



George D. Edwardson, guard supervisor

TOUCHÉ

Slide rules and T-squares have always been plentiful around M.I.T., but there's a new course in progress right now which features equipment like revolvers and fire-fighting apparatus. It's a training program for the D.S.R. guards, about 150 of whom keep round-the-clock watch over M.I.T.'s numerous "security projects." (Incidentally, they have an academic roving patrol, too.) Participants in the program, the first of its kind to be given in a university, are the 70 guards now stationed on campus and at Bedford. Later, it is hoped, the course will be given to guards at Lincoln and Round Hill.

"Seventeen subjects in 21 hours" is the objective of Harvey Burstein, chief security officer and administrator of the program. So far Mr. Burstein and his visiting lecturers from M.I.T. and the Cambridge Fire and Police Departments are covering the ground right on schedule, and their program is being received with great enthusiasm. The subject matter includes such mysteries as the laws of arrest, principles of investi-

gation and preservation of evidence, "identification," courtroom appearances, patrolling, civil defense and fire department liaison, emergency traffic control, fire arms and defensive tactics, and first aid.

To date the M.I.T. guards have an excellent record of protection. "People don't hear of incidents because there are none," says Herbert Moore, chairman of the Guard Representatives Committee on campus. "No major ones, that is," he adds. In the past, "incidents" have included spotting fires (a guard recently caught a potential holocaust in Bldg. 41);

keeping out unauthorized visitors (when Mr. Moore was new at guard duty he was high-pressured by a high-ranking naval officer who wanted to enter a project without authorization, and later discovered the man had been sent by the O.N.I. to test M.I.T.'s security system); taking care of classified material that is sometimes left carelessly around, and a host of other vigilances. Are there any loopholes in the system? "Some people make their own security regulations," says Mr. Moore, "and they're always the first to slip up on them. It's happened in every project—but never with serious consequences."



Herb Moore on duty in R.L.E.

SPRING IS HERE

"Like many other educational institutions, M.I.T. has reluctantly come to the point where an upward revision of rates must be undertaken." It is the first hike, Treasurer Snyder points out, since 1951. And as every milk-and-coffee drinking American knows, the cost of goods and services during these last six years has been marching steadily uphill. In the M.I.T. dormitory system, this situation has necessitated the use of funds originally earmarked for the academic departments. To get things back in balance again, a new price scale will go into effect in September, 1957. Included are a dormitory rent increase averaging 11%; a commons meal fee increase of 14% (from \$1075 to \$12.50 for fifteen meals); and a decrease in services like room cleaning and round-the-clock inter-dorm telephones.

The student reaction to the above news is now well known. In that reaction were some ingredients that had earlier been simmering quietly. After Stouffer's took over the food management in Walker (Feb. 1), grumblings about the quality of commons meals in Baker House became more vociferous. (The other dining rooms will have Stouffer management sometime within the next six months.) Two days before the general rate increases were announced, this protest had reached the planning stage of an orderly student boycott of Baker House meals and a scheduled exodus from the Baker dining hall to more enticing pastures in Walker. Then came the announcement from the Treasurer's Office, and pfffft -- before the weekend was over -- 30 M.I.T. students were arrested. (Among them, unfortunately, were some student government men who had tried to maintain order.)

Final Institute evaluation of the riot awaits investigations by the student Judicial Committee and the Faculty Discipline Committee. In the meantime, John T. Rule, Dean of Students, made a public apology for the disturbance. "Ample means exist through student government," said Dean Rule, "for students to raise questions about Institute policies and regulations. The Institute has traditionally encouraged mature and orderly student reaction through elected student government representatives. But the Institute refuses to respond to pressures other than those expressed through the orderly processes of student government."



Sheehan (left), Logan (right), & penicillin molecule (center)

DISCOVERY

A new "very high-speed" digital computer has been developed by engineers at Lincoln Laboratory. The computer, known as TX-2, has a memory of 260,000 numbers or words, which it stores or recalls at the rate of 167,000 per second (highest speed yet in a computer memory of this size). Major parts of TX-2, including one quarter of its formidable memory, are now in operation at Lincoln.

Chemical synthesis of penicillin, for years one of the most baffling problems in chemistry, has been accomplished by Drs. John C. Sheehan and K.R. Henery-Logan, both of the Chemistry Department. To date, penicillin has been derived from molds by a process of fermentation. The Sheehan-Logan discovery comes after more than a decade of intensive research by chemists throughout the United States and Great Britain.

RECOMMENDED

Composer-pianist Ernst Levy, professor of music in the Humanities Department, will conduct the Boston premiere of his Twelfth Symphony in Kresge on March 15. On deck will be a select chamber orchestra from the Boston Symphony and three vocal soloists. (Actually, it's Mr. Levy's thirteenth. He wrote his first symphony when he was about 18, but as the compositions multiplied and his standards soared, he demoted the early work to "0".)

