



Freshman Jumps Into Charles; Saves Old Man From Drowning

Flushed by his date for being a Good Samaritan — that's what happened to freshman Delta Kappa Epsilon pledge Jeff Hoggle after rescuing a drowning man from the Charles River Saturday night.

The man, Gustav Hall, who later died at Massachusetts General Hospital, was apparently attempting to commit suicide. Hoggle first noticed the man as he was walking across Harvard Bridge to pick up his date for the evening, a Boston University coed. He said that the man attracted his attention when he put his foot up on the railing. Noticing Hoggle, he pulled his foot down and stood by the railing.

After passing the man, Hoggle looked back to see him step over the railing and drop into the water. Taking off most of his clothes Hoggle jumped into the river and held the man's head above the water. Realizing that he had little chance of reaching shore, Jeff shouted for someone in the onlooking crowd which had gathered at the commotion to jump into the water and help him. No one responded.

After several minutes in the water, which was about 40 degrees, Jeff tried to lift both himself and the man out of the river by means of a rope lowered to him by someone in the crowd. The rope kept slipping, however, and after being lifted part way up they fell back into the river, a distance estimated by Jeff as 30 feet.

Realizing that he was getting tired, Jeff tried to grab hold of the bridge pilings but they were too slippery. An attempt to tow the couple to the shore was then made. The going, as described by the rescuer, was "very slow." He did manage to get the man to shore, however, where he was lifted out.

Jeff was then pulled from the river and taken to the hospital in an ambulance with the man he had rescued. After his release from the hospital Jeff took off for the Sig Ep circus with another date arranged for him by a fraternity brother.



Geoffrey Hoggle, '63, in ambulance after the Saturday night rescue.
— Photo by Boston Globe

Naval Architecture Society Seminar Today; Longshoremen's Representative to Speak

A seminar on automation in ships will be presented by the Naval Architecture Society of MIT this afternoon at 4:00 P.M. in Room 8-270. The guest speakers will be John Moran, a vice president of the International Longshoremen's Association, and Mr. H. M. Tiedemann, a designer of automated systems for cargo ships. Moderator for the discussion will be Professor White of the Industrial Management Department.

The desire for the seminar arose as an outgrowth of the strike by the Longshoremen which was ended last month by a Taft-Hartley injunction, according to Pierre Boisseau, secretary of the society. The Longshoremen were on strike because they objected to working on automated ships. The shipowners, on the other hand, said that it was necessary for them to automate in order to compete with other forms of transportation.

At the discussion, Mr. Moran will present the viewpoint of the Longshoremen while Mr. Tiedemann will discuss the situation from the shipowners side. Following the presentations by Mr. Moran and Mr. Tiedemann, there will be an open discussion in which the audience will be invited to question the speakers.

The importance of the subject was stressed by Mr. Boisseau in noting that unless the shipowners and the Longshoremen reach an agreement within eighty days of the day the injunction went into effect, they will go on strike again. This would, in effect, tie up all foreign, and much internal traffic. Mr. Boisseau stated that all interested are invited to attend.

Chemical Honorary Elects New Members; Phi Lambda Upsilon Hears J. R. Killian

The Beta Alpha Chapter of Phi Lambda Upsilon, national honorary chemical society, elected new members November 18. A formal initiation for the new members will be held December 13, at which time the speaker will be Dr. George R. Harrison, Dean of the School of Science.

At the election meeting, an informal talk was given by Dr. James R. Killian, Jr., Chairman of the Board of the Corporation, on his recent assignment as Special Assistant to the President for Science and Technology.

Those who were elected to the society are:

Richard Henry Albert, '61; Norman Earle Bednarczyk, '60; Leslie Glenn Bromwell, '61; Richard Averill Caldwell, '61; Jon Arthur Eklund, '60; Farley Fisher, '60; Robert Mitchell Hodges, '60; Harold Bruce Hopfenberg, '60; David Benjamin Kellerman, '60; George Ping-Shan Koo, '60; Angelo Anthony Lamola, '61; Robert Carl Lange, G; Jan William Mares, G; Joseph Fratus Martins, '61; Michael Harvey Nesson, '60; Brian Russ O'Connor, '60; Paal Prestgaard, '61; Henry Max Schleinitz, '61; Arnold Stancell, G; Wolf Randolph Vieth, G; Martin Edmund Weber, G; Robert Frederick Weimer; Evan Thomas Williams, G.

Condemns "Misplaced Patriotism"

Stratton Denounces NDEA Loyalty Oath

President Stratton, Dr. Killian, and other administration members have expressed strong personal disapproval of the "loyalty oath" clause of the National Defense Education Act Loan Fund. However, they do not feel that it would be opportune for the Institute itself to take an official stand at this time.

Stratton called this part of the act "extremely misguided and unfortunate." He said it was "discriminatory" and an "invasion of private beliefs." Citing the oath of allegiance requirement first, he said that it was "not a good way to develop patriotism", but that it was not a serious mistake, and he was therefore "not excited about it."

But the portion of the law requiring students receiving loans to sign an

affidavit of belief was strongly denounced by Stratton. He termed it an instance of the "distrust of the intellectual", noting that, to his knowledge, farmers and businessmen did not have to take similar oaths when obtaining Federal loans. He also said it was contrary to our fundamental Constitutional rights of free thought and opinion. He compared it to laws of many years ago, which required students in some universities to take oaths affirming that they did not believe in evolution.

Personal Beliefs Only

Dr. Stratton stressed that these were his own beliefs, and that he was not attempting to speak for the entire Institute community, although he felt that most faculty and students would agree with him. But he pointed out

Dean Brown Talks on Ford Grant

Gordon Brown, Dean of Engineering, will discuss the "Impact of the Ford Grant on Engineering Education", on December 9th, at 5 P.M., in Kresge Auditorium. In this talk, which every student is urged to attend, Dean Brown will discuss the philosophy of the grant, what it hopes to achieve, and what specific things will appear in the curriculum here as direct results of the grant.

Open Meeting Planned by SCEP

The Student Committee on Educational Policy, which is sponsoring this discussion, will also hold a meeting on Tuesday, December 1st, at 8 P.M., in the Baker House dining hall, to which all students are invited. At this open meeting, SCEP will take up the Freshman quiz system and the possible elimination of departmental majors.

Final Compton Lecture

Struve Cites Need for Astronomers

Dr. Otto Struve, in his final Karl Taylor Compton lecture on "The Universe", called on MIT to recognize the current need for young men with astronomical training. Speaking to a capacity audience Thursday night at Kresge Auditorium, Dr. Struve stated that the demand for astronomers in the world today far exceeds the supply.

