1
00:00:07,120 --> 00:00:10,549
this week at nasa

2
00:00:12,629 --> 00:00:11,589
three

3
00:00:13,589 --> 00:00:12,639
two

4
00:00:17,430 --> 00:00:13,599
one

5
00:00:20,630 --> 00:00:17,440
main engine start zero and lift off of

6
00:00:23,349 --> 00:00:20,640
the atlas five with curiosity seeking

7
00:00:27,109 --> 00:00:23,359
clues to the planetary puzzle about life

8
00:00:29,589 --> 00:00:27,119
on mars on november 26th at 1002 am

9
00:00:32,069 --> 00:00:29,599
eastern standard time nasa's mars

10
00:00:34,389 --> 00:00:32,079
science laboratory curiosity rover

11
00:00:37,270 --> 00:00:34,399
launched aboard a united launch alliance

12
00:00:39,750 --> 00:00:37,280
atlas v rocket from cape canaveral air

13
00:00:41,830 --> 00:00:39,760

force station in florida msl is

14
00:00:45,190 --> 00:00:41,840
scheduled to reach the red planet next

15
00:00:47,590 --> 00:00:45,200
august at a site known as gale crater

16
00:00:50,069 --> 00:00:47,600
curiosity rover's 10 instruments will

17
00:00:54,869 --> 00:00:50,079
investigate whether that area of mars

18
00:00:59,430 --> 00:00:57,270
now that expedition 29 crew members mike

19
00:01:01,670 --> 00:00:59,440
fossum satoshi furukawa and sergey

20
00:01:03,590 --> 00:01:01,680
volkov are back on earth the three

21
00:01:05,109 --> 00:01:03,600
remaining residents of the international

22
00:01:08,550 --> 00:01:05,119
space station are getting ready to

23
00:01:11,030 --> 00:01:08,560
welcome another trio to expedition 30.

