DuBridge and His Critics

Science Adviser's Critique of Mansfield Amendment Draws Sharp Rebuttal from Senate Majority Leader

Senate Majority Leader Mike Mansfield (D–Mont.) issued a stinging attack on Presidential Science Adviser Lee A. DuBridge recently, accusing him of making a "shocking statement," of attempting to "subvert" the law, and of providing "little initiative or leadership" in the effort to reduce the scientific community's dependence on military support.

The incident which aroused Mansfield's ire was a statement DuBridge made before a congressional subcommittee in opposition to the so-called Mansfield amendment, which prohibits the Defense Department from supporting any research that is not directly relevant to military needs. DuBridge is by no means alone in his opposition to the Mansfield amendment, however. The amendment has been criticized by many leaders of the scientific community, by leading Pentagon officials, and by some congressional supporters of science as well, largely on the ground that it forces the Defense Department to abandon the support of much high-quality research that will have difficulty finding adequate support elsewhere in this time of tight budgets and inflation. Moreover, although the amendment legally applies only to the Defense Department, some critics charge that its "philosophy" has spread to civilian agencies as well, and that these agencies are also cutting back support of basic research that is not directly relevant to their assigned missions.

DuBridge's Analysis

Ironically, the statement by DuBridge that so angered Mansfield was relatively mild in tone—DuBridge actually suggested that the deleterious impact of the Mansfield amendment had been exaggerated. The gist of DuBridge's argument was that the Mansfield amendment had had no impact on the dollar amount of the cuts made in the military research budget (since the Pentagon would have had to make the cuts for budgetary reasons anyway), but that the amendment had adversely affected the quality of the research projects cut (since some of the highest quality projects were deemed the least relevant).

DuBridge gave his analysis of the amendment's impact in response to a question after he had testified on 8 July at hearings on "national science policy" before the House Subcommittee on Science, Research and Development, chaired by Representative Emilio Q. Daddario (D–Conn.). The subject of the Mansfield amendment was raised by Representative James G. Fulton (R–Penn.), who noted that the amendment "greatly reduces or abolishes" Defense Department support of basic science that is not related to military programs. Fulton then asked DuBridge if he thought this was wise.

"No, sir, I don't," DuBridge replied, and then went on to explain that "the Mansfield situation is a very complicated one and it has been both overrated and exaggerated as to its impact." DuBridge said that for many years after World War II the Defense Department supplied "something like 80 percent of the funds for university science." But then other civilian agencies came along and boosted their support of science so that DOD's share "dropped over the years from 80 percent to under 20 percent where it was and is now." DuBridge said that, in the current fiscal year (fiscal 1970), "the Department of Defense had to reduce for budget reasons alone about $25 million worth of its university research support." DuBridge said that "this would have been true whether Mr. Mansfield had passed his amendment or not." But he added that the Mansfield amendment "substantially influenced" the way in which the particular projects were selected to be cut. "If DOD had been working only under budgetary restrictions," he explained, "it would have cut out what it believed to be the less productive, the less valuable of the research activities that it was supporting. But with the Mansfield amendment it had to cut out some of our most productive and most valuable projects to the country because they could not prove their relevance to specific military purposes." DuBridge said the Defense Department cut between $8 million and $9 million worth of university research projects "solely on the basis of the Mansfield restrictions." Even without the Mansfield amendment, Dubridge said, "that $8 million would have been cut out anyway but it would have been cut out of different projects for budget reasons." DuBridge went on to argue that "it is wrong to exclude an agency from supporting basic research which it deems would be valuable to it because . . . it is not possible to prove or disprove the relevance of a particular research project."

Mansfield's Counterattack

Two days later, on 10 July, Mansfield counterattacked. He called DuBridge's assertion that the defense agencies had cut some of their most productive research projects while continuing to fund less productive projects "a shocking statement." Mansfield said that if nonproductive research remains in the Defense Department, then it should be eliminated. And he said that if DOD had been forced to cut high-quality work because it has no relation to defense matters, then such work should be supported by the National Science Foundation. Mansfield argued that if high quality work is going down the drain, it is largely DuBridge's fault for failing to assure that the work is transferred to NSF.

From the start, Mansfield said, his amendment has had two related purposes: first, to reduce "the unique dependency of American science upon military appropriations"; and second, to sustain support of high-quality projects affected by the amendment by transferring them to other agencies. The transferral requires interagency coordination, Mansfield said, and such coordination is the responsibility of the Bureau of the Budget and of DuBridge's own Office of Science and Technology. "If the transfer is not smooth, they are not performing their responsibilities," he said.

