



FROSH CAMP STARTS TONIGHT

Class of 1946 To Be Greeted At Tech Smoker

Exhibits, Movies, Talks Planned To Acquaint Frosh With Institute

The entire freshman class will meet for the first time at the All-Tech Smoker to be held at 6:30 P.M. tomorrow in Morss Hall of Walker Memorial. Admission is free, and all freshmen are expected to attend. Exhibits by the various undergraduate activities will be shown in the lounge prior to the dinner itself.

Dr. Karl T. Compton will open the after-dinner program with the official welcome to the Freshman Class. S. Richard Childerhose, president of the Senior Class, will then receive the Walker Key from C. Frederick Barrett, '04, president of the Alumni Association.

Childerhose will then induct the incoming students into the Undergraduate Association. This is the first time that this has been included in the ceremony and it is to become a permanent part of future smokers.

The guest speaker of the evening will be Commander Luis de Florez, '11, Bureau of Aeronautics, U.S.N. The Institute regulations during wartime will be discussed by the chairman of the M.I.T. Safety Committee, Dean John W. M. Bunker.

The group singing will again be led by O. B. Denison, '11. After the singing the M.I.T. A.A. movies will be shown and the "Stein Song" will follow. A reception for the fathers of incoming students will be held in Pritchett Hall afterwards.

Toastmaster for the evening will be Professor Albert A. Shaefer of the department of Business and Engineering Administration.

Freshman Books Needed By T.C.A.

Second hand books, especially those used by the freshmen, are needed by the Technology Christian Association book exchange to fill the requirements of the 750 freshmen who are entering the Institute this week, the T.C.A. office has announced.

The war has placed a demand upon the nation's paper supply which has made it difficult to supply the needs of the entire Class of 1946 with brand new products. The books, drawing boards, instruments, etc. left for sale will bring the owner two-thirds of the original price.

Chi Phi Fraternity Spends \$1,500 For Bonds

The most important purchase of bonds yet reported by any group at the Institute is the purchase of two \$1000 bonds by the Chi Phi house recently. This commendable movement was started last Spring by the Lambda Chi Alpha purchase of a \$500 bond, and it is expected that many more of the fraternities will follow this example as soon as the confusion of the opening of a new term is over. In another drive the Chi Phi's found several obsolete bathtubs, which they promptly replaced with showers thus releasing a lot of scrap metal for the war effort and similarly donated.

Fred Waring To Salute Freshmen Over Air Tonight

The Class of 1946 at Technology will be honored with a salute from Fred Waring when he broadcasts at 7:00 P.M. tonight over Station WBZ. Maestro Waring, who entertains for fifteen minutes, is expected to mention the Freshman Smoker and the Class of 1946.

Glenn Miller serenaded Technology on his program in honor of the Assemblies Ball last April 17. At that time he was honoring one college each week.

For the past three years Fred Waring's program has been rated as the best 15-minute program on the air. Last year he conducted a contest to determine which was the best college Glee Club. The M.I.T. Glee Club participated in this contest.

Inst. Comm. Bars Formals

Senior Ball, Junior Prom Only Exceptions

At its last meeting of the summer, the Institute Committee passed a recommendation that all activities hold informal dances only, for the duration of the war. The only formals not to be affected by this decree would be the Senior Ball and the Junior Prom.

Main reason for this ruling, which was passed almost unanimously, after a lengthy discussion, was the feeling that to outsiders, persons who have sons and relatives in the armed forces, it would not look good for Technology students to continue their pre-war custom of rushing out to formal fraternity dances every week-end.

Among other reasons advanced for abolishing formals were the problems of transportation, gasoline rationing, and the rubber shortage, together with the prospect that, because of greatly increased personal income taxes, student allowances would probably be decreased.

The Tech has been requested to emphasize that this order is not

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Freshmen to Meet Faculty, Student Leaders; '45 Prexy Scorns Possible '46 Attacks

Burke Will Face Freshmen Alone If Necessary

"I'll take on all 750 of them single handed," said tall blonde John Burke, president of the Sophomore class when asked how he would face the freshmen at freshman camp today. The powerful end of last year's freshman Field Day football team said that he really felt sorry that the camp couldn't take place at Lake Massapoag again, as he really liked swimming, but felt that 750 freshmen crossing Memorial Drive might prove very dangerous.

Freshmen, however are warning to watch out for Burke when they approach him, and to hold in mind the fact that last year he won 3rd place in the 175 lb. class in the Institute wrestling meet. President of the Q Club as well as president of the Sophomore class, the freshmen have a double angle on Burke, as it is this club which sells and enforces the wearing of those freshmen ties. Burke guarantees all freshmen that these ties will go with any suit. Rowing No. 7 in the freshman heavy crew last year, Burke has already tasted the water of the river, and feels that after one taste he will be just as glad if Oscar tells the freshmen to lay off, as he says the river is not the most pleasant drink he has tasted.

Before November 1 all undergraduates must make appointments at the Homberg Infirmary for the annual physical examination required of all students. Appointments may be made with the secretary of the medical director in the first floor office of the infirmary.

Any student who fails to make an appointment before the deadline of November 1 will be subject to a \$5.00 fine.

Options For Senior Week On Sale For Last Time

Seniors are warned that options for Senior Week will be on sale for the last time beginning Wednesday of next week. The price remains \$5.00.

From 11:00 A.M. to 2:00 P.M. daily, for five days, option 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 complete book and at the face value of the tickets.