24
00:01:13,510 --> 00:01:11,040
scheduled to join dan burbank anton

25
00:01:16,789 --> 00:01:13,520
shkaplerov and anatoly ivanishin on

26
00:01:19,910 --> 00:01:16,799
december 23rd is nasa's don pettit the

27
00:01:22,710 --> 00:01:19,920
european space agency's andre kuipers

28
00:01:25,030 --> 00:01:22,720
and cosmonaut oleg kononenko

29
00:01:27,350 --> 00:01:25,040
now into its 12th year of continuous

30
00:01:29,910 --> 00:01:27,360
human presence the world's only

31
00:01:32,230 --> 00:01:29,920
laboratory in microgravity has led to

32
00:01:34,310 --> 00:01:32,240
breakthroughs in science and technology

33
00:01:35,590 --> 00:01:34,320
that are improving our quality of life

34
00:01:37,990 --> 00:01:35,600
here on earth

35
00:01:40,630 --> 00:01:38,000
also changing lives is a spin-off of

36
00:01:44,149 --> 00:01:40,640
important equipment aboard the iss

37
00:01:46,710 --> 00:01:44,159
canadarm canadarm2 and dexter the

38
00:01:49,510 --> 00:01:46,720

canadian space agency's family of heavy

39
00:01:52,630 --> 00:01:49,520
lifting space robots onboard the iss

40
00:01:55,190 --> 00:01:52,640
have borne neuroarm the world's first

41
00:01:58,389 --> 00:01:55,200
robot capable of performing surgery

42
00:02:00,389 --> 00:01:58,399
inside magnetic resonance machines

43
00:02:03,190 --> 00:02:00,399
among the dozens of patients helped by

44
00:02:06,310 --> 00:02:03,200
narrow arm is paige nicholson of calgary

45
00:02:11,350 --> 00:02:06,320
alberta from whose brain neural arms

46
00:02:14,550 --> 00:02:13,110
administrator charlie bolden was at the

47
00:02:16,710 --> 00:02:14,560
marshall space flight center for a

48
00:02:18,869 --> 00:02:16,720
first-hand look at work on nasa's new

49
00:02:21,430 --> 00:02:18,879
space launch system the rocket that'll

50
00:02:23,270 --> 00:02:21,440
make deep space missions possible bolden

51
00:02:25,350 --> 00:02:23,280
toured marshall's thrust vector control

52
00:02:28,070 --> 00:02:25,360
test lab as well as the hardware in the

53
00:02:29,830 --> 00:02:28,080
loop simulation lab here engineers are

54
00:02:32,309 --> 00:02:29,840
developing and testing the new rockets

55
00:02:34,309 --> 00:02:32,319
guidance navigation and control software

56
00:02:36,710 --> 00:02:34,319
and avionics and thrust vector control

57
00:02:39,350 --> 00:02:36,720
hardware this integrated propulsion

58
00:02:41,350 --> 00:02:39,360
testbed using digital computer models

59
00:02:43,350 --> 00:02:41,360
demonstrates real-time flight control of

60
00:02:45,910 --> 00:02:43,360
the launch vehicle during ascent what

61
00:02:47,430 --> 00:02:45,920
we're able to do in this facility is

62
00:02:48,790 --> 00:02:47,440
take the hardware test it out a little

63
00:02:50,470 --> 00:02:48,800

bit take the software test it out a

64
00:02:53,509 --> 00:02:50,480
little bit and marry them up right here

65
00:02:56,710 --> 00:02:53,519
in the sim lab so that you know we're

66
00:02:59,589 --> 00:02:56,720
going to have real live flight hardware

67
00:03:01,589 --> 00:02:59,599
with real live flight software married

68
00:03:02,949 --> 00:03:01,599
up in this facility so that if there's

69
00:03:04,949 --> 00:03:02,959
something that's going to go wrong we

70
00:03:06,550 --> 00:03:04,959
discover it here in huntsville before we

71
00:03:08,470 --> 00:03:06,560
take it to florida and put it on a

72
00:03:10,070 --> 00:03:08,480
vehicle the marshall center is leading

73
00:03:12,309 --> 00:03:10,080
design and development of the space

74
00:03:14,070 --> 00:03:12,319
launch system the new heavy lift launch

75
00:03:16,070 --> 00:03:14,080
vehicle will expand human presence

76
00:03:17,910 --> 00:03:16,080
beyond low earth orbit and enable new

77
00:03:20,229 --> 00:03:17,920
missions of exploration across the solar

78
00:03:23,670 --> 00:03:20,239
system its first full-scale test flight

79
00:03:29,910 --> 00:03:27,670
three two one the mighty eagle nasa's

80
00:03:32,550 --> 00:03:29,920
robotic lander designed to explore the

81
00:03:35,350 --> 00:03:32,560
surface of the moon asteroids and other

82
00:03:37,750 --> 00:03:35,360
destinations performed a successful

83
00:03:40,149 --> 00:03:37,760
altitude test flight at the redstone

84
00:03:42,789 --> 00:03:40,159
test center on redstone arsenal in

85
00:03:43,830 --> 00:03:42,799
huntsville as directed the lander

86
00:03:46,949 --> 00:03:43,840
hovered

87
00:03:52,470 --> 00:03:46,959
flew up to 100 feet before putting down

88
00:03:57,910 --> 00:03:55,350

once again a nationwide survey ranks

89
00:04:00,149 --> 00:03:57,920
nasa among the best places to work in

90
00:04:02,470 --> 00:04:00,159
the federal government at number five

91
00:04:04,470 --> 00:04:02,480
the survey conducted by the non-profit

92
00:04:08,149 --> 00:04:04,480
non-partisan partnership for public

93
00:04:09,190 --> 00:04:08,159
service polled more than 276 000 federal

94
00:04:11,670 --> 00:04:09,200
workers

95
00:04:14,949 --> 00:04:11,680
placing first among nasa centers was

96
