

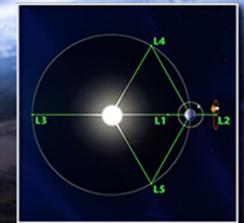
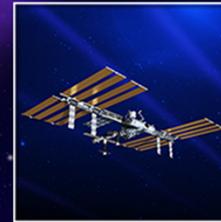


Engaging the Public in the Future of Exploration

Trey Cate

*OSAC Strategic Communication Lead
NASA Space Launch System*

November 2012

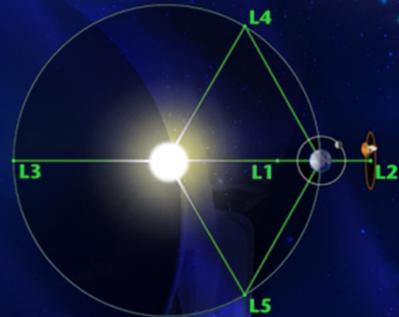




“To reach for new heights...

and reveal the unknown so that what we do and learn will benefit all humankind.”

National Aeronautics and
Space Administration



- Extend & sustain human activities across the solar system.
- Expand scientific understanding of the Earth & the universe in which we live.

Share NASA with the public, educators, and students to provide opportunities to participate in our mission, foster innovation, and contribute to a strong national economy.

NASA 2011 Strategic Plan



The Future of Exploration



Top Strategies



- ◆ **Emphasize Progress**
 - Exploration Systems Integration (Orion, GSDO)

- ◆ **Integrate Communication Activities**
 - MSFC, NASA HQ
 - Program/Element Managers
 - Outreach
 - Informal Education
 - Legislative Affairs
 - Public Affairs
 - Primes – Boeing, ATK, PWR, Dynetics, Northrop Grumman
 - Sub Suppliers

- ◆ **Develop Third Party Advocacy**

- ◆ **Involve Workforce (Internal/External)**



Informal Education & Public Outreach Ambassadors



“Share NASA with the public, educators, and students to provide opportunities to participate in our mission, foster innovation, and contribute to a strong national economy.” — NASA 2011 Strategic Plan



Pass the Torch Lecture at U.S. Space & Rocket Center
February 2, 2012



National Space Symposium with
Dr. Neil deGrasse Tyson
April 16 – 19 2012



Student Launch Projects Briefing
April 19, 2012



Shuttle *Discovery* Celebration at
Udvar-Hazy Space Museum
April 19 – 22, 2012



Space Ops 2012 Conference
June 11 – 15, 2012



Shuttle *Enterprise* Celebration at
Intrepid with Leland Melvin
July 19 – 22, 2012

Media

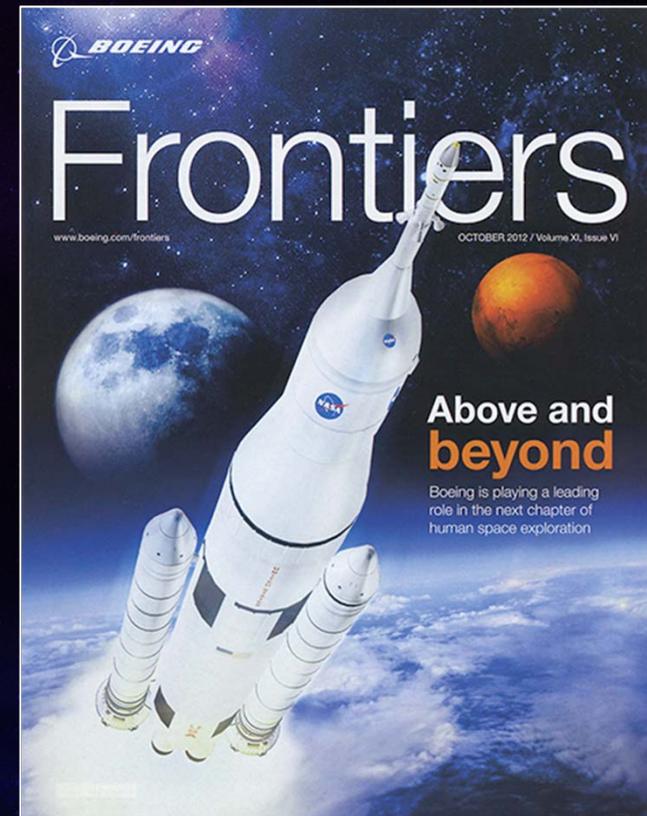


RS 25 Tour (This Week at NASA)

Special Features



USA TODAY's 88-page special publication looks at America's future in space. Get an in-depth look at NASA's re-launch of a post-shuttle business and scientific model that will send humans deeper into space than ever before.



