11 March 1959

MEMORANDUM FOR: Deputy Director (Intelligence)

SUBJECT: Electronics Conference

- 1. The American Management Association held its 5th Annual Electronics Conference in New York City from March 2nd to 4th. The main focus of the conference was the use of computers and other electronic data processing equipment. There was an interesting display of electronic data processing equipment at the conference, but in general the substance of the conference was quite disappointing since most of the presentation focused on problems of a rather parochial nature relating to business and industrial uses of computers.
- 2. One speech, however, was of particular interest since it covered some of the managerial problems which the Agency is now facing in connection with our own use of computers. The speech was given by Mr. L. H. Ohlinger of Northrup Aircraft, Incorporated. Mr. Ohlinger is in charge of Northrup's computer program. He described the Northrup computer program in some detail and made the following points of general concern to CIA:
 - a. Organisations undertaking the use of computers generally find there is no direct saving as a result of the use of computers, but that it is essential to develop computer use because of the increased volume of work that can be produced and the growing number of ways in which computers can be used.
 - b. Most computers are rented on the basis of one standard eight hour shift. Additional rent for any use beyond the first eight hours is 40-50% of the standard rate and the charge is made only for the additional time actually used. In other words, it is far more economical to have one computer working two shifts than to have two computers working a standard shift. The best way of using computers therefore, is to centralize their operation in order to minimize the investment in basic rental and installation costs and to maximize the hourly use per day per machine. Once computer use is centralized and the operation has been developed, it may then be possible to decentralize some parts of the operation as needs develop, so long as a strong relationship is maintained between the main computer center and the out-stations.

- c. Because of the rapid obsolescence of computer equipment, planning is the critical step. It is essential that planning be based on the anticipated use of the equipment 3 to 5 years in advance.
- d. Once the computer center has been established, strong analysts in the center can integrate the interests of the various users of the center by various ways and can see ways for the equipment to be used that the various users cannot see for themselves.
- e. A computer center should be designed to accommodate internal expansion through the addition of equipment within existing space rather than external expansion by the adding of new space.
- f. Any organization contemplating the use of computers should review the entire work system of the organization to see if the system itself may be improved before deciding to mechanize the existing system. Such a review should be undertaken by a planning group that cuts across all the main organizational components. The group should be in a position to study the entire flow of information and should report directly to top management rather than to any single component with its own local interest.
- 3. I think that a number of the above points make a great deal of sense for CIA and that it would be wise for us to look at the computer problem from an Agency point of view before DD/P and DD/I components are too heavily committed to their own independent problems.

