1
00:00:07,200 --> 00:00:13,509
this week at nasa

2
00:00:17,750 --> 00:00:15,749
members of the next international space

3
00:00:20,230 --> 00:00:17,760
station crew fielded questions from the

4
00:00:22,390 --> 00:00:20,240
media at the gagarin cosmonaut training

5
00:00:23,429 --> 00:00:22,400
center in star city russia outside

6
00:00:26,070 --> 00:00:23,439
moscow

7
00:00:28,470 --> 00:00:26,080
soyuz commander oleg kononenko nasa

8
00:00:30,470 --> 00:00:28,480
flight engineer don pettit and european

9
00:00:32,709 --> 00:00:30,480
space agency flight engineer andre

10
00:00:36,870 --> 00:00:32,719
kuipers also took part in traditional

11
00:00:39,030 --> 00:00:36,880
ceremonies at red square in moscow

12
00:00:41,670 --> 00:00:39,040
the trio is scheduled to launch to the

13
00:00:44,869 --> 00:00:41,680

iss later this month to join their

14
00:00:48,069 --> 00:00:44,879
expedition 30 crewmates dan burbank

15
00:00:56,709 --> 00:00:48,079
anton shkaplerov and anatoly ivanishin

16
00:01:01,349 --> 00:00:59,270
work continues on nasa's next generation

17
00:01:03,990 --> 00:01:01,359
of spacecraft that'll carry humans

18
00:01:06,870 --> 00:01:04,000
beyond low earth orbit at the stennis

19
00:01:09,270 --> 00:01:06,880
space center the j2x engine that'll help

20
00:01:12,390 --> 00:01:09,280
propel the new space launch system or

21
00:01:17,350 --> 00:01:12,400
sls underwent another successful test

22
00:01:22,149 --> 00:01:19,749
the orion multipurpose crew vehicle was

23
00:01:24,070 --> 00:01:22,159
put through the latest test of its water

24
00:01:26,469 --> 00:01:24,080
landing capabilities at the langley

25
00:01:28,870 --> 00:01:26,479
research center

26
00:01:30,789 --> 00:01:28,880
and at the kennedy space center workers

27
00:01:34,310 --> 00:01:30,799
have completed structural and other

28
00:01:36,230 --> 00:01:34,320
testing at launch pad 39b on the sls's

29
00:01:38,469 --> 00:01:36,240
mobile launcher platform

30
00:01:40,550 --> 00:01:38,479
the mlp will be modified to host the

31
00:01:42,950 --> 00:01:40,560
heavy lift rocket under development

32
00:01:49,510 --> 00:01:42,960
that'll send astronauts to destinations

33
00:01:53,830 --> 00:01:51,109
members of maryland's congressional

34
00:01:55,990 --> 00:01:53,840
delegation senator barbara mikulski

35
00:01:58,389 --> 00:01:56,000
representative steny hoyer and

36
00:02:00,310 --> 00:01:58,399
representative donna edwards took part

37
00:02:02,310 --> 00:02:00,320
in an employee town hall meeting at the

38
00:02:04,389 --> 00:02:02,320

goddard space flight center

39
00:02:06,469 --> 00:02:04,399
those inside the building aid auditorium

40
00:02:08,309 --> 00:02:06,479
heard about the recently passed nasa

41
00:02:10,309 --> 00:02:08,319
appropriations bill and other

42
00:02:12,949 --> 00:02:10,319
legislative issues important to the

43
00:02:16,229 --> 00:02:12,959
goddard workforce being america the

44
00:02:20,470 --> 00:02:16,239
exceptional doesn't lie into the future

45
00:02:21,670 --> 00:02:20,480
it lies right here today and what you do

46
00:02:22,470 --> 00:02:21,680
every day

47
00:02:26,150 --> 00:02:22,480
to

48
00:02:29,270 --> 00:02:26,160
discover new areas of science of

49
00:02:32,550 --> 00:02:29,280
technology that helped save the planet

50
00:02:34,869 --> 00:02:32,560
save the lives and also come up with

51
00:02:37,190 --> 00:02:34,879
discoveries that weren't even

52
00:02:39,509 --> 00:02:37,200
anticipated or dreamed about the

53
00:02:41,750 --> 00:02:39,519