Web Communications



facebook Search for people, places and things Debbie Find Friends Home Create Page

NASA's Space Launch System
Community Page about Space Launch System

The Space Launch System is a heavy-lift launch vehicle capable of crew or cargo missions beyond low-Earth orbit to multiple destinations including the Moon, asteroids, Lagrange points and eventually Mars.

Post: Write something...

NASA's Space Launch System shared a link about an hour ago

YouTube SPACE LAUNCH SYSTEM

Business Intelligence by questsoftware • 1,930 views

Space Launch System: Future by NASAMarshallTV • 9 months ago • 5 views

Way Forward -- Space Launch by NASAAppel • 1 year ago • 2,058 views

Space Launch System / Orion Test Flight Concepts by NASA Kennedy • 1 year ago • 7,162 views

NASA's Space Launch System: Powering Forward by SpaceFellowship • 2 months ago • 561 views

NASA_SLS @NASA_SLS
NASA's Space Launch System is a heavy-lift launch vehicle capable of powering the Orion spacecraft and cargo beyond low Earth orbit.
Huntsville, AL <http://www.nasa.gov/sls>

Follow 476 TWEETS 234 FOLLOWING 2,674 FOLLOWERS

Follow NASA_SLS

Tweets

NASA Kennedy / KSC @NASAKennedy
The CT-2 is being moved to test recent modifications in order to support @NASA new @NASA_SLS heavy-lift rocket.
pic.twitter.com/h9iBe5Cq
Retweeted by NASA_SLS

NASA Kennedy / KSC @NASAKennedy
At NASA's Kennedy Space Center, a crawler-transporter is being prepared to support future exploration missions. More:
go.nasa.gov/W9hFjV
Retweeted by NASA_SLS

NASA_SLS @NASA_SLS
@NASATennis installs a J-2X powerpack for more hot-fire testing. @PWRocketdyne builds the J-2X engine for @NASA_SLS!
pic.twitter.com/J5naB6TI

NASA_SLS @NASA_SLS
From our friends on the ISS - did you know you can see the station from your backyard? spotthestation.nasa.gov #SpotTheStation @ISS_Update

NASA_SLS @NASA_SLS
@smithsonian channel r/views SLS Chief Engineer Garry Lyles at Michoud Assembly Facility in NOLA for Space: What's Next
pic.twitter.com/TGY68xfr

Print Products Created in 2012



SLS
70 t

The SLS 70 metric ton (t) rocket will transport the Orion Multi-Purpose Crew Vehicle to new destinations beyond Earth orbit, continuing America's human exploration of space.

First flight: **2017**

Height: **321 ft**

Weight: **5.5 million lb**

Payload: **154,000 lb**

Crew: **4**

www.nasa.gov/sls
XX XXXX X XXX MSFC

How **tALL** will SLS be? How much will SLS weigh?

184 ft 305 ft 321 ft 384 ft

Space Shuttle Statue of Liberty 79 Metric tons 130 Metric tons

How much weight can SLS carry?

55,000 pounds 154,000 pounds 286,000 pounds

5 elephants 12 elephants 22 elephants

How powerful will SLS be?

7.8 M 8.4 M 9.2 M

Locomotive engines x 12,400 13,400 17,400

Corvette engines x 148,000 180,000 208,000

THRUST

Space Launch System (SLS) Overview

January 2011

National Aeronautics and Space Administration

space launch system

Space Launch System (SLS) Crew Cut-Out

Space Launch System (SLS) Word Search

Connect the Dots

Moon Maze!



