

probably very similar, if not identical. So again, we suggest this as one way of saving money in the MOL program within the Air Force jurisdiction.

When I discussed the reuse of spacecraft in the orbital workshop, I mentioned that we could revisit and reuse the orbital element, the piece that was left in orbit. Another reuse possibility, that we have recently examined under contract to the NASA Manned Spacecraft Center, deals with the RCM, renovated command module, program (slide 64). Our studies have shown that renovation and reuse of the Apollo command module is very practical: it is technically feasible, and the accomplishment of such a program would not interfere with on-going lunar program commitments. I will show you in just a moment that the technique of flying a vehicle over again provides major economic advantages over buying another vehicle for a flight of an identical type. We have for the moment been somewhat conservative and have restricted ourselves to examining the accomplishment of a second flight in earth orbit only, as opposed to using a vehicle that's gone to the moon for a second lunar mission. The crew safety factors are much less difficult to satisfy if we restrict the second flight to earth orbital missions. Under this RCM program, the existing facilities and GSE would be fully applicable with only very insignificant modifications. Under this concept, we recover a command module in the normal fashion, bring it on board one of the recovery ships and, as I will describe a little later, perform some

RENOVATED COMMAND MODULE (RCM)

(NAS 9-6445 STUDY)

- RENOVATION & REUSE TECHNICALLY FEASIBLE
- RCM PROGRAM WOULD NOT INTERFERE WITH NORMAL APOLLO ACTIVITIES
- RCM PROVIDES MAJOR ECONOMIC ADVANTAGE OVER NEW VEHICLE
- ADAPTABLE TO AAP EARTH-ORBITAL MISSIONS (RCM OR RCM LAB)
- EXISTING FACILITIES & GSE SUITABLE WITH ONLY MINIMAL MOD

SLIDE 64. RENOVATED COMMAND MODULE—NAS9-5446 STUDY