

INSTITUTE EMINENT IN AVIATION FIELD

Technology Preeminent in Teaching of Aeronautics — Alumni Very Active in Aero Publications

L. D. GARDNER '98 AERO EDITOR

The recent Aeronautic Show in the Grand Central Palace at New York City has attracted the eyes of the flying world to Technology, particularly in the matter of literature pertaining to this branch of scientific and engineering achievement. The Institute has long been recognized not only as the first institution on this side of the Atlantic to organize a course in this field, but as preeminent in the teaching of Aeronautics.

In close conjunction with the Department of Naval Architecture, which has the supervision of the graduate course in Aeronautical Engineering, Mr. Lester D. Gardner '98 in August, 1916, started the bi-monthly Aviation and Aeronautical Engineering as a scientific exponent of the art in America. This publication immediately obtained a high reputation and is now perhaps the leading American periodical in the field.

For his technical editor, Mr. Gardner naturally turned to the Institute and obtained the services of Mr. Alexander Klemm (M. S. M. I. T. '16), Instructor in Aeronautical Engineering. In addition to his duties as editor, Mr. Klemm together with Mr. F. H. Huff (S. B. M. I. T. '15) has contributed to the magazine an important series of articles on Aerodynamics and Aeroplane Design. This work has received favorable recognition throughout the country, and presents to students in the Graduate Course in Aeronautical Engineering, this important matter in a convenient form not otherwise accessible.

Other matter contributed by Tech men are the following articles:

"Dynamical Stability of Aeroplanes," by Naval Constructor Jerome C. Hunsaker (Eng. D. M. I. T. '16); "Aeroplane Control Surfaces," by J. C. Hunsaker and T. H. Huff; "Stresses in Propellers Due to Gyroscopic Action," by Alexander Klemm; "Notes on Aeroplane Shock Absorbers," by J. C. Hunsaker; "The Specification of Steel," by H. C. Cowdrey, Instructor in Mechanical Engineering at M. I. T.; "Tests on Air Speed Meters," by S. J. Zeigler, Assistant Naval Constructor (S. M. M. I. T. '16); "The Rocky Mountain Scout," by Captain V. E. Clark (Graduate Course in Aeronautical Engineering 1914-15); "The Thomas 150 Horsepower Aeromotor," by George H. Abel (S. B. M. I. T. '12); "A Method of Aligning Single-Engine Tractor Biplanes," by Captain Byron Q. Jones, U. S. A. (Graduate Course in Aeronautical Engineering 1915-16); "Requirements of Airplane Floats," by Naval Constructor H. C. Richardson (S. M. M. I. T. '12).

(Continued on page 4)

TENNIS MEETING

There will be a meeting of all candidates for the position of manager of the freshman tennis team on Tuesday, March 13, at 1.10 o'clock in Room 2-190. This competition is open to freshmen only and will last about two weeks. Manager Kimball of the tennis team, who selects the successful candidate, will outline the plan of competition for the men. The freshman manager will be eligible to receive his numerals if the team is awarded them by the M. I. T. A. A. and will be in line for the position of assistant manager in his Sophomore year and manager of the varsity team in his junior year.

MONTHLY MEETING

There will be an important meeting of members of the staff and candidates on Thursday afternoon, March 8, at 5.10 P. M. in Room 1-147.

1920 CLASS PRESIDENT RESIGNS

F. K. Gibson Made Temporary Chairman by Executive Committee

Cushman Nathan, President of the Class of 1920, resigned from that office at a meeting of the freshman Executive Committee yesterday afternoon. The Vice-President, S. A. Milliken, being temporarily ineligible to take over the Presidency, R. K. Gibson, of the Executive Committee, was made temporary chairman. R. L. Turner, the Class Secretary, was supposed to take over the Presidency, but it was thought that he had too much work on his hands.

The committee voted to hold a class smoker on Friday evening, March 30. They also voted to provide \$30 for the expenses of the class baseball team.

AERO CLUB MEETS

Captain Garrell Outlines Reserve Corps Requirements

The meeting held last Friday to form an Aero Club at the Institute was a great success. Over 150 men attended and all showed great enthusiasm. C. H. Taverner '18 called the meeting to order and said that since Technology was the first institution to have an aeronautical course, and most of the prominent men in this branch of science are Technology graduates, it seemed fitting that the undergraduates should have an organization to foster and to promote interest in aeronautics at the Institute.

John Braislin '18 was the next speaker and said in part: "Students in Technology are interested in aeronautics in three ways. First, some wish to go in for the theoretical end; second, there are those who want the practical side, and third, those who have an especial interest in having a Reserve Unit here. An Aero Club will help all three. Illinois and Princeton both have Reserve Units and since Technology by her training makes men who are especially fitted for such a line, why can't we have one here?"

Captain Garrell, U. S. A., followed and gave a brief outline of what the government requires for a Reserve Corps. "There are three ways by which a student may enter the service," he said. "A student may get into the Officers' Reserve Signal Corp by passing an aviation test. All men in this corps are trained by the government and may be called into service for fifteen days each year. Again, a student may enlist in the aviation section of the enlisted reserve corps when he becomes at once a non-commissioned officer. When he finishes training he is offered a commission in the Signal Officers' Reserve Corps. Finally, a student who does not care to enlist may attend an authorized civilian school at his own expense, and if he passes the flying test, the government pays this tuition and offers him a commission."

