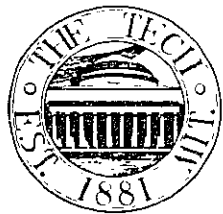


# The Tech



NEWSPAPER OF THE UNDERGRADUATES OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VOL. LXXIX NO. 6

CAMBRIDGE, MASSACHUSETTS, FRIDAY, MARCH 6, 1959

5 CENTS

## 20 Students in New Program

### Chemical Engineers Join Industry

MIT's School of Chemical Engineering Practice has joined forces with the Esso Standard Oil Company and the American Cyanamid Company industries in New Jersey to provide educational advanced opportunities for both graduate and undergraduate students in chemical engineering study.

Twenty students are presently working at Esso's Bayway Refinery in Linden, and at American Cyanamid's Bound Brook, organic chemicals plant. Half of the students are at each plant.

The classes which began at Linden and Bound Brook early last month marked the start of the spring semester of the MIT Practice School. The first group of students started last September and completed their 18-week course in January.

The Practice School differs from the usual industrial training program in that a full-time MIT faculty member is on hand at the plants, following the work of each student closely as a consultant and advisor and acting jointly with company representatives in developing engineering problems for student investigation.

The program is aimed at developing students' abilities to communicate ideas and to integrate human relations problems with their engineering efforts, according to Professor Walter G. Whitman, head of the Department of Chemical Engineering.

## New Officers Are Elected For TCA

New Officers of the Technology Community Association were elected March 4 in Walker Memorial.

President .....Dave Montgomery '60  
Vice Pres. for General Service  
Craig Sawyer '60  
Vice Pres. for Social Services  
Mike Rosner '60  
V. P. of Student Forum Div.  
Bob Kessler '60  
Secretary .....Walt Loveland '61  
Treasurer .....Mel Cornilland '61

Mention was made at the meeting of the Blood drive to be conducted on the MIT campus next week.

## Monkey Research Lecturer Will Be Here Next Week

Research which indicates that certain abilities in baby monkeys are inborn will be described by Dr. Harry Harlow in a lecture at the Massachusetts Institute of Technology in the Compton Auditorium at 8 p.m. next Wednesday (March 11). The lecture will be presented at 23 Eastern Colleges during the next month under the sponsorship of Sigma Xi, honorary science society.

Dr. Harlow, who is a member of the faculty of the University of Wisconsin and former president of the American Psychological Association, will report on experiments with young rhesus monkeys, conducted with the hope of shedding light on the early development of human children. Research has shown that when twelve days old monkeys can solve brightness discrimination problems and when twenty days old they can differentiate between forms.

Problem assignments cover all phases of engineering from research to customer service. "Frequently," comments Ross Murrell, manager of Esso's Bayway Refinery, "they yield important technical contributions. The companies' use of these results greatly stimulates the confidence of the students in their engineering ability," he added.

"This type of program may be compared to the hospital internship of a young doctor," said Garrett Hill, manager of Cyanamid's Bound Brook plant. "It offers the breadth of realistic experience and responsibility which are essential in achieving mature and professional competence."

In addition to the newly-opened field stations at Bayway and Bound Brook, stations have been operating in cooperation with industrial plants at Lackawanna, New York; South Brewer and Old Town, Maine, and Parlin, New Jersey.

MIT's School of Chemical Engineering Practice, which was begun in 1917, provides practical experience for hundreds of students from the department. Professor Whitman is among those who attended the school.

## MIT, Harvard Bands Will Play Combined Concert On Sunday

MIT and Harvard will make sweet music together this Sunday afternoon as their concert bands play together in Kresge Auditorium. Starting at 3:00, the combined bands will play under the batons of John Corley of MIT, G. Wright Briggs from Harvard, and Michael Gilman, student conductor from Harvard.

On the program are marches by Sousa, King, and Barber, as well as "Invention on Two American Folk Tunes" written by Andy Kazdin, a former MIT student now at the New England Conservatory. This number by Mr. Kazdin was premiered by the MIT Band in April, 1957.

## AeroHonoraryElects

Sigma Gamma Tau, Course 16 Honorary, has elected new executives for the coming year. They are: President, Paul Scott '60; Vice-President, Dick Kaplan '60; Secretary, Sheila Evans '60; and Treasurer, Doug Jaeger. At the elections meeting, plans were begun for an all-Course 16 steak fry.

## Landing on Venus and Mars to be Discussed

The third lecture in the Space Environment Symposium, sponsored by the Department of Aeronautics and Astronautics will be given in Kresge Auditorium on Thursday, March 5th by Dr. Gerard de Vaucouleurs, research associate of the Harvard College Observatory.

The subject of discussion will be the atmospheric problems which space ships landing on Venus and Mars would find. The extent of present knowledge of such factors as temperature, atmospheric composition, winds, radiation, magnetic fields and volcanoes on the two planets will also be discussed.

## Classes, Dorms and NRSA Go to Polls, Choose New Officers

### Classes Elect

Spirited contests in class elections this year brought the voting percentage to 32% of the undergraduate body, an increase by 13% over the usual turnout. The freshman class as usual led the voting, with a 47% vote.

The struggle for the presidency of the freshman class was particularly close, Frank Osha losing to Joe Vitteck by only a few votes. The margin was slightly larger in the race for sophomore secretary, with Bill Leffler edging out Gene Ruoff.

Due to a mixup on the petition (which stated candidacy for V. Pres.) Don Weaver '60 narrowly missed being elected as both V. President and Treasurer of his class.

**Freshmen officers:**  
President—Joe Vitteck  
Vice-President—George Dotson  
Secretary-Treasurer—Jim Kirkman  
**Sophomore Officers:**  
President—Hank Schleinitz  
Vice-President—John Vlcek  
Secretary—Bill Leffler  
Treasurer—Pete Burleson  
**Junior Officers:**

President—Jack Edwards  
Vice-President—Al Shalleck  
Secretary—Sheila Evans  
Treasurer—Don Weaver  
**Senior Officers:**  
Permanent Class President—  
Dick Sampson  
Permanent Secretary—Bob Muh  
Senior Executive Committee:

Adul Pinsuvana, Chuck Staples, Calvin Swift, John McElroy, Larry Bishoff, and Richard Simons.

