SENATE

Calendar No. 884

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# MASS SPECTROMETER FOR UNIVERSITY OF CHICAGO

OCTOBER 16, 1965.—Ordered to be printed. Filed under authority of the order of the Senate of October 15, 1965

# Mr. Long of Louisiana, from the Committee on Finance, submitted the following

## REPORT

### [To accompany H.R. 2565]

The Committee on Finance, to which was referred the bill (H.R. 2565) to provide for the free entry of one mass spectrometer for the use of the University of Chicago, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

### PURPOSE

The purpose of H.R. 2565 is to allow the University of Chicago to import free of duty a scientific instrument for its own use.

### GENERAL STATEMENT

H.R. 2565 would direct the Secretary of the Treasury to admit free of duty a mass spectrometer for the use of the University of Chicago.

A mass spectrometer is a device used by chemists and chemical engineers to provide chemical analyses, measurements, and other research features. They are ordinarily built to specifications to meet particular requirements of the user. In the use of a mass spectrometer, the material to be studied is subjected to an ionizing process after which the ions formed are physically separated according to mass by electromagnetic means so that a mass spectrum is produced. Your committee is advised that no comparable instrument made in the United States is available. The Department of Commerce has stated with respect to this bill:

After careful investigation, the Department is of the opinion that at the time the University of Chicago determined its requirements and specifications for a mass spectrometer, no instrument of equivalent scientific value was available from domestic producers of this instrument.

The University of Chicago requires an instrument that is uniquely suited to both chemical research and the training of graduate students in chemistry. The imported instrument selected by the university has certain significant features that are not obtainable in domestically manufactured mass spectrometers. These features include: electrical measurement of mass by comparing voltages necessary to focus 2 ion beams; electrical measurement of mass with a precision of less than 1 part in 100,000 and with an accuracy of at least 5 parts in 1 million; and provisions for instantaneous observations of the spectrum on an oscilloscope.

In the circumstances, the Committee on Finance, like the Committee on Ways and Means of the House, is of the opinion that this legislation is meritorious and consistent with prior legislation of this nature and recommends its enactment.

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