Pre-School Smoker Held By 5:15 Club

Featuring one of Oscar Hedlund's inimitable pep talks, the 5:15 Club held a pre-school smoker for freshman commuters in the clubroom in the basement of Walker Memorial last Wednesday night.

About ninety new men attended, feasted on cider and doughnuts, smoked free cigarettes, heard the officers of the club explain the purposes and activities of the club, and were harangued by Oscar on the values of organization and spirit toward winning of Field Day, and on the importance of sports and activities in the life of the Tech undergraduate.

Soph Horseplay At Camp Out For The Duration

Another Technology tradition has apparently gone the way of all good traditions, for the duration, at least, judging by the edict issued last night by Sid F. Atlas, '43.

Atlas, this year's director of Freshman Camp, has sent a letter to each member of the Sophomore Class, in which he refers to the Class of '45 as a "great class," speaks of "instilling the right spirit" into the freshmen, and requests the Sophomores to refrain from all horseplay during the period of the freshman camp.

Former Students Now in Training

As the war enters its eleventh month, all reports show that an increasing number of Technology students are found in the various Army, Navy, and Air Corps training centers throughout the United States. Notice was received recently that three Tech students are now receiving training as cadets at the San Antonio Aviation Cadet Center in Texas.

They are: Aviation Cadet Henry T. Young of Newton, Mass.; Aviation Cadet Charles D. Small of Brookline, Mass.; Aviation Cadet Richard H. Goodell Jr., of New Orleans, Louisiana.

Events to Last Through Dinner Saturday Night

With 750 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 campus. This change from the former site at Lake Massapoag comes because of the transportation and equipment shortage.

The camp will start at 5:30 P.M. this afternoon when all freshmen must register for the camp. Dinner will follow in the Morss Hall of Walker at 6:00 P.M. and a program much the same as held in past years will be put on afterwards.

Reserves To Be Discussed

Additional topics that evening which have never been considered in the past, will be discussed in a lecture on the Army Enlisted Reserve by Professor John D. Mitsch, '20; and talks on M.I.T. men in the Army and in the Navy by Colonel Edward W. Putney and Lieutenant Commander Bernard M. Olsen. Following the talks, the frosh will be entertained by the inimitable Orville B. "Obie" Denison, '11.

Friday night the freshmen will either go home, sleep in the dorms, stay at a fraternity house, or stay in the senior house where 164 members of the Class of '46 are being put up for the night.

Breakfast in Walker

Saturday morning, breakfast will be served in Walker at 8:30 A.M. and an assembly will be held at 9:30 A.M. in Huntington Hall, Room 10-250. This meeting, presided over by Secretary Wallace M. Ross of the Technology Christian Association, will be made up of a solo by Dr. Sylvester Carter and the presentation of activities.

The head of each activity will be

(Continued on Page 2)

The Tech Opens Fall Smoker Series

Newspaper To Outline Plans To Men of '46

The annual fall series of freshman smokers, sponsored by the various activities in an attempt to acquaint the frosh with the benefits to be derived from participation therein, will get under way next week. First on the program is that of The Tech, Technology's official undergraduate newspaper, and oldest campus activity.

After Freshman Camp, the frosh will probably give some thought to what activity they will go out for this year. It is to better acquaint these men with the workings of the activities that these smokers are held.

According to present plans, The Tech's smoker will feature short talks by the managing board, explaining the workings of the various departments, and the opportunities available to freshmen. All interested freshmen are invited to attend this smoker, to be held at 5:15 P.M., Wednesday, September 30, in Pritchett Hall, on the second floor of the Walker Memorial Building. Refreshments will be served.

FRESHMAN CAMP PROGRAM

FRIDAY

- 5:30 Registration at Walker Memorial
- 6:00 Dinner—Morss Hall, Walker Memorial
- 7:00 Salute to M.I.T.—Fred Waring
- 7:15 Welcome to Freshman Camp—Sid F. Atlas, '43
- 7:20 Tech Songs and Cheers—Orville B. Denison, '11
- 7:30 Intermission—Activity exhibitions in Walker
- 8:00 Assembly in Morss Hall
- President of Class of '43 presiding—S. Richard Childerhose
- Institute Welcoming Address—Dean Robert G. Caldwell
- "Getting Admitted and Staying In"—Prof. B. Alden Thresher, '20
- History of Technology—Prof. Charles E. Locke, '96
- Solo—Dr. Sylvester Carter
- The Army Enlisted Reserves Program—Prof. John D. Mitsch, '20
- M.I.T. Men and the Army—Col. Edward W. Putney
- M.I.T. Men and the Navy—Lt. Comdr. Bernard M. Olsen
- The Homberg Infirmary—Dr. Benjamin E. Sibley
- Announcement of Freshman Smoker—Robert W. Maxwell, '43
- "Obie" Denison, '11

10:00 Adjournment

SATURDAY

- 8:30 Breakfast in Walker
- 9:30 Assembly in Huntington Hall (10-250) Sec. Wallace M. Ross presiding
- Discussions—Dr. Newton C. Fetter
- Introduction of Rev. Carl Heath Kopf
- Solo—Dr. Carter
- Presentation of Activities—S. Richard Childerhose, '43 presiding
- "Obie" Denison

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The Tech



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College Students Face Uncertainty Of War Situation

As the Institute gathers for its 82nd academic year, an all-time record class of about 750 freshmen enter this engineering school. Little concrete and authoritative information has been released by Selective Service Headquarters in Washington as to whether and under what circumstances engineering students may be permitted to complete their education and how they may best help their country to win the mortal struggle for survival of its way of life. Simple computation shows that the recruiting of a projected fighting force of ten or even thirteen million will require nearly every second male between 18 and 45 to be in uniform. On the other hand, there is even at this moment a critical shortage of both labor and trained technical personnel for the multitude of essential war needs. Naturally much confusion and contradictory information has been published in the daily press, and the last word on the question of how we engineering students will be expected to help our country has not been released.