**N.R.S.A.**  
The Non-Resident Student's Association, formed by the merger of the Commuters' Association and the 5:15 Club this past summer, held its first elections Tuesday, in the Commuter Lounge, Walker Memorial. Keen interest stimulated a large turnout and some close races. The Vice-Presidential contest produced a tie between John Palmieri and Phil Cunningham, the outcome pending action of the present Executive Committee.

President .....Steve Corman  
Treasurer .....Henry Gabelnick  
Secretary .....Leo Cannon  
Members-at-Large

Dennis Dubois, Fred Salvucci, John Sullivan, and Dave Williams.

### Dormitories Elect

Dormitory Elections this year were sparked by the witty campaigns of various of the aspirants to office. Colorful electioneering resulted in Play-boy-type posters and diverse comments. One candidate announced that he was athletic (has all 8 physical education points) and persevering (hyper-tool), to mention only a few of his qualifications.

**Baker:**  
President—Frank Tapparo '60  
Vice-President and DormCon Representative—Paul Hashfield '61  
Social Chairman—  
Tom Heinscheimer '60  
Athletic Chairman—  
Steve Goodman '61

**East Campus:**  
President—Terry Welch '60  
DormCon Representative—  
Ray Johnson '61  
Treasurer—William Hale '61  
Secretary—Jon Glass '62  
Judicial Chairman—  
Duane Christiansen '60

**Burton:**  
President—Dick Greenspan '60  
DormCon Representative—  
Bob Saunders '60  
Treasurer—Lenny Spar '60  
Secretary—Bill Hecht '61  
**Senior House:**  
President—Al Krigman '60  
DormCon Representative—  
Ken Kotovsky '61

## APO Institute-Wide Carnival to be Presented this Spring

An Institute-wide Spring Carnival, slated to provide activities, fun, games of skill, a carnival queen and prizes for the top participating activities of living groups is to be held on April 18th from 7 to 12 p.m. in the Armory.

The carnival is open to all members of the MIT community and no admission charge will be made. The proceeds of the activity booths will become contributions to charity.

The evenings' activities will be topped off with the naming of a carnival queen who will in turn award a grand prize trophy to the booth collecting the most tickets and plaques to the second and third placers.

## Scabbard and Blade Prepare for Annual Mil Ball Next Week

The Annual Military Ball of the Scabbard and Blade Society is to be held on March 20th in the Rainbow Room on the roof of the Parker House with Jack Marshall and his orchestra supplying the dance music.

The formal affair will feature dancing from 9 p.m. to 1 a.m. and intermission entertainment by the Logarithms, culminating in the crowning of the queen of the ball.

Admission is open to the general student body and the fee is \$5 for the evening's entertainment. Although the dress is formal, uniforms are not required for blade members. Tickets can be obtained from any member of the society or in the lobby of building ten.

Nominations for queen of the ball will be open from March 11th to the 13th with the voting to be held in the lobby of building ten from the 16th to the 18th. Nominations may include the dates of anyone attending the ball and the elections are open to the general student body. The voting will be preferential for five of the nominees, the winner being crowned queen and the others making up the court. The five winners and their dates will dine with the Professors of Military Science and Tactics of the departments.

The carnival queen will be chosen by voting of the general student body on April 6th. Information is being sent out to all living groups concerning nominations for carnival queen which may be made by any member of the student body.

At the present time, 18 living groups and activities have indicated that they will participate in the carnival program which is being coordinated by Alpha Phi Omega and it is hoped that others will also join in the activities.

The following living groups and activities have indicated that they will have booths at the carnival: East Campus, Baker House, Burton House, TCA, Association of Women Students, DeMolay, Science Fiction Club, Sigma Phi Epsilon, Tau Epsilon Phi, Phi Sigma Kappa, Dover Club, Sigma Chi, Phi Mu Delta, Theta Delta Chi, Theta Chi, Sigma Alpha Mu, Sigma Nu and Chi Phi.

## Skeptics Seminar Here This Sunday

Professor Will Herberg, Graduate Professor of Judaic Studies and Social Philosophy at Drew University, Madison, New Jersey, will speak this Sunday at a T.C.A. Skeptics Seminar. Dr. Herberg's subject will be "Creative Response to the Challenge of a Technological Environment."

The Seminar, open to the public, will be at 8:00 p.m. in 26-100. Of special interest to the MIT student body is Dr. Herberg's intention to refer to the recent Sussman Report on last year's Freshman class in his talk.

Dr. Herberg has worked for many years with the A.F. of L., and recently has lectured at Yale, Harvard, and Princeton. He will lecture next month at Cal Tech. Among his writings are *Judaism and Modern Man*, and *Protestant-Catholic-Jew: An Essay in American Religious Sociology*. Prof. Herberg has edited *Four Existential Theologians* and *The Writings of Martin Buber*, which is used in the core humanities curriculum here at Tech.

## Former British Prime Minister to Speak at Tech Next Sunday

Earl Clement Attlee, former Prime-Minister of Great Britain, will speak at MIT under the sponsorship of LSC on Sunday, March 15. His topic will be "The Future of Europe," and the talk will take place in Kresge Auditorium at 8:00 p.m.

Attlee is best known as the head of the British government in the turbulent post-war period of 1945-51. During this period the British Labour Party for the first time had a majority in the House of Commons and, under Mr. Attlee's leadership, succeeded in bringing about widespread changes in the British economic, social, and colonial systems.

In 1955, after 33 years of service in the House of Commons, Mr. Attlee was elevated to the peerage and took his seat in the House of Lords.

Admission to Mr. Attlee's speech will be by free ticket until 7:45 p.m., after which time people will be admitted without tickets. The tickets will be distributed in Building 10 on March 11 and 12 between 8:00 a.m. and 4:00 p.m. MIT identification will be necessary to obtain tickets.

