National Aerospace Initiative (NAI)

Moderator: Row Rogacki
Director, NASA Space Technology Theme

Panelists: Paul Piscopo, Department of Defense Research and Engineering

Steve Cook, NASA Next Generation Launch Technology Program

Col. Pam Stewart, Air Force Space Command
NASA’s Integrated Space Transportation Plan (ISTP)

Orbital Space Plane (OSP)
- ISS Crew Rescue by 2010
- ISS Crew Transfer by 2012

Space Shuttle Technology Upgrades

Next Generation Launch Technology (NGLT)
- Technologies enabling near- and long-term advancements in U.S. space launch
National Aerospace Initiative (NAI)

Next Generation Launch Technology (NGLT)

High Speed/Hypersonics

Space Access (Rocket or Air-breathing Engines)

Space Technology

25-year National Plan to mature key technologies for NASA & DoD Needs
NASA / DoD Cooperation through the National Aerospace Initiative

NASA Objectives
- Scientific exploration
- Routine access to International Space Station
- Fostering new civil and commercial markets

DoD Objectives
- Homeland defense
- Operationally responsive space lift
- Rapid global strike

Common Technologies
- Long life rocket engines
- Combined cycle propulsion
- Ram / scramjets
- Long life, lightweight airframe and tanks
- Durable thermal protection systems
- “All electric” subsystems
- Rapid turnaround ground and flight operations

“The Department of Defense, the National Aeronautics and Space Administration and industry must partner in innovative aerospace technologies, especially in the areas of propulsion and power.”

Commission on the Future of the U.S. Aerospace Industry