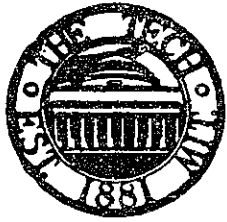


The Tech



OFFICIAL NEWSPAPER OF THE UNDERGRADUATES OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VOL. LXXVII NO. 39

CAMBRIDGE, MASSACHUSETTS, FRIDAY, NOVEMBER 8, 1957

5 CENTS

KILLIAN BECOMES SCIENCE CHIEF STRATTON WILL HEAD INSTITUTE

Killian's Statement:

Since I am undertaking a post that has not existed before, it is obviously premature for me to anticipate by comment now any future policies or actions. My first responsibility is to make myself available as promptly as possible to carry out the instructions and desires of the President.

In behalf of the President I shall move as rapidly as possible to marshal the best scientific and engineering judgement and creative talent in the United States and to make it available to the President for the formulation of national policy which involves science and technology. The President has provided a means to integrate American science in every proper way with national policy-making, and I shall seek to facilitate this by every means at my disposal. A very strong scientific advisory group is an essential part of the plan, and the recruiting of this group will proceed with the utmost dispatch.

The President has clearly stated his strong convictions about the importance of science and scientific education to our national life and security and his desire that everything possible be done to encourage scientific research and education and to strengthen any deficiencies.

In addition to the Department of Government, I will work in close association with such important existing agencies as the National Science Foundation and the National Academy of Sciences to further the President's objectives.

American science and engineering possess tremendous strength and vigor; and if we proceed diligently and decisively, we can maintain them in the flourishing state required by our national welfare and security and advance steadily in technological strength and achievement. The potential for advance is tremendous, and knowing as I do the sense of urgency, mission, and dedication in the scientific and engineering community of the United States, I am confident that it can do the job required by the nation and that we can meet any crisis just as the American people have always been able to meet any crisis.



Photo by Louis Nelson
Dr. Killian reads statement to press and radio describing his new assignment

Westgate Soon To Be Demolished; New Athletic Field Planned In Area

The recent installation of larger West Campus tennis court facilities and a grass-protection fence at the north end of Briggs Athletic Field mark the beginning of a long-range program which will include the removal of Westgate and Westgate West within the next two years. These living units, now occupied by married students, will be removed by April 1, 1959, to make way for an extension of the athletic fields, says Dean of Residence F. G. Fassett, Jr.

No New Assignments

No new assignments have been made to Westgate since July of this year, said Fassett, and its residents, in cooperation with the office of Student Residence, are now beginning to move about within the units in order to concentrate the vacancies and expedite the removal of the buildings. The Westgate Council, headed by Gerald W. Camiener, has elected Gerrit H. Toebes chairman of the Advisory Committee which is working

with Dean Fassett in controlling the problems of logistics which are involved.

New Athletic Fields Planned

After the removal of Westgate the land will be used largely for athletic fields, says Richard L. Balch, Director of the MIT Athletic Association. Plans showing the boundaries of individual fields or this site were approved by the Institute two years ago. The block of twelve tennis courts has already been installed, but no money has been allocated for further work as yet, said Balch. Completion of the project is expected soon after the land has been cleared, however.

Although the removal of Westgate will benefit athletics at MIT, it also poses a problem: How and where can these living quarters be replaced? When asked about the Institute's plans for future dormitory construc-

(Continued on page 3)

Pres. Eisenhower called Dr. Killian to Washington last night, and charged him with the task of leading the United States back to a position of technological supremacy.

Shortly afterward, Dr. Killian announced the appointment of Chancellor Stratton as acting President of the Institute.

Dr. Killian's official position will be Special Advisor to the President for Science and Technology. The President announced his appointment in a nationally televised speech at eight o'clock last night.

In his new post, the President said, Dr. Killian will have the following duties: to help reduce inter-service rivalry, to choose priorities, and to marshal all possible talent and resources for major projects. Eisenhower said that he will draw on the full abilities of scientists and engineers, of all countries in the new programs to better this country's position in scientific achievements.

Eisenhower also said of Dr. Killian that he "enjoys my confidence and the confidence of all his colleagues in science and engineering".

Dr. Killian said last night that he first learned of his appointment ten days ago. Since then, he has spent most of his time in Washington and will return there in a few days, he said.

The Executive Committee of the Corporation approved Dr. Stratton's appointment last Friday.

Dr. Killian, interviewed last night over WTBS, expressed regret at leaving MIT and said that he would return as soon as possible. Dr. Killian would probably be spending several week-ends here.

Dr. Stratton called Killian's leaving, a "terrible loss to the institute" but stated that the Institute will not stand pat during his tenure. "We will continue to see things through . . . we must carry on".

Dr. Stratton foresees a greater emphasis on basic research with MIT at the forefront. But, he emphasized, the Institute's primary function is an educational one. "Underlying the whole scientific program," he said, "is the task of bringing people to readiness."

