



Volume X/5

Worcester Polytechnic Institute, Worcester, Mass., Wednesday, November 27, 1946

# Alden Hydraulic Laboratory Scene of Unique Tests Performed Success In Behalf of Navy Department

W.P.I. Lab One of For Such Experiments Profs. Hooper and Newell

**Demonstrate Great** Skill and Patience

One of the departments least known on the Tech campus, Alden Hydraulics Laboratory at Chaffins, has been the scene of extremely interesting and unique tests carried on in behalf of the Navy in an effort to explain and demonstrate the phenomena associated with the entrance of various simple geometric bodies into water.

Various members of the W.P.I. Faculty have been active in many fields which have materially advanced our recent war program; but here at Chaffins we have an example of concentrated effort in which members of both the Mechanical and Electrical Engineering Departments have cooperated to their utmost. Here we can take you behind the scenes for a first hand rendition of the problems investigated since 1942, from which the restrictive lid has not yet been lifted. Restricted though the results are, the essence of the problem is to take high-speed photographs with an average exposure of 2 micro-seconds as various shaped models are projected into a tank of water at speeds approaching 200 feet per second. How this was accomplished is probably as interesting as the statistics developed from the tests.

(Continued on Page 2, Col. 1)

# A.S.M.E. Holds First Meeting of Term

The first meeting of the A.S.M.E. for this term was held on Friday November 15. The new undergraduate officers are President, Jack Williams; Vice-President, Larry Garnett; and Secretary-Treasurer, Sid Weatherhead.

Engineering Branch of Norton Company was the lecturer for the eve- F. Raymond. ning. His topic covered the grinding of tungsten carbide tools, and he Santandrea was elected President. showed movies depicting the grind- He is also a member of the Tech ing industry. Mr. Larson is a grad- News Staff, and last year appeared vate of W.P.I. Class of 1922 and he in the Masque, and this term he has been with Norton Company was on the football squad, as well since 1923. Besides his work in as a member of the baseball squad. Sales Engineering, he is also identi- He is a member of TKP fraternity. fied with the progress of diamond Vice-President, John L. Hawley; grinding wheels. He helped in the research of this product.

at the meeting including fourteen Carlson. new men. The Society is still accept-(Continued on Page 3, Col. 1)

# Four in U. S. Equipped Results of Various Class Elections Are Closely Decided

John G. Hambor Chosen Senior Class President On Second Ballot

The closeness of the dinner hour did not dampen the spirit of the various class elections held throughout the campus Thursday, November 21. Even though the time was limited and the balloting slow, there was little ballyhoo and each election was conducted with sensible orderliness, that was almost unusual.

This calmness did not dull the outlook of those present and prevent the installation of unqualified men. In each class the voting was close; the Senior class vice-presidency ran to five ballots with the final election of George Schupp, and the Junior to three ballots putting "Red" Meade into office with a count of 66-63. The final slates represented well rounded students both scholastically and athletically and the opposing tickets represented equally versatile men. The upper classmen proved to be the more discriminating in the selection of officers only because of the greater familiarity.

This year the Senior class will be represented by the following men: President, John G. Hambor, returned from service last July. He is also a member of A.I.E.E. the Radio their voices beautifully on "Stout-Club, and a member of PSK fraternity. Vice-President, George A. Song," and "The Riff Song." The Schupp, Jr.; Secretary, Alfred F. Larkin: Treasurer, Roger P. Roberge; Tech Council, Norman W. Padden, John N. Wholean.

this term by: President Robert H. first tenors; Norman Taylor and Adams. Bob is a member of the Willson Appelgate, second tenors; Interfraternity Council and a track John Beckwith and Daniel Lewis, Meade; Secretary, John F. Coyne; Kenneth Truesdell, basses. Mr. E. T. Larson from the Sales Treasurer, Richard K. Horne; Tech Dancing followed immediately aft-Council, George M. Thomson, Allen er the concert. Music was supplied

Secretary, David B. Brown; Treasurer, Jack K. Mullaney; Tech Coun-There were about fifty members cil, Stephen J. Ucich, Robert I.

> In addition the Sophomore class (Continued on Page 3, Col. 1)

# Concert Huge

Audience Enchanted By Combined Efforts Of Glee Clubs

The concert given last Saturday night in Alden Memorial by the To Be Modified Tech Glee Club and a women's chorus of Worcester church choir members, under the direction of Clifford Green, was a huge success musically and also from the standpoint of attendance. The program, expertly executed, was especially pleasing to admirers of Sigmund Romberg, Vincent Youmans and Victor Herbert and selections taken from "The Desert Song" and "The Old Red Mill" were applauded time and time again by the audience.

A semi-chorus consisting of so pranos Margaret Feeherry, Louise Sahagian, and Helen Wall, altos Martha Kalashian, and Malama Nicholas and the Glee Club octet set the audience in the mood of the program and were followed by a solo by Lawrence McCorkindale and class election for vice-presidency ran a duet by alto Betty Pearson and bass John Ebbs singing "Because You're You." Bass Bob Drew then proceeded to hold the audience spellbound with a rendition of "Old Man River." Helen Wall, a Worcester favorite, soloed on "I Love You Only," from Victor Herbert's "The Chocolate Soldier," followed by alto Malama Nicholas' "Siboney". Soprano and alto then combined their efforts to sing, "When You're Away

The Tech Glee Club under the direction of Clifford Green blended hearted Men," "The Whiffenpool octet then offered "Down by the Old Mill Stream," and "I Had a Dream Dear."

