

Federation of American Scientists
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NATIONAL SCIENCE FOUNDATION

This week, with scare-stories of communism among scientists, espionage, and atomic insecurity rattling like hail around Congressional ears, the National Science Foundation Bill (H.R. 4846) was reported out of the House Interstate and Foreign Commerce Committee. Although re-drafted in part, and thereby improved from the point of view of technical clarity, H.R. 4846 is fundamentally similar to S. 247, passed several months ago by the Senate, and to H.R. 12, originally introduced by Representative Priest. With some changes (only a few of which are significant), it is the Smith bill of the 80th Congress slightly modified to meet the objections of the Presidential veto message.

Loyalty Affidavits. In reporting out the bill, the House Committee has recommended several new amendments, two of which are of particular significance. The first is requirement of a loyalty affidavit for scholarship and fellowship holders. Inserted as paragraph (b) of Section 10, the amendment reads as follows: "No part of any funds appropriated or otherwise made available for expenditure by the Foundation under authority of this Act shall be used to make payments under any scholarship or fellowship to any individual unless there is on file with the Foundation an affidavit executed by such individual that he does not believe in, and is not a member of and does not support any organization that believes in or teaches, the overthrow of the United States Government by force or violence or by any illegal or unconstitutional methods."

Some provision relating to loyalty had been anticipated since the beginning of the furor over the AEC fellowship program. The wording selected by the Committee is similar to that governing officials of labor unions under the Taft-Hartley Act, except that it does not make specific reference to the Communist Party. It is regarded by Representative Priest, author of the bill and one of the prime movers in the House for NSF legislation, as a necessary concession to those who might push for still stronger wording.

The issue here raised is, of course, identical with that involved in the controversy over Atomic Energy Commission non-secret fellowships. With reference to these latter the Administrative Committee of the Federation has stated, "We believe that oaths, affidavits, or clearance investigations are unnecessary and potentially dangerous to scientific progress. We endorse the original policy of the Atomic Energy Commission and the National Research Council of granting these fellowships solely on the basis of scientific competence." The reasons for this stand have been amply discussed in communications from the FAS office during the past several weeks (See "Implications of the AEC Fellowship Controversy", A-724).

Although the provision now contained in H.R. 4846 is milder than some forms it might have taken, it is necessary to oppose it for two reasons. First, its sole justification for inclusion is concession to current fears and hysteria. Totally ineffective in detecting actual enemies of the U.S., it has significance only in its indication of the state of mind of the country — one of unreasoning insecurity and fear. To fail to oppose the provision is to accept this state of mind and permit it to go on to even more dangerous manifestations. Second, it is almost certain that an attempt will be made on the floor of the House to write in an even stricter provision. By speaking out against the present provision we give ammunition to those who will fight to retain at least the milder version.

Survey Function. The second amendment made by the Committee affords a happier situation. The Federation has repeatedly urged that the Foundation be instructed to maintain a continuous survey of the research programs of the nation, and to make recommendations for strengthening them. Paragraph 6 of Section 3 (a) has been amended to direct the Foundation "to evaluate scientific research programs undertaken by individuals and by public and private research groups, including scientific research programs of agencies

of the Federal government, and to correlate the Foundation's scientific research programs with such programs". This represents, whether deliberate or not, a real concession to Federation thinking and should be supported.

General Provisions. Virtually all observers in Washington agree that the general form of H.R. 4846 is the best that can be obtained at the present time. However, it should be noted that it does not conform to Federation recommendations in a number of important respects. Authority and responsibility are vested in a 24-man part-time National Science Board, rather than in full-time personnel. The full-time Director is the "chief executive officer of the Foundation", a non-voting member of the Board, and the non-voting Chairman of its nine-man Executive Committee. But he operates within the policies established by the part-time Board, makes grants-in-aid and awards scholarships and fellowships only with the approval of the Board.

The bill makes no specific provision for the social sciences, although it does not exclude them.