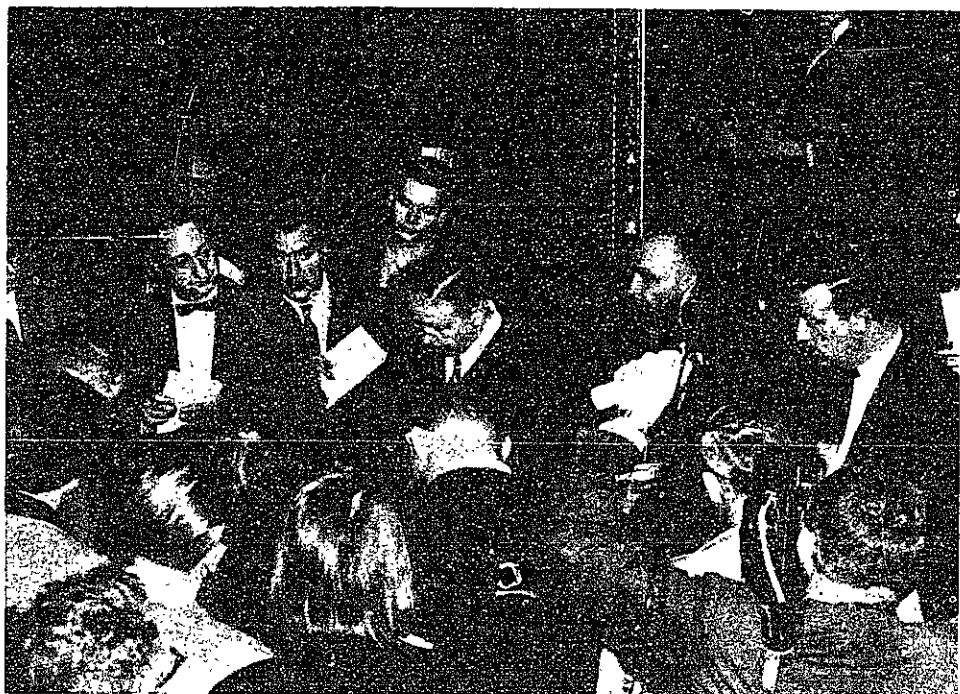


Photo by Louis Nelson
Dr. Killian is surrounded by newsmen and photographers as he enters his office for press conference. The meeting was covered by newspapers, radio, TV, and newsreels.

Record Audience Hears Bohr On Growth Of Classical Physics

Niels Bohr traced the development of classical physics through ten key experiments, Tuesday evening, and brought his overflow audience to the brink of Einsteinian relativity.

More than fifteen hundred persons jammed every corner of Kresge Auditorium to hear the venerable Dane's first of six lectures on "The Philosophical Lesson of Atomic Physics", inaugurating the Compton Lectures. It was the largest crowd ever to fill Kresge.

(Professor Bohr's second lecture, last night, dealt with "Atomic Theory and the Quantum of Action". His third will be next Thursday on, "The Principles of Quantum Mechanics".)

The ten experiments, each illustrated by a slide projected onto a screen in the center of the stage, were used by Professor Bohr to illustrate more than the verification of certain physical equations. Repeatedly, he urged his audience to look behind the simple experimental facts to the "kinds of arguments" used—to the symmetry arguments, the relativistic and deterministic arguments, to the gradual development of an objective description of nature. The experiments

1. Archimedes' static equilibrium experiments using weights and a pulley.

2. Galileo's "Leaning Tower of Pisa" experiment.

3. Vector components of velocity in a projectile shot from a cannon. ("The cannon," said Dr. Bohr, "is a very old-fashioned means of sending up a missile.")

4. Interaction of bodies—Huygens' experiment with a man in a moving boat and a man on shore, each viewing a collision in a different frame of reference.

5. Kepler's Laws and the Newtonian explanation of them.

6. Centrifugal force with a bucket on a string.

7. and 8. Oersted's and Faraday's work relating to electricity and magnetism.

9. Maxwell's equations.

10. Relativity of time—clocks in different systems running at different rates. To an observer in the first system, the clocks in the second system run slower than his own. But, to the observer in the second, the clocks in the first run slower.

Strong MIT Soccer Team Tops Brown 2-1; Tight Tech Defense Stops Last Quarter Rally



This Brown block momentarily stops the Beaver Soccer men in their march on to a 2-1 victory.

Wednesday afternoon on Briggs Field, the MIT Soccer team once again proved why it is rated one of the best soccer teams in New England as it defeated a tough Brown team, 2-1. Last year Brown won over the Beavers 5-3, but the play was completely reversed this year as the entire Tech team seemed set on revenge.

Early in the first quarter, Brown managed to control the ball, but could not penetrate the tight Beaver defense. As the quarter progressed, however, the Engineers' attack began to click, and with ten seconds left in the quarter, Ernesto Macaya '60 drove in from right wing to put the ball into the nets after a shot by Manny Penna '60 was deflected by the Brown fullback.

Throughout the second and third

(Continued on page 5)

were:

The Tech



VOL. LXXVII November 8, 1957 No. 39

Entered as second class matter at the post office at Boston, Massachusetts. Published every Tuesday and Friday during the college year, except during college vacations, by THE TECH, Walker Memorial, Cambridge 39, Mass. Telephones TRowbridge: 6-5855-6 or UNiversity 4-6900, Ext. 2731.

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Niels Bohr's Gift

Professor Niels Bohr comes to the Institute not merely as a passing lecturer, but as a full member of the MIT academic community. Throughout November he will be living at nearby 100 Memorial Drive and working in a Building Six office.