E. P. Warren, A. B., '17 gave a short history of the Aero Club which was formerly at Tech and which caused much attention several years ago. This club won several glide meets and was very successful for some time.

At the proposal of the presiding officer, Professors Peabody, Riley, Wilson, Mr. Huff and Mr. Klemm were made honorary members of the club. A committee was appointed to draw up a constitution and the next meeting will find the club fully organized.

E. E. SOCIETY TRIP

The Electrical Engineering Society takes a trip today to the B. F. Sturtevant plant in Jamaica Plain. The party leaves the main buildings at 1.30 o'clock. The plant is a large one and it will require most of the afternoon to inspect it.

The B. F. Sturtevant Company manufactures all types of small generators and motors, besides auxiliary equipment such as fans, blowers and heaters. The company has recently installed an erecting and testing room for airplanes and it is probable that this department will be inspected also.

JUNIOR PROM SIGN-UPS CLOSE

Limit Reached Last Monday—Waiting List to be Made For Juniors and Seniors—300 Subscriptions Taken

ADDITIONAL BALLROOM OBTAINED

The Prom Committee announces that no more sign-ups can be taken as the ballroom will not accommodate more without crowding. However, a waiting list is being started for Juniors and Seniors, and any student so classified may be listed by mailing his name and address to J. T. Leonard, chairman of the committee, at 484 Beacon Street, Boston. The names will be placed on this list in the order of their arrival, and the committee assures the applicants that no partiality will be shown. Each year there are a large number of sign-ups forfeited through failure to pay the final subscription of five dollars before the limiting date, which in this instance is April 2. After this date the unredeemed sign-ups will be allotted to the men whose names appear on the waiting list.

The committee anticipated the large demand for sign-ups and, before the original limit of two hundred and fifty was reached, arranged for the use of the small Ballroom at the Copley Plaza in addition to the large Ballroom and the Foyer. As this room has a capacity of over fifty couples, the limit was changed from two hundred and fifty to three hundred when the former number was reached. This did not slacken the demand, however, and the final number was reached Monday noon.

There appears to be a rumor that many freshmen have been signing up and that this has necessitated the exclusion of many upper classmen. As a matter of statistics, only seven per cent of those signed up are freshmen and practically all of these were taken at the beginning of the campaign when the committee had no assurance that there would be such a tremendous demand.

PACK AND PADDLE

The officers of the Pack and Paddle are planning to hold a hike on Saturday, March 10. The plan is to leave the North Station on the 1.25 o'clock train for Concord and hike cross country to a camp in Bedford, where supper is to be had. The evening will be spent around the fire in story telling and other forms of entertainments. In view of the present weather conditions it is very probable that there will be a chance for some snowshoeing. The total expense of the trip will not amount to more than a dollar, and the officers are looking for a large crowd, and wish it to be clearly understood that all men are welcome whether affiliated with the club or not. Men planning to take the trip must inform A. E. Tuttle at the Rifle Club office in the basement of Building 1 before Friday noon.

CORPORATION XV

There will be a Directors' meeting of Corporation XV at 1 o'clock today in Room 2-290. The next regular meeting will be held Friday, March 16. As usual, the members will meet at 6 o'clock in the Caf, where a short banquet will be held. Arrangements for entertainment have not yet been announced. Following the dinner and business meeting there will be a discussion of Foreign Trade by members of the Chinese and Latin American Clubs.

CHESS TEAM WINS MATCH

Last Friday evening the chess team met and defeated the Suburban team of the Metropolitan League, by the score of 4-2. One game was defaulted by Technology.

Tomorrow at 8 o'clock the team will play that of Harvard in Room 1-075.

FRESHMEN VICTORIOUS

Well-balanced Team Wins Inter-class Meet

Taking three firsts, two seconds, four thirds, and five fourths, the freshman class romped away with the annual interclass Indoor Track Meet Saturday afternoon. The meet started at 2.30 in the basement of Building 1 with the high jump. Frease '20 won first place at 5 ft. 9 in. Schoonmaker '17 and Hysom '19 tied for second and third places with 5 ft. 8 in., while Childs '18 took fourth.

The meet then moved to Tech Field, and the 60-yard dash was run in heats of three men each. The result of the finals gave Larsen '20 first place in 6 4-5 sec. Rollins '18 was second, Ormon '20 and Downey '20 ran a suspiciously even heat for third and fourth places.

In the high hurdles, the Seniors, represented by Sewall, took first place. The Sophomores won the next two places with Merrill second and Scranton third. Anable '20 was the last man to place. Sewall's time was 10 sec. The order in the low hurdles was as follows: VanKirk '18, first, time 8 4-5 sec; Scranton '19, second; Anable '20, third; Sewall '17, fourth.

Brock '17 took the lead at the start of the half mile and held it throughout, crossing the finish in 2 min. 12 2-5 sec. Barnes '20, McClusky 519, and Couch '20 finished in the order named.

