

The second class of missions that we have are follow-on missions and here we do expect to use the basic hardware of the Apollo spacecraft and standard launch vehicles with certain modifications in order to permit them to work for long periods of time in Earth and lunar orbit and on the lunar surface.

The major Apollo Applications objectives (MC 67-5412, fig. 4) for each of these classes of missions are, first of all, to determine the usefulness of man in space. The Apollo developed equipment, our experience is showing, is applicable, versatile enough to be applied to missions other than the Lunar landing itself and one of the most important things to determine from our national point of view is how useful man can be in space, what it is you can best use him for and one of the primary objectives of our Apollo Applications program is to determine just how best to use man in space and whether or not it is worthwhile to have man engaged in these activities.

A second major objective and one which has obtained almost universal recognition from the scientists and other people who have looked at the possible use of man in space is the use of man to conduct astronomical observations. One of the major objectives of the Apollo Applications Program is not only to determine the range of astronomical observations that can be carried out in the space vehicles adapted from the basic Apollo hardware but also to determine the usefulness and how best to use man in this set of observations.

Now, the third major objective is to develop the capability for economical space flight through hardware reuse and long duration

MAJOR APOLLO APPLICATIONS OBJECTIVES

- **USE APOLLO DEVELOPMENT TO:**
 - **DETERMINE USEFULNESS OF MAN IN SPACE.**
 - **CONDUCT ASTRONOMY OBSERVATIONS.**
 - **DEVELOP CAPABILITY FOR ECONOMICAL SPACE FLIGHT THROUGH HARDWARE REUSE AND LONG DURATION FLIGHT.**
 - **EXTEND LUNAR EXPLORATION.**

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FIGURE 4