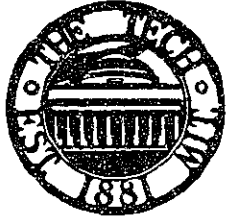


The Tech



OFFICIAL NEWSPAPER OF THE UNDERGRADUATES OF THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY

VOL. LXXVII NO. 41

CAMBRIDGE, MASSACHUSETTS, TUESDAY, NOVEMBER 19, 1957

5 CENTS

Bohr Attends Open World Seminar; Chipman Reveals "Steel Curtain" New Lincoln Lab Radar Watches Sputniks; For Ballistic Missile Defense Research

In the last of four speeches at an Engineering Faculty Seminar held in Kresge, Friday, at which Dr. Niels Bohr was guest of honor, Dr. John Chipman of Metallurgy gained more attention and response from the audience than any of the other three speakers who preceded him, by announcing that America and not Russia was the blockade to at least one plan for exchanging grad students between the two countries.

Professor Chipman first stated that an ambition he has long held was a mutual exchange of at least one thousand graduate students in metallurgy between America and a Russian metallurgical institute in Moscow. As a start, he said, he had proposed to the director of this institute that an exchange of just two students from each country to be tried. The Russian response was instant and unexpected acquiescence, even to the extent of offering to teach the Americans the Russian language. (The Russians would already know English.) The bombshell of the speech, however, was that the American response to the Chipman proposal was a flat negative—also unexpected. Certain areas of the U. S., most of Massachusetts included, are closed to Soviet citizens; although the Russian students would be allowed in Cambridge they could

not for instance cross the Mass. Ave. bridge to Boston. "It was as though," said Chipman, "we had found a tiny niche in the hitherto impenetrable Iron Curtain of Russia, only to run into the high-strength, chromium-plated Steel Curtain of America—in which there is no niche."

"Open World"

Other speakers at the seminar, entitled "The Open World", were Professors Manson Benedict of Nuclear Engineering, Walter Rosenblith of Electrical, Ascher Shapiro of the M. E. Department, and Dr. Bohr, the guest of honor. The subject, free exchange of ideas and information between scientists of all nations, was admittedly chosen for discussion during Dr. Bohr's visit to Cambridge because of his deep interest in it, as evidenced by his open letter to the U.N. at the time of the Geneva Convention. The moderator was Professor Walter G. Whitman.

Attendance Higher Than Expected

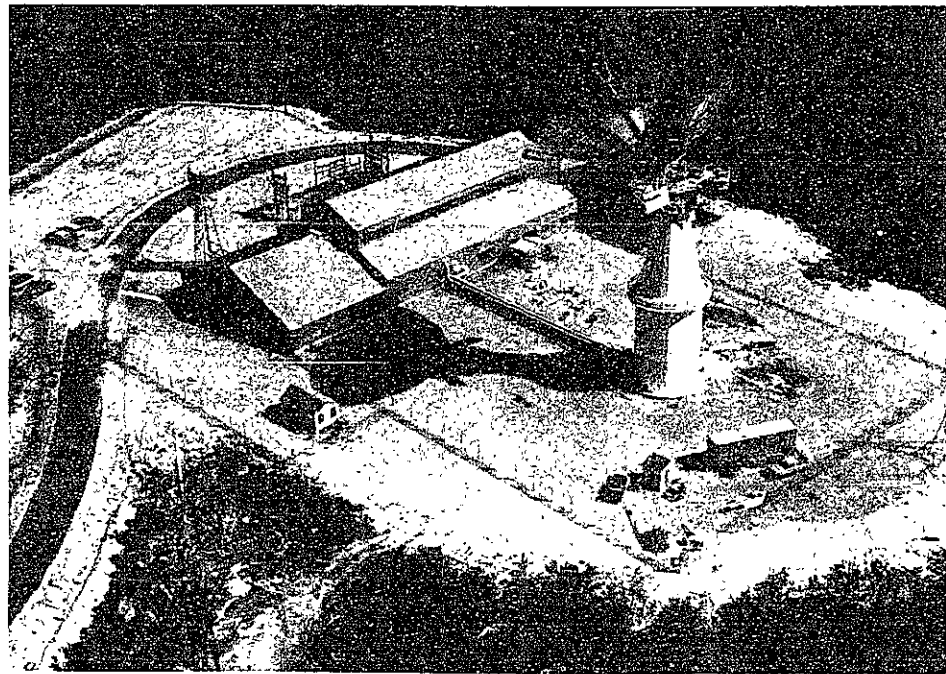
Attracted by the name of Niels Bohr (which seems to have an almost magic quality at Tech as far as boosting attendance is concerned) more than 500 members of the MIT community made their way to Kresge for the seminar which was originally intended for an audience of approximately twenty in the Library Lounge.

Announcement of a new long-range radar, which, it was revealed for the first time, has been used in observing Russian satellites, was made in New York last night by Dr. Julius A. Stratton, Chancellor and acting President of the Institute.

The radar, on Millstone Hill, 35 miles northwest of Boston, was installed by Lincoln Laboratory for research in the problems of ballistic missile defense, Dr. Stratton said.

Referring to the work being done, he said, "What is often forgotten is that such projects are based upon a great amount of pure science, which a university with trained personnel and facilities is especially qualified to provide . . ."

"Only forty-five days have passed since Sputnik transformed the Buck Rogers of fiction into fact. The impact upon the world is heavy and perhaps has brought us to a turning point in history. Science, not masses of the bravest men, will be the major factor in peace or war in the future. Never has the Soviet Union given a more spectacular demonstration of its strength than with the two earth satellites. It does no good to argue that the totalitarian state can drag on its scientists and arrange priorities so the crash programs can be made possible. The basic warning given by the Sputniks is that our nation must seriously look to the fundamentals of science teaching performing and supporting scientific research in order to maintain technological supremacy, and with this, a fresh attitude regarding utilization of scientists and technologists, both by government and industry."



Experimental high-power long-range radar installation developed by MIT Lincoln Laboratory at Millstone Hill in Westford, Massachusetts.

The radar has been detecting the Russian satellites at remote distances since their launching. These detections have verified the orbits predicted by scientists.

Sputnik II was first observed at Millstone at 5:12 on the morning of November 7. Measurements of range, elevation, and bearing were made from these readings. The satellite's altitude at this time was 152 miles.

The installation required new tools and developments for the radar and its associated equipment. A transistorized computer processes the signals from the radar at a very high speed. A tape printer records the information from the computer. High-power klystron tubes, eleven feet in height, provide the transmitting power.

