



TECH NEWS

SCHOOL OF TECHNOLOGY • CITY COLLEGE OF NEW YORK

VOL. IX No. 1

TUESDAY, SEPTEMBER 30, 1958

By Student Fees

TECH BUILDING READY TO RISE

For those of you who did not attend summer session, and could not see the leveling of the Bowker Library and the Drill Hall, here is a description of the operations.

First of all the library was worked upon primarily, and the Drill Hall was not started until it was almost completely down. This was due mainly to the Drill Hall's roof, which was a tar like substance 3 or 4 inches thick resting directly on the beams. It naturally had to be removed first, and in the following manner: a two man team, one with a heavy axe, and the other with a huge crowbar, would take out a strip of tar 3 to 4 feet wide from the apex of the roof down to the gutter. The axe man would start to swing at the roof trying to make an incision; after the incision was large enough for the tongue of the crowbar, the two men would try to remove as long a piece of tar as possible. One such strip took both men all day to remove.

Meanwhile back at the library... all trimmings were taken out of both the outside and the inside of the building. Next the frame was removed, and the walls demolished by a ball at the end

(Continued on page 2)

HEAVY DROP IN TECH ENROLLMENT UPPER CLASSMEN HIT BY "C MINUS RULE"

By David Katz Math '60

Enrollment in the School of Technology, which for several years has led the School of Liberal Arts and Science and the School of Business Administration in admissions, has fallen drastically for the Fall 1958 semester.

According to the Registrar, Robert W. Taylor, only 680 entering freshmen have registered in the School of Technology, a drop of 276 from last year's totals. Overall Tech registration has shown a decline of 450 since Fall 1957. In spite of this, the college as a whole has managed to gain 200 students.

ORIENTATION SET FOR TODAY

By Barry Schlein Ch. E. '59

Seniors, if you are majoring in engineering or science and graduating this February, take notice. Today at 3:30, the Placement Office is holding a job orientation program in Townsend Harris Auditorium. It is imperative that graduating seniors wishing to take advantage of the Placement Office employment program be at the first meeting. Time is short, as the first interviews begin Oct. 7.

The purpose of the meeting is to advise seniors in the use of the program and to enable the Placement Office to

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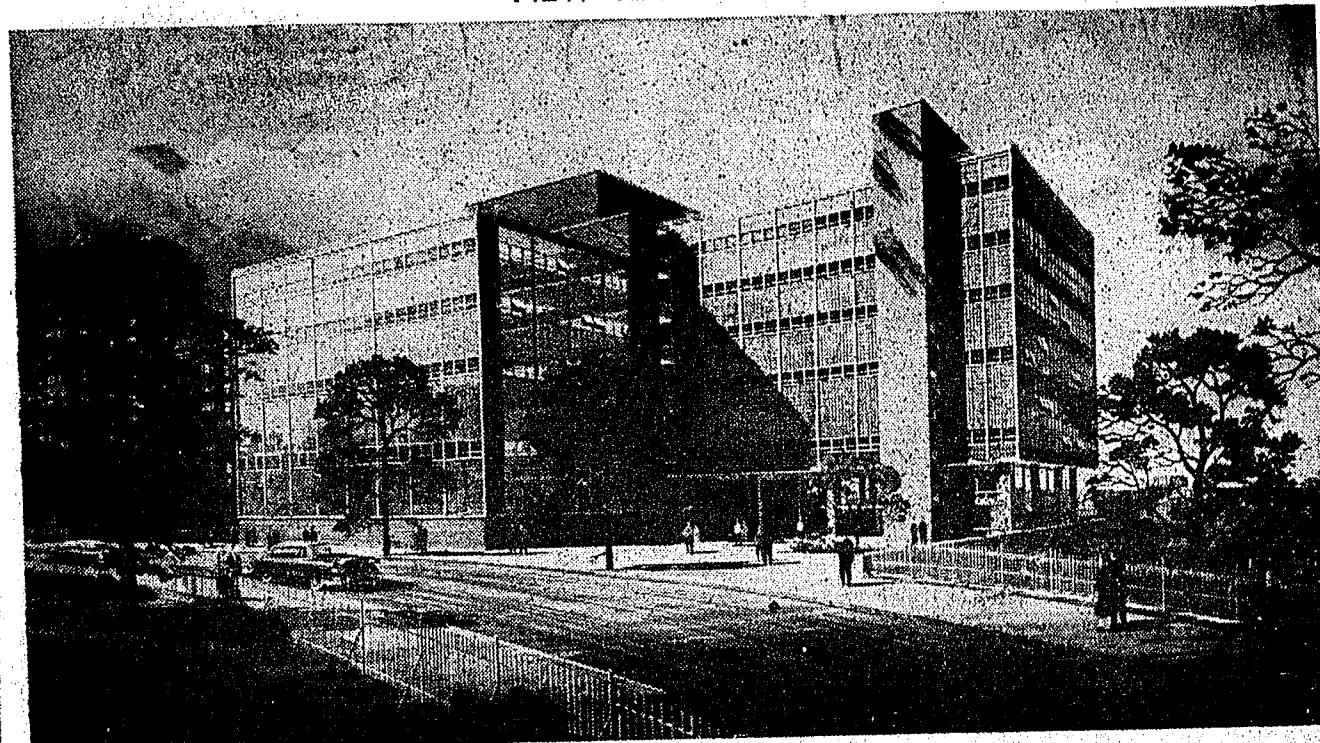
Mr. Taylor said that the decline came as a complete surprise. "I assumed that the Tech rise would eventually come to a halt," he stated, "but I didn't expect it to reverse itself." It was conjectured that fewer entering students chose an engineering education because of the recession. Anticipating a decline in positions open to engineers upon graduation, scientifically-minded high school seniors may have chosen to enroll in mathematics and the physical sciences. Also, the current emphasis on the need for pure scientists may have spurred this trend. "The enrollment figures, showing a gain in registration in math and the sciences tend to confirm this theory," Mr. Taylor added.