## The Tech Smoker

Don't like THE TECH? Think it's basically un-good? Do something about it. Come to THE TECH Smoker this Sunday from 5:00 to 7:00 at THE TECH's offices in the basement of Walker Memorial. Join the staff—positions are available in Advertising, Photography, News, Features, Reviews, etc.

Experience helps, but novices will have a chance to attend a series of informal journalism classes given by members of the MIT faculty and prominent journalists. Come on down on Sunday.

# The Tech



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## another comment on tech show

Every year at this same time of the second semester a crime is committed, a crime worth ten or fifteen thousand dollars, a crime worth the talents of many young people involved in a facsimile of musical comedy called Tech Show.

It is true that we cannot speak of the past, having only watched two of these attempts, but the reputation of Tech Show has never reached very high standards, according to the opinion given by people who have been around for quite a long time.

Before indicating what is wrong we would like to praise very sincerely the wonderful jobs done by Gus Solomon, Jr. and Bobby Shane. We wouldn't say that Gus Solomon, Jr. is "a talented young man" because he isn't: he is an artist, a true one, and his blood is of the purest blue of the noble stage family. Actor of immense versatility, dancer of excellent qualities, these assets would be enough for him to save Tech Show every year, as he has been doing. But Gus loves his art and transmits it to the chorus, designing an imaginative choreography and making the dancers look like experienced people, though most of them never really danced before. Gus IS Tech Show, and the first two scenes of the second act are his work, his touch, his success. The only male figure saved from the disaster.

As for Bobby Shane, we will miss her next year. A very good singer, witty, charming, with an astonishing presence on the stage, Bobby is the female counterpart to Gus Solomon. "Alma Mater," part of the fifth scene of the second act, is a masterpiece of musical comedy, and as interpreted by Bobby it's worth the book of any show on Broadway. As an actress she's not given much of a chance, a ridiculous mistake, an unbelievable lack of recognition for the best actress and singer of the show.

The music, professionally constructed, is under the slight influence of Leonard Bernstein's scores, was written by Andy Kazdin and orchestrated by John Corley. It lost very much of the sweet sentimentality it was given last year by Mort Achter and grew in strength, in power, in colorfulness, and in identification; giving us the feeling of careful elaboration and strong maturity.

What is wrong, then?

We know of the technical difficulties of Kresge Auditorium, whose stage ceiling is too high for normal sets, but whose back stage corridors are too low to allow appropriate sets to be put on stage. This is no excuse. With the actual set a lot more could have been done: the scene in the Orient-Express is the poorest effort ever made to represent a train, and the changes of scenery in front of the curtain lacked entirely of subtlety, of imagination, of cleverness. There is an enormous difference between theatrical expressionism and three chairs dropped on the middle of the stage in complete darkness by a stage crew who didn't bother to take the white and obnoxious sheets of paper out of the pocket of their blue-jeans.

Albert Hinckley, Jr. was the set-designer as well as the main character and the writer of the show. We honestly think that Mr. Hinckley was never made for a stage appearance and his "portrayal" of an English spy gets very tiresome and repetitious, as his "portrayal" of an Englishman did last year. As for the book, we know perfectly well the difficulty met by Mr. Hinckley in his fight against time: had it been done by a qualified person, and a person whose only job was to write the script, the difficulties would never have appeared.

The great mistake of Ellery Stone was to direct the show when there isn't a single soul in the MIT community who doesn't know that Ellery and Gus are some of the finest actors ever to appear at the Institute. Ellery is an actor, an excellent one, not a director, and he should be convinced of it by now. Not that the "Spy's the Limit"'s direction was exceptionally bad, but because Ellery's well known and admired ability to act was thrown away when the show needs it so much.

As you can see, many of the faults come from an increasing liberty of action for the members of the show, lacking of sound advice or supervision. This liberty of action entitles a little group of friends to write the leading roles for themselves, for their sweethearts or for their friends, like Randy Raelley or Cynthia Burbank.

We haven't the slightest personal grudge against these very nice people; but, my friends, this is a fifteen thousand dollars investment, this is an MIT public relations affair and, most of all, this is THEATER! And theater is too important to be a matter of friendship, of likes and dislikes.

But after all we are not professionals and there are things even the smartest amateur does not realize. That's

what the faculty adviser is for. Or is he? Being rather pedantic we would say that here lies the key to the problem: Tech Show needs a "connoisseur's" advice, Tech Show needs a man whose experience, whose knowledge, whose understanding is not a mere grunt or a vague comment done with a very precise swear word. Tech Show needs a man who knows about theater well enough to point out exactly *what* is wrong in every scene, *who is what* in the cast, so as to avoid throwing away the talents of Gus Solomon, Jr., Bobby Shane and Ellery Stone! Tech Show needs a man who comes constantly to rehearsals, who reads the script and corrects it as it is being written, not on the night of the dress rehearsal!

Let us not throw away another fifteen thousand dollars next year!

Jean Pierre Frankenhuis '61

## kibitzer

NORTH		
S—5 4 2		
H—J 8 3		
D—A Q 9 8 3		
C—J 2		
WEST		
S—A 10 7 3		
H—6 2		
D—J 10		
C—10 8 7 6 3		
EAST		
S—J 9 8		
H—A Q 7 4		
D—K 7 5		
C—9 5 4		
SOUTH		
S—K Q 6		
H—K 10 9 5		
D—6 4 2		
C—A K Q		
The bidding:	N	E S
Both vulnerable:	P	P 1NT
North dealer:	2NT	P 3NT
	P	P

Opening lead: Six of clubs.

The diamond finesse was taken at the second trick and another club returned when the finesse lost. The next diamond lead set up dummy's small diamonds, and the jack of hearts was lead for a finesse. But East figured South for the king of hearts and thus took his ace and led another club. The diamonds were then run with spades being sloughed by everyone. A finesse was then taken against the queen of hearts which won, but a spade and a heart had to be lost at the end and the contract was just barely made.

