



1

00:00:00,280 --> 00:00:05,280

NASA is preparing to send America's first asteroid-sampling spacecraft on an ambitious

2

00:00:05,280 --> 00:00:06,580

mission.

3

00:00:06,580 --> 00:00:12,539

It's called OSIRIS-REx, short for Origins, Spectral Interpretation, Resource Identification,

4

00:00:12,539 --> 00:00:14,919

Security-Regolith Explorer.

5

00:00:14,919 --> 00:00:20,680

OSIRIS-REx is launching on a United Launch Alliance Atlas V rocket on a mission to the

6

00:00:20,680 --> 00:00:23,530

near-Earth asteroid Bennu.

7

00:00:23,530 --> 00:00:28,170

Launch preparations kicked off when OSIRIS-REx traveled from Lockheed Martin's facility near

8

00:00:28,170 --> 00:00:33,339

Denver, Colorado and arrived May 20 at Kennedy Space aboard an Air Force C-17.

9

00:00:33,339 --> 00:00:40,239

It was transported to Kennedy's Payload Hazardous Servicing Facility for the remainder of its

10

00:00:40,239 --> 00:00:42,769

prelaunch processing.

11

00:00:42,769 --> 00:00:48,879

On May 23, OSIRIS-REx was attached to an overhead crane, which carefully moved the spacecraft

- 12
00:00:48,879 --> 00:00:53,609
onto a spin table...where it was rotated the
next day in a test of its weight and center
- 13
00:00:53,609 --> 00:00:55,309
of gravity.
- 14
00:00:55,309 --> 00:01:00,589
The solar array panels were removed May 31,
allowing team members to test the deployment
- 15
00:01:00,589 --> 00:01:04,790
mechanism, ensuring the arrays will release
properly during flight.
- 16
00:01:04,790 --> 00:01:10,909
The arrays were then inspected, tested and
cleaned, and reinstalled on August 2.
- 17
00:01:10,909 --> 00:01:16,430
As OSIRIS-REx went through its prelaunch paces,
the Atlas V rocket components arrived.
- 18
00:01:16,430 --> 00:01:21,829
The Centaur upper stage was delivered by truck
to Cape Canaveral Air Force Station's Horizontal
- 19
00:01:21,829 --> 00:01:25,290
Integration Facility on July 20.
- 20
00:01:25,290 --> 00:01:31,909
The first-stage booster reached Port Canaveral
aboard the Delta Mariner barge on July 29.
- 21
00:01:31,909 --> 00:01:36,680
Both elements were processed in the Atlas
Spaceflight Operations Center before moving
- 22

00:01:36,680 --> 00:01:42,150
to Space Launch Complex 41, where they were
assembled vertically: first the booster, on

23
00:01:42,150 --> 00:01:48,070
Aug. 8; then, the rocket's single solid rocket
motor a day later; then the Centaur upper

24
00:01:48,070 --> 00:01:50,409
stage on Aug. 11.

25
00:01:50,409 --> 00:01:56,100
The OSIRIS-REx spacecraft was sealed in the
protective payload fairing Aug. 24.-

26
00:01:56,100 --> 00:02:01,980
Finally, with its prelaunch processing complete,
OSIRIS-REx was moved to the launch pad and

27
00:02:01,980 --> 00:02:08,119
lifted into place atop the Atlas V rocket
on August 29...setting the stage for its upcoming