

APOLLO APPLICATIONS LAND LANDING

• DESIGN OBJECTIVES

- COMMAND MODULE REUSABILITY**
- INCREASED CREW COMPLEMENT**
- REDUCED WATER RECOVERY FORCES**
- INCREASED LANDING FLEXIBILITY**

• DEVELOPMENT REQUIREMENTS

- GLIDING CHUTES**
- MANEUVERABILITY CONTROLS AND DISPLAYS**

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FIGURE 29

call a parasail and the requisite controls and displays to cause this to be useful. I ought to add one other thing and that is the development of capability for retrorockets at touchdown.

This is under study at the present time and does have a great deal of promise in reducing the cost of operations for the manned space flight program in the future.

Now, where we stand in the course of procurement and where we have to go forward this year with the Appollo Applications program if we are to avoid a shutdown of the factory lines that are producing the equipment and a corresponding hiatus and dissipation, if you will, of the launch teams and the test teams and the whole fabric of the organization is shown in these two charts (ML 67-5906, fig. 31; ML 67-5907, fig. 32).

In the case of the command module, we have under procurement in one fashion or another all of the systems. In the case of the surface module and the lunar module, the same thing holds true. In the case of the Saturn launch vehicles, Uprated Saturn I, we have progressed to where all the vehicles are in fabrication and assembly at the present time. In the case of the Saturn V, we have long-lead-time procurement on all the vehicles, 10 of them are in various stages of fabrication and assembly so we are well along in the actual production of the hardware that is to be used in the basic Apollo program. In order to avoid a hiatus in production and to continue at least some