

Engineering Development Directorate is responsible for general-purpose scientific and engineering (category A) computers, special-purpose (category B) computers, and the operation of these computers. (An inventory of MSF computers is included in the appendix.)

1.5 MANAGEMENT TECHNIQUES

Management techniques have been developed and applied by OMSF and its Centers to manage its computer resources.

Automatic Data Processing (ADP) planning documents, which project intended ADP usage, are developed by each Center and transmitted to OMSF on a yearly basis with quarterly revisions. Program Operating Plans (POP) and quarterly submissions of revisions of the annual ADP budget are also intensively reviewed in OMSF.

Procedures for the acquisition of computer hardware have been developed that involve both the Centers and NASA Headquarters. Following NASA Headquarters authorization, the Center initiates a procurement based on a firm specification of the required system. Figure 1-1 demonstrates the broad participation by computer manufacturers in the MSF program.

In the centralized data processing facilities, a system of workload control procedures is utilized to provide the basis for controlling computer resources. Control is accomplished through user budgets. For operational systems, computer requirements are validated through program-management procedures.

A significant amount of computer resources utilized in MSF is developed, operated, and maintained by contractor personnel. Procedures and management tools for monitoring contractor performance have been developed and are being applied.

The OMSF and its three Field Centers actively promote computer-resource sharing arrangements through the MSF Resources Sharing Panel and through written agreements with the General Services Administration (GSA). Computer programs and machine time worth \$7,000,000 were shared in MSF during calendar year 1965. Resource sharing has been further encouraged in 1966 by management action, such as the establishment of programming standards, standard data formats, and a computer program library at MSC.