Prof. Levy is very enthusiastic about M.I.T. "Scientists are fascinated and moved by music," he mutters. "And they have such a wide range of interests. It's <u>much</u> more stimulating than teaching musicology to musicologists." The Levy family is a flourishing example of this theme. Prof. Levy has two sons -- one a cellist (now touring with the American Ballet Theatre), the other an engineer.

HERE AND THERE

Mrs. Laura Fabrizio (Photo Service) is a seasoned globe-trotter. Staying with her for a few days this month will be Mr. & Mrs. T. Öijerfeldt of Stockholm, Sweden. Mr. Öijerfeldt, a member of the Royal Board of Roads and Waterways in Stockholm, is coming to M.I.T. to study the latest developments in sewage treatment plants and water purification.

Paul Roberts (Research Assistant, Civil Eng.) received the 1957 Bausch and Lomb Award of the American Society of Photogrammetry on March 5.

Received in the Admissions Office: a letter addressed to the "Department of Research, M.I.T." Next question.



Mrs. Fabrizio. . . in Paris

The M.I.T. Matrons -- experts on the art of pajama-making and bed linen repair -- continue to perform these and other valuable duties for the Medical Department. Their latest contribution: Mrs. Alexander Korol has offered her services as a social worker for the Department.

Prof. William H. Radford (formerly R.L.E.) was honored at a party at the Faculty Club on Feb. 25. Prof. Radford is the new Associate Director of Lincoln Lab.

Spring nuptials are already in the air. Dorothy Coutts, active in the Accounting Office for 12 years, will start married life on nothing less than the S.S. United States -- bound for France where her husband-to-be will be stationed.

More extracurricular news from the Math Department. In addition to its chess exploits, the Department boasts two active string quartets -- with only three imposters: one from Elec. Eng., one from D.S.R. . . . and one from Harvard.

Competition! The first issue of "Gyroscoop," Instrumentation Lab newssheet, came off the presses on Feb. 1. Lots of news, nifty format, highly recommended.

A recent visitor to M.I.T. was Florence Stiles, librarian (Arch.) from 1931-48 and also adviser to women students. Miss Stiles is currently on the library staff of the duPont Company in Wilmington, Delaware.



As planned

.... in progress



O SOLE MIO

"We're a middle income family with conservative tastes. Do you recommend solar house heating for us?" This is a question which the M.I.T. Committee on Solar Energy has long since been accustomed to dealing with.

The committee, which was set up in 1938, has so far shed much light on "methods for using the energy from the sun." The researchers' major publication, Space Heating with Solar Energy, was one of the first in its field and has helped interested sunusers from the Atlantic seaboard to Death Valley in California. They have also built three solar houses. The most recent of these was on Memorial Drive in Cambridge, but its solar efficiency was destroyed by a small fire in the electrical system and by unusually zealous firemen. A new replacement (see left) is now under construction in Lexington, Mass.

According to present plans, the house's south-facing solar collector and the energy-storing water system connected to it will almost do the job of keeping the thermostat up and heating all the waterneeded by the occupants. But to operate most efficiently—and unless our warming winters warm up considerably more—it looks as if the house would require

auxiliary heat during the critical months of December, January and February. Even with the help of oil (gas is more expensive), the solar experts calculate that on a commercial basis solar houses will cost no more than the various heating systems currently in use.

In case you have any curiosity about this new solar scheme of things, the house will be on the market sometime this summer. And if you want more advance information, the M.I.T./TV program "Science Reporter" (WGBH) will feature the solar house on Wednesday, March 20, at 8:00 p.m.

FOR SALE

1955 Plymouth standard suburban station wagon. 17,000 miles. Ext. 892.

"Blessing" trumpet with case, stand, mute, and lyre for holding band music. Used one school season. Excellent condition. Sacrifice for \$90. C. B. Leard, Ext. 2520.

Custom made library or conference table, 3x8 ft. Plain walnut top, apron inlaid with holly and other woods, legs inlaid and carved. Asking \$150. Miss Peabody, Ext. 179.

19 ft. lead keel sloop. 5 h.p. inboard auxiliary. 2 bunks and head. Draft $3\frac{1}{2}$ feet. Bargain. Ext. 892.

1954 green Ford Fordor. Customline, fordomatic. New tires. Excellent condition. Must sell. B. Parker, Ext. 2995.

"Francesco Ruggeri" 'cello (celebrated pupil of Amati) and 'cello Tourte bow. Favorite solo instrument of cellist David Popper. Owned by the late Enrico E. Fabrizio, 34-year member of the Boston Symphony Orchestra. Mrs. Fabrizio, Ext. 2801.