

Mission support: RD2-8 payload integration, for which \$40 million of the \$50.3 million requested for mission support is earmarked, includes the system analysis and development effort required to assemble experiments into mission compatible payloads, and the effort required to physically install and qualify them for flight readiness.

This activity includes definition, design and development, modification, and installation. The definition phase of payload integration was initiated during fiscal year 1966 and will be essentially completed by the end of fiscal year 1967. Design and development includes control documentation, interface qualification and acceptance test specifications, and testing plans.

Modification and installation provide for changes to space vehicles and experiment carriers to accommodate experiments and physical installations of experiments into applicable carriers. The fiscal year 1968 effort will provide for the analyses of payloads to determine detailed payload integration requirements and the implementation of design and development activities for the initial Apollo Applications flights.

Operations will require \$10.3 million and include efforts at the Kennedy Space Center and the Manned Spacecraft Center that are directly concerned with launch, flight, crew, and recovery activity. Basic support is provided in the Apollo program for those missions currently scheduled as alternate Apollo Applications flights.

Fiscal year 1968 funding will also provide for initiation of operations support for missions including the augmentation of the Mission Control Center located at the Manned Spacecraft Center required to support the increased data demands resulting from the enlarged experiment and operational activity associated with the Apollo Applications program.

That is a summary of Apollo Applications.

Could I now turn to advanced missions to briefly go through that material, volume V, RD3-1.

The advanced missions program, for which (MC 67-5540, fig. 23) we are requesting \$8 million in fiscal year 1968, allows us to investigate Advanced Manned Space Flight concepts. The studies examine logical extensions of the NASA space capability through analysis of the growth potential of present hardware systems; assesses requirements for future systems; furnish guidance for research and technology activities; provide technical information and cost data upon which future program decisions can be based; and permit initiation of the definition, preliminary design, and specification of probably future missions.

By conducting these advanced studies, we build a solid base for planing and selecting future Manned Space Flight missions. Specific areas of investigation include manned Earth orbital, lunar, and planetary missions and launch vehicles. Fiscal year 1966 and 1967 studies provided support for the evolving Apollo Applications program, including the definition of experiments and other mission payloads and analysis of the cost effectiveness of alternate flight equipment approaches. The fiscal year 1966 and 1967 studies also examined the feasibility of a long-duration space station module. In addition to considering various Earth orbital applications, the space station