2013 Space Launch System

Space Launch System Highlights

October 2012

NASA Building a Better Solid Rocket Booster for Space Launch System Rocket

space launch system

space launch system

NASAfacts

Building America's Next Heavy-Lift Launch Vehicle

The Power to Explore Beyond Earth

ESD and SLS Video Products



- ◆ “Future Frontier,” SLS, On-Camera Talent, No Narration, Length: 3:42



- ◆ “Building Momentum,” Integrated Program Video, Music/SFX, Length: 4:54





For More Information

www.nasa.gov/sls

www.twitter.com/nasa_sls

www.facebook.com/nasasls





BACKUP SLIDES FOLLOW

SLS: Being Built Today in the U.S.A.

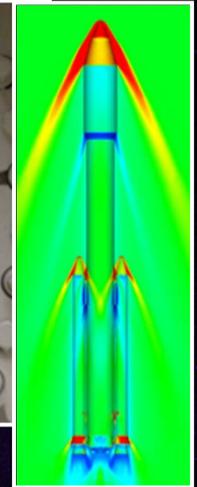


Systems Engineering & Integration



Avionics Test-Bed
May 2012

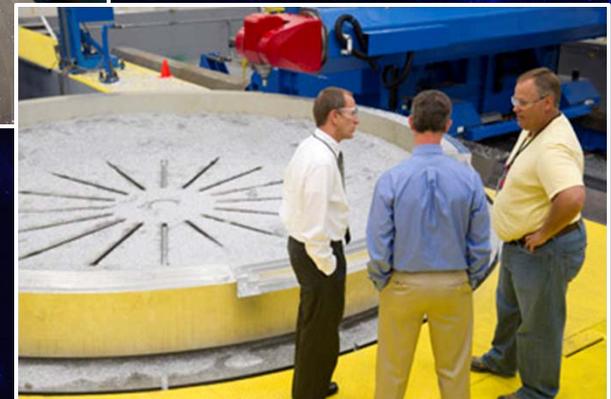
Force and
moment wind
Tunnel testing
July 2012



Ring Milling for
Multi-Purpose
Crew Vehicle-to-
Stage Adapter
(MSA) for 2014
Exploration Flight
Test
June 2012



MSA Pathfinder hardware
June 2012



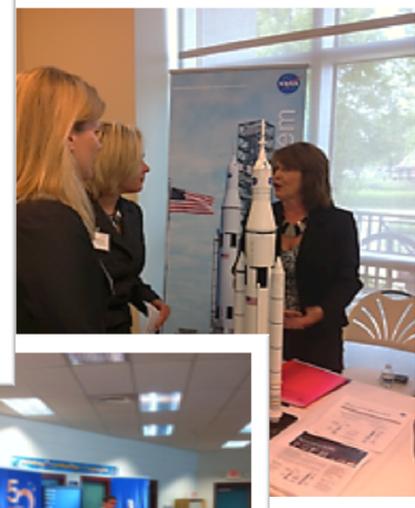
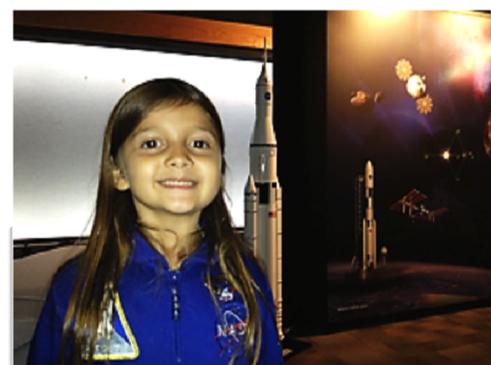
Stages manufacturing
demos and tooling
preparation for friction stir
welding
April 2012

Informal Education – October 2011-October 2012



SLS Exhibits – October 2011-2012

The Pictures



SLS: Safe, Affordable, and Sustainable



◆ Stakeholder Groups

- Office of Science and Technology Policy
- Office of Management and Budget
- Aerospace Partners (Industry and Academic)
 - Department of Defense
 - Potential Payload Providers
 - Science and Engineering Community
- Media (Including print, television and web)
- General Public
- NASA (External to Marshall)
 - Human Exploration and Operations (HEO) Mission Directorate
 - Office of the Chief Engineer
 - Office of the Chief Technologist
 - Other NASA centers
- NASA (Internal to Marshall)
 - Marshall Management
 - Marshall Employees