



1  
00:00:09,440 --> 00:00:14,150  
this week at nasa

2  
00:00:19,189 --> 00:00:16,630  
nasa administrator charles bolden joined

3  
00:00:21,189 --> 00:00:19,199  
with other nasa volunteers in helping

4  
00:00:24,870 --> 00:00:21,199  
these fifth graders become rocket

5  
00:00:26,710 --> 00:00:24,880  
scientists for the day what happens

6  
00:00:29,509 --> 00:00:26,720  
the students at the langlen elementary

7  
00:00:32,150 --> 00:00:29,519  
school in washington built and test flew

8  
00:00:35,990 --> 00:00:32,160  
their own paper rockets using a high

9  
00:00:40,869 --> 00:00:38,229  
the adventure was part of national lab

10  
00:00:43,190 --> 00:00:40,879  
day the nationwide initiative is a call

11  
00:00:46,150 --> 00:00:43,200  
to action for university students

12  
00:00:48,549 --> 00:00:46,160  
scientists engineers and volunteers to

13  
00:00:51,110 --> 00:00:48,559

help educators expose their kindergarten

14

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

through 12th grade students to discovery

15

00:00:55,430 --> 00:00:53,360

based science experiments

16

00:00:57,670 --> 00:00:55,440

a veteran of four space shuttle flights

17

00:00:59,910 --> 00:00:57,680

administrator bolden also spoke with the

18

00:01:01,590 --> 00:00:59,920

students about the excitement of his

19

00:01:03,349 --> 00:01:01,600

missions it gives these kids an

20

00:01:05,670 --> 00:01:03,359

opportunity to see something that they

21

00:01:06,950 --> 00:01:05,680

can only imagine or sometimes they can't

22

00:01:08,390 --> 00:01:06,960

even imagine because they've never been

23

00:01:10,390 --> 00:01:08,400

exposed to it that's why i think it's

24

00:01:12,950 --> 00:01:10,400

absolutely fantastic we've had a number

25

00:01:14,310 --> 00:01:12,960

of schools in which nasa engineers and

26

00:01:16,149 --> 00:01:14,320

scientists have gone out into the

27

00:01:17,590 --> 00:01:16,159

community and have really turned the

28

00:01:19,910 --> 00:01:17,600

school around have made a dramatic

29

00:01:21,670 --> 00:01:19,920

difference in in the performance of the

30

00:01:24,070 --> 00:01:21,680

students and in the ability of the

31

00:01:26,230 --> 00:01:24,080

teachers to teach because it helps the

32

00:01:28,070 --> 00:01:26,240

teachers to become very comfortable with

33

00:01:30,390 --> 00:01:28,080

the concepts of math science physics

34

00:01:37,510 --> 00:01:30,400

engineering and and that's what that's

35

00:01:42,389 --> 00:01:40,149

nasa assets continue to help scientists

36

00:01:45,030 --> 00:01:42,399

track two events causing worldwide

37

00:01:47,429 --> 00:01:45,040

environmental and economic concern

38

00:01:50,950 --> 00:01:47,439

nasa's instrumented research aircraft

39

00:01:53,429 --> 00:01:50,960

the earth resources 2 or er2 has been

40

00:01:56,469 --> 00:01:53,439

deployed to the gulf of mexico to do

41

00:01:59,510 --> 00:01:56,479

flyovers of the deepwater horizon bp oil

42

00:02:01,830 --> 00:01:59,520

spill and the coastline it threatens the

43

00:02:03,830 --> 00:02:01,840

agency is also making extra satellite

44

00:02:06,630 --> 00:02:03,840

observations and conducting additional

45

00:02:09,510 --> 00:02:06,640

data processing to help u.s disaster

46

00:02:11,350 --> 00:02:09,520

response agencies assess the spread and

47

00:02:14,070 --> 00:02:11,360

impact of the slick

48

00:02:16,390 --> 00:02:14,080

meanwhile nasa's aqua satellite is

49

00:02:18,949 --> 00:02:16,400

keeping an eye on iceland's ayaf yatla

50

00:02:21,430 --> 00:02:18,959