Members of the octet are Robert The Junior class is represented Jodrey and Lawrence McCorkindale, Vice-President, John C. baritones; and Robert Drew and

by Mal Gordon's thirteen piece For the Sophomore class, Geno orchestra. Daniel G. Lewis, Glee Club president, was in charge of all

# THE PEDDLER

There is room for several Sophomores and Freshmen on both the Editorial and Business Staff of the Peddler, Experience is necessary for advancement to higher positions later. Don't wait until you're a Senior and find that it is too late. Drop a note in the "P" Box, care of the Peddler,

# Foreign Students at Tech Represent Fourteen Countries

# Rushing Rules For This Year

Interfraternity Council Makes Changes Due to Large Frosh Class

Due to the extremely large Freshman class which entered Tech October 31, 1946, the Interfraternity Council has modified the rushing rules to cope with the situation. It is believed that this new system will give the Freshmen a chance to see and better decide for themselves which fraternity they will choose as their home here on the Tech campus for the next four years.

"Visiting periods", which began November 12 and will extend to whereby the Freshmen will have a chance to become acquainted with fraternity men. No one is allowed to converse on subjects pertaining to the fraternities during these rushing periods for it is only a time to become acquainted.

Another "visiting period" has been designated to extend from January 3 to January 10 and will afford a closer contact between Freshmen and fraternity men. It is to be clearly understood that no communication of any kind concerning fraternities is allowed, and any unauthorized rushing will be fined by the Interfraternity Council.

The first rushing week will be conducted at the fraternity houses houses that are interested in pledging them, and they are strongly o'clock and leave at 9:00 o'clock. If pledged to any house on the campus ty adviser. until the next designated rushing

rushing week, Freshmen will be ex- monitor. pected to list, on choice cards, no

(Continued on Page 3, Col. 2)

## **Diminished Wartime Enrollment Attains Prewar Level**

This year Tech has a large number of foreign students enrolled at the college. This is not a new policy, as there have always been many students from other countries here. During the war, the foreign enrollment diminished, due to enemy action and war-time shipping.

The men now at Tech represent fourteen countries. They have been in the states from a time ranging from two weeks to one year, and they say that skyscrapers amaze them. They find the American people friendly and ready to help them whenever possible. The foreign students feel the outstanding difference between their own country and America is the way the United States is mechanized. The men say December 20, have been designated they do not have a great deal of machinery in their own country, but after graduating from W.P.I. they want to go back home and build up their native land.

Most of the men came to Tech because it was recommended by their friends or former school teachers. However, there are some students who are following in their fathers' footsteps, as in the case of Mr. Mei, whose father graduated from Tech thirty years ago.

The men came to the States in (Continued on Page 3, Col. 2)

# Radio Club Plans Program

The W.P.I. Radio Club, which has on the following dates: January 13, been reorganized recently, held a 14, 16, 17, 20, 21, and 22. Fresh-business meeting last Thursday, men will receive invitations to the November 21. At this meeting the treasurer was elected, and the program for the coming year discussed. urged to arrive promptly at 7:00 The officers of the club at present are: Jones, vice-president; John a Freshman does not heed the invi- Begley, secretary; Bob Smith, treastation he will forfeit his right to be urer. Prof. H. H. Newell is the facul-

The program consists of Morse Code classes, designed to enable those Second rushing period will be held interested to get an amateur license, at the houses between the hours of and building projects to supplement 7:00 o'clock and 9:00 o'clock, Janu- the transmitting and receiving equipary 29, 30, and 31, and pledging ment already in the "shack", as it is will take place Saturday February 1, called. These projects include a 1500 volt supply, an antenna tuner, a new After the conclusion of the second final amplifier, and a modulation

At present, the transmitting equipmore than three fraternities from ment includes a crystal controlled, whom they will accept membership. voice modulated, 250 watt transmit-The fraternities will also submit a ter, which is on the air, and which has list of men whom they wish to already made several contacts, includpledge; and if the feeling for mem- ing Paris, France. Plans are being bership is mutual, the Freshman will made for an operating schedule with

(Continued on Page 3, Col. 2)

# TECH NEWS

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TERMS

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# Making the Most of Education

Tech is a fine school. It's rated as one of the best engineering institutions in the country. The staff includes professors and instructors of the most brilliant kind. And yet Tech is not as widely known as it might be. The criterion for a good all-around student is hard work and vigorous play. It's common knowledge that sports and extra-curricular activities make the mind more active and also of some previous ones bumped 200 tend to bring up marks. Certainly we have the opportunity for these couples. Very few fellows do any many extra activities but they are not holding the interest that they should. Fraternities play a very important roll (attention Freshmen) they have a rough exam on the follow in giving the undergraduate a more rounded education and that is ing Monday. So the only reason left what the graduate vitally needs in order to have the successful life is just disinterest. All these activities a W.P.I. man should have. Many names could be mentioned of men could be made interesting and would who left Tech for scholastic reasons and made tremendous names be a lot of fun for everybody-but Earl Johnson and Bob Russell from for themselves and yet the majority of the graduates sell their fine only if they are supported by Fra- the Marines. education down the river for some small job with no future. Some ternities and all others who attend of the companies take advantage of the graduates by offering them Tech. If not, they will have to be jobs and holding them for a year or so; keeping the top 10 per cent cream and then getting a new crop of graduates. The graduate students should be more dependent upon himself after getting his degree. He should know how to meet people, how to make a favorable impression on them and know how to shoulder responsibilities. Part of the blame may rest on the school. Perhaps we need more business courses combined with our engineering-perhaps we need a course on contact with people and how to be aggressive to make the most of our education. Perhaps the men themselves could take more interest in activities that make them feel easier in contact with people and that would train them to assume responsibilities without undue strain. Certainly, work hard but don't get in a rut. Make your education well-rounded.