The antenna system consists of a parabolic reflector, eighty-four feet in diameter, mounted atop a concrete and steel tower ninety feet high. The rotating portion of the structure weighs ninety tons. It can turn through 360 degrees in the horizontal plane and 90 degrees vertically, thus sweeping the sky.

The antenna is positioned with such precision that bending of the tower caused by the sun's rays cannot be tolerated. To secure maximum reflectivity and minimum bending the tower is painted white.

The Millstone Hill facility will be an integral part of the North American ballistic missile radar. It will be used in conjunction with a proposed detection station in the Canadian province of Saskatchewan.

Motorless Flight Research

Dr. August Raspet To Address AES

The Aeronautical Engineering Society, better known as the MIT Glider Club, and the Student Branch of the Institute of Aeronautical Science will sponsor a talk by Dr. August Raspet on "Motorless Flight Research," on Wednesday, November 20. Dr. Raspet is head of the Aerophysics department at Mississippi State College and is a world-renowned expert on the subject of gliders and motorless craft.

Boundary Layer Control

Some of the topics Dr. Raspet will cover are boundary layer control research, bird flight research and micrometeorological research. The first topic has been the subject of much research by Dr. Raspet and his colleagues. In Boundary Layer Control (BLC) attention is centered on the thin layer of air right next to the skin of the plane. By the use of streamlining and a perfected method of applying suction to the wings and fuselage, maximum BLC may be attained. Applying these principles, Dr. Raspet has attempted to perfect a "flying bicycle" which could be powered solely by the flyer himself.

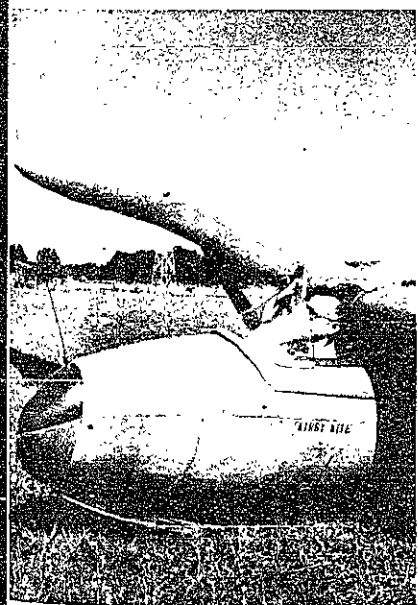
Applications of BLC

Applications of BLC to commercial flying would enable airplanes powered by ordinary reciprocating engines to increase their present speeds by 225 percent. Through BLC Dr. Raspet believes that jet planes could fly almost as economically as prop-driven craft. Dirigibles and submarines could also operate more efficiently with BLC.

Dr. Raspet's second topic, bird flight research, will cover his observations of bird flight and their applications to his study of motorless flight.

The third topic, micrometeorological research, is a new field in aerophysics, and Dr. Raspet hopes to shed some light on this interesting subject.

The meeting will be held in Room 35-225 at 5 p.m. The public is invited.



Aerophysicist Dr. August W. Raspet of Mississippi State College awaits a tow for his experimental sailplane. Dr. Raspet will speak here tomorrow in an open AES meeting.

Harvey Notarius Is TCA Member Of Year

At the October 30 meeting of the Technology Community Association Harvey J. Notarius '58 was elected to the Cabinet Honor Roll as outstanding member of TCA for the year 1956-57. Notarius is now completing his second year as Vice-President in charge of Social Service. Under his guidance several new programs of service to MIT and the Greater Boston community were initiated. Among them are a Science Club program run by MIT students at Elizabeth Peabody House, Christmas parties and an Easter Egg hunt for children from nearby settlement houses.

Notarius is also a member of the American Chemical Society and is studying in Course V. After graduation from the Institute, he plans to do graduate work at the University of Michigan.

Inscomm Members For Dropping Class Reps; Freshmen Disagree

The motion raised at the November 7 meeting of Institute Committee, providing for a major change in representation, has been warmly received by most Inscomm members. UAP Arnie Amstutz '58, AA President Dan Holland '58, and the upper-class representatives all approve the plan, presented by Bob Jordan '58, IFC Chairman.

Amstutz thinks that the new representation would provide better contacts between student body and student government, since class representatives generally have less contact than living group or activity reps. He approves of the motion as it stands, although he would like to see WTBS considered for a seat, along with the AA, TCA, and *The Tech*. This view is shared by most Inscomm members contacted, as is the opinion that as of now, no change should be made in living group representation. As Class Representative Larry Spiro '59 said, "It would be a good thing to have such a change take place in Inscomm at this time, since there has been no change for the past five years. However, a complete reorganization would be unadvisable."

Most Inscomm members are solidly behind the seating of an AA representative.

The James R. Killian Farewell Convocation, cancelled yesterday, will almost certainly never be held. Robert M. Briber '52, speaking for the Administration, said yesterday that Dr. Killian's commitments in Washington, which first necessitated the rescheduling of the Convocation from today to Friday, were the reason for the cancellation.

As for the future, Briber said that it would be "too cumbersome" to schedule the Convocation on an "on again-off again basis" with the resulting re-scheduling of academic schedules.

AA President Holland felt that Inscomm should work for better communication with the students concerning athletic activities. He also said that Inscomm should make a definite statement on their approval or disapproval of Field Day activities.

The class representatives now in office would not be removed by the new amendment, but no successors would be elected. The representatives of the sophomore, junior, and senior classes all feel that dropping their offices would be a gain for Inscomm.

Strongly dissenting with these views was Dorsey Dunn '61, newly elected Freshman Class Representative. He stressed the lack of freshman representation on the council, and said that, rather than dropping class reps because of a lack of communication and class unity, it would be far more advisable to work on improving communication and contacts. He feels that three activity reps could easily be added to Inscomm without dropping class reps, and not create an unwieldy organization.



William C. McLaughlin, staff member of MIT Lincoln Laboratory, measuring and recording radio observations of Sputnik I on both 20 and 40 megacycle frequencies simultaneously.

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MIT SYMPHONY ORCHESTRA

John Corley, Director

Overture—"Iphigenia in Aulis", Gluck; Concerto No. 1 in E flat, Liszt; Symphony No. 3, Hanson.

On Saturday, December 16, the MIT Symphony Orchestra under the able direction of John Corley gave its first concert of the season in Kresge Auditorium.

Opening with the Overture to *Iphigenia in Aulis* the orchestra, after a false start, proved itself to be a most competent organization. The strings were delicate yet assuring in the introduction, and, as this theme was developed they produced fine crescendos and decrescendos until the brasses entered with beautifully crisp, yet sonorous, telling notes. Throughout the overture the balance among the different sections was superb. Aside from the fact that all the first violinists had their own ideas about bowing, the performance of this first work was very well received.

