

SLS PDR

PRELIMINARY DESIGN REVIEW

PROGRAM

WHERE WE ARE

- From concept to preliminary design in less than 2 years.
- Integrated technical, schedule, budget, and risk reduction with Exploration Systems Development Division, Orion Program, and Ground Support Development and Operations Program.
- Implemented lean organization structure, with clearly defined roles and responsibilities.
- Reduced number of Boards, increasing decision velocity.
- Reached key elected officials and industry partners, and engaged thousands of students, teachers, and other audiences about the future of human and scientific space flight.

MAJOR ACCOMPLISHMENTS

Milestone Progress

◆ We are Following NPR 7120.5

Milestone / Key Event	FORMULATION			IMPLEMENTATION		
	Approval for Formulation	Approval for Implementation	Approval for Implementation	Approval for Implementation	Approval for Implementation	Approval for Implementation
Program Life Cycle Review	✓	✓	✓	✓	✓	✓
Program Life Cycle Goals and Major Events	✓	✓	✓	✓	✓	✓
Agency Activities	✓	✓	✓	✓	✓	✓
Program Space and Payload Review	✓	✓	✓	✓	✓	✓

WE ARE HERE NOW

Expanding Our Network



- Interacted with the SLS workforce across the country and the Astronaut Office to keep them informed of plans and progress.
- Coordinated with Safety and Mission Assurance to implement industry standards, where appropriate, and to realistically formulate loss of crew/loss of mission estimates with a positive trending.
- Interfaced with the Ground Operations Liaison Office for transfer of assets at the Kennedy Space Center, preparing for vehicle integration in 2016 and first flight in 2017.

Partners and Contractors on Board



- Completed System Requirements Review/ System Definition Review in July 2012.
- Achieved Key Decision Point B approval on July 25, 2012, in only 10 months from the SLS Program's official announcement in September 2011.
- Completed Element-level Preliminary Design Reviews for Core Stage; Boosters; Engines; and Spacecraft and Payload Integration.
- Awarded or negotiated prime contracts.
- Contracted for Delta Cryogenic Second Stage for conversion to Interim Cryogenic Propulsion Stage for Exploration Mission 1.
- Conducted industry days at the Michoud Assembly Facility in New Orleans, and in the Huntsville and D.C. metropolitan areas.
- Awarded Advanced Booster and Advanced Concept contracts to industry and academia and worked in partnership with the U.S. Air Force for affordable performance upgrades.