Aside from its being necessary for the preparation of his lectures, Professor Bohr's residency here is both an interesting and enriching experience for all of us, and a very fitting thing—fitting because Professor Bohr, though it may sometimes be overlooked, obviously belongs to the academic world. His role is no different from that of any other professor: to teach and to do research.

The great appeal of Professor Bohr, the quality which makes him an idol of his students and his colleagues is his creativity. He is more than just another teacher weaving a pedagogical shroud. He has been at the forefront of the research world, creating the models of nature which ultimately are diluted and shaped for the textbooks. He can tell us not only the principles of physics, but the arguments and the argumental process which led to their discovery. In the coming lectures, we will be looking forward to the moments when he communicates to us that gift.

More Riverfront

Though the "back door" of the Institute is a smoky conglomerate of factories and slums, its "front door" has always been the Charles. And, though we often gripe about the river's high specific gravity, its special blend of Newton ruralism, where it rises, and neon skyline, where it ends, has given pleasure to the naturalist in all of us. Among our fondest wishes, for the last forty years, has been to creep slowly up and down the river until the MIT campus

MIT Students Hear Bohr Lecture, Talk At Informal Seminars

Dr. Niels Bohr, who is perhaps the world's most widely revered scientist, delivered two of his series of six Karl Taylor Compton Lectures at MIT this week.

Dr. Bohr, who arrived in this country two weeks ago, lives with his wife in an apartment near MIT overlooking the Charles River. Every morning he walks to the Institute to spend the day in a physics department office working on the final manuscript of his lectures. Sometimes he lunches with scientists, but he often wanders into one of MIT's cafeterias and strikes up a conversation with students. "My name is Bohr," he will say, introducing himself as if he didn't expect anyone would ever have heard of him.

Seminars and Open Meetings

Dr. Bohr is very fond of discussions. Three seminars with members of the faculty and students have been arranged in his honor. He will also participate in two question-and-an-

Soft-Spoken Bohr Uses New Mike; Difficulties, Despite Prelim Checks

A new wireless microphone is being used by Dr. Niels Bohr in his lecture series. Although the usual first-night "bugs" developed Tuesday, Dr. Peterson, Bohr's assistant, described the initial use as the "most successful public lecture the Doctor has given."

The system has been under development for several years. However, Voc-O-Port, the first commercially successful apparatus, has been on the market only a year. Voc-O-Port consists of a small, sensitive micro-

phone worn by the speaker. This is connected to a small battery-powered transmitter also carried by the speaker. The signal is beamed to the system's receiver over a three-foot antenna, which Dr. Bohr wore inside his pant leg. From the receiver the signal can be fed into any broadcast system, in this case Kresge PA.

Trouble Develops

Because he has such a soft voice, Dr. Bohr was very interested when informed that the new system would be used for his lecture series. His first stop on reaching the States was MIT to test it, after which he flew to Washington. Preliminary tests were very successful. However, something seemed to go wrong Tuesday night. Every time Dr. Bohr turned to face the audience, his words became inaudible. At last Prof. Morris Cohen, chairman of the Committee on General Education which arranged the series, rose and tried to adjust the equipment. Thereafter, it worked approximately 70% of the time.

NORTH

S-6 5 4 2
H-Q 6 5 4
D-K 3 2
C-K 5

WEST

S-K Q 3
H-5 10 9 8
D-10 9 8
C-Q 6 5

EAST

S-
H-7 3 2
D-J 7 6 5 4
C-5 10 9 8 7

SOUTH

S-A 5 10 9 8 7
H-A K
D-A Q
C-A 3 2

N-S Vulnerable

The bidding:	S	W	N	E
	2S	P	3S	P
	6S	DbL	P	P
	P			

Let's listen in while J. Eager Freshman gets a lesson on the theory of doubled contracts, courtesy of I. M. Fish, president of the committee which bears his name.

"Excuse me, Mr. Fish," says J. E. F. "Can you enlighten me as to the proper use of the business double?"

"Why, certainly," replies I. M. F., in an aura of condescension. "Always double when you think you can set a contract."

Having absorbed this priceless bit of gospel, J. E. F. now double-times to the nearest bridge table and soon comes up with the West holding as shown above. "Clearly," he decides as the small slam is bid, "South has the ace of spades." "Just as clearly, my king and queen will win tricks, ergo . . ."

"Double," cries J. E. F., having learned his lesson well.

The jack of hearts is opened and yields to the king. South, now in possession of information as to the probable location of the spade honors (by virtue of the double), proceeds accordingly. He cashes his red suit aces, overtakes the diamond queen with the king, ruffs a heart, reenters the dummy with the club king, and ruffs another heart. The ace of clubs is played, a small club is trumped in dummy, followed by a diamond ruff in declarer's hand. This sequence has reduced all holdings to three cards, while West has been impatiently following suit. South is left with the A J 10 of spades, and West still holds his original K Q 3. And now, declarer, the bounder, leads the jack of spades, forcing the somewhat disillusioned J. E. F. to win the trick and lead away from his K 3 into South's tenace.

The traditional moral can be drawn from a set of simple calculations. (1) Points risked by information given to declarer through double-value of game and slam bonus, or about 1500 points. (2) Extra points derived from one trick set by virtue of double—100.