The drop in the number of Tech upperclassmen was due in part to the enforcement of the new scholastic regulations requiring upperclassmen to maintain a C average in their engineering courses, as well as an overall average of C. Enforcement of this rule has been lenient in the past several years to enable students to accustom themselves to the new regulations. This past summer was the first time the rules were put into full effect.

Despite the engineering slump, CCNY tied with NYU for the largest metropolitan enrollment. Each has an estimated total of 32,000 students, both full and part time. City estimates 28,000 undergraduates and 4000 graduates, while NYU claims 14,000 undergraduates and 18,000 graduate students. The four Mu-

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NEW TECH BUILDING



TECH NEWS

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EDITORIAL

Change — that will be the word that most of you entering freshmen in the School of Technology will be most conscious of for the next four or five years. Less than fifty percent of your ranks will obtain bachelor degrees in engineering.

Some of the changes which will affect your education and that of the students who follow you is obvious and visible; namely, the erection of the Technology building on what is, at the moment, a hole in the ground. On the other hand there will be more subtle changes, such as the increasing efforts on the parts of educators to instill in the engineering student a greater sense of social awareness — something which the most modern

...TECH BUILDING

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of a crane. (This crane's boom was higher than the 8 story building across the street from the workings.) After this was done the four reinforced concrete columns at the corners of the building were chipped down by pneumatic drill. The remaining mass on the top floor was then removed by a small bulldozer lifted into the floor by the crane.

Although the hole left by the two buildings looks quite ugly, it will soon be transformed into a beautiful six story, double basement building housing the labs of the School of Technology.

HERB HILLER

...ENROLLMENT

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municipal colleges will account for 79,480, a gain of 2,000 over Fall 1957.

The 6,000 freshmen admitted to Brooklyn, Hunter, Queens and City form the first class to be admitted on the strength of College Entrance Examination Board scores, rather than tests administered by the Board of Higher Education. Although the change in testing procedure does not have any significant advantage from the point of view of the college, students applying to private universities as well as the municipal colleges will be spared having to take two separate batteries of tests, as was the case previously. Another advantage to the student is the improvement of conditions under which the test is taken. In the past, the City entrance exam was given while classes were in session, restricting the number of rooms available. College Boards, given in High Schools when school is not in session, are not hampered by this problem.

laboratories in that new building cannot provide.

