



## Employees Bring Children to Work Day

1  
00:00:06,879 --> 00:00:11,589  
this week at nasa

2  
00:00:11,599 --> 00:00:17,189  
landing here down and locked

3  
00:00:23,509 --> 00:00:20,150  
after more than 30 years nasa's shuttle

4  
00:00:26,070 --> 00:00:23,519  
era has come to a close atlantis made a

5  
00:00:29,589 --> 00:00:26,080  
picture-perfect pre-dawn landing at the

6  
00:00:32,310 --> 00:00:29,599  
kennedy space center during sts-135's

7  
00:00:34,790 --> 00:00:32,320  
200th orbit of earth mission complete

8  
00:00:36,470 --> 00:00:34,800  
houston after serving the world for over

9  
00:00:37,750 --> 00:00:36,480  
30 years the space shuttle's earned its

10  
00:00:39,510 --> 00:00:37,760  
place in history

11  
00:00:41,830 --> 00:00:39,520  
and come to a final stop

12  
00:00:43,510 --> 00:00:41,840  
brought safely home after 13 days of

13  
00:00:46,270 --> 00:00:43,520

stocking up the international space

14

00:00:49,830 --> 00:00:46,280

station for the post shuttle era was the

15

00:00:51,670 --> 00:00:49,840

sts-135 crew commander chris ferguson

16

00:00:54,709 --> 00:00:51,680

pilot doug hurley and mission

17

00:00:56,069 --> 00:00:54,719

specialists sandy magnus and rex walheim

18

00:00:59,029 --> 00:00:56,079

it's a great day to be here and to

19

00:01:00,950 --> 00:00:59,039

welcome the sts-135 crew back home

20

00:01:02,470 --> 00:01:00,960

i personally want to salute them and

21

00:01:05,670 --> 00:01:02,480

everybody who's been involved in this

22

00:01:08,230 --> 00:01:05,680

program although we got to take the ride

23

00:01:09,750 --> 00:01:08,240

we sure hope that everybody

24

00:01:12,550 --> 00:01:09,760

who has ever worked

25

00:01:14,630 --> 00:01:12,560

or touched or looked at or envied or

26  
00:01:16,310 --> 00:01:14,640  
admired a space shuttle

27  
00:01:20,190 --> 00:01:16,320  
was able to take just a little part of

28  
00:01:22,950 --> 00:01:20,200  
the journey with us in all atlantis made

29  
00:01:26,710 --> 00:01:22,960  
4848 orbits of its home planet

30  
00:01:29,910 --> 00:01:26,720  
throughout 307 days in space the orbiter

31  
00:01:32,789 --> 00:01:29,920  
traveled almost 5.3 million miles over

32  
00:01:34,870 --> 00:01:32,799  
33 flights as i stood out on the runway

33  
00:01:36,390 --> 00:01:34,880  
and stared at it i looked at this winged

34  
00:01:38,230 --> 00:01:36,400  
vehicle and i thought about all the

35  
00:01:40,550 --> 00:01:38,240  
systems and when they were designed back

36  
00:01:42,469 --> 00:01:40,560  
in the 70s and it was a true marvel

37  
00:01:44,310 --> 00:01:42,479  
hearing the sonic booms

38  
00:01:46,550 --> 00:01:44,320

as atlantis came home for the last time

39

00:01:48,789 --> 00:01:46,560

really made it drive home to me that

40

00:01:50,310 --> 00:01:48,799

that this has been a heck of a program

41

00:01:52,630 --> 00:01:50,320

everybody feels good that we got the

42

00:01:55,350 --> 00:01:52,640

crew home safely and we're looking

43

00:01:57,590 --> 00:01:55,360

forward to our next challenges

44

00:01:59,749 --> 00:01:57,600

after being towed from the runway

45

00:02:02,469 --> 00:01:59,759

atlantis was parked outside orbiter

46

00:02:04,069 --> 00:02:02,479

processing facility 2 for several hours

47

00:02:06,950 --> 00:02:04,079

while workers walked around and

48

00:02:09,910 --> 00:02:06,960

photographed the shuttle

49

00:02:11,589 --> 00:02:09,920

you guys rock thanks for all that you do

50

00:02:13,910 --> 00:02:11,599

uh all that you've done over the last 30

51  
00:02:16,150 --> 00:02:13,920  
plus years uh you know the astronaut

52  
00:02:18,390 --> 00:02:16,160  
office is uh indebted to you all we've