yoghurt volcano the spacecraft's

51  
00:02:24,150 --> 00:02:21,440  
moderate imaging spectroradiometer or

52  
00:02:27,030 --> 00:02:24,160  
modis instrument is grabbing pictures of

53  
00:02:28,790 --> 00:02:27,040  
the volcano's ash plume to help airlines

54  
00:02:34,630 --> 00:02:28,800  
and air traffic control systems

55  
00:02:39,589 --> 00:02:36,630  
nasa's international space station

56  
00:02:42,150 --> 00:02:39,599  
program has been awarded the 2009

57  
00:02:43,990 --> 00:02:42,160  
collier trophy considered aviation's

58  
00:02:46,390 --> 00:02:44,000  
highest honor

59  
00:02:48,550 --> 00:02:46,400  
the national aeronautic association the

60  
00:02:50,869 --> 00:02:48,560  
country's oldest national aviation

61  
00:02:53,750 --> 00:02:50,879  
organization bestowed the prestigious

62  
00:02:56,070 --> 00:02:53,760  
award on the iss team not only for its

63  
00:02:58,949 --> 00:02:56,080

design development and assembly of the

64

00:03:01,589 --> 00:02:58,959

world's largest spacecraft but also for

65

00:03:03,670 --> 00:03:01,599

the complex's promising discoveries and

66

00:03:08,309 --> 00:03:03,680

pioneering new standards for

67

00:03:13,910 --> 00:03:11,030

accepting the award on behalf of the iss

68

00:03:16,149 --> 00:03:13,920

team was nasa deputy administrator lori

69

00:03:18,229 --> 00:03:16,159

garver i truly am standing on the

70

00:03:20,630 --> 00:03:18,239

shoulders of giants i of course only

71

00:03:23,030 --> 00:03:20,640

been back to nasa for 10 months and

72

00:03:25,110 --> 00:03:23,040

while i was there in the 90s was not an

73

00:03:27,670 --> 00:03:25,120

integral part of the space station team

74

00:03:29,270 --> 00:03:27,680

so i always a while i was a cheerleader

75

00:03:29,990 --> 00:03:29,280

which shouldn't be a surprise to you all

76

00:03:37,350 --> 00:03:30,000

i

77

00:03:39,030 --> 00:03:37,360

the shoulders of so so many of you who

78

00:03:40,869 --> 00:03:39,040

really deserve this prize

79

00:03:43,509 --> 00:03:40,879

and have contributed to the

80

00:03:45,670 --> 00:03:43,519

international space station success

81

00:03:48,309 --> 00:03:45,680

so many of you in the room tonight

82

00:03:50,630 --> 00:03:48,319

have made this possible for nasa and it

83

00:03:53,110 --> 00:03:50,640

is really your award a joint project of

84

00:03:55,270 --> 00:03:53,120

nasa and the space agencies of russia

85

00:03:57,110 --> 00:03:55,280

canada europe and japan the

86

00:03:59,910 --> 00:03:57,120

international space station is nearing

87

00:04:02,470 --> 00:03:59,920

completion and later this year will mark

88

00:04:05,910 --> 00:04:02,480

its 10th anniversary of a continuous

89

00:04:08,390 --> 00:04:05,920

human presence in orbit

90

00:04:11,270 --> 00:04:08,400

jet propulsion laboratory engineers used

91

00:04:13,350 --> 00:04:11,280

a helicopter to run a series of tests of

92

00:04:14,390 --> 00:04:13,360

the mars science laboratory's landing

93

00:04:17,110 --> 00:04:14,400

system

94

00:04:19,749 --> 00:04:17,120

the msl will use radar to descend on a

95

00:04:22,790 --> 00:04:19,759

parachute and during the final seconds

96

00:04:25,430 --> 00:04:22,800

before landing lower the upright rover

97

00:04:27,830 --> 00:04:25,440

on a tether to the surface much like a

98

00:04:29,830 --> 00:04:27,840

sky crane

99

00:04:31,830 --> 00:04:29,840

these tests will collect data over

100

00:04:34,390 --> 00:04:31,840

various terrains simulating their

101  
00:04:36,950 --> 00:04:34,400  
options on the martian surface

