

RENDEZVOUS DOCKING SIMULATOR, NASA Langley Research Center. One of the most significant ground-based artifacts in space exploration history, this facility enabled NASA's Gemini and Apollo astronauts to practice space rendezvous procedures that they had to master before journeying to the Moon. Built in 1963, it consisted of a full-size mock spacecraft suspended by a highly-maneuverable cable and gimbal system attached to an overhead carriage. By docking with a target, astronauts gained realistic training that closely approximated space operations. In 1969, when the Lunar Module lifted from the surface of the Moon and caught up to the waiting Apollo Command Module in lunar orbit, docking was absolutely crucial for the return trip to Earth. Therefore, this simulator was vital in making the round trip to the Moon possible. With some adaptive reuse of components, most of the facility is preserved in place at the NASA hangar in Hampton.