53  
00:02:20,949 --> 00:02:18,400  
seen you firsthand at how you process

54  
00:02:22,550 --> 00:02:20,959  
this vehicle and how it is your baby

55  
00:02:24,390 --> 00:02:22,560  
the space flight business really does

56  
00:02:26,309 --> 00:02:24,400  
run in our blood the pride you take in

57  
00:02:28,869 --> 00:02:26,319  
your work the care you take in your work

58  
00:02:30,630 --> 00:02:28,879  
the dedication the passion you are what

59  
00:02:32,550 --> 00:02:30,640  
makes it possible for us to have these

60  
00:02:34,470 --> 00:02:32,560  
very challenging missions and succeed

61  
00:02:36,390 --> 00:02:34,480  
this was also the setting for an

62  
00:02:39,190 --> 00:02:36,400  
employee appreciation event

63  
00:02:41,589 --> 00:02:39,200

hosted by two former shuttle astronauts

64

00:02:44,070 --> 00:02:41,599

nasa administrator charlie bolden and

65

00:02:45,910 --> 00:02:44,080

kennedy center director bob cabana we

66

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

got a lot to celebrate today an

67

00:02:50,470 --> 00:02:47,519

outstanding mission

68

00:02:52,790 --> 00:02:50,480

a successful program for 30 years

69

00:02:54,949 --> 00:02:52,800

but you know in the end the space

70

00:02:57,350 --> 00:02:54,959

shuttle is just hardware what really

71

00:02:59,509 --> 00:02:57,360

makes nasa what makes ksc

72

00:03:01,750 --> 00:02:59,519

is each and every one of you

73

00:03:03,190 --> 00:03:01,760

this final shuttle flight makes the end

74

00:03:06,070 --> 00:03:03,200

of an era

75

00:03:08,309 --> 00:03:06,080

but also the start of a remarkable new

76

00:03:11,750 --> 00:03:08,319

chapter in our nation's story of

77

00:03:15,030 --> 00:03:11,760

exploration with 135 missions flown over

78

00:03:17,589 --> 00:03:15,040

30 plus years the iconic shuttle nasa's

79

00:03:20,309 --> 00:03:17,599

space transportation system has left a

80

00:03:22,070 --> 00:03:20,319

legacy worthy of celebration

81

00:03:24,309 --> 00:03:22,080

lessons learned during these past

82

00:03:26,309 --> 00:03:24,319

decades will serve as stepping stones

83

00:03:33,990 --> 00:03:26,319

for the new era of human space

84

00:03:39,589 --> 00:03:36,630

while shuttle atlantis is de-serviced in

85

00:03:41,670 --> 00:03:39,599

opf-2 orbiter discovery will reside in

86

00:03:42,949 --> 00:03:41,680

kennedy's vehicle assembly building the

87

00:03:45,430 --> 00:03:42,959

vab

88

00:03:48,149 --> 00:03:45,440

it was recently shuttled there from opf

89

00:03:50,390 --> 00:03:48,159

ii discoveries being prepared for public

90

00:03:53,110 --> 00:03:50,400

display at the smithsonian's national

91

00:03:54,789 --> 00:03:53,120

air and space museum stephen f udvarhazy

92

00:03:57,589 --> 00:03:54,799

center in virginia

93

00:04:06,470 --> 00:03:57,599

its last mission was sts-133

94

00:04:10,470 --> 00:04:08,550

administrator charles bolden helped kick

95

00:04:11,670 --> 00:04:10,480

off take your children to work day at

96

00:04:14,390 --> 00:04:11,680

headquarters

97

00:04:16,789 --> 00:04:14,400

geared toward children ages 7 to 15

98

00:04:19,110 --> 00:04:16,799

the event featured hands-on activities

99

00:04:21,670 --> 00:04:19,120

presentations and demonstrations to

100

00:04:24,710 --> 00:04:21,680

teach children about space aeronautics

101  
00:04:26,070 --> 00:04:24,720  
chemistry and the work we do at nasa so

102  
00:04:27,270 --> 00:04:26,080  
you can go back and say this is what

103  
00:04:29,030 --> 00:04:27,280  
they do

104  
00:04:32,310 --> 00:04:29,040  
and if you want to see something back go

105  
00:04:36,070 --> 00:04:32,320  
to the nasa website go to [www.nasa.gov](http://www.nasa.gov)

