**FRESHMEN TO MEET FACULTY, STUDENT LEADERS; '45 PREXY**

**SCOPE MORE '46 ATTACKS**

Burke Will Face Fresher Alone If Necessary

"I'll take all on 'em if they single handed," said tall blonde John Burke, the Sophomore smoker when asked how he would fare the freshmen at a Tech smoker.

In his first and only Tech smoker, Burke had already shown the working of his club. Last year he had even more of the fraternities will continue in the ceremony and it is first time that this has been included in the ceremony and it is first time that this has been included in the ceremony.

**FRESHMEN CAMP STARTS TOMORROW**

Freshtmen to Meet Faculty, Student Leaders; '45 Prexy

**SGRESS Mops Held By 5:15 Club**

Pre-School Smoker to be held at 5:15 PM, featuring one of Oscar Hofland's inimitable pop talks, the 1:15 Club will present its smoker for freshmen of the Sophomore class, the fresh- men who have a double angle on Burke, as it is in this club where Burke has already watered the river of the film. After the war, he will be the best 15-minute program on the air. Last year he conducted a con- cert at the house where Burke was just as glad. Oscar tells the freshem to lay off, as the show is not the most pleasant drink he has tasted.

Before November 1 all under- graduates will have completed the administra- tions at the Homberg Infra- nary for the annual physical examinations.

**FRESHMAN CAMP PROGRAM**

Friday

9:00 Registration at Walker Memorial
9:15 Breakfast at Walker Memorial
9:30 Registration at Women's Hall Memorial
10:00 Salute to M.T. by Fred F. Alston, '43
10:15 Tech Songs and Cheers—Orville B. Denison, '11
10:30 Our Activities in Walker
10:45 Assembly in Morss Hall
President of Class of '43 presiding—B. Richard Childress
Introduction to the Sophomore Class, in which he refers to the Class of '45 as a "great class," speaks of "instilling the right spirit of freshmen," and requests the Sophomore class to refrain from all horseplay during the period of the freshman camp.

From 11:00 AM to 2:00 PM. This year's director of freshmen camp, Mr. L. A. H. Smith, after the start of the day's activities, will get under way next year, and more men expected, the largest freshman camp in the history of the Institute will be held tonight and tomorrow on the Technology cam- pus. This change from the former site at Lake Massapoag comes because of the transportation and equipment problem.

The camp will start at 5:30 PM. This afternoon all freshmen will be given a pre-salmon inspection. The smoker will follow in the Morss Hall of the 5:15 Club. The pre-salmon program much the same as held in past years.

Options For Senior Week
On Sale for Last Time
Seniors are warned that options for Senior Week will be sold for the last time be- ginning Wednesday of next week. The price remains $3.00. From 11:00 A.M. to 1:00 P.M. daily, for five days, options sales will continue in the lobby of Building 10. At the conclusion of this sales period tickets will be available only in the form of a compass book at the face value of the tickes.

Events to Last Through Dinner Saturday Night

With 170 freshmen now enrolled, and more men expected, the largest freshman camp in the history of the Institute will be held tonight and tomorrow on the Technology cam- pus. This change from the former site at Lake Massapoag comes because of the transportation and equipment problem.

The Tech Opens Fall Smoker Series

Newspaper To Outline Plans To Men of '46

The Tech offers a full series of fresh- men smokors, sponsored by the various activities in an attempt to en- courage freshmen to derive from participation in student activities. The Tech will be held on Friday, Sept. 25, at 7:20 P.M. in the Walker Memorial Building.

FRESHMAN BOOKS

**NEW Prexy Selected**

Alfred A. S. Holmes, '43, was the word for the job this year. According to present plans, The Tech will be held on Friday, Sept. 25, at 7:20 P.M. in the Walker Memorial Building.

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FRESHMAN BOOKS
A TOUGH JOB

It is under no ordinary conditions that you of the Class of 1946 begin your first year at the Massachusetts Institute of Technology. Your nation fights for its very life, your friends and relatives daily risk life and limb on the far-flung battlefields of the new world conflict. In the home front, an internal upheaval that could conceivably upset the nodal warfare of the past.

To the midst of such bewildering circumstances, you have been selected to do a special job, one that requires of utmost importance to the nation and its people. That job, which was difficult during peacetimes, has now become more difficult by the fact that your enlistment may mean that you will be called up. Diligent study has always been hard to practice during the crises of discontent that necessarily accompany a war. You will frequently be afflicted throughout your four years at Technology with the conviction that you are playing an unimportant part in the war effort and that you would be more valuable in the armed services. Near the end of your Institute career, you will have to go to school for an unanticipated period of six months, which, in many cases, will be an overedge of education and a drug that will dull the most conscientious mind. You may even be so difficult with your draft boards. As men are inducted into the armed forces, and the draftables become scarcer, you may be withdrawn from the Institute to satisfy the desperate demands of total war, even though this would be unwise in the long run.

