



## Curiosity Rover Update

1  
00:00:07,040 --> 00:00:19,269  
this week at nasa

2  
00:00:23,910 --> 00:00:21,510  
three weeks after its grand arrival at

3  
00:00:27,349 --> 00:00:23,920  
los angeles international airport atop a

4  
00:00:29,669 --> 00:00:27,359  
nasa 747 shuttle carrier aircraft

5  
00:00:32,549 --> 00:00:29,679  
space shuttle endeavour began the final

6  
00:00:34,709 --> 00:00:32,559  
leg of its journey a two-day 12-mile

7  
00:00:39,910 --> 00:00:34,719  
parade through the streets of l.a to the

8  
00:00:44,549 --> 00:00:41,910  
endeavour's route took it past several

9  
00:00:47,270 --> 00:00:44,559  
well-known landmarks it was captured

10  
00:00:49,590 --> 00:00:47,280  
from above by the goodyear blimp

11  
00:00:52,150 --> 00:00:49,600  
and was witnessed by thousands upon

12  
00:00:55,430 --> 00:00:52,160  
thousands of angelenos who came out for

13  
00:00:57,029 --> 00:00:55,440

a peek at nasa's youngest space shuttle

14

00:00:59,510 --> 00:00:57,039

in a city where celebrities are

15

00:01:01,910 --> 00:00:59,520

everywhere endeavors role through the

16

00:01:03,750 --> 00:01:01,920

neighborhood was the star attraction

17

00:01:05,509 --> 00:01:03,760

this is the most exciting thing i missed

18

00:01:07,990 --> 00:01:05,519

it when it landed so i'm just so happy i

19

00:01:10,149 --> 00:01:08,000

could be here to see it make its journey

20

00:01:12,950 --> 00:01:10,159

this is unbelievable i'm an educator so

21

00:01:14,630 --> 00:01:12,960

i'm always looking for history making

22

00:01:18,469 --> 00:01:14,640

events and it's only going to happen

23

00:01:20,390 --> 00:01:18,479

once so i had the time why not the

24

00:01:22,070 --> 00:01:20,400

california science center plans to open

25

00:01:26,630 --> 00:01:22,080

its space shuttle endeavor display to

26

00:01:30,310 --> 00:01:28,870

powering more than 100 successful

27

00:01:33,910 --> 00:01:30,320

flights

28

00:01:36,069 --> 00:01:33,920

nasa's rs 25 engines were the workhorses

29

00:01:38,149 --> 00:01:36,079

of the space shuttle program

30

00:01:40,230 --> 00:01:38,159

now these engines will help power the

31

00:01:42,310 --> 00:01:40,240

core stage of the agency's advanced

32

00:01:43,350 --> 00:01:42,320

heavy lift rocket the space launch

33

00:01:45,749 --> 00:01:43,360

system

34

00:01:47,350 --> 00:01:45,759

sls engineers at the marshall space

35

00:01:49,510 --> 00:01:47,360

flight center are working on

36

00:01:52,149 --> 00:01:49,520

enhancements to its engine controller

37

00:01:54,469 --> 00:01:52,159

unit the device exchanges data between

38

00:01:57,749 --> 00:01:54,479

the engine and the rocket and monitors

39

00:02:02,149 --> 00:01:59,990

united launch alliance has reached the

40

00:02:04,469 --> 00:02:02,159

final milestone in its development of a

41

00:02:06,950 --> 00:02:04,479

commercial spacecraft for transporting

42

00:02:09,669 --> 00:02:06,960

astronauts to low earth orbit

43

00:02:11,589 --> 00:02:09,679

technical experts from ula and nasa

44

00:02:14,630 --> 00:02:11,599

completed their assessment of whether

45

00:02:16,390 --> 00:02:14,640

ula's atlas v rocket launch hardware

46

00:02:18,790 --> 00:02:16,400

would keep the crew safe during launch

47

00:02:21,350 --> 00:02:18,800

and ascent two of three newly funded

48

00:02:24,229 --> 00:02:21,360

nasa commercial crew partners boeing and

