

# News and views

## The Astin Case

### Statement Approved by APS Council

At a meeting of the Council of the American Physical Society held at Washington on May first, 1953, the following statement was approved unanimously:

"The Council of the American Physical Society has been deeply concerned with the impact of the Astin dismissal on the morale and effectiveness of physicists in Government laboratories. The Council's apprehension has been partly relieved by the temporary reinstatement of Dr. Astin, and by the accompanying declaration of Secretary Weeks that his previous action did not imply any reflection on the scientific integrity of either Dr. Astin or the Bureau of Standards. However, more is needed to undo the harm that has been done; and a fundamental principle should be made very clear.

"It is the duty of a scientist to investigate scientific and technical problems by openly-stated objective methods without shading his conclusions under political or other pressures. On this principle the progress of science depends. We never doubted that the work of the Bureau of Standards has been conducted in this spirit.

"The Council urges that an authoritative statement be made that this principle forms the rule of ethics for scientists in Government service and that no scientist will be penalized for adhering to them. We believe that such a statement would do much to relieve the uneasiness caused by the Astin incident.

"The Council commends the intervention in this matter of the National Academy of Sciences, which was motivated by the same beliefs as ours."

### Some Facts and Figures

The foregoing is only one of a number of statements released by various scientific organizations in connection with the forced (but temporarily delayed) resignation of A. V. Astin as Director of the National Bureau of Standards. As matters now stand, a committee under the chairmanship of M. J. Kelly, President of the Bell Telephone Laboratories, is engaged in the task of evaluating the functions and operations of NBS, and is expected to submit its report within the next few weeks. The Bureau's Visiting Committee of Scientists, at the request of Secretary of Commerce Sinclair Weeks, is then to submit a slate of names from which Mr. Weeks expects to choose Dr. Astin's successor. A third committee is to investigate the tangible center of the Secretary's argument with the Bureau, the battery additive

AD-X2, which NBS has called worthless for the purpose of prolonging the lives of storage batteries and which has been eloquently defended by Mr. Weeks and others.

The report of the Kelly Committee, it is understood, will be made public upon its completion, but will not be concerned in particular with the Bureau's testing of battery additives or with the AD-X2 controversy since no more than one percent of the Bureau's work is devoted to the testing of commercial products.

A service laboratory established for the Federal Government by Act of Congress in 1901, the National Bureau of Standards has been assigned the following functions:

"(a) The custody, maintenance, and development of the national standards of measurement, and the provision of means and methods for making measurements consistent with those standards, including the comparison of standards used in scientific investigations, engineering, manufacturing, commerce, and educational institutions with the standards adopted or recognized by the Government.

"(b) The determination of physical constants and properties of materials when such data are of great importance to scientific or manufacturing interests and are not to be obtained of sufficient accuracy elsewhere.

"(c) The development of methods for testing materials, mechanisms, and structures, and the testing of materials, supplies, and equipment, including items purchased for use of Government departments and independent establishments.

"(d) Cooperation with other governmental agencies and with private organizations in the establishment of standard practices, incorporated in codes and specifications.

"(e) Advisory service to Government agencies on scientific and technical problems.

"(f) Invention and development of devices to serve special needs of the Government."

Total financial support for the Bureau this year is \$48 million, of which \$36.8 million has been transferred from the Department of Defense for research and development projects for the armed services. The Bureau's current operating budget is financed with a direct appropriation of \$8 million, which constitutes only about one percent of the total appropriations for the entire Department of Commerce. \$1.8 million in transfer funds from the Atomic Energy Commission for research projects at NBS and \$1.4 million transferred from other Government agencies make up the balance of the Bureau's present financial support.

The Bureau has seventeen major scientific and technical divisions: Electricity, Optics and Metrology, Heat and Power, Atomic and Radiation Physics, Chemistry, Mechanics, Organic and Fibrous Materials, Metallurgy, Mineral Products, Building Technology, Applied Mathematics, Electronics, Radio Propagation, Ordnance Development, Electromechanical Ordnance, Ordnance Electronics, and Missile Development. Each of these divisions contains specialized sections having distinct responsibilities in the various programs of the Bureau.