With this advice, THE TECH hopes that all 710 of you get the most out of your freshman camp and out of your stay in Cambridge. Take the Class of 1946 a most successful under-graduate career.

DISAPPEARANCE OF A TRADITION

A Technology tradition, it appears, is going to be discarded with the entrance of the first-year class into the bawled halls of the Institute. Since the beginning of freshman camp, the annual dunking of the Sophomore Class president has been a necessary part of the long run.

But this year, the omnipotent war has brought about a serious change: freshman camp has been moved from the halls of New Hampshire to the campus of M.I.T. Lake Massapoag is no longer the scene of T.C.A. It has forbidden the tradition bath for the Sophexy.

Once before, in the year of the hurricane, camp was out of reach. The ingenious freshman counsel, discovered Charles River in their front yard and made it serve the purpose.

We hope that this word to the wise is sufficient.
Freshman and Sophomore Field Day Teams Will Start Practice On Registration Day

Football, Track, Swimming Begin Monday, Tuesday

Practice for the clash between the Sophomores and freshmen will begin on this Registration Day, with the start of the winter term.

Football practice for the freshmen will begin Tuesday, Sept. 29th and the Sophomores will commence practice Monday, Sept. 18th. All freshmen who wish to try out for the Field Day football team are asked to report at Briggs Field at 3:15 P.M. on Tuesday.

The coaches for this team will be Bill Scott and Bob Flatten of the class of ’46.

Sophomore football practice will begin at Barbour Field House Monday at 3:30 P.M. Bob Reehbo and Doug Penston of the Class of ’45 will coach this team.

Swimming Coach Gordon Smith urges all freshmen and Sophomores swimmers to turn out for practice at the consumption pool as soon as possible.

Candidates should call the Coach's attention to themselves and he won't refuse them if they are there to practice for Field Day. Each swimmer will have two relay teams of three men each and two freestyle relay teams of four men each.

Two practice will be held under Coach Oscar Hedlund after 3:10 P.M. starting Monday, Sept. 25th. The two competing classes will each enter one relay team each mile. Each man will run 220 yards.

Track practice will begin Monday, October 5th. The coaches, Charles Ritterhoff, ’44, for the freshmen and Willford Smith, ’44, for the Sophomores, would like to see a large number of men participate.

Track Coach Oscar Hedlund Urges Frosh To Choose Track

By Oscar Hedlund, Track Coach

Each year the members of the Class of September, given a great many opportunities to build themselves up for the coming season in races with many schools and the New England Cross Country competition and the Inter-Collegiate championship at New York in November. Every year freshmen have reported for Cross Country and the majority of the boys who have reported are runners. However, before the season is over, they become excellent swimmers and by spring the Cross Country work has shown to be of great value. All men interested in Cross Country participation should report the first week of school for the Fall season.

The boys who are natives and interested may be read or studying Christian Science healing.

BOTTLED LIQUORS
Prompt Delivery
Popular Prices
Personal Service

 endorsements of Christian Science may be read or studying the Coop Store, put in a stock of merchandise, and employed salespeople.

A nnouncement...
IMPORTANT TO FRESHMEN

JOIN the Coop and SAVE Money on Your Purchases

By joining the COOP you become a storekeeper for yourself just as if you owned a store, put in a stock of merchandise, and employed salespeople.

The Stockholders, all members of the Faculty of M.I.T., Harvard and Radcliffe, hold the capital stock in trust and receive no dividends upon it. The stockholders from M.I.T. are Edward L. O`Leary and Professor Erwin H. Sinnott.

On the Board of Directors the M. I. T. Representatives are Ralph E. F. Schell, Professor Ralph E. F. Schell, Professor Frank W. Wilson, Alumni Director, Professor Walter Humphreys and Horace S. Reed, Secretary and Treasurer, respectively of the M. I. T. Corporation.

The COOP prices are never higher than elsewhere, and in many cases for the same quality much lower. In addition, a dividend is credited on all purchases of 25c or more.

Checks not exceeding one hundred dollars are cashed for members between the hours of 9:00 A.M. and 3:30 P.M.

Charge Accounts for members only.

Join before making a purchase, for dividends cannot be credited on purchases made previous to taking out a membership.

The TECH-COOP is the official distributor of all your supplies. The materials used by all freshmen have been passed upon by the Faculty and approved by them.

Every TECH Man should become a member without delay. The Membership fee is one dollar.