49

00:02:25,750 --> 00:02:24,239

sierra nevada will use the atlas 5 as

50

00:02:27,589 --> 00:02:25,760

their launch vehicle

51  
00:02:29,990 --> 00:02:27,599  
all of nasa's industry partners

52  
00:02:31,990 --> 00:02:30,000  
including ula continue to meet their

53  
00:02:33,830 --> 00:02:32,000  
established milestones in developing

54  
00:02:37,030 --> 00:02:33,840  
commercial crew transportation

55  
00:02:42,150 --> 00:02:38,830  
the mock-up of boeing's

56  
00:02:44,470 --> 00:02:42,160  
cst-100 spacecraft was put through water

57  
00:02:46,790 --> 00:02:44,480  
landing tests at bigelow aerospace

58  
00:02:48,710 --> 00:02:46,800  
headquarters near las vegas

59  
00:02:50,550 --> 00:02:48,720  
engineers dropped the capsule-shaped

60  
00:02:52,949 --> 00:02:50,560  
test article from a crane into an

61  
00:02:54,869 --> 00:02:52,959  
outdoor pool to determine if the airbags

62  
00:02:55,910 --> 00:02:54,879  
will stabilize the capsule during

63  
00:02:58,229 --> 00:02:55,920

landings

64

00:03:00,229 --> 00:02:58,239

the tests are part of boeing's ongoing

65

00:03:02,470 --> 00:03:00,239

work with nasa to develop a vehicle that

66

00:03:07,910 --> 00:03:02,480

can ferry astronauts between earth and

67

00:03:13,509 --> 00:03:09,990

meanwhile at the baikonur cosmodrome in

68

00:03:15,589 --> 00:03:13,519

kazakhstan expedition 33-34 soyuz

69

00:03:18,070 --> 00:03:15,599

commander oleg novitskiy of the russian

70

00:03:20,710 --> 00:03:18,080

federal space agency nasa flight

71

00:03:23,190 --> 00:03:20,720

engineer kevin ford and russian flight

72

00:03:25,110 --> 00:03:23,200

engineer evgeny tarelkin continue

73

00:03:26,630 --> 00:03:25,120

readying themselves for their launch to

74

00:03:28,550 --> 00:03:26,640

the international space station

75

00:03:30,149 --> 00:03:28,560

scheduled for this tuesday

76

00:03:31,990 --> 00:03:30,159

their pre-launch training regimen

77

00:03:34,149 --> 00:03:32,000

consists of performing generic flight

78

00:03:36,789 --> 00:03:34,159

plan reviews and familiarizing

79

00:03:39,270 --> 00:03:36,799

themselves with their soyuz spacecraft

80

00:03:41,910 --> 00:03:39,280

on board the station expedition 33

81

00:03:43,990 --> 00:03:41,920

commander suni williams of nasa flight

82

00:03:46,949 --> 00:03:44,000

engineer aki hoshide of the japan

83

00:03:49,270 --> 00:03:46,959

aerospace exploration agency and russian

84

00:03:51,830 --> 00:03:49,280

flight engineer yuri malenchenko

85

00:03:54,149 --> 00:03:51,840

continue with their daily activities

86

00:03:56,630 --> 00:03:54,159

including the transfer of supplies and

87

00:03:58,229 --> 00:03:56,640

materials from the spacex dragon cargo

88

00:04:00,390 --> 00:03:58,239

craft that arrived at the orbiting

89

00:04:02,070 --> 00:04:00,400

laboratory on october 10th

90

00:04:06,070 --> 00:04:02,080

dragon is scheduled to remain at the

91

00:04:08,949 --> 00:04:06,080

station until october 28th

92

00:04:10,630 --> 00:04:08,959

hello my name is bettina pavri payload

93

00:04:13,270 --> 00:04:10,640

downlink coordinator and this is your

94

00:04:15,670 --> 00:04:13,280

curiosity rover update

95

00:04:16,870 --> 00:04:15,680

curiosity continues scooping at rocknest

96

00:04:19,270 --> 00:04:16,880

this week

97

00:04:22,069 --> 00:04:19,280

the mast cam and navcam instruments

98