Mansfield noted that Congress had already begun transferring resources to other agencies by boosting the NSF budget, and he added that "if DuBridge would concentrate more on the responsibility of assuring the transfer to NSF of the high quality research previously sponsored by Defense . . . than on rigid opposition to the congressional policy of moving these resources to

NSF from DOD, then most of the difficulties he mentions would be eliminated. I hope he realizes that Congress makes the laws not to be subverted, but to be enforced."

Mansfield said he had "repeatedly" urged an "orderly, intelligent implementation" of his amendment, but complained that he had seen "little initiative or leadership from the Office of Science and Technology. Instead of seizing upon a real opportunity to help reduce the inordinate dependence of our scientists on the Defense Department, we have heard only silence . . . only requests for abolition [of the amendment]."

Obviously irked, Mansfield hinted that he may take a close look at the nation's science policy apparatus. He said the "lack of leadership" in responding to his amendment "indicates clearly that we in Congress need to start asking very seriously about the state of public policy for science in this country. What is it? Who is forming it? Who is minding the store?" Mansfield said he hopes "to have time to look into these questions in the not too distant future."—PHILIP M. BOFFEY

DuBridge Reviews Major Science Policy Issues, Defends Administration Actions on Basic Research

Presidential science adviser Lee A. DuBridge last week invited representatives of the Washington science press to a session which evolved into a defense by DuBridge of Administration policies and of his own role.

The meeting combined the features of an informal, after-office-hours "backgrounder" and a press conference, and it afforded DuBridge an opportunity to express his views—although not in great depth—on major problems in federal science.

The session was the first of its kind, but DuBridge has been generally more accessible to the science press than his predecessors, particularly when specific issues involving his office have come up.

New Relationships

The first part of the hour-and-a-half meeting was devoted to a description by DuBridge and several aides of the operation of the Office of Science and Technology (OST). OST continues to provide staff support for the President's Science Advisory Committee (PSAC) and the Federal Council on Science and Technology (whose members are chief research officials in government science agencies) and to furnish studies and perform liaison jobs directly for the White House. DuBridge said that, in addition, OST is working out relationships with the new advisory councils lodged in the Executive Office, including the Council on Environmental Quality which, he said, has asked OST to keep tabs on the technological aspects of environmental problems. One thing DuBridge noted in passing is that about as many of PSAC's panels deal with defense technology as with civilian technology.

The discussion then shifted to the "budget squeeze," and DuBridge indicated his own concern, as he has on other occasions, about basic research. He said that the average 20 percent annual rate of growth in R&D funds in the early 1960's has declined in recent years—until this year there will be an absolute decline in the development budget and, because of factors such as inflation, a decline for the first time in the volume of basic research. DuBridge noted that "Inflation hits basic research harder," in part because "salaries of scientists go up faster than general wage rates." He estimated that the effect would be a 10 to 15 percent decrease in work in basic science.

DuBridge and his deputy director of OST, Hubert Heffner, stressed the point that the Administration had sought to give basic science special treatment, despite a very tight budget situation, but that Congress last year cut the Administration budget request of $1.57 billion for basic research to $1.47 billion. He said there are signs that the pattern is being repeated again this year.

This was a theme hit particularly hard by Heffner, who said he had urged DuBridge to meet with the press because university critics of the Administration and of DuBridge were misinformed about the situation and about President Nixon's intentions.

Because nearly a score of reporters were present, queries tended to come at random and there was no possibility of hot pursuit in following up questions, but the OST argument contained these main points.

A leveling off of the R & D budget was inevitable. The Administration has sought to ease the effect on research, but Congress thwarted the attempt with its action on the budget and then seriously complicated the situation with the Mansfield Amendment. (DuBridge's comments on the amendment generally followed the line he took in his remarks on Capitol Hill [see above].)

To questions about cuts in federal support for graduate students and postdoctoral fellows, DuBridge replied that, with employment down in the aerospace industry and demand for faculty in higher education "leveled off," a "large number of highly trained people are out of jobs." He said that the OST is involved in manpower studies that will enable policy makers to "predict needs for technical manpower in a reasonable way."

To questions about a national science policy DuBridge gave very general answers, indicating mainly that he felt it should be possible to decide what kind of technology to promote—defense, space, environmental—by developing the tools of cost-benefit analysis, but that basic science should be supported separately. It is impossible to know which fields in basic science will produce important results, and so it is necessary to maintain a strong science base.

Comment on Reorganization

He said his office is working on a policy statement on science which he hopes the President will eventually accept.

Asked about a reorganization of science policy machinery along lines of the Cabinet-level agency often suggested, DuBridge said OST was not working on reorganization plans "very intensely." Structure, he observed, is now the province of the new White House Office of Management and the Budget, but he gave the clear impression that he thought money, not structure, was the main problem.

Earlier he had wryly observed that, when some people say we need better science policy, what they really want is more money.

As for money and the future, DuBridge admitted "it is evident that fiscal '72 is going to be a very tight budget situation."—JOHN WALSH