

parable costs at the Manned Spacecraft Center and the Kennedy Space Center are \$36,367,000 and \$10,334,000, respectively.

Question 9(b). How is the automatic data processing workload controlled at the three Manned Space Flight Centers?

Answer. The objective of the ADP workload control system is to furnish the means for planning, reviewing and approving ADP work requests and, as a result, controlling the work effort and expenditure of ADP resources. Each MSF Center utilizes essentially the same procedures for ADP workload control. The computation facility develops a workload projection and budget allocation in coordination with each user prior to the beginning of the fiscal year. Center management then sets a total allocation for the computer facility based on validated workload projections. Each user provides a work authorization to his management for computer work. The users' management reviews the work request against its assigned budget, the computation facility reviews the request for technical feasibility and performance. Periodic reports are provided showing allocations, expenditures, and balances to users.

Question 9(c). What reviews are conducted at the headquarters level of requests from field centers for additional data processing facilities and capabilities?

Answer. The program offices, including the Office of Manned Space Flight, are responsible for managing the acquisition and utilization of ADP resources at their centers in accordance with the policy and procedures promulgated in NHB 2410.1, "Management Procedures for Automatic Data Processing Equipment". Approval of overall ADP plans, as well as specific approval of general purpose of ADP equipment is the responsibility of the NASA Deputy Administrator, Office of Tracking and Data Acquisition. The program offices review ADP requirements on a center-by-center basis to insure that requirements are consistent with institutional and program objectives by conducting reviews of all center ADP acquisition plans and operating practices. Requests from field centers for acquisition of ADP equipment, with supporting documentation, are reviewed by the program offices and those requests which are validated are transmitted to the Deputy Administrator via the Associate Administrator for Tracking and Data Acquisition.

Question 9(d). Does NASA currently have a standard operation procedure for managing and supervising the automatic data processing areas? Furnish for the record, a brief description of such procedures.

Answer. In July 1965, NASA published NHB 2410.1, "Management Procedures for Automatic Data Processing Equipment." The provisions of this document are applicable to NASA Headquarters, NASA field installations, and NASA-owned contractor-operated facilities. The document prescribes the policies and procedures to be used throughout NASA in management of automatic data processing, including the assignment of responsibilities, the formulation of ADP plans, acquisition procedures, and guidelines for selection and utilization of general purpose ADP equipment. The document also assigns ADP responsibilities to the NASA Deputy Administrator, the Office of Tracking and Data Acquisition, the program offices and to the field centers. The NASA Deputy Administrator has been designated as the final approval authority of all policy and plans for acquisition, utilization and disposition of ADP equipment and services. The Office of Tracking and Data Acquisition serves as the ADP staff to the Deputy Administrator to develop ADP plans and procedures as well as review, evaluate and coordinate on a NASA-wide basis the utilization of ADP resources. Each program office validates ADP requirements and funding requests submitted by their centers who, in turn, are responsible for the local management and operation of the NASA computational capability.

Question 9(e). What progress is being made at the Manned Space Flight Centers to share automatic data processing equipment, personnel and programs?

Answer. Since its establishment in 1963, the MSF Resources Sharing Panel (RSP) has acted as the principal organization in the Manned Space Flight organization to coordinate sharing of ADP equipment, personnel and programs. Comprised of the directors of the computation laboratories at the centers, the MSF Resources Sharing Panel guides sharing activity by establishing standards and procedures, as well as sharing knowledge in specific computational techniques. In the recent past, the RSP has established a program sharing library, a standard for formatting telemetry calibration data, and a standard set of routines for driving output plotter devices. In the last year, MSF has shared 124 computer programs having an original development cost of approximately