00:04:24,070 --> 00:04:22,079

provided images and video used to assess

99

00:04:25,909 --> 00:04:24,080

the success of the scooping and sample

100

00:04:28,469 --> 00:04:25,919

processing activities

101  
00:04:30,390 --> 00:04:28,479  
these images also provided confirmation

102  
00:04:32,710 --> 00:04:30,400  
that the sampling system was

103  
00:04:34,150 --> 00:04:32,720  
successfully cleaned after the process

104  
00:04:36,310 --> 00:04:34,160  
was completed

105  
00:04:38,390 --> 00:04:36,320  
also this week a soil sample was dropped

106  
00:04:40,629 --> 00:04:38,400  
off to the rover's observation tray for

107  
00:04:42,310 --> 00:04:40,639  
assessment by the science team

108  
00:04:44,070 --> 00:04:42,320  
this sample was determined to be

109  
00:04:45,430 --> 00:04:44,080  
suitable for drop-off to the chemin

110  
00:04:50,550 --> 00:04:45,440  
instrument

111  
00:04:52,469 --> 00:04:50,560  
order to image the sample and determine

112  
00:04:54,550 --> 00:04:52,479  
what minerals make it up this helps

113  
00:04:56,230 --> 00:04:54,560

geologists understand how the rock

114

00:04:59,189 --> 00:04:56,240

formed and how it's related to other

115

00:05:01,110 --> 00:04:59,199

rocks we've studied so far on mars

116

00:05:03,350 --> 00:05:01,120

scientists identified numerous bright

117

00:05:05,110 --> 00:05:03,360

grains in the soil

118

00:05:06,790 --> 00:05:05,120

because of the small piece of plastic

119

00:05:08,790 --> 00:05:06,800

from the landing event that had been

120

00:05:11,189 --> 00:05:08,800

found earlier in the week the team

121

00:05:13,110 --> 00:05:11,199

proceeded cautiously dumping the second

122

00:05:15,270 --> 00:05:13,120

scoop collected and imaging the bright

123

00:05:17,110 --> 00:05:15,280

grains these bright grains were later

124

00:05:19,830 --> 00:05:17,120

determined to be components of the

125

00:05:21,830 --> 00:05:19,840

martian soil and therefore the sample

126  
00:05:24,710 --> 00:05:21,840  
was deemed to be suitable for delivery

127  
00:05:26,950 --> 00:05:24,720  
to the chemin instrument for analysis

128  
00:05:29,029 --> 00:05:26,960  
the science team requested mastcam and

129  
00:05:30,710 --> 00:05:29,039  
navcam mosaics of the outcrops in the

130  
00:05:32,710 --> 00:05:30,720  
direction of glen elk to plan

131  
00:05:34,469 --> 00:05:32,720  
curiosity's journey to this next science

132  
00:05:36,310 --> 00:05:34,479  
destination

133  
00:05:38,790 --> 00:05:36,320  
this has been your curiosity rover

134  
00:05:41,830 --> 00:05:38,800  
update please check back for future

135  
00:05:46,870 --> 00:05:44,469  
nasa engineers students and amateur

136  
00:05:50,230 --> 00:05:46,880  
radio enthusiasts around the world are

137  
00:05:52,550 --> 00:05:50,240  
listening for signals from tech ed sat

138  
00:05:54,070 --> 00:05:52,560

the small cube-shaped satellite was

139

00:05:56,710 --> 00:05:54,080

launched from the international space

140

00:05:58,710 --> 00:05:56,720

station into low-earth orbit to evaluate

141

00:06:00,710 --> 00:05:58,720

demonstrate and validate new

142

00:06:03,350 --> 00:06:00,720

technologies for future experiments

143

00:06:05,510 --> 00:06:03,360

aboard small space satellites

144

00:06:07,830 --> 00:06:05,520

tech headset was developed by interns

145

00:06:10,070 --> 00:06:07,840

from san jose state university with

146

