo, Norway. He has quite an impressive skiing background. Peter Goldstein '62 has spent seven years in the Austrian ski country. His home is in New Zealand. Roberto Peccei '62 is from Rome, Italy. He has earned his Gold Medal in Switzerland skiing and has also won junior races in that competition. Giogio Emo '62 is another member of the team that makes his home in Rome, Italy. He holds a Gold Medal together with high junior ranking. Jens Jorgenson '59, who makes his home in Oslo, Norway has had considerable experience in skiing.

Peter Stadler Stars

The star of the team in the recent victory of the Walter Foley Memorial Trophy at Killington Basin, Vt. was Peter Stadler '59 of Frederick, Md. Coach Shoemaker fired up Stadler by hinting of a demotion to the "B" team. So Pete, who learned his skiing in Switzerland, took the hint and promptly went on to win the slalom event on Saturday, and he then finished third in the downhill Sunday to capture the combined title. Another American boy who has been prominent in the team's success is Harry Peterson '59 of Highland Park, Michigan.

Off to a Slow Start

The boardmen started their season slowly, gaining only fifth place in the Brown Giant Slalom which opened the campaign on January 24. However in the Asa Osborn Race the following week, they moved into second place, and have not been beaten

The Beavers won the Tufts Giant Slalom at Belknap, N. H. on February 21, and followed up with victories in the American Intercollegiate Conference Slalom at Okemo Mt., Vt. on February 28 and in the Foley event last week.

Another triumph this Saturday and the bearded Engineers may keep their razors idle until the Fourth of July.

To Stay at Tech

The Charles River will be bustling with activity this spring vacation as sixty Dartmouth oarsmen join crews from Boston University, Harvard, and MIT in daily workouts. The men from Hanover will stay in Walker Memorial as guests of the Institute. Calisthenics and much rowing will be on the agenda for the visitors during their week's stay in Boston.

Dartmouth to Reciprocate

In June the MIT crews will go to Dartmouth as guests of the College. The trip to New Hampshire will not be a vacation however, as the oarsmen will train rigorously in preparation for the IRA Regatta. This meet is the highlight of the rowing season as it involves competition between all Eastern and Western College crews.

The presence of the Dartmouth crew will serve a two fold purpose. It will give the Indians a chance to test the waters where many of this season's races will be held.

Nelson Shoots 290

Last Friday, the varsity rifle team suffered its second loss of the season as it was edged out by Northeastern in a Greater Boston League match. The victors compiled a score of 1425 to the Engineer's 1412. High man for the Techmen was Louis Nelson '59 who shot 290. Close behind was Bill Leffler '61 with 287. Capt. Bob Voight '59 contributed 280 with Mike Zimmerman '61 shooting 278. He was followed closely by Dwight Moody '59 with 277.

Saturday the Beavers fired in the New England Collegiate Rifle League finals. They tied for fifth place, but the final results are incomplete as the team contested a target reading. If MIT is awarded this target, the riflemen will place fourth. In any event, this will be an improvement over last year's sixth place finish.

SPORTS CAR FANS

The MIT Sports Car Club will show a movie of the 1958 Sebring 12 hour race, on Wednesday, March 25, in 10-250 at 7:30 P.M. Admission is free.

AA Elects Slate Kaplan Pres.

The MIT Student Athletic Association has announced the election of Richard E. Kaplan '60, of Upper Darby, Pa., to the office of president for the year '59-'60. The association further selected C. Ralph Buncher '60, of Milburn, N. J., to serve as vicepresident, while Henry W. Wagner 60, of Evanston, Illinois and A. William Kleinbecker Jr. '60 of Manhasset, N. Y. were named recorder and intra-mural vice president respective-

Kaplan, an aeronautical engineering student, is presently manager of the MIT track team. Buncher, a junior in industrial management, has been manager of cross country. Kleinbecker has served as an official in the intramural program while studying electrical engineering, and Wagner, a mechanical engineer, has been intramural wrestling manager.