The eminent astronomer's talk, "Man and the Universe", emphasized the achievements of astronomy in modern science, and explained the great need and value of astronomical research. Dr. Struve stated that astronomy deserves, and is finally gaining, recognition as an integral branch of physics.

Dr. Struve pointed out the many significant triumphs of astronomy in recent years. He showed that astronomy plays a key role in the study of gravitation, in the verification of relativity theories, and in nuclear research.

Through the great advances of Rus-

sian science in fields related to astronomy Dr. Struve concluded that astronomy is in fact one of the battlefields of the cold war. He stated that Russian science has been swept free of old ideas and restrictions, and thus is free to expand rapidly. As for the United States, he stated, "We must think hard, and work even harder, if we are to win a rejuvenation of our scientific fields."

Dr. Struve stated that there is no doubt astronomy is capable of forming new laws of science, and that the recent acceptance of astronomy in physics makes this possibility even greater. He showed that the principle of the expanding universe is but the most recent of the "new" laws formulated through astronomy.

In conclusion, Dr. Struve expressed hope that but one member of the audiences that hears his lectures would develop sufficient interest in astronomy to enter it as a career. He reiterated that astronomy needs fresh talent to investigate its many unexplored fields.

Fun, Beer and Sawdust at Sig Ep



Everybody, but everybody had fun at the Sig Ep Circus. Read the story on page 3.

No Official Institute Stand

Loyalty Oath

that some would not, citing in particular Institute Committee's action last May when it passed the following resolution:

"Be it resolved that, The Institute Committee feels that the National Defense Education Act should not be accepted or rejected by the Administration of this Institution on the basis of its loyalty oath provisions. Any qualified student who is willing to abide by the provisions of the Act should not be prevented from so doing by action of the Administration of his educational institution."

No Official Position

Dr. Stratton feels that any official position taken by the Institute on this matter would not be appropriate at this time. When the act first went into effect, MIT decided not to participate since our own Technology loan fund was deemed adequate. Accordingly, no money from the Federal fund was taken by students here. For this reason, Stratton feels that we are not in a position to take an official stand in the same sense that Harvard and Yale were.

Stratton also feels that the important thing to consider here is the long fight over principle involved. He cited "McCarthyism" and the "Teachers' Oath" as other instances of this struggle. Stratton feels that the important objective at this time is to change the law, and the "tactics" dictate against an official stand by MIT at this time. However, he said that he would be willing to testify, on an individual basis, at any future hearings on the law, and recommend elimination of the objectionable clauses.

Killian Agrees

Corporation Chairman James R. Killian, Jr., agreed with Stratton's point of view, saying that he was "sorry that the provision requiring the oath is in the bill", since it was "discriminatory" and "not relevant to its purpose". But he feels that the Institute itself has no occasion to enter the discussion, since no funds were used here.

Dean Rule expressed agreement with these opinions, citing the actions of Presidents Pusey of Harvard and Griswold of Yale. He said, "Although I have not thoroughly analyzed the situation, my feelings are about the same as Mr. Pusey's and Mr. Griswold's."

Hazen Seeks Change

Professor Harold Hazen, Dean of the Graduate School, and also member of the committee in Washington administering the graduate fellowships provided by the act, said that he would seek a change in the law regarding the loyalty oath. He feels that the oath is obviously discriminatory against students, but agreed that MIT should not take an official stand. Dean Hazen feels that the graduate fellowships of the act, four of which are currently at the Institute, do not present a sufficiently urgent problem.

NOTICE

Erudite persuaders of the newly inaugurated newspaper vending machines will receive nothing for their coins on November 27 and December 1. On that Friday and Monday no The Tech's will be issued, for obvious reasons. Happy Thanksgiving!

Presidents and Principles

President Stratton has met; and met well, one of the criteria he set for the university president in his inaugural address: "He must himself be prepared to take positions on matters of educational import."

The loyalty oath provision in the National Education Defense Act is an item of such import. And Dr. Stratton has spoken wisely regarding it, as have other influential members of the MIT administration.

To a vast majority of the people in this country the oath looks innocuous enough, to many it must seem like a very fine and patriotic requirement for the future scientists, educators and leaders of our country. But the freedom at stake in the oath provision is one of far greater importance than patriotism, which should flow naturally out of a free and democratic country without undue flag waving. It is the freedom of thought, the freedom to choose that is on the bargaining block in the NDEA.

We must realize that on any issue which is less concrete than government price supports, the public, the grass roots, will be unconcerned and non-committal. It is therefore of extreme value for such respected and intelligent men as Dr. Stratton and J. R. Killian to speak and to be heard. The university presidents, the Strattons, Griswolds, and Puseys, are indeed responsible to this country in a more far-reaching way than the affairs of their own university communities. They, as the leading educators in a country whose future depends on education, must be constantly on guard against impositions which hamper intellectual freedom or are so repulsive as to embitter this country's youth.

Harvard and Yale have taken stands on the oath in the names of their respective presidents. MIT has not been forced to the wall on this issue because MIT has received no government funds. Yet the personal voices of the men who lead MIT can now be heard, and cannot be misinterpreted. Perhaps these voices will awaken in those who can see no harm in intellectual restrictions some awareness of the issue and the serious nature of its implications.

* * * * *

The moral fibre of this country has recently been questioned in both the national press and in a Presidential press conference. There is legitimate cause for concern; the vitality of this country in the past has stemmed from free enterprise and free thought. The quiz show compromises were one thing; the loyalty oath is a more deep seated one. Without the searching comments from our intellectual leaders it could have slipped by unnoticed.

The presidents of several American universities, our own included, have spoken admirably on this question. If the national sensitivity to fundamental issues, of which this is an example, has been increased, they have not spoken in vain.

vienna aftermath

The Vienna Youth Festival, the seventh Communist directed gathering of students from all parts of the world and the first to be held outside the Iron Curtain, ended on August 4th.

Since, newspapers and magazines throughout the world have been filled with the repercussions of the festival. Yet it is extremely difficult to find out exactly what went on. The press reports are literally worlds apart; the worlds are, as usual, the East and the West.

An issue of a Berlin daily called the participation figure at 13,000; an Italian Communist paper cited 20,000 as the number. The red papers said that on the opening of the conclave the stadium "was simply jam-packed!" The *New York Times* said it was filled to "two-thirds of capacity." When the reporters fail to agree on such simple observations as these, it is obvious that comments on more subtle issues will come out even further apart.

The Red stand is too good to be true. In their newspapermen's eyes the success of the festival was overwhelming; every pro-US or anti-USSR pamphlet was left unblemished by glances from ever loyal red eyes. The commies, in *Pravda* (which means truth) decried the hypocritical efforts of westerners to lure the eastern or uncommitted youth away from the fold by telling them "all kinds of fables." Someone is certainly telling fables, for the Washington Post related that "discussion sessions . . . are showing many uncommitted delegates a truth about Communism and about Western democracy that they had not been expected to learn."

