

# Luebbers Victor In UAP Election

Jerry Luebbers '64 is the new Undergraduate Association President. In preferential balloting yesterday, he defeated Ronald Gilman '64, John (Bill) Morris '64, Mark E. Barron '64, and Marty Tenenbaum '64.

The first-place votes were as follows: Luebbers, 559; Gilman, 436; Morris, 419; Barron, 289; Tenenbaum, 92; others, 38.

The total vote in the election was 1833, as compared with last year's record turnout of 1882. Luebbers obtained the necessary 917-vote majority of total votes cast on the fourth redistribution.

Luebbers will be installed at the Institute Committee changeover meeting on April 4; he will succeed Woody Bowman '63. At this meeting the out-going Inscomm will elect chairmen of Secretariat, Finance Board, and Judicial Committee. Other new officials will be chosen by the new Inscomm, probably April 11.

## Smead Ranks Last

Bosley L. Smead, a fictitious write-in candidate, ranked sixth with about 30 first place votes.

Ten students started Smead's campaign March 3. They posted 50 placards and distributed 2000

mimeographed blurbs written by Dave Nolan '65, and signed by Nolan with Smead's name. Nolan said the group's purpose was to split the protest vote so that no "undesirable" candidate would win.

Before the election, Nolan predicted Smead would get 150 votes.

Luebbers, of Sigma Phi Epsilon and Park Ridge, Illinois, is majoring in Course 15. After graduation, he plans to take a graduate course in business administration. He also hopes to study at the International Institute in Switzerland for a year.

## Luebber's Statement

Regarding his victory, Luebbers issued the following statement to The Tech:

"I hope I can prove myself worthy of the confidence you have expressed in electing me UAP. The campaign has produced a wealth of valuable ideas and has stirred an interest in student government. This is an interest I hope to maintain, to bolster, and to channel into positive effort.

"I'd like to take this chance to invite your comments and an expression of your interests. Committees will be determined within the next few weeks, and the time to join is now. Talk with me, with other Inscomm members, or with former committee members, of any committees in which you're interested, and find out what the work has to offer in terms of experience and educational as well as diversionary value.

"I'd like to close with my gratitude to Bill, Ron, Mark, and Marty for an enjoyable and notably clean race, to the various living groups who entertained our political inclinations, to the many people who took time out to talk with me about the UAP election, and, most of all, to the student body which has given me a chance to implement my plans for student government."



Jerry Luebbers  
—Photo by Joseph Baron

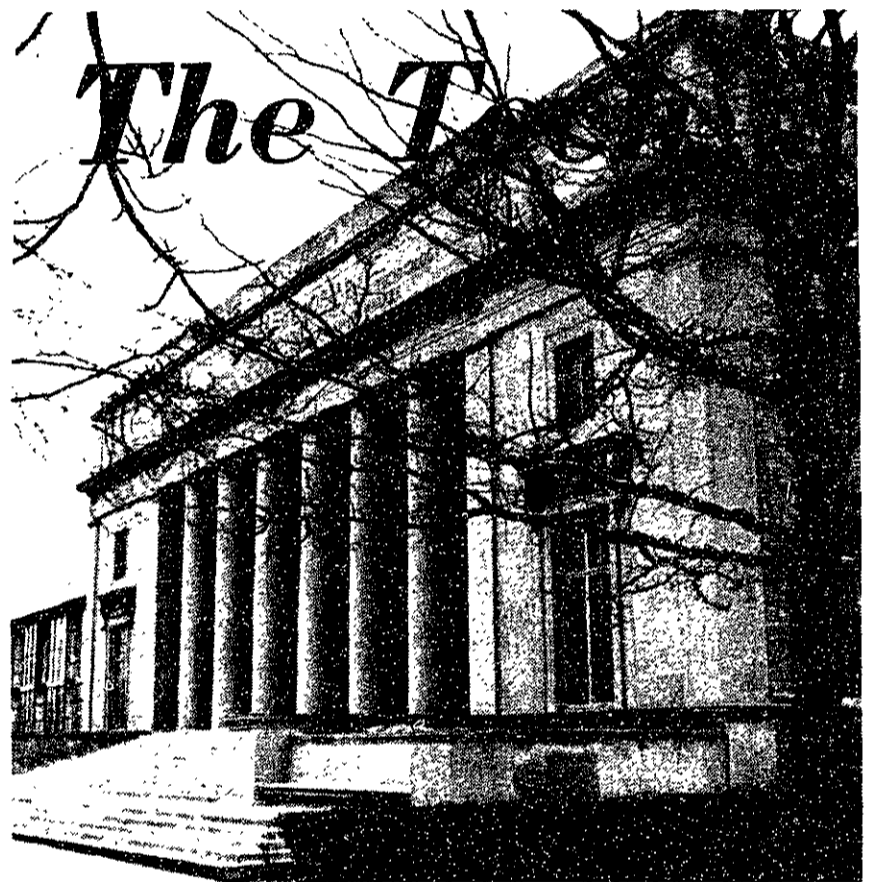
# Institute Disqualifies 55; BTPi Leads Grade List

Fifty-five students have been academically disqualified from the Institute last term, according to the Committee on Academic Performance. This number is fewer than that for the previous term.

Beta Theta Pi, with an average cum of 4.0, headed all living groups in academic rank. The all-fraternity average was 3.5 (1116 students), and the dormitories averaged 3.6 (1752 students).

The Class of 1966 was topped by the pledges of Sigma Alpha Mu with a 4.1. The average cum of the 318 fraternity freshmen was 3.4; that of the 524 dormitory freshmen was 3.6.

Avg.	Rank	Living Group	Ranks 61-62	Year	Frosh Avg.	Frosh Rank
			Spring	Fall		
4.0	1	Beta Theta Pi	1	1	3.7	9
3.8	2	Senior House	4	14	3.8	5
	3	Alpha Epsilon Pi	8	9	3.7	10
	4	Student House	14	23	3.6	14
	5	Chi Phi	10	6	3.8	3
	6	Bexley Hall	7	3	—	—
3.7	7	Zeta Beta Tau	9	5	3.6	12
	8	Sigma Alpha Mu	11	11	4.1	1
	9	Delta Kappa Epsilon	21	17	3.8	4
	10	Sigma Chi	3	2	3.0	32
	11	Burton House	13	21	3.6	11
	12	Kappa Sigma	16	15	3.8	7
3.6	13	Baker House	20	18	3.6	13
	14	East Campus	5	13	3.8	7
	15	Alpha Tau Omega	2	10	3.4	24
	16	Sigma Phi Epsilon	26	16	3.4	25
	17	Phi Sigma Kappa	17	7	3.4	22
	18	Theta Delta Chi	31	31	4.0	2
3.5	19	NRSA	22	25	3.3	26
	20	Phi Kappa Theta	28	19	3.5	17
	21	Phi Gamma Delta	29	35	3.2	28
	22	Phi Delta Theta	25	26	3.8	6
	23	Delta Phi	33	34	2.7	35
	24	Lambda Chi Alpha	30	24	3.5	18
	25	Delta Tau Delta	24	8	3.4	21
	26	Pi Lambda Phi	23	28	3.5	19
	27	Sigma Alpha Epsilon	13	22	3.3	27
3.4	28	Phi Beta Epsilon	15	4	3.2	30
	29	Theta Chi	34	30	2.8	33
	30	Theta Xi	32	20	3.2	29
	31	Sigma Nu	18	12	3.4	22
3.3	32	Delta Upsilon	6	28	2.7	34
	33	Tau Epsilon Phi	35	27	3.3	27
	34	Phi Kappa Sigma	27	32	3.0	31
	35	Phi Mu Delta	19	33	3.5	16



## Faculty Awards

# Cope Re-elected; French Wins Contest

Recent awards and honors received by faculty members have been as varied as their fields of interest.

Prof. Arthur G. Cope, head of the Department of Chemistry, has been re-elected chairman of the board of directors of the American Chemical Society.

Dr. Cope, who was president of the Society in 1961, also will be chairman of the board's executive committee. This will be Dr.

Cope's fourth year as board chairman.

Prof. Anthony P. French of the Department of Physics won first prize in the undergraduate-laboratory category in the annual competition of the American Institute of Physics for improved apparatus for undergraduate physics teaching.

Dr. French's apparatus permits measurement of radiation pressure by observation of the deflection of an aluminum vane

supported by a fiber inside a glass tube.

Dr. Kenneth W. Billman and Prof. David J. Rose won a third prize and an honorable mention, respectively, in the American Institute of Physics competition.

Dr. Rose is in the Department of Nuclear Engineering; Dr. Billman is an assistant professor of physics.

(Please turn to page 3)

Vol. 83, No. 6 Cambridge, Mass., Wed., March 13, 1963 5c

## Activities Council Elects New Officers Discusses Proposed Activities Card System

By Ron Frashure  
Activities Council discussed the proposed activities cards and the tentative activities awards system at its meeting last Wednesday.

The group also elected officers for the coming year. The new leaders of Activities Council are Robert B. Popadic '64, Chairman; Ed I. Shibata '64, treasurer; and William T. Frangos '65, secretary.

The proposed activities cards would be issued through the Registrar's Office, and would be used for such functions as voting for the J P Queen. The cards would be issued each term, stating the holder's name and living

group. They could not be used for identification in transactions with the Bursar's office. According to Steve Wanner '63, chairman of Activities Council, the Registrar's Office "is very definitely going to set up an activities card system."

The tentative plans for activities awards emphasize participation rather than management. There would be up to twenty awards each year. The proposed nominations system for the awards allows the chairman and secretary of each activity, in addition to Inscomm subcommittees, to suggest nominees.

The proposed awards would probably be plaques or trophies.

## Class Election Results

### Class of '63

Permanent president	Woody Bowman (PBE)
Permanent vice-president	Robert Vernon (LCA)
Permanent executive committee	Elliott Bird (AEPi)
	Juan J. Calvo (Baker)
	Jim Champy (PKS), Steven R. Ditmeyer (EC)
	James E. Evans (DU), Jack Solomon (Baker)
	Peter Van Aken (Baker)
Permanent secretary	Bob Johnson (PDT)
Permanent treasurer	Stephen Kaufman (PiLP)

### Class of '64

President	Steve Glassman (Baker)
Vice-president	Mark B. Barron (DU)
Secretary-treasurer	Dick Carpenter (BTPi)

### Class of '65

President	Bill Samuels
Vice-president	Frank Yin (DTD)
Secretary-treasurer	Dick Tsien (BTPi)

### Class of '66

President	Thomas O. Jones (SC)
Vice-president	Hank Perritt (SAE)
Secretary-treasurer	Ken Browning (SAE)

## KS Will Present Speakeasy Party

Kappa Sigma will hold its annual open-bid speakeasy party on Saturday night.

The party will be given from 8:00 p.m. until midnight at the Kappa Sigma house, 33 Bay State Road, Boston. Admission is free and for couples only.

## UAP Bowman Will Report On Tenure

By Lyall Morrill

The importance of problems presently faced by activities is too often obscured by the controversy about academic credit for activities work, according to a report on his tenure by outgoing UAP Woody Bowman.

The report, to be released during the week of March 25, will be distributed to the undergraduate student body through the living groups. It presents a brief history of the achievements of student government during Bowman's term as UAP and offers suggestions for improvements in the structure and functioning of Inscomm.

Although student government should be well enough informed to make suggestions to major

activities, according to Bowman, it must avoid exerting direct control.

Before student government can intelligently attack such problems as whether to grant credit for participation in activities, "a clear statement must be made of the purpose of extracurricular activities at MIT, and be accepted by the administration, faculty, and students."

### Political Questions

The report also discussed the expression of views on national and international politics by student government and by activities. "It is the personal responsibility of students to take an active interest in national political activity," Bowman says.

(Please turn to page 2)

**SQUASH RACQUETS**  
All Makes—Large Variety  
**Tennis & Squash Shop**  
67A Mr. Auburn St., Cambridge  
(Opp. Lowell House)  
TR 6-5417

Contact Lenses — Prescriptions Filled — Glasses Repaired  
**UNITY OPTICAL CO.**  
Abe Wise, Licensed Optician  
31 Mass. Ave. COpley 7-1571  
Special prices to MIT community  
Nearest Optical House to M.I.T.

**GAC**

Tired of "made work" for summer jobs? GENERAL ATRONICS offers you the opportunity to exploit your creative potential through constructive ends.

Openings exist for all degree levels in the areas of Applied Physics and Mathematics, Oceanography and Underwater Sound, Advanced Systems Design and Electrical Engineering.

Interviewers will be on campus Tuesday, March 19.  
Sign up now . . .

**General Atronics Corporation**  
Philadelphia, Pennsylvania

## UAP Report Will Discuss Politics, Operations

(Continued from Page 1)

He names autonomous clubs, as opposed to student government, as the proper vehicle for political activity. On the other hand, he points out, "any program which can provide opportunity for students to sharpen their political awareness while allowing student government to stay neutral" should be encouraged.

Bowman warns against institutionalizing political stimulation of any kind, "lest the elements of the political question, per se, become the major planks in election platforms and lest the institution become misdirected."

**Weekends and Conferences**  
Regarding the continuation of weekends at the Institute, the report says, "there were no doubts that MIT should again have a

second term social weekend." Bowman recommends scheduling future weekends later in the term.

Pointing out the value of intercollegiate conferences in permit-

### Stratton, Bush Talk On Course Choice

President Julius A. Stratton and Dr. Vannevar Bush, Honorary Chairman of the MIT Corporation, will be featured speakers at a freshman convocation Monday at 8:00 p.m. in Kresge Auditorium.

The convocation will begin the Freshman Advisory Council program to help freshmen in choosing a course.

ting exchanges of views with other schools, Bowman offered three concrete suggestions: (1) Attend all worthwhile conferences, expanding the conference budget from \$500 to \$1000. (2) Plan an annual conference at MIT, on a smaller scale than this year's spring program. (3) Join with other Boston area schools to sponsor a model United Nations General Assembly each year.

**Operations**  
The operation of student government is also discussed in the report. Bowman recommends that Inscomm meet more regularly to "uncover student dissatisfactions." He also recommends that Inscomm continue its new practice of rotating its meeting place among the various living groups. "Student government," states the report, "requires a broad base of interested, capable persons, willing to execute assignments." In order to recruit such students, Bowman recommends a campaign aimed especially at the sophomores, after which prospective workers would be placed on special project committees related to their interests.