The Office of War Information has recommended for collegiate publication statements on the college students part in winning the war by War Manpower Chief Paul V. McNutt. Speaking recently at Purdue University, McNutt said: "The colleges and universities are charged with increasing the number of technicians upon which both industry and the armed forces depend. The colleges and universities, by insuring a continual supply of technically trained men and women, can insure the continual increase of our strength for victory and for peace."

Recruits Needed

Emphasizing the great need for more fighting men, Secretary of War Stimson, in another statement, explained that the armed forces are already running short of manpower and new recruits must be called up. Student members of the enlisted reserve will not be summoned at some indefinite time in the future—they will be called up at the end of the present college term as they reach the draft age of 20.

"The stepping up of the intensity of the vital combat in which we are engaged and the growing need for enlarged forces," Secretary of War Stimson stated, "make it clear that all young men fortunate enough to have the physical and mental qualifications to enable them to serve their country in the armed forces are destined for that service."

Special Training

When the reservists are called to the colors, Mr. Stimson added, the army will give them highly specialized training to fit them for specific military tasks. The R.O.T.C. training program will be modified, he said, but he did not enlarge on this point.

Signs are meanwhile multiplying that the draft age will be lowered to 18 in the near future. While no decision is expected until after the November elections, the Senate Military Affairs Committee called a hearing on the Guernsey bill and the comparable committee in the House is expected to take it up later. F. W. Wilby, superintendent at West Point, added his voice to those who believe that the realities of total war demand the supple bodies, clear minds and unfettered hearts of the 18 and 19-year-olds.

President Roosevelt expressed the opinion that it would not be necessary to call up men of 18 and 19 years of age before January 1, 1943. The present selective service law, the President told his Press Conference, is providing about as

FRESHMAN CAMP COUNSELLORS

Activity	Representative
President of Senior Class	Dick Childerhose, '43
President of Junior Class	George Schutte, '44
Chairman I.F.C.	Warren Foster, '43
President M.I.T.A.A.	Kenneth R. Wadleigh, '43
Captain of Basketball	George Marakas, '43
Captain of Cross-Country	Robert Miller, '43
Captain of Gym	Robert Maxwell, '43
Captain of Hockey	Fred Kaneb, '43
Captain of Rifle	Peter Wiesenthal, '43
Captain of Soccer	W. W. Carpenter, '44
Captain of Squash	Richard Hess, '44
Captain of Swimming	Henry Tiedemann, '43
Captain of Wrestling	W. H. Botten, '44
Gen. Mgr. Combined Musical Clubs	Frank Wilbourn, '43
President 5:15 Club	Waldo Davis, Jr., '43
Commodore Nautical Assoc.	Kenneth L. Warden, '43
Gen. Mgr. The Tech	John F. Tyrrell, '43
Gen. Mgr. Vu	Stewart Rowe, '43
Gen. Mgr. Technique	Robert C. Meissner, '43
Gen. Mgr. Voo Doo	Robert Metzger, '44
Gen. Mgr. T.E.N.	James T. Harker, '43
Captain of Track	Sid Hall, '43
Chairman Dorm. Comm.	Robert Schaefer, '43
Vice-President T.C.A.	Sid Atlas, '43
Co-Director of Boys' Work	John Miller, '43
Treasurer T.C.A.	Charles C. Holt, '43
Debating Society	George M. Musgrave, '43
Captain of Lacrosse	Alfred H. Heckel, '44
Captain of Tennis	Ken Nelson, '44
Captain of Crew	James Malloch, '43
President of Sophomore Class	John F. Burke, '45
Field Day Manager	James Buchanan, '44
Captain of Fencing	Richard Ackerman, '43
Student-Faculty Committee	John Gardner, '43

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 world, and your folks at home confront a threatening internal upheaval that could conceivably upset the noblest of war efforts.

In the midst of such bewildering circumstances, you have been selected to do a special job, one that is of utmost importance to the nation and its people. That job, which was difficult during peacetimes, has now been made more difficult by the war, because you will be working under a strain.

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 Technology with the idea that you are playing an inactive, thankless 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 uninterrupted period of sixteen months, which, in many cases, will be an overdose of education and a drug that will dull the most conscientious mind. You may even be faced with difficulties with your draft boards. As more men are inducted into our army and as the draftables become scarcer, you may be withdrawn from the Institute to satisfy the excessive demands of total war, even though this would be unwise in the long run.

So with these difficulties confronting you, you are asked to prepare yourselves with the greatest possible efficiency and effectiveness for special duty in the army, navy, or in industry. The ultimate in successful preparation will involve more than an accumulation of technical knowledge; it will require experience in handling men, in making decisions, and in accepting responsibility. This experience can best be gained in college through participation in extracurricular activities. The place to investigate these activities is at freshman camp where their leaders will give talks and demonstrations.

Moreover, freshman camp offers you an opportunity to become acquainted in general with the methods, traditions, customs, and men of Technology. A well-rounded knowledge of the Institute acquired at freshman camp will provide an excellent start for a successful four years at M.I.T.

