
tumblr.

1
00:00:07,120 --> 00:00:10,790
this week at nasa

2
00:00:15,669 --> 00:00:13,030
nasa has retargeted the launch of space

3
00:00:18,950 --> 00:00:15,679
shuttle endeavour for friday april 29th

4
00:00:20,950 --> 00:00:18,960
at 3 47 pm eastern daylight time

5
00:00:23,109 --> 00:00:20,960
the move comes to resolve a scheduling

6
00:00:26,150 --> 00:00:23,119
conflict with a russian progress supply

7
00:00:28,950 --> 00:00:26,160
vehicle scheduled to launch april 27th

8
00:00:31,429 --> 00:00:28,960
and arrive at the station two days later

9
00:00:34,229 --> 00:00:31,439
at launch pad 39a at the kennedy space

10
00:00:36,709 --> 00:00:34,239
center where endeavour waits for liftoff

11
00:00:38,869 --> 00:00:36,719
a violent storm passing through caused

12
00:00:40,950 --> 00:00:38,879
only minor damage to foam insulation on

13
00:00:43,110 --> 00:00:40,960

the shuttle's external tank

14
00:00:45,029 --> 00:00:43,120
severe weather also delayed completion

15
00:00:47,670 --> 00:00:45,039
of sts-134's

16
00:00:49,910 --> 00:00:47,680
terminal countdown demonstration test

17
00:00:52,389 --> 00:00:49,920
the tcdt is a full launch dress

18
00:00:54,950 --> 00:00:52,399
rehearsal that allows ground teams and

19
00:00:57,029 --> 00:00:54,960
the mission's six astronauts a chance to

20
00:00:59,750 --> 00:00:57,039
familiarize themselves with equipment

21
00:01:02,310 --> 00:00:59,760
and emergency exit procedures

22
00:01:04,469 --> 00:01:02,320
landing the orbiter and emergency

23
00:01:06,310 --> 00:01:04,479
evacuation from the launch pad by

24
00:01:08,870 --> 00:01:06,320
armored carrier are some of the

25
00:01:12,550 --> 00:01:08,880
simulations performed in the multi-day

26
00:01:14,550 --> 00:01:12,560
tcdt this is the time where our training

27
00:01:15,670 --> 00:01:14,560
kind of meets the processing of the

28
00:01:19,350 --> 00:01:15,680
vehicle

29
00:01:21,190 --> 00:01:19,360
there yesterday we did what's called

30
00:01:23,270 --> 00:01:21,200
payload bay walk down

31
00:01:25,030 --> 00:01:23,280
which is pretty interesting because the

32
00:01:27,190 --> 00:01:25,040
vehicle is now in the vertical so it's

33
00:01:28,550 --> 00:01:27,200
more like payload bay climb up and down

34
00:01:31,270 --> 00:01:28,560
the stairs

35
00:01:34,550 --> 00:01:31,280
the commander mark kelly pilot greg

36
00:01:37,990 --> 00:01:34,560
johnson and mission specialist mike fink

37
00:01:40,710 --> 00:01:38,000
greg shamitak drew feustel and european

38
00:01:43,510 --> 00:01:40,720

space agency astronaut roberto vittori

39
00:01:46,069 --> 00:01:43,520
will crew endeavour's final flight

40
00:01:47,830 --> 00:01:46,079
their 14-day mission is to deliver a

41
00:01:50,389 --> 00:01:47,840
payload to the international space

42
00:01:53,510 --> 00:01:50,399
station that includes the alpha magnetic

43
00:01:55,590 --> 00:01:53,520
spectrometer a particle physics detector

44
00:02:01,830 --> 00:01:55,600
designed to search for various types of

45
00:02:01,840 --> 00:02:05,830
and now centerpieces

46
00:02:10,630 --> 00:02:08,550
so knowing nasa more than you can

47
00:02:13,030 --> 00:02:10,640
imagine was the theme of this year's

48
00:02:14,869 --> 00:02:13,040
robert h goddard memorial symposium held

49
00:02:16,869 --> 00:02:14,879
in greenbelt maryland

50
00:02:18,869 --> 00:02:16,879
the annual two-day event brought

51
00:02:22,070 --> 00:02:18,879
together leaders in government

52
00:02:24,229 --> 00:02:22,080
industry academia and entrepreneurship

53
00:02:26,309 --> 00:02:24,239
to discuss far-reaching topics from the

54
00:02:28,470 --> 00:02:26,319
future of commercial space flight to

55
00:02:30,390 --> 00:02:28,480
protecting our home planet

56
00:02:32,949 --> 00:02:30,400
this year's keynote speakers for white

57
00:02:35,430 --> 00:02:32,959
house science advisor dr john holdren

58
00:02:37,110 --> 00:02:35,440
and nasa administrator charlie bolden

59
00:02:38,470 --> 00:02:37,120
one of the reasons that i get excited

60
00:02:40,390 --> 00:02:38,480
about getting up in the morning is

61
00:02:41,990 --> 00:02:40,400