lawmakers also toured goddard's robotics

54
00:02:46,470 --> 00:02:41,760
facility and the james webb space

55
00:02:51,110 --> 00:02:48,710
nasa's office of education hosted its

56
00:02:53,750 --> 00:02:51,120
second education stakeholders summit in

57
00:02:55,910 --> 00:02:53,760
chantilly virginia outside washington

58
00:02:58,229 --> 00:02:55,920
the summit highlighted nasa's new

59
00:02:59,990 --> 00:02:58,239
one-stop shopping initiative an

60
00:03:04,070 --> 00:03:00,000
innovation in the recruitment of the

61
00:03:06,390 --> 00:03:04,080
agency's workforce of tomorrow the ossi

62
00:03:08,470 --> 00:03:06,400
aims to build a robust nasa

63
00:03:10,550 --> 00:03:08,480

infrastructure of internships

64
00:03:13,190 --> 00:03:10,560
fellowships and scholarships that

65
00:03:15,830 --> 00:03:13,200
attract students to science technology

66
00:03:18,070 --> 00:03:15,840
engineering and math and ultimately

67
00:03:19,270 --> 00:03:18,080
facilitate their entry into the nasa

68
00:03:21,350 --> 00:03:19,280
workforce

69
00:03:23,509 --> 00:03:21,360
presenters included office of personnel

70
00:03:25,270 --> 00:03:23,519
management director john barrett and

71
00:03:28,390 --> 00:03:25,280
nasa associate administrator for

72
00:03:31,030 --> 00:03:28,400
education leland melvin who spoke of why

73
00:03:32,949 --> 00:03:31,040
it's cool to work in nasa education if

74
00:03:35,190 --> 00:03:32,959
something has to be cool about what we

75
00:03:38,229 --> 00:03:35,200
do it's the it's the people

76
00:03:40,789 --> 00:03:38,239
it's the the integrity it's the honesty

77
00:03:43,430 --> 00:03:40,799
it's the banding together to change the

78
00:03:46,390 --> 00:03:43,440
world so i think one of the coolest

79
00:03:49,509 --> 00:03:46,400
things that we do as an agency as when

80
00:03:51,350 --> 00:03:49,519
we have failures when things happen

81
00:03:54,149 --> 00:03:51,360
when things go awry

82
00:03:55,190 --> 00:03:54,159
we band together as a community as a

83
00:03:57,509 --> 00:03:55,200
family

84
00:04:00,390 --> 00:03:57,519
and we come back and we're resilient and

85
00:04:03,350 --> 00:04:00,400
we make things happen

86
00:04:05,110 --> 00:04:03,360
it's an honor to be here

87
00:04:06,789 --> 00:04:05,120
i always dreamt of coming and seeing the

88
00:04:08,789 --> 00:04:06,799

rocket leave the planet

89
00:04:10,949 --> 00:04:08,799
helping melvin tout the importance of

90
00:04:14,229 --> 00:04:10,959
inspiring our youth about stem-based

91
00:04:16,550 --> 00:04:14,239
careers was entertainer will i am of the

92
00:04:19,830 --> 00:04:16,560
musical group the black eyed peas

93
00:04:21,909 --> 00:04:19,840
an avid fan of robotics will and melvin

94
00:04:23,830 --> 00:04:21,919
were interviewed by tv stations and

95
00:04:25,510 --> 00:04:23,840
networks throughout north america when

96
00:04:27,030 --> 00:04:25,520
you think of tomorrow

97
00:04:29,430 --> 00:04:27,040
and the people that are going to be

98
00:04:31,590 --> 00:04:29,440
leading the way it's the youth that we

99
00:04:33,909 --> 00:04:31,600
have right now the celebrity singer

100
00:04:36,310 --> 00:04:33,919
rapper also joined melvin nasa

101
00:04:38,710 --> 00:04:36,320
administrator charlie bolden and deputy

102
00:04:41,030 --> 00:04:38,720
administrator lori garver in speaking

103
00:04:43,590 --> 00:04:41,040
with attendees of a tweet up during

104
00:04:48,629 --> 00:04:43,600
curiosity rover's pre-launch activities

105
00:04:52,150 --> 00:04:50,629
this electrical box built and tested at