The parallel structure of reporting is seemingly unbroken by any instances of major agreement, and only a few of minor import. The situation, to say the least, must be exasperating to readers in the uncommitted nations who have as little faith in the *Times* as they do in *Pravda*. These readers are at the mercy of the press, and if on every issue the Red papers distort the issue as they have in this one, the end result can only be confusion for neutral, but interested, readers.

There is one point, however, at which it will be possible to make a choice between the two festival accounts. That is when the location for the Eighth World Festival is publicized. If the Communists were as successful outside the curtain as their stories relate, their choice of the next convention site will certainly be in the western world. Already

the date of the next "biennial" conference has been set up to 1962, the first delay since 1947. Specialists who have studied the Vienna meeting expect that the next festival will once again retreat to the land of Marx. We hope those confused by the duopoly of festival reporting will recognize the importance of this decision.

DWP

half notes

MIT Orchestra in Kresge

Next June, with the graduation of the class of 1960, the MIT community will bid farewell to a young chemical engineer who has made a single contribution to music at the Institute. Each of the past four years Gerry Litton has delighted a Kresge Auditorium audience with his performance of a piano concerto with the MIT Symphony Orchestra. Last year it was the Tchaikowsky First Piano Concerto; last Saturday he gave a memorable performance of Gershwin's Concerto in F.

The Orchestra, under the direction of John Corley, was excellent in its support of Litton. After a slightly shaky beginning, which was reminiscent of their somewhat less polished renditions of the La Cazza Ladra Overture of Rossini and of Prokofieff's Lieutenant Kije Suite, the undermanned string section managed to achieve a sustained tone quality, and thereafter the entire ensemble exhibited fine precision of attack and a balanced tone. Mr. Litton captured very well the pulsing life of the Charleston rhythms of the first movement, though in one or two instances he showed a slight tendency to rush the conductor. A fine touch and sensitive dynamic control characterized his interpretation of the slower middle movement. The wind and string sections did an especially nice job in this movement, and fine solos were heard from violin, flute and trumpet. The tempo seemed a little too slow, but the blues material was treated with feeling by soloist and orchestra.

Mr. Litton's flawless finger technique was very apparent in the violent final movement. Close cooperation between pianist and conductor made this movement the most exciting part of the concert, and provided a sparkling climax to a high quality performance. The nearly full house was loud in its applause of Litton and the orchestra, and with good reason.

— Noel S. Bartlett, '60

college world

If you consider your existence ineffectual, submerged in a bureaucratic morass, take heart from this story of one University of California freshman. Finding ROTC compulsory at Cal, this individualist began a seven day hunger strike on the steps of a university building to protest his induction into the military. Although he quit his starvation program after 50 hours (when his father, an Air Force colonel, visited him), the Board of Regents at U.C. is now considering the abandonment of the program and Edmund Brown, Governor of the State of California said flatly that he was against compulsory ROTC. It all goes to show what one man can do. But lest you rush into this sort of thing without advisement, we quote the concluding remark from the *San Francisco Foghorn* (our source of this information) that this modern Ghandi "withdrew from school Thursday with future plans undetermined."

Closer to home, we were sitting in Miller's Drugstore, getting Sunday morning breakfast, and happened to overhear the conversation of two Boston matrons who were sitting close by. Since they both live on Beacon Street, they naturally talked about the Sig Ep blast of the previous night. Although they were not exactly overjoyed by a searchlight shining in their window, they did not call the cops (someone else evidently did), largely because they thought it would be futile.

What they did object to was an exercise in group singing at 2 A.M. under their windows. "And those that could not sing" one commented, "yelled". "Isn't it possible to have fun without getting drunk?" asked the other. "I guess it's not any more," responded the first. She later added, "I don't really mind when the boys have fun. . . . I just wish that the MIT would move everything of its own over on the other side of the river."

— Wolfgang

The Tech

Entered as second class matter at the post office at Boston, Massachusetts. Published every Tuesday and Friday during the college year, except college vacations, by THE TECH — Walker Memorial, Cambridge 39, Mass. Telephones TRowbridge 6-5855-6 or UNiversity 4-6900, Ext. 2731. Twenty-four hour answering service: TR 6-5855.

VOL. LXXIX November 24, 1959 NO. 43

Kenneth F. Reinschmidt '60	Chairman
John B. Stevenson '60	Managing Editor
Peter M. Silverberg '60	Business Manager
David W. Packer '59	Editor
Linda H. Greiner '60	News Editor
Abraham Feinberg '60	Sports Editor

BRATTLE THEATRE

Harvard Square

Don Juan de Fernandel in
— PANTALOONS —
Plus Cartoon Festival
5:30 7:30 9:30

WANTED

MIT Students to wear our tuxedos at all your proms. Brookline Formal Wear — 342 Harvard St., Brookline — AS 7-1312.

Memo for opportunity

Ingersoll-Rand
will interview
Graduating Engineers
(BS, MS, PhD)
December 4

I-R offers attractive opportunities in research and development, design, production and sales engineering. Our machinery products include pumps, compressors, engines, vacuum equipment, power tools, and mining and construction equipment.

Why are so many college men switching to pipes?

SEND YOUR ANSWER IN 25 WORDS OR LESS

WIN 4 YEAR WARDROBE
251 PRIZES IN ALL

1st prize — A famous Botany "500" wardrobe every year for 4 years (2 Suits, 2 Sport Jackets, 2 Pair of Slacks, and 1 Topcoat.)

Next 5 prizes — Ultra-precision imported Sony Transistor Radio

Next 5 prizes — World-famous pocket size Minolta "16" Camera

Next 250 prizes — Kaywoodie Campus Pipe

Pick up an official entry blank at your regular tobacco counter, or write Kaywoodie Pipes, Inc., New York 22, for one.

HINTS TO WIN: Why men smoke pipes — There's a rich, fulfilling, "all's well" feeling that a man gets only from a pipe. A relaxed, calm-down contentment that's associated exclusively with pipe smoking. And you get all the pleasure of smoking without inhaling.

Campus Yacht \$4.95

KAYWOODIE BAIAR

Why pipe smokers choose KAYWOODIE

Kaywoodie Briar is imported, aged, selected, hand crafted, hand rubbed, tested, inspected, and only then does it earn the coveted Kaywoodie Cloverleaf. That's why Kaywoodie hefts airily light; always smokes cool and sweet. The exclusive Drinkless Fitment inside the pipe condenses tars, moisture and irritants as nothing else can. Try a Kaywoodie. One puff is worth 1,000 words.

