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SCIENCE, which is now combined with THE SCIENTIFIC MONTHLY, is published each Friday by the American Association for the Advancement of Science at Business Press, Lancaster, Pa. The joint journal is published in the SCIENCE format. Entered at the Lancaster, Pa., Post Office as second class matter under the Act of 3 March 1879. SCIENCE is indexed in the *Reader's Guide to Periodical Literature*.

Editorial and personnel-placement correspondence should be addressed to SCIENCE, 1515 Massachusetts Ave., NW, Washington 5, D.C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts or for the opinions expressed by contributors. For detailed suggestions on the preparation of manuscripts, book reviews, and illustrations, see *Science* 125, 16 (4 Jan. 1957).

Display-advertising correspondence should be addressed to SCIENCE, Room 740, 11 West 42 St., New York 36, N.Y.

Change of address notification should be sent to 1515 Massachusetts Ave., NW, Washington 5, D.C. 4 weeks in advance. If possible, furnish an address stencil label from a recent issue. Be sure to give both old and new addresses, including zone numbers, if any.

Annual subscriptions: \$8.50; foreign postage, \$1.50; Canadian postage, 75¢. Single copies, 35¢. Cable address: Advancesci, Washington.



Fiscal Control of Research

The university scientist, like his department head and his president, values unrestricted funds that he can use as the changing requirements of his research determine. Traditionally he has had such funds, frequently in small amount but with freedom to plan his own research and to alter his plans as he thought best. Now, however, with the increased cost of many kinds of research, the changing pattern of research support, and the great amount of research money coming from the Federal Government, some of this earlier freedom has been lost, the comptroller is challenging the research director, and there are beginning to be complaints from the campus that have a discouragingly familiar ring to one acquainted with government operations: plans must be submitted in advance so that they can be reviewed and approved at higher administrative levels; if changes become necessary, the changes must also be reviewed; decisions—typically negative or curtailing decisions—are frequently made by administrators who are far from the laboratory but close to the seat of over-all fiscal responsibility.

This whole process stems from the fact that where large amounts of money are involved, the "safe" step for each person in the line of authority to take is to insist upon reviewing the plans and expenditures of persons under his supervision. The resulting multiplicity of reviews is costly in manpower, in frustration, and in inevitable and sometimes protracted delay.

In applied or developmental research, these costs can become very great. A Congressional committee has severely criticized the Department of Defense for a management system that sometimes requires a project to be reviewed by as many as four parallel offices, as many as three times by the same office, and by a distressingly large number of individuals in different offices and at different administrative levels. A current topic in many discussions of military management is the extent to which this system has produced dangerous delays in the development of new weapons.

A basic fault with the whole process of multiple review is that authority to make decisions is divorced from the responsibility for carrying out those decisions. Decisions concerning weapon design are made at headquarters levels, but the contractor must build the weapons and see that they meet performance specifications. Some decisions concerning research plans are made at administrative levels, but the laboratory scientist must carry out the research.

In a general way, it is probably true that the larger the organization the greater is the pressure for centralized control. But the pressure can be resisted, and some administrators have learned that close attention to how each dollar is spent increases the total number of dollars necessary to accomplish a given end. Thus some large industries have learned the effectiveness of decentralizing authority as well as responsibility. The National Institutes of Health and the National Science Foundation provide some excellent examples of minimal review of project plans and changes. Congress recently extended the right to make grants, as opposed to research contracts, throughout the research-supporting agencies of government. Farther afield, the British Parliament accepts from the Department of Scientific and Industrial Research a budget document so slim that it hardly equals the introduction to the budget justification that the National Science Foundation submits to Congress. (For fiscal 1959 that document weighed three and a half pounds.)

Good business management is essential in universities, but it will be strange indeed if university research management follows the stultifying road of bureaucratic review and review and review when that road is so foreign to university traditions and when there are effective and much more congenial roads to follow.—D.W.