FOR DIAMONDS, WATCHES, JEWELRY  
**DAVIDSON JEWELERS**  
of Kenmore Square  
**Guaranteed Repair Service**  
518 Commonwealth Ave. CO 7-0017

## THE BELL TELEPHONE COMPANIES SALUTE: TONY DIGIOIA

Tony DiGioia (B.S., 1960), in less than two years, became supervisor in one of the Test Centers in the Plant Department of Pennsylvania Bell. He manages fifteen people who are responsible for the installation and repair of 53,000 telephones in the area.

Tony should handle his present assignment with his customary thoroughness, when you consider his first two assignments. Shortly after starting work, he proved his

capabilities by organizing a completely new microfilm filing system in the Engineering Department. And, later, he set up engineering practices covering many phases of the engineering operation.

Tony DiGioia and other young engineers like him in Bell Telephone Companies throughout the country help bring the finest communications service in the world to the homes and businesses of a growing America.



**BELL TELEPHONE COMPANIES**



**\$25,000** for \$100 a year

Now you can get \$25,000 of Savings Bank Life Insurance's famous term protection for as little as \$100 a year, net payment. If you are age 39 or younger. In fact the younger you are the less it costs. It's designed to give the man who needs more protection NOW what he needs at a cost he can afford NOW. You can buy smaller amounts (\$3,000 minimum) at the same low cost per thousand. Look into it. Ask for the free folder: \$25,000 for \$100.

**Cambridgeport Savings Bank**  
Right in Central Sq., Cambridge  
**UN 4-5271**

**SHERATON HOTELS**

**SPECIAL STUDENT-FACULTY DISCOUNT**

Now, vacationing students and faculty members can enjoy summer accommodations at Sheraton Hotels and Motor Inns, at special low rates! Thanks to Sheraton's Student I.D. or Faculty Guest Cards, you'll have a better vacation this summer for less money! Sheraton Hotels get straight A's in every department: Comfort, convenience, and cuisine. And if you're traveling by car, there's Free Parking at most Sheraton Hotels and at all Sheraton Motor Inns. Get these discounts at any of Sheraton's 80 hotels in the U.S.A., Hawaii and Canada by presenting your Card. To get a Sheraton I.D. Card or Faculty Guest Card with credit privileges, write us. Please state where you are a full time faculty member or student.

Mr. Patrick Green  
College Relations Dept.  
Sheraton Corporation  
470 Atlantic Avenue  
Boston 10, Mass.

## Mintz Discusses Planets' Atmosphere

Prof. Yale Mintz, of the UCLA Department of Meteorology discussed 'The Circulation of the Planetary Atmospheres' at last week's COMPASS Seminar.

Considering the problem of an arbitrary gravitating sphere with an atmosphere illuminated with solar radiation, Professor Mintz determined the mode of circulation of the atmosphere necessary to distribute the heat, and applied the results to Venus, Earth and Mars.

First considering the symmetric system in which the warm air flow is from the equator to the poles at high altitudes, with cold air returning at low altitude, Dr. Mintz determined un-

der what conditions this simple scheme becomes unstable and breaks up into another scheme.

The solution of this problem requires an analysis of vertical temperature gradient, coriolis force, the latitude heating differential, and eddy viscosity, which determine transition to instability. When this happens the symmetric system breaks up into wave regimes. The wave regime consists of high and low pressure zone pairs, forming winds which flow north through the lows and south through the highs in the northern hemisphere. Thus heat can be transported against the gradient. This is the case on Earth.

On Mars there are almost no clouds and no heat reservoirs, such as oceans, which are the cause of strong local variations of temperature. Most heat radiation is from the soil since there is little water or carbon dioxide in the atmosphere to radiate. The symmetric regime is expected to dominate on the average. Due to the high inclination of the planetary axis the poles at the solstices represent extremes in temperature and the air flow will be from pole to pole across the equator twice a year.

In Dr. Mintz's model of Venus rotation is retrograde, there are two days to the year, and the axis is perpendicular to the ecliptic. According to this model the warm air flow is across the poles to the dark side above the returning cold air.

## Kenya Bishop Speaks On Church's Role In Independence Movement

Bishop Caesar Gatimu, auxiliary bishop of the diocese of Neri in Kenya, spoke at a meeting of the Tech Catholic Club last Wednesday. Boston is the bishop's first stop in his five-month tour of the United States.

Bishop Gatimu has been sent to this country to gain additional experience from a study of church organization in America. Although his training before he was consecrated a bishop by Pope John XXIII included nine years in Rome, he has never been to America before.

Despite the rapid growth of the Roman Catholic Church in Africa, there is a great shortage of trained personnel. Kenya, which

is expecting independence in a few years, is not a part of the Peace Corps program and receives little outside help. Part of the bishop's mission is to present Kenya's problems to the American public and to appeal for aid.

The bishop feels the independence movement, "the new wind blowing in Africa," must be carried on by religious groups who will combat the communist influence that has revealed itself in so many places.

His own country is the scene of the most publicized of the Mau-Mau uprisings, and he hopes to avoid such uprisings when Kenya is granted independence.

## European Study Program Changes Applicant Deadline

The Institute of European Studies has changed deadline for applications from June 15 to June 5 due to an unusually large number of applications from qualified students.

The Institute's program, which involves study in either Vienna, Paris, or Freiburg, West Germany, also involves two field-study trips in Europe.

A folder giving further information about the program is available from the Institute of European Studies, 35 E. Wacker Drive, Chicago 1, Illinois.

## Sabin Type II Out Next Week

Sabin Type II oral polio vaccine will be distributed without charge to the MIT Community next Wednesday.

The vaccine will be available in Building 10 from 9:30 a.m. to 4:30 p.m. and in Walker Memorial and the dormitory dining

halls between 11:30 a.m. and 1:30 p.m.

Students who missed the Type I vaccine in January should take Type II now and Type III in May. Type I vaccine then should be taken 4 to 6 weeks after the type III vaccine.

## Faculty Members Win Diverse Awards

(Continued from Page 1)

Prof. F. Albert Cotton of the Department of Chemistry has been awarded the honorary degree of Doctor of Science by Temple University.

Dr. Cotton, Temple '51, is editor of an annual series entitled 'Progress in Organic Chemistry,' and has authored or co-authored two textbooks, about 100 research papers, and several review articles in inorganic chemistry.

Prof. John F. Elliott of the Department of Metallurgy was named to give the Howe Memorial Lecture of The Metallurgical Society, a constituent organization of the American Institute of Mining, Metallurgical and Petroleum Engineers.

The Howe Lecture is given by an individual of "high attainment in the science of iron and steel metallurgy and metallography."

Prof. Edwin R. Gilliland of the Department of Chemical Engineering is a member of the award committee which will select the 1963 winner of the Kirkpatrick

Award for Chemical Engineering Achievement.

The award is presented every other year to the company making the greatest contribution to the advance of chemical engineering. The award recognizes group effort rather than individual achievement.

Prof. Cyril S. Smith of the Departments of Metallurgy and Humanities was named a Fellow of the Metallurgical Society of the American Institute of Mining, Metallurgical and Petroleum Engineers. Dr. Smith is a professor at the University of Chicago's Institute for the Study of Metals, of which he is a former director.

Dr. Robert V. Whitman, associate professor of civil engineering, has received a Research Award from the American Society of Civil Engineers, in recognition of "outstanding contribution to the knowledge of designing blast-resistant underground structures." Prof. Whitman served as a member of the senior advisory panel for the installation of hardened Titan, Atlas and Minuteman missile bases.



### Does a man really take unfair advantage of women when he uses Mennen Skin Bracer?

All depends on why he uses it.

Most men simply think Menthol-Iced Skin Bracer is the best after-shave lotion around. Because it cools rather than burns. Because it helps heal shaving nicks and scrapes. Because it helps prevent blemishes.

So who can blame them if Bracer's crisp, long-lasting aroma just happens to affect women so remarkably?

Of course, some men may use Mennen Skin Bracer because of this effect.

How intelligent!



**BUY MENNEN NOW at THE COOP**

ONE WAY TO TRAVEL  
**FOR LESS**  
THAN GREYHOUND

A short walk is good for you. But when you really want to travel you can't beat Greyhound for going places at lowest cost. In fact Greyhound costs less than trains, planes or driving yourself. For economy, GO GREYHOUND . . . AND LEAVE THE DRIVING TO US.

No other form of public transportation has fares so low. For example:

<b>PORTLAND, MAINE</b> One way \$4.05 Round Trip \$7.30	<b>PHILADELPHIA</b> One way \$10.80 Round trip \$19.45
<b>HARTFORD, CONN.</b> One way \$4.30 Round trip \$7.75	<b>BALTIMORE</b> One way \$13.90 Round trip \$25.05
<b>NEW HAVEN, CONN.</b> One way \$5.20 Round trip \$9.40	<b>WASHINGTON, D. C.</b> One way \$15.30 Round trip \$27.55
<b>ALBANY, N. Y.</b> One way \$6.50 Round trip \$11.90	<b>MIAMI</b> One way \$44.75 Round trip \$67.15
<b>NEW YORK CITY</b> One way \$7.45 Round trip \$13.45	<b>10 St. James Ave., Boston 16</b> Phone 423-5810

BAGGAGE: You can take more with you on a Greyhound. If you prefer send laundry or extra baggage on ahead by Greyhound Package Express. It's there in hours and costs you less.

**GO GREYHOUND**  
...and leave the driving to us

# THE TECH

Vol. LXXXIII No. 6 Mar. 13, 1963

- Chairman ..... Tobias Zidle '63
- Managing Editor ..... David Trevett '65
- Editor ..... Jason Fane '64
- Business Manager ..... Howard Brauer '65
- News Editor ..... Howard Ellis '65
- Features Editor ..... Richard Schmalensee '65
- Sports Editor ..... Clifford Weinstein '65
- Photography Editor ..... Joseph Baron '65
- Entertainment Editor ..... Mona Dickson '65
- Advertising Manager ..... Bernard Yaged '64
- Associate Managing Editor ..... Linda Rollin '64
- Associate Editor ..... Ronald Frashure '64
- Associate Sports Editor ..... John Reintjes '65
- Associate Photography Editors ..... Maxim Smith '64
- Copy Editor ..... Lyal Morrill '66
- Controller ..... Kenneth Grace '63
- Treasurer ..... Malcolm Wheeler '66
- Circulation Manager ..... Kenneth Browning '66
- Typographic Consultant ..... Joseph Hanlon '63
- News Staff ..... Richard Trilling '63, Alan Rinsky '64, Alan Weinstein '64, Donald Goldstein '65, Stephen Katzberg '65, Ronald Lundquist '66, Gary Spittal '66, David Vanderwerf '66
- Features Staff ..... Clare Fetrow '63, Barbara Cohen '64, Steven Lipner '65, George McQuilken '65, Susan Hemley '66, John Montanus '66, Anthony Pappas '66, Richard Russell '66, Eugene Sherman '66, Michael Shorenstein '66, Edward Steinberg '66, Jeffrey Trimmer '66, James Veilleux '66
- Sports Staff ..... Charles Einolf '63, Robert Felix '63, Joseph Blew '64, Joseph Kirk '64, John Butler '65, Jesse Lipcon '66, Richard Tsien '65, Michael Newhouse '66, John Rible '66, Gerald Skinner '66
- Photography Staff ..... Ralph Grabowski '63, Harold Iuzzolino '64, Sanford Libman '65, Arthur Sindoris '65, Saul Moallem '66, William Park '66, Stephen Teicher '66, John Eulenberg '64, John Torode '66
- Photographic Consultants ..... Boyd Estus '63, Curtis Wiler '63
- Reviewers ..... Paul Zakrzewski, David Johnson '63, Lawrence Stark, Gilberto Perez-Guillermo '64, Robert Lurie '66, Henry Perritt '65, Ernest Cataldo '66

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.

Deadlines: Noon Thursday—advertising; 3:00 pm Saturday—features, activities, letters to The Tech; 11:00 pm Saturday—photography; noon Sunday—sports, entertainment; 7:00 pm Monday—news.

## Out For Blood

MIT's annual blood drive is now signing up donors in the lobby of Building 10. So long as MIT participates in the bank, any member of the MIT community may get blood free of charge from any Red Cross blood station. Last year 1170 pints were collected. We hope MIT gives more blood this year.

## Spills, Thrills And Tests of Skill



Piles of slush and pools of frigid water make walking along the sidewalks of MIT an unpleasant experience.

Take the dark-suited techman below, deftly balancing himself between a frigid dousing and a crunching fall into the snowbank. Doesn't he present a strong case for improving the drainage and snow removal along the walks of MIT?

The parka-clad gentleman is fording a stream across the road between Burton and Baker Houses. We hope that this road with its many potholes will



soon be repaved and better drainage installed.

The Great Court looks very picturesque with the light and shadows reflected in the sidewalk pools. Unfortunately these scenic lakes make travel treacherous. They freeze to glazed ice during cold nights. Pools could be eliminated by raising and tilting the sidewalks to drain the water.

The board walk across the Great Court was installed too late, and is too narrow. Wet feet are the penalty for not jumping the gaps between sections.

We hope these deficiencies will be corrected before next winter.

## MTA Service

If you travel about the Boston metropolitan area on the MTA, we don't have to tell you that the service is slow and infrequent, the routes are poorly planned, and the fares are irrational. You know about the unnecessary midnight crowding, the enormous deficits, and the austere vehicles.

We suggest three possible ways to improve service:

**1. Run through service.** Why have separate bus lines terminating end-to-end at Harvard Square and elsewhere? The MTA should join these into longer lines, and save passengers the time and bother of transfers. The MTA did this recently by connecting the Harvard and Dudley bus lines at Massachusetts Station.

**2. Publish and distribute timetables** of all routes which have service less frequently than six minutes, to eliminate long waits. Post the timetables at subway stations and bus stops. Have copies available on buses and trains, and at stations. Establish a public mailing list so that passengers can receive new timetables at their homes a few days before changes.

The Cleveland Transit System has been printing timetables for several years and production cost per time-table is only about one-fifth of a cent. This is a small change for the added convenience. The timetables could be sold if necessary, as they are in Europe.

**3. Run single-car subway trains.** Why run two-car subway trains with a two-man crew? Use the same two men to run two single-car trains — Passengers then wait only half as long. Single-car trains have been highly successful in several cities in the United States and abroad.

**4. Run all-night service** on major routes. Long, fast lines between the major population centers would be an important public service. Charge a higher fare if necessary, but run the service. Almost any fare would be cheaper than the Boston taxicabs.

## Letters to The Tech

### STRONG WEEKEND

To the Editor:

Your editorial entitled "Weak Weekend" demonstrated lack of knowledge concerning the matters at hand, a fault increasingly evident in articles and editorials in The Tech.

