

Vision

Field a new space transportation capability for assured access to and from the International Space Station (ISS) and low-Earth orbit.

Mission

- Provide a system for crew rescue from the International Space Station as soon as practical, but no later than 2010, and crew and limited cargo transport to and from the Space Station by 2012.
- Manage the design and development of a new multipurpose space transportation system for assured access to space and to provide operational flexibility for NASA.



Competing aerospace industry contractors will present detailed transportation system designs that meet NASA's mission requirements.

Benefiting Human Space Exploration

The Orbital Space Plane embodies the Agency's priority to transport Space Station crews safely, reliably, and affordably, while it empowers the Nation's greater strategies for scientific exploration and space leadership.

As early in the development cycle as possible, the Orbital Space Plane will provide crew rescue capability, offering an emergency ride home from the Space Station, while accommodating astronauts who are deconditioned due to long-duration missions, or those who may be ill or injured.

OSP Quick Facts

- Safer than either the Space Shuttle or the Russian Soyuz.
- Support 4 U.S. ISS crew and contingency cargo.
- Easier to process, launch, and land.
- More maneuverable on orbit.
- Able to operate autonomously.
- Designed to minimize operations and life cycle costs.

The Space Station is a stepping stone to new discoveries, and the OSP will be a bridge to the Space Station and future Reusable Launch Vehicles (artist concept).



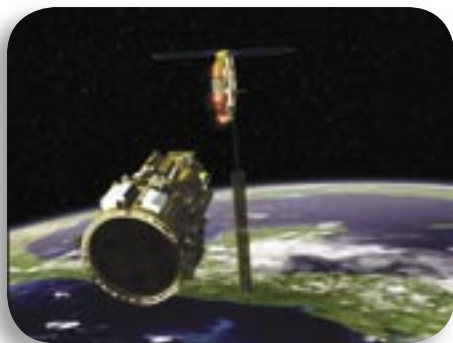
Meeting National Needs for Access to Space

NASA's Integrated Space Transportation Plan is the broad strategy to ensure space transportation systems are available to support U.S. missions.

It includes the Shuttle Service Life Extension Program and the Space Launch Initiative, with two high-priority programs — Orbital Space Plane and Next Generation Launch Technology for research that will inform future Reusable Launch Vehicle decisions.

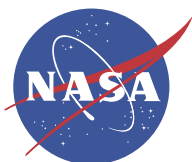
Testing in Real-World Flight Environments

As the Orbital Space Plane Program develops a fully integrated system, it will use mainly existing technologies and employ computer modeling and simulation. Select flight demonstrator projects will provide valuable data on launch, orbital, reentry, and landing conditions to validate thermal protection systems, autonomous operations, and other advancements, especially those related to crew safety and survival.



The Demonstration of Autonomous Rendezvous Technology Project will help establish U.S. ability to operate orbital vehicles remotely (artist concept).

For More Information:
www.SLInews.com
www.NASA.gov



The OSP will launch initially on a human-rated Expendable Launch Vehicle (artist concept).

One NASA

The Orbital Space Plane Program is managed by NASA Headquarters and supported by NASA Centers across the country. Through a series of in-depth, comprehensive reviews, the Program will progressively reduce both business and technical risks, while ensuring fiscal accountability and relevance to U.S. missions. This extensive groundwork will enable the Agency to make a full-scale development decision based on a sound business plan and innovative engineering.



The Orbital Space Plane will meet the Nation's needs for crew access to space (artist concept).

Key Milestones:

- System Requirements Review: Oct — Dec 2003
- System Design Review: April — June 2004
- Full-Scale Development Decision: Fall 2004
- Preliminary Design Review: March — April 2005
- Critical Design Review: Jan — March 2007
- Qualification Test Flights: Dec 2008 — Jan 2010
- Crew Rescue Vehicle First Flight: Sept 2010
- Crew Transport Vehicle First Flight: Sept 2012