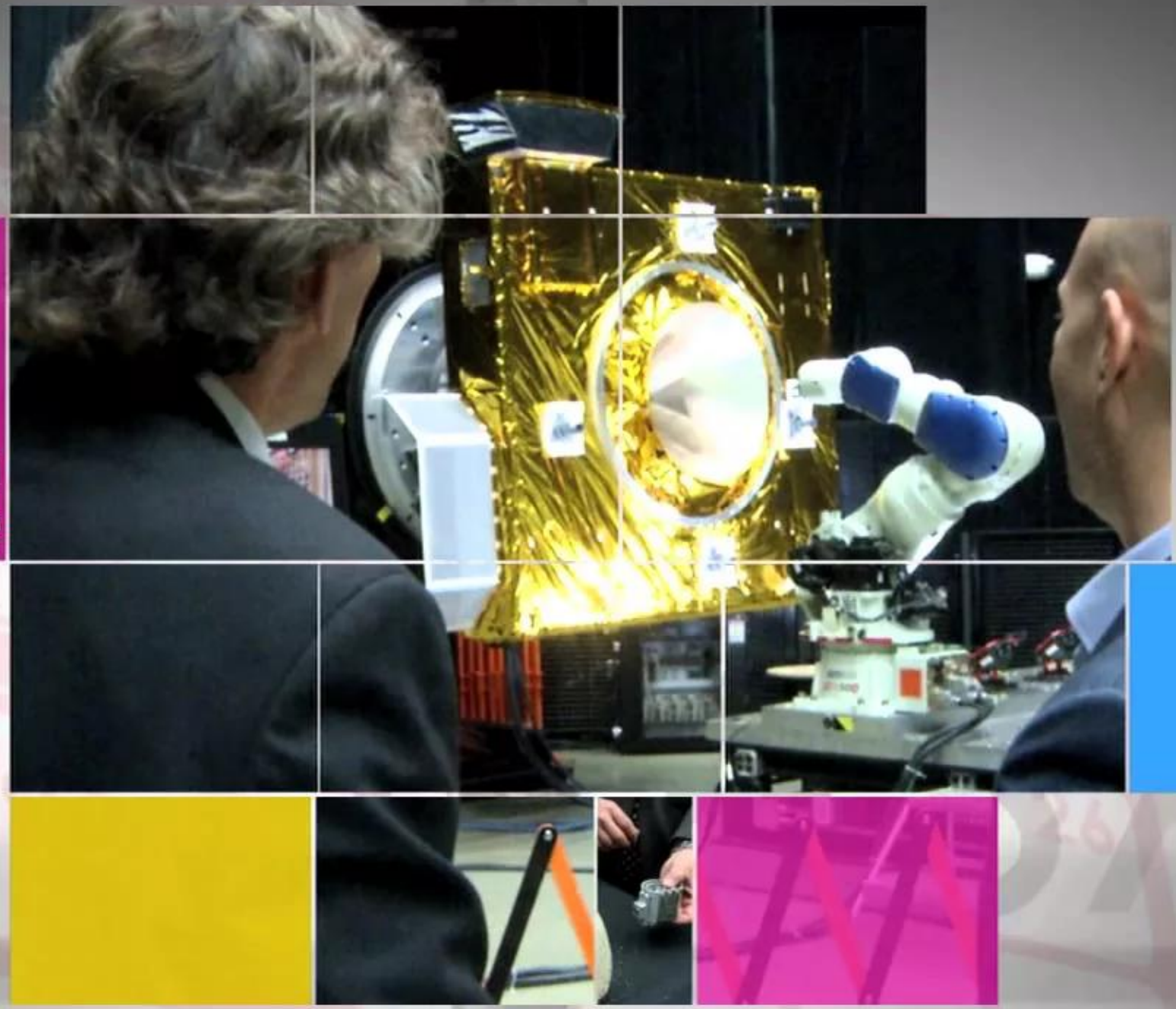
Asteroid exploration update



1
00:00:00,789 --> 00:00:03,810
“Here’s some of the stories trending This
Week at NASA!”

2
00:00:03,810 --> 00:00:10,460
A new NASA mission to investigate the habitability
of Jupiter's ocean moon Europa has moved from

3
00:00:10,460 --> 00:00:15,620
the concept phase to the development phase
known as formulation, after successfully completing

4
00:00:15,620 --> 00:00:18,430
its first major review by the agency.

5
00:00:18,430 --> 00:00:22,520
Europa is considered to be one of the best
places in the solar system to search for signs

6
00:00:22,520 --> 00:00:25,250
of present-day life beyond Earth.

7
00:00:25,250 --> 00:00:29,430
Plans for the mission call for a spacecraft
to be launched to the Jupiter system sometime

8
00:00:29,430 --> 00:00:32,650
in the 2020s.

9
00:00:32,650 --> 00:00:39,000
During a June 16 briefing at the 2015 Astrobiology
Science Conference in Chicago, NASA and university

10
00:00:39,000 --> 00:00:44,780
scientists discussed astrobiology research
and technology being used to advance our search

11
00:00:44,780 --> 00:00:48,170
for other habitable worlds in our solar system

and beyond.