You point out that "there is no reason for other students to subsidize the pleasures of the weekend-goers." If this is true for a big weekend like the past Winter Weekend, it is true for any activity, but, to quote the Social Beaver, "Each year roughly \$13 is taken out of each student's tuition and given to Finance Board for support of undergraduate activities." These include such diverse activities as Dramashop, Eulenspiegel Verein, Science Fiction Society, and Tech Model Railroad Club.

All these activities benefit only a small portion of the MIT student body. If The Tech advocates elimination of subsidies to the social weekends, then it must follow that The Tech is advocating the elimination of subsidies to any activity that does not benefit the entire student body, i.e., all activities.

Each student attending a weekend pays approximately \$12.50 to cover the expenses of entertainment and decoration. This \$12.50

represents a larger amount proportionately than is paid by members of any other activity to help defray expenses.

The members of the Winter Weekend committee were chosen on their merits, as records of their previous activities and experience indicate. For example, Weitz, chairman of the committee, was purchasing manager for the IFC and created an efficient, money-saving organization out of the old purchasing managers council. He is not, and never was, a campus politician, but was appointed solely on merit.

The weekends on MIT might not need to pay for "extensive hard-sell" publicity if The Tech featured articles about an activity that concerns several hundred MIT students as well as front-page pictures of demolished trucks.

If the social weekends are expendable, as the editorial suggests, what will fill the gap created by their absence? MIT appears cheerless enough to many prospective students and those already attending the Institute.

Eliminate the weekends and you take the final step in making MIT a factory turning out machines, not a school producing human beings adept at living in a non-scholastic environment.

Laurence Gardner '63  
Michael Weiss '65

## Kibitzer

By MICHAEL LINAH

The National Intercollegiate Par Contest was conducted in colleges across the country during third week of February. While the National results are not in yet, Stephan Lapides and Joseph Goldberg were the Campus Champions.

The contest consisted in a duplicate tournament run using "par" hands. Pre-dealt, fixed deals were used across the country. Each deal contained a special play, and to gain a par for your partnership, this play had to be found. In order to standardize playing conditions, the contract, the declarer, and the defense were standardized.

The conditions for this deal were as follows: South to be declarer at four spades, with the bidding shown; West must open the Jack of Clubs; the defense must lead clubs whenever possible.

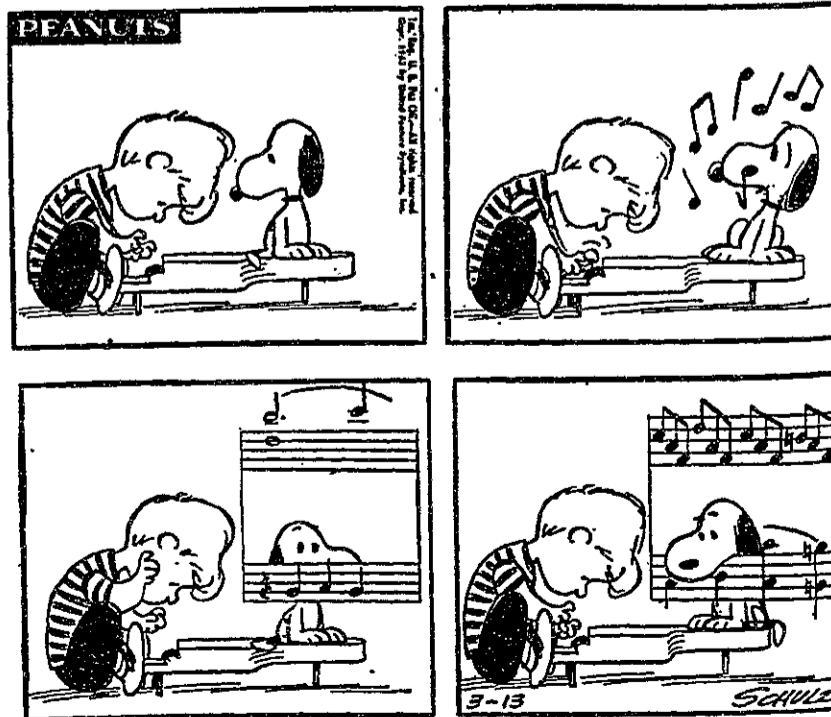
Thus each South player had the Jack of Clubs opened, and the suit was continued. Obviously, he must ruff the trick. The problem of the hand is that the diamond suit is blocked. If South gets a friendly three-two trump split, the hand is no trouble. He can draw three rounds of trump, play the Ace, King, and Queen of diamonds, ruff a club to return to his hand and then run the diamonds. However, if the trumps break four-one, when South re-enters his hand with a ruff, the hand holding the four trumps will hold one trump, while South

<b>NORTH</b>				
♠	7 5 2	♥	Q 9 2	
♦	A K Q	♣	Q 5 4 2	
<b>WEST</b>				
♠	10 9 8 6	♥	K 6 4	
♦	10 7	♣	J 10 9 8	
<b>EAST</b>				
♠	4	♥	A 10 8 7 3	
♦	8 5 2	♣	A K 7 6	
<b>SOUTH</b>				
♠	A K Q J 3	♥	J 5	
♦	J 9 6 4 3	♣	3	
<b>SOUTH WEST NORTH EAST</b>				
1	♠	pass	2 NT	pass
3	♦	pass	3 ♠	pass
4	♠	All Pass		

will have none. If he draws four rounds of trump, he will have no entry to his hand to run the diamond suit.

See if you can figure out how to make the hand. Only one declarer managed to make his contract. The winning line of play is this: Ruff the second club, and draw two rounds of trump; now cash the Ace and King of Diamonds, ending up in dummy; lead dummy's remaining trump, and draw two more rounds of trump, throwing the Queen of diamonds on the fourth high trump. Now the trumps are drawn, and the diamonds are ready to be run. Declarer loses two hearts

(Please turn to page 5)



PEANUTS appears daily and Sunday in the Boston Herald

## Concert Band Program To Include Hindemith, Schoenberg, Milhaud

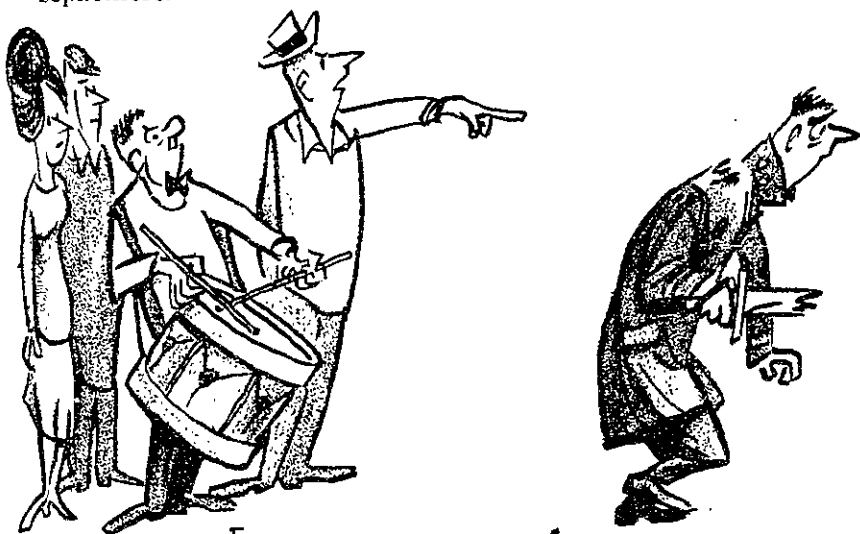
The MIT Concert Band, under the direction of John Corley, will present a concert Friday at 8:30 p.m. in Kresge Auditorium. The band, which has just returned from a tour of Pennsylvania, will play four pieces composed originally for band: 'Symphony for Band' by Paul Hindemith; 'Theme and Variations' by Arnold Schoenberg; 'West Point Suite' by Darius Milhaud; and 'Music for Winds and Percussion' by R. Hergig. Tickets for the concert are free to the MIT community this week in the lobby of Building 10.



### MARKING ON THE CURVE—AND WHAT TO DO ABOUT IT

Twonkey Crimscott was a professor. Choate Sigafos was a sophomore. Twonkey Crimscott was keen, cold, brilliant. Choate Sigafos was loose, vague, adenoidal. Twonkey Crimscott believed in diligence, discipline, and marking on the curve. Choate Sigafos believed in elves, Julie London, and thirteen hours of sleep each night.

Yet there came a time when Twonkey Crimscott—mentor, sage, and savant—was thoroughly outthought, outfoxed, outmaneuvered, outplayed, and out-witted by Choate Sigafos, sophomore.



"You and your ideas!"

It happened one day when Choate was at the library studying for one of Mr. Crimscott's exams in sociology. Mr. Crimscott's exams were murder—plain, flat murder. They consisted of one hundred questions, each question having four possible answers—A, B, C, and D. You had to check the correct answer, but the trouble was that the four choices were so subtly shaded, so intricately worded, that students more clever by far than Choate Sigafos were often set to gibbering.

So on this day Choate sat in the library poring over his sociology text, his tiny brow furrowed with concentration, while all around him sat the other members of the sociology class, every one studying like crazy, every one scared and pasty. Choate looked sadly at their stricken faces. "What a waste!" he thought. "All this youth, this verve, this bounce, chained to dusty books in a dusty library! We should be out singing and dancing and cutting didoes on the greensward! Instead we are here."

Then, suddenly, an absolute gasser of an idea hit Choate. "Listen!" he shouted to his classmates. "Tomorrow when we take the exam, let's all—every one of us—check Choice 'A' on every question—every one of them."

"Huh?" said his classmates. "Oh, I know that Choice 'A' can't be the right answer to every question," said Choate. "But what's the difference? Mr. Crimscott marks on the curve. If we all check the same answers, then we all get the same score, and everybody in the class gets a 'C'."

"Hmm," said his classmates. "So why should we knock ourselves out studying?" said Choate. "Let's get out of here and have a ball!"

So they all ran out and lit Marlboro Cigarettes and had a ball, as indeed, you will too when you light a Marlboro, for if there ever was a cigarette to lift the spirit and gladden the heart, to dispel the shades of night, to knot up the ravelled sleeve of care, to put spring in your gait and roses in your cheeks, it is filtered Marlboros—firm and pure and fragrant and filled with rich, natural, golden tobacco. And, what's more, this darlin' smoke comes in soft packs that are actually soft and flip-top boxes that actually flip.

Well sir, the next morning the whole class did what Choate said, and, sure enough, they all got 'C's, and they picked Choate up and carried him on their shoulders and sang "For He's a Jolly Good Fellow" and plied him with sweetmeats and Marlboros and girls and put on buttons which said "I DOTE ON CHOATE."

But they were celebrating too soon. Because the next time shrewd old Mr. Crimscott gave them a test, he did not give them one hundred multiple choice questions. He only gave them one question—to wit: write a 30,000 word essay on "Crime Does Not Pay."

"You and your ideas," they said to Choate and tore off his epaulets and broke his sword and drummed him out of the school. Today, a broken man, he earns a living as a camshaft in Toledo.

© 1963 Max Shulman

At the top of the curve of smoking pleasure, you'll find Marlboro Cigarettes, available at every tobacco counter in all fifty States of the Union.

## All-Tech Sing This Saturday In Kresge

Entries from eleven of MIT's living groups will compete for musical honors in the annual All-Tech Sing, Saturday at 8:30 p.m. in Kresge Auditorium.

First and second-place awards are presented in each of two categories, light and serious music. Also awarded are a best-in-show trophy and a special 'Eggbert' for the most original presentation. The exact nature of the 'Eggbert' is un-

announced, but is "bigger and better than ever" according to publicity sources.

The M.C. for the show will be Dean Frederic G. Fassett, Jr. Judges for the event are Band Director John Corley, Music Professor Gergory Tucker, and Assistant Glee Club Director Davt Ashton.

Tickets for the event are now on sale for \$5.00 in the lobby of Building 10.

music at mit...

## Joint Orchestra Concert Inconsistent

By G. A. Zaritzky

On Sunday afternoon the MIT and Smith-Amherst orchestras joined in Kresge Auditorium to perform works by Handel, Haydn, Lalo, and R. Strauss. Although the result was not consistently good music, the audience responded appreciatingly to the talent and efforts of the groups.

The program opened with a suite of four movements from 'The Water Music' of G. F. Handel. Conceived as entertainment for King George I during a floating barge party, the music has a pleasant, outdoor air. Precision and clarity are necessary to convey this mood; otherwise, a great deal of Handel's charm is lost. The overture began spirited-

MIT SYMPHONY	
John Corley, conductor	
SMITH-AMHERST ORCHESTRA	
Marion DeRonde, conductor	
March 10, 1963	
Kresge Auditorium	
- Suite from	
The Water Music	Handel
I Overture, Allegro	
III Bourée, Vivace	
V Andante espressivo	
VI Allegro deciso	
Symphony No. 104	Haydn
('London')	
I Adagio-Allegro	
II Andante	
III Menuetto, Allegro	
IV Allegro spiritoso	
Marion DeRonde, conducting	
'Symphonie Espagnole'	Lalo
for violin and Orchestra	
in D Minor, Op. 21	
I Allegro non troppo	
II Scherzando, Allegro molto	
IV Andante	
V Rondo, Allegro	
Janet Stober, Violinist	
Festliches Præludium, Strauss	
Op. 61	
John Corley, Conducting	

## CENTRAL WAR SURPLUS

433 MASS. AVE. TR 6-8512  
CENTRAL SQ., CAMBRIDGE

- HEADQUARTERS for LEVIS, LEES and WRANGLERS  
Blue denim, whites, blacks, and greens
- CHINOS and SLACKS
- BOOTS and TYROLEANS
- SPORTING and ATHLETIC EQUIP.
- CAMPING GEAR

SPECIAL!!

TURTLE NECK JERSEYS

Black, White, Red, Blue and Green

\$1.69 each 3 \$5.00



Don't be a meat-head! Get Vitalis with V-7. It keeps your hair neat all day without grease. Naturally, V-7® is the greaseless grooming discovery. Vitalis® with V-7 fights embarrassing dandruff, prevents dryness, keeps your hair neat all day without grease. Try it!



BUY VITALIS AT THE COOP

ly but with insecure intonation from the horns.

Muddled articulation in the strings marred the Bourée; even so, Marion DeRonde's whip-like beat finally caused the notes to dance. The group blended nicely in tone and color in the andante espressivo, and continued so in the allegro deciso, in which the horns proved finally to deserve their prominence in the lively close.

