hit at the gains the workers made in last year's uprisings, and it is doubtful that much more can be got out of the economy to buy the workers off again—all of which inspires the students to look again to the working classes. A common view is that, if not soon, then before long, the students will be moved by some issue or other to rise up again. After all, they can properly take credit for having started up the series of events that toppled President de Gaulle, which is no small inspiration to more ambitious goals. If and when it happens, the social scientists of Nanterre are likely again to be in the forefront.

—D. S. GREENBERG

M.I.T.: Panel on Special Labs Asks More Nondefense Research

Cambridge, Mass. An M.I.T. review panel last week recommended that the institution maintain ties with its two big off-campus laboratories, which are oriented primarily to military research, but urged that steps be taken to shift the balance of the labs' activities toward socially useful nondefense research. The panel also asked creation of an advisory committee representative of the M.I.T. community to monitor the special laboratories' program.

Under scrutiny are the Instrumentation Laboratory, which operates in several buildings near the campus, and the Lincoln Laboratories in Lexington in the Boston suburbs. The combined budget of the two labs for the current year amounts to well over $120 million, or more than half of M.I.T.'s $213 million total budget for the year.

The Instrumentation Laboratory was established 30 years ago by Charles Stark Draper, who still is "I-Lab" director. Under Draper, the lab has built a unique record by applying the principle of the gyroscope to problems of gunfire control, navigation, and guidance. In recent years the I-Lab has developed sophisticated inertial guidance systems for U.S. missiles and spacecraft. The current annual budget is $56 million, of which $27 million comes from the Defense Department.

Lincoln Laboratories was established at the behest of DOD in 1951 to develop air-defense technology, and has built a reputation as a leading applied electronics laboratory devoted primarily to communications problems, missile system development, and missile defense. The Lincoln Labs' budget is some $65.5 million.

The panel on the special laboratories was appointed by M.I.T. president Howard W. Johnson after a 22 April incident which was the closest M.I.T. has come to a campus confrontation in the style prevalent this year. On the 22nd a group of protesters picketed the I-Lab, sat down in the hall outside Johnson's office, and then adjourned to a big lecture room for a discussion in which Johnson and M.I.T. corporation chairman James R. Killian, Jr., took part.

Out of this meeting came appointment of the panel, and Dean William F. Pounds of M.I.T.'s Sloan School of Management was named chairman of the 22-member faculty-student-administration-trustee-alumni panel.

The panel, which observers say represented a fair cross section of M.I.T. opinion, save probably for some of the "conservatives," filed an interim report with recommendations reflecting a consensus of the members. The report does, however, carry three separate personal statements which might well have come out as minority views except for the atmosphere of relative good will in which the panel apparently operated.

The panel concluded that "continuation in the long term of the present mix and scale of the programs of the special laboratories would not fulfill M.I.T.'s ultimate objectives." Although it offered "alternative strategies" for conversion of mission-oriented work, it called for a major institutional effort to carry through a reappraisal. Its specific short-term recommendations, in brief form, follow.

1) The laboratories and M.I.T. should energetically explore new projects to provide a more balanced research program.

2) The educational interaction between the special laboratories and the campus should be expanded.

3) There should be intensive efforts to reduce classification and clearance barriers in the special laboratories.

4) A standing committee on the special laboratories should be established.

The recommendation of an advisory committee represents perhaps the greatest potential for change. As at other universities, attempts to write guidelines have led to emphasis on the creation of advisory committees, for it proves very difficult indeed to convert the spirit of reservations about defense research into the letter of research guidelines.

As for the administration response to the report, M.I.T. president Johnson said he would press for the appointment of an advisory committee, and declared that other recommendations would be "worked on by appropriate groups."

Dissent within the committee was directed largely at issues on which the panel did not concentrate. One committee member who filed a separate personal statement was professor of linguistics Noam Chomsky, who has been prominent among university critics of the Vietnam war. Chomsky, who added his views in part since he missed some of the panel meetings because of lecture commitments at Oxford this spring, argued that underlying political issues were not adequately dealt with. The following excerpts from different sections of his statement indicate the trend of his remarks.

> Any act undertaken by M.I.T. in its public service function is a political act and must be considered with great care. . . .
>
> The idea that a university preserves its neutrality and remains "value free" when it simply responds to requests that originate from without is an absurdity. . . .
>
> This subpart of the community (in the special laboratories) is restricted to participants who share a particular political ideology, and in this way the laboratories contribute to a dangerous and unwelcome politicization of the university.

The attitudes of activist students and something of their approach was reflected most clearly in a separate statement from graduate student Jonathan P. Kabat. His statement included considerable information about the special laboratories' budget, organization, and research projects and singled out for special criticism projects which contributed to the development of MIRV (multiple independently target-

able reentry vehicles) and counter-insurgency technology. In his statement Kabat asked for creation of an interdisciplinary "department of conversion science" as the focus of M.I.T.'s efforts to redirect military research.

At present there seems to be little chance of M.I.T.'s making a 180-degree turn away from military R & D. For radical politics, M.I.T. provides a generally inhospitable environment. By tradition and still dominantly in atmosphere, M.I.T. is an engineering school, and engineering students have been a conspicuously inert group in most universities during the current upheavals. Most M.I.T. faculty members practice in those disciplines in which research has drawn heavily on government funding, both military and nonmilitary, and faculty members serve as consultants for industry and as advisers to the government.

