

the Conseil struck at the practice by which chairholders, regardless of their competence or the demands on their time, automatically are the chiefs of all activities within their domain. In fact, many of them delegate responsibility to their subordinates, but, under such circumstances, credit, blame, and authority can be difficult to work out; also there are many instances in which

a professor chooses to behave as though he knows best when it comes to teaching students, running a research program, and conducting a medical service. Within his jurisdiction, all three are his to command if he so chooses, and there are those who do. Another of the recommendations of the Conseil states that the occupant of a position should be competent to perform the

work that is required—a stipulation that conveys some idea of the reformers' assessment of the present state of affairs. Striking again at the dominance of the professors, the Conseil recommends that no individual shall be at the head of more than two major activities. To govern the school, it proposes that a legislative body of 67 be elected, of whom 25 would be from the upper

M.I.T. Reviews Its Military Research Policies

Massachusetts Institute of Technology (M.I.T.), which currently receives more Defense funds for research activities than any other university, is reviewing the relationship of two special laboratories that conduct classified research activities to the institution as a whole. In the meantime, M.I.T. has declared a moratorium on all new classified research programs at the two laboratories. Work in progress will continue.

The M.I.T. hold on new classified research applies to the Lincoln Laboratory and the Instrumentation Laboratory, two independent facilities which M.I.T. administers. The laboratories conduct research and development under Defense Department and National Space and Aeronautics Administration contracts, which total more than \$115 million annually.

Sources at M.I.T. say that the move to examine its policy on conducting classified and other military research was sparked in part by the March 4th research stoppage (see *Science*, 14 March 1969) and by recent queries by a radical student group, the Science Action Coordinating Committee, concerning M.I.T.'s ties to the Pentagon. The research ban, which could remain in effect until 1 October, does not affect the present research programs at the laboratories. The ban merely gives M.I.T. time to review its policy for the future in regard to classified research contracts and other activities of the laboratories.

The 22-member investigation panel, which consists of trustees, students, faculty, alumni, and laboratory staff members, was selected, for the most part, by M.I.T. president Howard Johnson. It includes Frank Press, head of M.I.T.'s department of earth and planetary sciences; David G. Hoag, associate director of the Instrumentation Laboratory; Eugene Skolnikoff, M.I.T. professor of political science; Victor Weisskopf, head of the physics department; and Noam Chomsky, professor of linguistics. An essential purpose of the committee is to examine the relationship of the laboratories and their current and future research programs to M.I.T.'s on-campus research and education programs in general. Johnson has asked the panel to make a preliminary report to M.I.T. by 31 May and a final report by 1 October. Panel chairman William Pounds says he is optimistic that the final report may be well underway by 31 May.

M.I.T. officials say that about half the research done at the two laboratories is classified. The Instrumentation Laboratory, located in Cambridge on the fringe of the M.I.T. campus, conducts research and development pro-

grams in guidance, navigation, and control systems. In the past, the Instrumentation Laboratory helped develop instrumentation for the Polaris missile system; it is now working on a guidance system for MIRV (Multiple independent reentry vehicles) warheads for United States missile systems. M.I.T.'s involvement in the Poseidon project has raised considerable controversy among radical students. The Lincoln Laboratory, with its main facilities in Lexington, Massachusetts, does research and development in such areas as radar and communications systems, solid-state physics, reentry physics, military satellite communications, and data processing. It has been making specific missile-detection studies related to development of the ABM (the antiballistic missile)—also a sore point among radical students.

The Lincoln and Instrumentation laboratories, which university officials insist are "off campus," nevertheless enjoy a close relationship to M.I.T. The laboratories are not regarded as an official part of the academic framework of the university, but both are administered by an M.I.T. vice president, and laboratory staff members are on the university payroll. With a few exceptions, most of the 3600 laboratory employees are not members of the M.I.T. faculty, but laboratory directors Charles S. Draper of the Instrumentation Laboratory and Milton U. Clauser of Lincoln Laboratory are M.I.T. professors. There are, in all, seven M.I.T. faculty members at the Instrumentation Laboratory and three faculty members at Lincoln. M.I.T. graduate students are also involved. Twenty-one graduate students do academic work and serve as research assistants at Lincoln, and 17 conduct research at the Instrumentation Laboratory. Last year, 37 doctoral theses were completed by graduate students at both of the laboratories.

A recent annual report (1967-68) shows that the laboratories are highly dependent on Defense Department funding. Last year Lincoln laboratory had a total annual budget of \$65 million, almost all of which came from the Department of Defense. The Instrumentation Laboratory's total annual budget was \$50 million, of which \$30 million was supplied by the Pentagon and \$20 million by NASA. For the university itself, exclusive of the two special laboratories, total funding last year for on-campus research was \$55.8 million. About a third of this amount was supplied by the Department of Defense. University officials say that none of this research was classified.

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