## E. E. Research

imagine a simple set-up for project- at an exposure of 1/200th of a seccession of photographs following the to be had. Consider what happens when you

take a broadside picture of a runner With the proper lighting, you may Admittedly, it isn't difficult to be able to secure a fair photograph ing models into a tank of water at ond; anything greater will produce various angles to the surface. In a blurred negative. The runner is practice a "gun" operated by carbon moving at a maximum of eighteen dioxide at pressure up to three hun- feet per second; obviously the only dred pounds is employed to give the way to get a series of pictures of a model velocities ranging from fifty body moving at 200 ft. per second, to two hundred feet per second. The it was necessary to resort to the tank used is glass-walled, about the stroboscopic methods developed by size of one of the Boynton faculty Dr. Eggerton of M.I.T. Professor offices, and just about the thing to Leslie J. Hooper of the Mechanical have in your apartment living-room Engineering Department, in charge with Esther Williams swimming of the testing, learned that the about. However, obtaining a suc- necessary equipment needed was not

path of the model in actual tests A power supply and accessory was the problem which has been equipment was obtained from solved only by the joint ingenuity Crompton-Knowles Loom Works. In of mechanical and electrical minds. addition, by much trial and error, (Continued to Col. 5)

# Fraternity **News Bits**

There has been a lot of talk concerning school spirit around the campus for a long time. Well, the bulk of the student body belongs to the Fraternities, thus the members would be the ones to support the various social and athletic programs. Here are a few examples of how the Baldwin, House Manager. Fraternities in general with a membership of approximately 400 did not support many of the school activities.

First let us take social activities. Last spring the Junior Prom just barely covered expenses with a total of 140 couples. The two Dorm Dances failed with the first attendance of 50 and the second with 70 couples. These dances did not cover expenses a man for eight hours work.

Now for the athletics. How many Fraternity men can say that they saw a baseball or soccer game. There there were in the stands. One point here is that athletic teams are mainly not trying to blame Fraternities individually, but it does seem that the Fraternities could attend some of these functions to support their

It can't be too expensive for the Dorm Dances. Formals are quite a party. bit more expensive but the attendance studying on a Saturday night unless abandoned.

# A.E.P.

The Fraternity held a House dance on Nov. 9. Girls were invited from all over the city by Lou Block. There were eighteen couples who enjoyed

the music and refreshments. A Sadie E. E. Research Hawkins dance was held on Nov. 16 and girls were invited from Clark, two 16 mm. cameras were construct-State Teachers, and Becker.

#### A.T.O.

The social committee headed by 'Doc" Watson are in the midst of of November.

All the fellows are learning how to paint under the direction of Ed

#### Lambda Chi Alpha

The following new officers were elected recently: Wess Miller, President: Vladimer Dimitroff, Vice Pres.; Bob Macdonald, Secretary; and Bill Moulton, Treasurer.

Sunday, Nov. 17, our Mothers Club gave a buffet dinner for about seventy people.

Back this term after serving in the and the fellows who played in the Navy: Don Taylor, John Yeager, band received a total of two dollars Frank Emerson, and Wyman Thomas, all of the class of '49, Don Flohr, '48 and Jack Rogerson.

#### P.S.K.

It seemed like old times again to were as many men on the bench as have the brothers of Phi Sigma Kappa and Theta Chi get together for a fall party and dance last Saturday evecomposed of Fraternity men. I'm ning. Both houses served refreshments of cold cider, American cheese, and hot doughnuts to round out the evening. A vote of thanks to Ray Laferriere and Guy Nichols, from Phi Sig and Theta Chi respectively, who headed the arrangements for the

#### S.A.E.

A hay ride dance was held by S.A. E. on Halloween Eve. Brother Bob Good and wife were the chaperones.

Men we welcomed back are Arne Kellstrom, Bob Wallace, Mac Kirkwood, Guy Burr, Dick Morse, and Jim Breed, all from the Navy; and

# Sigma Phi Epsilon

Many veterans returned including J. P. Hyde, Elsworth Sammet, Al Reidel, Russ Norris, Ken Scott, Bob Smith, and Al Talboys.

The 40th Convocation of Delta Tau, the original of Sig Ep was held (Continued on Page 4, Col. 1)

(Continued from Col. 2) ed capable of a speed of seven hundred frames per minute. The electronic devices required were largely the original work of Professor planning a House dance for the 30th Hobart H. Newell of the Electrical Engineering Department.

> However, for certain work, this type of camera proved disadvantageous. But, it was remembered that about thirty years ago Professor Newell had developed a disk camera for thesis work capable of taking thirty consecutive pictures at high speed. The camera had been on the scrap-pile until the need arose for such an instrument at Chaffins. Here again it was necessary for Professor Newell to develop quite complicated timing circuits necessary to synchronize the revolving disk with the projectile, and with the additional problem of stopping the camera before double exposure was made.

This problem was solved by an ingenious combination of circuits activated when the projectile passed through the field of a coil located at the mouth of the "gun". The pulse created here started the camera, while after a certain elapsed time, the camera operation ceased by means of another tuned circuit activated by the first pulse.

Professor Hooper is proud of the fact that Tech's lab is one of four in the country equipped to perform such testing. Originally the work was carried on in conjunction with Cal. Tech, but more recently the affiliation has been switched to Harvard University. Other tests of hydraulic phenomena are being conducted at present at Chaffins, but as yet the results may not be made

Ever since the installation of the original Venturi metter at the close of the last century, Alden Laboratory has been responsible for advances in design theory. With its additional war-time record, we can understand the importance of such an institution as applicable in peacetime as in war.



# Letters to the Editor Foreign Students

Dear Sir:

Having read the latest issue of TECH NEWS (Nov. 14, 1946), we find that there are a few errors which we would like to call to your attention.

In the second paragraph of "P.I. Patter" a falsehood is stated, as there were approximately 180 students in the class of 1949B and not 40.