106
00:04:55,670 --> 00:04:52,160
nasa's langley research center in

107
00:04:58,629 --> 00:04:55,680
hampton virginia is no ordinary box

108
00:05:03,189 --> 00:04:58,639
it's an interplanetary traveler hitching

109
00:05:06,629 --> 00:05:03,199
a 354 million mile ride to mars on board

110
00:05:08,870 --> 00:05:06,639
the mars science laboratory or msl which

111
00:05:11,590 --> 00:05:08,880
launched november 26th

112
00:05:13,590 --> 00:05:11,600
medley is an instrumentation system on

113
00:05:15,510 --> 00:05:13,600

the aeroshell of the mars science

114
00:05:17,430 --> 00:05:15,520
laboratory and it measures the

115
00:05:19,990 --> 00:05:17,440
temperature and the pressure

116
00:05:22,550 --> 00:05:20,000
on the aeroshell as msl flies through

117
00:05:24,310 --> 00:05:22,560
the martian atmosphere medley stands for

118
00:05:25,990 --> 00:05:24,320
msl entry descent and landing

119
00:05:27,510 --> 00:05:26,000
instrumentation

120
00:05:30,070 --> 00:05:27,520
it's mounted on the inside of the

121
00:05:31,909 --> 00:05:30,080
spacecraft's heat shield and will take

122
00:05:33,270 --> 00:05:31,919
accurate heat and pressure data for the

123
00:05:35,830 --> 00:05:33,280
first time ever

124
00:05:36,950 --> 00:05:35,840
of the last eight minutes of a trip to

125
00:05:39,029 --> 00:05:36,960
mars

126
00:05:41,270 --> 00:05:39,039
our end goal is to

127
00:05:44,150 --> 00:05:41,280
make each entry descent and landing

128
00:05:46,790 --> 00:05:44,160
system better and better so that we can

129
00:05:49,430 --> 00:05:46,800
reduce the risk of landing on mars

130
00:05:51,189 --> 00:05:49,440
save cost and get more science back

131
00:05:52,950 --> 00:05:51,199
about a hundred people at nasa langley

132
00:05:56,230 --> 00:05:52,960
have been preparing for msl and the

133
00:05:57,990 --> 00:05:56,240
curiosity rover's landing for years

134
00:06:01,110 --> 00:05:58,000
david way leads a team whose work

135
00:06:02,629 --> 00:06:01,120
involves brain and computer power our

136
00:06:05,350 --> 00:06:02,639
primary role with mars science

137
00:06:08,790 --> 00:06:05,360
laboratory is

138
00:06:12,550 --> 00:06:08,800

in simulating the landing and so we

139
00:06:13,670 --> 00:06:12,560
model the vehicle in a computer and we

140
00:06:15,590 --> 00:06:13,680
practice

141
00:06:17,830 --> 00:06:15,600
thousands of times landing on the

142
00:06:19,990 --> 00:06:17,840
surface of mars

143
00:06:22,629 --> 00:06:20,000
in fact this computer cluster at langley

144
00:06:25,110 --> 00:06:22,639
has practiced msl's landing four million

145
00:06:26,790 --> 00:06:25,120
times just this year

146
00:06:28,790 --> 00:06:26,800
and nasa langley's team will continue

147
00:06:31,110 --> 00:06:28,800
those simulations almost up to the

148
00:06:34,790 --> 00:06:31,120
minute the curiosity rover lands in

149
00:06:38,469 --> 00:06:36,629
nasa scientists are joining with

150
00:06:40,950 --> 00:06:38,479
researchers from public and private

151
00:06:43,430 --> 00:06:40,960
institutions in a multi-year airborne

152
00:06:45,830 --> 00:06:43,440
campaign to study the humidity and

153
00:06:47,189 --> 00:06:45,840
chemical composition of a portion of our

154
00:06:49,749 --> 00:06:47,199
atmosphere

155
00:06:53,029 --> 00:06:49,759
nasa's airborne tropical tropopause

156
00:06:55,670 --> 00:06:53,039
experiment or atrex will be flown on a

157
00:06:58,950 --> 00:06:55,680
remotely operated global park aircraft

158
00:07:01,189 --> 00:06:58,960
over the pacific ocean in 2013 and 14.

