SATELLITE TO GIVE PIECES OF INFO
Talking to a full house in Kresge at evening, Dr. N. Whitney Mathews, project manager for Project Vanguard, explained the contributions the US satellite program will make, commented on the status of the Soviet Union and described the operation of the Vanguard satellite.

"It is Dr. John T. Hagan, Jr., of project Vanguard, who was inclined to speak until the news of the Russian satellite came in." Since last Wednesday, he has been working day and night gathering information on that subject.

"If even 1 working information were to be sold, we wouldn't have a ghost of a chance to decode it." He explained the unexpected weight of the foreign moon, how it moves around the earth, and rocket was delayed.

"It's all in the question," he said. "how should the Russians be situated?" he continued, however, that we have at least one such device which could be launched, but that at the present time the satellite is doing important testing through very extreme testing.

"It is the upswing of the moon, the IBM 704 was fed to the satellite," he said. "It will contain a 6 channel telemetering circuit which will send data concerning weather conditions with particles, and radiation from the sun. Later satellites will measure nuclear radiation, and transmit atomic data. He stressed, however, that just having a satellite can give much information concerning the outer atmosphere from path characteristics.

Satellite is transmitting with a power of one watt at the 20 and 40 meter bands. Mathews said the first 1 satellite could be decoded up on a slightly higher band.
The story was never found out if the current satellite is the one that will be done by MIT's IBM 704 computer to get the geophysical data. The MIT scientists have already attached from it when it reached the observatory the information would be sent through the Moonwatch, the 704 could "obtain the necessary details."

From the minimum height they would give proper answers. This, according to Dr. Whipple, he adds, can often be traced to physical forces like the unusually high ones of the atmosphere. Those who took apartments simply out of curiosity, and this, Dr. Stratton says. In the past, there has always been a sizeable number of upper-classmen who took apartments simply as a matter of convenience.

Referring to the Institute's acquisition of the "moon men" and Baker, he says, "I only wish we had been able to do it another way."

The correlation between height of the satellite and its life-span, according to Dr. Lautman, indicates that at least one of the satellites was not even a true satellite at all. He believes the data of the satellite may have been mistaken for the earth's.
Kibitzer

S-K 8 5
H-4 2
D-A J 9 7 5
C-A 7 2
S-Q 9
H-K-Q 10 9 8
N W E D-Q 8 6
C-Q 8 6
S-A 7 6 3
H-A J 5
D-K 3 2
C-K 5 4

The bidding:

E S W
1NT P 2NT P P

Opening lead: King of hearts

An abundance of high cards did not prevent South from finding a way to go down on this hand. Two bid plays were necessary, and declarer rose to the occasion at each opportunity.

The play of the hand was short, but not sweet. West's king of hearts wasobbled up by the ace, at which point declarer decided the contract depended on the diamond finesse. East won the queen of that suit, returned a heart, and after four more tricks had been cashed by the defense, the hand was spread for down one.

The key to the correct play of the hand is the prevention of a heart lead by East, through declarer's tensest, before nine tricks have been established. Thus, the first heart lead should have been declared, leaving West in the lead. West must switch suits, lest the jack of hearts win a trick, after which South will take the losing diamond finesse. East won the queen of that suit, returned a heart, and after four more tricks had been cashed by the defense, the hand was spread for down one.

Among America's great savers, George T. Coffee is a legend. One day, George discovered that by going to sleep with his shoes on, he could save a full 66 seconds dressing in the morning. Multiplying this by 365 days gave him over 6 hours saved per year. Thus, multiplying this by 4 years—gave him 48 hours—or two full days saved! George was aghast. "Think of it," he mused. "Two full days saved to do anything... read, sleep, or go to Europe?"

Another time, George passed a store that advertised "Save $100 When You Buy Those $100 Suits!" George immediately saw the fantastic opportunity—realizing that he could save $100 by not buying any of these suits. Therefore, he proceeded out to buy ten suits and ended up with a tidy $1,000 in a few seconds.

However, the best saving George ever did by far—was when he happened on the Van Heusen Vantage suit. Vantage is a shirt you don't have to iron... so you save on laundry bills. Wash it, hang it up to dry—-that's it. "What, you mean, "ain't there other shirts that one to the same thing?" "Mebbe" we laugh, "but Vantage is a cotton shirt—with all of cotton's natural softness, personality, and comfort. And it slips on in a flash."

Men—grab a pencil in your right hand. Figure out your laundry bill for shirts for a year. Then figure out the price for seven Vantage shirts. You'll find that Vantage shirts actually pay for themselves in the laundry bills you save. See you at the bank.