In Haydn's Symphony No. 104, the orchestra failed to project many small details which make this last symphony one of Haydn's best. The andante featured a weak violin section and thereby lacked continuity. But the menuetto was lively and generally clear, especially in the woodwinds. In the allegro spiritoso Haydn sparked during the orchestra's furious run to the finish.

The highlight of the afternoon was the performance of E. V. A. Lalo's 'Symphonie Espagnole.' Janet Stober, concertmistress of the MIT Orchestra, performed as solo violinist, displaying outstanding technical skill and musical sensitivity. Throughout, Miss Stober's intonation and control were excellent; and the orchestra, conducted by John Corley, set the violinist at her best. The allegro non troppo was rhythmical, decisive and skillfully performed; the scherzo, successfully clever and whimsical. The lyric solo lines and cadenzas of the andante beautifully reflected its many moods. And in the difficult rondo, Miss Stober concluded the concerto with an admirable display of virtuosity.

For a dramatic close, the combined orchestra performed the (fortunately) seldom heard "Festliches Præludium" of R. Strauss. The enormous orchestra, including organ and four off-stage trumpets, vibrated forte upon forte as organ and orchestra alternately vied for, and united in, joyous sounds. Finally, the piece climaxed as the four trumpets, almost overwhelmed by the orchestra, lent a final fanfare to close this "orchestral tour de force," giving the audience a rarely known taste of the full power of sound in a symphony orchestra.

## Kibitzer

(Continued from Page 4)

and a club, making four.

PUZZLER

The bidding has proceeded:

WEST NORTH EAST SOUTH

1 ♠ pass pass ??

You, South hold:

♠ K J 5, ♥ Q 10 7, ♦ A 10 3 2,

♣ K 10 6.

What do you bid now?

Answer next week.

**Hasty Pudding Theatricals 115  
OPENS TONIGHT**

**Tickle  
ME  
Pink**

**Tickets:**  
**12 Holyoke St. Cambridge Run**  
**EL 4-2900 March 13-26**

**movies...**

**'Sunday and Cybele' A Poetic 'Lolita'**

By Gilberto Perez-Guillermo  
The story in Serge Bourignon's "Sundays And Cybele" might be thought of as a poetic variation on the Lolita theme. Pierre, an ex-soldier, suffers from amnesia and the obsessive thought of having killed a little girl in war. When he meets Cybele, a twelve-year-old girl, he is attracted to her relatives and finally abandoned by her father in a religious school, grows attached to him as well. Their relation, of an unmistakably erotic origin as it is, acquires poetic overtones, holding the strange fascination of a child's wonderland. The film is touching and at times splendid, but it is often flawed by Mr. Bourignon's constant striving for technical effect. Mr. Bourignon has a painter's sense of visual beauty, and his use of the landscape gives unusual quality to Pierre's and Cybele's wonderland. Henri Decae's photography is outstanding in its views of nature — trees, the lake, leaves, waves on the water, the image of the ex-soldier and the girl reflected from the surface of the lake. In the water effects Mr. Bourignon is most successful — as in the superb lunch scene,

**SUNDAYS AND CYBELE:** directed by Serge Bourignon; screenplay, Mr. Bourignon and Antoine Tardat, based on the novel "Les Dimanches de Ville d'Avray," by Bernard Eschasseraux; photography by Henri Decae; music by Maurice Jarre; produced by Romain Pines.

**CAST**  
Pierre ..... Hardy Kruger  
Cybele ..... Patricia Gozzi  
Madeleine ..... Nicole Courcel  
Cassio ..... Daniel Ivernel  
Bernard ..... Michael de Re  
Nurse ..... Andre Oumansky  
At the Capri theatre, Boston. A French film, with English subtitles.

when Pierre misses his usual Sunday walk with Cybele, and views the others at the table through his wine glass, which suggests the surface of the lake and brings happy memories to his mind.

Mr. Bourignon's pretentious techniques are not always so successful, however. The search for unusual camera angles, unorthodox editing, camera movements and movement within the frame, result in a film where not a single scene is natural and direct, not a single line is delivered without a camera trick in the making. This would be all-right, of course, if Mr. Bourignon's techniques were effective, but this is not always the case. The close-up and close-angle shots are over used, with a consequent loss in emotional value. One grows tired of seeing the camera often behind screens or moving in tortuous paths, without much beauty or meaning attached to it. Mr. Bourignon's cinematic sense is no match for his pictorial taste.

The acting is excellent. Patricia Gozzi gives a splendid performance as Cybele. Even if her lines seem a trifle too smooth at times, her facial expressions are always moving. Hardy Kruger makes a believable Pierre, and Nicole Courcel is effective in the role of his mistress, Madeleine.

There are some other weaknesses. The reaction of some of the characters at the end, represent-



**THE UNICORN**  
825 BOYLSTON STREET, BOSTON

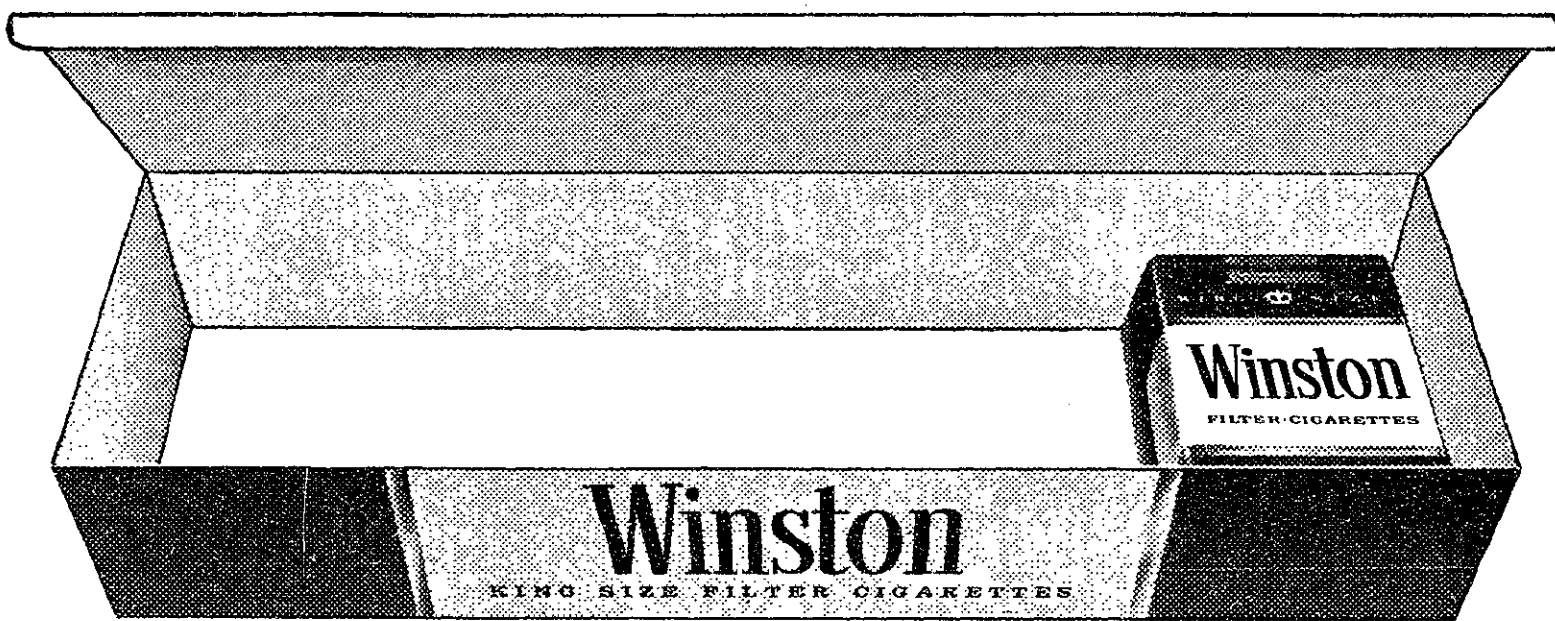
**IVAN** • "BRILLIANT"  
and • "EXCELLENT"  
**SYLVIA** • "SUPERB"  
**NOW THRU MAR. 17**

**THE CATACOMBS**

1120 Boylston Street  
Across from Bostonian Hotel

**Jackie Washington**  
March 17-22  
**ODETTA**  
March 22-31

**...AND THEN  
THERE WAS ONE**



Start with a carton and you'll end up knowing why Winston is America's number one filter cigarette...first in sales because it's first in flavor. The next time you buy cigarettes, buy pleasure by the carton...Winston!

PURE WHITE,  
MODERN FILTER



PLUS FILTER - BLEND UP FRONT

**Winston tastes good  
like a cigarette should!**

**SURPLUS S**  
**Electro-Voice LS-12**  
**12 inch Speakers...**

The LS-12 has a frequency response sensitivity rating of 45 db; heavy radax construction; edgewise wounding; frequency increase of 18% over conventional gain of 5 extra watts from a coil form; long throw voice coil; and more. Due to an oversight in inventory control, we duplicated a back order of LS-12's and, consequently, have an overstock. In order to help alleviate a congested warehouse, we are selling the LS-12's at a discount.

**Bargains in used equipment:**  
**Harmon-Kardon AM-FM**  
& intercom

**Heathkit Tape Recorder**  
**Thorens Changer**  
**Portable P.A. Speaker**

Prices arranged by "haggling"  
**Rek-O-Kut 16"**  
**"War Surplus"**  
**Realistic Electrostatic**

**AUDIO WORKSHOP**

DIRECTIONS: From M.I.T., follow Mass. turn left up Mt. Auburn Street. Plymouth left and the AUDIO WORKSHOP is the

**schedule**

**movies ...**

**'To Kill A Mockingbird' Film Version Of Best-Seller**

By Charles Foster Ford

There is no "new-wave" attempt, in "To Kill A Mockingbird," to penetrate to the gutsy truth beneath our age. The subject of the film is nostalgia, the point-of-view always the wonder-wide eyes of children. Some of the quite explosive material of the film is handled so delicately that it seems almost undramatic.

Gregory Peck plays Atticus Finch, a widowed lawyer with two young children. He accepts an appointment by the court to defend a negro accused of rape. Despite strong evidence that the accusers are lying, the negro is convicted, and killed in an escape attempt. Later, the drunkard father of the "outraged girl" in the case attempts to murder Finch's children.

This bare outline is, of course, useless in judging the film's marvellous achievements. While the trial builds, like a thunderclod on the horizon, the main concern of the children is the insane son of a neighbor. They are fascinated by this figure, whom they've heard about but never seen, naturally he is built up in their

imaginings as a walking horror, attractive because he is dangerous. For half the film, the impending trial appears only as momentary interruptions of this horror-story, and of the daily routines of childhood existence.

This is a film full of quite realistic acting from the children... a rather rare thing. There are several shots which play up only an instant's grimace, a contradiction in word and action, or a wholly natural childhood gesture or attitude. Mary Bodham and Philip Alford romp through the town growing up before your eyes, and yet wholly unaware of it, and apparently unaffected by the presence of cameras. They act as semi-comprehending chorus to the serious events of the story, softening the violence of the actual. They also sharpen the contrast between mean and noble behavior, in their elders, by their innocent witness of it.

Peck is also a tremendous asset to the film. His acting is always slow, deliberate, and correct. To his children, Atticus Finch is a quiet hero, made so as much by his deeds as by his behavior to his family. There is little doubt

**TO KILL A MOCKINGBIRD:** script by Horton Foote, based on the novel by Harper Lee; Produced by Adam Fakuja; Directed by Robert Mulligan. Cast includes Gregory Peck, Mary Bodham, Phillip Alford, Ruth White, Paul Fix, Brock Peters, Frank Overton. At the Keith Memorial Theatre.

a film chosen possibly for contrast, called "Young Guns of Texas." It is a technicolor-cinemascope western without an ounce of imagination, and no reason for being that I could detect. Coupling an example of the best Hollywood has to offer with the worst from the same source might be a good, educational bill, but it makes a strange entertainment package.

**Dramashop To Offer Richardson Play**

The MIT Dramashop will present its second evening of one-act plays March 15 at 8:30 in Kresge Little Theatre.

The plays are "Gallows Humor" parts I and II by Jack Richardson, a new writer who has done several off-Broadway plays.

Tryouts for the spring major production, an adaptation of Franz Kafka's 'The Trial,' will be held in the Little Theatre March 18-20 at 7:30.

or criticism of his character, but in the eyes of his children father is seldom anything else but a superman.

Unlike the usual Hollywood product, this film is not dead technically. The convincing establishment of this calm, gentle mood depends heavily on lyrical shots of the town and of the neighborhood, and on the brevity of most scenes. Often, the action is bitten off by a long cross-fade to a new scene. The effect is that of having described the essentials of a scene which, though it remains on the screen, ceases to contain significant material. These fading tableaux add more to the quality of memory than any other device. The "I remember" narration is well-done, but it is the use of fades which establish the true nostalgia of the film.

