Pre-Launch Mission Operation Report No. M-932-68-08

--- Doc. No. ----

MEMORANDUM

1

To: A/Acting Administrator From: MA/Apollo Program Director

SATURN HISTORY DOCOMENT University of Alabama Research Institute History of Science & Technology Group

Subject: [Apollo 8 Mission (AS-503)]

No earlier than 21 December 1968, we plan to launch the next Apollo/Saturn V mission, Apollo 8. This will be the first manned Saturn V flight, the second flight of a manned Apollo spacecraft and the first manned Apollo flight to the lunar vicinity.

Date

The purpose of this mission is to demonstrate: crew/space vehicle/mission support facilities performance during a manned Saturn V mission with CSM, and performance of nominal and selected backup lunar orbital mission activities including translunar injection, CSM navigation, communications and midcourse corrections, and CSM consumables assessment and passive thermal control. Mission duration is planned for approximately six days and three hours.

The launch will be the third Saturn V from Launch Complex 39 at Kennedy Space Center. The launch window opens at 7:51 EST 21 December and closes for December at 18:20 EST 27 December. Daily windows during this period vary in duration from 4-1/2 hours to approximately 1-1/2 hours.

The nominal mission will comprise: ascent to parking orbit; translunar injection by the S-IVB; CSM separation from S-IVB; translunar coast with required midcourse corrections; lunar orbit insertion and circularization; up to 10 lunar orbits; transearth injection, transearth coast and required midcourse corrections; reentry and splashdown. Recovery will be in the Pacific recovery area with exact location dependent on launch conditions.

Sam C. Phillips

Lt. General, USAF Apollo Program Director

APPROVAL:

Géorge E. Mueller Associate Administrator for Manned Space Flight