

## RESOURCES

The fiscal year 1967 and 1968 increments of funding required for the AAP-3 and AAP-4 flights are tabulated as follows:

*Apollo Applications program—Resources summary*

[In millions of dollars]

|                                     | Fiscal year<br>1967 | Fiscal year<br>1968 |
|-------------------------------------|---------------------|---------------------|
| Apollo Applications:                |                     |                     |
| AAP-3.....                          | 6.0                 | 13.1                |
| AAP-4.....                          | 12.2                | 34.8                |
| Subtotal.....                       | 18.2                | 47.9                |
| Basic Apollo hardware: <sup>1</sup> |                     |                     |
| AAP-3.....                          | 55.4                | 24.2                |
| AAP-4.....                          | 38.3                | 22.2                |
| Subtotal.....                       | 93.7                | 46.4                |
| Total.....                          | 111.9               | 94.3                |

<sup>1</sup> Apollo procured equipment for alternate use by AAP.

## APOLLO APPLICATIONS MISSIONS FOR CALENDAR YEAR 1969

The first two Apollo Applications missions will demonstrate the ability to employ a concept of revisitation and reuse of major equipment stored in orbit. This capability will then be extended to approach continuous operations in the late 1969 time period. In this way new experimental packages can be ferried to the workshop to carry out more detailed observations of the earth and sun. Emphasis will be placed on weather observations, with man evaluating new scientific instruments and techniques to better comprehend the factors affecting the earth's weather as an aid to improved predictions and leading eventually to possible control of storm systems and general climatic conditions.

A significant aspect in the utilization of the revisitation and reuse concept is the ability to sustain men in this orbiting observation post. Can man perform effectively and usefully in the space environment for periods up to a year? The ferry and resupply concept as planned for the 1969 period will allow crews to be sustained and to operate in the embryonic space station for such periods of time. If man is ultimately to journey to his neighbor planets this ability must be demonstrated.

Preliminary investigations are also necessary to design and improve instruments and devices required for orbital observations of the earth's resources. These investigations in 1969 will provide better information on overall resources existing on the surface of the earth and will lead to more complete earth resources surveys beginning in the 1970's.

## MISSION MODES AND RELATED EQUIPMENT

As now planned we would revisit and reuse the embryonic space station, placed in orbit by Apollo Applications flights 1 through 4, through additional flights, beginning in calendar year 1969. These flights will be of increasing duration and open-ended for up to 90 days for each mission. We would thus build up to nearly a continuous manned operation of the Orbital Workshop and Apollo Telescope Mount.

With appropriate overlapping of succeeding Apollo Applications flights using the uprated Saturn I and Apollo Command and Service Modules, we can interchange crews and can build up operational and biomedical data approaching one year's duration on a given crew member. By overlapping 3-man crews, we can also provide up to 6 crew members for short periods of time working in the Orbital Workshop or with the ATM.

The equipment planned for the missions starting in calendar year 1969 will support four launches approximately 90 days apart, each consisting of an uprated Saturn I launch vehicle, and Command and Service Module spacecraft with resupply provisions.