1
00:00:07,200 --> 00:00:10,549
this week at nasa

2
00:00:14,549 --> 00:00:12,150
what we have to do

3
00:00:17,590 --> 00:00:14,559
is move forward in a way that preserves

4
00:00:18,470 --> 00:00:17,600
the very best of nasa but recognizes

5
00:00:21,990 --> 00:00:18,480
that

6
00:00:24,310 --> 00:00:22,000
what we have invested in can now be done

7
00:00:26,150 --> 00:00:24,320
in partnership with others and others

8
00:00:28,710 --> 00:00:26,160
have a lot to bring to the table as well

9
00:00:30,950 --> 00:00:28,720
nasa deputy administrator lori garver

10
00:00:33,190 --> 00:00:30,960
provided keynote remarks at this year's

11
00:00:35,350 --> 00:00:33,200
international symposium for personal and

12
00:00:38,310 --> 00:00:35,360
commercial space flight held in las

13
00:00:40,709 --> 00:00:38,320

cruces new mexico with business at the

14
00:00:42,790 --> 00:00:40,719
speed of innovation the conference theme

15
00:00:45,270 --> 00:00:42,800
garver focused on nasa's vision for

16
00:00:47,430 --> 00:00:45,280
future exploration and a strong

17
00:00:49,750 --> 00:00:47,440
commercial space capability that will

18
00:00:52,790 --> 00:00:49,760
spur job creation and strengthen the

19
00:00:57,270 --> 00:00:55,590
greg whitney thomas gonzalez torres and

20
00:00:58,389 --> 00:00:57,280
judd freeling share a special

21
00:01:00,470 --> 00:00:58,399
distinction

22
00:01:02,470 --> 00:01:00,480
they're nasa's newest flight directors

23
00:01:04,789 --> 00:01:02,480
in mission control at the johnson space

24
00:01:07,190 --> 00:01:04,799
center in houston they'll help manage

25
00:01:10,230 --> 00:01:07,200
international space station operations

26
00:01:12,550 --> 00:01:10,240
integrate cargo and crew vehicles and

27
00:01:13,670 --> 00:01:12,560
assist in planning future exploration

28
00:01:16,230 --> 00:01:13,680
missions

29
00:01:18,789 --> 00:01:16,240
whitney gonzalez torres and freiling

30
00:01:21,590 --> 00:01:18,799
have 40 years of combined experience at

31
00:01:25,510 --> 00:01:24,070
if the past is any indication science

32
00:01:27,590 --> 00:01:25,520
research on the now complete

33
00:01:30,069 --> 00:01:27,600
international space station the world's

34
00:01:32,870 --> 00:01:30,079
only laboratory in microgravity will

35
00:01:35,109 --> 00:01:32,880
continue to improve life here on earth

36
00:01:37,350 --> 00:01:35,119
one success story the advanced

37
00:01:39,990 --> 00:01:37,360
astroculture investigation by a team at

38
00:01:41,830 --> 00:01:40,000

the university of wisconsin-madison

39
00:01:43,910 --> 00:01:41,840
their research conducted during three

40
00:01:46,469 --> 00:01:43,920
station expeditions will help create

41
00:01:48,870 --> 00:01:46,479
high-energy low-mass food sources in

42
00:01:52,069 --> 00:01:48,880
limited volume for both long-duration

43
00:01:54,710 --> 00:01:52,079
space flight and here on terra firma

44
00:01:57,670 --> 00:01:54,720
among other contributions the technology

45
00:02:01,270 --> 00:01:57,680
behind advas novel air purifier that

46
00:02:04,149 --> 00:02:01,280
kills 98 of airborne pathogens is now in

47
00:02:07,030 --> 00:02:04,159
widespread use in food preservation in

48
00:02:09,910 --> 00:02:07,040
doctors offices and everyday living

49
00:02:14,390 --> 00:02:12,309
mars exploration rover spirit and

50
00:02:16,630 --> 00:02:14,400