With Jerry Litton, MIT '60 as soloist, the orchestra next performed the Liszt piano concerto No. 1. Mr. Litton is a very capable player and considering that MIT studies do not allow much time for practice, he gave a most commendable account of himself. Your reviewer felt, however,

that Mr. Litton played too "noisily" and at times had little regard for refinement in his phrasing. The orchestra was weak in places and this was especially evident in the cello section at the beginning of the slow movement.

Your reviewer cannot report on the Hanson for a previous engagement forced him to leave at the intermission.

The director, John Corley, who took over complete musical responsibilities of this organization only a few short years ago, has built the MIT Symphony Orchestra into an excellent musical group of which the MIT Community should be justly proud. Judging from the good attendance and response of the audience, we have much to look forward to in the musical pursuits of the MIT Symphony.

—Allen C. Langord '58

kibitzer

S—10 6 5 4 3 2

H—10 7 5 4 3

D—10 7

C—

WEST

S—9 8 7

H—9

D—J 8 6 5 2

C—8 7 6 3

EAST

S—K Q J

H—A K Q J 8 2

D—

C—Q J 5 4

SOUTH

S—A

H—6

D—A K Q 9 4 3

C—A K 10 9 2

The bidding:

N	E	S	W
—	2H	P	5D
P	P	P	DBL
P	P	RDBL	P

Opening lead: nine of spades

This hand from a recent party session provides a good lesson for the beginner to never give up even when it appears that all is lost. Remembering seemingly worthless cards in the dummy pays off.

East had a logical, if shaded opening. South did not want to take any chances on being left below game. He could see only two losers with any kind of normal distribution, regardless of partner's strength. East doubled, regardless of partner's strength, on the obviously poor distribution and high cards, while South, still bold to the end redoubled.

West opened the nine of hearts. When the dummy was spread, South was disheartened to see that it provided no means of setting up the club suit by two finesses. However, it was noted that if clubs broke 4-4 there was still a chance to bring home the contract losing only one club and the heart. So South proceeded along this line.

West took the opening lead and returned the suit, South ruffing. South layed down the top two clubs, ruffed a club in the dummy, returned to his hand with the ace of spades and led another club, uttering the words "There is a God after all" when the suit broke. South, with visions of an overtrick, now trumped a spade to get back to his hand, and proceeded to extract trumps. He got the rude awakening on the first lead when East showed out. West now had more trumps left than declarer, and it looked to declarer as if he were going to lose the jack of diamonds as well as the ten of clubs to go down one. However, South kept a level head and drew one more round of trumps.

South then saddled West with the lead by playing the ten of clubs and gathered up the last two tricks as West was forced to lead with him.

Note that besides the club break, the key to South's success was in dummy's "worthless" holding, namely the ten of diamonds. Had East drawn this card the end play would have failed.

NORTH

S—10 7 6

H—

D—

C—

WEST

S—

H—

D—J 8 6

C—

EAST

S—K

H—Q J

D—

C—

SOUTH

S—

H—

D—Q 9

C—10

—Earl Rogers '59



BUTTON-DOWN WINSOCKI!

College students love shirts with button-down collars, but we've never known exactly why. So Van Heusen's research department asked around and got the following answers.

L.B. Senior at Mass. Institute of Entomology. "The buttons keep things from crawling under your collar. Or, if things do crawl under your collar, the buttons prevent them from crawling out again."

D.D.E. Freshman at Horatio Alger Tech. "You get more buttons so I figure the shirt is more valuable. Is it?"

B.P. Junior at the Pate School of Tonsorial Arts. "They're cooler! Wisps of air blow through the little hole in the button and keep my clavicle at a refreshing temperature."

P.S. Senior of Makemoney's Correspondence School. "I'm a neurotic. With Button-down

shirts I can wear one side buttoned and the other side unbuttoned, thereby giving the effect of wearing two types of shirt at one time. Oh help me, help me!"

Z.J. Graduate student at the T.S. Swinburne School of Beautiful Experiences. "Buttons remind me of pearls. Pearls do remind me of oysters. Oysters remind me of indigestion. Indigestion reminds me of my doctor. My doctor reminds me of his nurse. She's gorgeous. Gorgeous! So the more buttons the better."

Yes, there's agreement that button-down collars are the thing. And there's further agreement that Van Heusen is the king of Button-down stylists. Just take a look at Van Heusen Oxfordians next time you're in the market for shirts. You'll see immediately why they're famous. \$5.00.

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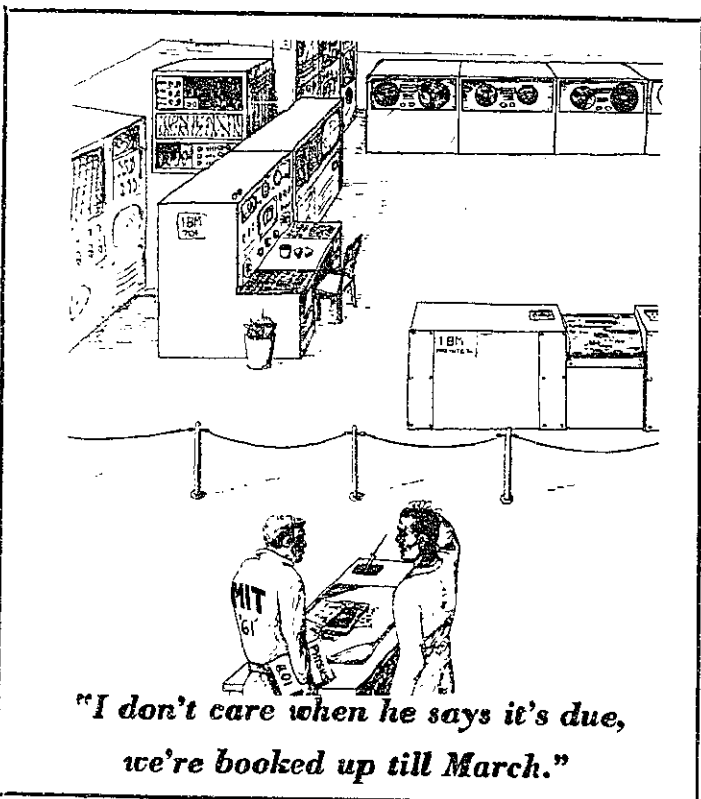
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Mass. Beauty Queen Will Be Top Prize In Soph Raffle

On the assumption that wine, women, and song are the primary extra-curricula activities of the MIT student and personnel, the sophomores will begin a campaign this week to satisfy these desires, and, at the same time, to raise money for the assurance of a financially successful 1958 JP Weekend.