—Fred Golenzer '58

Notes On The First Bohr Lecture

It was not a command performance of "My Fair Lady" that drew unprecedented crowds to Kresge Auditorium Tuesday night, but was instead the first of the Karl Taylor Compton Lectures, given by a man with a far more subtle dramatic appeal. People undoubtedly came to hear Niels Bohr for a variety of reasons; some out of curiosity and a desire to witness the great physicist's "summing up", as it were, and some with a genuine interest in what he had to say. At any rate the standing ovation accorded Dr. Bohr as he rose to speak is powerful proof of a general enthusiasm to learn the ways of both physics and physicists.

Dr. Bohr's talk had a dual purpose; in the first place to summarize and show the limitations of classical physics, and secondly, to provide an introduction to the new ways of thinking which subsumed the classical laws.

From Dr. Bohr's point of view, the first important step in enabling people to generalize about nature, to create a science, was the process of objectifying experience. For the Greeks, this was close to impossible. According to Dr. Bohr "It was actually not found possible in ancient Greece to liberate oneself from such human experience as exertions by movements of our bodies, especially, of course, by fast running, or even from the motives of our actions . . ." Later, however, Galileo and Kepler were able to idealize the problems of bodies in motion, and, what is the same thing, separate the relevant from the irrelevant in formulating these problems.

But this was only a part of Dr. Bohr's central theme. Objectification allowed a six-coordinate specification of the state of a system, and, as a result, a knowledge of the system's past and future history. This determinism was extended by Maxwell's electromagnetic theory. Even relativity is "a completion of classical physics (where) one can still maintain a deterministic position."

But, Dr. Bohr said, "We will see that the idea of determinism loses its logical possibilities of application." The concept of simultaneity, and its connection with ideas about causation, is thanks to Einstein, "relative and dependent upon the observer," Dr. Bohr said.

A closer examination of the phenomena with which Dr. Bohr chose to illustrate his talk will point up this general theme.

By examining several experiments Bohr showed that by using symmetry one could more fully understand the full physical meaning of phenomena.

The first example of using symmetry was the balancing of weights. Bohr showed without using any mathematical equations how the laws of levers could be proved by symmetry.



DR. NIELS BOHR

The second example was the classic experiment of Galileo at the Leaning Tower of Pisa. "The special point which was at issue was how different bodies of different weights would fall. It was . . . since the time of Aristophanes . . . assumed that a heavy body, which has a greater pull downwards, will fall quicker. Now Galileo actually proved that light and heavy bodies, if we look apart from the small effect of air resistance, actually fall equally quickly.

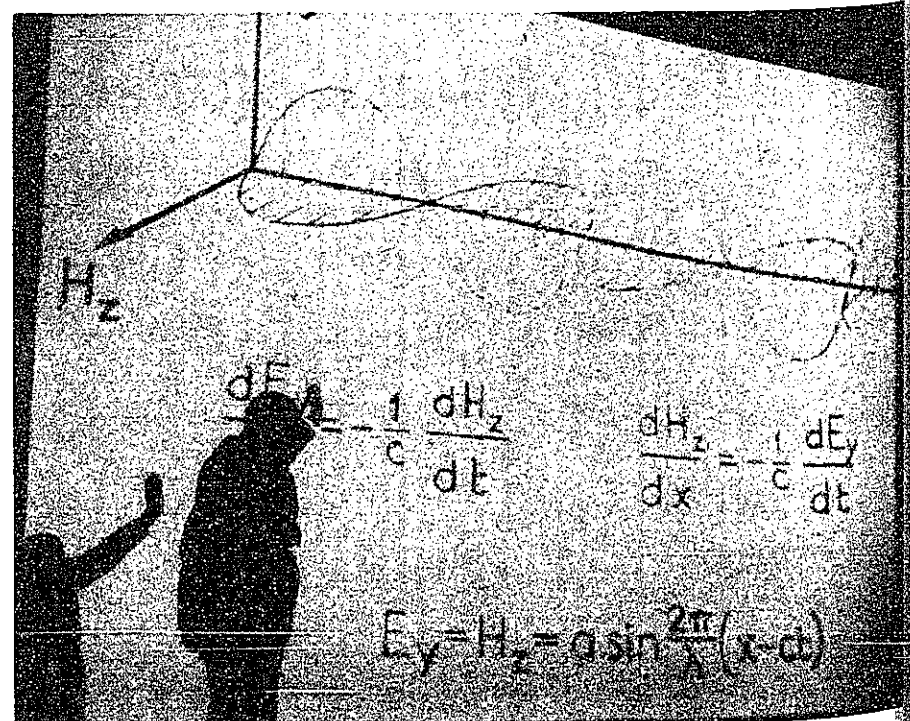
"But the symmetrical argument which came in here is that if we had two bodies released at the same time, they would fall (at the same rate) . . . And if we wind a fine cord around them, we have, so to say, one heavier body, and the gist of the argument is that the behavior of such a body should not depend on whether we choose to call it two small or one bigger."

