

APOLLO APPLICATIONS

(Set No. 2)

Question 1. Of the \$51,247,000 budgeted for AAP in fiscal year 1966, how much has been committed and how much has been costed as of February 28, 1967?

Answer 1. As of February 28, 1967, the latest date for which data is available \$45,147,000 of the \$51,247,000 had been committed. Actual obligations were \$41,787,000.

Question 2. Of the \$80 million budgeted for AAP in fiscal year 1967, how much has been committed and how much has been obligated as of February 28, 1967?

Answer 2. As of February 28, 1967, \$44,323,000 of the \$80 million had been committed. Obligations totaled \$35,382,000.

Question 3. The back-up books (p. RD 2-2) refer to the long duration flight capability of AAP as a key requirement for most of the significant advances in Manned Space Flight. Does this indicate that NASA will wait until it has demonstrated the ability of man to survive in space for at least 1 year before recommending the approval of new space goals such as a manned Mars flyby or landing?

Answer 3. Full assurance that the crew would not only survive, but would function effectively throughout the mission, is, of course, a prerequisite to embarking on a manned planetary mission and will require extensive test operations and demonstrations in orbital flight, as well as a comprehensive ground test program. A goal such as a manned planetary mission could be established on the basis of considered judgment against well-defined risks, taking into account the state of knowledge at the time, with demonstration and confirmation of key capabilities at their proper time in the development program. In the planned AAP Earth orbital series, we expect to have results during 1968-70 from flights of progressively longer duration, ranging initially from 1 month up to 1 year. These results will provide either increased assurance of the feasibility of manned planetary flight or early indications of problems to be solved. NASA is recommending that the United States go ahead with a vigorous program of long duration manned flight in the Apollo Applications program so that the United States will have the basic data for major decisions beyond the post-Apollo space program as early and completely as possible.

Question 4. Will shielding against radiation hazards and micrometeoroid penetration have to be added in orbit to the walls of the S-IVB stage in order to make it safe for astronauts?

Answer 4. It is possible that shielding may have to be added to the S-IVB stage to lower the probability of micrometeoroid penetration. The probability of penetration during planned occupancy is quite low,