Patterning the affair after the successful "Date With An Angel" of two years ago, the class will offer an all-expense paid date with the new Miss Massachusetts, Dolly Hirsch, a student at Emerson College, but will substitute second and third prizes of a portable bar and three hi-fi records, respectively, for the full evening of entertainment previously offered to all participants by the '59ers. This again is based on an assumption that the "consolation" prizes would be more enticing to more people than a special program at higher prices.

Al Shalleck '60, chairman of the affair, has announced that chances will be sold in the lobby of Building 10, starting this week, at 20c or 3 for 50c.

MIT Solar House Tests Feasibility Of Sun Heating, Found To Be Impractical For Temperate N.E. Climate

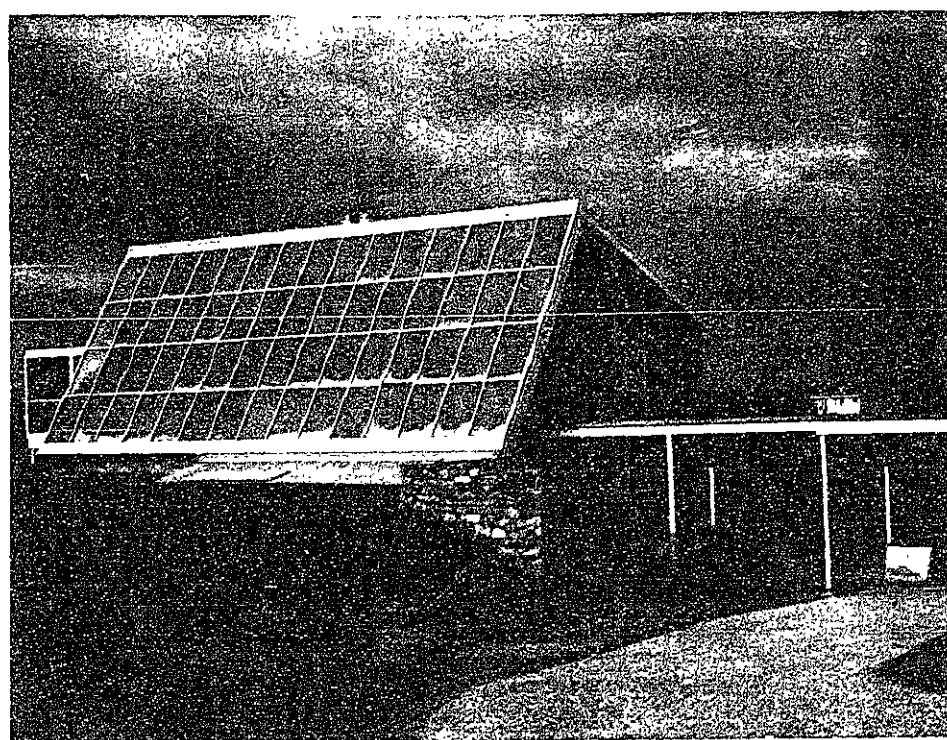


Photo by Louis Nelson

MIT engineers have combined functional design and comfortable living quarters in this new experimental solar house in Lexington.

"Looks like a uniquely conceived modern home in the eighteen to twenty thousand dollar price class," is the description that *Popular Mechanics* has for MIT's new solar house, which is located in Lexington. This three-bedroom, experimental house is the third one designed and built by MIT to test solar heating in northern climates.

The outstanding feature of this two-story house is the collector unit, 666 square feet inclined at 60 degrees from the horizontal. Underneath the glass sheets is black-painted copper. The solar heat passes through the glass easily and is absorbed by the black-surfaced copper. Most of this heat will be absorbed by water passing through copper coils fastened to the underside of the sheets.

This water then flows to a 1500 gallon insulated storage tank in the basement. This tank has sufficient heat storage capacity for a three day period of cloudy weather. Water from this tank is pumped to a heat exchanger, where a fan transfers the heat to air, which is blown through the house in ducts. The piping is so

arranged that whenever heat from the sun is not sufficient to keep the house warm, an oil furnace will turn on automatically and heat the water. It is estimated that the yearly cost of oil for auxiliary heat will not exceed \$50.

In the summer, the solar-heated water will circulate only through the domestic hot-water system. Water in the storage tank will be cooled by a small refrigeration unit, which is less costly to install and operate than the usual home air conditioners. All air will be filtered, both summer and winter. To change over the system from winter to summer operation requires only the turning of a few valves.

The earlier solar house on Memorial Drive showed the importance of a well-designed collector unit. The new house has a collector that is raintight, resistant to the accumulation of smog and dust, and is self-cleaning.

There are large windows on the east and west ends of the house on both floors. The only visible interior items of the solar house that differ from conventional homes are special tight-fitting draperies to cut down heat loss at night.

The whole program is sponsored by the Godfrey L. Cabot Fund and was planned by the MIT Committee on Space Heating with Solar Energy. Members of this committee are Profs. Lawrence Anderson, Hoyt C. Hottel, Albert Dietz, A. L. Hesselschwerdt, and Joseph Kaye.

"Economically Impractical" for N. E.

Prof. Anderson has stated, "A solar house is still economically impractical for general use in a northern climate such as New England's, but is more feasible in areas where there is ample clear weather and where cost of fossil fuels is abnormally high. We hope through further research to solve some of the problems that make it unfeasible for other conditions."

Advertisement

Christian Science Lecture To Be Given NOVEMBER 20th

The availability of healthier, happier, more abundant living through spiritual understanding will be the subject of a lecture on Christian Science to be given at MIT Wednesday, November 20th, by Harry B. MacRae of Dallas, Texas.

