



1
00:00:00,599 --> 00:00:04,620

“Here’s some of the stories trending This
Week at NASA!”

2
00:00:04,620 --> 00:00:05,620

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3
00:00:05,620 --> 00:00:09,800

NASA’s James Webb Space Telescope (JWST)
has successfully passed the center of curvature

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00:00:09,800 --> 00:00:14,170

test at Goddard Space Flight Center, in Greenbelt,
Md.

5
00:00:14,170 --> 00:00:19,270

This important optical measurement of Webb’s
fully assembled primary mirror was the final

6
00:00:19,270 --> 00:00:24,880

test held at Goddard before the telescope
is shipped off for end-to-end cryogenic testing

7
00:00:24,880 --> 00:00:27,390

at Johnson Space Center in Houston.

8
00:00:27,390 --> 00:00:31,830

When that’s complete, the world’s most
advanced observatory goes to Northrop Grumman

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00:00:31,830 --> 00:00:37,760

Aerospace Systems in Redondo Beach, California,
for final assembly and testing.

10
00:00:37,760 --> 00:00:43,870

Webb is targeted for launch in 2018 on a mission
to help unravel some of the greatest mysteries

11
00:00:43,870 --> 00:00:45,399

of the universe.

12
00:00:45,399 --> 00:00:51,440
A new movie sequence of images captured by NASA's Cassini spacecraft shows the view

13
00:00:51,440 --> 00:00:56,879
during its first dive between Saturn and its rings on April 26.

14
00:00:56,879 --> 00:01:02,719
The movie, which comprises about an hour of observations as the spacecraft moved southward,

15
00:01:02,719 --> 00:01:08,420
shows the swirling vortex at the planet's north pole, and the outer boundary of Saturn's

16
00:01:08,420 --> 00:01:10,990
hexagon-shaped jet stream.

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00:01:10,990 --> 00:01:15,689
Other data from the initial dive indicates the region through which Cassini traveled

18
00:01:15,689 --> 00:01:18,729
appears to be relatively dust-free.

19
00:01:18,729 --> 00:01:23,770
This was the first of 22 such dives as part of Cassini's Grand Finale – before the

20
00:01:23,770 --> 00:01:27,329
mission ends in September.

21
00:01:27,329 --> 00:01:33,070
On May 1, NASA officials visited Ingersoll Machine Tools in Rockford, Illinois – where

22

00:01:33,070 --> 00:01:39,079

machining is well underway on the Orion spacecraft that is scheduled to fly on Exploration Mission-2,

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00:01:39,079 --> 00:01:44,340

the second integrated flight with the agency's Space Launch System (SLS) rocket.

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00:01:44,340 --> 00:01:49,770

NASA's deputy associate administrator for Exploration Systems Development, William Hill,

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00:01:49,770 --> 00:01:55,270

Orion Program manager, Mark Kirasich, and astronaut Rex Walheim toured the facility

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00:01:55,270 --> 00:01:59,420

and commended employees for their work.

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00:01:59,420 --> 00:02:05,310

Orbital ATK recently completed a successful hot fire test of the Orion spacecraft's

28

00:02:05,310 --> 00:02:11,000

launch abort system attitude control motor at the company's facility in Elkton, Maryland.

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00:02:11,000 --> 00:02:17,330

This milestone was part of a test series required to qualify the motor for crewed missions.

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00:02:17,330 --> 00:02:22,690

The motor is designed to steer astronauts inside Orion to safety in the unlikely event

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00:02:22,690 --> 00:02:26,470

of an emergency during launch.

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00:02:26,470 --> 00:02:32,410

Engineers at NASA's Langley Research Center

in Hampton, Virginia are using the center's

33

00:02:32,410 --> 00:02:38,220

14x22-Foot Subsonic Wind Tunnel to understand how environmental factors affect the second-generation

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00:02:38,220 --> 00:02:40,510

Space Launch System rocket.

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00:02:40,510 --> 00:02:44,300

The testing is designed to improve crew safety.

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00:02:44,300 --> 00:02:49,510

On SLS's second mission with Orion, the rocket is expected to send astronauts around the

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00:02:49,510 --> 00:02:55,430

moon to verify technologies and capabilities needed for deep space missions, including

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00:02:55,430 --> 00:02:58,150

Mars.

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00:02:58,150 --> 00:03:03,480

Students from about 23 colleges in six states participated recently in the NASA Community

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00:03:03,480 --> 00:03:07,470

College Aerospace Scholars Program at Johnson Space Center.

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00:03:07,470 --> 00:03:13,060

The students, who were mentored by NASA engineers, worked on team projects, competed in a rover

42

00:03:13,060 --> 00:03:17,360

competition, attended technical briefings, and toured facilities.

43

00:03:17,360 --> 00:03:24,010

The program encourages students to complete a 2-year degree or transfer to a 4-year university

44

00:03:24,010 --> 00:03:28,261

to pursue a field or career in science, technology, engineering or mathematics.

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00:03:28,261 --> 00:03:33,130

And that's what's up this week @NASA ...

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