The Student Athletic Association is responsible for the effectiveness with which managers, captains and association members administer the MIT intercollegiate and intramural

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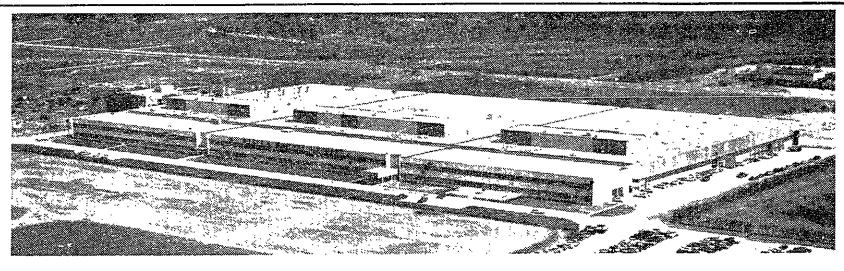
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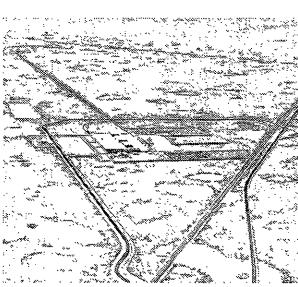
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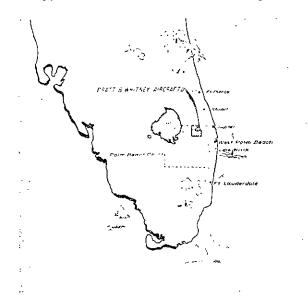
The new Florida Center, financed and built by Pratt & Whitney Aircraft, is unique in America's air industry. Here a completely air-conditioned plant with 17 acres under roof is specially designed and equipped for the development of new power plants of virtually any type. Testing is handled in special isolated areas; the nearest is four miles from the plant and many miles from any inhabited area. The new Center can be greatly expanded on its 10-squaremile site. Continued isolation is insured by a vast wildlife sanctuary in which the Center is located.

Of the many people employed at the Center today, about half are scientists, engineers and highly trained technicians. By late next year, the total number of employees is expected to be almost doubled.

The new Florida Research and Development Center is one more reason why Pratt & Whitney Aircraft is able to continue producing the world's best aircraft propulsion systems . . . in whatever form they take.



en square mues compr of Pratt & Whitney Aircraft's new Florida Research and Development Center. Experimental shops and offices covering some 17 acres are in the foreground, while the test areas, barely visible in upper left, lie four miles in the background.



LOCATION — The new Center is located at United, Florida, midway between West Palm Beach and Lake Okeechobee, in the upper Everglades area. It is almost surrounded by a wildlife sanctuary. Most employees live in the cities and towns along the east coast of Florida, driving to the Center on excellent new highways.



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Beaver Sluggers to Open Season PlayinSouthernCircuitNextWeek

An eager Tech baseball team will open its 1959 season with a southern road trip meeting Rutgers on March 30, and on consecutive days playing Catholic University, Randolph Macon, and Johns Hopkins. According to Coach Robert Whitelaw, this trip will indicate to a large extent just how the Beaver nine will fare this year in its sixteen game regular season schedule.

With a strong defensive infield and good depth and ability at catcher, the Engineers have high hopes of improving on last year's 4-16 record. The big problems facing the team are a pitching roster of only three men and an inexperienced cutfield. The outfield spots are up for grabs at the moment, but Coach Whitelaw said that he expects to have a much better idea of who will be playing these positions after the southern road trip.

Goodnew Heads Catchers

Leading the four man catching crew will be team captain and 1958 Greater Boston All-Star, Warren Goodnow '59. Heading the pitching staff will be Al Beard '59, the top Enginer moundsman last year. He will be ably assisted by Dick Oeler '60 and John Blinn '61.

Neil Fitzpatrick '60 will be making the long stretch at first for Tech this spring, and it is expected that he will do an even better job there this season than he did last year. Harold Parmallee '60, Bowdoin transfer, should lend strength to second, and John Vlcek '61, star shortstop on last year's

Bridge Tournament Will Be Tomorrow

Participation in the 1959 National Intercollegiate Bridge Tournament by MIT undergraduates will be held tomorrow at 1:30 p.m. in the basement of Walker Memorial.