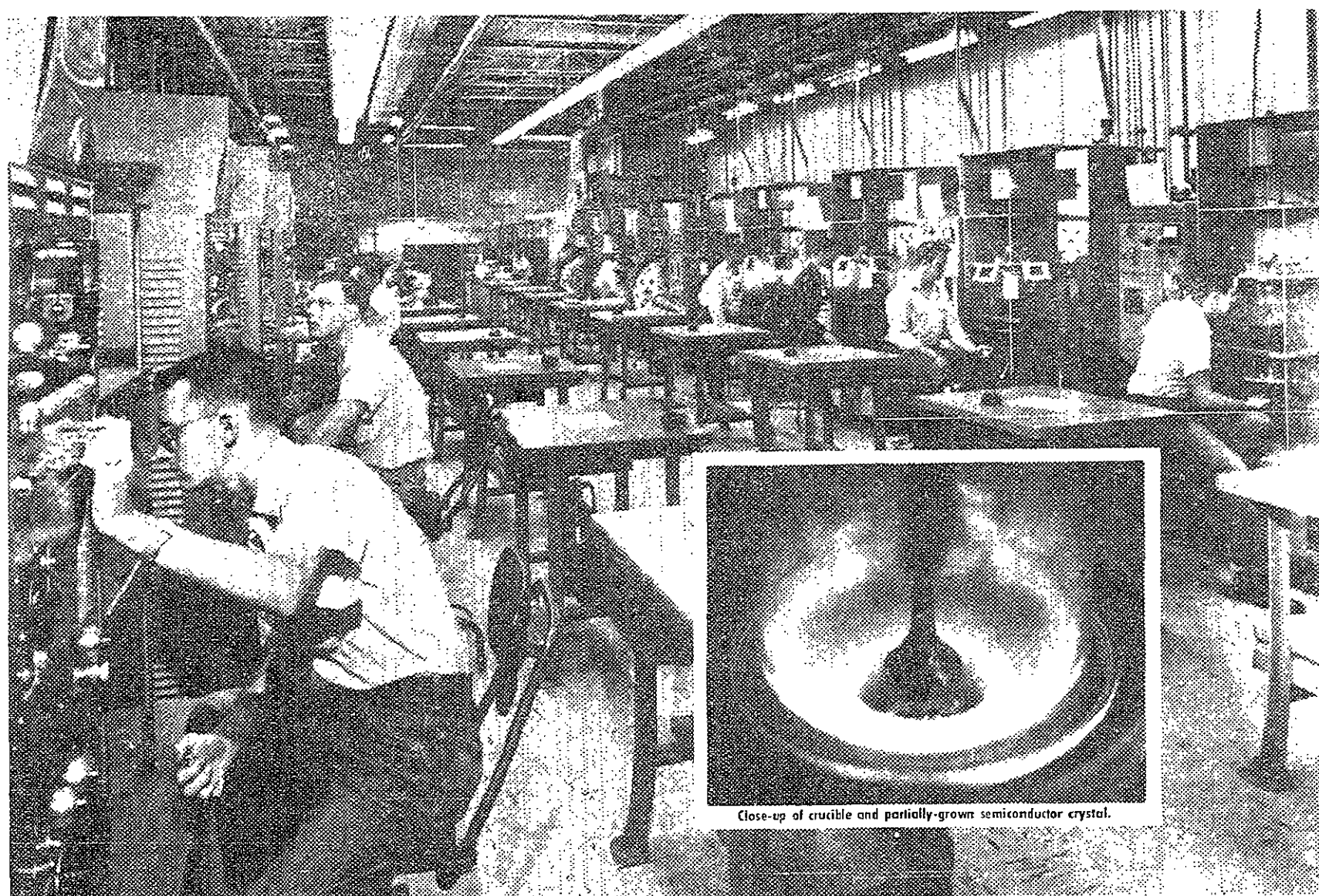
Mr. MacRae, a member of the Christian Science Board of Lectureship, will speak in the Little Theater of Kresge Auditorium at 5:15 p.m., under the auspices of the Christian Science Organization at MIT. His subject will be "Christian Science: The Way to Dominion and Freedom Through Prayer." All members of the MIT community and their friends are invited to attend.



HARRY B. MacRAE

Mr. MacRae became interested in Christian Science while completing a premedical course at the University of Cincinnati through a physical healing of his father. He withdrew from a business career in 1932 to devote his full time to Christian Science healing. Since 1937 he has served as a Christian Science lecturer, traveling widely to speak on Christian Science in this country and abroad.

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Tribute To Teamwork: 7-1-1

Best Season In Years For Booters

by Dick Solomon '59

As the final period gun announced the 4-2 victory over Dartmouth last Saturday, MIT closed its most successful soccer season in many years. The seven win, one tie and one loss record is a tribute to the teamwork of the cosmopolitan team.

The best soccer of the season was to be seen in the battle with Tufts, where the skill and teamwork of the Internationally flavored squad combined to give a thrilling demonstration of good soccer. The tie with Amherst did not dampen the early season spirits of the team, but rather seemed to create greater impetus for hard work and team effort. And the bow to a traditionally strong Springfield squad was not a game given away, but rather gave greater concern for the slow starting play of the team. The particular psyche of this team was a characteristically slow first period rally, with the best soccer being exhibited in the latter periods. Sensing, Renaldo Doval, and Herb Johnson. Although many fine backfield men are leaving, a young and

The end of the Dartmouth game also heralded the last play of many seniors on the team; next year's squad will be looking for a new backfield. Leaving the team were: goalie Rudy Segovia, who has directed the Tech backfield for the last three years and is one of New England's best goalkeepers; Captain Rod Brandt, Eddie Changkasiri, Huber Warner, Bart powerful front line remains: Sophs

Manny Penna, Ernie Macaya, Petey Villovincencio and Dale Rhce will form a strong nucleus for the 1958 line.

Last Thursday afternoon Dan Morley of the Voice of America tape recorded an interview with the team in Briggs Fieldhouse, for broadcast overseas. Perhaps this season's play can be summarized by the remarks of one of the team's members in that interview: "The season was an active and a rewarding one, but by far the greatest thrill was playing with an international team, inspired by a common passion for soccer and united by an interest in the varying backgrounds of the individual players."

