day (fig. 35). I think a little explanation is in order on what an operational checkout procedure is. We call them OCP's. These can vary from a pressure or circuit check, which can be accomplished in perhaps 3 to 5 hours, to a complex sequence of circuit checks which can run hundreds of hours. What is done here is not just a casual checking of a system, or combination of systems. This is a formal checkout procedure, where the test director works from a small telephone booth, which has in it, in exquisite detail, what is to be done, what is to be measured and what the criteria are for proceeding.

To boil it down to its simplest form, it is a—well, you hear talk these days of programed learning. This is programed testing. The first instruction could be "turn switch A to on." The second one would read "read meter B." The third one would be "If the reading on meter B lies between two limits, proceed to the next step."

And the reason that this has to be done in this fashion is that some of the systems that we are dealing with have many alternate modes of operation. And without doing it formally, there is the danger of not really checking out the system and still thinking you had. This is a painstaking process, and once it is accomplished, it lends considerable confidence to the fact that the system which has passed that test is indeed satisfactory. It turns out that the time taken on these tests is distributed between running the test and troubleshooting to find out why the test doesn't run smoothly. At this point, naturally, we are trying to cut down the amount of time devoted to troubleshooting, in order to improve the efficiency of the testing.

With this background, I would like to go on to the next slide (fig. 36) which is a statement of where the operating plan stands for the early vehicles. The diamonds represent the contract ship dates, and from this you can see that LTA-8 and LM-1 are indeed behind.

FIGURE 35

## **OPERATIONAL CHECKOUT TEST STATUS**

VEHICLE	TOTAL TESTS	TEST COMPL.
LTA-8	43	<b>30</b>
LM-1	62	40
LM-2	77	26
	76	3
LM-3		
LM-4	68	0