Under the column headed "Largest Freshman Class Enters Tech" the statement was made that the present Freshman class has a larger age difference than that of any previous class. This is not true because Phil Ackerman was a Freshman last year, and his age at that time was 32, if not 33 (please correct us if we are wrong). The youngest students included such men (?) as Phil Silver, whom we believe was 17 at the time.

The larger age difference, therefore, occurred last semester when the class of 1949B was in its first year. The age difference then was 15 years as compared with the present difference of 12 years.

> Sincerely. MEMBERS OF THE CLASS OF '49.

P.S.-Just how many students are there in the largest Freshman class ever to attend W.P.I.?

Ed. Note.-Ans.: 214 students!

Such interest as this is commendable! This letter inaugurates a column, long missing in the News Will the students perpetuate this Radio Club column in the future? All letters, properly signed, will be printed.

# Class Elections

(Continued from Page 1, Col. 2) elected a historian, George Crompton III. The Junior and Senior classes maintained their historians as previously elected in their Sophomore years.

The Freshman class did not hold their election in order that the class Wireless Association. This club piocan get a little better acquainted neered in wireless, using a 2000 watt with one another. Two men, Robert L. Tagen and John F. Brierly, were elected temporary class chairman and Tech Council Representative respectively, until the regular elections can be held.

## A.S.M.E.

(Continued from Page 1, Col. 1) ing new members and Freshmen and Freshman Rushing Sophomores as well as the Juniors (Continued from Page 1, Col. 4) and Seniors are welcome to join. be pledge on Saturday, February 1 The next meeting will be held sometime around December 15.

A committee of Bill Jaegle, Jock Warren, Don Hall, Bob Rutland and Al Riley was appointed. The purpose of this committee was to select approximately fifteen different topics not begin until after the Freshmen of interest to future mechanical have been pledged. engineers. Lists of these topics have been sent out to numerous industrial concerns in and about this area with the hopes of securing some interesting and enlightening lecturers.

With the new plans starting to develop, it looks as though the A.S.M.E. Chapter here at the school will have a successful year.

(Continued from Page 1, Col. 5) various ways. Some of them were New Staff lucky, and were able to fly to this country. One of the men said he was impressed in the way the towns were so well laid, and how neat they looked from the sky. Most of them came by boat, and landed in New York, where they had their first taste of the so-called "fast life" we live here in America. Most of them are getting used to it now. One of them came over on a troop transport and had what he called, "Eggs by the powder," for the first, and what he also hoped, the last time.

Tech should have a great soccer team next spring, because all the foreign students have been brought up in the same way American boys are on baseball and football. They call it "field hockey". The foreign students are also interested in football and baseball. They have seen these games in American movies and also have watched American soldiers play them. Mr. Roed, from Norway is waiting for winter so he can go skiing, which is the national sport in his country. Other sports which the foreign students are interested in are swimming and tennis. Mr. Goh from Malaya, is very interested in swimming, as his country is an island, and he has spent a great deal of time in the water.

Their respective countries will benefit a great deal by the experience that these men will have to offer when they graduate from Tech.

(Continued from Page 1, Col. 5) the radio clubs of other colleges through which school news might be exchanged.

All interested students are cordially invited to the next meeting of the club, which will be held Thursday, December 19, in the Communications

The history of the Radio Club dates back to the fall of 1909 when a group of students formed the W.P.I spark transmitter. In 1931 the name was changed to the present name, the W.P.I. Radio Club, and a new constitution was drawn up. The purpose of the club is to give the members training in building and operating, and for the advancement of radio in

A separate plan has been put into effect for returning upperclassmen who have never previously been pledged to a fraternity on the hill. Rushing periods on these men will

This new system of prolonging the rushing period should provide a better chance for the Freshmen to

Lubrication and Battery Service Farnsworth's Texaco Service Station Cor. Highland & Goulding Sts.

# **Peddler Has**

# Members Appointed by Faculty Advisor and **Tech Council**

With the events of the week just passed, the Peddler is once again back to its pre-war status. Because of the war, the Peddler found itself in the position of having no Senior members left on campus. This situation necessitated abandonment of the constitution, which provides that the Senior members elect the next Senior Staff, and so the faculty advisors and Senior members of the Tech Council were asked by Prof. Schweiger, faculty Peddler advisor, to assist him in choosing this year's staff from the letters of application which had been submitted to him.

The results of this selection process are listed below. For further information concerning this matter, read the box at the bottom of page

Co - Editors - in - Chief: Paul D. O'Donnell, Roger Perry; Business Manager: Henry J. Bove; Managing Editor: Keith McIntyre; Photography Editor: Carrol Burtner; Advertising Manager: Allan Glazer; Senior Editors: David Bassett, Edmond Eager, Leslie Flood, H. L. Hoyt, Robert Hubley, Edwin Johnson. Senior Business Assistants: Nathaniel Feldman, A. L. Flotteran, Edward George, John Harding, Philip Jones, D. S. Watson, John Williams; Editorial Assistants: A. H. Dinsmoor, Lou Block, W. J. Wachter, J. R. McBride; Junior Business Assistants: J. C. Meade, J. W. Ebbs M. D. Jordon, G. Hall, A. E. Riley, R. K. Horne.

intelligently choose a fraternity, and will in return allow the fraternity men to get a better knowledge of all the new men.

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# **Debating Club Has Debates With Clark** And Holy Cross

#### Discussion of Debating Topics and Elections Are Items of Interest

At the November 12 meeting of the Debating Society, the main purposes of which were organization and the election of this season's officers, Allan Glazer was re-elected president, Robert Lerner, manager, Peter Kahn, secretary, and Jerome Eckerman, assistant manager; these last three men being new to their respective positions.