P.S. You can also save yourself the trouble of searching for lost collar-stays. For Van Heusen shirts have Collarite™ collar-stays which can't get lost. Keep the collar neat, always.
President Killian Releases Annual Report For 1956-1957

More Benefits For Faculty Urged; Teachers Needed At College Level

In his report, President Killian states that "Private institutions, as well as the nation, must work together and raise more funds to operate excellence centers of higher education, both for industrial development and for education itself."

Support To Increase; With Tuition Waits; Urges Local Support

In his report, President Killian points out that many students are averse to borrowing and that MIT's aim is to help students by increasing the number of scholarships to several times the present number and amount and number of scholarships--that scholarships should include (when feasible) provisions of funds for travel (institutions--to pay for the cost of educating the student above what he pays through fees and tuition.)

He estimates that MIT's work program has grossed $29 million and number of scholarships to $145,000,000 per year, exclusive of stipends paid to grad students.

Improvements In All Fields During'56-57

In his review of the year in general, Killian says that MIT has made many advances made by the MIT community in the past year.

In particular he pointed out the new program adopted by the department of Electrical Engineering which "Greatly increased the choices of subjects available to students majoring in engineering," to satisfy many requirements with electives in upper years.

The Civil and Sanitary Engineering Department took the "liberal arts" approach and the MIT Faculty of Architecture was expanded to include a new program that would allow students to complete their studies in four years.

Also mentioned was the Mechanical Engineering department's new curriculum in the field of mechanics, the new Engineering department's efforts to make undergraduate education more effective and the creation of new fields in the project in the Humanities department.

(Continued on page 9)
Insecomm Advisory Councils Plan
To Investigate Problems At MIT

Insecomm Committee has formed several internal advisory councils to investigate specific problems at MIT. Acting on the recommendation of Committee president Arnie Amstutz '59, Insecomm plans to find out where and why past activity in this realm has not always been meaningful. With this information they will then form definite methods of attack.

The first council formed will investigate communication between the faculty and the students. Executive Committee will contact members of the faculty staff and Liaison Committees will transmit the information.

A tentative agenda of another council includes the problems of Insecomm publicity. The group plans to study a systematic and effective use of The Tech and WDRB to acquaint MIT men with the activities of the Institute's student governing body. The cumulative average system of figuring a man's standing will be examined. A group will find out what the faculty thinks of the exam, and what other grading systems could be used if the exam is abolished as the measure of scholastic standing.

The pros and cons of adopting a candidates method of testing in the advanced classes will be examined. The nature of instructors and students, administrative difficulties and other aspects of the proposal will be discussed.

Another council will look into the design of the senior ring. Possibility of a design change will be the major topic of discussion in this group. Activities of the National Student Association will be the topic of study in another group's meetings. The methods and progress of higher education on other campuses across the country will be discussed. Recommendations will be made to the Institute if anything worthy of attention is found.

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Favorites Intramural Football Starters
Betas Romp, Sailors Win, Fijis Edge Grad House

Division A
League I

Using their talented passing attack to great advantage, Sigma Alpha Epsilon boomed Alpha Epsilon Pi 21-6, in a bay afternoon. Although the losers registered the first touchdowns of the game, their lead did not last long. With powerful offense, sparked by tailbacks Walt Humann '59 and Lou Hudders '59, the Betas swung into action to tally twice. Thorley Connard another three times to give the game to round out the scoring.

In the other Sunday League I encounter, Sigma Chi trounced Psi Lambda Phi 25-0. The victors tallied in each of the first three periods to get the decision. Jim Long '59 threw to Mark Jones '58 for the initial score late in the opening stanza. Ford Marshfield '58 bolted a 71 yard post and then fell on it for a t.d., just before the half. LongBig with Larry Flannagan '57 for the final marker.

League II

Displaying powerful ground and aerial attacks, Beta Theta Pi trounced Phi Kappa Sigma 34-6, Sunday. The hard-charging Betas left their opponents very little time to pass, and effectively throttled the PKS offense. The Betas' Jim Russell '58 getting excellent blocking, scored the first of the seven touch-downs. Fresh quarterback Gary Foster then hit Tony Addicks '56 in the end zone, and followed with a 75 yard run. In the third quarter, Russell tallied again. Gilbert tossed two more scor- ing aerials to complete the rout.

With a touchdown pass in the first period, Delta Upsilon supplied Sigma Alpha Mu's 6-0, in a hard-fought game Sunday. The BU attack was led by John Roberts '61, who hit Bob Shelton '57 three times. With Dan Holland '58 doing double duty in the backfield, Delta Upsilon easily defeated Sigma Alpha Mu.