But if the eight of hearts is led for the first heart finesse instead of the jack an overtrick is possible. If East takes his ace the Jack and 3 are left instead of the 8 and 3, and the Jack can be led for the second finesse against the queen after the diamonds are run. No matter what East does, no heart trick is lost at the end. If East holds up his ace of hearts, the jack is next led, and three heart tricks must be made the way the cards lie.

If the three of hearts is led the first time, East holds up his ace and the trick is won in the South hand. But now there aren't enough entries in the dummy to finesse again, since East will take his ace the next time hearts are led from the dummy, and the contract is still held to three.

James R. Chalfant '60

## reviews

### Feature and Co-feature

As much as it is the "Sean O'Casey season" for theater, we have the impression of being under the Indian motion picture festival. The Kenmore, in its double bill, is presenting "Boot Polish," an Indian feature, and "Times Gone By," an Italian collection of little sketches.

"Boot Polish" has the same quality of all Oriental movies we have seen so far: an admirable photography direction, intended to say more than any of the actors could dream of. It is again the misery, but with the right amount of hope and confidence in a nearby future. Children seem to be the favorite messengers of Indian art, and this picture is no exception, with an admirable performance of a young girl whose name we couldn't remember, but who deserves all the credit for the success of this new poem of human distress and abandon. It is a co-feature worth seeing and, contrary to the usual manner, it is worth coming at the beginning to watch the whole show.

The second feature is a collection of five short stories in the best tradition of Italian comedy. We shouldn't say comedy because the fourth sketch is taken from a tragedy by Pirandello, and it comes at the right time to change the mood of the spectator, by this time a little tired of laughing.

The climax of the picture is undoubtedly the "Judgment of Phyné," with Vittorio de Sicca and Gina LO-Lollobrigida. The three judges, the jury, the first row of the public, the prosecutor, the defender, the defendant are admirable! A masterpiece of comedy, of human ridiculous, of variation on one theme, the best of all: beauty. Pardon, Beauty. Spiritual, sarcastic, this adaptation of an old mythological or historical (I don't really know) Judgment is a pearl of good-humour.

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 Tickets \$1.75 (reserved) from M.I.T.  
 Music Office, Room 14-N236, M.I.T.

**Harmful Fallout Effects Equal One Cigarette A Month, Says MIT Man**

by Bob Johnson

Though the hazard of radioactive fallout from nuclear bomb tests is not a new problem, it is gaining attention by the alert public. This growing concern is quite justified since World War II the size, number per year, and deadliness of nuclear explosions has generally increased with the world's great powers between furious competition. The nuclear arms race was until recently blasting harmful waste-products into the atmosphere. The population is rightfully asking, "How will this affect me and my descendants?"

Not long ago the Special Subcommittee on Radiation of the Joint Committee on Atomic Energy in Wash-

ington called before it experts from many fields related to this problem. They testified on the topics of: strontium 90, the effects of genetical mutation by radiation on future generations, the danger of an increase of leukemia cases, the occurrence of bone tumors, and the possibility of decreasing the average life expectancy of the world's population.

The Radiation Hazards Committee of the Federation of American Scientists in this report declared that the dose of radiation from the present rate of testing is less injurious than that we receive from cosmic rays, commercial products with luminous parts, medical and dental x-rays and the earth itself. However, no matter how small it is, many deaths will occur from the added radiation.

The figures are relatively consistent, but genuine differences of opinion on whether or not nuclear test should be suspended arise from interpretation of the facts. One can merely look at the percentages which experts agree are very small, or one may ignore percents and accept fearful absolute numbers; small percentages are big when the earth's 2.7 billion people are considered.

Lecturer in Physics Dr. Louis Osborne of MIT is a former chairman of the Radiation Hazards Committee, and he quotes this interesting illustration. The harmful effects of fallout is about equal to smoking one cigarette a month; in terms of life expectancy smoking at this rate for ten years would be the equivalent of having one person in ten thousand dying thirty years earlier, and although one day is a small price for many to pay for security, thirty years is costly for one individual.

Of a total of 4,000,000 live births in the U. S. per year, 80,000 have defects because of natural spontaneous mutation. It is expected that at our present rate of testing, background radiation will cause an increase of 160 to 800 more births per year of genetically defective children. Yet percentage-wise, this is less than .02% of the total.

Basic scientific information about the hazards involved does not appreciably conflict. The question of whether the bomb tests should continue depends on these two questions. Is the U. S. willing to pay the price and to assume all risks for testing? Is the nation justified in jeopardizing the lives of a few for the security of the many?



