1
00:00:07,120 --> 00:00:10,629
this week at nasa

2
00:00:15,669 --> 00:00:12,950
appearing to be in excellent shape soyuz

3
00:00:18,470 --> 00:00:15,679
commander alexander schwarzoff back on

4
00:00:21,189 --> 00:00:18,480
earth after almost six months aboard the

5
00:00:24,390 --> 00:00:21,199
international space station expedition

6
00:00:26,390 --> 00:00:24,400
24 soyuz commander alexander schwarzoff

7
00:00:28,550 --> 00:00:26,400
nasa flight engineer tracy caldwell

8
00:00:31,509 --> 00:00:28,560
dyson and russian flight engineer

9
00:00:34,389 --> 00:00:31,519
mikhail konyenko are back on earth

10
00:00:37,910 --> 00:00:34,399
the trio of explorers made a safe return

11
00:00:39,670 --> 00:00:37,920
in the soyuz tma-18 spacecraft landing

12
00:00:42,150 --> 00:00:39,680
in southern kazakhstan

13
00:00:44,310 --> 00:00:42,160

their flight home was delayed a day when

14
00:00:46,389 --> 00:00:44,320
a malfunctioning docking mechanism

15
00:00:48,229 --> 00:00:46,399
wouldn't allow their vehicle to separate

16
00:00:50,470 --> 00:00:48,239
safely from the station

17
00:00:53,029 --> 00:00:50,480
their replacements soyuz commander

18
00:00:55,990 --> 00:00:53,039
cosmonaut alexander kaleri flight

19
00:00:58,630 --> 00:00:56,000
engineer cosmonaut oleg skopochka an

20
00:01:01,510 --> 00:00:58,640
expedition 25 flight engineer expedition

21
00:01:03,830 --> 00:01:01,520
26 commander scott kelly are scheduled

22
00:01:06,550 --> 00:01:03,840
to launch aboard a soyuz spacecraft from

23
00:01:07,990 --> 00:01:06,560
the baikonur cosmodrome in kazakhstan on

24
00:01:10,390 --> 00:01:08,000
october 7th

25
00:01:12,950 --> 00:01:10,400
they'll join expedition 25 commander

26
00:01:15,670 --> 00:01:12,960
astronaut doug wheelock flight engineer

27
00:01:17,670 --> 00:01:15,680
astronaut shannon walker and cosmonaut

28
00:01:22,310 --> 00:01:17,680
fyodor yurchikhin who have been aboard

29
00:01:28,630 --> 00:01:25,030
veteran astronauts chris ferguson doug

30
00:01:30,670 --> 00:01:28,640
hurley sandy magnus and rex walheim will

31
00:01:32,310 --> 00:01:30,680
make up the crew of

32
00:01:35,230 --> 00:01:32,320
sts-335

33
00:01:37,990 --> 00:01:35,240
the mission will fly only if members of

34
00:01:41,670 --> 00:01:38,000
sts-134 aboard space shuttle endeavour

35
00:01:43,670 --> 00:01:41,680
would need to be rescued sts-134

36
00:01:45,910 --> 00:01:43,680
is the last scheduled shuttle mission to

37
00:01:48,870 --> 00:01:45,920
the international space station since

38
00:01:51,429 --> 00:01:48,880

the loss of colombia in 2003

39
00:01:53,590 --> 00:01:51,439
nasa has had a crew ready to fly if a

40
00:01:54,469 --> 00:01:53,600
shuttle suffers irreparable damage in

41
00:01:55,149 --> 00:01:54,479
orbit

42
00:01:57,749 --> 00:01:55,159
the

43
00:02:00,550 --> 00:01:57,759
sts-335 crew will not only train for

44
00:02:02,550 --> 00:02:00,560
rescue but will also stand ready in case

45
00:02:05,950 --> 00:02:02,560
a new shuttle mission is added to the

46
00:02:10,550 --> 00:02:05,960
launch manifest if that happens

47
00:02:12,630 --> 00:02:10,560
sts-335 would be redesignated sts-135

48
00:02:18,070 --> 00:02:12,640
and would be targeted to launch in june

49
00:02:22,630 --> 00:02:19,190
and now

50
00:02:26,309 --> 00:02:24,630
preparations continue for the next space

51
00:02:27,790 --> 00:02:26,319
shuttle mission to the international

52
00:02:29,589 --> 00:02:27,800
space station

53
00:02:31,589 --> 00:02:29,599
sts-133

54
00:02:33,910 --> 00:02:31,599
space shuttle discovery is now at launch

55
00:02:36,790 --> 00:02:33,920
pad 39a at the kennedy space center in

56
00:02:39,390 --> 00:02:36,800
florida following its move or rollout

57
00:02:42,150 --> 00:02:39,400
from the vehicle assembly building

58
00:02:44,390 --> 00:02:42,160
sts-133 is the next to last scheduled

59
00:02:46,949 --> 00:02:44,400
shuttle mission and the final flight of

60
00:02:49,030 --> 00:02:46,959
discovery before it's retired

61
00:02:51,430 --> 00:02:49,040
the orbiter and its six-member crew

62
00:02:53,670 --> 00:02:51,440
commanded by steve lindsey will carry to

63
00:02:56,630 --> 00:02:53,680

the station the permanent multi-purpose

64
00:02:58,790 --> 00:02:56,640
module or pmm packed with supplies and

65
00:03:01,430 --> 00:02:58,800
critical spare parts as well as the

66
00:03:02,309 --> 00:03:01,440
first human-like robot in space robonaut

67
00:03:04,229 --> 00:03:02,319
2.