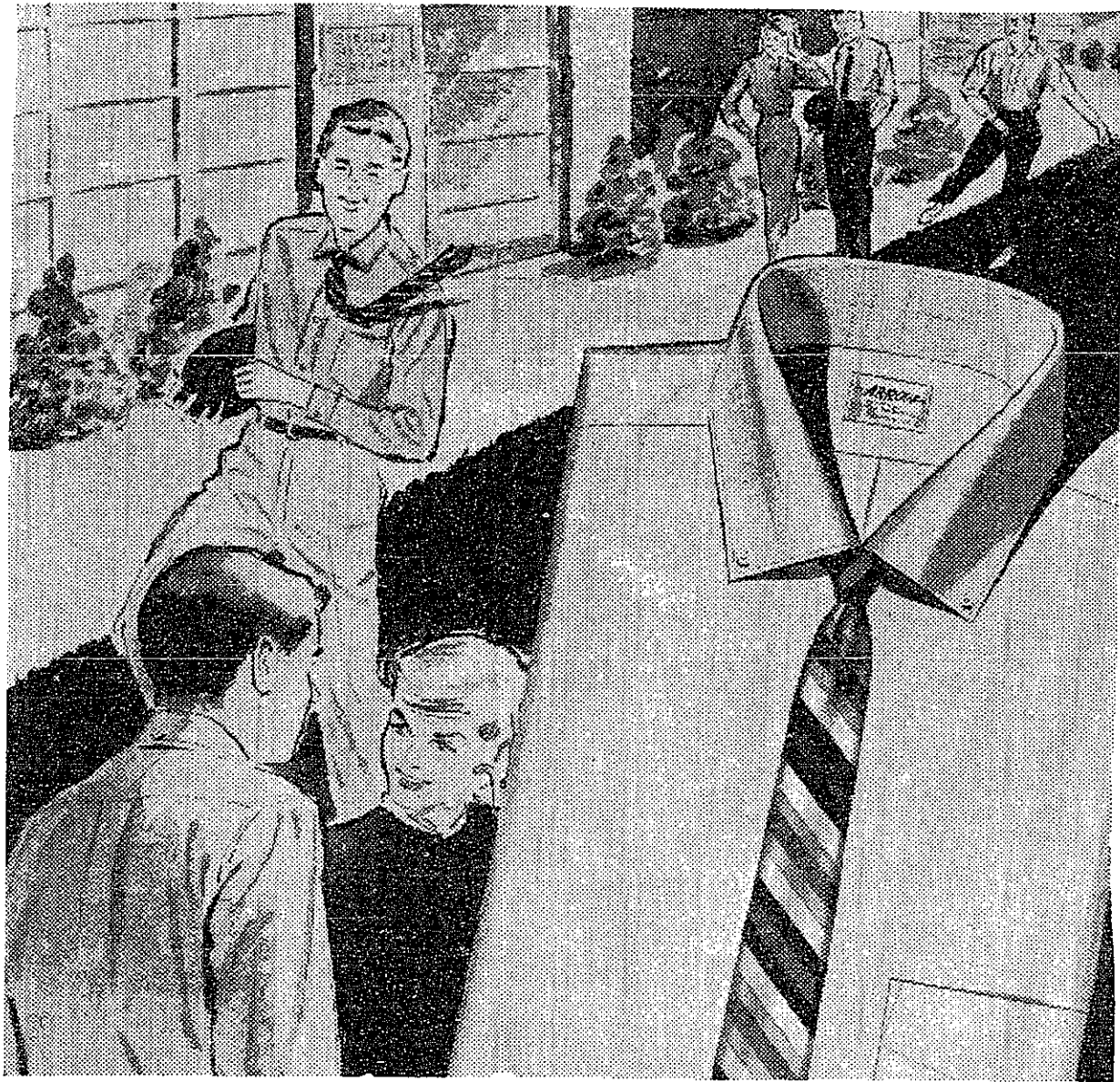
"That is also a reminder of that kind of argument on which classical physics developed."

Bohr then went on to show the fundamental separation of velocities into their various components. From Newton's Laws it was found that in principle if one could calculate the momenta and positions of every particle, then the state of all particles could be completely determined at any time in the future; that the system was completely deterministic.

From the Newtonian determinism, Bohr went on to the electric and magnetic interaction with matter and the existence of free electromagnetic waves. The existence of light and the finite time of propagation raised the question of absoluteness of space and relative velocities.

S.W.—L.H.





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- New England Telephone and Telegraph Company*
- The Bell Telephone Company of Pennsylvania*
- New York Telephone Company*
- The Southern New England Telephone Company*
- American Telephone and Telegraph Company*
- Long Lines Department*

Applicants will be interviewed for other regional operating companies in the United States and Canada.

WESTERN ELECTRIC COMPANY (Nov. 14, 15 only)

Manufacturing, purchasing, installation and distribution of equipment and supplies for the Bell System and national defense projects.

SANDIA CORPORATION

Research and development in electronics, mechanics, physics, and mathematics in nuclear weapon ordnance.