MIT is one of approximately 176 colleges and universities throughout the United States which is participating in the competition, in which entry is open to any registered undergraduate.

All play will be by mail with the completed hands being returned to committee headquarters where they will be scored by Geoffrey Mott-Smith, author and contract bridge authority who will in addition, determine regional and national winners.

Prizes will include trophy cups for the colleges winning the national titles, one cup for the pair scoring highest on the East-West hands and one cup for the college for the North-South hand winners. Each of the four individual national winners will receive a smaller cup for his permanent possession.

Protestant Ministry Will Give Mission During Next Week

The Protestant Ministry at MIT, representing the Baptist, Congregational, Episcopal, Lutheran, Methodist and Presbyterian denominations will sponsor a Mission next week led by The Rev. Father Michael Fisher, a Franciscan Friar in the Church of England.

Luncheons, coffee hours, chapel meditations, and talks in the Hayden Library Lounge will fill the three day mission to be held March 23, 24, and 25.

The main thrust of the mission will be Father Michael's three talks in the Hayden Lounge at 8 p.m. on each of the three mission days. On Monday evening his title is "The Beginning of Life," on Tuesday, "The End of Life," and on Wednesday, "Now is the Time." He will also conduct meditations in the Chapel from 12:10 to 12:30 p.m. on each of the three days.

Coffee hours and lunches are being arranged so that all members of the MIT community will have an opportunity to meet Father Michael. He will also be available for private meetings in the Religious Counselors' Building, 317 Memorial Drive, from 10:30 to 12 p.m. and from 2:30 to 4:00 p.m. during the mission.

freshman team, is being counted on to spear plenty of the hard liners that will be coming his way. Third base however, may be the weak link in the defensive armor of the infield this year. At present, Elliot Fineman '59 appears to have the edge on the other candidates for this position.

Coach Whitelaw said that he thought that the team this year would be better defensively than at the plate, and that on an overall basis, it should certainly be as good a ball club as that of last year.

First Boston Showing

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Pistol Team Defeats Arlington Gun Club Tied for First Place

The varsity pistol team remained in a three way tie for first place in the Greater Boston Pistol League as they defeated the Arlington Gun Club by a score of 1026-995 this past Tuesday evening. This was a great comeback for the team which lost to both Harvard and the Mystic Valley Gun Club in their last two outings.

High man for the Arlington meet was Dennis Kelly '60, who shot an impressive 273. Trailing him were

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2:15-5:30-8:45 "THE RED BALLOON"

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Tonight and Tomorrow Night March 20-21 at 8:30 P.M.
Reserved Seats: \$1.80-\$2.40-\$3.00

Harvard Cooperative Society—Harvard Sq.—Cambridge Mail Orders: Tom Lehrer, 25 Huntington Ave., Boston Paul Rubero '59 with 252, John Schaefer '60 with 250 and Captain Tom Remmers '60 with a 251. This was the first time in the last three contests that Remmers fired a score below 270.

The overall league record for the team now stands at 8 wins against 2 defeats. This same record is shared by both Harvard and the Parkway Gun Club. However, the three way deadlock for first place will be broken next Tuesday when the Techmen shoot against the Parkway Gun Club.

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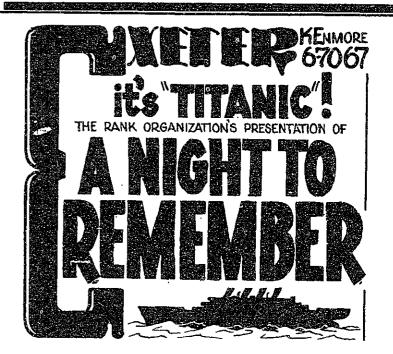


Sunday Evening MARCH 22 at 8 o'clock JUDGE JUSTINE WISE POLIER NORMAN THOMAS

"Israel's Immigration Policy as it Affects
the Arab States"

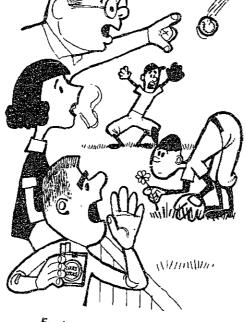
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Thinklish: COPITALISM

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