Implementing the Vision
2nd Space Exploration Conference

Exploration Systems Mission Directorate

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Strategic Goals for ESMD

**Strategic Goal 3:** Develop a balanced overall program of science, exploration, and aeronautics consistent with the redirection of the human spaceflight program to focus on exploration.

*Sub-Goal 3F:* Understand the effects of the space environment on human performance, and test new technologies and countermeasures for long-duration human space exploration.

**Strategic Goal 4:** Bring a new Crew Exploration Vehicle into service as soon as possible after Shuttle retirement.

**Strategic Goal 5:** Encourage the pursuit of appropriate partnerships with the emerging commercial space sector.

**Strategic Goal 6:** Establish a lunar return program having the maximum possible utility for later missions to Mars and other destinations.
Exploration Roadmap

- Initial Orion (CEV) Capability
- 1st Human Flight Aboard Orion
- Lunar Outpost Buildup
- Lunar Robotic Missions
- Science Robotic Missions
- Mars Expedition Design
- Commercial Crew/Cargo for ISS
- Space Shuttle Operations
- Orion Development
- ARES I Launch Vehicle Development
- Orion Production and Operations
- Early Design Activity
- Lunar Lander Development
- Lunar Heavy Launch Development
- Surface Systems Development
- Earth Departure Stage Development

Note: Specific dates and milestones not yet established. CEV/CLV availability planned for as close to 2010 as possible, but NLT 2014. Return to the moon as early as 2018, but NLT 2020.
First Test Flight …
28 Months And Counting!

GOAL!

- 5 Months
- 10 Months
- 15 Months
- 20 Months
- 25 Months
- 30 Months
- 35 Months

MONTHS

28

29