CHOOSE YOUR KAYWOODIE
from the famous campus collection...\$4.95

Campus Bulldog \$4.95

Campus Billiard \$4.95

other styles and shapes \$5 to \$50

White Briar Pear \$6

Custom Grain Prince of Wales \$10

KAYWOODIE
accents the male look



MAINE GUIDE
Canadian Trapper
\$25.95

- SHELL.....** Highly mercerized all cotton sanforized sateen.
LINING..... Quilted Celacloud.
COLLAR..... Weather-insulating orlon pile — convertible to a hood in stormy weather.
FEATURES
- Washable.
 - RUGGED ZIP for easy grip (extra heavy-duty zipper).
 - Fly front.
 - Sleeve tabs.
 - Knitted inner wind cuffs.
 - Two slash pockets.
 - Railroad stitching at bottom.

TECH COOP

For Graduates Seeking

GROWTH TYPE CAREER OPPORTUNITIES IN CHEMICAL INDUSTRY!

Approaching its 50th year of specialization in industrial chemicals and commercial explosives, ATLAS is constantly on the alert for graduate engineers seeking unusual growth opportunities. Here at ATLAS in Wilmington, as well as in our nine manufacturing facilities and four research centers throughout the United States, we are planning and looking, as always, to the future.

Since YOUR future, as well as OUR OWN, could be closely linked together in the expansive period ahead, we invite your consideration of our opportunities.

For those who have degrees in Chemistry and Chemical Engineering, we have a wide range of openings. Our present need is for qualified men at every level for work in Research, Development, Sales, Management, Staff Functions and Production. We also need imaginative graduates who seek unusual experiences in Civil, Mechanical and Mining engineering.

Our financial rewards are many. Salaries are competitive with the industry; our benefits are unsurpassed. And, opportunity for rapid advancement depends on you . . . our planned program of management development will prepare you for the responsibilities you are capable of assuming.

ON-THE-JOB-TRAINING

Most new technical employees start at ATLAS with a formal training course at one of the company's laboratories. Afterward, they train on the job at an ATLAS laboratory, plant, or sales office, where they gradually assume increasing responsibility under the guidance of an experienced ATLAS staff member. Men with specialized qualifications may immediately begin the on-the-job phase of the training program.



**MAKE YOUR
APPOINTMENT Now
WITH YOUR PLACEMENT
OFFICER TO SEE OUR
MR. L. H. SNYDER
WHO WILL VISIT YOUR CAMPUS ON
DECEMBER 10, 1959**

ATLAS
POWDER COMPANY
WILMINGTON, DELAWARE
Olympia 8-6511

Sawdust and a Gorilla

Sig Ep Circus Party

By Ed (The Ape) Underriner

With a searchlight attracting folks from Brockton, and two 50 watt stereo speakers broadcasting music of the three rings to Beacon Street, the Sigma Phi Epsilon Circus roared into being last Saturday night.

Bob Anderson, '62, as barker, invited all Techmen and their dates to grind their feet into the sawdust and join the circus.

Entering the house, the visitors were greeted by six cages of animals behind blinking colored lights. With the sawdust on the floor, the animals in the cages and the paper arches overhead, you were in a circus.

In the cage at the end of the room, Al Wright dispensed liquid refreshment "Get your huddy hot toddies, before they cool off."



A cheerful greeting from the barker!

Going up through the tunnel to the "balcony", one could hear the music of "Historic Jazz Band" playing the jumping kind of music that makes all parties successful.

It was possible to actually move around on the second floor — not that it was crowded or anything like that!

The walls were decorated with side show murals that were quite amusing although several people questioned the ostrich painted by Mill Firebaugh, '61.

Plaudits to the members of the MIT Security Force who got into the spirit of the circus by really swinging out with the Techmen and generally enlivening the party.

Like all circuses, this one had to pull up stakes and depart — which happened early Sunday morning. One question remained — What will the Sig Eps do with all that sawdust?



And as all good circuses must this one too packed up and left, in a hurry it seems.

Positions with Potential

ENGINEERS • CHEMISTS • PHYSICISTS

*Ceramic • Chemical
Electrical • Industrial • Mechanical
Metallurgical*

National Carbon Company, America's foremost manufacturer of carbon and graphite electrodes and anodes, impervious graphite, brushes for motors and generators, dry cells and flashlights, arc carbons and a wide variety of other industrial products, offers positions to qualified B.S. and M.S. graduates in the fields listed above.

Positions are available at National Carbon Company's 16 plants, located in the following states: Iowa, New York, North Carolina, Ohio, Tennessee, West Virginia and Vermont, and throughout the country in our sales organization.

Interesting, rewarding careers in research, process and product development, production and methods engineering, product and process control, machine development, plant engineering and sales. A National Carbon representative will be on campus —

Interview December 2

NATIONAL CARBON COMPANY Division of Union Carbide Corporation

NATIONAL
TRADE MARK
CARBON AND
GRAPHITE PRODUCTS

EVEREADY
TRADE MARKS
BATTERIES

PRESTONE
BRAND
ANTI-FREEZE
KARBATE
BRAND
IMPERVIOUS GRAPHITE

G. L. FROST CO., INC.

AUTOMOBILE BODY REPAIRING & REFINISHING

E. W. PERKINS
Tel. ELiot 4-9100

31 LANSDOWNE STREET
CAMBRIDGE, MASS.

UNLIKE A WOMAN



there's no "maintenance cost" with a Merchant's THRIFTICHECK account

You know what they say about the fairer sex . . . "It's not the initial cost—it's the upkeep."

Here's the *only* Thrifticheck Service with no monthly maintenance charge . . . just \$3.00 for 24 checks (get a math major to figure out unit cost for you). So unlike a woman—but so practical for the student financier. (Your name is imprinted on each check). But that's not all.

1. You get fast, 24 hour reorder service (if you start writing checks like they're going out of style).
2. You receive a complete statement, showing all entries, each quarter. (This is a very revealing document—and invaluable in controlling your madder impulses).
3. You may bank at any Merchants Office. Our Kenmore Square office is probably handiest for you.

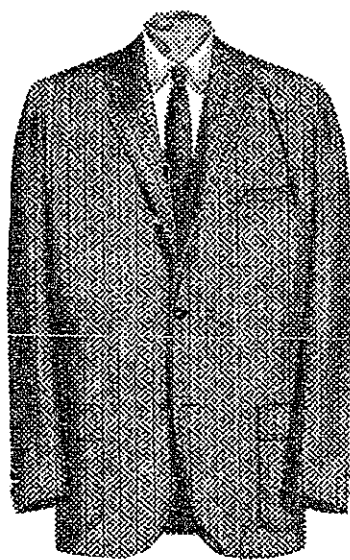
So, drop everything—and live. Open a Merchants National Thrifticheck Account today. Keep yourself in check—with no monthly maintenance charge.



