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NEWS AND COMMENT

NSF: House Appropriations Panel Gives Warning Tug on Purse Strings

Through much of the National Science Foundation's formative period in the 1950's and 1960's, the chairman of the House Appropriations subcommittee which handled funds for NSF was Representative Albert Thomas (D–Texas). Thomas was one of the House's old-style, pragmatic philosophers who counseled NSF to stick to slow growth and hard science and avoid controversy that, for example, support of social sciences research might incite. He reinforced his advice by maintaining a firm grip on the purse strings.* Last week the Appropriations Committee followed the lead of the NSF subcommittee, now headed by Representative Edward P. Boland (D–Mass.) and treated NSF in a way reminiscent of the paternalistic, Thomas tradition.

The committee on 19 June approved an appropriations package for NSF which tightened the reins on the agency, most obviously by providing no funds for "implementation" of NSF's school curriculum improvement program. The ban on spending of funds—amounting to $9.2 million—used to inform school authorities about NSF-funded courses and to train teachers to employ them, was directly inspired by criticism within Congress of some behavioral science courses developed with NSF support, particularly one called "Man: A Course of Study" (MACOS) (*Science*, 2 May).

The committee also held the line on the basic research portion of the appropriation, recommending $345 million for the fiscal year compared with an actual appropriation of $340 million for the current year and the President's budget request of $380 million for the coming year.

As the following language in the draft report on the appropriations bill shows, the committee was influenced by recent criticism of the relevance of some research projects:

> In recent months particular activities of the Foundation have been questioned. Members of Congress, representatives of the press, and countless American taxpayers have been openly critical of the uses of tax revenues to finance seemingly frivolous and irrelevant scientific research projects. A number of specific examples have been cited, and responsibility for some has been attributed to the Foundation. Investigation has shown that in *most* cases the responsibility for these grants rests with agencies other than NSF, and some charges of frivolity have stemmed from an inadequate understanding of the scope, purpose and intent of research.
>
> Nevertheless, the Committee is aware of a responsibility to insure that the quality and value of scientific research undertaken is commensurate with the tax dollars provided.

The committee recommended a total of $707 million for NSF in fiscal year 1976, slightly less than the appropriation for the current year, but the carryover of funds deferred last year by the Administration will add $20 million. NSF officials seem to feel that, under the circumstances, the appropriation bill could be a lot worse from the agency's standpoint.

NSF had ample reason to feel it was under the gun. Appropriations Committee chairman Representative George H. Mahon (D–Texas) had written NSF director H. Guyford Stever a letter in May finding fault with NSF in very strong terms. Neither Mahon nor Stever made the letter public, but the contents became fairly widely known. Mahon wrote that if he discovered "damn fool" NSF projects, he would seek to cut millions of dollars out of the agency's budget. He went on to say he was "sick and tired of responding to correspondence from citizens who are blaming Congress for some of the idiotic things done by a few unstable people in the executive branch."

Mahon is said to have commented in the same vein during committee discussion of NSF, but the NSF sections of the pending appropriations bill, which includes funds for NASA and other independent agencies, is said to be essentially the handiwork of Boland and his subcommittee.

NSF officials were apparently braced for the Appropriations action. Under the circumstances, the committee treatment of NSF is being interpreted as reflecting basic sympathy for the agency, but signaling clearly that NSF had better change some of its ways.

NSF has far from finished running the gauntlet of criticism. Representative John B. Conlan (R–Ariz.), who called congressional attention to NSF-supported behavioral sciences courses in general, and to MACOS in particular, continues to press

*A notable exception to Thomas's normal caution and frugality where NSF was concerned was his enthusiasm over the selection of a Houston engineering firm for the ill-starred Mohole ocean-drilling project in the early 1960's. The Houston firm's bid on the Mohole contract was higher than that of two competitors. No impropriety was ever documented, but the fact that officials of the firm were political friends of Thomas, whose district was in the Houston area, and of then Vice President Lyndon B. Johnson, gave rise to speculation that NSF had succumbed to political influence. This was to add embarrassment to what became NSF's most controversial project.

ahead with his criticism and has widened his attack to include the peer review system (*Science*, 6 June). Conlan is still demanding that Stever provide him with peer review material. Stever is still refusing to do so on the basis of confidentiality, and Conlan is apparently gathering information outside said to indicate that NSF may have operated in contradiction of its own rules.

NSF, for its own part, is currently carrying out an extensive statistical study of the peer review system, marshaling data on a scale never attempted by the agency.

The issue of peer review is expected to be aired thoroughly at oversight hearings set by Science and Technology committee chairman Olin D. Teague (D–Texas) to begin on 22 July. So far, peer review and "geographical concentration" of research funds are the issues on which the committee is scheduled to concentrate, but it is possible that the discussion could broaden and the hearings develop into something of a showdown between NSF and its critics.