00:06:11,909 --> 00:06:10,080

mentoring help from employees at the

147

00:06:13,749 --> 00:06:11,919

ames research center which is great to

148

00:06:15,590 --> 00:06:13,759

get real science out of really small

149

00:06:16,950 --> 00:06:15,600

cubesats and it's really it's not

150

00:06:19,510 --> 00:06:16,960

something that you know 23 year olds

151

00:06:21,270 --> 00:06:19,520

like myself are often able to do and i

152

00:06:23,990 --> 00:06:21,280

think it's really a great honor and

153

00:06:29,830 --> 00:06:27,350

dr nancy grace roman nasa's first chief

154

00:06:32,150 --> 00:06:29,840

astronomer and the first woman to hold

155

00:06:34,309 --> 00:06:32,160

an executive position at the agency

156

00:06:36,550 --> 00:06:34,319

spoke about the origins of nasa's

157

00:06:38,790 --> 00:06:36,560

astronomy program during a recent

158

00:06:41,029 --> 00:06:38,800

history office lecture at headquarters

159

00:06:43,590 --> 00:06:41,039

nasa was a great place to work i started

160

00:06:45,670 --> 00:06:43,600

with nasa when it was six months old it

161

00:06:48,230 --> 00:06:45,680

was a great place to work in the early

162

00:06:50,150 --> 00:06:48,240

days and the first place most of the

163

00:06:52,150 --> 00:06:50,160

technical staff were the cream of the

164

00:06:54,150 --> 00:06:52,160

ncaa engineers

165

00:06:57,029 --> 00:06:54,160

great group of people

166

00:06:59,350 --> 00:06:57,039

everybody was enthusiastic roman was

167

00:07:01,830 --> 00:06:59,360

instrumental in the success of several

168

00:07:04,150 --> 00:07:01,840

astronomical satellites including oso

169

00:07:06,790 --> 00:07:04,160

the orbiting solar observatory the

170

00:07:10,390 --> 00:07:06,800

cosmic background explorer and the

171

00:07:11,350 --> 00:07:10,400

hubble space telescope

172

00:07:12,390 --> 00:07:11,360

four

173

00:07:13,430 --> 00:07:12,400

three

174

00:07:14,469 --> 00:07:13,440

two

175

00:07:17,430 --> 00:07:14,479

one

176

00:07:19,749 --> 00:07:17,440

we have ignition and liftoff of columbia

177

00:07:22,390 --> 00:07:19,759

on an ambitious 10-day international

178

00:07:24,710 --> 00:07:22,400

research flight 20 years ago on october

179

00:07:26,629 --> 00:07:24,720

22 1992

180

00:07:28,830 --> 00:07:26,639

space shuttle columbia began its

181

00:07:32,070 --> 00:07:28,840

nine-day mission on

182

00:07:34,790 --> 00:07:32,080

sts-52 on board commander jim weatherby

183

00:07:37,189 --> 00:07:34,800

pilot michael baker mission specialists

184

00:07:39,589 --> 00:07:37,199

charlie veach bill shepherd and tammy

185

00:07:42,629 --> 00:07:39,599

jernigan and payload specialist steve

186

00:07:45,270 --> 00:07:42,639

mclean of canada copy we see the fire as

187

00:07:47,510 --> 00:07:45,280

well as deploying the laser geodynamic

188

00:07:50,469 --> 00:07:47,520

satellite 2 and conducting several

189

00:07:51,909 --> 00:07:50,479

international experiments columbia also

190

00:07:54,309 --> 00:07:51,919

carried to space

191

00:07:57,670 --> 00:07:54,319

ashes of star trek creator gene

192

00:08:04,710 --> 00:08:01,830

eleven years ago on october 24 2001 the

193

00:08:06,950 --> 00:08:04,720

odyssey spacecraft reached mars to study

194

00:08:09,909 --> 00:08:06,960

and map the elemental composition of the

195

00:08:12,869 --> 00:08:09,919

planet's surface and evaluate radiation