After the elections had been disposed of, President Glazer started a discussion of the debate topic for the coming intercollegiate season. The topic is: Resolved that: Labor should be given a direct share in the management of industry. Having discussed the subject thoroughly, the members decided that at the next meeing to be held on November 19, the following men would present debates on this subject: Glazer and Oletz versus Feldman and Eckerman, Lerner and Picard against Kahn and Meade, the first pair of names in each case taking the affirmative.

On November 19, the club met again, and with many heated, but calmly and cleverly presented arguments, the whole subject of labor versus management was laid open. Although Professor Easton, faculty advisor, made public none of his decisions as to winning teams, it was generally agreed that Allan Glazer's fiery and excellently gestured speech, in which he very convincingly presented the need for some new policy in labor-management relations, was the best of the evening. Since Messrs. Feldman and Kahn presented the best negative talks of the evening, they were chosen to represent Tech in the first debate of the season, to be held at Clark on Tuesday evening, November 26. On Wednesday, December 4, Holy Cross will come to Tech.

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# **Newman Club Holds Dance**

The first monthly meeting this term of the Newman Club was called to order by the club president Norman Padden, '47, on Friday night, November 15, in the Janet Earle Room. The feature event of the program was an illustrated lecture given by the club's chaplain, Rev. Henry Brabson entitled "Communism". Fr. Brabson demonstrated the parallelism between the Nazi line of thinking and the present Communistic platform.

During the business portion of the meeting, plans for the annual communion breakfast were discussed as well as arrangements for a joint dance at the Worcester State Teacher's College sponsored by the Newman Clubs of both schools. The dance plans materialized last Friday night at the college with a large attendance. Miss Patricia Hehir of W.S.T.C. was co-chairman of the party with Norman Padden.

The communion breakfast was held at the Hotel Sheraton last Sunday following attendance in a body by the members of the Immaculate Conception Church.



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**TOILETRIES** 

# SPORT SIDELIGHTS

By LES FLOOD

gym for, to say the least, this was to participate in the various events. unbelievable, but the solution was soon discovered, for in "Doc's" hand was a microphone which was conpublic address system. Everybody is now happy; the student body because it will now know what is going on at the athletic events, and the Athletic Department because it has a new toy to play with.

The unexpected has been occurring on the basketball court lately. The "J.V's." have been giving the varsity a rough time. Maybe these upsets can be attributed to the fact that three men have left the squad. I don't know the answer myself, but I did hear one of the varsity men say that the "J.V's." have improved remarkably since the beginning of the year, whereas the varsity has only suffered from an increasing lack of teamwork. Coach Stagg seems to think he has better material than last year, but, unfortunately, not the stars like Laffey or Kuykendall.

Three floors down, Coach Grant has quite a large group out for the swimming team. Although it is too early to make any predictions, the overall appearance is good. The candidates have been timed for one lap with excellent results. Favorable criticism seems to be in order, for not only has the turn-out been good, but the enthusiasm is overwhelming.

The Interfraternity athletic activities are off to a strong start with many fraternity men running around the gym track trying to make the

# Fraternity News

(Continued from Page 2, Col. 4) on November 2. It was comprised of a buffet supper Saturday followed by slides and dancing. Sunday an alumni meeting and banquet was held at the Hotel Sheraton. Harry Newell, Larry Hine, and several members of Theta Upsilon Omega and Delta Tau were initiated into Sigma Phi Epsilon.

## Theta Chi

There are many new faces, or rather old faces but new to most. They are Eli Gifford Braley, Gordon Brandes, Fred Bruno, Bill Carpenter, Howie Cheney, Ed Cornell, Bob Donnan, Gene Kosso, Lawrence Minnick, Roger Perry, H. Rienstra, Clayton Roberts, Chet Snow, Bill Williams.

## T.K.P.

Walter Mussoni and Henry Zaney both from the sophomore class were pledged by Lambda last Thursday night and Francis Hoey was repledged.

Brother and Mrs. Edward Tamulevitch were the chaperones for a dance at the house on November 16. Brother Tamulevitch was graduated in June 1945.

One afternoon last week, while various relay teams. Some of the boys everything at basketball practice don't look in too good shape, for it is was running smoothly as usual, a not at all uncommon to see a man loud voice paging Coach Stagg roared run two laps, at half speed, and then through the gym. Bewildered and walk five. It's hard to figure just baffled, the by-standers unmistakably which house is going to win what observed that the voice came from because so many houses have a lot none other than "Doc" Carpenter. of good athletes, some of whom are, Confusion silenced everyone in the (and some of whom are not) eligible

Although this may be considered to mention what I considered the dungeon-like soils lab. The future and somewhat dubiously applied to nected to the long-awaited portable biggest social event of the term on engineers, regarding the earthy heaps highly theoretical formulae to deterthis hill. The way it used to be there with disgusted disdain and aloofness mine the oh! so very interesting would be a formal dance on Friday were told their interest for the next characteristics of the specimens: their night. Saturday morning you would few weeks laid there in the study of elasticities, plasticities, densities, etc. mud pies are all working for a truly, bring your best girl to your worst the "mud". classes. Saturday afternoon you would see a sports event or go on a picnic. gaged hammering and pounding away son, so are these men all, all alone we must solemnly take off our hats.

# CAMPUS RAMBLINGS

By MYRON LUNCHICK

brothers straddling the campus hills sounding through Stratton Hall. with their transits, ogling the passing Groping their way through the dust, brandishing barbers-pole colored was placed in machines for further acquiring a few civil engineering prac- and lovingly collected in small lilytices. But, few of us realize the white dishes. From thence mud pies men into the realms of soils analysisthe men who deal with "mud".

