1
00:00:06,600 --> 00:00:10,760
This Week at NASA…

2
00:00:10,760 --> 00:00:17,430
Veteran Astronauts Chris Ferguson, Doug Hurley,
Sandy Magnus and Rex Walheim will make up

3
00:00:17,430 --> 00:00:25,720
the crew of STS-335. The mission will fly
only if members of STS-134 aboard space shuttle

4
00:00:25,720 --> 00:00:32,160
Endeavour, would need to be rescued. STS-134
is the last scheduled shuttle mission to the

5
00:00:32,160 --> 00:00:34,110
International Space Station.\h

6
00:00:34,110 --> 00:00:40,710
Since the loss of Columbia in 2003, NASA has
had a crew ready to fly if a shuttle suffers

7
00:00:40,710 --> 00:00:47,839
irreparable damage in orbit.\h The STS-335
crew will not only train for rescue but will

8
00:00:47,839 --> 00:00:53,319
stand ready in case a new shuttle mission
is added to the launch manifest. If that happens,

9
00:00:53,319 --> 00:01:02,379
STS-335 would be re-designated STS-135 and
would be targeted to launch in June 2011 aboard

10
00:01:02,379 --> 00:01:11,140
space shuttle Atlantis.
And now Centerpieces…

11
00:01:11,140 --> 00:01:15,310

Preparations continue for the next space shuttle
mission to the International Space Station,

12
00:01:15,310 --> 00:01:22,200
STS-133. Space shuttle Discovery is now at
Launch Pad 39A at the Kennedy Space Center

13
00:01:22,200 --> 00:01:27,780
in Florida following its move, or “rollout”
from the Vehicle Assembly Building.\h STS-133

14
00:01:27,780 --> 00:01:34,110
is the next-to-last scheduled shuttle mission
and the final flight of Discovery before it’s

15
00:01:34,110 --> 00:01:35,110
retired.

16
00:01:35,110 --> 00:01:40,299
The orbiter and its six-member crew commanded
by Steve Lindsey will carry to the station

17
00:01:40,299 --> 00:01:46,590
the Permanent Multipurpose Module, or PMM,
packed with supplies and critical spare parts,

18
00:01:46,590 --> 00:01:50,689
as well as the first human-like robot in space,
Robonaut 2.

19
00:01:50,689 --> 00:01:56,340
Discovery is targeted to launch on Nov. 1.
\h

20
00:01:56,340 --> 00:02:02,140
Looking from behind glass into a controlled-atmosphere
clean room at the Jet Propulsion Laboratory,

21
00:02:02,140 --> 00:02:09,620
invited media satisfied their curiosity about

Curiosity, the next Mars rover. Along with

22
00:02:09,620 --> 00:02:14,910
other elements of the Mars Science Laboratory spacecraft, Curiosity has been undergoing

23
00:02:14,910 --> 00:02:22,050
tests inside JPL’s Spacecraft Assembly Facility, driving short distances and moving its robotic

24
00:02:22,050 --> 00:02:23,050
arm.

25
00:02:23,050 --> 00:02:26,720
“Now just about everything you see on the mobility system looks black, that doesn’t

26
00:02:26,720 --> 00:02:30,550
mean it’s the same material.\h The tubes, the suspension arms coming down to the wheels,

27
00:02:30,550 --> 00:02:35,820
those are all titanium; the tires themselves, those are aluminum; the shell on those tires

28
00:02:35,820 --> 00:02:40,360
is actually a piece of machined aluminum about 30-thousandth-of-an-inch thick; that’s about

29
00:02:40,360 --> 00:02:45,300
the sickness of seven pieces of paper, and when they’re that thin, it makes them actually

30
00:02:45,300 --> 00:02:49,600
soft and so they to behave in much the way that a rubber tire would behave.

31
00:02:49,600 --> 00:02:52,950
“This test was sort of an obstacle course for the rover because we have to drive over

32
00:02:52,950 --> 00:02:57,340
obstacles at certain heights and those correspond
to rocks at certain heights we expect to see

33
00:02:57,340 --> 00:03:01,660
on the surface of Mars. So those ramps are
mimicking those rocks to make sure we actually

34
00:03:01,660 --> 00:03:03,700
drive over them and get to the science."

35
00:03:03,700 --> 00:03:08,720
MSL and its rover are scheduled to launch
to Mars in late 2011.

36
00:03:08,720 --> 00:03:16,390
Ames and Marshall were among the NASA centers
hosting a celebration of International Observe

37
00:03:16,390 --> 00:03:18,070
the Moon Night.

38
00:03:18,070 --> 00:03:22,890
Center guests viewed the moon and other celestial
objects through large telescopes, guided by

39
00:03:22,890 --> 00:03:29,420
local astronomical groups, and visitors enjoyed
several hands-on games and activities, including

40
00:03:29,420 --> 00:03:35,080
an inflatable planetarium to learn more about
the stars, moon and planets.

41
00:03:35,080 --> 00:03:39,880
NASA scientists also talked about the presence
of water on the moon and upcoming missions

42

00:03:39,880 --> 00:03:42,240
to our nearest neighbor in space.

43
00:03:42,240 --> 00:03:47,650
International Observe the Moon Night was celebrated
in more than 30 countries worldwide.

44
00:03:47,650 --> 00:03:51,790
And that’s This Week at NASA!