With this advice, THE TECH hopes that all 750 of you get the most out of freshman camp and out of your stay in Cambridge and wishes the Class of 1946 a most successful undergraduate career.

DISAPPEARANCE OF A TRADITION

A Technology tradition, it appears, is going to be discarded with the entrance of the Class of 1946 into the hallowed halls of the Institute. Since the beginning of freshman camp, the annual dunking of the Sophomore Class president has been a necessity for a successful class inauguration.

But this year, the omnipotent war has brought about a serious change: freshman camp has been moved from the hills of New Hampshire to the campus of M.I.T., Lake Massapoag is no longer handy, and the T.C.A. has forbidden the traditional bath for the Soph prexy.

Once before, in the year of the hurricane, camp was on campus and Lake Massapoag was out of reach. The ingenious freshmen, however, discovered the Charles River in their front yard and made it serve the purpose.

We hope that this word to the wise is sufficient.

Freshman Camp To End Saturday

(Continued from Page 1)

introduced by S. Richard Childerhose, president of the Class of '43, and will make a short talk explaining his activity. This meeting will adjourn at 10:45 A.M. and resume at eleven o'clock with talks on Field Day, and Class Spirit by James F. Buchanan, '44, and Coach Oscar Hedlund respectively.

Activities Discussion Scheduled

The Undergraduate House, The 5:15 Club, and the Inter-Fraternity Conference will be explained by their respective presidents, Robert J. Schaeffer, '43; Waldo F. Davis, Jr., '43; and Warren E. Foster, '43. Professor F. Alexander Magoun, '18, will address the meeting on "From School to College" following which will be held an open forum on the marking system, the point system, the freshman council, and other subjects of interest to the incoming men. The meeting will be closed by more songs from Obie Denison.

Following lunch in Walker Memorial, an assembly will be held in the Great Court, at which President Compton will address the men, and the staff of the Institute will be introduced by Dean Harold E. Lobdell. Kenneth R. Wadleigh, '43, will then preside over the presentation of athletics, at which the captains of the various sports will make a short talk about their sports.

The athletic program will begin at 2:45 P.M. with a softball game between the faculty and the counsellors. At 3:15 P.M. the first athletic groups will get under way with talks and shows on track, soccer, and lacrosse on Briggs Field; basketball, gym, and talks on swimming in the Walker Gym; and sailing on the Charles. At 4:00 P.M. the groups will shift positions, and change again at 4:45 P.M. in order that all freshmen will have the opportunity to see all the demonstrations.

The freshmen camp will officially close at 5:30 P.M.

many older men as can be trained with the present facilities for the rest of this year.

Vast Reservoir

If and when the draft age is dropped, the law will tap a reservoir of 2,500,000 youths between 18 and 20 who have registered for selective service but cannot at present be taken into service.

At this time then, there is no official and authoritative statement on the true situation confronting the college student. So that even students in technical institutions must for the present accept the uncertainty of the situation as one of the smaller hardships of a world-wide war.

Faculty Members At Frosh Camp

ADMINISTRATION

Dr. Karl T. Compton
 Dean Thomas P. Pitre
 Delbert L. Rhind
 B. Alden Thresher
 Horace S. Ford
 J. Rhyne Killian
 Donald P. Severance
 Robert M. Kimball
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 Arthur C. Watson
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 Prof. Bissil Alderman
 Prof. E. N. Gelotte

Building and Eng. Const.

Prof. H. R. Staley

Chemistry

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 Prof. C. M. Wareham
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 Mr. J. L. Ohlson
 Mr. R. M. Sherman
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 Mr. R. M. Bridgforth
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 Mr. J. B. Ray
 Mr. P. M. Chalmers
 Mr. G. H. Leggett

Graphics

Mr. D. P. Adams
 Mr. W. C. Eberhard

Mathematics

Prof. H. B. Phillips
 Prof. R. D. Douglass
 Prof. W. T. Martin
 Mr. G. B. Thomas

Mechanical Engineering

Prof. A. Sloane
 Prof. J. A. Hrones
 Mr. Deane Lent

Military Science

Captain S. Stevens
 Captain C. H. Thyng

Physics

Mr. S. F. Brown
 Mr. M. Deutsch
 Mr. H. Feshbach
 Mr. J. R. McNally

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 at Briggs Field at 5:00 P.M. on Tuesday. The coaches for this team will be Bill Scott and Bob Plachta of the class of '44.

Sophomore football practice will begin at Barbour Field House Monday at 3:30 P.M. Bob Reebie and Doug Fenton of the Class of '43 will coach this team.

Swimming Coach Gordon Smith urges all freshmen and Sophomore swimmers to turn out for practice at the swimming pool as soon as possible. Candidates should call the Coach's attention to themselves otherwise he won't realize they are there to practice for Field Day. Each team will have two medley relay teams of three men each and two freestyle relay teams of four men each.

Track practice will be held under Coach Oscar Hedlund afternoons after 3:00 P.M. starting Monday, Sept. 28th. The two competing classes will each enter one relay team of twelve men. Each man will run 220 yards.

Tug of war practice will begin Monday, October 5th. The coaches, Charles Ritterhoff, '44, for the freshmen and Wilfred Kaneb, '43, for the Sophomores, would like to see 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 handicap meets held around Boston, winning seven first places in competition against the best college and club runners. Larry Stewart and Bob Miller worked out during the summer months after classes and went into open competition which is quite different from college dual meets.

