NASA RESHUFFLES APOLLO SCHEDULE

Manned Tests Delayed by Lunar Module Problems

By JOHN NOBLE WILFORD pecial to The New York Tim

WASHINGTON, Aug. 19major reshuffling of the Apollo project flight schedule was announced today by the national space agency because of delays in preparing the moon landing vehicle for its initial manned test.

The first earth-orbiting test of the so-called lunar module craft involving astronauts has been rescheduled from this December until next February or March.

As an alternate mission in December, astronauts will fly an Apollo spacecraft, without the attached lunar module, in order not to lose time demontrating the Saturn 5 rocket's reliability for manned flight.

Lieut. Gen. Samuel C. Phillips of the Air Force, the Apollo program director, said at a news conference here that the schedule revisions were made to "minimize" the impact of the lunar module's engineering problems on the nation's chances for landing astronauts on the moon by the end of next year—the Apollo goal established back in 1961.

The changes raised the possibility that on the newly planned December mission astronauts might fly around the moon without landing, a flight that the Soviet Union was reported to be planning in the

near future.

Under the American plan for a lunar-landing flight, the spacecraft will consist of three components—the Apollo com-mand module containing the crew, the service module carrying equipment and propulsion devices, and the lunar module that will deposit two of the three astronauts on the moon This spacecraft would be boosted toward the moon by Saturn 5 rocket.

To orbit the moon it would not be necessary to carry along a lunar module. Though the current plan is for the December mission to be confined to earth orbit, General Phillips indicated under questioning that a moon-orbit attempt might be considered.

New Apollo 7 Flight

Much would depend on the success of the first flight of astronauts in the command astronauts in the command module, now scheduled to be launched by a smaller Saturn 1-R rocket on Oct. 11. It has been designated Apollo 7.

Thus the new Apollo schedule looks like this:

Apollo 7—An earth-orbiting flight of up to 10 days by the first astronauts to test the

flight of up to 10 days by the first astronauts to test the Apollo command module. It "looks good" for mid-October, General Phillips said.

Apollo 8—The first flight of astronauts, to be launched by the Saturn 5 moon rocket, is set for December. It could last up to 10 days in earth orbit, perhaps including swings several haps including swings several thousands of miles out in space or even around the moon. No lunar module would be in-cluded.

Apollo 9 — This would give astronauts their first opportunity to rendezvous and dock their Apollo command ship with the lunar module, a ma-neuver essential for a lunar

neuver essential for a lunar landing. It would come no earlier than February.

After a follow-up practice flight, it might be possible to attempt to land men on the moon on Apollo 11, according to the National Aeronautics and Space Administration's planning. A more likely possibility, General Phillips said, was the Apollo 13 flight.

In the same move today, the space agency reassigned two crews of astronauts.

A three-man crew headed by

A three-man crew headed by Col. Frank Borman of the Air Force was assigned to the Apollo 8 flight in December. His crew had been training for a later flight.

The crew led by Lieut. Col. James A. McDivitt of the Air Force was named for Apollo 9. This was done because the McDivitt crew has already pre-pared itself for handling the

lunar module.
Capt. Walter M. Schirra Jr. of the Navy will head the crew for the first Apollo manned flight—the mission that was delayed more than 20 months by the spacecraft fire that killed three astronauts in January, 1967.