because i know that we are going to

62
00:02:44,150 --> 00:02:42,000
affect people's lives in a positive

63
00:02:46,710 --> 00:02:44,160

manner among the featured presentations

64
00:02:48,550 --> 00:02:46,720
were expert panel discussions a 3d

65
00:02:50,869 --> 00:02:48,560
demonstration exploring new ways to

66
00:02:52,630 --> 00:02:50,879
communicate nasa science

67
00:02:54,790 --> 00:02:52,640
and videos highlighting various nasa

68
00:02:57,110 --> 00:02:54,800
missions based at goddard including the

69
00:02:58,790 --> 00:02:57,120
tracking and data relay satellite system

70
00:03:01,110 --> 00:02:58,800
also known as tdrs

71
00:03:02,869 --> 00:03:01,120
and maven a spacecraft that'll explore

72
00:03:04,550 --> 00:03:02,879
the martian atmosphere

73
00:03:07,030 --> 00:03:04,560
this was the 49th annual goddard

74
00:03:09,509 --> 00:03:07,040
memorial symposium held in honor of dr

75
00:03:13,309 --> 00:03:09,519
robert h goddard the father of modern

76
00:03:18,630 --> 00:03:15,750
congratulations to nasa astronaut doug

77
00:03:21,110 --> 00:03:18,640
wheelock for capturing a shorty award at

78
00:03:23,990 --> 00:03:21,120
this year's ceremonies in new york city

79
00:03:26,789 --> 00:03:24,000
willa who goes by at astra wheels on the

80
00:03:28,470 --> 00:03:26,799
social media twitter captured top honors

81
00:03:30,390 --> 00:03:28,480
in the real time photo of the year

82
00:03:32,789 --> 00:03:30,400
category for an image he sent from the

83
00:03:34,789 --> 00:03:32,799
international space station titled moon

84
00:03:36,630 --> 00:03:34,799
from space

85
00:03:40,070 --> 00:03:36,640
wheelock commander of the station's

86
00:03:42,470 --> 00:03:40,080
expedition 25 crew last year tweeted or

87
00:03:44,949 --> 00:03:42,480
sent via twitter more than 100 messages

88
00:03:46,710 --> 00:03:44,959

from space many of them stunning images

89
00:03:49,190 --> 00:03:46,720
like these

90
00:03:51,910 --> 00:03:49,200
the shorty awards also known as the

91
00:03:54,149 --> 00:03:51,920
shorties honor top short form content

92
00:03:55,110 --> 00:03:54,159
creators on the micro blogging website

93
00:03:57,350 --> 00:03:55,120
twitter

94
00:03:59,350 --> 00:03:57,360
since their creation in 2008 the

95
00:04:01,429 --> 00:03:59,360
shorties have expanded to recognize

96
00:04:03,990 --> 00:04:01,439
content creation on other social

97
00:04:07,830 --> 00:04:04,000
networking sites including tumblr

98
00:04:12,869 --> 00:04:10,229
the ames research center hosted nasa's

99
00:04:15,509 --> 00:04:12,879
first open source summit the two-day

100
00:04:17,349 --> 00:04:15,519
event brought engineers and policymakers

101
00:04:19,830 --> 00:04:17,359
from throughout the agency together with

102
00:04:22,629 --> 00:04:19,840
members of the open source community to

103
00:04:25,749 --> 00:04:22,639
discuss how nasa can more easily develop

104
00:04:27,189 --> 00:04:25,759
release and use open source software

105
00:04:28,629 --> 00:04:27,199
it's important for nasa to be involved

106
00:04:30,790 --> 00:04:28,639
in open source because it has the

107
00:04:32,550 --> 00:04:30,800
promise of reducing the overall cost of

108
00:04:34,469 --> 00:04:32,560
development of software

109
00:04:36,790 --> 00:04:34,479
increasing the quality of the software

110
00:04:38,629 --> 00:04:36,800
and then just generally adding another

111
00:04:41,189 --> 00:04:38,639
way of doing software development to our

112
00:04:42,950 --> 00:04:41,199
toolkit open source software is computer

113
00:04:45,270 --> 00:04:42,960

software that's often developed in a

114
00:04:48,310 --> 00:04:45,280
public collaborative manner and not

115
00:04:50,710 --> 00:04:48,320
subject to usual copyright restrictions

116
00:04:52,629 --> 00:04:50,720
use of open source software models by

117
00:04:55,430 --> 00:04:52,639
business is believed to result in

118
00:04:58,469 --> 00:04:55,440
savings to consumers of about 60 billion

119
00:05:02,870 --> 00:05:00,629
aircraft that are arriving at laguardia

120
00:05:04,469 --> 00:05:02,880
ames is celebrating the winning of two

121
00:05:06,550 --> 00:05:04,479
