



# Open House in Pasadena

1  
00:00:06,960 --> 00:00:12,789  
this week at nasa

2  
00:00:16,870 --> 00:00:14,789  
main gear touchdown space shuttle

3  
00:00:19,510 --> 00:00:16,880  
endeavour and its six astronaut crew

4  
00:00:22,550 --> 00:00:19,520  
sailed home for the final time ending a

5  
00:00:25,910 --> 00:00:22,560  
16-day journey of more than 6.5 million

6  
00:00:28,390 --> 00:00:25,920  
miles with a landing at 2 35 a.m eastern

7  
00:00:29,589 --> 00:00:28,400  
on wednesday at the kennedy space center

8  
00:00:31,429 --> 00:00:29,599  
in florida

9  
00:00:33,030 --> 00:00:31,439  
i love the space shuttle i mean i'd buy

10  
00:00:34,310 --> 00:00:33,040  
it as much as i possibly could i'd

11  
00:00:36,069 --> 00:00:34,320  
probably go out there

12  
00:00:38,709 --> 00:00:36,079  
every couple months if i could have the

13  
00:00:42,310 --> 00:00:38,719

opportunity to fly in the space shuttle

14

00:00:44,310 --> 00:00:42,320

but it's uh 30 years old we've got to

15

00:00:45,990 --> 00:00:44,320

you know grow and adapt and build new

16

00:00:47,190 --> 00:00:46,000

things and

17

00:00:49,910 --> 00:00:47,200

it's gonna be

18

00:00:51,750 --> 00:00:49,920

probably five or six years maybe seven

19

00:00:53,750 --> 00:00:51,760

you know before we have a new u.s

20

00:00:55,830 --> 00:00:53,760

spacecraft to take crew members first to

21

00:00:57,990 --> 00:00:55,840

and from the international space station

22

00:00:58,950 --> 00:00:58,000

and then hopefully outside of low earth

23

00:01:01,510 --> 00:00:58,960

orbit

24

00:01:03,510 --> 00:01:01,520

but we'll get there sts-134

25

00:01:05,990 --> 00:01:03,520

was the last mission for the youngest of

26

00:01:07,750 --> 00:01:06,000

nasa's space shuttle fleet delivering to

27

00:01:10,710 --> 00:01:07,760

the international space station the

28

00:01:12,550 --> 00:01:10,720

alpha magnetic spectrometer a cosmic ray

29

00:01:14,789 --> 00:01:12,560

detector that will search the universe

30

00:01:16,710 --> 00:01:14,799

for evidence of dark matter strange

31

00:01:18,550 --> 00:01:16,720

matter and anti-matter

32

00:01:22,550 --> 00:01:18,560

since 1992

33

00:01:24,830 --> 00:01:22,560

endeavor flew 25 missions spent 299 days

34

00:01:26,469 --> 00:01:24,840

in space orbited earth

35

00:01:28,830 --> 00:01:26,479

4600

36

00:01:32,710 --> 00:01:28,840

times and traveled almost

37

00:01:35,350 --> 00:01:32,720

123 million miles

38

00:01:37,270 --> 00:01:35,360

extraordinary opportunity to converse

39

00:01:39,350 --> 00:01:37,280

with you during your mission

40

00:01:42,069 --> 00:01:39,360

and especially grateful to be able to

41

00:01:43,990 --> 00:01:42,079

speak to so many of you as both crews

42

00:01:46,230 --> 00:01:44,000

are present on this situation of this

43

00:01:47,109 --> 00:01:46,240

time in a history-making event from the

44

00:01:49,510 --> 00:01:47,119

vatican

45

00:01:51,789 --> 00:01:49,520

pope benedict xvi spoke with the

46

00:01:53,749 --> 00:01:51,799

expedition 27 and

47

00:01:55,510 --> 00:01:53,759

sts-134 crew

48

00:01:57,830 --> 00:01:55,520

working on orbit aboard the

49

00:02:00,069 --> 00:01:57,840

international space station from your

50

00:02:02,709 --> 00:02:00,079

extraordinary observation point

51  
00:02:04,950 --> 00:02:02,719  
how do you see situation on earth do you

52  
00:02:06,950 --> 00:02:04,960  
see science or phenomena to which we

53  
00:02:08,710 --> 00:02:06,960  