WHERE THE MAN YOU
TALK TO IS THE BANK

Offices: 28 State St. • 31 Milk St.

South Station • 513 Boylston St. • 642 Beacon St. • 30 Birmingham Parkway, Brighton



during the Christmas holidays select your clothing and furnishings AT OUR UNIVERSITY SHOP

In our New York, Boston, Chicago and West Coast stores, an interesting selection of good-looking suits, sportwear, evening clothes and outerwear awaits your visit . . . made to our exacting specifications in sizes 35 to 42 . . . and all moderately priced for such fine clothing.

Suits, \$60 to \$70 • Tweed Sport Jackets, \$45
Topcoats, from \$75 • Outerwear, from \$50

ESTABLISHED 1818

Brooks Brothers,
CLOTHING
Men's Furnishings, Hats & Shoes

346 MADISON AVENUE, COR. 44TH ST., NEW YORK 17, N. Y.
46 NEWBURY, COR. BERKELEY ST., BOSTON 16, MASS.
CHICAGO • LOS ANGELES • SAN FRANCISCO

Coming December 1, 2

Hughes announces
campus interviews for Electrical Engineers
and Physicists receiving
M. S. or Ph. D. degrees.
(Mid-Year or June Graduates)
Consult your placement office now
for an appointment.

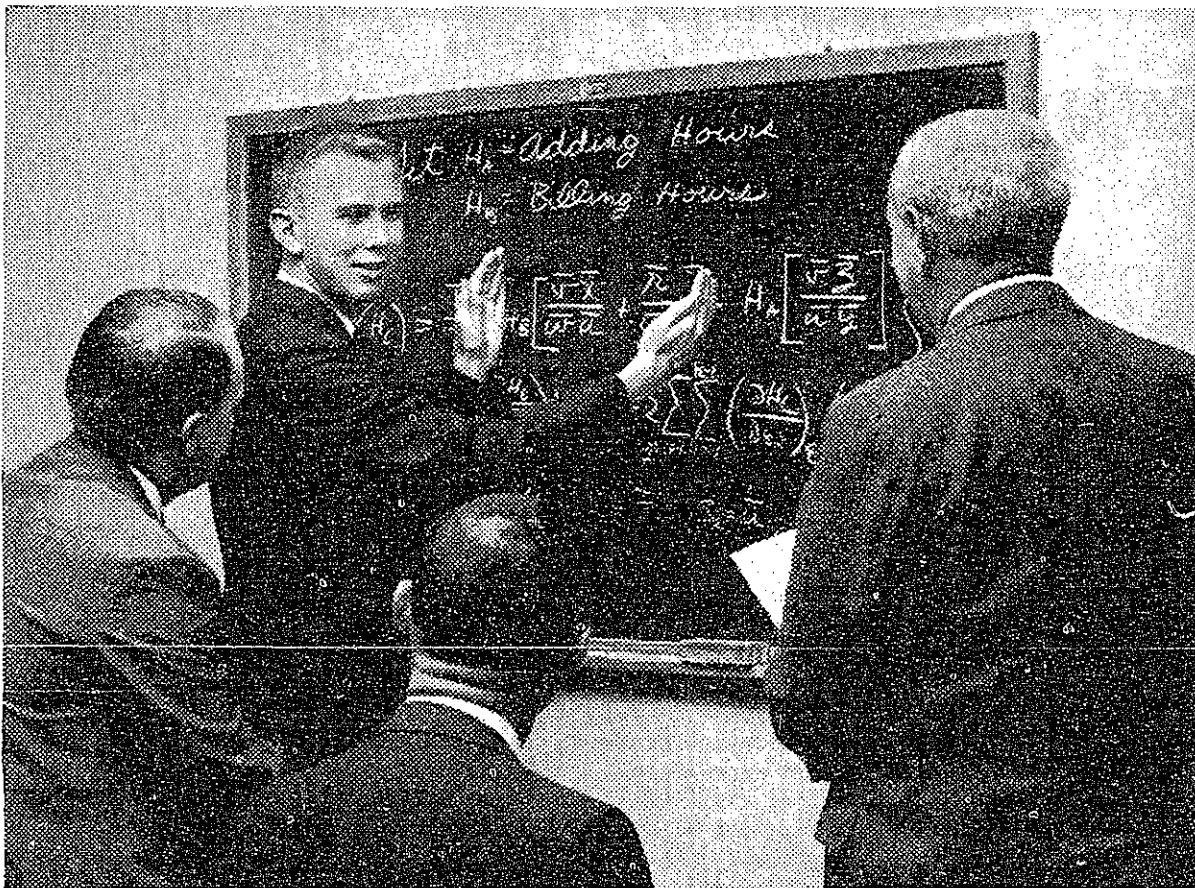
the West's leader in advanced electronics

HUGHES

HUGHES AIRCRAFT COMPANY

Culver City, El Segundo, Fullerton, Los Angeles, Malibu and
Newport Beach, California; and Tucson, Arizona

A Campus-to-Career Case History



Ken Murphy meets with Revenue Accounting people to discuss a new statistical formula. This will be used to proportion the billing time spent on interstate and intrastate Long Distance calls.

He's making math and telephones add up to a fine business career

During his senior year in college, math major Kendall T. Murphy had job interviews with several firms, but none of them appealed to him. "I wasn't interested in doing *pure* mathematics," he says. "I wanted to apply math and statistics to everyday business problems and have management responsibilities, too."

At a professor's suggestion, Ken talked with a Bell System representative and was "surprised to learn how many practical applications statistics had in telephone company operations." The thorough and varied training program and opportunities to advance as a member of management also impressed him.

Ken joined the Pacific Telephone and Telegraph Company at Sacramento, Cali-

fornia, in June, 1956. Two years of rotational training familiarized him with company equipment, services and commercial procedures. Then he was assigned to the Chief Statistician's Office in San Francisco.

Today, as a Staff Statistician, Ken is applying his math background to a variety of statistical studies dealing with: rates and revenue, inventory and obsolescence of equipment, customer opinion, personnel administration, quality control and auditing.

