

and AS-504 time periods. In the case of AS-503, we were able to reduce our ship requirements from 10 to 6, and in the case of AS-504 from 17 to 11.

OPERATIONAL CONSTRAINTS

As a final comment regarding Missions Operations, I would like to mention three of the potential constraints in the operations area which have been discussed previously (fig. 104, MA66-9832).

Based upon our present experience, we are constrained to a minimum of 61 days turn around time from the splash of one mission to the launch of the next mission.

I believe that as we get additional experience with our software and new equipment, that we will be able to reduce this time required. But at the moment it is one of our items of concern.

I have discussed also the availability of Apollo simulators and I have covered the status of the Apollo ships. It will be necessary for us to follow carefully the completion of this program throughout 1967 to make sure that the hardware stays on schedule and can provide the support that we need to meet our launch schedule.

In summary, 1967 will be a demanding year as we prepare for lunar flight (fig. 105, MA66-9588). Among the mission "firsts" planned are a Lunar Module flight and flights of the Apollo Saturn V space vehicle, which I have previously described in my discussion of the Apollo flight schedule.

In addition, we will achieve operational status of the huge and intricate Launch Complex 39. The Mission Control Center at Houston, Texas, will be converted to third-generation computers. The Manned Space Flight Network will be made completely operational for Apollo. The remaining Apollo training equipment and facilities will be made operational.

And finally, our astronauts, flight controllers, and launch crews will be training in preparation for lunar flight



APOLLO PROGRAM

POTENTIAL CONSTRAINTS

- MCC-H/MSFN TURNAROUND TIME BETWEEN MISSIONS
- SIMULATOR AVAILABILITY
- OPERATIONAL READINESS OF APOLLO SHIPS

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FIGURE 104