



1

00:00:00,640 --> 00:00:04,810

"Here's some of the stories trending This Week at NASA!"

2

00:00:04,810 --> 00:00:08,880

At Kennedy Space Center, NASA Administrator Charlie Bolden, Kennedy Center Director Bob

3

00:00:08,880 --> 00:00:14,810

Cabana and other officials invited the media to view prelaunch progress of the Orion spacecraft.

4

00:00:14,810 --> 00:00:19,980

Kennedy technicians recently attached Orion's crew module to its service module -- the first

5

00:00:19,980 --> 00:00:25,000

step in moving the spacecraft's three primary elements, which includes the launch abort

6

00:00:25,000 --> 00:00:28,369

system, into the correct configuration for launch.

7

00:00:28,369 --> 00:00:33,230

Orion is being prepared for its first space flight in December - a four-and-a-half-hour

8

00:00:33,230 --> 00:00:38,210

uncrewed mission to test systems that will be critical for survival of astronauts on

9

00:00:38,210 --> 00:00:40,960

future deep space missions.

10

00:00:40,960 --> 00:00:45,440

During a multi-center program, anchored at NASA headquarters, agency officials announced

11

00:00:45,440 --> 00:00:50,920

recent progress to identify candidate asteroids for its Asteroid Redirect Mission, increase

12

00:00:50,920 --> 00:00:57,059

public participation in finding asteroids and advance the design of the redirect mission.

13

00:00:57,059 --> 00:01:02,269

NASA plans to launch a robotic spacecraft in 2019 to capture and redirect an asteroid

14

00:01:02,269 --> 00:01:07,840

to a stable orbit around the moon for study during a human mission with Orion.

15

00:01:07,840 --> 00:01:11,780

Concept studies solicited through a recent Broad Agency Announcement will help refine

16

00:01:11,780 --> 00:01:17,850

system concepts and key technologies needed for the Asteroid Redirect Mission, and assess

17

00:01:17,850 --> 00:01:22,940

feasibility of potential commercial partnerships to support the robotic mission.

18

00:01:22,940 --> 00:01:28,369

NASA is evaluating two concepts -- the full capture of a small asteroid or retrieval of

19

00:01:28,369 --> 00:01:30,620

a boulder from a much larger one.

20

00:01:30,620 --> 00:01:35,049

While NASA plans to pick the specific target asteroid about a year before the redirect

21

00:01:35,049 --> 00:01:40,619

mission will launch, recent observations by NASA's Spitzer Space Telescope of asteroid

22  
00:01:40,619 --> 00:01:46,370  
2011 MD show it could make a good candidate for the full capture concept.

23  
00:01:46,370 --> 00:01:51,000  
Meanwhile, boulders have been seen on all larger asteroids visited by spacecraft so

24  
00:01:51,000 --> 00:01:55,730  
far -- which makes the boulder retrieval option viable too.

25  
00:01:55,730 --> 00:02:00,369  
These findings show astronomers are making progress in characterizing suitable candidate

26  
00:02:00,369 --> 00:02:02,250  
asteroids for the mission.

27  
00:02:02,250 --> 00:02:07,409  
The hunt for asteroids for the redirect mission is a component of NASA's effort to identify

28  
00:02:07,409 --> 00:02:12,430  
all near-Earth objects that pose a threat to humans -- an effort the public and other

29  
00:02:12,430 --> 00:02:17,480  
entities are helping with through the agency's Asteroid Grand Challenge -- which has resulted

30  
00:02:17,480 --> 00:02:20,900  
in more than 14-hundred potential threats found.

31  
00:02:20,900 --> 00:02:25,670  
In recognition of the first anniversary of

the grand challenge, NASA held a virtual workshop

32  
00:02:25,670 --> 00:02:32,849  
about new opportunities for public participation  
-- visit [nasa.gov](http://nasa.gov) for details.

33  
00:02:32,849 --> 00:02:36,792  
Up on the International Space Station, Expedition  
40 Flight Engineers Alexander Skvortsov (pron:

34  
00:02:36,792 --> 00:02:39,870  
Skuh-VORT'-tsoff) and Oleg Artemyev (pron:  
Ar-TIM'-ee-ehv) of the Russian Federal Space

35  
00:02:39,870 --> 00:02:45,590  
Agency conducted a spacewalk to install a  
telemetry system antenna and to relocate a

36  
00:02:45,590 --> 00:02:46,980  
payload boom.

37  
00:02:46,980 --> 00:02:52,340  
It was the 180th spacewalk in support of space  
station assembly and maintenance and the first

38  
00:02:52,340 --> 00:02:55,270  
for both cosmonauts.

39  
00:02:55,270 --> 00:03:00,190  
At the first White House Maker Faire, NASA  
announced new opportunities for Makers -- including

40  
00:03:00,190 --> 00:03:06,410  
a 3D printing challenge, an additive manufacturing  
competition, and a new way for CubeSat developers

41  
00:03:06,410 --> 00:03:08,290  
to work with NASA.

42

00:03:08,290 --> 00:03:13,120

Inventing the future is a passion NASA shares  
with Makers -- working together to create

43

00:03:13,120 --> 00:03:17,310

the technology that drives exploration on  
Earth and in space.

44

00:03:17,310 --> 00:03:19,129

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