opportunity have been honored with

51
00:02:18,869 --> 00:02:16,640
popular mechanics mechanical lifetime

52
00:02:22,070 --> 00:02:18,879
achievement award for their dogged

53
00:02:24,710 --> 00:02:22,080
pursuit of exploration on the red planet

54
00:02:26,470 --> 00:02:24,720
the 2011 breakthrough awards were

55
00:02:28,949 --> 00:02:26,480
presented to the rover team at an

56
00:02:31,830 --> 00:02:28,959
invitation only awards gala and ceremony

57
00:02:33,750 --> 00:02:31,840
in new york other awardees included fame

58
00:02:35,830 --> 00:02:33,760
director and former nasa advisory

59
00:02:37,509 --> 00:02:35,840
council member james cameron who

60
00:02:39,910 --> 00:02:37,519
received the breakthrough leadership

61
00:02:42,229 --> 00:02:39,920
award for technological innovations that

62
00:02:44,550 --> 00:02:42,239
have changed the face of filmmaking

63
00:02:46,470 --> 00:02:44,560

more on the awards and their winners is

64
00:02:53,509 --> 00:02:46,480
in the november issue of popular

65
00:02:57,110 --> 00:02:55,270
florida governor rick scott and

66
00:02:59,509 --> 00:02:57,120
lieutenant governor jennifer carroll

67
00:03:01,430 --> 00:02:59,519
visited the kennedy space center center

68
00:03:03,430 --> 00:03:01,440
director bob cabana led them on a tour

69
00:03:05,750 --> 00:03:03,440
of kennedy's operations and checkout

70
00:03:07,430 --> 00:03:05,760
building where nasa's new orion

71
00:03:09,110 --> 00:03:07,440
multi-purpose crew vehicle will be

72
00:03:11,270 --> 00:03:09,120
prepared for launch

73
00:03:13,670 --> 00:03:11,280
scott and carol also visited launch

74
00:03:16,390 --> 00:03:13,680
complex 40 on cape canaveral air force

75
00:03:17,750 --> 00:03:16,400
station from where spacex's falcon 9

76
00:03:19,750 --> 00:03:17,760
rocket will lift off for the

77
00:03:21,190 --> 00:03:19,760
international space station on a test

78
00:03:23,509 --> 00:03:21,200
flight for nasa

79
00:03:25,750 --> 00:03:23,519
the state's top officials also held a

80
00:03:28,229 --> 00:03:25,760
florida cabinet meeting and space

81
00:03:32,309 --> 00:03:28,239
industry roundtable at the kennedy space

82
00:03:32,319 --> 00:03:38,949
and now centerpieces

83
00:03:43,270 --> 00:03:40,869
virginia governor bob mcdonnell paid a

84
00:03:45,270 --> 00:03:43,280
visit to nasa's wallops flight facility

85
00:03:48,070 --> 00:03:45,280
for a firsthand look at the development

86
00:03:49,990 --> 00:03:48,080
of orbital sciences corporation's taurus

87
00:03:51,670 --> 00:03:50,000
2 rocket that will start carrying

88
00:03:54,149 --> 00:03:51,680

supplies to the international space

89
00:03:56,149 --> 00:03:54,159
station in 2012. orbital will be

90
00:03:57,589 --> 00:03:56,159
conducting missions for nasa under the

91
00:03:59,670 --> 00:03:57,599
agency's commercial orbital

92
00:04:02,229 --> 00:03:59,680
transportation services project and

93
00:04:03,830 --> 00:04:02,239
commercial resupply services contract

94
00:04:05,750 --> 00:04:03,840
during the visit the governor also

95
00:04:08,229 --> 00:04:05,760
received a construction update on the

96
00:04:10,789 --> 00:04:08,239
mid-atlantic regional spaceport's launch

97
00:04:12,789 --> 00:04:10,799
pad 0a from which the taurus 2 will

98
00:04:15,270 --> 00:04:12,799
launch the first taurus 2 launch is

99
00:04:16,949 --> 00:04:15,280
currently slated for early 2012.