Meyer deposited the specimens, con- weights, measurements, and condi-

Many of us have noticed our C. E. at the earth with reverberations re-

in appreciation of the properties of their muddy charges. But, whether alone or no, nothing deters these men

Not entirely satisfied with findings at this point, they go on and on in girls through their telescopes and the painstaking labor of their hands their analysis. An hydrometer test is next performed for the grain sizes of equipment supposedly intent upon torture and violently shaken, sieved, the soil and their distribution, using the principles that the grains are all spherical which they are not-that all strenuous efforts of the upper-class- were made and playfully rolled, of the heavier particles fall out of a patted and baked into appetizing, but solution first, in proportion to time unfortunately inedible little cakes. and density of solution-which they Not so long ago little smiling Prof. Like true engineers, numerable do not-and that the hydrometer measures the density of soil suspenglomerations of muck, dirt, and tions simply had to be taken and re- sion-which it may after, of course, slightly out of the sports line, I'd like rock, on the lab tables in the dingy corded, all of an ambiguous nature, applying a few correction factors: Kg, Kn, Kl, delta R and so on, ad

> Let not the reader misconstrue the article. These engineers with their Like the mother who is alone in the yes, truly great purpose-to provide Before long they were busily en- appreciation of the antics of her Better Roads for America-to them

# Du Pont Digest

Items of Interest in the Fields of Chemistry, Engineering, Physics, and Biology

# Low-Cost Sulfamic Acid Was Result of Newly Discovered Process

#### Once obscure laboratory chemical now finding wide use in industry

Sulfamic acid, which for years was merely another obscure laboratory chemical, is today being produced in carload quantities for a constantly growing list of uses because of a discovery made by a Du Pont chemist.

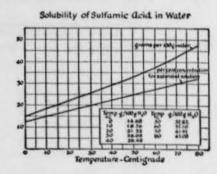
Believing that urea could be sulfonated to give a product which might have commercial utility, the chemist treated urea with fuming sulfuric acid. The reaction was exceedingly violent, and it appeared that decomposi-

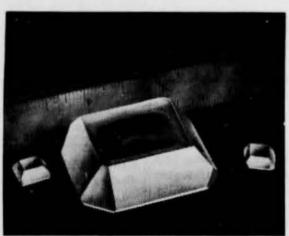
tion had taken place to give ordi-nary ammonium sulfate. However, the chemist noted that the white precipitate which had formed did not dissolve rapidly in water as ammonium sulfate should, and further investigation proved that he had obtained sulfamic acid.

NH<sub>4</sub>CONH<sub>4</sub> + SO<sub>5</sub> + H<sub>2</sub>SO<sub>4</sub>

→ 2NH,SO,OH + CO, sulfamic acid

Thus the way was pointed to an inexpensive method of making this





Crystals of sulfamic acid

scarcely known chemical, and an intensive study of its chemical and physical properties has led to its development for a wide variety of industrial uses.

## First Industrial Applications

The salts of sulfamic acid are being used extensively as flame-proofing agents. Highly compatible with cellulose, ammonium sulfamate is unique among fire retardants in that it does not cause stiffening or otherwise adversely affect the hand or feel of textiles and paper.

Another outstanding use for ammonium sulfamate is as a weed killer for the control of poison ivy, ragweed, and a variety of noxious annuals. Its effect on poison ivy is unmatched by any other product.

One of the most important industrial applications for sulfamic acid is based on the fact that it reacts quantitatively and very rapidly with nitrous acid. This has led to its wide use in eliminating the excess nitrite employed in diazotization reactions for dye and colored pigment

## Soluble in Water and Non-hygroscopic

Sulfamic acid is a strong acid, and despite the fact that it is exceedingly soluble in water, it is a solid non-hygroscopic, non-volatile material which has found application as a laboratory titrimetric standard. Additional information will be found in the bulletin "Sulfamic Acid and Its Salts." Write to 2521 Nemours Bldg., Wilmington, Delaware.

Understandably, men of Du Pont are proud that their work in the laboratory has created and developed many products like this 'chemical curiosity" to help make life safer, more pleasant and comfortable for all Americans.

## Questions College Men ask about working with Du Pont

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# AROUND THE BLOCK

By LOU BLOCK

By far, one of the most important some points against his former mates of the extra-curricular activities car- last week when he starred for the ried out here at Tech is that of the Norton Abrasives five in their prac-

There seems to be, however, one sport which they have seemed to overlook for intramural competition, i.e., handball. When the Naval students were at Tech, this was a favorite sport among them, and numerous contests were held to determine the champion handball player. These contests were held on an elimination basis, with those interested in competing submitting their names to Professor Carpenter, whereby he made out a schedule of play with winners playing winners until the final champion was determined. Another contest could be conducted in this manner today with the individuals who are interested submitting their names to Professor Carpenter. If, however, the interest were great enough it could be conducted on an interfraternity and interdormitoryfloor basis.

In the latter case each fraternity

low, who normally never would events. have done so, to represent his fraternity in a sport. Handball is a pleased with the large turnout of game which requires certain skills Freshmen and Sophomores. Just which are quite different to those how good a team Tech has this seaneeded in other sports. Someone son will depend largely on these new who may be quite poor at running, men. One handicap facing the team bowling, or playing basketball, may is the lack of a springboard. With be quite proficient at the art of the old one suffering from a comcould be carried on right now during the winter months, with every team having little fear of being unable to sheer speculation. have their best players represent them.

Handball cannot be played simply by someone reading about it or talking about it. I feel quite sure that the athletic department would not object to any competitive matches if sufficient interest were shown in their wanting to be played. The manner in which this competition could be held can be determined by the type of interest that is shown.

