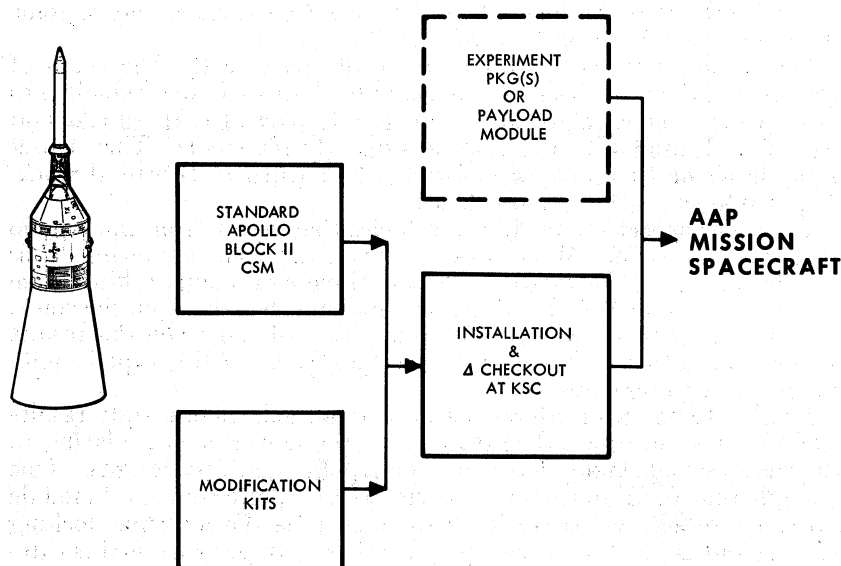


ALTERNATE MISSION CONCEPT



SLIDE 52. ALTERNATE MISSION CONCEPT

I'd like to show you an illustration of one such example, and Mr. Myers touched on this briefly when he pointed out that we had just, this past December, completed the preliminary design review on the lunar mapping and survey system (slide 53).

In this program we take the standard Apollo command and service modules, and in the LM adapter section, instead of carrying a lunar module, we carry the lunar mapping and survey system. The LMSS, the lunar mapping and survey system, is housed in a payload module that is carried on a support rack which is built in-house by the Marshall Space Flight Center. The vehicle is launched into orbit, and depending upon whether it's going toward the Moon or into Earth's orbit, on a Saturn V or an uprated Saturn launch vehicle. After reaching orbit, the command and service modules lift off slightly and turn around. We call this a transposition maneuver; it then docks to the vehicle as shown in the upper right-hand corner of the slide, and then operates in that mode. The potential mission applications being considered include those listed in the lower right-hand corner. These include certification of possible lunar landing sites either for initial or later Apollo lunar landings, and here we're talking about mission durations on the order of 2 weeks. Next, for lunar cartography, and now instead of placing the vehicle into an orbit around the Moon's equator, as we do in a normal Apollo mission, we would place it in a polar orbit, orbiting the poles of the Moon so that it will be able to cover the entire lunar sphere and give us