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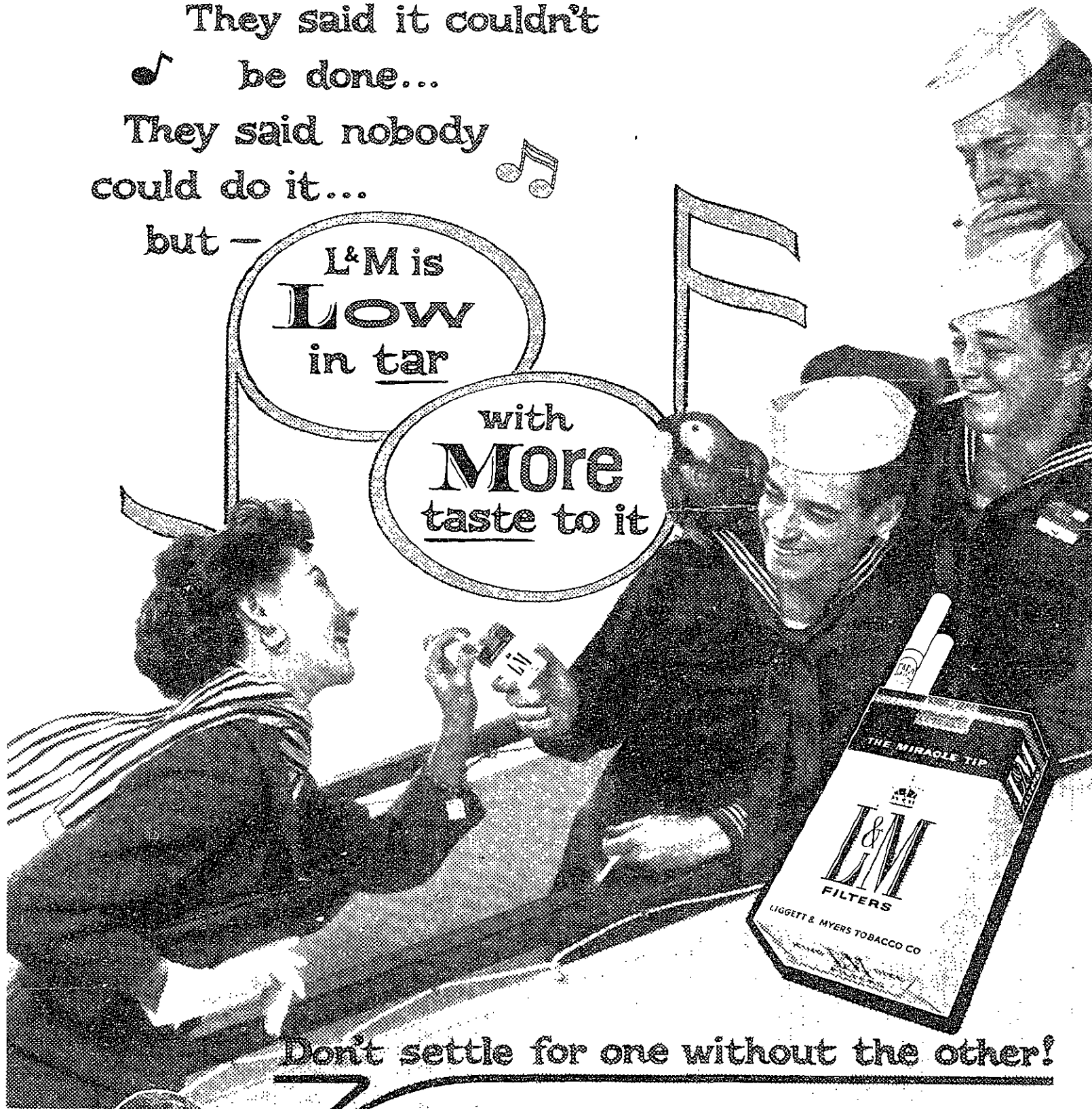
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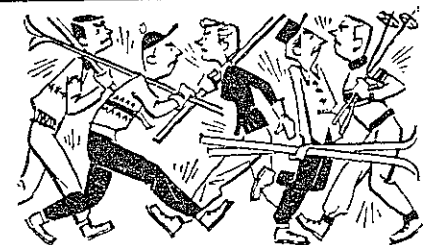
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# Are Engineers People? Asks Society For Social Responsibility In Science

An Austrian Army Officer said, "I am the kindest and sweetest man in the world, but when I am on duty I am a brute. I am always on duty."

Dr. Victor Paschkis of Columbia University thinks that engineers, as well, tend to be on duty too much of the time. Dr. Paschkis presented his views in Kresge Auditorium in a speech given under the auspices of the Society for Social Responsibility in Science of which a chapter exists at MIT and of which Dr. Paschkis is a member and a founder.

Once the engineer was only concerned about the safety of the manufacturing labor, if he were concerned at all. But the idea soon evolved that perhaps the engineer was responsible for the safety of the consumer as well. Now one can ask, "Is the engineer responsible for the mental as well as physical well being of the user?" Dr. Paschkis thinks that the engineer is responsible. And he goes on farther and says that Natural resources and the well being of future generations are the engineer's responsibility, too.

Dr. Paschkis cites three attitudes he has noticed among his colleagues. 1) An engineer can simply say that "I am selling my skills, and it is up to the manufacturer, society, and the law to determine how they are used." This is the first mason who when asked what he was doing, replied, "I am laying one brick on top of the other."

The second mason who noted that he was building a wall, Dr. Paschkis thinks, corresponds to the engineer who says to himself, 2) "This is wrong to do, but I live in a democracy and I will do as I am told."

There was a third mason, and when he was asked what he was building, replied, "I am building a cathedral to the glory of God." This man knew what he was doing, and Dr. Paschkis says that he corresponds to the engineer who 3) looks at his work as an expression of man's dignity. If the work has morally or ethically unsound consequences, engineer No. 3 will refuse to do it.

Dr. Paschkis practices what he preaches. He refused to work on defense contracts. He has declared that he will do no work contrary to his conscience. Columbia has cooperated and supplied him with his type of work.

Dr. Paschkis speaks with a strong German accent, and he spoke frequently of his German friends. Recently, he has given many lectures in Europe on the "Engineers' Consequence for Society." He likes to contrast the stand taken by the 18 German nuclear physicists who refused to work on military nuclear armaments because they considered it wrong for Germany to arm with the American scientists who said that

the development of an H-Bomb would be morally wrong and politically disastrous, but if they were asked to make one they would do so.

Dr. Paschkis also sighted the brilliant Russian physicist Kapitsa who has refused to work on the nuclear bomb.

Dr. Paschkis stated the major problems 1) Can the engineer delegate the responsibility for his work? 2) What should the engineer do in a case where he does not decide what is manufactured? 3) And how are we to bring the question into the proper focus when the young engineers are too busy to take part in discussion.

Ken Knowlton, a research assistant in electronics, is one of the local students in the Society for Social Responsibility in Science, and can be contacted at Extension 2524. He will be glad to see that the society's newsletter reaches everyone who is not too busy.

The Society is an organization whose purpose is to "foster throughout the world a functioning cooperative tradition of personal moral responsibility for consequences for humanity of professional activity, with emphasis on constructive alternatives to militarism, . . . to embody in this tradition the principle that the individual must abstain from destructive work and devote himself to constructive work, drawing the line between the two according to his own moral judgment; . . . to ascertain through open and free discussion the boundary between constructive and destructive work to serve as a guide for individual and group discussion and action."