HERE AND THERE: Arnie Jones, former Tech star, really racked up

intramural sports. These activities tice game against the Techmen. enable many individuals who do not Coach Stagg certainly could use have enough ability to compete in a Arnie's experience and height this varsity sport to participate in sports season. . . . Bill Stone and Marty of their choice. The athletic depart- Wilson, two former Tech hoopsters ment has done a grand job in this are making a strong bid for leading respect, in keeping a steady flow of roles in Clark University's basketintramural activities-from the relay ball plans this season. Stoney used meets in the fall, continually through to be the ideal guard; never coming the softball competition of mid- too far down the court and with a dead eye for mid-court long shots. him are George Pano, who is Vice-We sure could use him this year. . . One of the last times that W.P.I. played another local college in basketball was in February, 1944, visor. While sailing itself will not against Holy Cross when George Connor, now starring for Notre Dame, was one of the Crusader hardwood representatives, while Hal Fleit, who tallied twenty points that night before being forced to leave the game on fouls three minutes after the use of half a dozen more craft the start of the second half, Jack next spring, which are being donated Laffey, Charlie Schmit, Howie Swenson, and Bob Twitchell were some of the Tech stars. The Techmen feasible. eventually won the game that night by a 55-47 verdict. Can we do it

# TECH TANKMEN DEVELOPING FOR WINTER MEETS

With two weeks' practice behind or dorm team could be represented them, Coach Grant's natators are by two players who would compete, showing very definite possibilities. individually or in doubles matches. George Schupp, only letterman of Personally, I believe singles are pre- previous years, has lost none of his ferable because they offer a better ability in the breaststroke. Tom test of an individual's skill. What- Hunter, who starred in the Interever the case may be, a regular fraternity Meet last year, is developschedule could be drawn up similar ing rapidly and should finish well to that of other sports, and these up in the dashes. Logan and Hassan matches could be played after school. have also been showing well in the Another advantage of handball is dashes, and together with Hunter that it offers a chance for some fel- should give Tech strength in these

Coach Grant has been especially handball. Consequently, this sport pound fracture, and the new board 'delayed en route", just who will be entered in the diving is a matter of

Mass. State will be here for the first meet of the season on Jan. 11. Big attraction will be the meet with our rivals, M.I.T., here on March 8.

The complete schedule is as

THUMAS.		
Jan.	11-Mass State	Here
Jan.	18—Amherst	Here
	25—Springfield	Away
	31-Boston Univ.	Away
200	15—Trinity	Away
	8-M.I.T.	Here
	14-N.E.I.S.A. Meet	

At Williams

# W.P.I. Salts Prepare For Victorious Spring Season

Embryo Sailors Headed By Commodore Bob Miller

Surging back to the fore, after some lean war years, is the Nautical Club. There are some thirty-five salts on hand at present, who are feverishly getting ready for next spring so that they can sail Tech's pride and joy over the finish line in front of M.I.T., New Hampshire,

In charge of all this preparation is Commodore Bob Miller. Assisting Commodore, and Dan McQuillan, who is Secretary-Treasurer. Professor E. C. Brown is the faculty adbe possible during the winter, the embryo John Paul Joneses will spend their time learning the rules, regulations, and techniques of handling boats. The club has one boat of its own, a fourteen footer, and will have by friends. M.I.T. also lets us use their craft for practice whenever

During last fall, our boys participated in three meets, the last being held in the Charles River basin at M.I.T. Next spring the schedule will be expanded. These meets are held among the members of the "Intercollegiate Yacht Racing Association," of which Tech is a member. It also includes M.I.T., Yale, Michigan, New Hampshire, and seventeen other members with nine associate members. These meets also have their share of glamor, with some of the schools sporting feminine crews.

Some of the high point getters of the club are Herb Cahoon, and the Beckwith brothers, John and Walter. Francis Holden accumulated sailing experience in those beautiful, romantic lagoons of the Philippine Islands during the war. Another member who gained additional experience during the war is W. A. Underwood, who was a member of the club during 1941 and '42. He was a skipper on a P.T. boat in the Navy.

The club extends a welcome to all who are interested in sailing, whether or not they are experienced.

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# **Basketball Team Getting in Shape** For First Game with Springfield

# RIFLE CLUB **ORGANIZES**

Membership Swells to Forty As Opening Match Approaches

The Tech Rifle Club made a start on what it hopes will be a successful season at a recent meeting in Higgins 109. The club president, Arthur H. Burns, presided at the meeting and introduced secretary Edward H. Dion, treasurer Robert N. Gowing, and the new faculty adviser, Major William F. M. Longwell, all of whom spoke briefly.

In addition to the regular members, the meeting was attended by a number of men interested in shootcompetition, and it is hoped that they will assist the team to a successful sesaon.

Instruction will be given on Friday afternoons at 4:00 P.M. by Major Longwell who has had considerable coaching experience while with the U. S. Army. Major Longwell coached at N.Y.U. from 1936 to 1938, and at Virginia Polytechnic Institute from 1938 to 1942.

The club's members expressed an almost unanimous desire to become a Class A Club in the National Rifle Association. This will entitle the Club to the use of two caliber .30 Springfield rifles, two caliber .22 Springfield rifles, and a small quanare supplied for the National Qualifications

The club is a member of the New has eleven matches scheduled. The members of the winning team will receive medals. Individual awards will be given the League's highest scorers. The schedule is as follows:

Nov. 30-M.I.T. and Harvard

Dec. 7-Yale

Dec. 14-Bowdoin and Norwich

Jan. 11-Vermont

Jan. 18-New Hampshire

Jan. 25-Mass. State Feb. 1—Coast Guard Academy

Feb. 8-Rhode Island

Feb. 15-Brown

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X That noise which can be heard from the gym daily at 4:00 is not a herd of elephants imported by one of the students from India. No, it is merely the 1946 edition of the Tech basketball team. The squad, which has completed its third week of practice, looks as though it will need every day of the two weeks remaining before the December 7th opener with Springfield.