Also at the Keith Memorial is

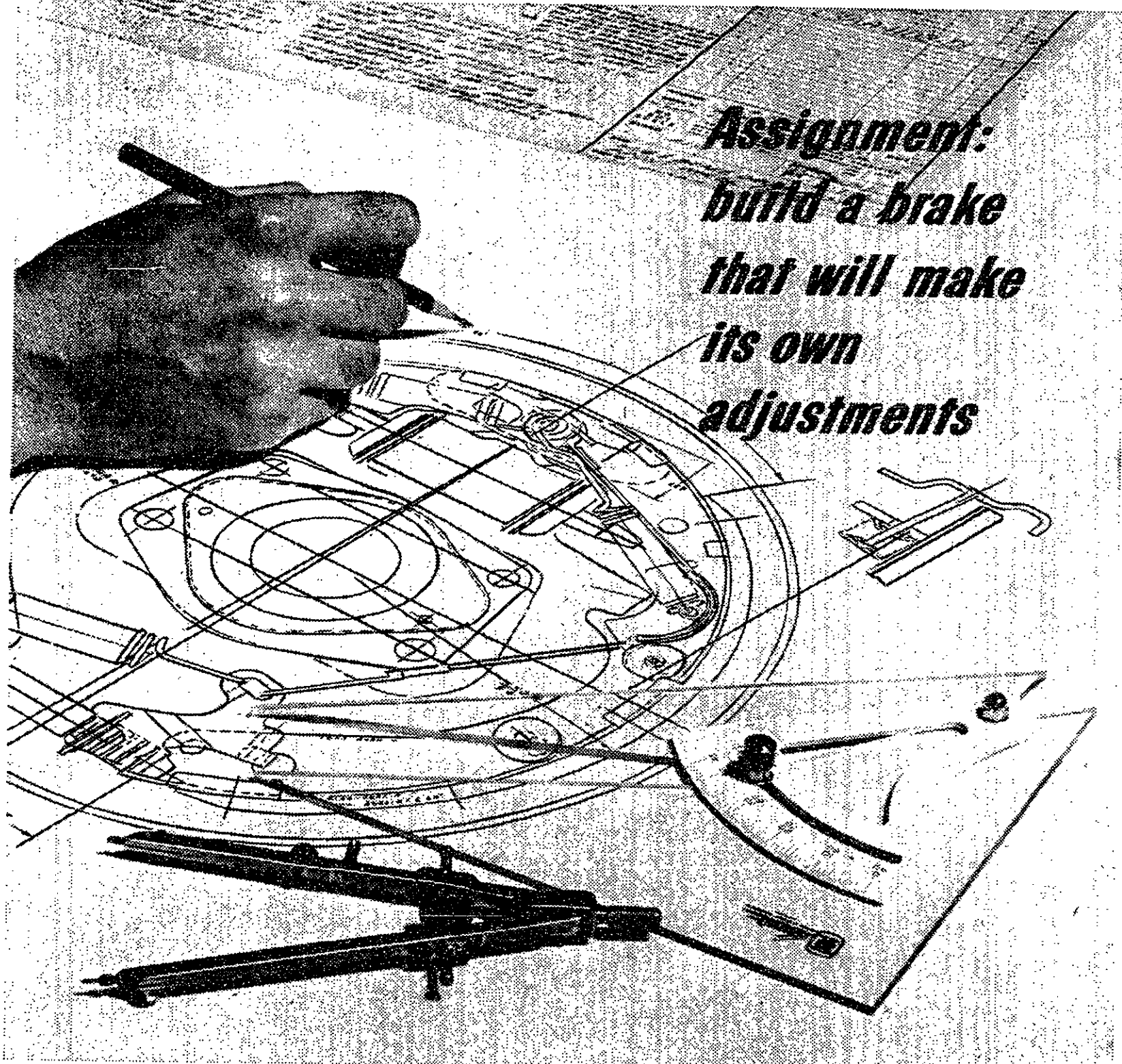
Mar. 12 eves., 8:15, mat. Wed., Sat., Sun., 2:15  
**WELLESLEY COMMUNITY PLAYHOUSE**—through Mar. 16, "Two for the Seesaw", eves. 7:45, mats. Wed., Sat. 2:00.  
**UPTOWN** — "Barabbas", 12:40, 4:55, 9:10, Sun., 1:00, 5:15, 9:10; "Doctor in Love", 11:00, 3:15, 7:30, Sun., 3:30, 7:30.

**Theatre Schedule**

**ACTORS PLAYHOUSE** — "Knot one, Purl Two", 8:00.  
**AGASSIZ THEATER** — "Time Remembered", Mar. 15-16, 21-23.  
**CHARLES PLAYHOUSE** — "Oh Dad, Poor Dad, Mama's Hung You in the Closet And I'm Feeling So Bad", Tues.-Fri. 8:30, Sat. 5:30, 9:00, Sun., 3:00, 7:30.  
**COLONIAL** — starting Mar. 18, "The Sound of Music", eves. 8:30, mats. Wed., Sat. 2:30.  
**HARVARD HASTY PUDDING THEATRICALS** — "Tickle Me Pink", Mar. 13-26.  
**IMAGE** — "The Trunk" and "All That Jazz", two new one-acts, Tues.-Fri. 8:30, Sun., 5:00, 9:00.  
**KRESGE LITTLE THEATRE** — "Gallows Humor", Dramashop one-acts, Mar. 15, 8:30.  
**LOEB EXPERIMENTAL THEATRE** — "A Short Safari Through Purgatory", Mar. 14-16, 8:00, additional performance Mar. 16, 9:30.  
**SCHUBERT** — starting Mar. 18, "The School for Scandal", eves. 8:30, mats. Thurs. 2:15, Sat. 2:30.  
**TUFTS ARENA THEATRE** — "Dark of the Moon", Mar. 15-17, 20-23, 8:30.  
**WELLESLEY COLLEGE THEATRE** — "The Father", Mar. 15-16, 8:00.

**BSO Concert**

Friday, Mar. 15, 2:15; Sat., Mar. 16, 8:30; Symphony Hall, Leinsdorf conducting.  
**LISZT**: Symphonic Poem No. 4, "Orpheus"  
**WILLIAM SCHUMAN**: Symphony No. 3.  
**SCHUBERT**: Symphony in C Major (Posthumous).



**Assignment:  
 build a brake  
 that will make  
 its own  
 adjustments**

**It's now a fact: every Ford-built car in '63 has self-adjusting brakes**

"Give us a brake," Ford Motor Company engineers were told, "that will automatically compensate for lining wear whenever an adjustment is needed—and make it work for the entire life of the lining."

Tough assignment—but not insurmountable. Today, not only does every Ford-built car boast self-adjusting brakes (Falcon extra-duty bus-type wagons excluded), but the design is so excellent that adjustments can be made more precisely than by hand.

This Ford-pioneered concept is not complex. Key to it is a simple mechanism which automatically maintains proper clearance between brake drum and lining.

Self-adjustment takes place when the brakes are applied while backing up. This adjustment normally occurs but once in several hundred miles of driving. The brake pedal stays up, providing full pedal reserve for braking.

Another assignment completed—and another example of how Ford Motor Company provides engineering leadership for the American Road.



**MOTOR COMPANY**  
 The American Road, Dearborn, Michigan  
**WHERE ENGINEERING LEADERSHIP  
 BRINGS YOU BETTER-BUILT CARS**

**At the Coffeehouses  
 Club Mt. Auburn 47**

47 Mt. Auburn Street (near Harvard Square)  
 Today — Tom Rush 9 p.m.-1 a.m.  
 Thursday—Rooney Val & Applin, 9 p.m.-1 a.m.  
 Friday—Jim Kweskin, Dayle Starley, Geoff Muldaur, 8 p.m.-1 a.m.  
 Saturday—Charles Fayer Valley Boys 8 p.m.-12 m.  
 Sunday — Hootenanny with Dayle Starley, 8 p.m.-12m.  
 Monday — Film "W. C. Fields Festival", Chaplin Short, New Serial, 9 p.m.  
 Tuesday—Jackie Washington, 9 p.m.-1 a.m.

**The Unicorn**  
 825 Boylston St.  
 Mar. 13-17 — Ian and Sylvia, New Folk singers from Canada.

**The Catacombs**  
 1120 Boylston Street  
 Mar. 17-22—Jackie Washington.

**"A MOST REMARKABLE ARTISTIC FEAT... MAGNIFICENT!"**  
 —Jesse Zinner, Cue  
**"A beautiful, flowing, filmic evocation of the drama. Miss Papas gives it greatness."**  
 —Hollis Alpert, Saturday Review



**IRENE PAPAS in  
 ELECTRA**  
 PRODUCED AND DIRECTED BY  
 MICHAEL CACOYANNIS



DISTRIBUTED BY LOPERT PICTURES CORPORATION  
**Coolidge Corner**  
 Brookline — 734-2500

M. A. GREENHILL presents

# THEODORE BIKEL

2 CONCERTS: 8:30 P.M.  
THURS. AND FRI., MARCH 14 and 15  
JORDAN HALL KE 6-2412 TICKETS: \$4, 3.50, 2.80, 2.20



An Evening of BLUES with  
**SONNY TERRY and BROWNIE MCGHEE**  
and  
**LIGHTNIN' HOPKINS**  
Sat., Mar. 30 8:30 P.M.—Jordan Hall KE 6-2412 Tickets \$3.50, 2.80, 2.20

## Summer Jobs

### Graduate Students... Seniors... Juniors

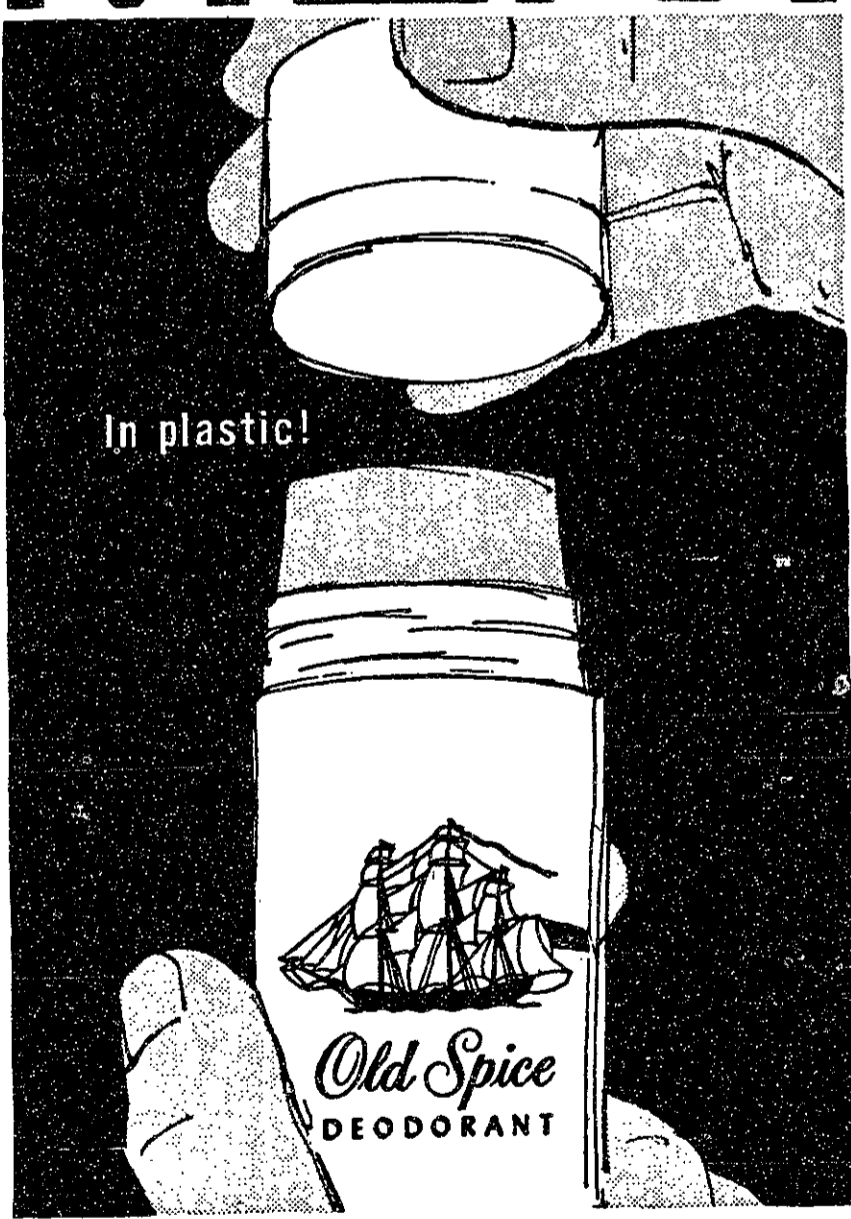
(Courses I, II, VI, XIV, XV)

Mr. B. H. Nelson of New York Telephone will interview for summer assignments on March 18-19 at the Placement Office.



An Equal Opportunity Employer

# MEN!



## Here's deodorant protection YOU CAN TRUST

Old Spice Stick Deodorant... fastest, neatest way to all-day, every day protection! It's the active deodorant for active men... absolutely dependable. Glides on smoothly, speedily... dries in record time. Old Spice Stick Deodorant — most convenient, most economical deodorant money can buy. 1.00 plus tax.

**Old Spice** STICK DEODORANT  
SHULTON

## Making the Scene

Concert of Vocal and Instruments Music	S	M	T	W	T	F	S
— Jordan Hall, today 8:30; Henry Eccles' Sonata in G minor, Bach's Sonata No. 3, Hindemith's 'Kleine Kammermusik', 'Requiem' by Daniel Pinkham.	17	18	19	20	21	22	23
Theodore Bikel — Mar. 14-15, 8:30, Jordan Hall; \$4.00, \$3.50, \$2.80, \$2.20.	24	25	26				

## Music Center To Hold Auditions

The Berkshire Music Center will hold auditions for acceptance at the Twenty-first Session of the Music Center at Symphony Hall March 28 from 2:00 to 4:00 p.m. Faculty members of this summer center for the advanced

study of music will hear the auditions. Aaron Copland is chairman of the faculty. Instructors include many well-known musicians, as well as members of the Boston Symphony Orchestra. Interested instrumentalists and singers can get further information by writing to the Berkshire Music Center, Symphony Hall, Boston.

### Nominated for 3 Academy Awards

Best Actor—Marcello Mastroianni  
Best Direction!  
Best Original Screen Play

**PARK SQ. CINEMA**  
Opp. Statler Hilton  
Tel. 542-2220

"The season's best comedy from any land!"—LIFE Magazine

**JOSEPH E. LEVINE** — MARCELLO MASTROIANNI  
**Divorcee Italian Style**  
WINNER CARRER FESTIVAL AWARD  
"BEST COMEDY"

An Embassy Pictures Release  
Recommended for mature audiences

**HARVARD SQ.** UN 4-4580

"A Kind of Loving"  
1:45, 5:30, 9:20

"The War Lover"  
3:40, 7:30  
Starting Sunday

"Indiscreet"  
1:45, 5:35, 9:25

"Roman Holiday"  
3:35, 7:25

**BRATTLE SQ.** TR 6-4226

RUSSIAN FILM FESTIVAL  
Conclusion — Today

"Fate of a Man" (1961)  
Thurs.-Fri.-Sat.

"THE LETTER THAT WAS NEVER SENT"  
Starting Sunday

Boston Premiere of  
"ZAZIE" plus Short Subject  
Shows daily 5:30, 7:30, 9:30  
Matinees Sat. & Sun. at 3:30

## CHEMISTS . . . PHYSICISTS . . . ENGINEERS

Beckman Instruments Inc., will interview on campus March 20, 1963 for positions in research, design and technical marketing. Beckman is a world leader in the manufacture of instruments for biomedical and laboratory research and analysis; process analysis and control; and space and military applications. The Company also specializes in the design of electronic components, systems, and test instruments. To arrange a personal interview, please contact your Placement Office. If the date of our visit conflicts with your schedule, you are invited to send a resume directly to Mr. R. P. Swank at:

**Beckman INSTRUMENTS, INC.** • Fullerton, California  
An equal opportunity employer.

KEEP ALERT!  
**SAFE**  
**NoDoz**  
TABLETS  
SAFE AS COFFEE

## THE SAFE WAY to stay alert without harmful stimulants

NoDoz keeps you mentally alert with the same safe refresher found in coffee and tea. Yet NoDoz is faster, handier, more reliable. Absolutely not habit-forming.

