

A composite space-themed image. On the left, a portion of Earth is visible, showing continents and clouds. In the center, the Moon orbits Earth. To the right, Mars is shown. In the bottom right corner, Jupiter is depicted with its characteristic bands. A bright comet streaks across the upper right. A satellite is visible in the upper left. The background is a deep blue space filled with stars and a spiral galaxy in the upper right.

**Johnson Space Center
Leading The Next Era
of Space Exploration**

**Rice University
Strategic Space Forum**

1 July 2011



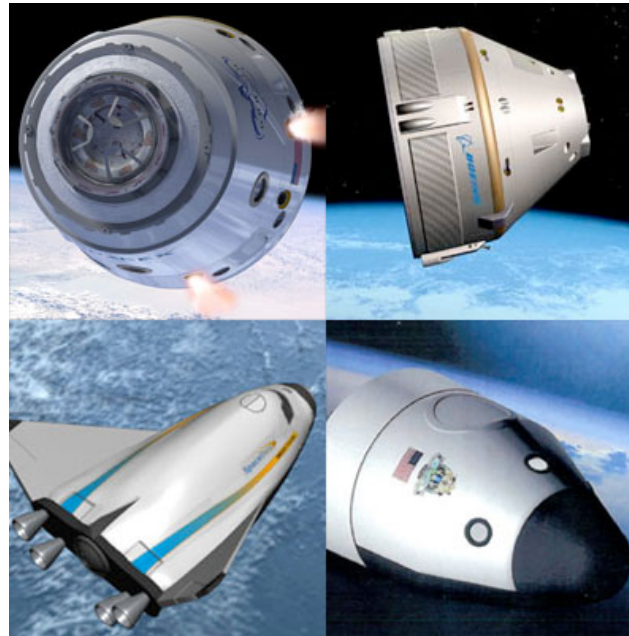
STS-135 Will Conclude an Historic Era in Human Spaceflight



As we celebrate 30 years of accomplishments of the Space Shuttle Program team, we look forward to building on this legacy to lead the next exciting era of exploration.



Priorities for Next Era of Human Spaceflight

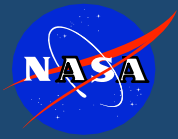


- ISS Extended Through At Least 2020 with Enhanced Science Role
- CCDev2 Program Developing Commercial Crew Vehicle for LEO
- MPCV and SLS Programs Developing Essential Elements of Beyond-LEO Architecture
- Space Technology Program Developing Cross-cutting and Beyond-LEO Capabilities



Exploration Domain Evolution





Long Term Trend – HSF Evolution

Integration of Multiple Systems, Multi-lateral Partnerships
- ISS Program is Prototypical Example of Success



Apollo Soyuz



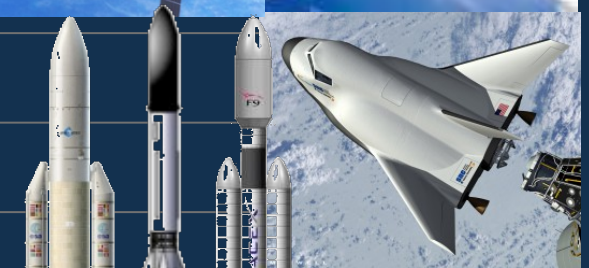
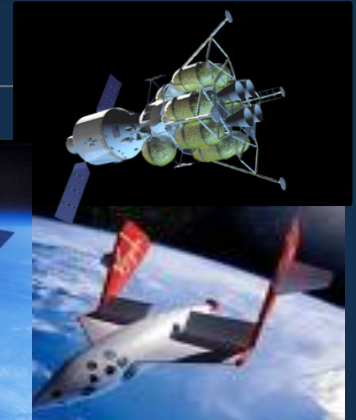
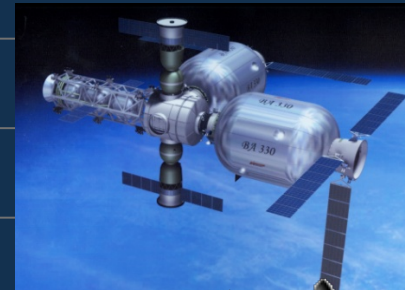
Space Race:
US vs Soviet Union



Space Shuttle

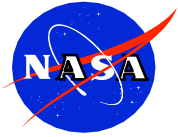


ISS: NASA, Canada,
Russia, Japan, ESA



NASA,
International,
Commercial,
Technology,
Academia

Increasing Collaboration



JSC Strategic Focus

- **Diverse priorities and austere budget create challenge for JSC and human spaceflight**
- **Acute need to engage new opportunities and partnerships to utilize critical capabilities**
- **Long term strategy required for viable, affordable, sustainable human spaceflight program**
- **Leverage capability of entire scope of partners - NASA, contractors, new commercial space, academia, regional non-aerospace industry, international participation**
- **JSC goal is to lead and integrate multi-lateral human spaceflight community**
- **JSC reorganized to strategically align efforts to address challenges**
 - Space Shuttle Transition and Retirement Office
 - Human Exploration Development Support Office
 - Multi-Purpose Crew Vehicle Program Office
 - Commercial Crew Deputy Program Manager Office
 - JSC Chief Technologist to reporting to the Associate Director
 - Strategic Opportunities and Partnership Development Office



Recent Progress

- **Orion MPCV Decision Formalized**
 - Approximate value \$1.1B
- **JSC awarded Advanced Exploration Systems Development Work**
 - ~380 CS and \$30M procurement
- **Proposed OCT Tech Demonstrations in Response to BAA**
 - 3 JSC led TDM proposals , 2 supporting - Potential value ~\$150M
- **Reimbursable Space Act Agreements Supporting CCdev2 Companies**
 - Leasing processes and facilities to provide competitive services
- **Non-Aerospace Partnerships Producing Mutual Benefits**
 - Spin-off NASA technology to Energy, Safety, Medical, Automotive, etc.
- **Exploring New Opportunities (e.g. DoD)**
- **Enhancing University Relationships**
- **Developing Regional Innovation Center to Facilitate Opportunities**
- ***Next Steps.....***
 - *Continue to broaden partnership discussions starting with this event*