## Sunday At 5:00 For Features Smoker, Cider And Donuts

The Features Department will have a smoker Sunday, March 8, 5:00 to 7:00 p.m. in The Tech Office in the basement of Walker Memorial. There will be cider and donuts, and everyone is welcome.

The department needs good men to cover a variety of interesting assignments and fields of potential interest.

Work on the department offers an excellent opportunity to compose factual prose or to develop one's special interest. And no one need feel that work on The Tech will affect his academic performance. It will be time well spent.

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KOOL ANSWER

# KOOL CROSSWORD

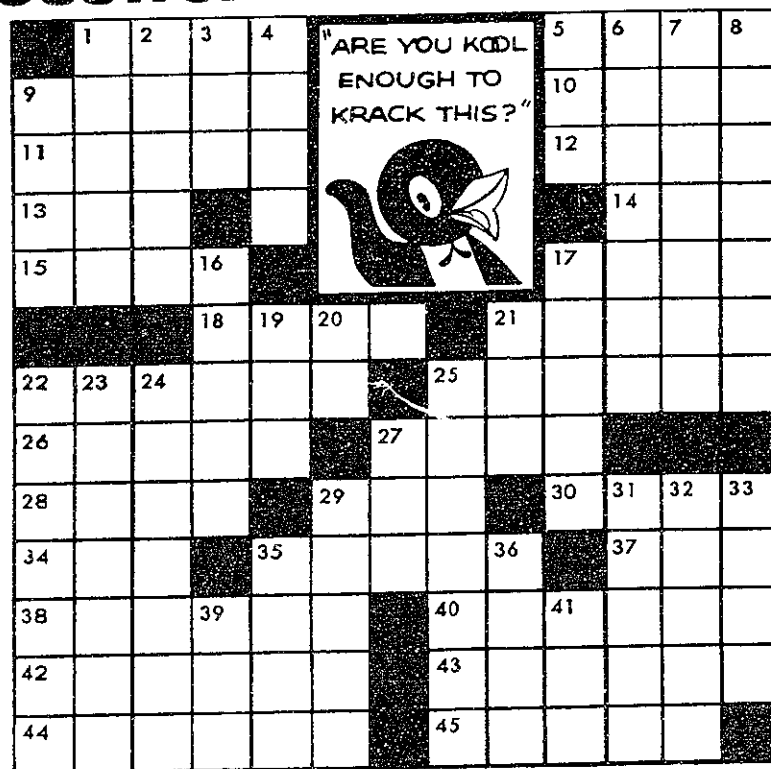
No. 17

### ACROSS

1. Between a hop and a jump
5. Animal from Green Bay?
9. Wall encountered on some dates
10. Miss Gardner ad infinitum
11. They attract eyes
12. Kind of stand
13. It follows you down South
14. Don't get caught in it
15. Gal who looks like unmade bed
17. Marilyn's one at Yale
18. Kind of do
21. Half a song
22. This makes a profound impression
25. With lemon in your mouth
26. All you need to get ahead
27. Paint
28. Snick and
29. Tackle's rainy-day facial
30. Chow
34. Kind of etera
35. Biblical birth reference
37. She sounds like money
38. Instrument of the conniver
40. Temple, but far from Philly
42. Flipped
43. Horse & soap
44. Rains marbles
45. But she may not be a cheap date

### DOWN

1. Got beyond first base, illicitly
2. Are you smoking 'em? Good!
3. You're brave if you're using this
4. Pets in confusion
5. Manhandle
6. He gets the air
7. Meow from girl on phone?
8. A good place for "hots"
9. Rock popular in Ireland
16. Early morning cut
17. Overimbiber
19. It's good in the hole
20. What Pop saw in Clara Bow
21. Crosby cat
22. Gnatty crowd
23. Koole's mild refreshing ingredient
24. Right on target
25. Drink not favored by 17 Down
27. Favored receptacle of 17 Down
29. Pinchle or gun maneuvers
31. Dress up
32. Something to live for
33. Aqueous solutions
35. Favorite vegetable of this generation?
36. The first man to break it wins
39. Point in compasses
41. Short general



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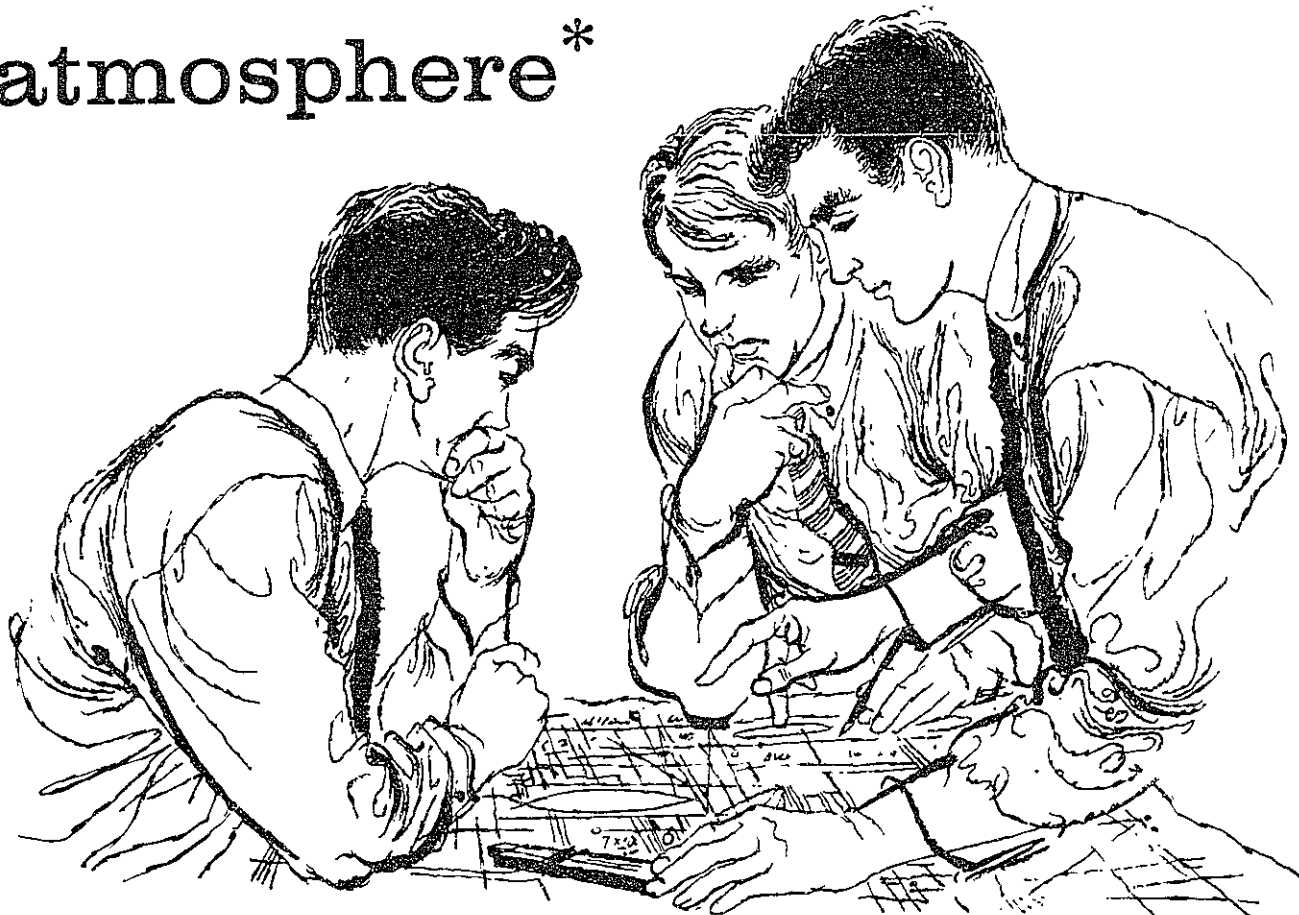
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## atmosphere\*