Teague has appointed a citizens review committee to consider the future of NSF's curriculum development program. The committee scheduled to meet on 23 and 24 June, was originally expected to make its report to Teague by the end of June, but it is now thought that it will take more time.

The General Accounting Office, the congressional financial and management watchdog agency, is actually working on two reports relevant to the subject, one on MACOS—requested by Teague—and a second more general one on the curriculum improvement program, which it undertook some months ago on its own initiative.

Teague now has in his hands a report of a specially created NSF science curriculum review team which, at the end of May, completed a crash study of the precollege curriculum activities of the agency. The group, headed by Robert E. Hughes, assistant director for national and international programs, concentrated on case studies of five curriculum development projects, including MACOS, picked to represent a cross section of science courses developed with NSF funds. The report isolates policy issues and makes a series of policy recommendations. In general, the recommendations urge establishment of clearer guidelines, better review procedures, and improved mechanisms for ensuring that NSF policies are carried out by grantees in the course improvement program.

The National Science Board, at its 18–20 June meeting in San Diego, passed several resolutions which apparently parallel the Hughes recommendations but go somewhat further in prescribing changes. These resolutions and a new policy on peer review were being transmitted to Congress at the time of the *Science* deadline.

When all these reports and recommendations are in, Teague will have to decide how to proceed. His main options would seem to be to hold special hearings this year or to wait until authorization hearings next year and use authorization legislation as a vehicle for making policy changes in the NSF science education program. Teague so far has not indicated what course he will take.

During NSF's first 25 years, science education programs have attracted relatively little attention. However, now and in the immediate future, it is evident that education will be a sensitive sector. The following excerpt from the Appropriations Committee draft report indicates the focus of congressional concern.

> The Committee is greatly concerned about the extent to which the National Science Foundation has supported the promotion and marketing of course curriculum for elementary and secondary schools and the concentration of these activities on courses that have been developed with NSF or other federal support. The Committee recognizes the need to acquaint teachers with new course materials but federal support for activities designed to get high school and elementary school administrators, members of school boards and other curriculum decision makers to adopt curricula developed with Federal funds could lead to the establishment of a single federal standard for education in the various fields of science.
>
> It is significant that one social science course for 5th graders entitled "MAN: A Course of Study" which has stirred considerable controversy because of its value orientation which many parents feel runs counter to western cultural standards has already been implemented in 1,700 schools nationwide. NSF recently funded a grant to the developers of MACOS which announced plans for the further spread of these studies. Regardless of the merits of a particular course of study, the Committee believes that the provision of federal funding for unique education marketing activities tends to give particular courses unfair advantage in the market place and therefore it is of extreme importance that federal intervention in the development of curriculum, and especially in its implementation be fully justified on a course-by-course basis to the Congress and to a broad base of public, educator, and professional organizations and parent groups nationwide.
>
> The Committee is chiefly concerned about courses which are value oriented and which fall in the broad behavioral science category. This includes MAN: A Course of Study, Exploring Human Nature and other courses dealing with political attitudes and moral values.

As for current prospects on NSF appropriations, the House bill is expected to pass in substantially the form given it by the committee. The Senate Appropriations Committee is scheduled to work on its version of the bill after the Fourth of July recess and to send it to the floor for action fairly promptly. Differences between the

Bauman Amendment's Chances Down

While the Appropriations Committee was expressing itself on NSF through a funding bill (see accompanying story), the House in the same week eased up slightly on NSF in another area. The action occurred in one of those minor parliamentary dramas that requires an insider's knowledge to appreciate fully. Causing the suspense was a provision voted by the House on 9 April (*Science*, 25 April) which would require NSF to submit all research grants to Congress for review. The proposal was attached to the NSF authorization bill in the form of an amendment sponsored by Representative Robert Bauman (R–Md.). The Senate subsequently passed an NSF authorization bill which omitted any measure similar to the Bauman amendment and differed in other ways from the House bill. This meant that a House-Senate conference was required on the bill. When Representative Olin D. Teague (D–Texas), chairman of the Science and Technology Committee (which is responsible for NSF funding authorization) made a routine request for approval of House conferees, Bauman objected, thus forcing formal consideration of the issue on the House floor.

It was assumed that when the matter was brought up Bauman would seek a vote to instruct the House conferees to insist that the House position on his amendment be incorporated in the conference measure and, in fact, when the matter came up on 17 June, Bauman did just that.

Teague had delayed going to the House floor on the issue for more than a month, and there was some speculation that Teague judged that Bauman might succeed, an outcome which would constitute a rather rude rebuff of a committee chairman by the House. As it turned out, Bauman's motion was defeated by a heavy 284 to 127 majority. And although Teague made a point of saying that he will insist on the amendment in conference, the odds now seem to be against the amendment finding its way into the final version of the bill.—J.W.