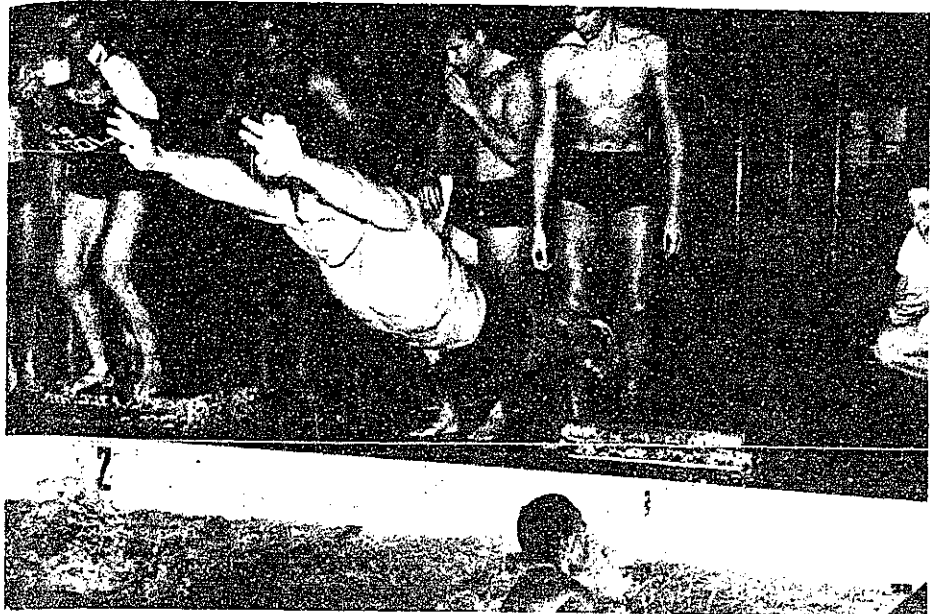
"This is a big, fast-growing business," says Ken, "and I feel I'm helping it operate more efficiently every day. That's a mighty satisfying way to put my college education to work."

Ken Murphy got his B.A. in Mathematics from the University of California's Santa Barbara College in 1956. He's one of many young men building interesting careers in the Bell Telephone Companies. There could be one for you, too. Be sure to talk it over with the Bell interviewer when he visits your campus.



BELL
TELEPHONE
COMPANIES

'62 Wins All-Institute Swim Meet; Races, Exhibitions Are Highlights



Bob Rappaport, '63, takes off for the second leg of the freestyle relay, as Nelson Stephany, '61, gets ready in lane 2. The race was won by the sophomores who are not shown.

In a flurry of splashing, swimming, and diving, the Class of 1962 proved again to all that '62 rules the waves. Institute Swimming Champions in 1958-59, the sophomores became the first class to win the trophy twice in succession. The Class of 1963 was game opposition, however, scoring 74, short of the winners' 84. Following were '61 with 59 points, '60 with 34, and Graduate with 30.

The individual high scorer for the evening was Dave Stein, '62, who with 17.5 points carried away first place trophies in the 220 and 440 yard freestyle, and, with the help of classmates Roger Cooke, Robin Lytle and Bob Ingram took the freestyle relay. Tom Ising, '61, with 16.5, Burnell West, '60, with 14, Tim Sloat, '63, with 10.5, and Les Sodickson G, with 6.5, led their classes.

Close Races

It was an evening of upsets and close finishes, as Cooke dethroned varsity captain John Windle, '60, in the 50 yard freestyle. Windle came back, however, to win the 100 yard freestyle by a wide margin. Then, in the individual medley, Ising with-

stood a late challenge by West to win by a few tenths of a second. West was almost upset in his specialty, the breaststroke, by Lauren Sompayrac, '63, who lost by a touch.

Delightful interludes were provided by Charlie Batterman, NCAA and AAU Diving Champion, who demonstrated excellent diving form; the Moon Hill Swim Pool group with an exceptional show of synchronized swimming; a water polo game between MIT teams, and some beautiful water ballet by the Wellesley Swim Club, as the Alumni Pool was filled to capacity.

Intramural Cagers Reach Mid-Season; Some Upsets Seen

The intramural basketball season passed the halfway point this week with 46 teams battling for eight league titles.

The season, which began early this month for a majority of the leagues, ends December 13. Playoffs will begin immediately thereafter so that the single elimination tournament for the intramural championship can be held promptly after Christmas vacation.

Strength in League II

Judging from first round activity, League II may prove to be the most contested. Burton House "A", league titlists last year, bowed to the "Apartments", a group of off-campus dwellers.

Beta Theta Pi, runnerup last year and generally conceded to be Burton's main opposition, has dropped its first two encounters, the first to Burton and then to Pi Lambda Phi.

The League III titleholder, Sigma Alpha Epsilon, has also absorbed one defeat while coping another contest.

Phi Gamma Delta, defending League VII champs, lost a 39-23 decision to Sigma Chi. In League VIII, Graduate House "B" fell before second-ranked Alpha Epsilon Pi, 47-27.

Phi Sigma Kappa, top ranked in League IV, downed Delta Kappa Epsilon 36-10 and Theta Chi 42-21.

League V's Senior House smashed Phi Delta Theta 39-23 and Burton "C" 49-16.

From the Sports Desk

IM Tackle Football

By Abe Feinberg, '60, Sports Editor

At the present time, the Executive Committee of the Athletic Association is making a detailed study of the intramural football program at MIT, with the intention of improving it.

Specifically, they're considering a plan that would enable those students who want to play tackle football to realize their wishes. The tackle competition would be held at the intramural level, and would involve teams from living groups who both desire to play and could field the best possible squads. Thus the top entries in the present intramural setup would switch to tackle football, and compete in a separate league of about eight teams. These teams would still consist of eight men, the same as the touch squads have now. With the exception of these eight teams, the current intramural program would continue.

The proposed program has been influenced by the eleven-man intramural tackle football played at Harvard. At Harvard, the gridders practice only occasionally, and the teams are drawn from living groups of around 400.

Proponents of the tackle program at MIT argue that there are enough interested students to make it worthwhile. They feel that the opportunity to engage in this sport should be offered here. They also think that the removal of the best teams from the regular leagues would provide much better games for these top squads, as well as closer competition for the others.

There are a number of considerations that weigh against this program, and in my opinion, should defeat it. First of all, in order to participate, a student would have to live in a certain living group. This inequality of opportunity is present nowhere else in MIT's intramural program, and it should not be introduced. Also, since almost all of MIT's living groups are much smaller than Harvard's, it is doubtful whether eight squads could be formed.

One of the main points the tackle supporters make is that the teams would not have to practice too often, basing this on Harvard again. This means that the sport would be played here on weekends only, with few workouts during the week. Of course, a great expense would be involved with the institution of tackle football. About fifteen outfits for each of eight teams would cost about as much as a full season of a varsity sport such as basketball.