68
00:03:07,830 --> 00:03:04,239
discovery is targeted to launch on

69
00:03:11,990 --> 00:03:09,910
looking from behind glass into a

70
00:03:15,190 --> 00:03:12,000
controlled atmosphere clean room at the

71
00:03:17,670 --> 00:03:15,200
jet propulsion laboratory invited media

72
00:03:20,790 --> 00:03:17,680
satisfied their curiosity about

73
00:03:22,630 --> 00:03:20,800
curiosity the next mars rover

74
00:03:25,670 --> 00:03:22,640
along with other elements of the mars

75
00:03:28,390 --> 00:03:25,680
science laboratory spacecraft curiosity

76
00:03:31,110 --> 00:03:28,400
has been undergoing tests inside jpl's

77
00:03:33,670 --> 00:03:31,120
spacecraft assembly facility driving

78
00:03:35,589 --> 00:03:33,680
short distances and moving its robotic

79
00:03:37,990 --> 00:03:35,599
arm now just about everything you see on

80
00:03:39,589 --> 00:03:38,000
the mobility system looks black but that

81
00:03:41,110 --> 00:03:39,599
doesn't mean it's all the same material

82
00:03:42,630 --> 00:03:41,120
the tubes the suspension arms coming

83
00:03:45,030 --> 00:03:42,640
down to the wheels those are all

84
00:03:47,589 --> 00:03:45,040
titanium the tires themselves those are

85
00:03:49,270 --> 00:03:47,599
aluminum the shell on those tires is

86
00:03:50,949 --> 00:03:49,280
actually a piece of machined aluminum

87
00:03:52,789 --> 00:03:50,959
that's about 30 thousandths of an inch

88
00:03:54,470 --> 00:03:52,799

thick it's about the thickness of seven

89
00:03:56,630 --> 00:03:54,480
pieces of paper

90
00:03:59,429 --> 00:03:56,640
and when they're that thin it makes them

91
00:04:01,270 --> 00:03:59,439
actually soft so they behave in much the

92
00:04:02,789 --> 00:04:01,280
way that a rubber tire would behave this

93
00:04:04,630 --> 00:04:02,799
test was sort of an obstacle course for

94
00:04:06,630 --> 00:04:04,640
the rover because we have to drive over

95
00:04:08,229 --> 00:04:06,640
obstacles of certain heights and those

96
00:04:09,509 --> 00:04:08,239
correspond to rocks at certain heights

97
00:04:11,589 --> 00:04:09,519
that we expect to see on the surface of

98
00:04:13,110 --> 00:04:11,599
mars so those ramps we're mimicking

99
00:04:14,470 --> 00:04:13,120
those rocks to make sure that we can

100
00:04:15,350 --> 00:04:14,480
actually drive over them and get to the

101
00:04:17,749 --> 00:04:15,360
science

102
00:04:22,150 --> 00:04:17,759
msl and its rover are scheduled to

103
00:04:26,629 --> 00:04:24,550
ames and marshall were among the nasa

104
00:04:29,430 --> 00:04:26,639
centers hosting a celebration of

105
00:04:31,510 --> 00:04:29,440
international observe the moon night

106
00:04:33,110 --> 00:04:31,520
center guests viewed the moon and other

107
00:04:35,909 --> 00:04:33,120
celestial objects through large

108
00:04:38,230 --> 00:04:35,919
telescopes guided by local astronomical

109
00:04:40,950 --> 00:04:38,240
groups and visitors enjoyed several

110
00:04:43,350 --> 00:04:40,960
hands-on games and activities including

111
00:04:46,390 --> 00:04:43,360
an inflatable planetarium to learn more

112
00:04:48,550 --> 00:04:46,400
about the stars moon and planets

113
00:04:50,469 --> 00:04:48,560

nasa scientists also talked about the

114
00:04:52,390 --> 00:04:50,479
presence of water on the moon and

115
00:04:53,909 --> 00:04:52,400
upcoming missions to our nearest

116
00:04:56,469 --> 00:04:53,919
neighbor in space

117
00:04:59,030 --> 00:04:56,479
international observe the moon night was

118
00:05:00,870 --> 00:04:59,040
celebrated in more than 30 countries

119
00:05:03,430 --> 00:05:00,880
worldwide

120
00:05:06,070 --> 00:05:03,440
and that's this week at nasa