League III

Led by the passing of Dick Boyle '58, Theta Chi downed Sigma Alpha Epsilon 35-5, Saturday afternoon. Bob Repeta '58 and Mac Jodar '58 were the standouts for the Big Eg- offensives, which was halted by the victor's powerful line.

With Dan Holland '58 doing double duty in the backfield, Delta Upsilon easily defeated Sigma Alpha Mu.

League IV

Sparked by a group of seasoned veterans, Phi Gamma Delta edged a tough Grad House squad 14-12 last Saturday. The FIJI line offered good protection to quarterback Al Bond '59, who varied his plays well enough to push across two t.d.'s and the pair of extra points. Chuck Hughes, offen-

dive and defensive standout for the losers caught the two scoring passes and accounted for almost all their offensive gains.

The FIJI first drive for joy dirt was blunted on a pass from Bond to Freshman and AI Gasser. Bond turned again for the all important extra point. Grad House backed back on Paul Zanot tossed a scoring aerial to the chlorine Hughes, but they missed the point after attempt. Hal Smith '59 was selected for the week's MVP award at Quarterback. Zanot will hit Richie Johnson '58 in the end zone, midway in the second quarter.

Phi Nu Delta 13 Phi Kappa Sigma 0

League VIII

Phi Nu Delta 13 Phi Kappa Sigma 0

Theta Delta Chi 0 Baker House 15 Lambda Chi Alpha 0

Phi Kappa Sigma 0

League VII

5:15 Club 20 Chi Xi 7 Grad. House Diblik 0 (Chi Xi won on first downs in the second overtime).

League VIII

TP 0 Sigma Phi Kappa Sigma 2 East Campus 0

Our "Countryude" sport jackets, correct for campus and town wear, in a new, lightweight wool Shetland that's leamed exclusively for us in Scotland and tailored in our own popular three-button, hooded-vest model. In a range of browns, greys and lavas; sizes 36 to 46; regulars, shorts, longs, $8.50.

Your Career Opportunity

in research and development of missile systems

Postdoc to opening now in these fields


U.S. CITIZENSHIP REQUIRED

ON-CAMPUS INTERVIEWS

Tues. and Wed., October 15-16 9:00-12:00 M., 1:30-5:00 P.M., Room 1-171

Fulbright Grant Competition To End November 1

Competition for Fulbright and Bureau Aeronautics scholarships is open to graduate students. All U.S. citizens who were born on or before November 50 will close November 1, if not announced by Kenneth Holland, Ful- bright program director of the Institute for International Education.

Fulbright awards for post-doctoral study and research in Europe, Latin America and Asia for transportation, tuition, books and maintenance are available under the terms of the Fulbright Act. In 1950 the Fulbright Aeronautics scholarship provides transportation from the U. S. government and maintenance from the government of the host country.

Eligibility requirements for these foreign study fellowships are United States citizenship, a college degree or its equivalent by the time the award is to be used, knowledge of the lan- guage of the country of application sufficient to carry on the proposed study, and good health. Preference is given to applicants not more than 35 years of age.

Countries where U. S. graduate students may study under the Ful- bright Act are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Israel, Italy, Japan, the Neth- erlands, New Zealand, Norway, the Philippines, and the United King- dom. In addition, this country and the Philip- pines, and the United King- dom. In addition, this country and the Philip- pines, and the United King- dom. In addition, this country and the Philip- pines, and the United King- dom. In addition, this country and the Philip- pines, and the United King- dom. In addition, this country and the Philip- pines, and the United King- dom.
Beaver Booters Deadlock Amherst
Evans Scores Twice, Penna Once

Last Saturday at Springfield, Tech's varsity booters tied their first house game against Amherst, Col-
lege. The final score was 3-3.

Facing one of the stronger teams in the league, Tech got off to a slow start, as the Jeffs took the lead by scoring twice in the first quarter and again in the second. Roth of the booters was kept pointless the first two goals were kicked point-

and again in the second. Roth of the booters scored twice in the first quarter, as the Jeffs took the lead by

half way through the first period. Half way through the second, MIT took the better control of the game scoring once in each quarter. Half way through the last half, MIT took the better control of the game scoring once in each quarter. Half way through the third quarter Tech's Right Side line and passed to the center where Bill Evans '58 received a long pass from Capt. Rod Cameron '59. At the end of the game MIT came close to

receiving a long pass from Capt. Rod Cameron '59. At the end of the game

the last goal for the Engineers was

able to break the deadlock.

There were two overtime periods of

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