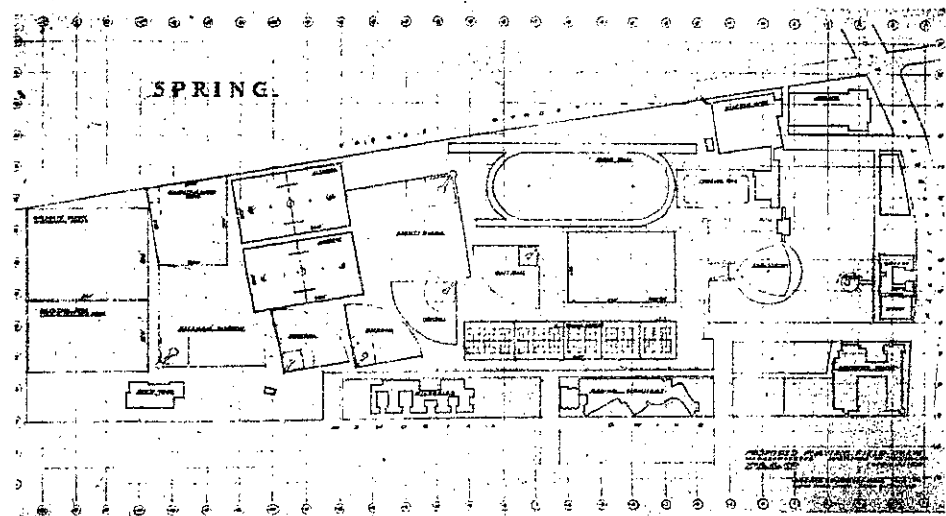
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NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY

Westgate Goes; Sod Moves In



Photo by Ron Pellar
This building in Westgate and many of its kind will be razed soon to provide for expansion of athletic facilities at MIT.



The spring athletic field layout will follow this pattern when improvement in the Westgate area is completed in 1959.

WESTGATE

(Continued from page 1)

tion, Dean Pietro Belluschi of the Department of Architecture, replied, "There is nothing definite yet, concerning plans for a new housing project. No plans have been either seen or made by the architecture department, but the Institute has several ideas in the pre-planning stages," said Dean Belluschi.

"Urban Renewal" Laws

For an example, the "Urban Renewal" laws may help solve the problem. These laws state, in effect, that valuable centrally-located property now occupied by slums or condemned buildings may be sold at a reduction in price below the current market

value as an inducement for industry or improved housing to take hold. The financial loss to the owner would be paid by the Federal and City governments in such a case. Since much of the land behind MIT along Vassar Street fulfills these requirements, it may be possible to buy and build on it, Dean Belluschi said.

Also, it may be possible to build on the land now occupied by the Smith House and Howard Johnson's restaurant on Memorial Drive near Westgate West, since the land is owned by MIT and the leases on these buildings expire on Jan. 31, 1961, says Assistant Treasurer P. A. Stoddard. However, all plans for future housing are indefinite at best, said Mr. Stoddard.

R.W. Hagopian Wins Traffic Fine Appeal; Pleads His Own Case

Robert W. Hagopian '58, accused of speeding, took his case to Superior Court and won acquittal in a jury trial last week.

Hagopian, a Course VIII senior from Wrentham, handled his own defense. To the arresting officer's testimony that he had seen Hagopian cut to the left of a row of stopped cars at an excessive speed, Hagopian answered that the arresting officer, separated from Hagopian by the bumper-to-bumper line, could not have actually seen him for the required five hundred yards. This, Hagopian said, was because the Mercedes-Benz 190SL, which he was driving, is too low to be visible.

Hagopian further argued that the arresting officer must have based his arrest solely on the sound of the car. Since, Hagopian said, the "190SL" was in first gear, with the engine R.P.M. in excess of 6000, the officer might be falsely led to believe that the car's speed was excessive.

The alleged violation took place in Newton, July 23. Hagopian pleaded not guilty in Third District Court, August 15, and was found guilty in the same court, August 22, and fined \$25—at which time he appealed to Superior Court.

Charter Flight To Europe Organizes Second Short Trip

Reacting to a tremendous response from the travel-minded contingent of the MIT community, the "MIT Charter Flight to Europe" organization has announced a second, shorter trip.

The dates and expenses for this flight are designed to fit the vacation period and budget of the would-be travelers. Allowing five weeks in Europe, it will leave New York on June 15, and return from Paris on July 19. Because this is an off-season period for the airlines, the share of expenses per passenger will be only \$280 for the round trip.

Hundreds Respond

Already more than 200 people have indicated interest in the flights by requesting information and application papers from the manager of the group, Stewart Mott '59, who may be contacted at 36 Alice St., Revere, or at REvere 8-5271.

The organization, in order to comply with laws governing such school charter groups, presented its constitution and by-laws to the Activities Council on Wednesday, October 30 and received provisional Class "B" status.

Macaya, Penna Beaver Scorers

SOCCER

(Continued from page 1)

quarters Tech continued to dominate play as the forward and halfback lines played together beautifully and kept the ball away from Brown much of the time. Further Beaver scoring was averted only by many good saves by the visiting goaler. Midway through the fourth quarter, Penna connected on a rebounding ball and placed it in the corner of the goal beyond the goaler's reach to increase the Beavers' lead. At this point Brown pulled up its halfback line in a desperate attempt to score and with only six minutes left, the visitors' center forward scored on a fast break, to narrow the lead to one goal. The defense tightened and the remainder of the game was played up and down the middle of the field with the Techmen in control as the final gun sounded.

Segovia Again Stands Out

Particularly outstanding were Rudy Segovia '58, probably the top goal-

er in New England, and fullback Eddie Changkasiri '58. Segovia made many brilliant saves as he has been doing all season and Changkasiri continually broke up the Brown attacks single handedly. The forward line of Herb Johnson '58, Dale Rhee '60, Petey Villavicencio '60, Manuel Penna '60 and Ernesto Macaya '63 once again proved too skillful for the opposing defense as they consistently moved the ball deep into scoring territory. The halfback line of Andrus Viilu '60, Bart Sensenig '58 and Huber Warner '58, provided the forward line with many fine passes and showed relentless hustle at midfield to make the difference in the game.

