NBS Team Starts 3-Year Study of Metric Advantages for US

In the decade to come, the US may join most of the rest of the world in using the metric system. Great Britain plans to make the changeover by 1975, a decision that has given new impetus to studies of metric-system advantages in Canada and the US.

Last summer the Congress ordered a three-year study of the "desirability and practicability of increasing the use of metric weights and measures in the United States." Alvin G. McNish, former chief of the metrology division at the National Bureau of Standards, will report directly to NBS Director Allen V. Astin during the study. He is assisted by Jeffrey V. Odom, also a physicist. For the rest of this fiscal year (which ends 30 June) they will have only clerical help; after that they plan to add other professionals, including economists and engineers, to their staff.

The bill signed by the President 9 Aug. (PHYSICS TODAY, September, page 81) authorized the spending of not more than $500 000 during the first year of the study, but appropriated no money. The money was to come from "funds previously appropriated to the Department of Commerce," a phrase which set off a scramble to have the Commerce appropriations bill signed earlier the same day.

McNish told PHYSICS TODAY, however, that he is getting much help from inside and outside the government. "We are getting marvelous support from the trade associations," he said. "I suppose private industry will pay two or three times as much as the federal government."

No stranger to the problem, McNish had studied the problem for six months before the bill was signed. Metric bills have been introduced in Congress intermittently over the years, McNish noted, but they had not received much support until 1965 when the language was changed from "general conversion" to "increased use." The last metric bill adopted, 102 years ago, made it legal to use the metric system in the US, but said nothing about conversion to that system.

Some industries use metric units already. Optical, photographic and drug manufacturers have been metric for years. Some consumer products are labeled in both systems; motor oils and many foods are examples.

On the other hand, some areas probably never will switch to metric units. McNish says it would not make sense to require the nation's lawyers to rewrite deed descriptions; too many errors could creep into conversions from feet (not to mention rods and chains) to meters. Air traffic controllers have found 1,000-foot vertical separations between planes ample. Converting these to meters would mean losing the simplicity of altimeters whose clock hands work on a decimal system; altimeters would be based on units of 304.8 meters. McNish and Odom are working closely with trade and industrial groups, professional societies and even with metric committees within individual companies. Other agencies of government are helping: The Bureau of the Census and the Office of Education are applying their special expertise to the problems raised by the introduction of metric units. At the same time McNish is keeping in close touch with his counterparts in Canada and Great Britain.

What will result? First, interim reports will be issued as information and recommendations are gathered. Then sometime in 1971 the secretary of commerce will report to Congress on how increased use of the metric system would affect industry and trade, military operations and education. He

RESONANCES

Final federal appropriations are as low as expected. Actual expenditures will be still lower during the fiscal year which ends 30 June. The National Science Foundation received $400 million in place of the $495 million it received in fiscal 1968; the National Aeronautics and Space Administration will have $3.995 billion, down from $4.588 billion. Atomic Energy Commission funding rose from $2.509 to $2.571 billion.

Faced with a threatened drop in page-charge revenue, the American Physical Society took emergency action 26 Sept. Authors of papers in *The Physical Review* will be asked at the time of acceptance whether the page charges will be honored. The APS decided that in 1969 the number of pages published in *The Physical Review* will depend on the percentage of page charges paid; under the present system about 70% of the publication cost is paid with page-charge income.

CERN has cut the budget for the 300-GeV accelerator by $101 million to $307 million. A simpler injection system will provide a beam intensity of 2×10^{12} instead of 10^{13} protons per sec. Energy may be restricted to 200 GeV during the initial operating period unless even heavier cuts are made elsewhere. Support facilities are reduced and installation of the main computer postponed. The number of physicists having access to the machine will be cut to 60% of the original target; after two years this may be raised to 75%. Initial voting on a site is scheduled for December.

A military nuclear expert has been named to the Atomic Energy Commission by President Johnson. Capt. Francesco Costagiola, who had been military consultant to the Joint Committee on Atomic Energy, resigned from the Navy 25 Sept.