I don't feel that occasional use of such expensive equipment warrants its purchase. Certainly athletes who practice regularly are more deserving of better equipment, or it could be spread over other aspects of the intramural program. As far as organizing closer competition; this could be accomplished by further dividing up the present touch football leagues.

To Candidates for Baccalaureate and Advanced Degrees
in the Engineering and Scientific Disciplines

THE
MITRE
CORPORATION

Invites You To Investigate The Broad Opportunities Inherent In Large-Scale System Engineering

MITRE, a systems engineering and development organization, has the continuing responsibility for solving the complex problems involved in the design, development, evaluation and integration of the many and varied air defense systems.

Formed under the sponsorship of the Massachusetts Institute of Technology with a staff nucleus composed of the scientists who designed and developed the SAGE System, MITRE affords individuals accelerated professional growth in a multi-disciplined environment. There exists freedom of choice in assignments ranging from system design through prototype development to advanced operations research.

We invite you to discuss with us how your academic training can be effectively utilized in one of these stimulating areas:

- SYSTEM DESIGN
- COMPONENT DEVELOPMENT
- REAL-TIME COMPUTER CONTROL SYSTEMS
- RADAR TECHNIQUES
- OPERATIONS ANALYSIS
- WEAPONS SYSTEM INTEGRATION
- HUMAN ENGINEERING
- COMMUNICATIONS SYSTEMS
- ELECTRONIC WARFARE
- INTEGRATED SYSTEM EVALUATION

The above openings are available at MITRE's modern facilities in suburban Boston, Massachusetts — Fort Walton Beach, Florida — and Montgomery, Alabama.

CAMPUS INTERVIEWS

TUESDAY, DECEMBER 1

Please contact your Placement Director for appointment

THE MITRE CORPORATION

244 Wood Street — Lexington 73, Massachusetts

A brochure more fully describing MITRE and its activities is available on request

MIT Winter Sports Previewed in Next Issue of "The Tech"

A preview of 11 winter sports in which MIT competes will appear in the next issue of The Tech, Friday, December 5.

Included will be an analysis of the basketball team, which opens its 16 game season under new coach Jack Barry, December 5; a preview of the hockey season, which opens at home December 12 against Columbia University; and interesting views on all the other sports.

You'll want to save this copy to use as reference for the winter sports season; plan to buy one Friday, December 5.

Herb Wegener Will Head '60 Harriers

Herbert Wegener, '61, was elected captain of the 1960 cross country team at the annual cross country awards banquet last Wednesday night. Herb, who has competed since his freshman year, has continually been one of the team leaders, both in spirit and performance. The Course X junior hails from White Plains, New York.

Rog Hinrichs, '62, was recently elected captain of the 1959 freshman cross country team. A native of Burlingame, California, he aspires to Course VIII.

The Prospectors Ski Club
presents

"LET'S GO SKIING
with Warren Miller"

Tuesday, December 1st

Cambridge High & Latin School

\$1.50 Tax included 8:15 P.M.

WOLFGANG
ARRIVES
IN
235 DAYS
Don't Believe Vicious Rumors

VOLKSWAGON IN BOSTON
Charles Street Garage
144 Charles Street
CA 7-7460
Glenn E. Whitham, '42, President

Honegger's KING DAVID


Honegger's symphonic psalm, "King David," will be presented by the Bennington College and MIT Glee Clubs, and the MIT Symphony Orchestra, Sunday, December 13, in Kresge Auditorium at 3 PM. The performance will feature professional soloists and will be conducted by Paul Boepple, who conducted the world premiere of the work. Reserved Tickets at \$1.00 and \$1.50 will go on sale in the lobby of Building 10 Monday, November 30, and phone reservations may be made by calling Ext. 2902. Mail orders should be accompanied by a stamped, self-addressed envelope and check made payable to MIT Musical Clubs, 301 Walker Memorial, MIT.

Food Technology Banquet;
Clam Chowder a la Course 20

What is probably the best New England Clam Chowder in the confines of Cambridge is served up approximately two times a year in MIT's own Food Technology Department. The master chef is Professor John Nickerson, the Course XX registration officer. The occasions are the meetings of the Samuel C. Prescott Chapter of the Institute of Food Technologists. In addition to their approximately weekly coffee hour, the local student chapter holds occasional large scale dinners in which they try to feature exotic foods from all over the world. They have had Oriental, Middle Eastern, Italian and of course New England dinners.

The Food Technology course which has a rather small enrollment, approximately twenty undergraduate and 60 graduate students is notable for the close contact maintained between the faculty and the students. An outsider is impressed with the friendly relations which apparently exists throughout the whole group. Daniel Farkas, President of the local IFT chapter, pointed this out as one of the many advantages for undergraduates in Course XX. The Department is apparently going out of its way to build up the enrollment to try and balance off the large proportion of graduate students which it now has.

PERSONALIZED
CHRISTMAS CARD ALBUMS
now on display
Order Now For Best Selection
TECHNOLOGY STORE



Stays moist and firm throughout your shave!
regular or new mentholated

Take your choice of new, cool mentholated or regular Smooth Shave. Both have rich, thick Old Spice quality-lather that won't dry up before you've finished shaving. Both soften your beard instantly—end razor drag completely. For the closest, cleanest, quickest shaves... try Old Spice Smooth Shave!

Old Spice

SMOOTH SHAVE
by SHULTON

100 each


— WOLFGANG —
IS HERE
(We thank the great pumpkin)

Folklore Productions—M. A. Greenhill, Mgr.

An Evening with
THEODORE BIKEL
songs from everywhere
Sunday December 6 8:30 P.M.
JOHN HANCOCK HALL
Tickets: \$3 and \$2.20. MAIL ORDERS ONLY accepted now. Send to Folklore Productions, P. O. Box 227, Boston 1, with stamped envelope.