need to be more attentive well your

54  
00:02:09,749 --> 00:02:08,720  
holiness it's a it's a great honor to

55  
00:02:12,070 --> 00:02:09,759  
speak with you and you're right it

56  
00:02:13,430 --> 00:02:12,080  
really is an extraordinary vantage point

57  
00:02:15,670 --> 00:02:13,440  
we have up here

58  
00:02:17,670 --> 00:02:15,680  
on the one hand we could see how

59  
00:02:19,270 --> 00:02:17,680  
indescribably beautiful the planet that

60  
00:02:21,830 --> 00:02:19,280  
we have been given is but on the other

61  
00:02:24,070 --> 00:02:21,840  
hand we can really clearly see how

62  
00:02:26,550 --> 00:02:24,080  
fragile it is the pope chatted in

63  
00:02:29,030 --> 00:02:26,560

particular with the two european space

64

00:02:31,910 --> 00:02:29,040

agency astronauts from italy roberto

65

00:02:33,750 --> 00:02:31,920

vittori and paolo nesto whose mother

66

00:02:37,670 --> 00:02:33,760

died during his mission

67

00:02:42,710 --> 00:02:39,830

i felt your prayers and everyone's

68

00:02:45,910 --> 00:02:42,720

prayers arriving up here

69

00:02:47,509 --> 00:02:45,920

we're outside the world we orbit

70

00:02:49,350 --> 00:02:47,519

outside the earth

71

00:02:51,270 --> 00:02:49,360

and we have a vantage point to look at

72

00:02:52,070 --> 00:02:51,280

the earth and we feel everything around

73

00:02:54,470 --> 00:02:52,080

us

74

00:03:01,589 --> 00:02:54,480

pope benedict's call was the first by a

75

00:03:06,309 --> 00:03:04,309

less than three days later the soyuz

76  
00:03:08,869 --> 00:03:06,319  
capsule carrying the last three members

77  
00:03:10,869 --> 00:03:08,879  
of the expedition 27 team made a

78  
00:03:13,910 --> 00:03:10,879  
picture-perfect landing on the step of

79  
00:03:16,630 --> 00:03:13,920  
kazakhstan dimitri kondratya katie

80  
00:03:18,630 --> 00:03:16,640  
coleman and nespoli returned to earth

81  
00:03:21,270 --> 00:03:18,640  
and sunny skies and 70 degree

82  
00:03:25,509 --> 00:03:21,280  
temperatures after more than five months

83  
00:03:30,149 --> 00:03:27,430  
having arrived at the complex last

84  
00:03:32,390 --> 00:03:30,159  
december 17th the trio worked on more

85  
00:03:34,789 --> 00:03:32,400  
than 100 experiments involving

86  
00:03:37,509 --> 00:03:34,799  
researchers from around the globe as

87  
00:03:39,830 --> 00:03:37,519  
well as juggled space for supplies and

88  
00:03:41,509 --> 00:03:39,840

equipment uploaded on the final shuttle

89

00:03:43,830 --> 00:03:41,519

missions

90

00:03:46,390 --> 00:03:43,840

with their departure the three remaining

91

00:03:49,350 --> 00:03:46,400

station residents andre borisenko

92

00:03:52,390 --> 00:03:49,360

alexander samakoutiyev and ron garan

93

00:03:54,470 --> 00:03:52,400

became members of expedition 28. they're

94

00:03:57,429 --> 00:03:54,480

scheduled to be joined by three new

95

00:04:00,630 --> 00:03:57,439

crewmates on june 9. cosmonaut sergey

96

00:04:10,390 --> 00:04:00,640

volkov nasa astronaut mike fossum and

97

00:04:14,869 --> 00:04:12,470

miami-dade police department director

98

00:04:17,749 --> 00:04:14,879

james loftus presented kennedy space

99

00:04:20,310 --> 00:04:17,759

center director bob cabana with the u.s

100

00:04:22,469 --> 00:04:20,320

honor flat at a special ceremony at the

101

00:04:24,790 --> 00:04:22,479

ksc visitor complex

102

00:04:27,270 --> 00:04:24,800

the flag will be prepared to fly aboard

103

00:04:29,909 --> 00:04:27,280

shuttle atlantis on its final mission in