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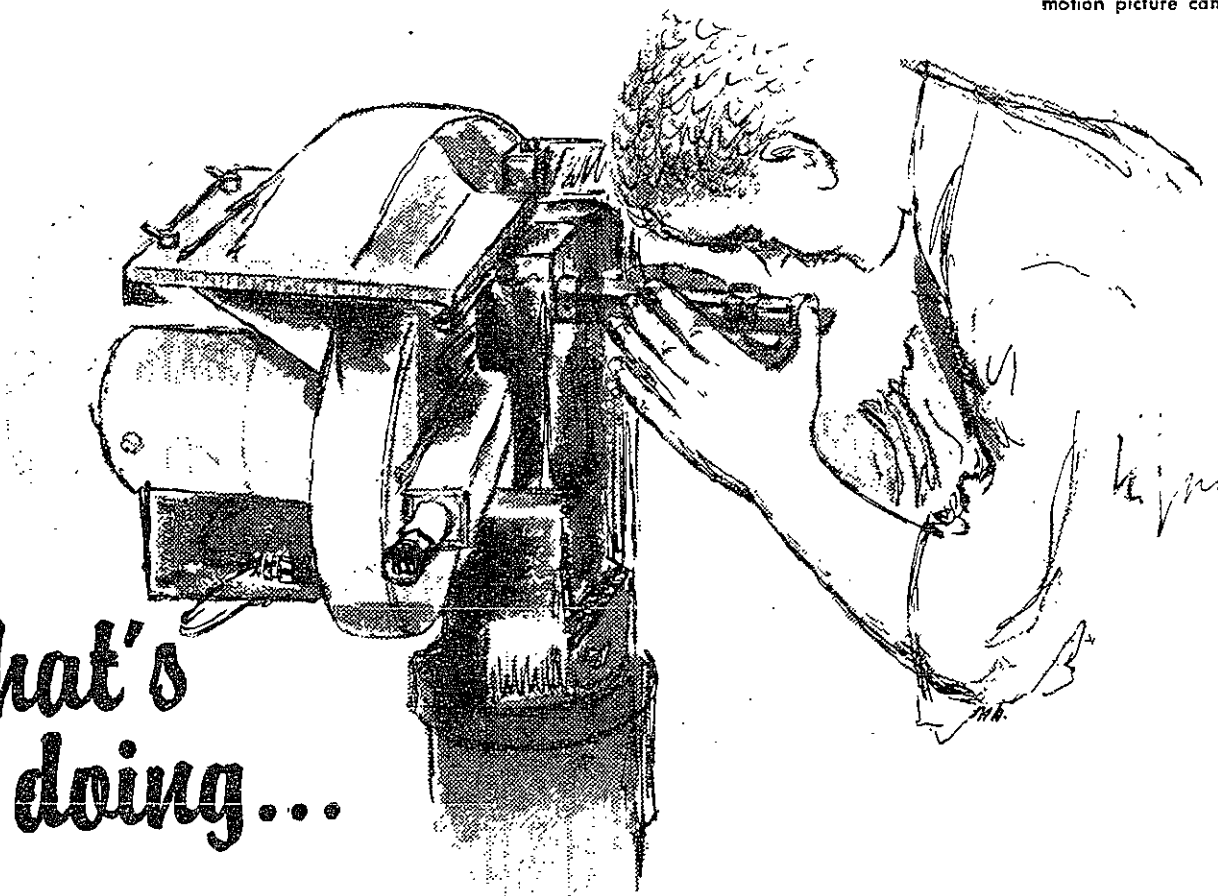
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Historically, the process of combustion has excited man's insatiable hunger for knowledge. Since his most primitive attempts to harness this phenomenon, he has been tremendously fascinated by its potentials... perhaps never more so than today with respect to the use of combustion principles in the modern aircraft engine.

Theorems of many sciences are being applied to the design and development of high heat release rate devices at Pratt & Whitney Aircraft. In the realm of aerodynamics alone, one of many airflow problems that exist in combustion work is diffuser design for advanced powerplants.

In spite of the apparent simplicity of a combustion system, the bringing to-

gether of fuel and air in proper proportions, the ignition of the mixture, and the rapid mixing of burned and unburned gases involves a most complex series of interrelated events occurring simultaneously in time and space.

Fuel injection systems which properly atomize and distribute under all flight conditions are a continuing challenge. In later stages of powerplant development, various combustion problems may be encountered which can be studied and resolved through the highly advanced facilities of P & W A's Willgoos Turbine Laboratory.

Although the combustion engineer draws on many fields of science (including thermodynamics, aerodynamics, fluid mechanics, heat transfer, applied

mechanics, metallurgy and chemistry), the design of combustion systems has not yet been reduced to really scientific principles. The highly successful performance of engines like the J-57, J-75 and others stands as a tribute to the vision, imagination and pioneering efforts of those at Pratt & Whitney Aircraft engaged in combustion work.

While combustion assignments involve a diversity of engineering talent, this field is only one of a broadly diversified engineering program at Pratt & Whitney Aircraft. That program—with other far-reaching activities in the fields of materials problems, mechanical design, instrumentation and aerodynamics — spells out a gratifying future for many of today's engineering students.

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Pratt & Whitney Aircraft operates a completely self-contained engineering facility in East Hartford, Connecticut, and is now building a similar facility in Palm Beach County, Florida. For further information about engineering careers at Pratt & Whitney Aircraft, write to Mr. F. W. Powers, Engineering Department.

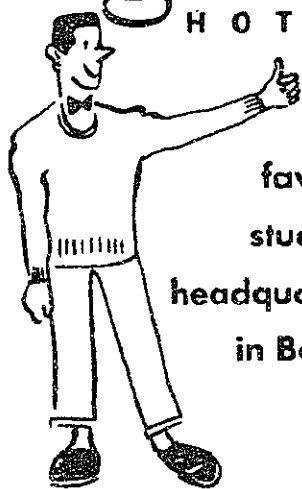
Ruggers Win

At Troy, New York, the MIT Rugby club took their first victory of the fall season over Cornell, 12-5.

The Cornell fifteen drew first blood after 5 minutes of play, scoring and converting for their only 5 points. MIT then began to dominate the game offensively and defensively. Frank Braidech '61 scored twice before being hurt early in the second half.

The Tech Ruggers scored four times, twice in each half, to pull away from the powerful Cornell team. Outstanding for Tech were Braidech G, Conn '60 and Pollard '60, Henry G and Morefield G. The Rugby team will travel to New York over Thanksgiving to play the Wall Street Rugby Club.

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SAE Continues Streak; Fijis Top Betas; DU Wrestlers First

Number 28 For SAE As Delts Fail To Tally

Moving one step closer to their third consecutive title, a spirited Sigma Alpha Epsilon football squad ground out a 12-0 victory over an undermanned Delta Tau Delta team, Sunday afternoon, to remain the only undefeated team in either division. The triumph marked the twenty-eighth win in a row for the Sailors.

Broward Scores First Touchdown
The victors took the lead midway in the opening period when, after a sustained drive, tailback Lou Bangert '58 hit Fred Broward '59 with an aerial in the end zone.

Lightning struck again, as early in the second quarter the Sailors drove downfield and climaxed their thrust with a ten-yard scoring pass from tailback Herman Burton '60 to end Bob Thompson '58.

The losers had their only chance to rally late in the final quarter, when they moved the ball to the SAE fifteen yard stripe. On the ensuing play, SAE's Pete Hohorst '57 intercepted a belt aerial in the end zone, and the remaining moments saw little excitement.

The failure of the Delts' offense to score can be partially attributed to the fact that their star backs, Dan Holland '58 and Frank Brady '61 missed the contest because of injuries.

Late Fiji Drive Takes Betas 16-7

Phi Gam 16—Beta 7

Scoring twice in the last quarter Phi Gamma Delta upped Beta Theta Pi 16-7 last Sunday. Trailing 7-2, at the half, the Fijis came back strong to even both team's playoff records at 1-1.

