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CELEBRATING
APOLLO

YEARS

The First Step

NASA Langley
Research Center





The First Step

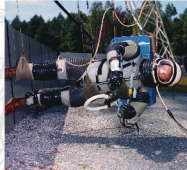
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Reduced Gravity Walking Simulator

The Reduced Gravity Walking Simulator, located at the Lunar Landing Facility at NASA's Langley Research Center, was used to study subjects while walking, jumping or running. Researchers conducted studies of various factors such as fatigue limit, energy expenditure, and speed of locomotion.



The purpose of the simulator was to train Apollo astronauts for tasks they'd face in an unfamiliar lunar environment with only one-sixth the gravity of Earth. A unique method of simulating lunar gravity was developed by suspending astronauts with ropes at the end of a long pendulum on an angled floor so that one-sixth of the subject's weight was supported by the floor with the remainder being supported by the suspension system. The effect was quite realistic. When Neil Armstrong was asked by a reporter what it was like to walk on the Moon, he answered, "Like Langley."

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