Dividends at the rate of 12% on cash purchases and 10% on charge purchases, are paid at the close of the fall term. All memberships start July 1 and expire June 30.

A Membership at the Technology Store also makes you a member of the Harvard Square Store.

TECHNOLOGY STORE
HARVARD COOPERATIVE SOCIETY
Dividends to Members
A TOUGH JOB

It is under no ordinary conditions that you of the Class of 1946 find yourself at the Massachusetts Institute of Technology. Your nation fights for its very life, your friends and relatives daily risk life and limb on the far-distant battlefields of Europe. At home, you are confronted with a staggering internal upheaval that could conceivably upset the noblest of war efforts.

In the midst of such bewildering circumstances, you have been expected to do a special job, one that is of utmost importance to the nation and its people. That job, which was difficult during peacetime, has been made more difficult by the Draconian laws, the draft, and the rationing system. Diligent study has always been hard to practice during the times of discontent that necessarily accompany a war. You will frequently be afflicted throughout your four years at M.I.T. with the present facilities for the prosecution of your academic work.
Freshman and Sophomore Field Day Teams Will Start Practice On Registration Day

Football, Track, Swimming Begin Monday, Tuesday. Practice for the clash between the Sophomores and freshmen at the annual Field Day will begin with the start of the winter term. Football practice for the freshmen will begin Tuesday, Sept. 29th and the Sophomores will commence practice Monday, Sept. 28th. All freshmen who wish to try out for the Field Day football team are asked to report to Briggs Field at 9:30 P.M. on Tuesday. The coaches for this team will be Bill Bobbitt and Bob Plachta of the class of '44.

Sophomore football practice will be held at Barbour Field House Monday, Tuesday. Bob Reebie and Doug Frister of the Class of '42 will coach this team.

Swimming Coach Gordon Smith urges all freshmen and sophomores to turn out for practice at the swimming pool as soon as possible. Candidates should call the Coach at 805 Massachusetts Ave., otherwise he won't realize they are there to practice for Field Day. Each team will have two relay teams, one in each and two freestyle relay teams of four men each.

Track practice will be held under Coach Oscar Hedlund, after 3:00 P.M. starting Monday, Sept. 28th. The two competing classes will each maintain one relay team of twelve men. Each man will run 200 yards.
The track practice will begin Monday, October 5th. The coaches charge $1.00 per hour, with freshmen and Wilfred Knaus, '43, for the Sophomore team. There will be a large turnout. The teams will consist of 25 men each.

MILLER, STEWART Win Many Races During Summer

Two Tech runners were standouts in the summer handicapping meets held around Boston, winning several first places in competition against the best college and club runners, Larry Brearley and Bob Miller, who entered during the summer months after classes and went into open competition which is quite separate from college dual meets.

The big event of the summer was Miller's win of the Walter Scott Mile for men of 25 years and over. He received the beautiful trophy offered each year by the Boston Clun Club of Boston. The meet was held at the old Tech Field in Cambridge on Labor Day afternoon. The site at which other Tech men have won their laurels prior to 1916 was used for the first time on September 6th at 4:00 P.M. President A. E. Freeman, Faculty Treasurer, and Walter Humphreys, '38, coached the Tech runners.

At the New England Junior Championshp meet Bob Miller and Larry Brearley were both in the top ten points. Bob received the half mile title of M.I.T. in 2:38 and the mile in 4:39.8. Larry also won his favorite event at the American Express and Morton Yacht Club last summer. Miller won third, second, and second thirds, Stewart finished his lap with four firsts, one third and two fourths.

The above picture shows sophomore back as he cuts around right end to end a clear field score. This was taken during the game between the Class of '44 and the Class of '42, two years ago. In the background, the temporary stands set up on Briggs Field to accommodate the large crowd usually attracted to Field Day.

Track Coach Oscar Hedlund Urges Frosh To Choose Track

By Oscar Hedlund, Track Coach

Each year the members of the incoming Sophomore Class are in a quandary as to the sport that they should take up for their recreation. Track and Cross Country together, or the same sport each week during the school year which gives an individual, not waiting for a team or a crowd to work together. Schedules are made out for this sport so that the freshmen have plenty of competition both in Track and Cross Country, also in handicap events and the big Inter-class race in November. Every year freshmen have reported for Cross Country and the majority of the boys who have reported are novices. However, before the season is over, they become excellent runners and by部分内容未显示
**Tech Develops 4 Million Volt X-Ray Machine Produces Radiation Stronger Than Radium**

Supply of "Whole World Stronger Than Radiums Produces Radiation of Unlimited Value," is announced by Dr. Richard Dresser of Boston, at the Institute. The new generator was announced at the 39th annual meeting of the American BTNAY Society in Chicago on Friday, September 18.