### Buy At the COOP Now

## Irish Festival of Stars — Camel

Quinn, Mar. 17, 8:30, Donnelly Memorial Theatre.

**THEATRE**

"Tickle Me Pink" — Harvard Hasty Pudding Clubhouse, Mar. 13-26.

"A Short Safari Through Puratory" — Loeb Experimental Theater, Mar. 14-16, 8:00, additional performance Mar. 16, 9:30.

"Gallows Humor" — parts I and II, Mar. 15, 8:30, Kresge Little Theatre; free.

"The Father" — Strindberg, Mar. 15, 8:00, Wellesley College Theatre; \$1.50.

"Dark of the Moon" — American folk play, Mar. 15-17, 20-23, Tufts Arena Theater, Tufts University, 8:30.

"Time Remembered" — Agassiz Theatre, Mar. 15-16, 21-23; \$1.00, \$1.50.

LSC Classics Series — "Siegfried", Mar. 15, Room 10-250, 6:00, 9:00. Fritz Lang directs this pre-Wagnerian version of the Siegfried legend. All of the sets, the forests and the mist as well as the architecture, were studio made. The original German titles are preserved on this version. There will be piano accompaniment for this show. Single admissions will not be sold. (Germany 1923)

**ENTERTAINMENT SERIES** — "The Girl Can't Help It", Mar. 16, Room 10-250, 5:15, 7:30, 9:45; Jaye Mansfield, Tom Ewell, Edmond O'Brien, Julie London. A broken down ex-underworld boss hires a hard-drinking theatrical agent to make a singing star of his voluptuous but wholly untalented girl friend.

"Crisis in Levittown" — MIT Civil Rights Committee, Mar. 18, 7:30, Room 10-105; free; discussion led by Fr. Harry J. Dooley, Catholic Chaplain.

**MISCELLANEOUS**

Dr. Abram L. Sachar—President of Brandeis, "The Many Lives of Eleanor Roosevelt", Mar. 17, Jordan Hall, 8:00; free.

Prof. John Ely Burchard — "The Unassimilated Past", Kresge Little Theatre, 8:00, Mar. 18.

"Barbizon Revisited"—100 oils, pastels and drawings of this movement, Museum of Fine Arts; \$5.00.

Sculpture of Alfred Duce — Mois Mirsk Gallery, through April 8.

**NEXT WEEK**

Vocal Music—Mar. 20, Jordan Hall, 8:30; works of Debussy, Braunesfeld, Korngold, Dvorak, Cornelius, Bruck; free.

New England Conservatory Orchestra — Mar. 21, Jordan Hall, 8:30; music of Mozart, Hartmann, Prokofiev, Wagner; free.

"The Christmas" — the New England Passion Play, Mar. 21-23, 8:30, Mar. 24, 2:30; \$3.00, \$2.25, \$1.50.

Boris Gutnikov — violinist, Jordan Hall, Mar. 22; \$2.00, to \$4.50.

"The Passion According to St. John" — Chorus pro Musica, Symphony Hall, Mar. 24, 8:00.

Elinor Preble — flutist, Mar. 24, 3:00, Gardner Museum.

Japanese Night — International Student Association, Mar. 20, 8:00.

Martin Luther King — "Desegregation and the Future", Mar. 24, Jordan Hall, 8:00.

"Juno and the Paycock"—Mar. 21, 23, 27-30, Loeb Drama Center, 8:30.

## Dean Burchard To Lecture On Modern Architecture

Prof. John Burchard, Dean of the School of Humanities and Social Sciences, will present two lectures under the sponsorship of the Humanities Department on March 18 and April 1. Titled "The Dilemma of Contemporary Architecture," the pair of lectures will be given in the Kresge Little Theatre at 8:00 pm. Burchard's topics will be "The Unassimilated Past" (March 18) and "The Evolution of Confusion" (April 1). Prof. Burchard is presently engaged in lecturing throughout the United States.

**Antoniomi's**  
**ECLIPSE**  
FASCINATING!

## Chorus Pro Musica

Alfred Nash Patterson, Conductor  
SYMPHONY HALL  
SUNDAY, MARCH 24, 8 P.M.

**Bach**  
**St. John Passion**  
Cambridge Festival Orchestra  
Soloists:  
Marguerite Willauer, sop.,  
Ann Golden, contralto,  
Charles Bressler, tenor,  
Mac Morgan, bass,  
John Ring, bass

Tickets at Box Office or write Chorus pro Musica  
645 Boylston St., Boston 16  
\$6.00, \$5.00, \$4.00, \$3.00,  
\$2.50, \$2.00

# Three Professors Receive Sloan Grants German Club To Give Gemuetlichkeitabend

Professors Glenn A. Berchtold, James L. Kinsey, and Bertram Kostant have received two-year unrestricted research grants from the Alfred P. Sloan Foundation.

Professors Berchtold and Kinsey, both members of the Chemistry Department, received their first Foundation grants. Prof. Kostant, a professor of mathematics, was awarded a second grant to continue work begun under a

previous Sloan Foundation grant in 1961.

Dr. Kostant will use his grant to continue work on applications of Lie theory to differential and algebraic geometry.

Dr. Kinsey plans to use his grant to study chemical reactions in crossed molecular beams, the reactions obtained when low-density streams of highly-reactive molecules intersect at extremely low pressures.

Dr. Berchtold will use his grant to continue work he has been doing in two areas. One is the application of enamine chemistry to organic synthesis. The other is the investigation of the synthesis and properties of hetero-substituted 1, 3-cyclohexadienes.

Enamines, organic compounds with nitrogen-carbon double bonds, have been found useful in the preparation of ketone and cyclobutane derivatives. Prof. Berchtold is primarily interested in the reactions, spectrographic properties, and stability of the hetero-substituted 1, 3-cyclohexadienes.

A "Gemuetlichkeitabend" will be held Friday by the Eulenspiegel Verein.

This evening of dancing, conversation, and relaxation will follow the first showing of the LSC class-

ic series movie 'Siegfried.' Admission will be 50c for members and \$1 for non-members. The evening will be from 8:30 p.m. until 1:00 a.m. in the Varnevar Bush Room, 10-105.

## Saltonstall On Foreign Policy

Senator Leverett Saltonstall will speak on 'The Role of the Military in U. S. Foreign Policy' in the next Harvard-Radcliffe International Relations Council lecture.

The Cuban and Berlin situations will be the principal examples discussed by the Massachusetts

senior senator. The lecture will be given Monday, March 18, at 8:00 p.m., in Harvard's Burr B Lecture Hall, Quincy Street and Broadway, Cambridge. Admission is 50 cents.

The next speaker will be French Ambassador Herve Alphand, who will lecture April 10.

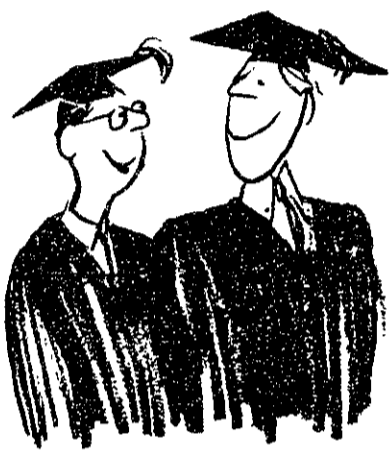
## April 19 Chosen For Assembly Ball

The Francis Amasa Walker Assembly Ball will take place Friday, April 19, in the Walker Memorial Building. This 29th annual ball, more commonly called 'A-Ball', is a formal closed-bid affair, sponsored by the Walker Student Staff.

The evening will begin with a receiving line of honor guests at 10:00 p.m. Dancing in Morss Hall and on the terraces will continue

until 3:00 a.m. Harry Marchard's Orchestra of 14 men has been engaged. The Grand Promenade will take place on the third floor of Walker.

A-Ball is financed solely by the Walker Student Staff, with funds provided by the IDC mixers and dances, the sale of quiz books, and contributions. Many alumni from all parts of the country are expected to return for the ball.



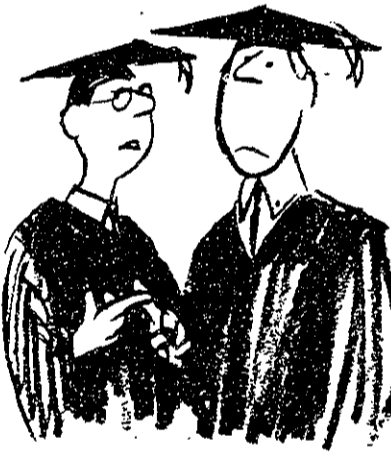
1. According to the Department of Labor, you're worth over \$350,000 as soon as you get your sheepskin. That's theoretical, of course.

I didn't even know the Department was thinking about me.



2. The way they figure it, that \$350,000 is how much the average college graduate will earn by the time he retires.

I'll take it right now in a lump sum. Would I live! Penthouse. Yacht. Homburg. The works.



3. As an Eco major, I feel obliged to tell you what would happen to that bundle. First, Uncle Sam would help himself to about 290 Gs. With the going rate for penthouses, your life's earnings would disappear in one year.

You've ruined my day.



4. Since you'd be only 22, you couldn't qualify for Social Security. You'd have to go back to your dad for an allowance.

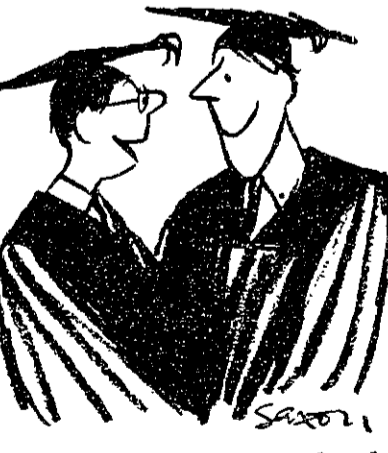
I never could handle money.



5. Fortunately, there's a way out for you.

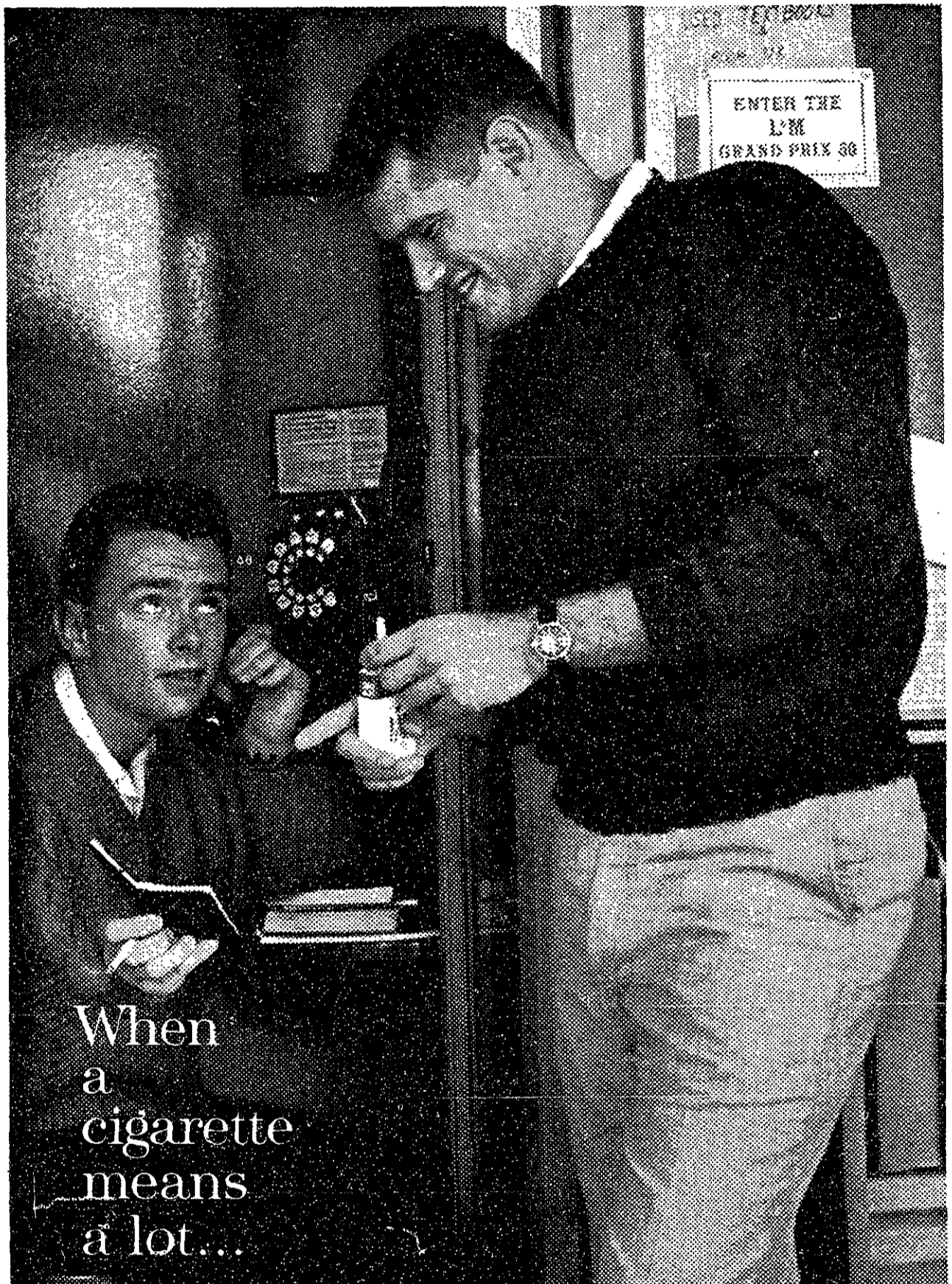
Tell me—tell me.

Well, you won't be getting all that money in one year. You'll be getting some of it each year, at a much lower tax rate. What you should do is put aside a certain amount of it.





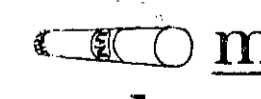
6. Put some money into cash-value insurance, the kind they call Living Insurance at Equitable. It gives your wife and kids solid protection and it saves for you automatically—builds a cash fund you can use for retirement or any other purpose.

You Eco guys have all the answers.



When a cigarette means a lot...