Dartmouth Next

The Beavers' teamwork was particularly sharp in this and has steadily improved as the season has progressed. This will be a strong factor when the Techmen meet a rough Dartmouth squad tomorrow at 1:30 p.m. on Briggs Field to end the regular season play.

Slawecki In Sloop Championship; Defeats Six In New London Races

Varsity sailor Jerry Slawecki '59 walked off with the first annual New England sloop championship last Saturday. Sailed at New London in the 24 foot Ravens of the Coast Guard Academy, Slawecki, with crews Jan Northby '59, Bob Slusser '60, and Charlie Baker '59, downed six other skippers to win the title.

MIT and Brown were the only colleges not to foul-out at least once; the other teams lost precious points in fouls in the close racing.

The races, held on the Thames River at the U. S. Coast Guard Academy were the first sloop championships to be sponsored in New England since the discontinuance of intercollegiate Star competition in 1951.

Eliminations Hampered

The eliminations for the races were somewhat bedeviled by bad weather plus Asian flu, but seven strong finalists competed in the round robin series. They were: MIT, Brown, Harvard, Trinity, Boston College, Coast Guard and Yale. Spinnakers were used in the race, and each college was represented by a crew of four.

ATTENTION

FINANCIAL MAGNATES!

Openings for candidates on the business board of THE TECH. Anyone interested come to THE TECH offices Saturdays at noon or Sundays 10 a.m. to 3 p.m. Or drop a note indicating interest to

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Right now, most of the Du Pont units are east of the Mississippi, but we have plants in Texas and on the Pacific Coast, too. In the past year plants were completed in Michigan, California, Ohio and Georgia. New plants are also under construction in Kansas, Tennessee, Virginia and North Carolina. Perhaps one of these locations has just what you're looking for in a job.

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Career opportunities at Du Pont are greater today than ever before because of the Company's continued growth. In 1957, Du Pont's sales were at the \$2 billion level. Four new plants were being built. New research programs were being launched, and new products were moving into the production and marketing stages. All of these developments tend to broaden opportunities at Du Pont for the young scientist and engineer.

ALL KINDS OF ENGINEERS

Students with chemical engineering and chemistry degrees are needed, of course. But the opportunities are equally great for students majoring in many other fields. And the type of work for these men varies greatly. Among other things:

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search and development as well as in plant engineering and production supervision.

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Booklets on jobs at Du Pont are yours for the asking. Subjects include: mechanical, civil, metallurgical, chemical, electrical, instrumentation and industrial engineers at Du Pont; atomic energy, technical sales, research and development. Name the subject that interests you in a letter to Du Pont, 2494-B Nemours Building, Wilmington 98, Del.

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bush leaguer
Grid Finals Begin Sunday

The Athletic Association has announced the schedule for the round robin intramural football finals which begin this weekend. Opponents within each division were arbitrarily selected for these finals, in which each league champion will play every other league leader in order to select a division champion. All games will be played at two o'clock on either field two or field four. The schedule is published at the end of this article.

Beta vs. Delt
Beta Theta Pi and Delta Tau Delta, unscored upon during regular league this season, meet this Sunday in a game that should be marked by outstanding defensive play. The Betas boast the better offense, however, and should manage to dominate the game.

The Delt's rugged defense, which accounted for their 2-0 victory over Theta Chi, is anchored by all star lineman Joe Timms '58. Timms could be instrumental in upsetting the passing punch of Rob Cross '59 to all star end Warren Goodnow '59. However, all star back Jim Russell '59, supported by the aggressive Beta line, should account for most of the afternoon's ground gains and set up Beta touchdowns. The success of the Delt offense will depend on all star back Dan Holland's ability to find his ends, particularly Dan Michaels '60, through the tight Beta pass defense.

SAE vs. Fiji
The second game in division A this Sunday pits last year's champion, Sigma Alpha Epsilon, against Phi Gamma Delta, which should prove to be the outstanding game of the weekend. The powerful S.A.E. squad that has compiled a streak of twenty-six straight games will find a worthy opponent in the spirited Fijis, who have come out on top in the rugged competition of League IV.

The offensive prowess of the Sailors lies mainly in their passing attack, led by quarterback Walt Humann '59. Humann, even without the services of Pete Hohorst, has two able re-

ceivers in end Fred Browand '59 and halfback Bob Thomson '58. Yet, this combination has never met up with such obstacles as John Irwin '58, Bruce Blanchard '57, and Ed Pollard '60, the formidable Fiji forward wall. The Fijis will attempt to crack the S.A.E. defense, which has suffered from the loss of lineman Bob McCullough '60, with a passing and running attack engineered by quarterback Al Beard '59. Beard will direct his passes to all star end Chuck Ingraham '58 and freshman Al Gaston, interspersing these passes with runs by Don Reynier '60 and Hal Smith '57. The outcome of this game, however, will depend on the extent to which the Fiji line can rush Humann.