104

00:04:31,670 --> 00:04:29,919

july i think it's a real privilege for

105

00:04:34,070 --> 00:04:31,680

us to be able to take it aboard atlantis

106

00:04:36,070 --> 00:04:34,080

and bring it home safe it says a lot the

107

00:04:38,310 --> 00:04:36,080

u.s honor flag has traveled throughout

108

00:04:41,110 --> 00:04:38,320

the world honoring police officers

109

00:04:43,670 --> 00:04:41,120

firefighters members of the armed forces

110

00:04:45,430 --> 00:04:43,680

astronauts and other heroes who lost

111

00:04:49,030 --> 00:04:45,440

their lives while serving their

112

00:04:52,870 --> 00:04:51,270

nasa administrator charles bolden

113

00:04:55,510 --> 00:04:52,880

welcome to nasa headquarters in

114

00:04:57,430 --> 00:04:55,520

washington the 85 winners of the

115

00:04:59,909 --> 00:04:57,440

presidential award for excellence in

116

00:05:02,230 --> 00:04:59,919

mathematics and science teaching

117

00:05:04,310 --> 00:05:02,240

the award recognizes teachers at the

118

00:05:06,150 --> 00:05:04,320

kindergarten to sixth grade level i want

119

00:05:08,310 --> 00:05:06,160

to congratulate all of you on the

120

00:05:10,550 --> 00:05:08,320

exceptional achievement and and your

121

00:05:12,710 --> 00:05:10,560

recognition on the part of the president

122

00:05:15,189 --> 00:05:12,720

president obama's educate to innovate

123

00:05:17,350 --> 00:05:15,199

campaign aims to strengthen the nation's

124

00:05:19,110 --> 00:05:17,360

teaching of science technology

125

00:05:21,830 --> 00:05:19,120

engineering and math the stem

126

00:05:23,590 --> 00:05:21,840

disciplines by preparing 10 000

127

00:05:27,430 --> 00:05:23,600

effective science and mathematics

128

00:05:31,510 --> 00:05:29,430

the administrator delivered the keynote

129

00:05:33,990 --> 00:05:31,520

speech at southern university spring

130

00:05:36,550 --> 00:05:34,000

commencement speaking to an audience of

131

00:05:38,469 --> 00:05:36,560

thousands bolden told graduates that

132

00:05:40,710 --> 00:05:38,479

challenges in their future

133

00:05:42,390 --> 00:05:40,720

will present big opportunities for them

134

00:05:44,710 --> 00:05:42,400

to do great things

135

00:05:46,950 --> 00:05:44,720

he congratulated southern university as

136

00:05:49,350 --> 00:05:46,960

one of the top 10 producers of african

137

00:05:51,110 --> 00:05:49,360

americans with undergraduate degrees in

138

00:05:53,350 --> 00:05:51,120

engineering and nursing

139

00:05:55,350 --> 00:05:53,360

and encourage graduates to consider

140

00:05:58,790 --> 00:05:55,360

careers with nasa i hope you're

141

00:06:00,629 --> 00:05:58,800

optimistic about the future because i am

142

00:06:01,990 --> 00:06:00,639

it's been my observation that students

143

00:06:03,430 --> 00:06:02,000

who are just starting their college

144

00:06:04,870 --> 00:06:03,440

careers or

145

00:06:08,950 --> 00:06:04,880

wrapping them up

146

00:06:10,230 --> 00:06:08,960

right now are excited about the future

147

00:06:13,909 --> 00:06:10,240

i am

148

00:06:15,670 --> 00:06:13,919

hoping i'm right about all of you

149

00:06:18,830 --> 00:06:15,680

that's a question

150

00:06:22,790 --> 00:06:18,840

are you excited about the future

151  
00:06:25,350 --> 00:06:22,800  
okay located in baton rouge louisiana

152  
00:06:27,670 --> 00:06:25,360  
southern university and a m college is a

153  
00:06:29,350 --> 00:06:27,680  
historically black institution created

154  