Now that the squad has been cut to a workable size, Coaches Stagg and McNulty may be able to develop the shooting and passing ability which has appeared so lacking in the preliminary practice sessions. All the men on the team appear to be good ball-handlers, and the shooting "eyes" will probably develop with practice. The principal weaking. Eighteen of these men made ness seems to be the lack of a really treasurer Gowing quite happy by outstanding man. A player with paying their dues and becoming ac- that needed amount of extra ability tive members. This boosts the club's and drive who can lead the attack active membership to forty. Some of and direct the team during a game. these men have had experience in Tech's basketball fortunes suffered a severe blow when Bill Stone, who was a standout player before the war, enrolled at Clark instead of returning to the Hill.

Last Monday evening Tech played a practice game with the Norton Company team in the Alumni Gym. Last year the "Boynton Hillers" defeated the "Abrasives" in one of these pre-season scrimmages, but Monday's set-to was quite a different story. Mutt Johnson, Arnold Jones, who was a teammate of Bill Stone's on Tech's great 1942 squad, and the seemingly ageless Billy Kasper had pretty much their own way with the inexperienced "Engineers". Kasper, who acts as a player-coach tity of ammunition at no extra of the Norton club, has been known charge. The rifles and ammunition for years as one of the smartest basketball players in the section. This year's team looks like a well coached, smooth playing group, and England College Rifle League and the Greendale club should be in for a successful season.

Coach Stagg is developing the team's offense along the same plan as that used by the Norton team, with the attack working almost entirely around the pivot man. The difference between the two teams is that while the Norton five has an excellent pivot man in Arnold Jones, Tech seems woefully weak in this all important position. Bob Carlson who has been playing the position in practice was a good forward on last year's team but he doesn't appear suited to his new position. Unless a new pivot man is developed or a different system is adopted, it looks as if Tech is in for a rough evening when Springfield comes here December 7. One thing which seems certain is that by the opening game John Concordia, a product of Worcester's South High, will be holding down a first team position. Playing at guard on the second team, John has shown outstanding ability.

# ON AND OFF THE RECORD

By JACK SAUNIER

Does this look familiar to some% men? Here we are back again at the same old stand, after a two and a half year lay-off, pounding out bits of news and comment on this and that in the field of music,-jazz, classical, popular, and most anything that comes under the heading of pretty noises. We'll try to keep you slipstick slaves up to date on local doings and some of the best recordings as they appear in the shops.

Currently, the Christmas boom is on in the record marts, with a plethora of new albums and singles of the old stand-bys and a few new comers to add variety. Bing Crosby sounds just a little older but still as tasteful as you could wish on the newer numbers, but most of the album is re-issue of records the Groaner has already had on the market for years.

Perry Como's album of Christmas songs for Victor is a very strong contender, and may well outsell Der Bingle, on the momentum of Perry's current popularity. There is another album that promises to be a big seller, on Decca again, but rather undistinguished performances by Deanna Durbin, Judy Garland (who is playing ball out of her league here), and Kenny Baker leave the listener unimpressed.

Best offerings in the Yuletide spirit are on single records by Sinatra, Jo Stafford, and Les Brown's band. Frankie sings White Christmas so well that one would have to be a dyed-in-the-wool Bing fan and Frankie-hater to give Bing the nod here, and when you consider backgrounds there just isn't any argument after you've heard Axel Stordahl's lush and beautiful arrangement behind Sinatra. Jo Stafford's disc of the same tune is a very straightforward treatment, with some excellent choral work by an unnamed group we suspect to be the Lynn Murray chorus; a polished, soothing three minutes of Irving Berlin's best.

Les Brown's band has a tuneful coupling of When You Trim Your Christmas Tree, a danceable ballad with a nice arrangement that interpolates some of the traditional carols in the background of Jack Haskell's vocal, and The Christmas Song, which impresses us as the top new tune of the season. Doris Day sings the lyric so perfectly in imitation of King Cole's vocal style that it's almost a shock when she departs from the melodic line used by the King at the end of the tune. However, if that's all she can be criticized for (and it seems to be), it leaves the record with about sixteen stars, five bells, or whatever might be used to signify a top-notch performance. Again the Les Brown band supplies a fine backing, with The First Noel, Little Town of Bethlehem, and a few others intermingled in one of those modern dance arrangements that is putting this band up where it belongs in the orchestra ratings.

The King Cole recording of the same tune departs from the usual Trio style and adds a brilliant string section to give you that Christmas-y

anyone's book, and Nat Cole sings one of his finest vocals to date.

Apart from the seasonal offerings, you may find on the record shelves Woody Herman, and it's a solid Django Reinhardt, French gypsy such first-rate items as the new Stan start. And speaking of Herman, his guitarist. "Great" is not an empty

the top swing band in the country Ebony Concerto (written for Woody's uses advisedly, on a background of and its formidable array of solo band by the famous composer, and four months of sitting in little Paris stars: Vido Musso, Boots Mussulli, conducted by him) is now available, bistros listening to Django's variety Ed Safranski, Shelley Manne, Kai and will undoubtedly confound a of jazz. He's a weird and wonderful of your returnees and upper-class- feeling. It's a marvelous record in Winding and of course, Kenton on good many people. piano. It is a definite bid by Kenton to enter the ranks of concert jazz Hall concert in Boston on Sunday with a touch of genius. orchestras, like Duke Ellington and afternoon, Dec. 1, featuring the great Kenton "Artistry" album, featuring 12-inch recording of Stravinski's word, but one this column compiler

person, and his will-o'-the-wisp char-Ellington is playing a Symphony acter sings out of those guitar strings

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