

try's defense laboratories. This necessary security can be and is now maintained by the little publicized but ever vigilant security agencies which are already established and which operate under well-defined procedural regulations. It is clear that a real maximum of national security can be achieved only by an intelligent balance of security by secrecy against security by vigorous military research and continuing achievement.

"The point should be clearly made and emphasized that investigations which are characterized largely by sensational headlines and wholesale suspensions can, by crippling our defense research, actually result in a net gain for those who work against the interests of the United States. The effect on our national security would be extremely serious if such investigative methods are allowed to spread to other areas of this country's scientific effort."

New NSF Advisory Committee

On Government-University Relationships

The National Science Foundation announced on December 7th that an advisory committee* has been formed to consider the effects of government support to colleges and universities on their research and teaching functions. Noting that while many millions of dollars have been spent by government agencies during and since World War II for the procurement of services in technological developments in universities and colleges, the Foundation added that relatively few millions of dollars have been provided for research and education in the sciences, although in many instances these institutions are uniquely fitted to carry on such activities. "A closely related question to which the Committee may also give attention," the announcement stated, "is how the Federal Government, in cooperation with the colleges and universities, may best develop and encourage research and education in the sciences. These matters will receive objective study and appraisal by the Foundation with the advice of the Committee. The results of the study may be expected to have substantial value both to government agencies and the institutions of higher education."

Statistics compiled by the Foundation indicate that during the year ending June 30, 1952, educational institutions received almost \$300 million from Federal agencies for development and research. Approximately \$136 million (46 percent) was spent by instructional departments. Of the rest, about \$3 million was spent by affiliated research organizations, \$12.5 million by agricultural experiment stations, and \$143.5 million by re-

search centers, which were administered by educational institutions for specific Federal agencies but organizationally segregated from the normal activities of the institutions. According to the Foundation a total of 225 educational institutions received some Federal support for development and research in 1951-52. These included 86 universities, 95 liberal arts colleges, 41 professional-technical schools, and three other educational institutions.

Miscellany

Massachusetts Institute of Technology would withdraw from secret research "with enthusiasm and relief" whenever national policy might find it to be no longer necessary, according to MIT President James R. Killian, Jr. In his annual report to the MIT corporation, Dr. Killian noted that the Institute regards its research programs in support of the national security as an inescapable responsibility, but that under more normal conditions they would not be undertaken by choice.

A committee to study legal practices and decisions concerning complex scientific questions has been created at Columbia University under a \$50 000 grant donated by Edwin H. Armstrong, professor of electrical engineering at Columbia and inventor of frequency modulation in radio communication. The committee is headed by W. C. Warren, dean of the Columbia Law School, and includes three other legal experts and a physicist, K. T. Compton, former president of the Massachusetts Institute of Technology. Dr. Armstrong is quoted as saying that he made the grant after having observed that public bodies often were required to ascertain facts without the benefit of adequately developed techniques and procedures, with the result that "important decisions sometimes have been made, and important actions taken, upon erroneous findings of fact in technical and scientific fields".

In connection with the publication of the 30-year *Index of The Physical Review* (1921-1950), which is now available from the American Institute of Physics, the Treasurer of the American Physical Society informs us that while the publication of this valuable reference aid was made possible through a contract with the Office of Naval Research, that Office and the Society wish it to be known that the U. S. Army and the Atomic Energy Commission were also co-sponsors of the *Index* and each agency supplied one-third of the funds for the contract.

New Research Facilities

The University of Maryland, College Park, Md., has completed a million dollar physics laboratory and an adjoining mathematics building, which houses the Institute for Fluid Dynamics and Applied Mathematics and an extensive physics-mathematics-engineering library. A laboratory for molecular physics, directed by Professor A. M. J. F. Michels, is now under construction and will be completed early next year. New research programs have been begun in cosmic rays, micro-

* The appointment of the Committee was authorized by the National Science Board, which also selected its own chairman, Chester I. Barnard, to be the chairman of the Committee. The other members are:

Arthur S. Adams, President, American Council on Education
Vannevar Bush, President, Carnegie Institution of Washington
James S. Coles, President, Bowdoin College
Harold W. Dodds, President, Princeton University
Conrad A. Elvehjem, Dean, University of Wisconsin Graduate School
T. Keith Glennan, President, Case Institute of Technology
Virgil M. Hancher, President, State University of Iowa
William V. Houston, President, Rice Institute
Clark Kerr, Chancellor, University of California, Berkeley
C. N. H. Long, Professor of Physiology, Yale University
Don Price, Associate Director, The Ford Foundation
Julius A. Stratton, Provost, Massachusetts Institute of Technology