00:06:31,590 --> 00:06:29,360  
in 1890

155  
00:06:33,909 --> 00:06:31,600  
its goal is to provide students with a

156  
00:06:36,469 --> 00:06:33,919  
high quality global educational

157  
00:06:39,029 --> 00:06:36,479  
experience to engage in scholarly

158  
00:06:40,950 --> 00:06:39,039  
research and creative activities and to

159  
00:06:43,909 --> 00:06:40,960  
give meaningful public service to the

160  
00:06:46,790 --> 00:06:43,919  
community the state the nation and the

161  
00:06:46,800 --> 00:06:50,790  
and now centerpieces

162  
00:06:54,550 --> 00:06:53,350  
the gates have just opened people are

163  
00:06:57,110 --> 00:06:54,560

filing in

164

00:07:00,870 --> 00:06:57,120

the jpl open house is a time-honored

165

00:07:04,309 --> 00:07:00,880

tradition once a year one weekend in may

166

00:07:06,150 --> 00:07:04,319

the lab throws open its gates and people

167

00:07:08,230 --> 00:07:06,160

come we have tried lots of different

168

00:07:10,390 --> 00:07:08,240

mobility systems we tried four wheels

169

00:07:12,710 --> 00:07:10,400

six wheels eight wheels more than thirty

170

00:07:14,550 --> 00:07:12,720

eight thousand people stopped by over

171

00:07:17,510 --> 00:07:14,560

two days

172

00:07:19,589 --> 00:07:17,520

not including an additional 27 000 who

173

00:07:23,029 --> 00:07:19,599

viewed the open house remotely via

174

00:07:25,589 --> 00:07:23,039

ustream tv i'm gay ye hell next to me

175

00:07:27,909 --> 00:07:25,599

here is christopher harris and had their

176

00:07:30,469 --> 00:07:27,919

chat questions answered by a real nasa

177

00:07:33,029 --> 00:07:30,479

scientist or engineer athlete has rubber

178

00:07:35,510 --> 00:07:33,039

wheels because it's just a prototype

179

00:07:37,990 --> 00:07:35,520

folks got to see a real mars rover

180

00:07:40,710 --> 00:07:38,000

curiosity before it's packed up and

181

00:07:43,029 --> 00:07:40,720

headed for mars in november is it bigger

182

00:07:45,670 --> 00:07:43,039

than you thought it kind of would be

183

00:07:47,510 --> 00:07:45,680

like 6.8

184

00:07:49,350 --> 00:07:47,520

feet

185

00:07:52,309 --> 00:07:49,360

they felt what it was like to be run

186

00:07:55,909 --> 00:07:52,319

over by a rover

187

00:07:57,990 --> 00:07:55,919

and drive a robot with their own hands

188

00:08:01,029 --> 00:07:58,000

for two days people shared the

189

00:08:03,749 --> 00:08:01,039

excitement of exploration as some folks

190

00:08:07,589 --> 00:08:03,759

put it jpl's open house is a lot like

191

00:08:18,790 --> 00:08:07,599

disneyland only this isn't fantasy land

192

00:08:23,029 --> 00:08:20,550

the john f kennedy center for the

193

00:08:25,670 --> 00:08:23,039

performing arts in washington hosted a

194

00:08:27,749 --> 00:08:25,680

special concert honoring its namesake

195

00:08:32,230 --> 00:08:27,759

and american achievements in space

196

00:08:36,550 --> 00:08:34,870

human spaceflight the kennedy legacy

197

00:08:38,949 --> 00:08:36,560

featured a series of selections

198

00:08:47,990 --> 00:08:38,959

performed by the space philharmonic

199

00:08:52,310 --> 00:08:50,470

the musical celebration came on the 50th

200

00:08:54,470 --> 00:08:52,320

anniversary of president kennedy's

201  
00:08:56,550 --> 00:08:54,480  
speech to congress in which he

202  
00:08:58,870 --> 00:08:56,560  
challenged the united states i believe

203  
00:09:00,790 --> 00:08:58,880  
that this nation should commit itself

204  
00:09:02,870 --> 00:09:00,800  