106  
00:04:40,070 --> 00:04:37,909  
my first job

107  
00:04:42,790 --> 00:04:40,080  
out of college was working for none

108  
00:04:44,950 --> 00:04:42,800  
other than john h glenn deputy

109  
00:04:47,749 --> 00:04:44,960  
administrator laurie garver joined

110  
00:04:49,749 --> 00:04:47,759  
center director ray lugo in officiating

111  
00:04:52,070 --> 00:04:49,759  
at the glenn research center's annual

112  
00:04:54,070 --> 00:04:52,080  
honor awards ceremony

113  
00:04:56,310 --> 00:04:54,080

the awards were presented to individuals

114

00:05:02,870 --> 00:04:56,320

who've made significant contributions to

115

00:05:09,270 --> 00:05:06,070

but i was i grew up in cold war while at

116

00:05:11,590 --> 00:05:09,280

glenn garver also sat down with 25 high

117

00:05:13,749 --> 00:05:11,600

school and college interns from three

118

00:05:15,749 --> 00:05:13,759

programs that offer support and

119

00:05:18,150 --> 00:05:15,759

direction for young men and women to

120

00:05:20,629 --> 00:05:18,160

undertake nasa careers after furthering

121

00:05:24,230 --> 00:05:20,639

their education in science technology

122

00:05:29,110 --> 00:05:24,240

engineering and math

123

00:05:32,790 --> 00:05:31,029

rising high school seniors from around

124

00:05:34,790 --> 00:05:32,800

the commonwealth spent a week of their

125

00:05:37,510 --> 00:05:34,800

summer at nasa langley planning a

126

00:05:39,590 --> 00:05:37,520

mission to mars it takes all kinds of

127

00:05:41,510 --> 00:05:39,600

things to make that mission successful

128

00:05:44,070 --> 00:05:41,520

the virginia aerospace science and

129

00:05:46,310 --> 00:05:44,080

technology scholars also known as vast

130

00:05:48,469 --> 00:05:46,320

participated in an online program during

131

00:05:50,150 --> 00:05:48,479

the school year and more than 100

132

00:05:52,230 --> 00:05:50,160

students were given the opportunity to

133

00:05:54,390 --> 00:05:52,240

attend a week-long academy to heighten

134

00:05:57,830 --> 00:05:54,400

their interest in science technology

135

00:05:59,590 --> 00:05:57,840

engineering and math trl is nine

136

00:06:01,270 --> 00:05:59,600

vast is the result of a partnership

137

00:06:03,830 --> 00:06:01,280

between the virginia space grant

138

00:06:06,950 --> 00:06:03,840

consortium and nasa langley once it

139

00:06:08,950 --> 00:06:06,960

comes time to really start

140

00:06:10,870 --> 00:06:08,960

crunching the numbers the students are

141

00:06:13,350 --> 00:06:10,880

broken down into four teams that worked

142

00:06:14,950 --> 00:06:13,360

together to plan the mission to mars the

143

00:06:17,510 --> 00:06:14,960

teams were getting there

144

00:06:18,790 --> 00:06:17,520

living there working there and mission

145

00:06:20,230 --> 00:06:18,800

integration

146

00:06:22,309 --> 00:06:20,240

during the week students had the

147

00:06:24,870 --> 00:06:22,319

opportunity to hear from astronaut roger

148

00:06:26,550 --> 00:06:24,880

crouch i'm a physicist and when i was

149

00:06:28,390 --> 00:06:26,560

working here at langley i worked on heat

150

00:06:30,309 --> 00:06:28,400

shield materials and then i worked on

151  
00:06:31,510 --> 00:06:30,319  
electronic materials and then i worked

152  
00:06:32,950 --> 00:06:31,520  
on

153  
00:06:34,790 --> 00:06:32,960  
different kinds of experiments that

