Space Launch System
The Next Great Ship

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One Ship, Many Destinations

Ships of exploration shouldn’t limit destinations, they should open opportunities.
With his ship Resolution, James Cook was the first European to visit Hawaii.
... to the Antarctic

With the same ship, Cook sailed farther south than anyone had been.
Yesterday’s explorers charted today’s shipping lanes.

Scientific results from Cook’s journeys changed astronomy and saved lives.
“Mens sana in corpore sano.”
A sound mind in a healthy body.

Exploration Uses Both Mental and Physical Abilities
Space “is the new ocean, and I believe the United States must sail on it.” – JFK
For more than 40 years, humans have gone only hundreds of miles from home.

Islands in Our Ocean

Earth
Moon
Near-Earth Asteroid
Mars
Europa

- Earth: 239,000 mi
- Moon: 239,000 mi
- Near-Earth Asteroid: 3,100,000 mi
- Mars: 34,600,000 mi
- Europa: 390,400,000 mi
A Deeper Purpose, A Bolder Mission

“To reach for new heights... and reveal the unknown so that what we do and learn will benefit all humankind.”
Launching Soon. Building Today.
Bigger Rocket = Unrivaled Mass, Unrivaled Volume

Enables missions no other rocket can perform.
Proven success.
Greater power.

Orion:
Carries astronauts into deep space

Stage Adapters:
The Orion stage adapter will be the first new SLS hardware to fly.

Interim Cryogenic Propulsion Stage:
Based on the Delta IV Heavy upper stage; the power to leave Earth

Core Stage:
Newly developed for SLS, the Core Stage towers more than 200 feet tall

Solid Rocket Boosters:
Built on Space Shuttle hardware; more powerful for a new era of exploration

RS-25 Engines:
Space Shuttle engines for the first four flights are already in inventory

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Doing the heavy lifting for space exploration

Unrivaled mass lift capability means larger payloads and reduced risk.
Greater power means greater versatility.

SLS benefits science by cutting transit to the outer solar system in half.

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Having more space for payloads lets you do more in space.

The world’s largest payload fairings change the game for mission design.

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A vital resource for the space industry

Space Launch System will open new opportunities for investment in space.

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A national resource the nation can afford

Innovatively designed to be affordable within a limited budget.
Core Stage is taking shape

New tooling is installed at Michoud and confidence welding has begun.
Our first payload adapter hardware is ready to fly.

The Orion mating adapter will make a test flight in 2014.
Testing is soon for RS-25 engines.

Test stand upgrades being made now will support RS-25 test firings in 2014.
New upgrades are being tested for Solid Rocket Boosters.

Three successful test firings demonstrated the five-segment motor.
‘Stack it. I’m ready.’
–Tony Antonelli

After an in-depth technical review, the SLS Program is ready to build.
SLS’s first launch will send Orion beyond the moon into deep space.

First flight in four years
SLS is the first step in the journey to Mars.

Going to Mars will be difficult. SLS provides the power that it takes.
We explore space to promote inspiration, security, diplomacy, knowledge, technology & prosperity.

Going out there to better life here
The biggest challenges aren’t always technical.

Our team is doing their part. We need your support.

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Man cannot discover new oceans unless he has the courage to lose sight of the shore.

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