and humans on Earth,

1
00:00:00,510 --> 00:00:02,860
A new crew at the space station …

2
00:00:02,860 --> 00:00:06,720
Some science on the next SpaceX resupply mission
…

3
00:00:06,720 --> 00:00:11,940
And testing Orion's parachutes - a few of
the stories to tell you about - This Week

4
00:00:11,940 --> 00:00:13,250
at NASA!

5
00:00:13,250 --> 00:00:19,800
"Steady as she goes - the Soyuz spacecraft
continuing its fly-around of the International

6
00:00:19,800 --> 00:00:21,250
Space Station."

7
00:00:21,250 --> 00:00:27,020
Our astronauts Drew Feustel and Ricky Arnold
and Russia's Oleg Artemyev arrived safely

8
00:00:27,020 --> 00:00:32,520
at the International Space Station on March
23, after a successful launch two days earlier,

9
00:00:32,520 --> 00:00:35,289
from the Baikonur Cosmodrome in Kazakhstan.

10
00:00:35,289 --> 00:00:40,979
The Expedition 55/56 crew will work on hundreds
of experiments during their five-month stay

11
00:00:40,979 --> 00:00:45,160
on the orbiting microgravity laboratory.

12
00:00:45,160 --> 00:00:49,960
The next SpaceX resupply mission to the space
station is set to launch April 2, from Cape

13
00:00:49,960 --> 00:00:52,870
Canaveral Air Force Station in Florida.

14
00:00:52,870 --> 00:00:58,539
Included in the 5,800 pounds of crew supplies,
hardware and research is an Earth observatory

15
00:00:58,539 --> 00:01:04,050
that will study severe thunderstorms and their
role in Earth's atmosphere and climate, an

16
00:01:04,050 --> 00:01:09,070
investigation on bone marrow that could benefit
future space explorers as well as humans on

17
00:01:09,070 --> 00:01:15,230
Earth, and a study on the production of high-performance
products from metal powders, which could lead

18
00:01:15,230 --> 00:01:19,740
to improved manufacturing techniques.

19
00:01:19,740 --> 00:01:25,360
NASA successfully tested the Orion spacecraft's
parachute system on March 16 at the U.S. Army

20
00:01:25,360 --> 00:01:27,590
Proving Ground in Yuma, Arizona.

21
00:01:27,590 --> 00:01:32,670
It was the first time engineers intentionally
failed one of the system's three Forward Bay

22
00:01:32,670 --> 00:01:34,550
Cover parachutes.

23
00:01:34,550 --> 00:01:39,140
The Forward Bay Cover protects the upper part
of Orion throughout its mission, but must

24
00:01:39,140 --> 00:01:45,340
be jettisoned during landing so the rest of
Orion's parachutes can deploy.

25
00:01:45,340 --> 00:01:49,490
A team of engineers at our Marshall Space
Flight Center, in Huntsville, Alabama have

26
00:01:49,490 --> 00:01:55,370
developed and tested a new 3-D printing technique
that can greatly reduce the cost and time

27
00:01:55,370 --> 00:01:57,980
needed to make rocket engine nozzles.

28
00:01:57,980 --> 00:02:03,659
This new technology, which could reduce manufacturing
time from several months to several weeks,

29
00:02:03,659 --> 00:02:10,610
is now being licensed and considered in commercial
applications across the industry.

30
00:02:10,610 --> 00:02:15,750
Spacecraft AR is a new mobile app produced
by our Jet Propulsion Laboratory - in collaboration

31
00:02:15,750 --> 00:02:21,709
with Google - that uses the latest augmented
reality technology to put virtual 3-D models

32
00:02:21,709 --> 00:02:26,840
of NASA's robotic spacecraft into any environment
with a flat surface.

33
00:02:26,840 --> 00:02:31,480
The initial version of the app is available
for Android devices - with plans to add other

34
00:02:31,480 --> 00:02:34,540
devices in the future.

35
00:02:34,540 --> 00:02:36,319
That's what's up this week @NASA …