Ormon '20 captured the quarter mile in 55 4-5 sec, Bent '19 taking second, Downey '20 third, and Wilson '20 fourth place.

(Continued on page 4)

WIRELESS SOCIETY

Mr. H. B. Richmond Addresses Radio Club

Monday afternoon, at a meeting of the Radio Club, Mr. H. B. Richmond '14, of the Electrical Engineering Department, spoke on "The Development of Wireless Instruments." The speaker explained that although Marconi began his work about 1896, it was not until about 1905 that the amateurs came into the field to any extent. It was about this time that the use of the spark coil among amateurs became prominent along with the old idea that the most efficient set was the one giving the greatest amount of noise and the most external evidence of leakage and corona.

The first commercial station operated in Boston was located on the Herald building, later moving to Quincy, and still later, upon the completion of the Filene building, it was set up there. When first set up its range was limited to Highland Light under favorable conditions, which at the present day seems ridiculously small.

Mr. Richmond explained that the greatest advance has been made in detectors. The earliest form of rectifying device was the carbon detector, closely followed by the microphone and coherer, all of which depended upon the change of resistance with an incoming wave. Later on came the electrolytic device in which the incoming wave broke down the film of polarized hydrogen on the contact. Crystal detectors made their appearance in 1906, the earlier types using silicon, which was later replaced by pericon, following experiments by Professor G. W. Pickard. During this time the commercial stations adhered to the magnetic detector which did not stand up under strong signals. At the present day the audion or valve detectors seems to be giving very satisfactory results.

(Continued on page 4)

CATHOLIC CLUB

Tonight at the meeting of the Catholic Club, Chief Tabors of the Boston Fire Department will repeat his lecture on "Fire Fighting in Large Cities," which was enthusiastically received when given before the Harvard Club of Boston. The talk will follow the regular supper of the club, which is at 6 o'clock. Tickets for the talk, which is scheduled for 7.30 o'clock in Room 4-270, may be obtained from the Executive Committee.

ALUMNI ORGANIZE FOR NATIONAL SERVICE

Technology Graduates Respond Rapidly to Circular Letter of Special Preparedness Committee

I. W. LITCHFIELD '85 CHAIRMAN

While the United States has been wondering if she will be forced to enter this war, Technology has not been the last to pledge her assistance in case of necessity. First the report comes that the laboratories will be turned over to the government and that all the facilities be placed at the disposal of the national cause; then a committee makes a report on the advisability of the men from each course taking part in his own line and how he can best serve, and finally it is learned that the Alumni have started to organize.

At the present time there are about 12,000 Technology Alumni, of which over seventy-five per cent will be able to turn their brains to the help of the nation. Many of these have had training in industrial occupations which will be of material assistance in war time, for they comprise chemists, construction engineers, electrical engineers, marine architects, mechanical engineers, and aeronautical engineers, who can enter their respective branches, either at the front or behind the lines.

Massachusetts holds claim to about 4,000 Technology Alumni who are in business, while 2,400 of these are in Boston itself. These men will serve the flag in the capacity for which they are best fitted under this organization scheme. They will not be organized in any unit, but will pull together from a distance. A circular letter has been sent out to each man from the Alumni Field Secretary, I. W. Litchfield '85, who has charge of the sign-ups. The substance of the letter follows:

Cambridge, Mass., Feb. 27, 1917.
TO FORMER STUDENTS OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

As this is being printed there is an imminent prospect that our country will soon be in a state of war. Technically trained men will be urgently and immediately needed to supply the army and navy with the most effective materials, equipment, and devices, in immense quantities, true to specification, in the shortest possible time.

(Continued on page 3)

WORCESTER ACADEMY MEN MEET

There will be a meeting of the Worcester Academy men of Technology who wish to attend the Worcester Academy Alumni banquet, to be held at Hotel Somerset tomorrow afternoon at 5 o'clock in Room 2-190.

THERE WILL BE A NEWS MEETING IN THE TECH OFFICE TODAY AT 1.05 O'CLOCK.

CALENDAR

Wednesday, March 7, 1917

- 1.00 P. M.—Meeting of the Directors of Corporation XV. Room 2-290.
- 1.20 P. M.—Meeting of Freshman Baseball Candidates. Room 4-108.
- 1.30 P. M.—E. E. Society Trip. Meet in Main Corridor of Building 10.
- 5.00 P. M.—Show Orchestra Rehearsal. Caf.
- 7.30 P. M.—Catholic Club Meeting. Room 4-270.

Thursday, March 8, 1917

- 5.00 P. M.—Show Orchestra Rehearsal. Room 1-175.
- 5.00 P. M.—Show Chorus Rehearsal. Room 1-190.
- 5.10 P. M.—Meeting of Staff and All Candidates of the Monthly. Room 1-147.
- 5.00 P. M.—Meeting of Worcester Academy Alumni. Room 2-190.
- 7.15 P. M.—Show Cast Rehearsal. Room 1-190.
- 7.15 P. M.—Show Ballet Rehearsal. Emma Rogers Room.
- 8.00 P. M.—Chess Match. Room 1-075.