A change in the attitude of upper classmen toward their future employers has begun this past year as the economic recession has left many students with greatly reduced employment prospects. In the few years preceding this economic decline, job interviews were considered by most graduates as a means of selecting the company of their choice; the position of the selector being reversed, (and perhaps it will stay that way for a while), the student will, and certainly must strive for self improvement, both academically and socially, with a sincerity not so noticeable in the graduates of the boom years.

...ORIENTATION

(Continued from page 1)

bring it's records up to date. This makes a favorable impression on the interviewer and enables both his company and you to find the most suitable position for you. Mr. Schnaebly, the placement director, points out that since there is greater competition for positions, impressions will be important. Tips on the do's and don'ts of interviews will also be discussed.

The Placement Office program has become a fixture during the past five or six years, and has proven itself highly effective. In order to best implement the program in the short time remaining, those concerned cannot afford to miss any meetings. Do yourselves a favor, and be there.

VECTOR POSITIONS OPEN

VECTOR, the undergraduate magazine of the School of Technology announced today that there are openings on their staff for lowerclassmen, both Tech and Non-Tech, who wish to train for editorial positions. Previous magazine or newspaper experience, while helpful, is NOT a requirement for these positions. Interested students may stop in at VECTOR's office, 331 Finley, Thursday afternoons.

DON'T procrastinate

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TECH NEWS



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TECH LIFE

Are you one of those; who voted against the activities fee rise? If so—thanks a lot. Just watch this space; I'll be first with news of TECH NEWS' bankruptcy.

AICHE should have its term program completed as you read this. One thing I might mention is a program that should be of great interest to all Techmen. AICHE is attempting to arrange for a speaker to discuss recent court decisions concerning the relationship of engineers and scientists to corporation patents and secret processes.

ASCE is in the process of finalizing its schedule. Films and speakers are presently being arranged for and a field trip to the new Owl's Head sewage treatment plant in Brooklyn is being arranged; the completed schedule will be posted at Tech-Crossroads soon. This Thursday is the first meeting for new members and there will also be a film.

The national ASCE conference will be held this year at the Statler-Hilton hotel on October 10-13. Our C.C.N.Y. Chapter is expected to turn out en masse.

Perhaps someone would explain to me why our poor harried E.E.'s must obtain written certification of having registered for E.E. 107 in order to buy the "M.I.T. notes" for the course. There may be a shortage, but is this light reading that might sell out to the academic dilettants in the school? Or is it feared that Vladimir might buy a set and take them home to the motherland?

Last Thursday's introductory meeting of the AIEE-IRE was addressed by four members of the E.E. Department: Professors Hanstein, Hunt, Taub and Wolf.

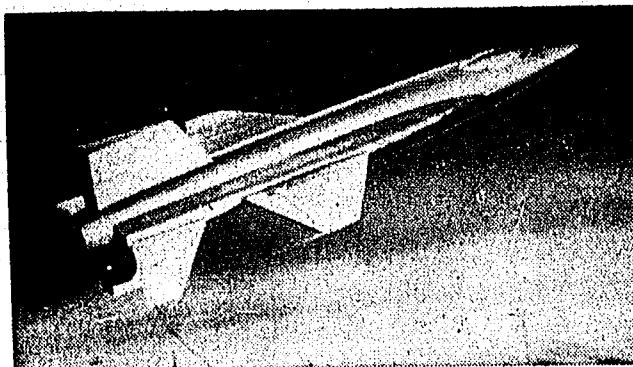
The term's schedule for the double E's is set up clear to January. Along the way there will be lectures by Dumont, R.C.A., Bell Labs, a member of the faculty and a group of E.E. alumni. I'll post these here in detail as they

(Continued on page 4)

STAINLESS STEEL AND SPACE AGE AIRCRAFT

Stainless steel has been used in land-bound applications such as food processing equipment, architecture and automobiles, but as air speeds increased and the missile and satellite era unfolded, this alloy alone was able to meet the new combination of environments. High strength-weight ratio, resistance to temperature extremes, corrosion and oxidation resistance are all famed characteristics of this chromium, nickel and iron alloy. The entire skin and integral tanks of the huge Atlas, X-15, and the nose cones of all the Explorers are stainless steel.