There is little sign of radicalization of the undergraduates at M.I.T. The year passed without a violent episode of the kind that has led to the calling in of police, which on some campuses has tended to inflame the students and divide the faculty or turn it against the administration. Most observers say that Johnson and provost Jerome Wiesner, who has devoted much time this spring to dealing directly with students, have things very much under control, and even the radicals who have plenty to say in criticism of the "establishment" concede that Johnson and Wiesner have been a very effective management team. Considering, however, the smallness of the radical minority and the political climate at M.I.T., the activists have made a considerable impact.

The history of the radical movement at M.I.T., to all intents and purposes, began last autumn when an AWOL soldier was given sanctuary at the M.I.T. chapel for several days as an act of opposition to the Vietnam war. Many of those involved were from outside the M.I.T. community, but there is little doubt that the incident raised the level of political awareness on the campus. Momentum was established in late autumn when activists began to work toward the research stoppage and discussion of defense research issues which ultimately took place on 4 March at M.I.T. and other universities. The acceptance of "March 4th" doubtless depended on a group of well-known M.I.T. faculty, most of them political liberals, who seem to have been willing to cooperate because of arms control and anti-Vietnam war sentiments. The faculty members shied away from any formal alliance with the activists (*Science*, 14 March), but the activists, who rallied themselves into a Science Action Coordinating Committee (SACC), consider that they clearly established a beachhead for radical politics at M.I.T.

SACC is essentially an organization of graduate students and still depends on a handful of energetic organizers. It would appear that SACC strategy in the immediate future will be to continue to dig for information and continue to demonstrate to the administration that it can raise awkward questions at awkward moments. On the agenda is a protest set for alumni homecoming day on 16 June. Plans call for a "non-disruptive" program to remind the old grads about MIRV, about Vietnam-war-related research at M.I.T., and about M.I.T.'s impact on the local community. The inroads made by the activists at M.I.T. should not be exaggerated, but it is probably true, as SACC claims, "M.I.T. is now officially examining its policies of involvement with the Pentagon" because of them.

Just where that examination will lead cannot yet be predicted. A great technical university, M.I.T. has never questioned its responsibility to perform broad public service functions. Certainly the most difficult task facing it now is to reconcile R & D work in the cause of national security with the rising demands that it exercise "social responsibility." And the practical problems of financing nondefense research will complicate the process.

For many faculty at M.I.T. the matter of balance in the institute's activities is of growing concern. The Pounds panel was troubled by the question, and it was the subject of a statement added to the panel report by chemistry professor E. R. Gilliland and graduate student Marvin A. Sirbu, Jr., who called for the eventual divestiture by M.I.T. of the special laboratories. The burden of their argument is indicated in the following excerpt.

> . . . the rapid growth of these laboratories and of on-campus research during the past twenty years has resulted in the Institute's having a responsibility for research and development expenditures that are now five to ten times the non-research academic budget. M.I.T.'s main function is fast becoming a research and development institute rather than an educational institution. The imbalance between research and education is changing the character of the institute. . . .

—JOHN WALSH

APPOINTMENTS

Carl J. Dolce, superintendent of schools for New Orleans, La., to dean of education at North Carolina State University. . . . **Angel G. Jordan**, professor of electrical engineering at Carnegie-Mellon University, has been elevated to head of that department. . . . **Stanley Deutsch**, assistant professor of anesthesia at Harvard Medical School and Peter Bent Brigham Hospital, to chairman of anesthesiology at Michael Reese Hospital & Medical Center, Chicago. . . . **William E. Vandament**, assistant professor of psychology, to director of Institutional Research at the State University of New York at Binghamton. . . . **John E. Romani**, associate dean at the University of Michigan, Ann Arbor, to vice-chancellor of the University of Wisconsin, Milwaukee. . . . **Donald W. Taylor**, chairman of the psychology department at Yale University, to dean of the Yale Graduate School.

RECENT DEATHS

Emory D. Burgess, 62; entomologist with the Department of Agriculture; 16 May.

Richard M. Elliott, 81; professor emeritus of psychology at the University of Minnesota; 6 May.

Carroll W. Grant, 68; retired chairman of the biology department at Brooklyn College; 15 May.

A. Remington Kellogg, 78; biologist and former director of the U.S. National Museum; 8 May.

Cloyd H. Marvin, 79; president emeritus of George Washington University; 28 April.

Donald D. Matson, 55; president of the American Association of Neurological Surgeons; 10 May.

Harold H. Noyes, 70; former dean of the University of Oregon dental school; 25 April.

Everett P. Partridge, 66; chemist and retired corporate vice president of the Calgon Corporation; 27 April.

Warren P. Spencer, 71; retired professor of biology at Wooster College, Ohio; 9 May.

Llewellyn H. Welsh, 56; chief of the organic chemistry section of the Food and Drug Administration; 26 April.

Philip D. Wilson, 83; former director of surgery at the Hospital for Special Surgery in New York; 7 May.