The section on patent rights remains far too general. In essence it instructs that provisions governing patents shall "protect the public interest and the equities of the individual or organization with which the contract or other arrangement is executed". The wording of the provision on coordination with foreign policy has been altered slightly but still makes authority to engage in international activities of any kind contingent on "consultation with the Secretary of State, to the end that such authority shall be exercised in such manner as is consistent with the foreign policy objectives of the United States". The insistence upon a provision to ensure wide-spread distribution of funds is met by the statement that, "it shall be one of the objectives of the Foundation to strengthen basic research and education in the sciences, including independent research by individuals, throughout the United States, including its Territories and possessions, and to avoid undue concentration of such research and education". The Foundation is excluded from the field of "atomic energy" without prior concurrence of the AEC.

Military Research. Military research is included along with fundamental research. The Foundation is directed, "after consultation with the Secretary of Defense, to initiate and support scientific research in connection with matters relating to the national defense". This naturally involves security. "The Executive Committee, after consultation with the Secretary of Defense, shall establish regulations and procedures for the security classification of information or property (having military significance) in connection with scientific research under this Act, and for the proper safeguarding of any information or property so classified."

The Positive Side. On the positive side, it must be realized that H.R. 4846 established, for the first time in peace-time, a government civilian agency whose exclusive responsibility is with the problems of science. Although this feature is marred by the direction to the Foundation to engage in research relating to national defense and to establish security regulations, its advantage relative to current difficulties is evident. The bill established scholarship and fellowship and grant-in-aid programs in basic science, specifically without relation to immediate practical needs. This is a new step for the Federal government. And an important principle is recognized when the Foundation is directed "to develop and encourage the pursuit of a national policy for the promotion of basic research and education in the sciences". Never before have we had a Federal agency instructed to think in terms of, and to attempt to implement, a national policy for the advancement of science.

Those FAS members who have been active in support of National Science Foundation legislation do not look on H.R. 4846 with great enthusiasm. It is certainly not exactly the kind of bill the Federation would have written. But the consensus is that it will be better to have this NSF than none. And we have now progressed to the point where this has become the choice. Viewed dispassionately the bill is a product of the times. Its sins, with a few outstanding exceptions, are ones of omission rather than commission. It does not delineate a clear positive policy for the agency, but neither do its

provisions preclude such a policy if the Director and Board are so minded. It does not establish a top-level agency for government science, but the trend can be in this direction. Social science can be included under the Foundation; funds can be used for expanding the scientific plant through emphasis on building up under-developed areas; the Foundation can survey and evaluate the national research effort. The proper selection of personnel becomes crucial in the form of Foundation we shall apparently have.

Recommended action. The bill will probably come to the floor of the House in one to three weeks. This is therefore the time for all who are interested in the legislation to make their views known to their own Representatives. Many of those who will make the final decisions on the House floor have little knowledge of the bill or the views of scientists on it. It is urged that all local chapters, and all individual members, act to get a maximum flow of communications to individual Congressmen from their home districts as soon as possible. It is recommended that these communications stress the importance of passage of H.R. 4846, without Section 10 (b) relating to loyalty affidavits for scholarship and fellowship holders; without Section 3 (a) 3 relating to national defense research; without Section 14 (k) relating to security classification (or with a modification making clear that the Foundation shall not give continuing support to classified research; see FAS memo A-700, P. 4*); but with Section 3 (a) 6, as amended, relating to evaluation of public and private research groups. The recommended deletions tie together under the principle of no military research, no secrecy, no clearance. The Foundation should be concerned only with science for its intrinsic worth, and its constructive values.

For a fourth, and perhaps final, time a National Science Foundation is nearly within grasp. Properly administered, such a Foundation might solve, or at least reduce the pressure of some of the problems which have become so serious in the past several weeks. Most of our energies are going into defending science and scientists. Just a little energy, right now, can be put to something constructive, an offense which in the long run may contribute our best defense.

*FAS memo A-700, "Views of the FAS on National Science Foundation Legislation", states:

"it is recommended that Section (14 (k) of H.R. 4846) be amended to read as follows: 'It shall be the general policy of the Foundation not to give continuing support to research requiring security classification. When any research under its auspices is deemed by the Foundation, in accordance with such national policies as may be established by Congress, to require security classification, the Director shall consult with the Secretary of Defense to determine the appropriate agency to which support of the research should be transferred. Pending such transfer, security classification and procedures shall be determined by the Director after consultation with the Secretary of Defense.'"

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