The Air Force's Atlas, slated as a future moon or "lunar probe", is virtually a flying stainless fuel tank. The ultra-lightweight unit, which comprises the entire missile's skin, also serves as



the propellant tanks, holding tons of liquid oxygen and hydrocarbons and supporting a large warhead on one end and a monolithic rocket engine on the other. Convair, builders of the airframe, have submitted a broad space development plan utilizing the Atlas to place huge satellites in orbit and to enable men to operate recoverable satellites or permanent space stations. The plan also includes the use of Atlas to send instrumented "artificial comets" into interplanetary space.

Without extensive modification, the X-15 may become candidate for the first recoverable manned satellite. Hitched on the second stage of a large missile, it would be boosted out of the atmosphere

where it would then detach and reach the minimum orbital speed of 18,000 m.p.h. One 25,000 mile-90 minute revolution around the world would probably be sufficient for the history making first orbit and the pencil-thin ship would be braked by reverse rockets or chutes and glide back to earth.

The nose cone of the Army's Explorer satellite weighs an amazingly light thirteen ounces. Nevertheless, its strength is only partly demonstrated by the fact that it also serves as the nose cone of the entire Jupiter-C launching vehicle that helped propel the satellite into orbit.

Other examples of the transition to stainless are the vital second and third stages of the Vanguard satellite rockets and the Strategic Air Command's latest deterrent to a third world war—the multi-podded B-58 bomber.

The fuels for Vanguard's second stage are white fuming nitric acid and unsymmetrical dimethylhydrazine, both highly corrosive chemicals. These called for stainless propellant tanks whose outer walls, like the Atlas, serve as the Vanguard's skin, making an integral, lightweight structure. The entire third stage, which "kicks" the satellite into orbit, is entirely stainless and as an empty fuel container, it also goes into orbit and trails the Vanguard sphere.

The B-58 is the first production military aircraft to need stainless in large quantities. This plane owes its very existence to this metal. Over one thousand square feet of the bomber's engine pods and wing flaps are covered with glistening stainless honeycomb. Honeycomb design, borrowed from the bees own cavernous version, allows for extremely light but surprisingly strong skin and panels. The deadly delta-winged four engined plane can fly intercontinental distances and jettison a huge thermonuclear pod slung under its long, thin belly.

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ENTERTAINMENT

FRIDAY, OCT. 3, AT 8:30 P.M. AT OUR HOUSE

501 W. 138th ST.—OPP. TOWNSEND HARRIS HALL

OPEN HOUSE—TODAY UNTIL OCT. 10

SPORTS . . .

Last Thursday, the "Slide Rule League," basketball tournament began. The organizations competing represent the four branches of engineering; AIEE, ALChE, ASME and ASCE. These teams will each play twelve games. Winner will be decided by the end of December, unless playoffs become necessary. In recent terms the Electrical Engineers have dominated the tournament. However, they, as well as the other teams, have lost leading players through graduation. For this reason, leading Las Vegas bookmakers are not taking bets until after the first week of play.

On October 2nd the Intramural program opens with a basketball field day and handball singles. Different tournaments will begin on later dates comprising the 22 scheduled for the term. Last semester there were over 1000 participants, and it is hoped that this year's program will be even more successful. In addition to athletes, Mr. Frankel needs students to assist as referees, office workers and writers for the Beaver Tail publication. Further information is obtainable in the Intramurals Office, Wingate Building.

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. . . TECH LIFE*(continued from page 3)*

come up. October 30 is set for the student-faculty softball game. (In mittens I suppose.)

On October 9, "The Why and How of Digital Computers" will be explained by an engineer from I.B.M. All meetings of AIEE-IRE this term will be held in S306.

Alpha Mu Epsilon, the ME social frat, having been hit hard by graduations, is financially hard up. Contributions are being gratefully accepted. But they'd be even happier for your presence at their smoker this Friday evening.

This Thursday, a representative of the Heald Company will address ASME on "Machine Tool Vibrations."