The big event of the summer was Miller's win of the Walter Scott Mile for which he received the beautiful trophy offered each year by the Scotch Clan of Boston. The meet was held at the old Tech Field in Brookline on Labor Day afternoon, the site at which other Tech men won their laurels prior to 1916. Larry Stewart won the 440 from scratch leading Janiak by 10 yards in a 51.4 second finish.

At the New England Junior Championships Bob Miller and Larry Stewart scored fifteen points. Bob won the half-mile in 2:06.8 and the mile in 4:39.8, while Larry got the gold medal in the 440 yard run with a 52.0 second flat finish. Larry also won his favorite event at the American Legion and Newton Y.M.C.A. Games. Miller won three firsts, one second, and two thirds. Stewart feathered his cap with four firsts, one third and two fourths.

SOPH BACK SWEEPS RIGHT END TO SCORE



The above picture shows Sophomore back as he cuts around right end into a clear field to score. This was taken during the game between the Class of 1944 and the Class of 1943, two years ago. In the background are 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 Freshman Class are in a quandary as to the sport that they should take up for their recreation. Track and Cross Country together, have been one of the major sports in the Institute for many years due to the fact that they require very little time and each man works as an individual, not waiting for a team or a crowd to work together. Schedules are all made out for this year so that the freshmen have plenty of competition both in Track and Cross Country, also in handicap meets and the big Inter-class meet in November. There is some form of competition each week during the school year which gives each boy an opportunity to try his luck and at the same time creates regular competition, either with the boys at school, or outside colleges and Prep Schools.

The big event of the Fall is the freshmen and Sophomore Field Day relay race which is held October 30th and which has created a great amount of interest each year. This competition involves twenty-four boys and gives everyone a chance to try out and possibly find a position for himself in this interesting race,—it also has been spectacular, and the interest seems to be getting keener and keener each year between these two classes. This form of competition also gives myself and Bob Bowie an opportunity to see what the Freshmen class have to offer for the winter and spring meets. During this time of the year, the freshmen are given special attention. They are not overlooked due to the fact that they will be possible material for the Varsity Team the following year.

Cross Country which starts the

28th of September, gives a great many boys an opportunity to build themselves up for the coming season in races with nearby 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 novices. However, before the season is over, they become excellent runners 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 novices and

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Beaver Feats

BY GARD SLOAN

Welcome to Tech, '46
And to Tech Athletics

Instead of spending the traditional weekend on the wooded shores of Massapoag, you are gathering on the Institute grounds for Freshman Camp. Regardless of this innovation the Freshman Camp of 1942 will accomplish one of its aims if it acquaints you with M.I.T. athletics.

Some men in your class will sign up for a sport in the excitement of the first few days and then will quit as soon as the going gets a little tough.

Some men, obviously good athletes, will pass up the opportunities to improve themselves and rest on laurels won in high school with the apparent conviction that they have outgrown preliminary practice.

The real men, however, will make up their minds to train. They will report regularly for workouts, not just for the first few days or weeks, but for two or three years. Like other endeavors at Tech, you will get out of athletics just about what you put into it.

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College Students Face Uncertainty Of War Situation

As the Institute gathers for its 82nd academic year, an all-time record class of about 750 freshmen enter this engineering school. Little concrete and authoritative information has been released by Selective Service Headquarters in Washington as to whether and under what circumstances engineering students may be permitted to complete their education and how they may best help their country to win the mortal struggle for survival of its way of life. Simple computation shows that the recruiting of a projected fighting force of ten or even thirteen million will require nearly every second male between 18 and 45 to be in uniform. On the other hand, there is even at this moment a critical shortage of both labor and trained technical personnel for the multitude of essential war needs. Naturally much confusion and contradictory information has been published in the daily press, and the last word on the question of how we engineering students will be expected to help our country has not been released.

The Office of War Information has recommended for collegiate publication statements on the college students part in winning the war by War Manpower Chief Paul V. McNutt. Speaking recently at Purdue University, McNutt said: "The colleges and universities are charged with increasing the number of technicians upon which both industry and the armed forces depend. The colleges and universities, by insuring a continual supply of technically trained men and women, can insure the continual increase of our strength for victory and for peace."

Recruits Needed

Emphasizing the great need for more fighting men, Secretary of War Stimson, in another statement, explained that the armed forces are already running short of manpower and new recruits must be called up. Student members of the enlisted reserve will not be summoned at some indefinite time in the future—they will be called up at the end of the present college term as they reach the draft age of 20.

"The stepping up of the intensity of the vital combat in which we are engaged and the growing need for enlarged forces," Secretary of War Stimson stated, "make it clear that all young men fortunate enough to have the physical and mental qualifications to enable them to serve their country in the armed forces are destined for that service."

Special Training

When the reservists are called to the colors, Mr. Stimson added, the army will give them highly specialized training to fit them for specific military tasks. The R.O.T.C. training program will be modified, he said, but he did not enlarge on this point.

Signs are meanwhile multiplying that the draft age will be lowered to 18 in the near future. While no decision is expected until after the November elections, the Senate Military Affairs Committee called a hearing on the Guernsey bill and the comparable committee in the House is expected to take it up later. F. W. Wilby, superintendent at West Point, added his voice to those who believe that the realities of total war demand the supple bodies, clear minds and unfettered hearts of the 18 and 19-year-olds.