House and Senate versions would then be reconciled in conference. Indications are that the senators will not seriously dispute the cutoff of implementation funds.

Perhaps, as one observer suggested, the cutoff "gets everybody off the hook." The cut of implementation funds suspends the most controversial part of the science education program. NSF will have time to reassess all parts of the program but will be permitted to continue development of projects. Some of the pressure will be off Teague and his committee to intervene directly in agency operations. Nevertheless, the agency has been given an unmistakable signal of Congressional concern; if NSF or the scientific community needed evidence that criticism of federal science was not just the work of a few sharpshooters, the action of the Appropriations Committee amply provides it.—JOHN WALSH

White House Science Adviser: House Committee Mulls Ford Bill

President Ford has sent a science advisory bill to the House Committee on Science and Technology, thereby formalizing his decision last month to reestablish a science adviser in the White House. The bill, however, was drawn up in a bit of a hurry just before committee hearings were set to begin and remains to be filled out in detail. The lack of legal embroidery also apparently reflects continuing disagreement among Ford's staff about the scope of authority to be vested in the new job and about the degree of access Congress will have to the science adviser.

The Administration bill, moreover, differs dramatically from legislation worked up during the past 2 years by the committee itself. The House version, sponsored by the House science committee chairman, Olin E. Teague (D–Tex.), and the ranking minority member, Charles Mosher (R–Ohio), contains a long preamble setting forth a national science policy together with sections that would centralize management of federal civilian research under a new Department of Research and Technology Operations. The bill would also create not a single science advisory post in the White House but a council of five persons. In spite of these differences committee sources believe that the final legislative product due out in late summer or early fall will closely resemble what the President wants. That, as Ford explained it to a group of congressmen on 22 May, is a single science adviser, backed by a staff of about 15 professionals and an annual budget of around $1.5 million. Ford also was said to want the science adviser to be subject to Senate confirmation and have rank "comparable to" that of a cabinet member.

The Science and Technology committee began a leisurely series of hearings on the bill on 10 June. The first witness—committee members preferred to call him a "guest"—was Vice President Nelson Rockefeller, whom Ford had asked several months ago for advice about science advice.

Rockefeller was remarkably candid about the way the bill—which had come across his desk only the previous afternoon and had been sent on to committee members that evening—had been drawn up. Rockefeller explained that Ford had rejected the idea of a council, at least partly, in order to avoid complaints from the scientific community about a council's makeup and whether it was sufficiently representative. "There are many fields of science and technology to choose from," Rockefeller said. "The more you include, the more those not included feel they are left out . . . and you create difficulties."

The alternative was to pick a single head of an office, designated in the Ford bill as the Office of Science and Technology Policy, with up to 15 professional staff picked from representative fields.

(Rockefeller's original recommendation had been for an office with five assistant directors "selected on the basis of concerns of the moment"—oceanography, world food problems, and so on. This idea, apparently, implied a larger staff than Ford wanted.)

Why fifteen? The Vice President said, "I really think this was kind of drawn out of the air. To tell you the honest truth, I think it was a 'not too big, not too small' type of [decision], to give evidence that the Administration is serious, but that they are not trying to compete with Guy Stever [director of the National Science Foundation] or the other departments."

The Administration bill does not spell out the size of the staff or the budget, but instead would merely authorize such personnel and money "as may be necessary." Nor does the bill confer a formal title that would connote cabinet rank; instead, it would create an Office of Science and Technology Policy headed by a "director" and "deputy director." The director would, the bill says, be regarded as the President's chief adviser on science-related matters with respect to:

▶Scientific and technological aspects of major national policies, programs, and issues.

▶The adequacy and effectiveness of federal science and technology policy.

▶Utilization of science and technology in addressing important national problems.

▶Coordination of science and technology activities of the federal government.

▶Other matters, as the President may direct.

All this struck some members of the House committee as a bit vague. Important areas not mentioned in the bill, for example, are the science adviser's role in assembling the federal R & D budget and in matters of military research; the latter is at present not in the ken of the official science adviser, NSF director Guyford Stever, and many committee members, as well as former science advisers, are anxious to rectify this.

Yet another point unmentioned in the Administration bill is the matter of Senate confirmation. House and Senate science committee members want the science adviser to be subject to Senate confirmation, as this would open the way to periodic recall to explain or account for White House policies; balanced against this accessibility is a President's traditional inclination to keep the family linen under the cover of executive privilege.

Ford, as it happens, had previously told the visiting congressmen in May that he favored Senate confirmation, as a means of imparting congressional sanction to his appointee but not to make him a conduit for internal White House conversations and disagreements.

Noting that the bill had not mentioned this sensitive subject, Representative Mosher asked the Vice President whether Ford still favored Senate confirmation.

Said Rockefeller, "Well, I would say the President is. That doesn't necessarily mean everybody in the White House."