

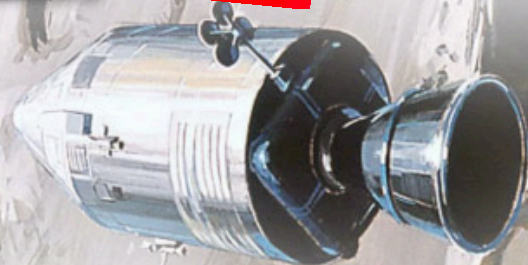
SPACE DISCOVERY

APOLLO 8

THE FIRST MANNED FLIGHT TO ANOTHER WORLD



The 3 astronauts of the Apollo 8 mission
Frank Borman - William Anders - Jim Lovell



In April 1968, U.S. intelligence sources reported that the Soviet Union had a rocket capable of sending men to the moon. The crew members of Apollo 8 (commander Frank Borman, service module pilot James Lovell and lunar module pilot William Anders) were supposed to test the lunar module in high Earth orbit in December. However, engineers would not have the lunar module ready in time for that launch window. Apollo's program manager, George Low, contemplated what to do with the mission. Should Apollo 8 repeat the test of the Apollo capsule that was assigned to Apollo 7, but only in high Earth orbit? Should they do something to outshine the Soviets, like having the crew of Apollo 8 orbit the moon by the year's end?

The plan to orbit the moon was risky; no one had ever left Earth's orbit. If the service module engine failed, the astronauts would die in lunar orbit. Low considered these issues, but decided that beating the Soviets at sending men to the moon was worth the risks. It would be like a "Hail, Mary" pass during the closing seconds of a football game for the win. Chief rocket engineer Wernher von Braun assured him that the powerful Saturn V moon rocket would work despite previous setbacks; the rocket had never been tested with a manned crew. So, in August 1968, the decision to send Apollo 8 to the moon was approved. NASA had four months to get ready, and that included developing navigation software to fly a space ship to the moon.

On Dec. 21, 1968, Apollo 8 lifted off into Earth orbit. Hours later, the astronauts fired the third-stage engine to send them to the moon. For the next three days, they coasted to the moon. On Christmas Eve morning, they fired the service

module engine to place them in lunar orbit. The astronauts became the first humans to see the lunar surface up close -- from about 60 miles (100 kilometers) above. They spent the time photographing the lunar surface and studying future Apollo landing sites. They also were the first people to see the Earth rise above the lunar horizon. Early Christmas morning, the moment of truth came; they fired the engine to leave lunar orbit. The atmosphere in Houston was tense until Lovell announced, "Please be informed, there IS a Santa Claus." Apollo 8 was on its way home. The space ship splashed down in the Pacific Ocean on Dec. 27, thereby completing the first voyage to the moon. Of the crew, only Lovell would return to the moon -- on the Apollo 13 flight.

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