Division B
TET vs. Phi Mu Delt
The first game in Division B on Saturday will pit Tau Epsilon Phi against Phi Mu Delta. Both teams will rely heavily on their passing attacks. The T.E.P.'s aerials will be thrown by Elliot Fineman '58 to all star end Marty Goldstein '58 and Dick Pack '60. Defensive standout should be Dick Rosen '58, offensive guard and defensive end. The Phi Mu Delta passes will probably go from Joe O'Connell '60 to Lennie Eng '58. Their defense is anchored by Al Schallenmuller '58.

Baker vs. 5:15
Baker House takes on the 5:15 Club in Saturday's second game. The 5:15 Club, sparked by all star back Jack Pogarian, will find a tough opponent in the Baker House eight. Baker, protected by the line of Frank Tapparo '60, Steve Halprin '60, and all star Dick Sherman '58, will bank on the passing combo of Marv Alper '59 to Ron Rosenberg '59.

- PREDICTIONS**
Beta Theta Pi 13—Delta Tau Delta 0
Sigma Alpha Epsilon 13—Phi Gamma Delta 7
Tau Epsilon Phi 13—Phi Mu Delta 6
Baker House 19—5:15 Club 13
- SCHEDULE FOR INTRAMURAL FOOTBALL FINALS**
- Sunday, November 10
Beta Theta Pi vs. Delta Tau Delta: Field 2
Phi Gamma Delta vs. Sigma Alpha Epsilon: Field 4.
- Sunday, November 17
Beta Theta Pi vs. Phi Gamma Delta: Field 2.
Delta Tau Delta vs. Sigma Alpha Epsilon: Field 4.
- Sunday, November 24
Beta Theta Pi vs. Sigma Alpha Epsilon: Field 2.
Delta Tau Delta vs. Phi Gamma Delta: Field 4.
- Saturday, November 9
Tau Epsilon Phi vs. Phi Mu Delta: Field 2.
Baker House vs. 5:15 Club: Field 4.
- Saturday, November 16
Tau Epsilon Phi vs. Baker House: Field 2.
Phi Mu Delta vs. 5:15 Club: Field 4.
- Saturday, November 23
Tau Epsilon Phi vs. 5:15 Club: Field 2.
Phi Mu Delta vs. Baker House: Field 4.

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Harriers Victorious; Engineer Frosh And Varsity Defeat Tufts

Fielding a complete squad for the first time this season, the MIT cross country team defeated Tufts University Wednesday 26-31 at the latter's home course. Superior depth spelled the difference as the Tech harriers captured six of the first nine places, although they failed to gain first place. The Beavers swept the day as the frosh array was also victorious, 24-35.

Pacing the Cardinal and Gray attack was Bob Murano '60, who copied second spot in 22:33, Captain Rod Swift '58 and Duncan Ewing '58 followed in fourth and fifth positions, respectively. Completing the MIT tally were Dan Oliver '60 and Bob Cooper '58 in seventh and eighth slots.

The course, although beginning and ending on grass, was mostly on pavement throughout its approximate four-mile length.

Frosh runner Brian White led the yearlings to victory, as he won by a single second in 13:46. Also scoring were Herb Wegener, Bob Hurd, Herb Grieves, and Larry Coon.

This meet was the last of the regular season; however, on Monday seven-man squads from both the freshman and varsity teams will compete in the New England AAU Championships at Franklin Park. The Engineers will be out to beat Maine, who were last year's victors and who have already annexed the Yankee Conference Championship, and to improve on their seventh place finish. Among the outstanding runners will be MIT's Bob Murano, who finished seventh in last year's freshman competition, and Brian White, 1956 Illinois scholastic cross country champ.

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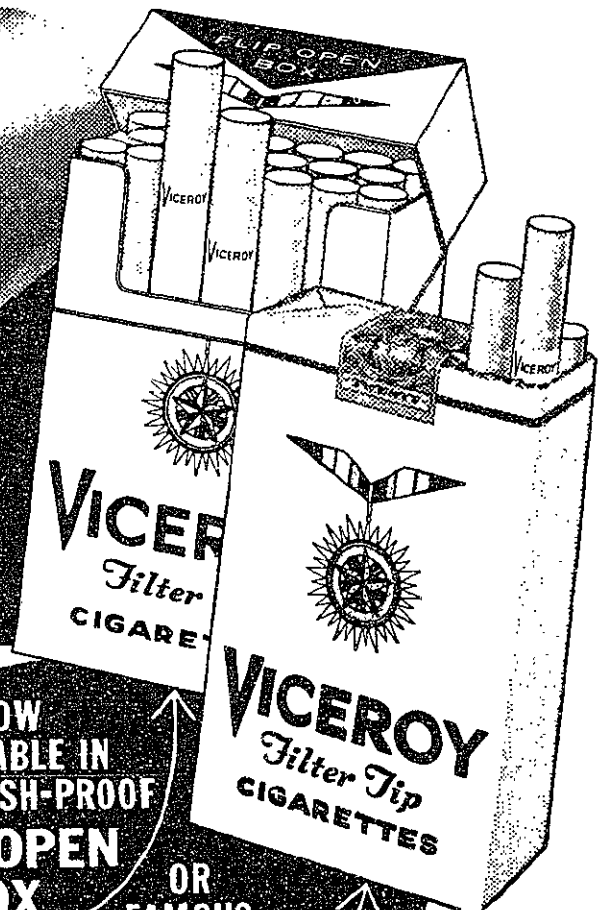


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