

To the Moon and Back

Note: This article was published in 2007. The program described in the article, NASA's Constellation program, is no longer active. This news article has been preserved for historical context.

Astronauts Aim for the Moon—And Beyond

NASA announced plans that are out of this world—literally! The space agency hopes to send humans to the moon again by 2020.

NASA hopes to make a giant leap—back to the moon. Back in 2005, the U.S. space agency announced its plan to send four astronauts to the moon within the next 15 years.



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The new spacecraft is like Apollo, "But bigger."

NASA officials say the moon is just the first step. They hope future missions will take astronauts to Mars and beyond. "We will return to the moon no later than 2020 and extend the human presence across the solar system and beyond," says Michael Griffin, the head of NASA.

So far, the moon is the only place beyond Earth that humans have visited. At 226,000 miles away, the moon is Earth's closest space neighbor.

On July 20, 1969, Neil Armstrong and Edwin "Buzz" Aldrin became the first astronauts to land on the moon. They traveled there aboard

Reading Passage

Apollo 11. When Armstrong first set foot on the moon, he spoke these famous words: "That's one small step for a man, one giant leap for mankind."

During NASA's *Apollo* program, 12 American astronauts explored the lunar terrain. The last U.S. trip to the moon ended in December 1972.

New Spaceship

The new NASA mission may have the same destination, but the astronauts will have a new way of getting there.

Astronauts who trek to the moon will do their traveling in a crew exploration vehicle—a souped-up version of the three-person *Apollo* capsule that transported explorers to the moon. "It's very Apollo-like," says Griffin, "but bigger."

While on the moon, astronauts hope to demonstrate that they can "live off the land." They will use resources on the moon to produce drinkable water and fuel.

The moon journey would be a trial run for a Mars mission. Astronauts would spend more time on Mars—at least 500 days—because it is 49 million miles from Earth. Because they will be on the planet so long, astronauts will need to be able to **sustain**¹ themselves using local resources; they will not be able to bring enough supplies for the whole mission.

Split Decisions

Not everyone is over the moon about NASA's plans. The project is estimated to cost \$104 billion. Critics say the price tag is too high, especially because the United States is dealing with a federal budget **deficit** and the war on terror. A deficit occurs when a sum of money is short of its expected total.

However, supporters insist that space exploration offers enormous long-term benefits to all of humankind and that the United States should not be deterred from this mission. "The space program is a long-term investment in our future," Griffin says.

¹ **sustain**: supply with nourishment