Report No. 375

ORTHICON IMAGE ASSEMBLY FOR MEDICAL COLLEGE OF GEORGIA

JULY 24, 1963.—Ordered to be printed

Mr. Byrd of Virginia, from the Committee on Finance, submitted the following

REPORT

[To accompany H.R. 3272]

The Committee on Finance, to whom was referred the bill (H.R. 3272) to provide for the free entry of an orthicon image assembly for the use of the Medical College of Georgia, Augusta, Ga., having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

PURPOSE

The purpose of H.R. 3272 is to authorize and direct the Secretary of the Treasury to admit, free of duty, one orthicon image assembly imported for the use of the Medical College of Georgia, Augusta, Ga.

GENERAL STATEMENT

H.R. 3272 would direct the Secretary of the Treasury to admit, free of duty, an orthicon image assembly for the use of the Medical College of Georgia, Augusta, Ga. This assembly has been delivered and installed at the medical college hemodynamic center, and the bill provides for reliquidation of the entry and appropriate refund of duty in the event liquidation of the entry has become final.

Image orthicons are photo emissive camera tubes which are used in high-quality television cameras. A complete assembly consists of an X-ray source or generator, an X-ray table for the patient, an image intensifier tube (or a fluoroscopic screen/optical enlarger system), a television camera, a TV amplifier, and a TV monitor. The assembly is used in medical diagnosis, research, or education to enlarge and display X-ray views of portions of the human anatomy.

In answer to the question as to whether there was a domestic instrument of equivalent scientific value or adequate performance characteristics available at the time of purchase, the president of the Medical College of Georgia furnished the following information: "This equipment is a Marconi-type image amplifier which uses an orthicon-type camera and a mirror optical enlarger in place of an image intensifier This system gives an image resolution of 1,025 lines and uses a 12-inch viewing screen. There are several American manufacturers such as Westinghouse, Phillips, Machlett, and others, who either manufacture image amplifiers or who assemble such equipment from imported parts. All of these systems, however, use an image intensifier in their circuits which causes distortion of the image. These systems have a screen of only 9 inches, and can resolve only 525 lines. They are not satisfactory to properly perform the research activities to which we are obligated under a grant from the National Institutes of Health. There is no other known source of supply for equipment having these performance specifications. Any report to the contrary is based upon either misinformation or misunderstanding of the specifications required. This misunderstanding may be based on the fact that the American systems employ an orthicon camera to make a picture from the image intensifier, whereas the Marconi system does not employ this intermediate image intensifying system but makes its picture from the X-ray screen which is amplified by a mirror optical To recapitulate: our specifications call for a 12-inch viewing screen with a system capable of image resolution of 1,025 lines, which does not use image intensification as an intermediate step. There is no American-made equipment which can meet these specifications."

In view of these facts the Committee on Finance is of the opinion that this legislation is meritorious and consistent with prior congressional enactments, and recommends that the bill do pass.