

tions of hardware-oriented people to make the purchasing decisions on the basis of merit of the individual equipment or service, whether it be manufactured by computer maker or from an independent supplier.

The Ford Motor Co. has also recognized this fallacy and has employed our former assistant manager of systems who has stated the prime objective of his position is to bring to Ford Motor Co. the hardware knowledge and understanding of computer systems and to assist in implementing the best peripherals and augment the many total computer systems they now have with better peripherals which will assist in decreasing computer systems leasing costs, initial computer system cost, maintenance cost, floor space, manpower, and new buildings which were forecasted for computer facilities which now can be used for more important functions with all this leading to a tremendous dollar savings.

Mr. Chairman, we are faced with a situation in which one minute the Government says it wants competition and the next it practices a lockout of manufacturers.

Yet, if Government would follow just competitive practices both the Government and the taxpayer would benefit. The Government would be able to obtain superior equipment at lower cost through increased competition, and could serve to advance technology in the computer industry by preventing the ultimate destruction of many peripheral makers that today cannot foresee competing with major computer firms if the current lockout situation is allowed to continue in Government procurement.

The ultimate solution to this problem is a Federal standardization in the industry of interfaces between peripheral equipment and the computer proper. This is not something that obviously can be done overnight and should be a main objective of the Government now for future procurement of fourth generation of computing equipment.

Strong indicators clearly indicate Federal standardization would help to direct these companies to establish common interface equipment to allow the Government a free choice of input/output and peripheral equipment with assured compatibility between the devices and systems. This can and should be a subject for Government control of the computer interface, at least involving computer equipment furnished the U.S. Government.

At the present time, however, an immediate solution is available that will allow the Government to purchase virtually any peripheral device and yet be assured plug-in compatibility can be achieved at reasonable cost without resorting to special negotiations between the Government, the independent peripheral supplier, and the manufacturer of the computer.

This solution rests in the creation by each computer manufacturer for machines offered to the Government, a general purpose peripheral adapter. This device is not a controller, but provides the required timing, controlled data, and interface circuit specifications necessary to connect the peripheral device to the computer manufacturer's line of computers. It is anticipated that there would probably be a general purpose adapter for each series or type of computers from a given manufacturer.

The object of the general purpose peripheral adapter would be that for each manufacturer this unit would be clearly specified and listed