President Roosevelt expressed the opinion that it would not be necessary to call up men of 18 and 19 years of age before January 1, 1943. The present selective service law, the President told his Press Conference, is providing about as

FRESHMAN CAMP COUNSELLORS

Activity	Representative
President of Senior Class	Dick Childerhose, '43
President of Junior Class	George Schutte, '44
Chairman I.F.C.	Warren Foster, '43
President M.I.T.A.A.	Kenneth R. Wadleigh, '43
Captain of Basketball	George Marakas, '42
Captain of Cross-Country	Robert Miller, '43
Captain of Gym	Robert Maxwell, '43
Captain of Hockey	Fred Kaneb, '43
Captain of Rifle	Peter Wiesenthal, '43
Captain of Soccer	W. W. Carpenter, '44
Captain of Squash	Richard Hess, '44
Captain of Swimming	Henry Tiedemann, '43
Captain of Wrestling	W. H. Botten, '44
Gen. Mgr. Combined Musical Clubs	Frank Wilbour, '43
President 5:15 Club	Waldo Davis, Jr., '43
Commodore Nautical Assoc.	Kenneth L. Warden, '43
Gen. Mgr. The Tech	John F. Tyrrell, '43
Gen. Mgr. Vu	Stewart Rowe, '43
Gen. Mgr. Technique	Robert C. Meissner, '43
Gen. Mgr. Voo Doo	Robert Metzger, '44
Gen. Mgr. T.E.N.	James T. Harker, '43
Captain of Track	Sid Hall, '43
Chairman Dorm. Comm.	Robert Schaefer, '43
Vice-President T.C.A.	Sid Atlas, '43
Co-Director of Boys' Work	John Miller, '43
Treasurer T.C.A.	Charles C. Holt, '43
Debating Society	George M. Musgrave, '43
Captain of Lacrosse	Alfred H. Heckel, '44
Captain of Tennis	Ken Nelson, '44
Captain of Crew	James Malloch, '43
President of Sophomore Class	John F. Burke, '45
Field Day Manager	James Buchanan, '44
Captain of Fencing	Richard Ackerman, '43
Student-Faculty Committee	John Gardner, '43

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 world, and your folks at home confront a threatening internal upheaval that could conceivably upset the noblest of war efforts.

In the midst of such bewildering circumstances, you have been selected to do a special job, one that is of utmost importance to the nation and its people. That job, which was difficult during peacetimes, has now been made more difficult by the war, because you will be working under a strain.

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 Technology with the idea that you are playing an inactive, thankless 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 uninterrupted period of sixteen months, which, in many cases, will be an overdose of education and a drug that will dull the most conscientious mind. You may even be faced with difficulties with your draft boards. As more men are inducted into our army and as the draftables become scarcer, you may be withdrawn from the Institute to satisfy the excessive demands of total war, even though this would be unwise in the long run.

So with these difficulties confronting you, you are asked to prepare yourselves with the greatest possible efficiency and effectiveness for special duty in the army, navy, or in industry. The ultimate in successful preparation will involve more than an accumulation of technical knowledge; it will require experience in handling men, in making decisions, and in accepting responsibility. This experience can best be gained in college through participation in extracurricular activities. The place to investigate these activities is at freshman camp where their leaders will give talks and demonstrations.

Moreover, freshman camp offers you an opportunity to become acquainted in general with the methods, traditions, customs, and men of Technology. A well-rounded knowledge of the Institute acquired at freshman camp will provide an excellent start for a successful four years at M.I.T.

With this advice, THE TECH hopes that all 750 of you get the most out of freshman camp and out of your stay in Cambridge and wishes the Class of 1946 a most successful undergraduate career.

DISAPPEARANCE OF A TRADITION

A Technology tradition, it appears, is going to be discarded with the entrance of the Class of 1946 into the hallowed halls of the Institute. Since the beginning of freshman camp, the annual dunking of the Sophomore Class president has been a necessity for a successful class inauguration.

But this year, the omnipotent war has brought about a serious change: freshman camp has been moved from the hills of New Hampshire to the campus of M.I.T., Lake Massapoag is no longer handy, and the T.C.A. has forbidden the traditional bath for the Soph prexy.

Once before, in the year of the hurricane, camp was on campus and Lake Massapoag was out of reach. The ingenious freshmen, however, discovered the Charles River in their front yard and made it serve the purpose.

We hope that this word to the wise is sufficient.

Freshman Camp To End Saturday

(Continued from Page 1)

introduced by S. Richard Childerhose, president of the Class of '43, and will make a short talk explaining his activity. This meeting will adjourn at 10:45 A.M. and resume at eleven o'clock with talks on Field Day, and Class Spirit by James F. Buchanan, '44, and Coach Oscar Hedlund respectively.

Activities Discussion Scheduled

The Undergraduate House, The 5:15 Club, and the Inter-Fraternity Conference will be explained by their respective presidents, Robert J. Schaeffer, '43; Waldo F. Davis, Jr., '43; and Warren E. Foster, '43. Professor F. Alexander Magoun, '18, will address the meeting on "From School to College" following which will be held an open forum on the marking system, the point system, the freshman council, and other subjects of interest to the incoming men. The meeting will be closed by more songs from Obie Denison.

Following lunch in Walker Memorial, an assembly will be held in the Great Court, at which President Compton will address the men, and the staff of the Institute will be introduced by Dean Harold E. Lobdell. Kenneth R. Wadleigh, '43, will then preside over the presentation of athletics, at which the captains of the various sports will make a short talk about their sports.