agency awards

122
00:05:10,150 --> 00:05:06,560
first aims researchers developed the

123
00:05:12,950 --> 00:05:10,160
future atm concepts evaluation tool or

124
00:05:15,749 --> 00:05:12,960
facet software that creates simulations

125
00:05:17,749 --> 00:05:15,759
for managing air traffic scenarios for

126
00:05:19,990 --> 00:05:17,759
that accomplishment ames garnered the

127
00:05:20,950 --> 00:05:20,000
2010 government invention of the year

128
00:05:23,510 --> 00:05:20,960
award

129
00:05:25,350 --> 00:05:23,520
ames also won the 2010 commercial

130
00:05:27,830 --> 00:05:25,360
invention of the year award for

131
00:05:30,070 --> 00:05:27,840
developing a powder vibration system

132
00:05:31,270 --> 00:05:30,080
used in portable x-ray diffraction

133
00:05:33,510 --> 00:05:31,280
instruments

134
00:05:35,670 --> 00:05:33,520
research scientist david blank and

135
00:05:37,270 --> 00:05:35,680
former nasa post-doctoral fellow

136
00:05:39,590 --> 00:05:37,280
philippe sarazan developed the

137
00:05:41,830 --> 00:05:39,600
technology which has since been licensed

138
00:05:43,990 --> 00:05:41,840

to a california firm the powder

139
00:05:46,310 --> 00:05:44,000
vibration system enabled the development

140
00:05:48,710 --> 00:05:46,320
of a miniaturized soil and rock analysis

141
00:05:51,990 --> 00:05:48,720
instrument that ames will fly on the

142
00:05:53,749 --> 00:05:52,000
mars science laboratory or msl nasa's

143
00:05:56,629 --> 00:05:53,759
next mission to mars

144
00:05:58,950 --> 00:05:56,639
msl is scheduled to launch this november

145
00:06:01,510 --> 00:05:58,960
mars science laboratory is is the next

146
00:06:03,110 --> 00:06:01,520
big mission to mars that nasa is flying

147
00:06:05,350 --> 00:06:03,120
and it will be doing fully quantitative

148
00:06:08,309 --> 00:06:05,360
analyses on the surface of mars for the

149
00:06:09,830 --> 00:06:08,319
minerals and soils and

150
00:06:12,870 --> 00:06:09,840
this instrument kevin makes that

151
00:06:14,870 --> 00:06:13,909
three

152
00:06:15,749 --> 00:06:14,880
two

153
00:06:18,790 --> 00:06:15,759
one

154
00:06:21,110 --> 00:06:18,800
we have ignition and liftoff of a delta

155
00:06:22,469 --> 00:06:21,120
ii rocket carrying nasa on an odyssey

156
00:06:25,909 --> 00:06:22,479
back to mars

157
00:06:28,150 --> 00:06:25,919
ten years ago on april 7 2001

158
00:06:30,550 --> 00:06:28,160
the mars odyssey orbiter began its

159
00:06:31,670 --> 00:06:30,560
journey to map and search for water on

160
00:06:33,590 --> 00:06:31,680
mars

161
00:06:34,469 --> 00:06:33,600
launched by a delta ii rocket from cape

162
00:06:36,710 --> 00:06:34,479
canaveral

163
00:06:37,670 --> 00:06:36,720

it reached its destination six months

164
00:06:39,350 --> 00:06:37,680
later

165
00:06:41,189 --> 00:06:39,360
not only have odyssey science

166
00:06:43,110 --> 00:06:41,199
instruments discovered vast amounts of

167
00:06:44,070 --> 00:06:43,120
frozen water just beneath the martian

168
00:06:46,150 --> 00:06:44,080
surface

169
00:06:48,790 --> 00:06:46,160
run a radiation safety check for future

170
00:06:51,350 --> 00:06:48,800
astronauts and map surface textures

171
00:06:53,670 --> 00:06:51,360
minerals and elements its camera has

172
00:06:56,230 --> 00:06:53,680
also produced the highest resolution map

173
00:06:58,550 --> 00:06:56,240
of the entire red planet

174
00:07:00,629 --> 00:06:58,560
nasa scientists continue to marvel at

175
00:07:03,110 --> 00:07:00,639
the spacecraft's reliability to conduct

176
00:07:05,589 --> 00:07:03,120
scientific investigations in addition to

177
00:07:07,749 --> 00:07:05,599
its own science odyssey has relayed to

178
00:07:10,469 --> 00:07:07,759
earth nearly all of the data provided by

179
00:07:12,469 --> 00:07:10,479
the mars rover's spirit and opportunity

180
00:07:14,870 --> 00:07:12,479
and will provide relay service for the

181
00:07:18,550 --> 00:07:14,880
mars science laboratory after its rover

182
00:07:21,350 --> 00:07:18,560
curiosity lands on mars next year

183
00:07:23,430 --> 00:07:21,360
and that's this week at nasa for more on