159
00:07:03,830 --> 00:07:01,199
the tropopause is the boundary between

160
00:07:06,230 --> 00:07:03,840
earth's troposphere and stratosphere

161
00:07:08,070 --> 00:07:06,240
led by the ames research center aatrex

162
00:07:10,150 --> 00:07:08,080
will focus on small changes in

163
00:07:14,870 --> 00:07:10,160

stratospheric humidity that may

164
00:07:19,029 --> 00:07:16,790
the a-trex science team recently

165
00:07:21,430 --> 00:07:19,039
integrated 11 specialized instruments

166
00:07:23,350 --> 00:07:21,440
onto a global hawk and verified their

167
00:07:25,189 --> 00:07:23,360
operation during several checkout

168
00:07:27,189 --> 00:07:25,199
flights from the dryden flight research

169
00:07:28,710 --> 00:07:27,199
center

170
00:07:31,270 --> 00:07:28,720
again this was the stainless steel

171
00:07:34,390 --> 00:07:31,280
spring from the ballpoint pen

172
00:07:36,309 --> 00:07:34,400
it'd be permanently ruined

173
00:07:37,430 --> 00:07:36,319
just returns to its shape just with a

174
00:07:39,110 --> 00:07:37,440
little bit of heat

175
00:07:41,670 --> 00:07:39,120
the glenn research center recently

176
00:07:43,589 --> 00:07:41,680
hosted what one observer called a

177
00:07:45,430 --> 00:07:43,599
high-powered science fair for the

178
00:07:47,430 --> 00:07:45,440
automobile industry

179
00:07:50,150 --> 00:07:47,440
this automotive workshop featured the

180
00:07:51,990 --> 00:07:50,160
latest gadgets and technologies geared

181
00:07:53,270 --> 00:07:52,000
to the needs of automakers and their

182
00:07:55,990 --> 00:07:53,280
suppliers

183
00:07:58,390 --> 00:07:56,000
local cleveland area firms displayed

184
00:08:00,309 --> 00:07:58,400
their discoveries from super light super

185
00:08:03,110 --> 00:08:00,319
strong composites and collision

186
00:08:05,589 --> 00:08:03,120
avoidance technology to no lubricant

187
00:08:10,710 --> 00:08:08,070
and please welcome our honorary captain

188
00:08:13,309 --> 00:08:10,720

for tonight's game astronaut chris

189
00:08:16,390 --> 00:08:13,319
ferguson flight commander for the last

190
00:08:18,309 --> 00:08:16,400
sts-135 space shuttle mission and nasa

191
00:08:20,150 --> 00:08:18,319
astronaut chris ferguson served as

192
00:08:22,869 --> 00:08:20,160
honorary captain of his hometown

193
00:08:24,869 --> 00:08:22,879
philadelphia eagles versus the chicago

194
00:08:27,270 --> 00:08:24,879
bears at a recent monday night football

195
00:08:29,430 --> 00:08:27,280
contest at lincoln financial field in

196
00:08:30,950 --> 00:08:29,440
philadelphia what's your call

197
00:08:33,350 --> 00:08:30,960
tails is the call

198
00:08:35,350 --> 00:08:33,360
the commander of sts-135

199
00:08:37,990 --> 00:08:35,360
presented the team with a photograph of

200
00:08:40,310 --> 00:08:38,000
the city of brotherly love taken from

201
00:08:42,070 --> 00:08:40,320
space during the final space shuttle

202
00:08:44,870 --> 00:08:42,080
mission

203
00:08:47,110 --> 00:08:44,880
and that's this week at nasa for more on