

# Scientists: We must return to the moon

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WASHINGTON (AP) -- A panel of scientists strongly endorsed NASA's plans to return to the moon, saying in a report Tuesday that lunar exploration will open the way toward broader studies of the Earth and solar system.

"The moon is priceless to planetary scientists," declared the special National Research Council panel of the National Academy of Sciences.

The scientists were asked to evaluate and give guidance to the National Aeronautics and Space Administration's plans for robotic and human exploration of the moon over the next two decades.

President Bush two years ago vowed to return astronauts to the moon and establish an "extended presence there" in preparation for exploring Mars. He called on NASA to devote \$12 billion over five years for the beginning of the program with a goal of landing on the moon between 2015 and 2020, and eventually landing on Mars.

The Academy panel said the moon holds a deep geological record of early planetary evolution and provides great opportunities for a sustained program of both robotic and human exploration of space.

"Only by returning to the moon to carry out new scientific exploration can we hope to close the gaps in understanding and learn the secrets that the moon alone has kept for eons," the 15-member panel said.

The committee was made up of academics, a journalist and retired members of private industry involved in space programs. The congressionally chartered Academy advises the government on scientific and technical matters.

The scientists urged NASA to stimulate lunar research along two programs: one for fundamental lunar research and the other focusing on analyzing lunar data to advance research elsewhere in the solar system.

Among the priorities the panel outlined were determining the composition and structure of the lunar interior, better understanding the lunar atmosphere, evaluating the moon's potential as "an observation platform" for studying the Earth, the relationship of the sun and Earth, and broader astronomy and astrophysics.



NASA plans to land astronauts on the moon between 2015 and 2020.

The scientists said NASA should provide astronauts with the best possible technical systems for exploring the moon using both robotic, teleoperated systems and robot-assisted human exploration.

Tuesday's report was described as interim, with a more detailed report to be released in mid-2007.

The federal space agency and space enthusiasts outside of NASA long have hungered for a return to the moon. Bush's outline for exploration of the moon and later Mars represented the boldest space goal since President Kennedy called in the early 1960s for landing Americans on the moon, a goal that was accomplished in 1969.

Two weeks ago, NASA announced it had awarded Lockheed Martin Corp. the multibillion-dollar contract to build the Orion manned lunar space craft. NASA anticipates building eight of the reusable spaceships through 2019, replacing the space shuttle.