00:04:17,110 --> 00:04:14,959
stennis which out of 240 organizations

97
00:04:18,469 --> 00:04:17,120
within the federal government ranked

98
00:04:20,949 --> 00:04:18,479
number two

99
00:04:23,270 --> 00:04:20,959
stennis also topped the list of all

100
00:04:26,469 --> 00:04:23,280
federal organizations for employee

101
00:04:29,110 --> 00:04:26,479
empowerment fairness and support for

102
00:04:31,110 --> 00:04:29,120
diversity

103
00:04:32,870 --> 00:04:31,120
it seemed to me like this idea could be

104
00:04:35,749 --> 00:04:32,880
expanded it can be taken to the next

105
00:04:37,909 --> 00:04:35,759
level matthew ritzko a financial manager

106
00:04:40,070 --> 00:04:37,919
at the goddard space flight center is

107
00:04:43,270 --> 00:04:40,080
the winner of the third annual white

108
00:04:45,510 --> 00:04:43,280
house save award a contest that solicits

109
00:04:47,030 --> 00:04:45,520
cost cutting ideas from federal

110
00:04:48,870 --> 00:04:47,040
employees

111
00:04:51,670 --> 00:04:48,880
ritzko proposed establishing a

112
00:04:54,469 --> 00:04:51,680
centralized tool repository or lending

113
00:04:56,310 --> 00:04:54,479

library for nasa employees to access

114
00:04:57,749 --> 00:04:56,320
when developing and building space

115
00:05:00,070 --> 00:04:57,759
flight projects

116
00:05:05,110 --> 00:05:00,080
ritzko's plan is being included in the

117
00:05:11,749 --> 00:05:07,590
the women at nasa website has expanded

118
00:05:13,670 --> 00:05:11,759
to include aspire to inspire a new

119
00:05:16,310 --> 00:05:13,680
feature aimed at helping middle school

120
00:05:17,990 --> 00:05:16,320
girls explore education and careers in

121
00:05:19,670 --> 00:05:18,000
science

122
00:05:21,350 --> 00:05:19,680
technology

123
00:05:22,790 --> 00:05:21,360
engineering

124
00:05:24,950 --> 00:05:22,800
and mathematics

125
00:05:26,870 --> 00:05:24,960
five videos explore the careers and

126
00:05:29,830 --> 00:05:26,880
backgrounds of early career women who

127
00:05:32,950 --> 00:05:29,840
work for nasa in each of the stem fields

128
00:05:35,350 --> 00:05:32,960
aspire to inspire also lists community

129
00:05:38,230 --> 00:05:35,360
organizations and nasa-affiliated

130
00:05:40,469 --> 00:05:38,240
outreach programs that emphasize stem

131
00:05:42,070 --> 00:05:40,479
four twitter feeds enable site visitors

132
00:05:45,990 --> 00:05:42,080
to interact with the young women

133
00:05:50,150 --> 00:05:48,230
nasa spin-offs are the subject of two

134
00:05:53,590 --> 00:05:50,160
new public service announcements airing

135
00:05:55,350 --> 00:05:53,600
on nasa tv speaking of space technology

136
00:05:59,029 --> 00:05:55,360
do you know that space is hidden all

137
00:06:01,830 --> 00:05:59,039
around you the first features elf 6409

138
00:06:02,870 --> 00:06:01,840

ef from sony pictures new film arthur

139
00:06:05,670 --> 00:06:02,880
christmas

140
00:06:07,670 --> 00:06:05,680
our animated protagonist illustrates how

141
00:06:10,469 --> 00:06:07,680
nasa developed space technologies are

142
00:06:12,390 --> 00:06:10,479
making our lives better here on earth

143
00:06:14,430 --> 00:06:12,400
hi i'm norah jones and i'm pierce

144
00:06:17,110 --> 00:06:14,440
sellers and grammy-winning

145
00:06:18,950 --> 00:06:17,120
singer-songwriter norah jones teams up

146
00:06:20,629 --> 00:06:18,960
with astronaut piers sellers on the

147
00:06:22,870 --> 00:06:20,639
second psa

148
00:06:27,830 --> 00:06:22,880
jones and sellers recorded their message

149
00:06:31,350 --> 00:06:28,830
for

150
00:06:35,590 --> 00:06:31,360
spacious skies

151
00:06:39,749 --> 00:06:37,670
after jones singing of america the

152
00:06:42,150 --> 00:06:39,759
beautiful at the recent congressional

153
00:06:43,510 --> 00:06:42,160
gold medal award ceremony on capitol

154
00:06:50,629 --> 00:06:43,520
hill

155
00:06:54,390 --> 00:06:52,309
and while you ate thanksgiving dinner

156
00:06:56,790 --> 00:06:54,400
and watched football on tv

157
00:06:59,270 --> 00:06:56,800
nasa astronaut dan burbank russian

158
00:07:01,990 --> 00:06:59,280
cosmonauts anton shkaplerov and anatoly

159
00:07:05,110 --> 00:07:02,000
ivanishin passed the irradiated smoked

160
00:07:08,469 --> 00:07:05,120
turkey thermostatable yams and freeze

161
00:07:10,150 --> 00:07:08,479
dried green beans plenty of vegetables

162
00:07:11,990 --> 00:07:10,160
just like the pilgrims their

163
00:07:14,230 --> 00:07:12,000

international space station meal of

164
00:07:15,749 --> 00:07:14,240
thanks also included nasa's own

165
00:07:17,990 --> 00:07:15,759
cornbread dressing

166
00:07:20,150 --> 00:07:18,000
home style potatoes and

167
00:07:23,029 --> 00:07:20,160
some cranberries

168
00:07:25,749 --> 00:07:23,039
for dessert what could be better than

169
00:07:27,990 --> 00:07:25,759
cherry blueberry cobbler and the best

170
00:07:29,990 --> 00:07:28,000
view from any thanksgiving table

171
00:07:32,629 --> 00:07:30,000
anywhere

172
00:07:34,710 --> 00:07:32,639
and that's this week at nasa for more on