Fast Beta Start

The Betas started strong, scoring in the first quarter on a 20 yard pass from Robin Cross '59 to Jim Russell '59. This same combination which played outstandingly all game long added the extra point. In the second period Cross intercepted a pass on the Beta two, but on the next play the whole Fiji line converged on Cross for the safety. The Betas threatened once more before the half, but the Fijis held on the ten yard line as time ran out.

Fiji Offense Moves

As the third period came to a close the Fiji offense finally began to click with runs by Bob Williamson '59 and Al Beard '59 interspersed with passes from Beard to all star end Chuck Ingraham '58. Early in the 4th period Beard '59 hit Hal Smith '57 all alone in the end zone and added the extra point on a pass to Ingraham.

The Fiji defensive line of Bruce Blanchard '57, Ed Pollard '60, and John Irwin '58, topped their second half performance by holding for downs at midfield with less than 2 minutes to go. On the second play after taking over Beard pitched out to Williamson who tightroped down the sideline for the TD. Don de Reynier '60 scored the extra point on a pass from Beard. Other standouts for the Betas were Stan Graves '58 and Cal Counce '60.



Photo by Malcolm Fraser
Beta Warren Goodnow '59 snags a pass as team mate Jim Russell '59 keeps out Fiji Larry Boyd '59. The ground gained here was not enough, as the Fijis won 16-7.

DU's 41 Tallies High As Hundreds Tangle

Last Friday and Saturday Rockwell Cage was converted into a mass wrestling gymnasium as almost one hundred intramural matches were held in determining the winners and runner ups in eight weight classes. First, second, third, and fourth places were

determined with first place winners receiving a medal in recognition of their victories. The individual winners and their affiliations were:

- 123 lb. class—Andy Bulfer, ATO '61
- 130 lb. class—B. Barrett, DKE '60
- 137 lb. class—D. Latham, DU '61
- 147 lb. class—B. Schneiterman, Burton '58
- 157 lb. class—John Sullivan, 5:15 Club '61
- 167 lb. class—Reed Freeman, 5:15 Club, '61
- 177 lb. class—Featherstone, SAE '58
- Heavyweight—R. Meehan, SAE '61

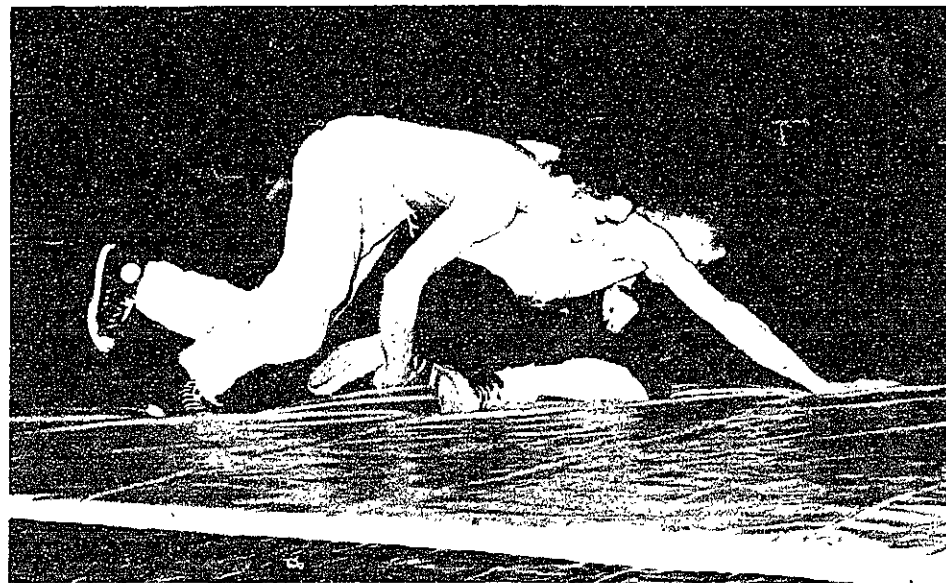


Photo by Phillip Fauchald

Two 167 pounders tangle in the first intramural wrestling tourney. Reed Freeman '61 (white trunks), representing 5:15 Club, took this weight division.

DU, SAE, 5:15 Lead

The three leading point winners among the living groups were DU with 41 points—first, SAE with 36 points—second, and 5:15 Club with 33 points—third. Burton House finished fourth with 20 points. By far the outstanding showing of one team was that of 5:15 Club who with only two wrestlers entered (who took first places) managed to finish third overall.

This first intramural tournament was a success in intramurals and uncovered much material for the MIT Wrestling Team.

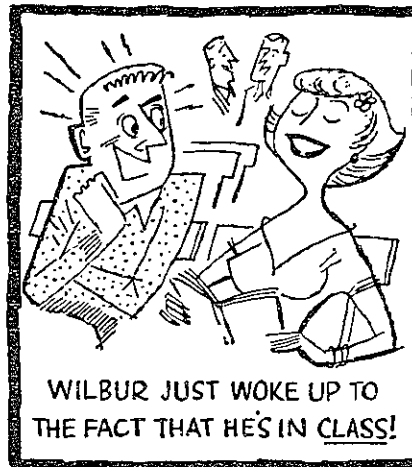
Phi Mu Delta, Baker Cop Grid Encounters

Surprises dominated the B Division grid contests Saturday, as Baker House rolled over TEP 26-0, and Phi Mu Delta crushed 5:15 Club 26-6, leaving all four teams tied for first with records of one win and one loss.

The Baker defense, spearheaded by Frank Tapparro '60, Dick Sherman '58, and Len Tenner '60 gained almost as much ground as the offense as they pushed the losers back. The victors' scoring came on a trio of passes by Marv Alper '59 to Ron Rosenberg '59, Jerry Glass '59, and Harv Korotkin '60, and a forty-yard run by Bob Kaplan '61.

A pair of touchdown passes and two long, scoring end runs provided Phi Mu Delta their victory margin.

GOING HOME for the Christmas holidays? Do you need a ride? Or do you own a car and want riders to share the driving? Whichever you are, THE TECH offers a place for you to find the transportation you desire. It's the new CLASSIFIED COLUMN, and it costs only 10c a line (it's cheaper than the train, brother). For details, see page 6, this issue.



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- ALPHA PHI OMEGA
- QUADRANGLE CLUB
- T CLUB
- THE TECH
- ATHLETIC ASSOCIATION

For the assistance they have given us in sponsoring the All Institute Meet, to be held on November 23 at the Alumni Pool, 8:00 P.M.

TCA OFFICE OPEN TILL 9

Beginning this Friday the TCA office will be open until 9 p.m., although the ticket service will close at 5 as usual. This practice will be continued if there is sufficient demand.

