

EDITORIAL

Meters for America

BRTAIN WILL SURELY laugh last. After years in which Americans have ridiculed the awkwardness of twelve pence to the shilling and twenty shillings to the pound, Britain has decided to go decimal—all the way. Ten years from now she will travel in kilometers, pour liters of beer and buy decagrams of cheese.

Britons will be making all their conversions by moving the decimal point, and US citizens, we fear, will still have to multiply by 12, 13.6, 454 and 5280. The 1965 US House-of-Representatives Rules Committee buried a bill that would authorize a study of what increasing metric-system use elsewhere will do to the US. In explaining the action, committee chairman Howard W. Smith said, "I don't know what the metric system is."

But a real problem exists and won't lie dormant with tabled legislation. The situation will get worse, not better. More US products are used in Europe each year; more cars and drivers cross oceans; more literature is printed on one continent and read on another. In addition US industry is part of a complex whole in which the pitch of a screw must be specified in inches or centimeters and cloth must be woven to meters or yards. Having half the world use one set of measures and the other half another becomes more difficult each day.

METRIC SYSTEM, at least as the term is used in Washington, is a convenient abbreviation for a consistent decimal system of units for basic quantities (length, mass, time, current, temperature, illumination) and all others derived from them. Most strongly favored by both US and foreign standards organizations is the International System of Units (SI) adopted by the eleventh General Conference on Weights and Measures. SI specifies the meter, kilogram, second, ampere, degree Kelvin and candela as basic units. Many segments of US industry, the National Bureau of Standards, several centers of the National Aeronautics and Space Agency and many scientific publications have already adopted SI or other more limited metric systems as their standards.

Newspaper stories show that ignorance of

the significance of a standard system is not limited to congressmen. Seldom do reporters mention decimal conversion. Usually the fundamental question, as they see it, is whether Gina Lollobrigida is 91, 61, 89, or 36, 24, 35.

Congress has by no means turned its back on the matter, and many predict that the bill that failed in 1965 may achieve passage in 1966. Even in 1965 it had approval of the Senate and the House Commerce Committee. The House Rules Committee may be more friendly and better informed next time around.

PHYSICISTS have a stake in the issue, and, even more, as the group best informed on units and their significance, they have a duty to see that what must be done is done efficiently. Here are some steps they could take now:

1. *Make a decision.* Should science and industry be working toward an eventual standard system, and should the system be SI?

2. *Clean house.* Even physicists, mainly committed to meters, kilograms, seconds and amperes already, use some units that are not simply and rationally derived from the standards. Millimeters of mercury and atmospheres would be better expressed as bars. Curies should be rutherfords. The millimicron is better than the Ångström.

3. *Develop a program.* Eventual conversion will be eased if helpful trends are established and harmful ones resisted. New specifications, computer programs and tools, for example, can be designed for both old and new systems or for easy conversion.

4. *Spread the word.* Reporters, officials and students should understand the utility of decimal conversion and a worldwide system of standard units.

We were amused recently when a PHYSICS TODAY story, sent out for prepublication criticism, came back with miles changed to kilometers and the comment that surely we must be at least *that* scientific. The change isn't always easy, but we'll try. We think the physics community should do so too.

—R. Hobart Ellis Jr.