100
00:04:18,069 --> 00:04:16,959
virginia's taking a kind of a renewed

101
00:04:20,150 --> 00:04:18,079
interest

102
00:04:21,749 --> 00:04:20,160
in everything that's going on at wallops

103
00:04:24,230 --> 00:04:21,759
i think it was a good a good opportunity

104
00:04:26,070 --> 00:04:24,240
for him to come in and kind of tour the

105
00:04:27,590 --> 00:04:26,080
facilities we have here and just just

106
00:04:31,350 --> 00:04:27,600
see what all

107
00:04:35,030 --> 00:04:33,749
just wonder where what it means and

108
00:04:36,390 --> 00:04:35,040
where it is and

109
00:04:37,830 --> 00:04:36,400
it's really interesting

110
00:04:40,550 --> 00:04:37,840
what's getting the attention of

111
00:04:42,629 --> 00:04:40,560
passers-by in baltimore's inner harbor

112
00:04:44,629 --> 00:04:42,639
is a unique art exhibit

113
00:04:46,790 --> 00:04:44,639

that's literally lighting up this

114
00:04:49,270 --> 00:04:46,800
tourist destination it's like a laser

115
00:04:51,350 --> 00:04:49,280
show yeah i really didn't know i had no

116
00:04:52,870 --> 00:04:51,360
idea what somebody was fascinating or

117
00:04:55,189 --> 00:04:52,880
scientific at all

118
00:04:56,790 --> 00:04:55,199
but it is science the green line

119
00:04:58,790 --> 00:04:56,800
represents the different kinds of

120
00:05:01,510 --> 00:04:58,800
information nasa's hubble space

121
00:05:02,950 --> 00:05:01,520
telescope gets when it looks out into

122
00:05:05,510 --> 00:05:02,960
the cosmos

123
00:05:07,430 --> 00:05:05,520
the real true physics that allow

124
00:05:09,830 --> 00:05:07,440
astronomers to understand what the

125
00:05:12,710 --> 00:05:09,840
object is all about we learn about the

126
00:05:15,350 --> 00:05:12,720
temperature the physical conditions we

127
00:05:17,110 --> 00:05:15,360
learn about their distance after decades

128
00:05:20,070 --> 00:05:17,120
of seeing the beautiful pictures from

129
00:05:23,590 --> 00:05:20,080
hubble artist tim roth wanted to shine a

130
00:05:26,870 --> 00:05:23,600
new light on the 21 year old newsmaker

131
00:05:29,749 --> 00:05:26,880
this is the job of art is really not to

132
00:05:31,270 --> 00:05:29,759
explain immediately is more really to

133
00:05:33,749 --> 00:05:31,280
to puzzle people

134
00:05:35,270 --> 00:05:33,759
so so the people are standing there and

135
00:05:38,870 --> 00:05:35,280
saying oh

136
00:05:41,350 --> 00:05:38,880
what's that so the people get interested

137
00:05:43,350 --> 00:05:41,360
while roth knows many who walk by think

138
00:05:46,310 --> 00:05:43,360

the display on the wall of the maryland

139
00:05:48,870 --> 00:05:46,320
science center looks like a heartbeat he

140
00:05:52,870 --> 00:05:48,880
says it is in a way but it's the

141
00:05:55,189 --> 00:05:52,880
heartbeat of the universe

142
00:05:57,430 --> 00:05:55,199
i just want to say that we are we're all

143
00:05:59,110 --> 00:05:57,440
big space nuts we're all

144
00:06:00,870 --> 00:05:59,120
one the space

145
00:06:01,909 --> 00:06:00,880
program to continue

146
00:06:06,150 --> 00:06:01,919
and

147
00:06:07,990 --> 00:06:06,160
musician peter frampton toured the

148
00:06:11,189 --> 00:06:08,000
johnson space center at the invitation

149
00:06:13,029 --> 00:06:11,199
of expedition 28 astronaut ron garan

150
00:06:15,029 --> 00:06:13,039
frampton visited the mission control

151
00:06:16,950 --> 00:06:15,039
center where he spoke with astronaut

152
00:06:18,469 --> 00:06:16,960
mike fossum aboard the international

153
00:06:20,070 --> 00:06:18,479
space station

154
00:06:22,309 --> 00:06:20,080
the guys here don't believe you're

155
00:06:25,990 --> 00:06:22,319
actually in space so can you prove it to

156
00:06:30,070 --> 00:06:28,070
we believe you

157
00:06:32,150 --> 00:06:30,080
that's amazing

158
00:06:33,909 --> 00:06:32,160
frampton stops included astronaut

159
00:06:36,150 --> 00:06:33,919
training facilities and watching

160
00:06:38,150 --> 00:06:36,160
engineers developing vehicles to explore

161
00:06:41,029 --> 00:06:38,160
the surfaces of distant planets

162
00:06:43,029 --> 00:06:41,039
asteroids or moons frampton and guerin

163
00:06:45,749 --> 00:06:43,039

corresponded while guerin lived on the

164
00:06:47,909 --> 00:06:45,759
space station during expedition 28.