\*a surrounding or pervading influence

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The other atmosphere at GPL involves the physical—the modern buildings and equipment, the excellent research and development facilities. These include an Environmental Test Lab, a Flight Test Section equipped with jet and conventional aircraft, and model shops for both formal prototype and informal experimental work. There is also a modern library of more than 2500 volumes. GPL is situated on 69 estate-like acres less than an hour from New York City, in residential Pleasantville in Westchester County.

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These are some of the projects on which you might eventually work:

**Air Traffic Control.** GPL has a prominent role in the development of digital computer systems and devices for safe, efficient air navigation and traffic control.

**Advanced Radar.** GPL is the leading designer and builder of Doppler navigation systems, and is actively involved with terrain-clearance, missile guidance, and other radar system applications, both military and commercial.

**Research.** Advanced studies are underway at GPL on such projects as infrared techniques, Maser amplifiers, nuclear magnetic resonance, and other classified devices.

**Industrial TV.** GPL is an outstanding developer and producer of broadcast and closed-circuit TV devices and systems, for military and commercial applications.

There are excellent career openings for EEs, MEs, Mathematics and Physics majors.

GPL's representative will visit MARCH 13



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The public high schools of Newton, Somerville, Belmont, Brookline, Wayland, and Lexington have asked Harvard Undergraduate Teachers to find juniors and graduate students of good academic standing willing to assist in the teaching of high school courses next year.

The volunteer must have honor grades in the field in which he will teach and should have minimum group IV (near Dean's List) standing. To be effective, the volunteer student teacher must devote a rough average of ten hours a week during the entire academic year, with the exception of exam periods, reading periods, and holidays. This ten hours is a maximum figure including time spent in teaching, in preparation, and in travel.

HUT can only introduce the volunteer to the school system of his choice. Having agreed to work with a regular teacher, the volunteer may negotiate any practical teaching arrangement. The chances are that the volunteer will be expected to enter into the routine of his high school course gradually. The seven HUT's now active are teaching occasional classes, doing research for their professional teachers, and are coaching small groups.

Having committed himself to a public school, the volunteer must honor that commitment throughout the entire academic year.

Because HUT is new to two of the six school systems and is untried by three others, the volunteer will have ample opportunity to establish a reputation which may insure the growth of this project.

If you are a Harvard, Radcliffe, or MIT junior or graduate student desiring to teach next year, please call:

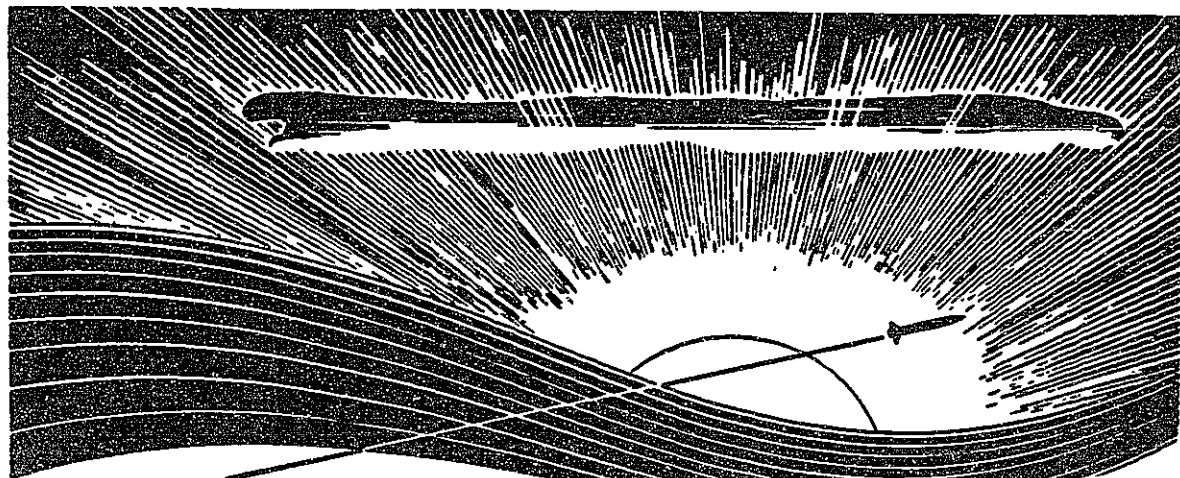
UN 8-7600, Ext. 526, 527 or 528—7:00 P.M. to 9:00 P.M.—March 2, 3 or 4

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**Swimmers Beat Wesleyan, 54-32  
Host New Englands This Weekend**

Taking the lead from the opening race, the varsity swimming team closed their best dual meet season in twelve years with a 54-32 victory over Wesleyan at the Alumni Pool Wednesday evening. The mermen racked up their seventh triumph in ten contests by capturing eight events, losing only in the freestyle distance races.