NBS activities include fundamental and applied research, development and engineering, testing, calibration and specifications, and many miscellaneous advisory scientific services. The NBS laboratories in Washington, D. C., are the scene of most of the Bureau's activities, but there has been a noticeable increase at the other three principal laboratories—the Institute for Numerical Analysis at UCLA, the Corona Laboratories for missile and ordnance research, also in Southern California, and the cryogenic engineering establishment at Boulder, Colorado.

As can be seen from the relative weighting of the Bureau's financial support, the bulk of its work is related to defense research and development programs. During the heat of the controversy over the merits of AD-X2, Secretary of Defense Charles E. Wilson issued an order specifying that all future Defense Department research projects be cleared by him. Although no mention of the Bureau of Standards was made in the order, it was widely interpreted as having been made at the request of the Secretary of Commerce as a restrictive measure against the Bureau. On April 30th, Lee A. DuBridge, a member of the Kelly Committee to evaluate the operations and functions of NBS, revealed that Mr. Wilson had been asked to withdraw the order, at least until the committee's work is completed.

## Independent NBS Proposed

### National Physical Sciences Laboratories

On May 6th a bill was introduced in the House of Representatives calling for the establishment in the executive branch of the Government of an independent agency to be known as the "National Physical Sciences Laboratories" and having all of the present functions and responsibilities of the National Bureau of Standards. The bill, H. R. 5043, was introduced by Representative DeWitt S. Hyde (R., Maryland) and has been referred to the House Committee on Interstate and Foreign Commerce.

Calling for the repeal of the original Act of 1901 establishing the Bureau, and for the transfer to the proposed Laboratories of the personnel, records, property, and unexpended funds of NBS, the bill asks for the creation of a governing board for the Laboratories that would be broadly representative of the nation's scientific interests. The board, it is proposed, would consist of eighteen members appointed by the President, and of the Director of the Laboratories as an *ex officio* member. Board members would serve without compensation and would include two members from each of the following: the Army, the Navy, the Air Force, and the Atomic Energy Commission. Other members would include the Chairman of the Research and Development Board of the Department of Defense, the Director of the National Science Foundation, the Director of the National Advisory Committee for Aeronautics, and seven "scientifically qualified individuals appointed from private life".

The Director of the proposed Laboratories would be

appointed by the President, by and with the advice and consent of the Senate, and would consult with the board in performing his duties. The board, in turn, would be called upon to visit the Laboratories at least once a year, and to report to the President upon the "efficiency of its scientific work and the condition of its equipment".

## National Science Foundation

### Graduate Fellowships in Science

Approximately twenty percent of the most recent NSF graduate fellowships in the natural sciences for 1953-54 have been awarded in physics, according to an announcement made by the Foundation early in April. A total of 556 fellows were selected from 3298 applications from all parts of the continental United States, Hawaii, and Puerto Rico. In addition, the Foundation named 1274 applicants to an "honorable mention" list, which is to be forwarded to the fellowship offices of graduate schools throughout the country. The list of fellowship winners includes 515 predoctoral and 41 postdoctoral candidates. 180 awards were made to first year graduate students, 166 to graduates in intermediate years, and 169 to terminal-year predoctoral students. Of the total, 175 had also been awarded NSF fellowships for the current academic year. They received awards for 1953-54 after competing on an equal basis with all new applicants for the fellowships.

The largest group, 129, was awarded in chemistry. In other fields the numbers of awards were: physics, 115; engineering, 63; mathematics, 56; zoology, 38; biochemistry, 35; geosciences, 26; botany, 19; microbiology, 18; biophysics, 14; medical sciences, 13; genetics, 11; psychology and anthropology, 10; and agriculture, 9.

### Grants in Support of Research

NSF has also announced approval of this year's third group of grants in the physical and biological sciences and to support studies and conferences on science and scientific education. Sixty grants, amounting to \$469,550, are included in the new list, bringing the total for the 1953 fiscal year to more than \$1.8 million for 190 grants. Nearly three million dollars in grants have been awarded by the Foundation to institutions throughout the nation for support of basic scientific research and related matter since the beginning of the program in 1950. Only one of the most recent research grants was listed under the category of physics, the University of Pennsylvania being named to receive \$8800 for a three-year investigation into physical methods for the measurement of biological phenomena under B. Chance as principal scientist.

Other awards of interest include NSF support of the University of Minnesota's Summer Institute for College Teachers of Physics; the University of Michigan's Symposium on Astrophysics; a conference at the University of New Mexico on motions in the upper atmosphere; the Summer Mathematical Institute in Provi-