\$2 million. In addition, the MSF Centers shared 5,930 man-hours and 5,540 hours of computer time. It is expected that the level of sharing will increase this year and that this trend will continue. The sharing of machine time and program exchange among the centers is being facilitated by the standardization of languages and installation of the same general type computers starting in fiscal year 1967.

Question 9(f). How does NASA administer and manage the computer and data processing service provided to contractors in the Louisiana-Mississippi area from the Slidell Computer Center?

Answer. At Slidell, La., the Marshall Space Flight Center (MSFC) has established a centralized computer facility to meet the needs of MSFC's contractors at the Michoud Assembly Facility and the Mississippi Test Facility. The computer center has a small group of NASA personnel who administer the center. The equipment is operated by a support contractor specializing in ADP operations. Programing is a user responsibility. The users are also responsible for estimates of computer usage.

Question 9(g). Why is the Manned Spacecraft Center replacing its general purpose equipment with "third generation" computers and what will be the im-

pact of this action on current automatic data processing operations!

Answer. The principal objective of the ADP equipment replacement program at the Manned Spacecraft Center is to achieve a reduction in computer hardware cost that will result from the more efficient design of the third generation equipment. It is anticipated that this savings will approximate 30 percent of the lease cost of the second generation equipment being replaced. At a result of the change, work now requiring round-the-clock operation can be accomplished in less than two shifts, and eliminate the need for using outside ADP sources for workload overflow. Further, the less efficient decentralized operation of numerous small individual computers is being replaced, in the main, by a centralized computer complex.

Question 9(h). During last year's hearings, Congressman Rumsfeld requested a summary of computer operations which would help explain how the computer

area was managed. Is such a study available?

Answer, Yes. A comprehensive Computer Systems Survey report was published in October 1966 and describes the complete spectrum of Manned Space Flight computational activities, including the way in which MSF manages its computer resources

Question 9(i). What is the total estimated cost relating to automatic data processing equipment, by center, regardless of funding appropriation for Fiscal Year 1968?

Answer

Manned space flight ADP total estimated costs, fiscal year 1968

## In thousands of dollars

	Purchase	Lease	Mainte- nance	Support	Total
Manned Spacecraft Center Marshall Space Flight Center (Huntsville) Marshall Space Flight Center (Slidell)	300 26	15, 277 4, 833 4, 472	592 402 75	20, 198 6, 330 3, 711	36, 367 11, 591 8, 258
Kennedy Space Center	2, 048	1, 556	441	6, 289	10, 334
Total	2, 374	26, 138	1,510	36, 528	66, 550

Question 10(a). Since the number of permanent positions at each of the three centers remains at exactly the same level as in fiscal year 1967, what is the reason for an increase in two centers and a decrease in the other?

Answer. The fiscal year 1967 budget provided for a personnel increase for the Kennedy Space Center. These new positions will be filled on a phased basis during fiscal year 1967; therefore, there will be a greater number of man-years realized in fiscal year 1968 even though the end-of-year ceiling is the same for both fiscal years.

The same explanation applies for the Manned Spacecraft Center increase for personnel costs in fiscal year 1968, except the vacancies to be filled during fiscal year 1967 are a carry over from a fiscal year 1966 authorization.