102  
00:04:40,230 --> 00:04:36,960  
once landed the rover will be able to

103  
00:04:43,749 --> 00:04:40,240  
roll over obstacles up to 29 inches high

104  
00:04:45,990 --> 00:04:43,759  
and travel up to 295 feet per hour

105  
00:04:48,710 --> 00:04:46,000  
currently in its assembly and testing

106  
00:04:51,510 --> 00:04:48,720  
phase msl is scheduled to launch in the

107  
00:04:53,749 --> 00:04:51,520  
fall of 2011 and arrive at the red

108  
00:04:58,390 --> 00:04:53,759  
planet the following summer to usher in

109  
00:05:00,710 --> 00:04:58,400  
the next decade of mars exploration

110  
00:05:03,029 --> 00:05:00,720  
thanks to a program at the nasa marshall

111  
00:05:04,950 --> 00:05:03,039  
space flight center huntsville area

112  
00:05:07,270 --> 00:05:04,960  
students are helping scientific and

113  
00:05:10,070 --> 00:05:07,280

community leaders make better informed

114

00:05:12,629 --> 00:05:10,080

decisions about lyme disease and how and

115

00:05:14,629 --> 00:05:12,639

where this chronic illness is likely to

116

00:05:16,710 --> 00:05:14,639

strike the local public

117

00:05:18,710 --> 00:05:16,720

through the development applied sciences

118

00:05:20,950 --> 00:05:18,720

program the students performed field

119

00:05:23,430 --> 00:05:20,960

work and used remote sensing data

120

00:05:26,390 --> 00:05:23,440

provided by marshall to analyze soil

121

00:05:28,790 --> 00:05:26,400

moisture and vegetation at 12 locations

122

00:05:31,909 --> 00:05:28,800

in the talladega national forest in

123

00:05:33,990 --> 00:05:31,919

north central alabama in the develop

124

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

program that i'm mentoring we're really

125

00:05:39,749 --> 00:05:36,560

focusing on public health benefits

126

00:05:41,510 --> 00:05:39,759

and one might think that what's nasa

127

00:05:43,909 --> 00:05:41,520

doing in public health

128

00:05:46,629 --> 00:05:43,919

well in actuality many of the problems

129

00:05:49,110 --> 00:05:46,639

in public health rely on some kind of

130

00:05:51,590 --> 00:05:49,120

spatial information

131

00:05:52,469 --> 00:05:51,600

to solve their problems or to inform the

132

00:05:54,629 --> 00:05:52,479

public

133

00:05:57,830 --> 00:05:54,639

and with nasa's satellite data and

134

00:05:59,909 --> 00:05:57,840

models it's an ideal combination to go

135

00:06:02,469 --> 00:05:59,919

into the public health community and

136

00:06:03,909 --> 00:06:02,479

provide them information that they need

137

00:06:05,670 --> 00:06:03,919

to do their job

138

00:06:07,670 --> 00:06:05,680

results of their satellite imagery

139

00:06:10,309 --> 00:06:07,680

analysis showed areas of dense

140

00:06:13,590 --> 00:06:10,319

vegetation overlapped with high soil

141

00:06:15,670 --> 00:06:13,600

moisture likely tick habitats the

142

00:06:17,590 --> 00:06:15,680

students also learned how to share their

143

00:06:20,309 --> 00:06:17,600

data with the scientific community and

144

00:06:22,629 --> 00:06:20,319

the public sponsored by nasa's applied

145

00:06:24,629 --> 00:06:22,639

science program develop encourages

146

00:06:26,950 --> 00:06:24,639

students to not only pursue careers in

147

00:06:28,629 --> 00:06:26,960

technical fields but also help the

148

00:06:33,029 --> 00:06:28,639

public through expanded use of

149

00:06:35,110 --> 00:06:33,039

information obtained by nasa satellites

150

00:06:37,270 --> 00:06:35,120

a new book highlighting some of the most

151  
00:06:39,590 --> 00:06:37,280  