154  
00:06:36,710 --> 00:06:34,800  
needed to go into space

155  
00:06:38,950 --> 00:06:36,720  
between researching and team meetings

156  
00:06:40,790 --> 00:06:38,960  
students participated in an activity to

157  
00:06:43,270 --> 00:06:40,800  
simulate communication in space by

158  
00:06:45,029 --> 00:06:43,280  
having a team member act as a rover the

159  
00:06:46,870 --> 00:06:45,039  
river must follow instructions from the

160  
00:06:49,029 --> 00:06:46,880  
rest of the team acting as a mission

161  
00:06:50,950 --> 00:06:49,039  
control from another room they also

162  
00:06:52,710 --> 00:06:50,960  
worked on their robotic skills having to

163  
00:06:58,070 --> 00:06:52,720

assemble and program their very own

164

00:07:01,830 --> 00:06:59,670

for our habitat we decided to use a

165

00:07:03,589 --> 00:07:01,840

single joint airlock at the end of the

166

00:07:06,469 --> 00:07:03,599

week the students presented their final

167

00:07:08,070 --> 00:07:06,479

mission to a panel of experts the isru

168

00:07:09,749 --> 00:07:08,080

systems would be initially used to

169

00:07:12,390 --> 00:07:09,759

produce enough fuel for the mars ascent

170

00:07:15,350 --> 00:07:13,510

for example

171

00:07:17,350 --> 00:07:15,360

this camera system that i put the

172

00:07:19,909 --> 00:07:17,360

international space station program

173

00:07:21,990 --> 00:07:19,919

office at the johnson space center

174

00:07:23,749 --> 00:07:22,000

partnered with the glenn research center

175

00:07:25,830 --> 00:07:23,759

to highlight the unique research

176

00:07:28,309 --> 00:07:25,840

opportunities offered by the world's

177

00:07:30,150 --> 00:07:28,319

laboratory in microgravity

178

00:07:32,870 --> 00:07:30,160

held in cleveland at the great lakes

179

00:07:35,189 --> 00:07:32,880

science center this destination station

180

00:07:38,070 --> 00:07:35,199

forum noted the accomplishments of the

181

00:07:39,990 --> 00:07:38,080

iss national laboratory and promoted

182

00:07:42,309 --> 00:07:40,000

future opportunities for commercial

183

00:07:46,150 --> 00:07:42,319

academic and government research and

184

00:07:46,160 --> 00:07:50,629

all engines

185

00:07:56,790 --> 00:07:54,230

at 9 34 a.m eastern daylight time forty

186

00:07:59,189 --> 00:07:56,800

years ago astronauts dave scott jim

187

00:08:01,510 --> 00:07:59,199

irwin and al worden took off from the

188

00:08:02,469 --> 00:08:01,520

kennedy space center headed into lunar

189

00:08:04,629 --> 00:08:02,479

orbit

190

00:08:06,790 --> 00:08:04,639

it was the fourth mission to land humans

191

00:08:09,909 --> 00:08:06,800

on the moon and featured the first deep

192

00:08:12,150 --> 00:08:09,919

space eva executed by worden

193

00:08:13,990 --> 00:08:12,160

the voyage also saw the first flight of

194

00:08:16,230 --> 00:08:14,000

the lunar roving vehicle which

195

00:08:18,469 --> 00:08:16,240

astronauts used to explore the geology

196

00:08:24,150 --> 00:08:18,479

of the hadley real aponine region of the

197

00:08:30,790 --> 00:08:27,830

the lrv allowed apollo 15 16 and 17

198

00:08:33,029 --> 00:08:30,800

astronauts to survey the lunar surface

199

00:08:35,750 --> 00:08:33,039

farther away from the lunar module than

200

00:08:38,949 --> 00:08:35,760

ever before

201

00:08:41,670 --> 00:08:38,959

and that's this week at nasa for more on