## M.I.T. "I" Lab Changing Direction

The retirement of Professor Charles Stark Draper as director of the Massachusetts Institute of Technology Instrumentation Laboratory is being taken as evidence that M.I.T. is implementing a new policy of shifting the balance of effort away from military research in its off-campus "special laboratories." Draper, 68, the founder and dominant personality in the "I" Lab for three decades, says he was "fired." His retirement takes effect on 1 January; Charles L. Miller, chairman of the M.I.T. civil engineering department, has been named Draper's successor.

The Instrumentation Laboratory established its reputation during World War II with advances in gunfire control and navigation aids. More recently the lab has been given primary credit for the development of inertial guidance systems for U.S. spacecraft and missiles and has been a special target for campus critics protesting M.I.T. involvement in military research. (The "I" Lab's current annual budget is \$54 million, \$26 million of this amount coming from defense agencies.)

Last June a faculty-administration-student committee urged that M.I.T. retain its links with both the "I" Lab and M.I.T.'s other large off-campus lab, the Lincoln Laboratories, which specializes in applied electronics research, but recommended that the balance of work in both labs be shifted toward more socially useful research. During the summer, the M.I.T. Corporation accepted the committee recommendations, but did not rule out the special laboratories' performing research funded by the Defense Department, including classified projects. The statement said, "The execcutive committee of the corporation believes that it would be inappropriate for the institute in incur new obligations in the design and development of systems that are intended for operational deployment as military weapons. This does not mean that, with its unique qualities, the institute should not continue to be involved in advancing the state of technology in areas that have defense applications." M.I.T. President Howard W. Johnson has said he will appoint an advisory committee with members drawn from the faculty, administration, and student body to review work undertaken by Lincoln Laboratories and the "I" Lab .- J.W.

even get to plead his case before the Budget Bureau Director. Whether a direct appeal from NSF would have made much difference is debatable, but the fact remains that some agencies have used a direct pipeline to the president to gain budgetary plums. Once Glenn T. Seaborg, chairman of the Atomic Energy Commission, for example, won reinstatement of a budget item that had been vetoed by the Budget Bureau and the Office of Science and Technology simply by making a personal visit to President Johnson and coming out with what envious officials dubbed "Seaborg's Christmas present."

With respect to Congress, NSF, in a low-pressure way, has developed cordial relations with some members of the committees that have jurisdiction over science. But the agency has not made much effort to cultivate the "power centers" of Congress or to broaden the base of its congressional

support. As Handler describes it: "The director and the board have rather deliberately avoided the relationships—the lunches with senators and congressmen—that most agencies have with their Congressional committees. This agency has never done that kind of thing. It was not the style of either director (Waterman or Haworth). NSF has remained as apolitical as it could possibly be."

In similar fashion, NSF's relationships with the press have been extremely limited in recent years. Haworth, for example, almost never held press conferences and was seldom available for interviews.

In at least one case, NSF was so inept in its dealings with Congress that it antagonized a senator who was in a position to hurt the agency. This happened when NSF failed to inform Colorado Senator Gordon Allott about an award that Allott was particularly interested in. Subsequently Allott, who

is the ranking Republican on the appropriations subcommittee that handles NSF, subjected NSF to the roughest budget hearing in the agency's history and charged that NSF was violating the law by asking college officials to lobby for more money for NSF (*Science*, 3 May 1968).

NSF's aloofness from politics was not particularly noticeable—and may even have been desirable-during a period of budgetary plenty. But after several successive years of tight budgets, the various federal agencies find themselves pitted in a harsh competitive struggle for the available dollars. The prize, most likely, will go to the "strongest" rather than to the "purest" of the federal agencies. Recognizing this fact, McElroy, who believes that NSF's programs have already been "cut down to the bone" and "can't get much lower" without inflicting unacceptable damage on American science. is undertaking an extensive campaign to repair NSF's political fences. He told Science he expects to spend fully half his time during his first year in office on congressional, public, and other "external" relations.

McElroy has already personally visited some 25 senators and representatives; he has had at least one lengthy session with Robert Mayo, Nixon's budget director; and he says he is prepared to go directly to the President when crucial issues arise. Another possible avenue to the President lies through the National Science Board which has already met twice with Nixon.

Recently McElroy also had an informal background dinner with the press, a tactic which is not new to Washington but which seems revolutionary for NSF. McElroy was clearly at ease with the reporters. He joked about the sex lives of fireflies (bioluminescence is his research specialty), fielded questions deftly, warned of the dire consequences of budget cuts for science, and even threw in a few jocular digs at a reporter who had written an article that was critical of him. There seems little doubt that McElroy is more attuned to dealing with the press and the politicians than either of his predecessors. And McElroy is convinced that time spent on improving NSF's public relations will pay substantial dividends. "A lot of people are friends of the foundation, contrary to popular opinion," he says. "Maybe we just haven't spent enough time emphasizing the

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