196

00:08:14,950 --> 00:08:12,879

in the martian environment odyssey also

197

00:08:17,430 --> 00:08:14,960

was a communication relay for most of

198

00:08:19,430 --> 00:08:17,440

the data sent home by the phoenix lander

199

00:08:20,629 --> 00:08:19,440

and the mars rover spirit and

200

00:08:22,390 --> 00:08:20,639

opportunity

201

00:08:24,469 --> 00:08:22,400

it also became the middle link for

202

00:08:27,430 --> 00:08:24,479

continuous observation of martian

203

00:08:30,070 --> 00:08:27,440

weather by nasa's mars global surveyor

204

00:08:33,829 --> 00:08:30,080

and the mars reconnaissance orbiter in

205

00:08:38,230 --> 00:08:33,839

2010 odyssey became the longest serving

206

00:08:38,240 --> 00:08:42,389

one

207

00:08:50,710 --> 00:08:46,470

and five years ago on october 23rd 2007

208

00:08:52,389 --> 00:08:50,720

discovery lifted off on sts-120 the 23rd

209

00:08:53,750 --> 00:08:52,399

shuttle mission to the international

210

00:08:55,829 --> 00:08:53,760

space station

211

00:08:58,550 --> 00:08:55,839

delivering the italian built harmony

212

00:09:00,630 --> 00:08:58,560

node 2 module was commander pam melroy

213

00:09:03,030 --> 00:09:00,640

pilot george zamka and mission

214

00:09:05,670 --> 00:09:03,040

specialist scott parazynski doug

215

00:09:07,990 --> 00:09:05,680

wheelock stephanie wilson and european

216

00:09:09,110 --> 00:09:08,000

space agency astronaut paolo nespoli

217

00:09:10,870 --> 00:09:09,120

from italy

218

00:09:14,230 --> 00:09:10,880

swapping places with clay anderson

219

00:09:16,150 --> 00:09:14,240

aboard the iss was astronaut d'antani

220

00:09:18,630 --> 00:09:16,160

melroy and station commander peggy

221

00:09:20,710 --> 00:09:18,640

whitson became the first two female

222

00:09:24,070 --> 00:09:20,720

mission commanders in space at the same

223

00:09:28,710 --> 00:09:26,230

nasa administrator charlie bolden helped

224

00:09:30,550 --> 00:09:28,720

kick off the 2012 combined federal

225

00:09:31,829 --> 00:09:30,560

campaign during an event at nasa

226

00:09:36,870 --> 00:09:31,839

headquarters

227

00:09:39,190 --> 00:09:36,880

than 400 thousand dollars with federal

228

00:09:40,910 --> 00:09:39,200

employees in the national capital area

229

00:09:43,509 --> 00:09:40,920

contributing more than

230

00:09:46,070 --> 00:09:43,519

62.7 million dollars the commitment and

231

00:09:48,150 --> 00:09:46,080

generosity of federal workers like us

232

00:09:50,389 --> 00:09:48,160

uh has made the cfc one of the most

233

00:09:53,590 --> 00:09:50,399

successful philanthropic programs in

234

00:09:55,590 --> 00:09:53,600

history and its impact is wide and deep

235

00:09:57,750 --> 00:09:55,600

among several charitable organizations

236

00:10:00,310 --> 00:09:57,760

represented was the wilson parrot

237

00:10:03,670 --> 00:10:00,320

foundation a maryland group that rescues

238

00:10:06,790 --> 00:10:03,680

abused and abandoned pet birds here the

239

00:10:10,389 --> 00:10:06,800

administrator a former naval aviator

240

00:10:11,990 --> 00:10:10,399

poses with a few fellow flyers

241

00:10:14,949 --> 00:10:12,000

oh my goodness

242

00:10:22,949 --> 00:10:14,959

you can browse the more than 4 400 cfc

243

00:10:27,910 --> 00:10:25,670

and that's this week at nasa for more on

244

00:10:30,310 --> 00:10:27,920

these and other stories or to follow us