beautiful and awe-inspiring images

152  
00:06:42,710 --> 00:06:39,600  
captured by the hubble space telescope

153  
00:06:45,350 --> 00:06:42,720  
is now available in stores and online

154  
00:06:47,430 --> 00:06:45,360  
hubble a journey through space and time

155  
00:06:49,990 --> 00:06:47,440  
features the observatory's spectacular

156  
00:06:52,550 --> 00:06:50,000  
visual legacy in stunning images that

157  
00:06:54,790 --> 00:06:52,560  
include what many consider are its 20

158  
00:06:56,550 --> 00:06:54,800  
most important scientific findings to

159  
00:06:58,230 --> 00:06:56,560  
date they range from planets in our

160  
00:06:59,510 --> 00:06:58,240  
solar system

161  
00:07:01,270 --> 00:06:59,520  
to

162  
00:07:03,110 --> 00:07:01,280  
regions where stars and planets are

163  
00:07:05,430 --> 00:07:03,120

being born right now to just the

164

00:07:08,390 --> 00:07:05,440

opposite regions where stars are dying

165

00:07:10,710 --> 00:07:08,400

right now to nearby galaxies to black

166

00:07:12,550 --> 00:07:10,720

holes at the centers of galaxies and

167

00:07:15,270 --> 00:07:12,560

clusters of galaxies and then out to the

168

00:07:17,029 --> 00:07:15,280

very earliest galaxies so it's really

169

00:07:19,510 --> 00:07:17,039

like a time tunnel a walk through the

170

00:07:21,670 --> 00:07:19,520

universe and looking back in time the

171

00:07:24,309 --> 00:07:21,680

classic images all selected by nasa

172

00:07:27,430 --> 00:07:24,319

astronomers show stars being born and

173

00:07:29,830 --> 00:07:27,440

dying galaxies colliding and reforming

174

00:07:31,029 --> 00:07:29,840

and the young universe in the throes of

175

00:07:32,950 --> 00:07:31,039

creation

176

00:07:34,749 --> 00:07:32,960

also contained in this authoritative

177

00:07:37,670 --> 00:07:34,759

account of the observatory that's

178

00:07:39,830 --> 00:07:37,680

revolutionized astronomy and photography

179

00:07:42,469 --> 00:07:39,840

are comments from scientists and veteran

180

00:07:44,869 --> 00:07:42,479

astronauts who manned nasa's five space

181

00:07:49,189 --> 00:07:44,879

shuttle missions to repair and maintain

182

00:07:54,869 --> 00:07:51,589

the skylab lifting off the pad now

183

00:07:57,909 --> 00:07:54,879

moving up 37 years ago america's first

184

00:07:59,589 --> 00:07:57,919

space station skylab was launched into

185

00:08:02,469 --> 00:07:59,599

earth orbit from the kennedy space

186

00:08:05,189 --> 00:08:02,479

center atop a saturn v rocket

187

00:08:07,670 --> 00:08:05,199

a dry or empty third stage of the rocket

188

00:08:09,029 --> 00:08:07,680

was completely outfitted as a workshop

189

00:08:12,070 --> 00:08:09,039

in laboratory

190

00:08:14,790 --> 00:08:12,080

accessing skylab in apollo spacecraft

191

00:08:18,710 --> 00:08:14,800

three three-man crews occupied the space

192

00:08:19,670 --> 00:08:18,720

station for a total of 171 days and 13

193

00:08:22,230 --> 00:08:19,680

hours

194

00:08:24,390 --> 00:08:22,240

nearly 300 scientific technical and

195

00:08:28,070 --> 00:08:24,400

medical experiments were conducted in

196

00:08:30,469 --> 00:08:28,080

the skylab on july 11 1979

197

00:08:32,149 --> 00:08:30,479

the empty spacecraft disintegrated as it

198

00:08:34,790 --> 00:08:32,159

re-entered the earth's atmosphere

199

00:08:38,149 --> 00:08:34,800

scattering debris over the indian ocean

200

00:08:40,790 --> 00:08:38,159

and a remote region of western australia

201

00:08:43,589 --> 00:08:40,800

and that's this week at nasa for more on