Opening Tonight Through Sunday
8 Performances Only

THE WORLD OF
SHOLOM
ALEICHEM



(in English) Directed by Joseph Pate

MORRIS CARNOVSKY
THE BROADWAY LADY
"A Time For Rejoicing"
— Brooks Atkinson
Tuesday, Nov. 24 thru Sunday, Nov. 29: Matinee, Wednesday, Friday and Sunday.
NEW ENGLAND
MUTUAL HALL
Clarendon & Boylston Sts.
Tel. CO 6-7262
Tickets \$4, \$3.50, \$2.75.
\$2.25 at Box Office
FOR THEATER PARTIES CALL HU 2-1827

TELEPIX CINEMA
Horst Buchholz — Romy Schneider
— MON PETIT —
Directed by Helmut Kautner
"all the aspects of young love and life..."
Cyrus Durgin — Globe
"lovely, lovely..."
Elinor Hughes — Herald
Opposite Staller
HA 6-1115
In color — SHOT IN PARIS
Last Three Days

Honegger's KING DAVID
presented by
Bennington College Choir
MIT Glee Club and Symphony Orchestra
conducted by Paul Boepple
Joyce McIntosh, soprano
Robin Longanecker, alto
Donald Sullivan, tenor
Robert Brooks, narrator
Sunday December 13 3:00 P.M.
Kresge Auditorium MIT
Reserved seats at \$1.00 and \$1.50 available by mail from MIT Glee Club, 301 Walker Memorial, MIT or by phone — UN 4-6900, Ext. 2902. Also on sale in Building 10 between 10-12
Also in Building 10 between 11-12

WTBS
Program
Schedule

Wednesday
7:30-8:45 A.M. Rise and Shine
5:00 P.M. Caravan
6:00 Clyde Reedy Show
8:30 Campus News
8:50 News
9:00 Classical Music
1:00 A.M. Sign-off
Thursday
7:30-8:45 A.M. Rise and Shine
5:00 P.M. Caravan
6:00 Jazz
7:00 Bob Nagro Show
8:30 Limelight Review
8:50 News
9:00 Classical Music
1:00 A.M. Sign-off
Friday
7:30-8:45 A.M. Rise and Shine
5:00 P.M. Caravan
6:00 Jazz
7:00 Fiesta
8:00 Baton Society
8:30 Campus News
8:50 News
9:00 Nite Owl request show
2:00 A.M. Sign-off
Saturday
5:00 P.M. Sports Roundup
7:00 Jazz
8:50 News
9:00 Nite Owl request show
2:00 A.M. Sign-off

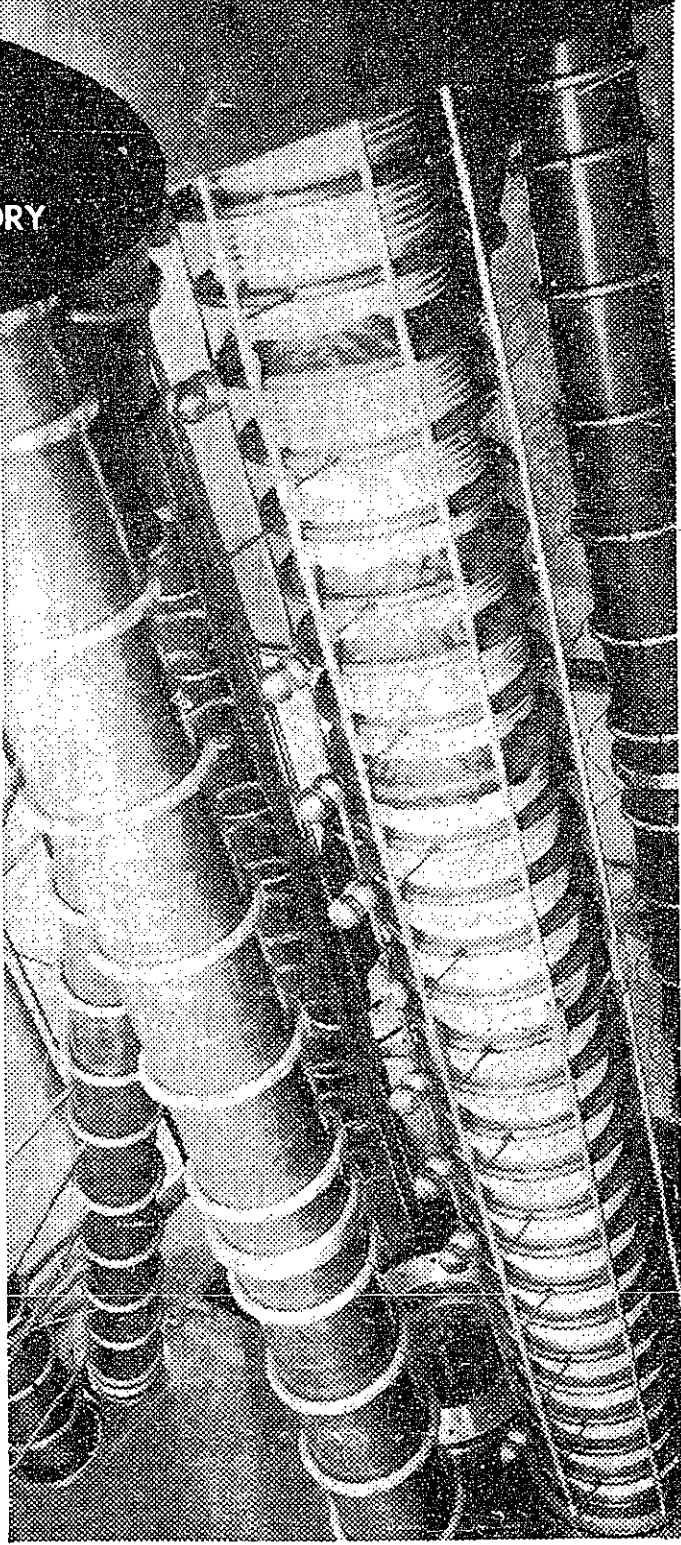
Expand your knowledge
of the physical universe through
advanced research projects at
LAWRENCE RADIATION LABORATORY
leader in nuclear research

On Monday - Dec. 7
a Lawrence Lab staff member
will be on campus to answer
your questions about
employment opportunities
at the Laboratory

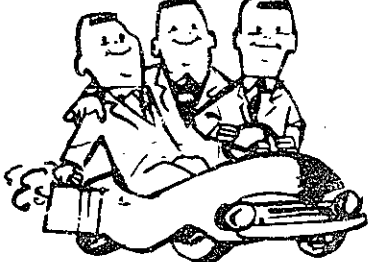
Interviewing for:
Chemists Physicists
Electronic engineers Mechanical engineers
Metallurgists Mathematicians
Ceramic engineers Chemical engineers
Current activities include programs involving nuclear-powered ramjet propulsion, controlled thermonuclear reactions, the industrial applications of nuclear explosives and basic particle research.

Call your placement office for an appointment

LAWRENCE RADIATION LABORATORY
UNIVERSITY OF CALIFORNIA, BERKELEY & LIVERMORE, CALIFORNIA



WEEK-END
IN NEW YORK



\$5 DAILY PER PERSON

3-IN-A-ROOM
(1 single, 1 double bed;
slight extra charge for
third bed)

BREAKFAST, TAXES INCLUDED
BY RESERVATION ONLY.
See your travel agent.
Or write:
HOTEL COMMODORE
42ND STREET AT LEXINGTON AVENUE
N.Y. 17, N.Y. • A ZECKENDORF HOTEL