it and have carried up to the workshop the Apollo Telescope Mount and have assembled in space the Apollo Telescope Mount and the workshop together with the command module and the crew and we will have begun to stay there for 56 days so we will have built up our exposure.

They will experiment with the Sun and carry out experiments in the workshop and they will test various techniques for the use of the

Apollo telescope itself.

In particular, you will note that one of the views in this chart (see ML66-8975, fig. 17), shows the Apollo Telescope Mount tethered to the workshop. We hope to be able to study this as a possible method of operation in order to isolate the Apollo Telescope Mount from the workshop.

We will also be carrying out operations with the Apollo Telescope Mount coupled or docked to the workshop, and if our control system works well enough, it will be possible without going into pressure suits to travel from the Apollo Telescope Mount to the workshop using the

airlock and docking adaptor.

We will have then really an embryonic space station available to us for carrying out additional observations of the Sun and additional experiments throughout 1969 by using additionally the follow-on command and service modules to resupply and revisit.

By the end of 1969 we would expect to have reached, by doubling the weightless exposure, the ability to stay in orbit for as much as a

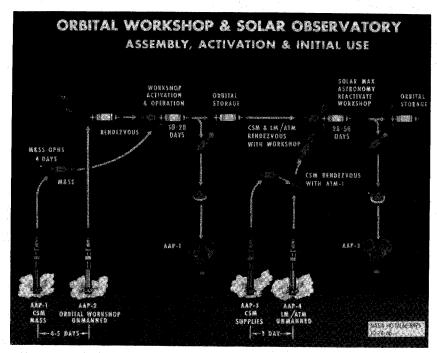


FIGURE 17