to achieving the goal

205  
00:09:04,550 --> 00:09:02,880  
before this decade is out

206  
00:09:08,870 --> 00:09:04,560  
of landing a man on the moon and

207  
00:09:10,949 --> 00:09:08,880  
returning him safely to the earth

208  
00:09:12,790 --> 00:09:10,959  
since those words were spoken nasa has

209  
00:09:15,350 --> 00:09:12,800  
taken my brother's charge

210  
00:09:17,430 --> 00:09:15,360  
and created a future that even he

211  
00:09:19,430 --> 00:09:17,440  
probably could not have dreamt up nasa

212  
00:09:21,750 --> 00:09:19,440  
administrator charles bolden was joined

213  
00:09:24,870 --> 00:09:21,760

on stage by deputy administrator lori

214

00:09:27,110 --> 00:09:24,880

garver astronauts and other special

215

00:09:29,910 --> 00:09:27,120

guests that included former star trek

216

00:09:31,430 --> 00:09:29,920

star nichelle nichols june lockhart of

217

00:09:33,430 --> 00:09:31,440

lost in space

218

00:09:35,670 --> 00:09:33,440

and grammy-winning recording artist

219

00:09:37,829 --> 00:09:35,680

herbie hancock who performed a piece

220

00:09:47,350 --> 00:09:37,839

about witnessing february's launch of

221

00:09:52,470 --> 00:09:49,430

also performing were several local high

222

00:09:57,350 --> 00:09:52,480

school musical groups and the soldiers

223

00:10:03,190 --> 00:10:00,150

to conclude the orchestra was led by

224

00:10:08,150 --> 00:10:03,200

teddy kennedy iii in stars and stripes

225

00:10:14,949 --> 00:10:12,310

40 years ago on may 30th 1971

226

00:10:17,430 --> 00:10:14,959

mariner 9 was launched toward mars from

227

00:10:19,670 --> 00:10:17,440

cape canaveral air force station

228

00:10:22,470 --> 00:10:19,680

mariner reached mars in november of that

229

00:10:25,110 --> 00:10:22,480

same year becoming the first spacecraft

230

00:10:27,829 --> 00:10:25,120

to orbit another planet and sending back

231

00:10:30,829 --> 00:10:27,839

clear pictures of the martian surface

232

00:10:33,670 --> 00:10:30,839

the images revealed riverbeds craters

233

00:10:34,710 --> 00:10:33,680

volcanoes evidence of wind and water

234

00:10:37,829 --> 00:10:34,720

erosion

235

00:10:40,630 --> 00:10:37,839

weather fronts fogs and more

236

00:10:43,030 --> 00:10:40,640

mars's tiny moons phobos and deimos were

237

00:10:45,750 --> 00:10:43,040

also photographed the findings from the

238

00:10:49,990 --> 00:10:45,760

mariner 9 missions served as foundation

239

00:10:56,150 --> 00:10:53,910

twelve years ago on may 29 1999

240

00:10:57,829 --> 00:10:56,160

discovery made the first space shuttle

241

00:10:59,550 --> 00:10:57,839

docking to the international space

242

00:11:03,790 --> 00:10:59,560

station during mission

243

00:11:07,829 --> 00:11:03,800

sts-96 the second flight to the complex

244

00:11:09,910 --> 00:11:07,839

sts-96 launched to the iss on may 27th

245

00:11:13,430 --> 00:11:09,920

carrying crew members commander kent

246

00:11:17,269 --> 00:11:13,440

rominger pilot rick husband mission

247

00:11:21,310 --> 00:11:17,279

ellen ochoa tamara jernigan daniel barry

248

00:11:24,310 --> 00:11:21,320

julie payette and valerie tocara and 3

249

00:11:26,870 --> 00:11:24,320

567 pounds of material including

250

00:11:29,430 --> 00:11:26,880

clothing sleeping bags spare parts

251

00:11:32,790 --> 00:11:29,440

medical equipment supplies hardware and

252

00:11:35,190 --> 00:11:32,800

about 84 gallons of water

253

00:11:37,509 --> 00:11:35,200

and that's this week at nasa