12
00:00:48,170 --> 00:00:55,190
Mars, Europa, Saturn’s moon Enceladus and
various exoplanets were discussed.

13
00:00:55,190 --> 00:01:02,540
Astrobiology is the study of the origin, evolution,
distribution, and future of life in the universe.

14
00:01:02,540 --> 00:01:06,890
Progression on NASA’s journey to Mars and
exploration of the Red Planet now includes

15
00:01:06,890 --> 00:01:11,050
newly signed agreements between NASA and two
European partners.

16
00:01:11,050 --> 00:01:15,850
Under one agreement, CNES, the French space
agency will provide the structural support

17
00:01:15,850 --> 00:01:19,400
for the SuperCam on NASA’s Mars 2020 rover.

18
00:01:19,400 --> 00:01:25,260
The other agreement will extend cooperation
by Spain on the Mars Curiosity rover, NASA’s

19
00:01:25,260 --> 00:01:30,040
InSight mission to Mars that will launch next
year, and the Mars 2020 rover.

20
00:01:30,040 --> 00:01:34,270
NASA Administrator Charlie Bolden signed the
agreements during meetings at the Paris Air

21
00:01:34,270 --> 00:01:35,830
Show.

22
00:01:35,830 --> 00:01:41,070
NASA’s Asteroid Grand Challenge and the
robotic systems being developed for future

23
00:01:41,070 --> 00:01:45,990
asteroid exploration missions were the focus
of a June 16 event at Goddard Space Flight

24
00:01:45,990 --> 00:01:47,130
Center.

25
00:01:47,130 --> 00:01:51,189
Agency officials gave a status update on the
Asteroid Grand Challenge, which was started

26
00:01:51,189 --> 00:01:56,710
two years ago as a way to focus on finding
all asteroid threats to human populations

27
00:01:56,710 --> 00:01:58,970
and knowing what to do about them.

28
00:01:58,970 --> 00:02:03,970
They also discussed progress on the Asteroid
Robotic Redirect Mission or (ARRM).

29
00:02:03,970 --> 00:02:08,039
Representatives from Goddard’s Satellite
Servicing Capabilities Office (SSCO) also

30
00:02:08,039 --> 00:02:12,810
discussed the development of robotic systems
for the ARRM and other NASA missions using

31
00:02:12,810 --> 00:02:15,810
space robotics.

32
00:02:15,810 --> 00:02:20,659
Deputy Administrator Dava Newman visited with

employees at Langley Research Center on June

33
00:02:20,659 --> 00:02:21,680
18.

34
00:02:21,680 --> 00:02:26,769
While there, Newman also toured a Boeing ecoDemonstrator
757 aircraft.

35
00:02:26,769 --> 00:02:32,549
An ecoDemonstrator has been used for three
NASA research projects conducted in partnership

36
00:02:32,549 --> 00:02:38,870
with Boeing to test several innovative green
aviation technologies, as part of NASA's Environmentally

37
00:02:38,870 --> 00:02:44,989
Responsible Aviation Project to reduce aircraft
fuel consumption and emissions.

38
00:02:44,989 --> 00:02:51,029
NASA’s Tropical Rainfall Measuring Mission
or (TRMM) spacecraft re-entered Earth’s

39
00:02:51,029 --> 00:02:58,220
atmosphere on June 15 at 11:55 p.m. EDT, over
the South Indian Ocean, according to the U.S.

40
00:02:58,220 --> 00:03:02,480
Strategic Command’s Joint Functional Component
Command for Space through the Joint Space

41
00:03:02,480 --> 00:03:04,120
Operations Center (JSpOC).

42
00:03:04,120 --> 00:03:08,780
TRMM was a joint mission between NASA and
the Japan Aerospace Exploration Agency (JAXA)

43
00:03:08,780 --> 00:03:12,040
to study rainfall for weather and climate
research.

44
00:03:12,040 --> 00:03:18,219
The spacecraft’s descent had been closely
monitored since the mission was ended in April.

45
00:03:18,219 --> 00:03:24,219
NASA awarded $100,000 in prize money to a
team from West Virginia University for successfully

46
00:03:24,219 --> 00:03:29,489
completing Level 2 of the Sample Return Robot
Challenge at Worcester Polytechnic Institute

47
00:03:29,489 --> 00:03:31,010
in Massachusetts.

48
00:03:31,010 --> 00:03:35,940
The purpose of the challenge was to demonstrate
how an autonomous robot could locate samples

49
00:03:35,940 --> 00:03:38,379
and return them to the starting zone.

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00:03:38,379 --> 00:03:43,150
This was the fourth year of the event, which
is part NASA's Centennial Challenges Program

51
00:03:43,150 --> 00:03:47,900
to encourage innovations in autonomous navigation
and robotics technologies.

52
00:03:47,900 --> 00:03:51,890
And that’s what’s up this week @NASA …