165
00:06:50,390 --> 00:06:47,919
karen came alive at frampton's august

166
00:06:54,150 --> 00:06:50,400
concert in san francisco via a special

167
00:06:58,070 --> 00:06:56,230
the year-long celebration of stennis

168
00:07:01,830 --> 00:06:58,080
space center's 50th anniversary

169
00:07:03,749 --> 00:07:01,840
continues it was 1961 when nasa

170
00:07:05,430 --> 00:07:03,759
announced its plans to build a rocket

171
00:07:06,629 --> 00:07:05,440
engine test facility in south

172
00:07:09,110 --> 00:07:06,639
mississippi

173
00:07:11,909 --> 00:07:09,120
stennis's rich history and role in the

174
00:07:13,990 --> 00:07:11,919
future of space exploration was cited at

175
00:07:15,990 --> 00:07:14,000
a center event by nasa administrator

176
00:07:18,550 --> 00:07:16,000
charlie bolden one of these days when my

177
00:07:21,029 --> 00:07:18,560
granddaughters are preparing to get on a

178
00:07:22,390 --> 00:07:21,039
rocket ship and go to mars

179
00:07:23,909 --> 00:07:22,400
they're going to have the satisfaction

180
00:07:25,909 --> 00:07:23,919
and their granddad is going to be able

181
00:07:27,909 --> 00:07:25,919
to tell them i'm comfortable with what

182
00:07:29,029 --> 00:07:27,919
you're about to do i know the engines

183
00:07:30,710 --> 00:07:29,039
are going to be good because they've

184
00:07:31,990 --> 00:07:30,720
been through stennis and they've been

185
00:07:33,589 --> 00:07:32,000
through the state of mississippi so

186
00:07:35,830 --> 00:07:33,599
thank you all so very much for what you

187
00:07:37,830 --> 00:07:35,840
do god bless all of you

188
00:07:40,469 --> 00:07:37,840

the center held the final round of its

189
00:07:42,950 --> 00:07:40,479
legends lecture series influential

190
00:07:45,589 --> 00:07:42,960
former employees and contractors joined

191
00:07:47,589 --> 00:07:45,599
current employees in sharing experiences

192
00:07:49,670 --> 00:07:47,599
and contributions that have played a

193
00:07:52,150 --> 00:07:49,680
vital role in the center's development

194
00:07:55,029 --> 00:07:52,160
this this whole workforce doesn't matter

195
00:07:57,670 --> 00:07:55,039
what badge you wore or who you were

196
00:07:59,670 --> 00:07:57,680
was a can-do outfit

197
00:08:01,990 --> 00:07:59,680
there was nothing that you couldn't take

198
00:08:07,350 --> 00:08:02,000
on and wouldn't take home

199
00:08:09,270 --> 00:08:08,309
three

200
00:08:12,390 --> 00:08:09,280
two

201
00:08:15,029 --> 00:08:12,400
one we have ignition and liftoff

202
00:08:16,869 --> 00:08:15,039
of a delta ii rocket carrying nasa on an

203
00:08:20,950 --> 00:08:16,879
odyssey back to mars

204
00:08:23,990 --> 00:08:20,960
ten years ago on march 24 2001 the

205
00:08:25,990 --> 00:08:24,000
odyssey spacecraft reached mars to study

206
00:08:28,469 --> 00:08:26,000
and map the elemental composition of the

207
00:08:30,869 --> 00:08:28,479
martian surface and evaluate the red

208
00:08:32,630 --> 00:08:30,879
planet's radiation environment

209
00:08:34,790 --> 00:08:32,640
odyssey also has served as a

210
00:08:37,350 --> 00:08:34,800
communication relay for most of the data

211
00:08:40,469 --> 00:08:37,360
sent home by the phoenix lander and the

212
00:08:41,990 --> 00:08:40,479
mars rovers spirit and opportunity it

213
00:08:43,909 --> 00:08:42,000

also became the middle link for

214
00:08:47,190 --> 00:08:43,919
continuous observation of martian

215
00:08:49,910 --> 00:08:47,200
weather by nasa's mars global surveyor

216
00:08:53,269 --> 00:08:49,920
and the mars reconnaissance orbiter in

217
00:08:57,430 --> 00:08:53,279
2010 odyssey became the longest serving

218
00:09:02,389 --> 00:08:59,990
and five years later nasa released the

219
00:09:04,949 --> 00:09:02,399
solar terrestrial relations observatory

220
00:09:08,230 --> 00:09:04,959
into the heavens to stereographically

221
00:09:10,630 --> 00:09:08,240
image the sun and its emissions the two

222
00:09:14,310 --> 00:09:10,640
identical space-based observatories

223
00:09:16,630 --> 00:09:14,320
stereo a and stereo b orbit the sun one

224
00:09:19,110 --> 00:09:16,640
ahead of the earth the other trailing

225
00:09:20,790 --> 00:09:19,120
this dual perspective allows scientists

226
00:09:23,509 --> 00:09:20,800
to better see the structure and

227
00:09:26,470 --> 00:09:23,519
evolution of solar storms as they move

228
00:09:29,030 --> 00:09:26,480
from the sun into space

229
00:09:31,269 --> 00:09:29,040
and that's this week at nasa for more on