## get Lots More from L&M

 more body  
in the blend  
 more flavor  
in the smoke  
 more taste  
through the filter



It's the rich-flavor leaf that does it! Among L&M's choice tobaccos there's more longer-aged, extra-cured leaf than even in some unfiltered cigarettes. And L&M's filter is the modern filter—all white, inside and outside—so only pure white touches your lips. L&M's the filter cigarette for people who really like to smoke.

The Equitable Life Assurance Society of the United States ©1963  
Home Office: 1285 Avenue of the Americas, New York 19, New York  
For information about Living Insurance, see The Man from Equitable in your community. For information about career opportunities at Equitable, see your Placement Officer, or write William E. Blevins, Employment Manager.



### Awaiting Your Arrival

Clean, comfortable and reasonable accommodations for male students, clubs, teams, administrators and groups in the heart of midtown New York, close to all transportation and nearby Empire State Building. All conveniences, cafeteria, coffee shop, tailor, laundry, barber shop, TV room, tours, etc. Booklet C.  
Rates: Single Rooms \$2.75-\$2.90; Double Rooms \$4.40-\$4.50

**WILLIAM SLOANE HOUSE Y.M.C.A.**  
356 West 34th St., New York, N. Y. OXford 5-5133 (nr. Penn Sta.)

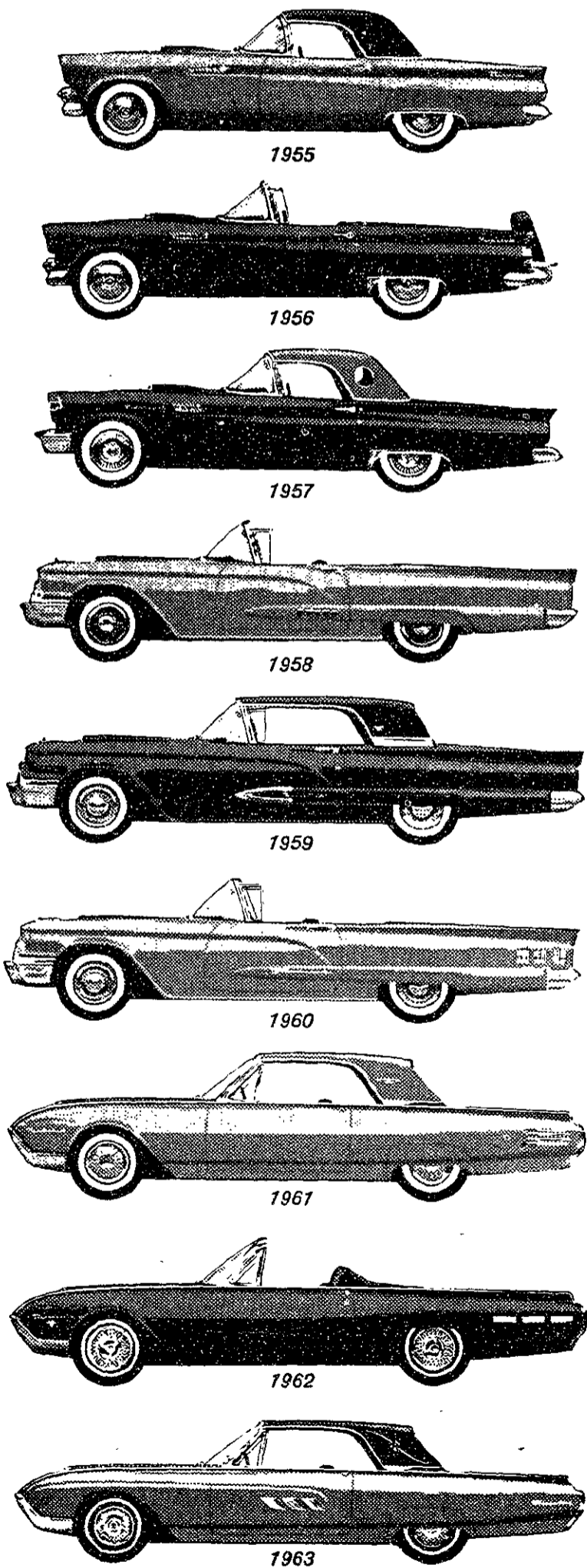


a particular place for particular skiers



**Mad River Glen**  
WAITSFIELD • VERMONT

## The story of a classic



## College World

## Tea From Harvard's Dining Halls A One To Ten Dilution Of Charles

By Toby Zidle '63

The headline in *The Harvard Crimson* a few days ago read, "Tea Served to College Not Unlike the Charles." The results of a sanitation study of the Harvard and Radcliffe have finally been released. Harvard's Central Kitchen, the report shows, passed only three of ten bacteriological tests.

One of these tests was the count of coliforms (a bacterial measure of pollution) in tea served by the kitchen. The tea, "iced or otherwise," was found to contain 2400 coliforms per 100 milliliters. In comparison, the coliform count of the Charles River is of the order of 20,000 per 100 milliliters. The maximum count allowed by public health standards for drinking water is one coliform per 100 mls. Reports the study, the tea served in the dining hall has a bacteria content comparable to

"a one to ten dilution of the Charles River." The condition in the Central Kitchen, says the report, are "particularly bad."

### Boycott At St. Michael's

In a similar situation, students at St. Michael's College, in Winooski, Vermont, boycotted their dining hall in protest against "unsanitary dining conditions." The boycott lasted one night, after a couple of bugs turned up in the meatloaf that noon.

"We don't expect especially good food," said one student, "just clean food." He said he had never eaten "good" food in any mass feeding situation, but in this case objected to foreign matter in the salad, egg on the forks (even if sterilized), and the bugs.

### Just Not Appreciated

Like bugs in the food, fire hydrants in dormitory rooms are just not appreciated — at least by dormitory managers. A dorm resident, in a letter to editor of Michigan State University's *State News*, protested the removal of "one of the best friend-makers in the university, a genuine fire hydrant."

"All it did," said the writer, "was sit in the middle of the floor and cause people to ask questions. Many people in the dorm knew about it, including several resident assistants, several janitors, and the resident advisor. And it was even mentioned in the dorm newsletter."

"This term when we returned from vacation it was missing. After asking a few discreet questions we discovered it was residing in a storage room awaiting deportation to the salvage yard."

After finally cornering the dormitory manager (with some effort), the student learned not only that the dorm manager authorized removal of the hydrant, but that he was now levying a fine against the student. Further questioning revealed that the fine was not for having the hydrant in the room, but to pay for its removal.

The next question was, why was the hydrant removed. Of course the manager had a ready answer: the hydrant was in the way of the cleaning men. (But the hydrant had been placed on a bed specifically to avoid this.) The next reason given was a doubt about the legality of possessing such an item. (But the student had a bill of sale.) The next interpretation was that the hydrant was like a bicycle and consequently wouldn't be allowed in a room. (But the rule book said nothing about fire hydrants.)

Only after much debate was the dormitory resident able to win the concession that if the hydrant were removed from the room no fine would be assessed. The fire hydrant is now sitting in a car awaiting some new roommates.

### Moonshine by Letter

Another letter has caused quite a bit of commotion — this time at University of Alabama. A chain letter offered 32 bottles of liquor for \$6 — if the chain weren't broken. Because the letters were distributed internally (presumably through the University mail service), federal mail regulations on chain letters were not violated.

After the letters had been in circulation a few days, an estimated thousand students had taken part and several of the originators bragged of a profit of \$60-\$100.

### News From SINA

The Tech has received another press release from SINA (Society for Indecency to Naked Animals), announcing that 250 members of its Baltimore group have agreed to march on Washington and picket the White House.

The demonstration is said to serve a two-fold purpose:  
(1) "Adherence to the President's physical fitness program."  
(2) "A protest against Mrs. Kennedy and daughter Caroline for riding nude horses."

**G. L. FROST Co., Inc.**  
AUTOMOBILE BODY REPAIRING & REFINISHING  
E. W. PERKINS 31 LANSDOWNE STREET  
Tel. ELiot 4-9100 CAMBRIDGE, MASS.

In many ways the story of the Thunderbird is one of the most unusual in the automobile business. The whole idea of the car was born at one of the great European automobile shows. The then president of our company pointed to some of the small, lush sports cars that are always a center of attention at such shows and asked his companion, "Why can't we build something like these?"

The companion, who later became a vice president of the company, said, "It just so happens I have one on the boards. I'll show it to you when we get back to Detroit." Then as fast as he could discreetly get to a transatlantic telephone he called his assistant and told him, "Remember that car we've been talking about? Finish those sketches on it."

The Thunderbird became one of the few cars ever built that was produced essentially as the original sketches presented it. Most cars undergo countless changes in the design period. But there was a natural clarity and cleanness to the Thunderbird design that immediately captured all of us at Ford.

It was probably this clean, sharp look that won so many friends so fast when the car went into production. That first Thunderbird had its drawbacks. For example, it was too soft-sprung for true sports-car handling. But, the truth is, it was not designed in the European tradition of the fast performance car. Some people called it a sports car but we never did. We called it a "personal" car; a small, fairly luxurious car that was fun to look at and fun to drive. It had its own integrity: it was one alone.

We built the Thunderbird as a bellwether car for Ford. It was our intention to test new ideas before we put them into our Fords, Fairlanes and Falcons. The new Ford ride and Swing-Away steering wheel appeared first on the Thunderbird, for instance. However, we never foresaw the extraordinary influence Thunderbird would have on the whole automobile business here and abroad. Almost everybody offers the Thunderbird bucket seats these days. And the Thunderbird look is the most decisive styling of the '60s.

The Thunderbird is a classic, made so by a peculiar blend of magic ingredients of which we would love to know the secret. We're building cars right now we hope will become classics, but the truth is, we don't make classics, we make cars. People make the car a classic. And that's the story of the Thunderbird.

America's liveliest,  
most care-free cars!

**FORD**

FALCON • FAIRLANE • FORD • THUNDERBIRD

FOR 60 YEARS THE SYMBOL OF DEPENDABLE PRODUCTS



MOTOR COMPANY

**CLASSIFIED ADS**

**LAST WEEK'S** The Tech ran an advertisement for bargaining games which created misunderstanding as to the minimum pay. The advertiser wishes to apologize for any inconvenience this advertisement may have caused and note that all subjects have been reimbursed by an amount that gives them the stated minimum. Lester Lave and Richard Carlson.

**RIDERS WANTED,** Pittsburgh to Bost., Mar. 28 (or 27 or 29). Meet riders anywhere on route. Call Ron Baecker, X2892.

**EXPERT TYPING** of term papers, theses. Electric IBM typewriter. Academic Boldface type. Mrs. Annette Slocombe, Telephone VO 2-1676.

**Indian Students To Give Pageant**

Students from India at MIT and other schools throughout Boston area are collaborating on a 'Pageant of India,' to be presented to the Boston public at Kresge Auditorium Saturday, March 23.

The pageant program will dramatize cultural aspects of life in India and present a variety

of live Indian music. It will include a fashion show of traditional dress from ten different regions of India, enactment of authentic Hindu and Moslem wedding ceremonies, and ballets and folk dances of national and regional origin.

Proceeds from the pageant will be given to the India Relief Fund, Inc., a non-profit organization which administers aid to India from contributors in the United States.

Tickets are priced at \$2.00 and \$3.00. Seat reservations may be made by calling extension 2910.

**Cleaning - Pressing  
Repairing - Laundry  
Quick Service**  
**Charlie The Tech Tailor**  
71 Amherst St., Cambridge  
EL 4-2088

**Lockheed V.P. Speaks**

**Mach-3.2 Craft Proposed**

Clarence L. Johnson, Vice-President in charge of Advanced Development Projects of Lockheed Aircraft, spoke Wednesday on the supersonic transport before the Flight Transportation Seminar.

Johnson stated that currently thought is being given to a transport able to travel at mach 3.2.

Pointing to justifications for the jump from current subsonic transports to the mach-3.2 design, Johnson explained that range considerations make the higher speed better in many ways than the previously proposed mach 2. He also mentioned that both

the Soviets and a coalition of France and Britain are currently considering supersonic transports. Thus national prestige as well as commercial interests dictate American interest in the supersonic transport.

Describing the engineering problems of such an aircraft, Johnson explained that skin materials, engine parts and cooling systems all must be extremely rugged at such speeds. The temperature transition from mach 2 to mach 3 is one drawback to the use of the higher speed. At three times the speed of sound, said Johnson, outside temperatures can soar to 600 degrees Fahrenheit, creating new material problems.

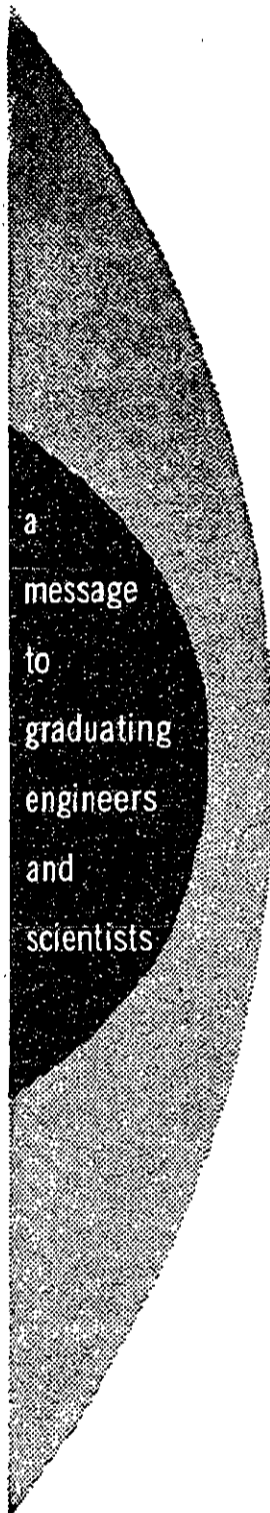
Engine efficiency can also be affected by temperature, said Johnson, explaining that a six-degree temperature rise can prevent supersonic flight. Although adequate engines are close to existence today, he said, the supersonic transport will have a flight plan based on temperature at specific altitudes.

A foolproof blind landing system is also necessary, said Johnson, so that large extra fuel reserves for maneuvering will not be necessary.

Speaking of the economics of the supersonic transport, Mr. Johnson explained that a first step was the construction of two prototypes in a period of about 9 years at a cost of \$240 million.

The prototypes would then be tested and production decisions made. In ten years a fleet of 95 mach 3.2 aircraft could be assembled at a cost of \$4 billion, about equal to the cost of the present subsonic jet fleet. A government subsidy, said Johnson, would be a necessity.