Incidentally, all meetings of the ME societies — ASME, ASTE, SAE — and of the American Rocket Society will begin just at noon with an "early bird film." This was tried out last year and proved its worth. If you can get to your meeting early, you've gained an interesting bonus; if not, you can still make the full business meeting—and of course, it keeps the potential delinquents among us occupied until the meetings start.

I might also mention here that ASME is planning to sponsor a student-faculty basketball game and square-dance on October 10. The game will begin at 8:00 in the Wingate Gym and at 9:30 a professional caller will start things moving in the Grand Ballroom of the Finley Student Center. The starting team for the game will be A.S.M.E.'s Slide-Rule League team, but after the first period, substitutions will be freely made with all who volunteer. That's October 10, and the tickets are \$.75 each.

The game sounds fine, but this student-faculty square dance bit seems like a rather hairy idea—at least it does to me.

STAN GROSSEL

INTERESTED IN G. E.?**E.E. and M.E. January 1959 graduates:**

Explore General Electric career opportunities with our representatives at group meetings October 6 at 4 p.m. or 6 p.m. in room F217. Sponsored by AIEE, IRE and ASME student chapters.

Training programs, types of engineering assignments, job locations and all your questions will be discussed.

Applications will be accepted AT THESE MEETINGS ONLY for General Electric's October 21 & 22 campus interviews.

Placement Office has further details.

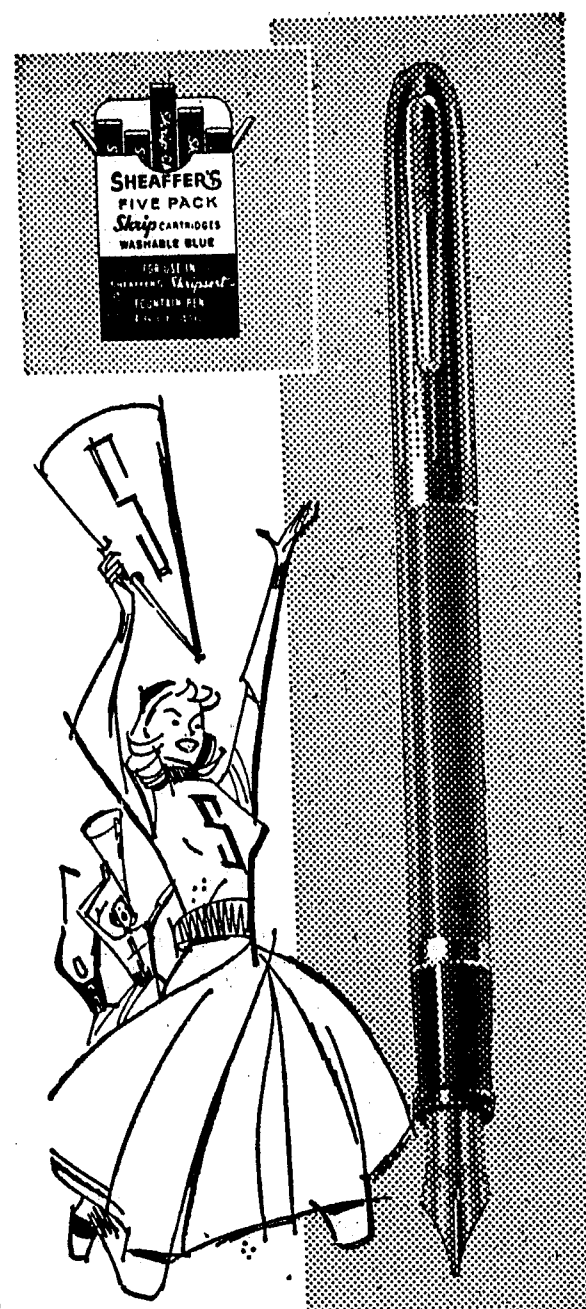
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SCHOOL
VOL. IX

HAM
MOVIE

Hamilton mark, located at 100 West Avenue. Plans to pave the way located at South Campus being held for some time. Committee in charge has been having necessary funds used to caring for relocated. definite plan. Education area of campus have been announced.

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