The athletic program will begin at 2:45 P.M. with a softball game between the faculty and the counsellors. At 3:15 P.M. the first athletic groups will get under way with talks and shows on track, soccer, and lacrosse on Briggs Field; basketball, gym, and talks on swimming in the Walker Gym; and sailing on the Charles. At 4:00 P.M. the groups will shift positions, and change again at 4:45 P.M. in order that all freshmen will have the opportunity to see all the demonstrations.

The freshman camp will officially close at 5:30 P.M.

many older men as can be trained with the present facilities for the rest of this year.

Vast Reservoir

If and when the draft age is dropped, the law will tap a reservoir of 2,500,000 youths between 18 and 20 who have registered for selective service but cannot at present be taken into service.

At this time then, there is no official and authoritative statement on the true situation confronting the college student. So that even students in technical institutions must for the present accept the uncertainty of the situation as one of the smaller hardships of a world-wide war.

Faculty Members At Frosh Camp

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 Dean Thomas P. Pitre
 Delbert L. Rhind
 B. Alden Thresher
 Horace S. Ford
 J. Rhyne Killian
 Donald P. Severance
 Robert M. Kimball
 Thomas F. Creamer
 Arthur C. Watson
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Building and Eng. Const.

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Chemistry

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Graphics

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Mathematics

Prof. H. B. Phillips
 Prof. R. D. Douglass
 Prof. W. T. Martin
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Mechanical Engineering

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 Prof. J. A. Hrones
 Mr. Deane Lent

Military Science

Captain S. Stevens
 Captain C. H. Thyng

Physics

Mr. S. F. Brown
 Mr. M. Deusch
 Mr. H. Feshbach
 Mr. J. R. McNally

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 at Briggs Field at 5:00 P.M. on Tuesday. The coaches for this team will be Bill Scott and Bob Plachta of the class of '44.

Sophomore football practice will begin at Barbour Field House Monday at 3:30 P.M. Bob Reebie and Doug Fenton of the Class of '43 will coach this team.

Swimming Coach Gordon Smith urges all freshmen and Sophomore swimmers to turn out for practice at the swimming pool as soon as possible. Candidates should call the Coach's attention to themselves otherwise he won't realize they are there to practice for Field Day. Each team will have two medley relay teams of three men each and two freestyle relay teams of four men each.

Track practice will be held under Coach Oscar Hedlund afternoons after 3:00 P.M. starting Monday, Sept. 28th. The two competing classes will each enter one relay team of twelve men. Each man will run 220 yards.

Tug of war practice will begin Monday, October 5th. The coaches, Charles Ritterhoff, '44, for the freshmen and Wilfred Kaneb, '43, for the Sophomores, would like to see 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 handicap meets held around Boston, winning seven first places in competition against the best college and club runners. Larry Stewart and Bob Miller worked out during the summer months after classes and went into open competition which is quite different from college dual meets.

The big event of the summer was Miller's win of the Walter Scott Mile for which he received the beautiful trophy offered each year by the Scotch Clan of Boston. The meet was held at the old Tech Field in Brookline on Labor Day afternoon, the site at which other Tech men won their laurels prior to 1916. Larry Stewart won the 440 from scratch leading Janiak by 10 yards in a 51.4 second finish.

At the New England Junior Championships Bob Miller and Larry Stewart scored fifteen points. Bob won the half-mile in 2:06.8 and the mile in 4:39.8, while Larry got the gold medal in the 440 yard run with a 52.0 second flat finish. Larry also won his favorite event at the American Legion and Newton Y.M.C.A. Games. Miller won three firsts, one second, and two thirds. Stewart feathered his cap with four firsts, one third and two fourths.

SOPH BACK SWEEPS RIGHT END TO SCORE



The above picture shows Sophomore back as he cuts around right end into a clear field to score. This was taken during the game between the Class of 1944 and the Class of 1943, two years ago. In the background are 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 Freshman Class are in a quandary as to the sport that they should take up for their recreation. Track and Cross Country together, have been one of the major sports in the Institute for many years due to the fact that they require very little time and each man works as an individual, not waiting for a team or a crowd to work together. Schedules are all made out for this year so that the freshmen have plenty of competition both in Track and Cross Country, also in handicap meets and the big Inter-class meet in November. There is some form of competition each week during the school year which gives each boy an opportunity to try his luck and at the same time creates regular competition, either with the boys at school, or outside colleges and Prep Schools.

The big event of the Fall is the freshmen and Sophomore Field Day relay race which is held October 30th and which has created a great amount of interest each year. This competition involves twenty-four boys and gives everyone a chance to try out and possibly find a position for himself in this interesting race,—it also has been spectacular, and the interest seems to be getting keener and keener each year between these two classes. This form of competition also gives myself and Bob Bowie an opportunity to see what the Freshmen class have to offer for the winter and spring meets. During this time of the year, the freshmen are given special attention. They are not overlooked due to the fact that they will be possible material for the Varsity Team the following year.

Cross Country which starts the

28th of September, gives a great many boys an opportunity to build themselves up for the coming season in races with nearby 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 novices. However, before the season is over, they become excellent runners 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 novices and

(Continued on Page 4)

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Beaver Feats

BY GARD SLOAN

Welcome to Tech, '46 And to Tech Athletics

Instead of spending the traditional weekend on the wooded shores of Massapoag, you are gathering on the Institute grounds for Freshman Camp. Regardless of this innovation the Freshman Camp of 1942 will accomplish one of its aims if it acquaints you with M.I.T. athletics.

