



1
00:00:00,600 --> 00:00:03,720
Closing in on a hot fire test for Artemis I ...

2
00:00:03,720 --> 00:00:07,140
A tiny hitchhiker headed for a near-Earth destination ...

3
00:00:07,140 --> 00:00:10,780
And a final rehearsal for OSIRIS-REx...

4
00:00:10,780 --> 00:00:13,720
a few of the stories to tell you about –This Week at NASA!

5
00:00:15,780 --> 00:00:18,260
The Space Launch System (SLS) rocket core stage for the

6
00:00:18,260 --> 00:00:22,960
Artemis I lunar mission has completed the first four Green Run tests.

7
00:00:22,960 --> 00:00:28,220
Green Run is a demanding series of eight tests to verify the stage is ready for launch.

8
00:00:28,220 --> 00:00:32,300
It'll culminate with a full-up hot fire test of all four of the rocket's

9
00:00:32,300 --> 00:00:35,860
RS-25 engines for up to eight minutes.

10
00:00:36,240 --> 00:00:39,840
Several CubeSats that will hitch a ride on the Artemis I mission

11
00:00:39,840 --> 00:00:41,900
will eventually be deployed in space.

12
00:00:41,900 --> 00:00:45,720
One of them, NEA Scout, has a huge solar sail.

13
00:00:45,720 --> 00:00:51,320

It will travel to and study an asteroid to better understand near-Earth asteroids

14

00:00:51,320 --> 00:00:56,100

in preparation for a possible future human mission to one of these objects.

15

00:00:56,100 --> 00:00:58,460

Artemis I is the first integrated,

16

00:00:58,460 --> 00:01:03,180

uncrewed flight test of our Space Launch System rocket and Orion spacecraft.

17

00:01:03,180 --> 00:01:06,640

Learn more at nasa.gov/artemis.

18

00:01:06,640 --> 00:01:10,520

NASA's OSIRIS-REx spacecraft conducted another practice run for its

19

00:01:10,520 --> 00:01:14,520

upcoming attempt to collect a sample from asteroid Bennu.

20

00:01:14,520 --> 00:01:18,740

The spacecraft got even closer to Bennu this time than in a previous rehearsal,

21

00:01:18,740 --> 00:01:22,900

and flew in tandem with the asteroid's rotation for the first time.

22

00:01:22,900 --> 00:01:25,760

The first sample collection attempt is Oct. 20.

23

00:01:25,760 --> 00:01:31,900

If successful, OSIRIS-REx will return the sample to Earth in September 2023.

24

00:01:32,460 --> 00:01:35,980

For the first time, an experiment to bounce a laser beam from Earth

25

00:01:35,980 --> 00:01:40,200

off a reflector the size of a paperback novel mounted on our

26

00:01:40,200 --> 00:01:44,080

Lunar Reconnaissance Orbiter (LRO), received a signal back

27

00:01:44,080 --> 00:01:49,160

This could enhance laser experiments used to study the physics of the universe.

28

00:01:49,160 --> 00:01:51,460

Since Apollo, reflectors on

29

00:01:51,460 --> 00:01:54,960

the lunar surface have helped us learn more about our Moon.