

NBS: Meeting industry standards?

This month we leave the usual optical standards reporting per se and review a document of wider yet related interest. In October 1986, Congress charged the director of the National Bureau of Standards to prepare a report outlining the Bureau's support of industry and other government agencies in the area of "process and quality control and calibration programs".

In June 1987, the 207-page document, "Process and Quality Control and Calibration Programs of the National Bureau of Standards", was issued. (Available through NTIS in Springfield, Va. for \$24.95; NBSIR 87-3596.)

A 13-page executive summary is followed by three "chapters," the first describing the role of NBS, its products, and customers. The second is a digest of comments from "customers" obtained while the NBS was collecting material for the report. The third is a fairly specific review of areas where customers felt the Bureau could be of more help. The latter half of this chapter is a detailed list of the companies and persons visited by bureau director, Ernest Ambler, and other deputy directors.

The report concludes with four appendices detailing "customer" needs for calibrations, special tests, and Standard Reference Materials (such as line width standards). One full appendix is devoted to Department of Defense needs for measurement research and services. A final appendix on "The Status of Emerging Technologies: An Economic/Technological Assessment to the year 2000" includes a ranking of these technologies by economic impact and lists generic barriers to achieving maximum benefits from these emerging technologies. This material may be the most valuable part of the report for many readers.

NBS brings resources together

While the report as a whole is somewhat political and self serving, it gives an interesting review of the Bureau's services, how NBS perceives its role of serving industry and national commerce, and how its customers feel the Bureau is serving them. For example, the Bureau annually performs 7,000 calibrations for 3,000 customers and supplies 40,000 units of Standard Reference Materials worth over \$6 million. Through its measurement science and services, NBS feels that it links institutions with total metrology resources many times its own in a coherent and compatible whole. Industry and other users of NBS services feel that the Bureau satisfactorily fulfills its role as the national central reference laboratory.

The report raises several disturbing issues for those of us interested in standards and optics. For one, the method by which the Bureau gets much of its funding hampers its efforts to stay on top of emerging metrological techniques. Often other government "lead agencies" must budget

money for NBS development use. If the other agencies do not see the same need for development in some new area of technology, the work may not get funded in a timely fashion.

Optics not emphasized

In addition, while there is much emphasis these days on process control and in situ measurement, there seems to be little Bureau emphasis on optics as an efficient means of remote sensing of processes. In fact, given the breadth of the Bureau's services, the report does not indicate much optics work outside the areas of spectroscopy and fiber optics, even in the emerging technologies part of the report.

While this work does not belong on everyone's bookshelf, a casual reading is certainly educational and a critical reading may point to areas of concern in the optics community. A better understanding of the Bureau's role in optical metrology is obviously necessary before greater support can be expected in this increasingly important technological field.

—Robert E. Parks

OPTICAL SCATTERINGS

Task force looks at women in science

The congressionally mandated Task Force on Women, Minorities, and the Handicapped in Science and Technology is holding public hearings across the country to encourage participation in its activities.

After examining the role of women, minorities, and the disabled in federal science and engineering positions, the task force will coordinate

existing federal programs designed to further their employment. In addition, the group will suggest cooperative interagency programs for promoting such employment.

Upcoming hearings are set for March 2 in Atlanta and April 7 in Boston. For additional information, please call the task force at (202) 245-7477.