Some men in your class will sign up for a sport in the excitement of the first few days and then will quit as soon as the going gets a little tough.

Some men, obviously good athletes, will pass up the opportunities to improve themselves and rest on laurels won in high school with the apparent conviction that they have outgrown preliminary practice.

The real men, however, will make up their minds to train. They will report regularly for workouts, not just for the first few days or weeks, but for two or three years. Like other endeavors at Tech, you will get out of athletics just about what you put into it.

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CALENDAR

FRIDAY, SEPTEMBER 25
 5:30 P.M. Freshman Camp Begins—Morss Hall.

SATURDAY, SEPTEMBER 26
 6:30 P.M. Freshman Smoker—Morss Hall

MONDAY, SEPTEMBER 28
 Registration Day

TUESDAY, SEPTEMBER 29
 9:00 A.M. First Classes of Fall Term.

Tech Develops 4 Million Volt X-Ray Machine

Produces Radiation Stronger Than Radiums Supply of Whole World

Development at the Institute of a direct current x-ray generator operating at a potential of more than 4,000,000 volts, was announced at the forty-third annual meeting of the American Raentgen Ray Society in Chicago on Friday morning, September 18.

This generator produces for the first time 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 R. 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 x-rays.

Development of this new generator has gone forward under a grant of funds from the Godfrey M. Hyams Trust, which had supported earlier experimental work in high-voltage radiation 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 dome-shaped high-voltage terminal about two feet in diameter supported on a column of alternate insulating and metallic spacers. A single insulating belt twelve inches wide travels at high speed within the column and transfers an electrical charge continuously between the ground 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 sprayed 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-conveyor belt. The x-ray tube is fixed vertically within the generator column. A metal extension of the tube passes out through the bottom of the tank and terminates in a water-cooled gold target surrounded by lead shielding and provided with beam-defining portals and shutter. The tube consists of 100 glass rings between each of which is placed a metallic accelerating and focusing electrode connected to the generator column. The electrons for producing x-rays by bombardment of the gold target originate at the tungsten filament in the high-voltage terminal end of the tube and are progressively accelerated and focused as they are propelled down the tube at the gold 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 long treatment distances with the result that the depth dose is much greater than it has been possible to obtain in radium therapy.

Treatment with the high-voltage deeply penetrating x-rays produces no visible skin reaction. The first x-ray generator of the type just described was developed in 1937 to operate at 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 1,250,000 volts was built in 1940 for the Massachusetts General Hos-

A representative of the Boston Symphony Orchestra will be at the T. C. A. office on Monday, Sept. 28, from 12:30 to 2:30 P.M. Tuesday, Sept. 29, from 12:30 to 1:30 P.M. Wednesday, Sept. 30, from 12:30 to 1:30 P.M. to answer inquiries about students' Season tickets to the Saturday evening concerts of the Boston Symphony Orchestra

Oscar Urges Frosh To Enter Athletics

(Continued from Page 3)

who have never had any athletic work previous to coming to the Institute should not take this into consideration but report, to try to see if there is some hidden talent in their make-up. The biggest majority 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 on Varsity Teams, Tech will still maintain its regular standard and frosh 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.S. Track gives them an excellent opportunity to work out of doors the year round. Many boys who have substituted track for 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 Barbour Field House and ask any questions. I will 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.

pital where it is in operation. The latest unit, still more compact than any of its predecessors, is operating in a special laboratory at the Massachusetts Institute of Technology, where therapeutic investigations 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.

CAMP PROGRAM

(Continued from Page 1)

10:45 Intermission
 11:00 Assembly in Huntington Hall
 Field Day—James F. Buchanan, '44
 Class Spirit—Coach Oscar Hedlund
 Solo—Dr. Carter
 Undergraduate House—Robert J. Schaeffer, '43
 5:15 Club—Waldo F. Davis, Jr. '43
 Inter-Fraternity Conference—Warren E. Foster, '43
 "From School to College"—Prof. F. Alexander Magoun, '18
 Open Forum—Marking System, Point System, Freshman Council, etc. Dick Childerhose, Sid Atlas, Presiding.
 "Obie" Denison
 12:30 Lunch in Walker
 1:45 Assembly in Great Court (Walker if inclement weather)
 President Compton
 Introduction of Staff—Dean Lobdell, '17 presiding
 Presentation of Athletics—Kenneth Wadleigh, '43 presiding
 2:45 Athletic Program
 Faculty—Counsellor Softball Game
 3:15 First Athletic Group
 4:00 Second Athletic Group
 4:45 Third Athletic Group
 5:30 Adjournment

Inst. Comm. Decrees No More Formals

(Continued from Page 1)

mandatory, but is intended merely as a suggestion. However, the Institute Committee (student governing body) has made provisions whereby any activity not following the recommendation would be outlawed and its budget refused, and its dance chairman asked to personally explain his lack of cooperation.

Among the dances affected by the "no tux suggestion" would be all fraternity formals (an average of two for each of twenty-four fraternities), the Field Day Dance, the Sophomore and freshman proms, and the Inter-Fraternity Conference dance.

Wareham Hurls Hammer To Place In I.C.4-A

Dick Wareham, '44, won fourth place in the intercollegiate meet at New York last May, throwing the hammer 143 feet 11 1/2 inches. He is the first Tech Sophomore ever to score in the event at the I.C. 4-A meet.

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