START POLIO SHOTS NOW

The Medical Department wishes to call attention to the fact that the full course of three injections of polio vaccine requires a period of eight months to complete, and since the danger of polio is greatest in the summer months, it is urgent that those with no protection start their shots now.

The shots are given in the Infirmary between 9 a.m. and 5 p.m. daily. There is no waiting. A charge of one dollar is made for each shot.

WTBS ANNOUNCES . . .

. . . that it will rebroadcast the remaining lectures by Niels Bohr at 11 p.m. on the night they are given.

. . . that play-by-plays of all home and some away basketball games will be broadcast at 8:15 p.m., starting December 4.

. . . that a new program, Seabury Presents, has been inaugurated, and will be heard Tuesday at 8:30 p.m. It will consist of a series of humanities lectures given by prominent persons and sponsored by the Seabury Society of MIT.

CLUB LATINO FIESTA

The next traditional Fiesta of Club Latino will be held in Baker House Dining Room on Saturday, November 23rd, 1957 from 7:30-1. Free drinks will be abundant as usual. Members \$4, non-members \$7. Tickets now available at Building 10.

B-BALL REFS NEEDED

Basketball Referees needed for IM Basketball. \$2 per game. No experience needed. Call Ray Landis, CI 7-8691.

RALLY

There will be a rally for Junior Varsity and Freshman basketball candidates at 5:15 in the armory today.

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ARMY-NAVY GAME TICKETS Philadelphia, November 30, 1957. For details call Jim Knoedler, CI 7-8029 any evening except Thursday.

RIDE to Wash., Ida., Ore., or North Calif. wanted around Dec. 20. Destination Seattle. Will pay. John Cheney, Bem. 509.

ARLINGTON—New Ranch Houses. TR 6-1935.

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FAST, accurate typing done. Will do thesis. Call ST 2-6772 anytime.

WANTED—Riders for Christmas Holidays. Leaving December 20 for Greenland and points north. Late model sleigh, share driving. Contact S. Claws at Room 10-180.

TAKE A TIP from these smart people—THE TECH classified ads really do pay off. No matter what you're selling, buying, or giving away—THE TECH can help you.

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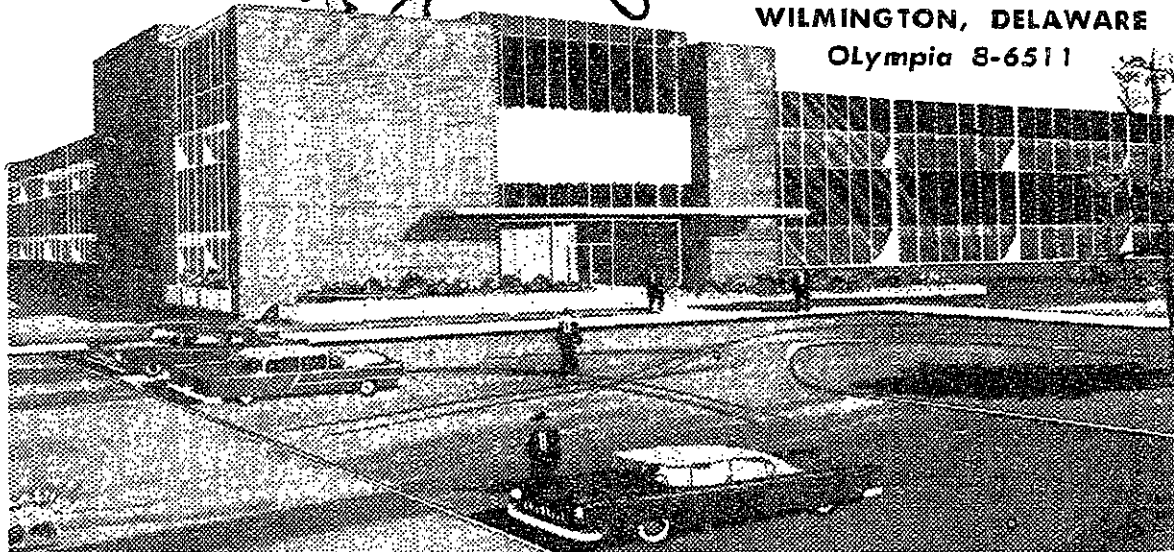
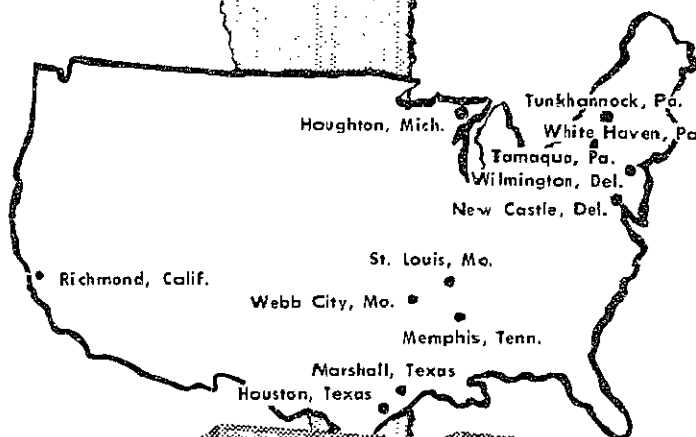
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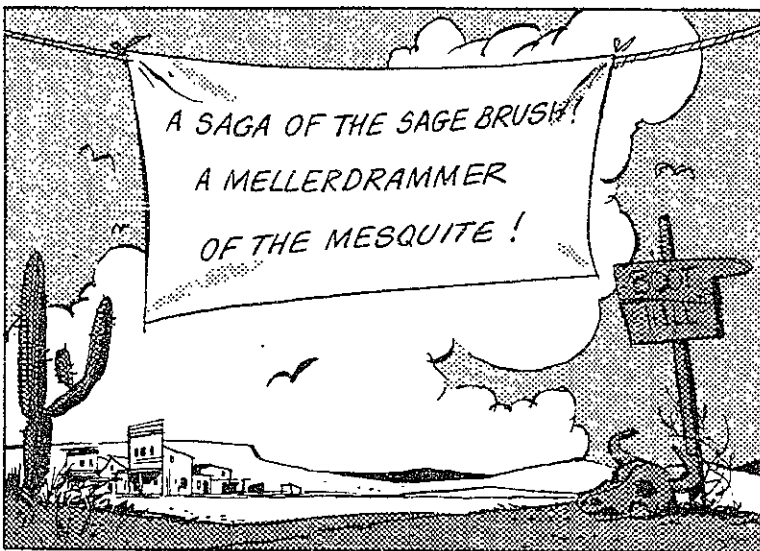
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