Mr. Rumsfeld. I remember talking to some people from the Lindheim Observatory in Illinois some years ago that they desired to undertake such an effort prior to the first manned lunar mission. Their thought was that it would be a simpler operation. They thought the information would be of greater interest before the first manned flight.

Dr. MUELLER. The complexity of that is greater when you get down to designing it than it is in concept and there were some studies made several years ago in this area, but when you really figure out what you actually have to do in order to do it, it turns out to be a pretty

complex mission.

Mr. Rumsfeld. So there are no plans for it to be unmanned?

Dr. MUELLER. That is right; on the lunar surface.

Another area of great promise is the land landing capability in the Apollo Applications program (ML 67-5763, fig. 29). What we are talking about is the development of a capability to reuse the command module. We hope at the same time to be able to increase the crew complement hopefully to as many as six rather than three using the basic Appollo capsule. We would expect, therefore, to be able to reduce the water recovery forces and, of course, to increase our landing flexibility.

Now, the development required in order to do this is first of all a development for a gliding parachute (ML 67-5516, fig. 30) which we

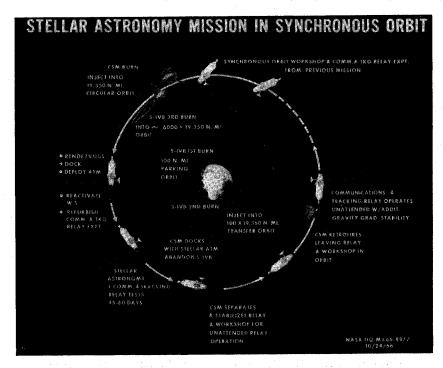


FIGURE 28