

Flight organization a primary function performed is the management of contractor effort. Under this criterion approximately 15,000 man-years of government and center support contractor effort are involved in quality assurance and reliability related activities. For example, the review of program changes by the various levels as outlined in the Apollo management presentation to the committee involves quality assurance and reliability activity. Other examples are to be found in the working groups and test programs conducted at the centers.

In fiscal year 1967 effort of Apollo personnel specifically classified as quality assurance and reliability is divided between Government personnel, who are performing 2,200 man-years, and contractor personnel who are performing 8,200 man-years.

The fiscal year 1968 budget plan, which was formulated before the AS-204 accident, provided for a level of effort corresponding to the planned decline in overall engineering, manufacturing, and test effort. We are now in the process of conducting a thorough review of our current R. & Q.A. program. The results are expected to be available in April 1967.

*Question 14. What effect will recent loss of a S-IVB stage have on the flight vehicle delivery schedule?*

Answer 14. Actions are underway with Douglas Aircraft Co. to reallocate existing flight stages. S-IVB-503 will be replaced by S-IVB-504 for launch vehicle AS-503. Subsequently each flight stage will be advanced to replace the preceding stage.

*Question 14(a). Will it affect the unmanned Apollo flight schedule?*

Answer 14(a). No. S-IVB planned deliveries were ahead of schedule at the time of the loss. S-IVB deliveries will support KSC need dates.

*Question 14(b). At what point in time would it affect the manned Apollo flight schedule when it is resumed?*

Answer 14(b). We expect S-IVB deliveries will support the manned flight Apollo schedule.

*Question 15. To what extent is NASA hardware and technology available and utilized by the Department of Defense space effort?*

Answer 15. Much NASA hardware and technology have already been made available to the Department of Defense with respect to the Gemini program (question 17). In addition, elements of the U.S. Air Force are working for, or closely with, the NASA organization in prosecuting the Apollo program at both headquarters and our field centers. For instance, a large number of Air Force officers are employed in the Mission Control Center, Houston, contributing, as well as gaining, experience in the operating area. We have carried, and plan to carry, DOD experiments on NASA space flights.

It is NASA's policy that all technology gained is available to anyone requiring it.

The policies regarding hardware which governed disposition of Gemini equipment will prevail in the Apollo program as well.

*Question 16(a). Is experimental space available in the Apollo program?*

Answer 16(a). Yes. Payload space has been made available and is being used in all uprated Saturn I Apollo Earth orbital flights. These consist of medical, scientific, and technological experiments. Additional space can be made available on certain flights. However, the