

tive efforts toward solving common standards and measurement problems. Its members include standards laboratories of individual companies, universities, independent laboratories, and those in other government agencies.

NBS extends its laboratory resources to professional societies and standards groups in several ways. Our experts visit groups all over the country and pass on the latest developments of NBS research in different fields. We also sponsor (or are host to) many conferences, seminars, workshops, meetings, and such, at which Bureau scientists and engineers report on the latest results of NBS research, and participants are given an opportunity to visit NBS labs, and thus note how our special facilities may be used at some future time to solve a measurement or standard problem.

INDUSTRY

Finally, our laboratory facilities are shared with industry itself. The most effective mechanism is our Research Associate Program. Under this plan, industrial groups sponsor research at the Bureau which is of special interest to them and yet has public significance. Experiments are carried out by Research Associates who are paid by their sponsors but who work in Bureau laboratories with the Bureau staff. The knowledge and skills thus derived by Research Associates are expected to advance the Nation's economy and to increase utilization of NBS research results. The Research Associates contribute their industrial experience and their knowledge of urgent industrial needs.

The work of Research Associates is not directed to proprietary solutions. Instead, it is aimed at removing obstacles to the use of measurement; such obstacles may arise from a lack of sound data or instrumentation, or from a lack of criteria or of appropriate techniques.

At present there are 63 Research Associates at NBS representing 23 companies, trade groups, and government organizations.

In summary, the laboratories of the NBS are utilized in many different ways and by many groups. These include actual use of NBS equipment by others, work done for others, extension of our laboratory capability through contact between our experts and others, calibration and testing for various customers, and by the distribution of our laboratory products, such as the standard reference materials and reference data.

THE PROBLEM OF ADDED RESPONSIBILITIES

Since 1950, when the basic missions of the Bureau were fully spelled out, a number of responsibilities have been assigned to us—some by amendment of the Organic Act, some by specific legislation, and some by delegation from the Secretary of Commerce. Among these new assignments are:

(1) The dissemination of technical, scientific and engineering information through the Federal Clearinghouse for Scientific and Technical Information.

(2) The establishment of uniform Federal automatic data processing standards.

(3) Operation of a National Standard Reference Data System.

(4) Research on and development of flammability standards for fabrics and household furnishings.

(5) Operation of a National Fire Research and Safety Program.

The problem is not that we don't have the capability of performing these functions, but that we have not been provided with the resources necessary to carry out the programs at optimum levels. The result is that we have had to do extensive reprogramming which has seriously hurt our longer established programs. Our ability to pick and choose priorities now is practically nonexistent. And we face this situation at a time when there is an urgent need to keep abreast of rapid technological advances requiring basic standards and data services. As a Nation, we can ill afford any unnecessary delays in these technological advances which are vital to our domestic economy, to the expansion of our export trade, and to the solution of such far ranging national problems as urbanization, environmental pollution, transportation, and many others.

Mr. DADDARIO. Just one question, Dr. Astin, because we do have two more witnesses.

On your first statement, the one that I asked you to summarize, you say on the last page "our ability to pick and choose priorities now is practically nonexistent."