Concluding, Mr. Johnson said that a supersonic transport fleet was practical, if the cost of \$4 billion could be borne. He stated that such a fleet was both desirable and feasible economically with the proper subsidy.



AT PRATT & WHITNEY AIRCRAFT...

**YOUR EYES CAN BE ON THE STARS**

**BUT YOUR FEET MUST BE ON THE GROUND**

The glamour and excitement of space age programs often obscure a fundamental fact. It is simply that farsightedness must be coupled with sound, practical, down-to-earth engineering if goals are to be attained. This is the philosophy upon which Pratt & Whitney Aircraft's position as a world leader in flight propulsion systems has been built.

Almost four decades of solid engineering achievement at Pratt & Whitney Aircraft can be credited to management's conviction that basic and applied research is essential to healthy progress. In addition to concentrated research and development efforts on advanced gas turbine and rocket engines, new and exciting effects are being explored in every field of aerospace, marine and industrial power application.

The challenge of the future is indicated by current programs. Presently Pratt & Whitney Aircraft is exploring the areas of technical knowledge in *magnetohydrodynamics . . . thermionic and thermoelectric conversions . . . hypersonic propulsion . . . fuel cells and nuclear power.*

If you have interests in common with us, if you look to the future but desire to take a down-to-earth approach to get there, investigate career opportunities at Pratt & Whitney Aircraft.

To help move tomorrow closer to today, we continually seek ambitious young engineers and scientists. Your degree? It can be a B.S., M.S. or Ph.D. in: **MECHANICAL • AERONAUTICAL • ELECTRICAL • CHEMICAL and NUCLEAR ENGINEERING • PHYSICS • CHEMISTRY • METALLURGY • CERAMICS • MATHEMATICS • ENGINEERING SCIENCE or APPLIED MECHANICS.** The field still broadens. The challenge grows greater. And a future of recognition and advancement may be here for you.

For further information regarding an engineering career at Pratt & Whitney Aircraft, consult your college placement officer or write to Mr. William L. Stoner, Engineering Department, Pratt & Whitney Aircraft, East Hartford 8, Connecticut.

**Pratt & Whitney Aircraft**

CONNECTICUT OPERATIONS EAST HARTFORD, CONNECTICUT  
FLORIDA OPERATIONS WEST PALM BEACH, FLORIDA



**SPECIALISTS IN POWER . . . POWER FOR PROPULSION—POWER FOR AUXILIARY SYSTEMS.**  
CURRENT UTILIZATIONS INCLUDE AIRCRAFT, MISSILES, SPACE VEHICLES, MARINE AND INDUSTRIAL APPLICATION!

**Plumb, British Historian Will Speak Next Wed.**

Dr. J. H. Plumb, of Christ's College, Cambridge University, will present a lecture next Wednesday at 8:00 p.m., in the Kresge Little Theatre, under the sponsorship of the Humanities Department. There is no admission charge.

Dr. Plumb, who serves as European Advisory Editor to Horizon magazine, will speak on 'British Attitudes toward the American Revolution.'

Dr. Plumb is in this country to deliver the principal address at the annual meeting of the Mississippi Valley Historical Association in Omaha, Nebraska.

An author, lecturer, and critic, he has served as visiting professor of history at Columbia University.

**NEW LOWER Premium RATES**

on all new policies  
**SAVINGS BANK LIFE INSURANCE**

Get your new rate folder here

**Cambridgeport Savings Bank**

Right in Central Sq., Cambridge  
Telephone UN 4-5271

## Flink, Lukis Captains

### Tech Trackmen In IC4A Meet

Five Tech cindermen competed in the annual IC4A (Intercollegiate Athletic Association) at Madison Square Garden in New York City last Saturday. None of the Techmen placed in this meet, in which participants of 60-odd schools were entered.

Terry Dorschner '65, Jim Flink '64, and Al Tervalon '65 competed in the high hurdles, with Flink doubling in the dash. Tom Goddard '63 ran the mile. Tech entered a mile relay squad composed of Dorschner, Flink, Goddard, and Mike Parker '64.

This event marked the close of this indoor track season. Varsity captains elected for the '63-'64 season were Jim Flink for track, and Gary Lukis '64 for field. Sumner Brown was elected freshman captain for this season. Tom Goddard received the Varsity Track Club Award, Sumner Brown won the Freshman Track Club Award, and manager Henry Modetz '64 was presented with the Coaches' Award.

Freshmen and varsity outdoor practice begins today at 4 p.m. in Rockwell Cage.

## Matmen Take 2nd In New England Tourney

Tech's matmen took second place in the New England Intercollegiate Wrestling Tournament for the second consecutive year last Saturday. MIT lost only to Springfield, boasted one New England champion in Terry Chatwin at 137 pounds, and took one second and four third places in the remaining weight classes. Final scores were (top 5 of 11 teams): Springfield, 105; MIT, 56; Wesleyan, 55; Coast Guard, 49; Dartmouth, 27.

Evans 2nd to Fox  
Team Co-captain James Evans

'63 lost seven more pounds to go into the 130 pound class. He took second place, losing only to Fox of Springfield.

#### Chatwin New England Champ

Terry Chatwin '63 also lost weight, but he swept through all his matches and took the championship in the 137 pound weight class. In doing so he defeated Sisson of UMass by a pin in seven minutes and thirty seconds, Winfield of Williams 5-2, and in the final match Ederl of Dartmouth 6-1.

## Tech Skiers Take 2nd In New England Intercollegiate Ski Council Championship

The MIT "A" ski team, led by junior Bent Aasnaes' individual 1st place finish, took 2nd place in the New England Intercollegiate Ski Council Championship at Mount Okemo, Vermont, last week. Tech closed 22.6 seconds behind New England College, and the other teams in order of finish were: Northeastern, Amherst, UMass, Tufts, Boston U., and Brown. The "B" team finished 9th in a 47-gate slalom contest at Mt. Ascutney, Vermont, Saturday.

At Mount Okemo in Vermont, the Tech "A" Ski Team had its final trial of the season. Expecting a two run slalom, the team ar-

rived to find a downhill-like giant-slalom on the trail. This was probably the toughest course the skiers have seen this year, 1 1/4 miles long, with many very fast bumps. Much of the run was in the air.

#### Aasnaes 1st, Wessel 3rd

Bent Aasnaes '64 came in first with a time of 132.5 seconds. Henrik Wessel '64 was third with 136.5 seconds. The Sophomores on the squad each took falls due to not enough downhill practice. Giovanni Emo '65 came in 3rd among the Tech 6, 23rd all over with a time of 165.1, Stan Brown '65 took thirtieth place in 171.3 seconds. Karl Kehler '65 finished in

179.4 seconds, and Ed Roberts '65 came out of his safety binding and could not finish.

#### "B" Team Takes 9th

The MIT "B" Ski Team competed in a 47-gate slalom last Saturday at Mt. Ascutney in eastern Vermont. Also competing were 12 other schools including strong teams from Amherst, Keene Teachers College, Bowdoin, and Princeton. MIT finished in 9th place. However, an extremely slim margin of 4 seconds separated the 6 teams from 3rd to 9th place.

Racing for MIT were Dick Sidel '65, Grinnell Jones '66, Pete Lehman '66, and Bruce Powell '66. Best times were registered by Sidel-76.6 seconds, Powell-82.0, and Lehman-89.2. This was the last race of the season for the "B" team which has competed in 3 other races this winter.

#### Gerrity Takes 3rd

The other team Co-captain, Tom Gerrity '63, was beaten only once in his climb to third place in the 157 pound weight class. He defeated Wheelock of Williams 7-4, then was upset by Sharp of Coast Guard 1-5. He then dropped into the consolation bracket and went on to beat DeWallace of UMass 6-0, and in the consolation finals defeated Dean of Dartmouth.

Mike Williams '64 was defeated only by the eventual champion, Heinz of Springfield, and took

third place in the 167 pound weight class.

#### Wells Edged by Ferguson

Bob Wells '65 took third place in the 177 pound class. He was defeated only by Ferguson of Wesleyan, by a pin with 10 seconds left. Bob is one of many outstanding sophomores on the squad this year and should play a key role in coming seasons.

Kim Sloat '64 moved up a notch this year to take third place in the unlimited division. His only defeat was a 5-2 decision to Sanzone of Springfield, New England champion for the last three years.

#### Frosh Perform Well

Two frosh grapplers took thirds in their section of this tourney. Team captain Marland Whiteman took third in the 147 pound class, and Harry Moser finished third in the 167 pound division.

## Pistolmen Top UMass, Meet Rutgers Mar. 16

The MIT pistol team beat the University of Massachusetts 1266-1249 in a very close contest at U-Mass Saturday. This was the fourth consecutive match between U-Mass and MIT in which the host team has been beaten on their home range. The high five for MIT were Bill McFarland '63, R. B. Melton '64, Dave Root '65, Tom English '63, and Scott Graham '65. The final match of the season will be Rutgers at MIT Saturday, March 16.

## Bernard, MacKenzie Win In Table Tennis Tourney

MIT hosted a regional table tennis tournament March 2. Tech students Richard Bernhard '63 and Stan McKenzie '65 won the doubles competition, and Bernhard finished 2nd in the singles to Suffolk University. Darryl Sperber '66 managed the tourney, which was sponsored by the Association of College Unions.

## Mermen Swim To 4 MIT Marks

The swimmers set four MIT varsity records at the New England Intercollegiate championships last weekend. Two Techmen, Steve Colburn '63 and Charlie Einolf '63, placed in the final round of the championships.

#### St. Peters Sets 3 Records

Dick St. Peters '65 set three of the four MIT records. In the 1650-yard freestyle he placed 10th in 20:16.3, while in the 200-yard freestyle he finished 8th in 2:00.6. He also registered an MIT record clocking in the 500-yard freestyle trials with 5:39.6. Sandy Blanchard '65 set a varsity record in the 100-yard freestyle trials, with a time of 52.8, breaking the old record by more than a second.

#### Colburn, Einolf In Finals

Colburn placed seventh in the final competition of the one-meter diving. Einolf reached the finals in the 200-yard breaststroke, and finished fourth in 2:34.3.

The 400-yard medley relay team of Frank Mechura '65, Einolf, Ron Matlin '63, and Bob Bachrach '64 recorded their best time, placing seventh in 4:06.5. Eric Jensen '63 registered his best time in the 1650 yard freestyle, with a 20:33.8. Matlin finished 8th in the 200-yard butterfly in 2:26.5. Cash Peacock '65 swam the 200-yard breaststroke in 2:39.8.

## How They Did

- Pistol**  
MIT 1266 — Massachusetts 1249
- Skiing**  
MIT "A" Team second at Mt. Okemo, Vermont  
MIT "B" Team ninth at Mt. Ascutney, Vermont
- Wrestling**  
MIT 2nd in Intercollegiate Championships

### Tourney This Week

## ZBT, SAE, ESL Win IM VB Races

The regular intramural volleyball season ended last week as teams began looking toward the double elimination tournament which began last night.

#### ZBT Wins In League B

In League A, the Chinese Students handed the high-flying Sigma Phi Epsilon team its first loss; both teams have 3-1 records. In League B, Zeta Beta Tau edged out Burton Conner 2nd A and Alpha Epsilon Pi to reign undefeated. Sigma Alpha Epsilon finished the leader of League C, against stiff competition from Grad House, and Beta Theta Pi. On top in League D

is ESL, also undefeated.

#### LCA, PSK Undefeated

In the minor leagues, from League I, Lambda Chi Alpha B and Burton 4th cinched finals berths by winning over Burton 3rd and Phi Kappa Theta respectively. Phi Sigma Kappa trounced previously undefeated Delta Tau Delta; both enter the finals. Senior House lost to undefeated First Burton for a 4-1 record; they represent League III. In League IV, Burton 2nd, knocked off Delta Kappa Epsilon, both teams gaining finals berths.

Grad House Dining Staff beat Chi Phi B, and enters the finals

with the winner of the elimination match between Burton Conner 2nd B and Senior House C. Finally, in League IV, Phi Gamma Delta and SAE B finished with identical 3-1 records.

#### Double Elimination Tourney

This year the finals are being run in this way: the losers of the 16 opening games last night are out, and the winners proceed in regular double elimination. There is one schedule change. Games in the last two rounds planned for Saturday and Sunday afternoons are now scheduled for Tuesday and Thursday evenings of this week.

League A	
Chinese Students*	3-1
Sigma Phi Epsilon A*	3-1
Club Mediterranean*	2-2
Lambda Chi Alpha A*	2-2
Burton Fine Fifth A*	0-4
League B	
Zeta Beta Tau*	5-0
Burton Con. 2nd A*	4-1
Alpha Tau Omega*	3-2
Grad Management*	3-2
Alpha Epsilon Pi*	3-2
Paradise Cafe	0-5
League C	
Sigma Alpha Epsilon A*	5-0
Grad House A*	4-1
Beta Theta Pi*	3-2
Burton A*	2-3
Baker House B*	1-4
Sigma Chi	0-5
League D	
ESL*	5-0
Phi Delta Theta A*	4-1
Baker House A*	3-2
Burton E*	2-3
Grad House B*	1-4
Chi Phi A	0-5



**THE INTERCLUB SQUASH RACKET**

Fine tournament calibre racket with top quality 7 ply frame... five selected white ash and two black fiber laminations. Reinforcement inside throat and shoulders, full white fiber shoulder overlays. Natural wood finish with six attractive bindings. Top grade red leather grip, perforated and skived.

**12.00**

Also choice of Bancroft, Magnum or Spalding at **5.95 to 13.85**

**THE TECH COOP**

## NEW LOWER Premium RATES

on all new policies  
**SAVINGS BANK LIFE INSURANCE**

Get your new rate folder here

**Cambridgeport Savings Bank**

Right in Central Sq., Cambridge  
Telephone UN 4-5271

**RACQUETS RESTRUNG**  
Prompt Service  
**Tennis & Squash Shop**  
67A Mt. Auburn St., Cambridge  
(Opp. Lowell House)  
TR 6-5417

**SOUTH SEAS**  
21 HARRISON AVE.  
HA 6-4210  
(Between Essex & Beech Streets, Boston)  
**ISLAND & CANTONESE FOOD & EXOTIC DRINKS**  
Authentic Hawaiian Luau's  
Moderate Prices  
11 a.m.-3 a.m.  
Daily & Sunday

Second class postage paid at Boston, Massachusetts. The Tech is published every Wednesday during the college year, except college vacations, by THE TECH, Walter Memorial 130-2111, 311 West Cambridge, Mass. U. S. Mail subscription \$2.75 for one year, \$4.25 for two years.