This generator produces the first radiation which is more penetrating than the gamma rays of radium and with an intensity greater than that of the entire available world supply of radium. The new generator was announced in a paper presented by Dr. John G. Trump, its designer, and H. W. Cloud who described construction of the apparatus, while a paper by Dr. Richard Dresser of Boston reported the preliminary clinical observations on the use of these high voltage rays.

Development of this new generator has gone forward under a grant of funds from the Collis P. Huntington Memorial Trust, which has supported earlier experimental work in high-voltage research at the Institute.

The new generator, the design of which is based on the Van de Graaff type of electrostatic high-voltage machine, consists of a dUNUSED-high-voltage terminal about 12 inches in diameter supported on a column of alternate insulating and metallic spacers. A single insulating belt twelve inches wide travels at a high speed within the column and transfers an electric charge continuously between the column and the terminal. This assembly is mounted within a sealed metal pressure tank in order that by compression of a mixture of air and Freon gas the electrically charged belt, terminal, and column may be insulated. This tank is four and one half feet in diameter and thirteen feet high. In operation, a negative electric charge is imparted on the insulating belt at its lower end and carried up into the high-voltage terminal, which thus acquires a negative electrical pressure in direct proportion to the stored electrical charge. The voltage may be adjusted from a few thousand volts to the maximum of more than four million volts by controlling the current sprayed on the charge-carrying belt. The area of the tube is fixed vertically within the generator column. A metal extender of the tube goes out through the bottom of the tank and terminals in a water-cooled gold target to the vacuum column. The electrons for producing x-rays by bombardment of the gold target originate at the anode fins in the high-voltage terminal end of the tube and are progressively accelerated and focused as they are propelled down the tube at the old target.

In describing the clinical uses of the highly penetrating radiation of the new generator, Dr. Dresser reported that the rays have essentially the same physical properties as the gamma rays of radium, but that their high intensity permits much more rapid diagnosis and permits of a depth that the depth dose is much greater than it has been possible to obtain in clinical therapy.

Treatment with the high-voltage, deeply penetrating x-rays produces no side effects on normal skin reaction. The first x-ray generator of the type just described was developed in 1957 to a potential of 1,000,000 volts. This machine was installed in the Collis P. Huntington Memorial Hospital in Boston. A second and more compact unit operating at 1,290,000 volts was built in 1940 for the Massachusetts General Hospital.

**CAMP PROGRAM**
10:45 Intermission
11:00 Assembly in Huntington Hall
Feld Day—James F. Buchanan, '44
Chief Spirit—Coach Gier Hieald
10:45-11:00 Class of 1943
12:15 Lunch in Walker
1:45 Assembly in Great Court (Walter in inclement weather)
President Compton
2:45 Athletic Program
Faculty—Coach French (football) Game
3:15 First Athlete Group
4:00 Second Athlete Group
4:45 Third Athlete Group
5:30 Adjournment

**Inst. Comm. Decees**
No More Forms

(Continued from Page 2)

**The Technology**

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**THE TECHNOLOGY DIVISION TO STORE**

**Select Your Parker Pen**

Choice of three...to suit your every individual need.

Parker Vacumatic...the most modern pen in the world, now available in four sizes with 3,000,000 volt rays are made under the direction of Dr. Dresser. In view of the fact that clinical experimentation at high voltages is still in a preliminary stage, Dr. Dresser made no report on the therapeutic effects of the radiation.

Oscar Ursel Freight To Enter Athletes

(Continued from Page 5)

who have never had any athlete work previous to coming to the Institute should not take this into consideration but report, try to see if there is some hidden talent in their make-up. The biggest majesty of boys reporting each year have had no experience, but before getting through school, they excel in their event.

While many colleges are changing the rule so that freshmen can compete in varsity teams, the Institute will still maintain its regular athletic program and freshmen and will have a full schedule of meets with nearby Prep and high school teams.

Freshmen have the privilege of selecting some sport instead of M.B. Track gives them an excellent opportunity to work out and develop their year round. Many boys who have substituted physical training have become excellent athletes and received many prizes for their efforts. I hope that all freshmen who are interested in track will report to the Harvard Field Stone and ask any questions they might have. I shall be very glad to help you in every way solving your freshman problems. Do not wait until it is too late. Start early and see what the Institute track can do for you. It has done a lot for others, so let it be of help to you in your college days at M.I.T.

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1:45 Assembly in Great Court (Walter in inclement weather)
President Compton
2:45 Athletic Program
Faculty—Coach French (football) Game
3:15 First Athlete Group
4:00 Second Athlete Group
4:45 Third Athlete Group
5:30 Adjournment

**Inst. Comm. Decees**
No More Forms

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