The Beavers were never pressed, and only one outstanding time was posted as Burnell West '60 gave his season's best effort in the 200-yard breaststroke to win in 2:37.5. Eric Essene '61 picked up third for the victors.

The meet opened with the Engineer medley relay quartet of Neil Divine '59, West, Tony Silvestri '61, and Roger Kane '59 sweeping home in 4:15.2. The 220-yard freestyle saw Tom Ising '61 cop second as the visitors' Bob Clement had too much endurance.

MIT's sprinter, John Windle '60,

**Tech Fencers Seek  
New England Title**

MIT's Fencing Team will travel to Storrs, Connecticut, the home of the University of Connecticut, this Saturday to compete in the annual New England Fencing Tournament. Besides the host school the competition will include representative squads from Boston University, Brandeis Bradford Durfee, Holy Cross, Trinity, Brown, and Harvard.

Making the trip for the Engineers will be foilmen Barry Shabel '59 and Jerry Yarborough '60; Larry Campbell '59 and Joe Verderber '60, sabre; and Ron Wempin '59 and Joe Pedloskey '59, epee. Shabel, last year's foil champion, will be after his second consecutive title.

The team's prospects are good, for the duelers have conquered all of the competition except Harvard, UConn, and Brandeis in regular season activity. MIT did not engage Brandeis this season, and its losses to the other two were by narrow margins.

It appears at present that a four-way battle will be waged among Brandeis, Harvard, MIT, and Trinity for the title.

although slightly off his best times, won both the 50- and 100-yard freestyles by comfortable margins with Bob Brooker '59 and Kane taking thirds respectively.

Diving in top form, Dave Cahlander '59 easily placed first in his specialty for the Techmen. Similarly, Ising splashed to an unchallenged win in the 100-yard butterfly in 1:04.2 with Silvestri runner-up to complete the sweep.

Divine finished the 200-yard backstroke over a length in front of his nearest competitor in 2:21.2. Clement won the 440-yard freestyle for the visitors' only other first.

In the last event of the evening, the Beavers' freestyle relay squad of Windle, Brooker, Kane and Jack Kossler '59 closed the rout with a 3:45 clocking.

**Best Season In Years**

Wednesday night's win, in contrast to the Beavers' 46-40 defeat by Wesleyan last winter reflects the vast improvement in the current team. This year's 7-3 record was the reverse of last season's results.

Under the expert coaching and spirited leadership of Charlie Batterman, the mermen have outshone every varsity delegation of the last decade and probably even further back in the past. They compiled wins over Bowdoin, Tufts, Trinity, RPI, Coast Guard, WPI and Wesleyan while losing only to perennially powerful Harvard and Brown and a tight meet with Springfield.

**New Englands Here Today**

Today at 2:00 p.m. and 7:30 p.m. the trials for the New England Intercollegiate Swimming Championships will be held at the Alumni Pool. The finals will be held at the same place tomorrow at two o'clock in the afternoon. Admission to MIT students will be by registration card.

The Beaver tankmen could put a glorious finishing touch to an already outstanding season by taking a near top position of the fourteen teams entered in the meet. The host team will find the toughest competition from Brown, Williams and Springfield.

Individual hopefuls for scoring for the Techmen include Ising in the butterfly and 440 freestyle, Cahlander in the diving, West in the breaststroke, and Windle in the 100 yard freestyle. Another point-getter for the Beavers will be the 400 yard medley relay of Ising, West, Windle and Divine.

Earlier Wednesday evening, the frosh swimming squad topped Wesleyan to finish their season with a fine 8-2 record. They should add much next year to a varsity that loses only four men to graduation.

**Grad House Meets  
Phi Beta Epsilon for  
IM Hockey Crown**

The last of the gladiators will take to the ice tomorrow evening in the final battle of the IM Hockey playoffs. Phi Beta Epsilon will attempt to repeat in its role of giant killer. It was only last Thursday evening that the undergraduates, led by their star Dave Aaker, scored a 3-0 victory over their senior rivals.

Thus, going into tomorrow night's contest both teams sport identical 2-1 records. The game promises to be a rough and tumble affair, and the breaks should decide the outcome.

Semi-Final Results:  
Phi Beta Epsilon 3—Graduate House 0  
Graduate House 2—Sigma Nu 0  
Grad. House 2—Theta Delta Chi 1  
Phi Beta Epsilon 4—Sigma Nu 0

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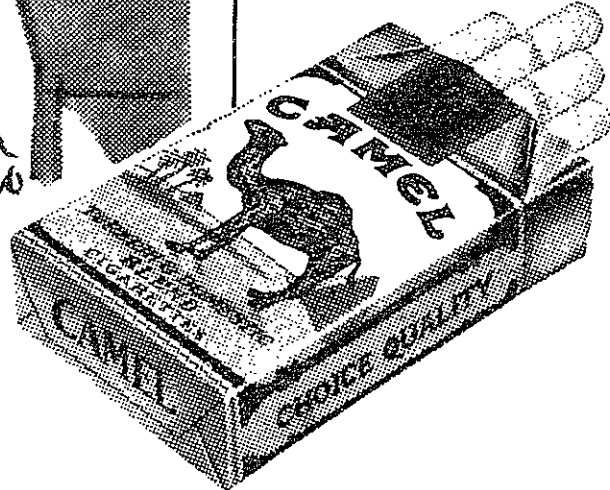


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