1
00:00:13,190 --> 00:00:10,470
this week at nasa

2
00:00:15,749 --> 00:00:13,200
ron garan flashing a big smile as he's

3
00:00:18,230 --> 00:00:15,759
extracted the soyuz spacecraft carrying

4
00:00:21,189 --> 00:00:18,240
nasa astronaut ron garan and his fellow

5
00:00:23,349 --> 00:00:21,199
expedition 28 flight engineers returned

6
00:00:25,349 --> 00:00:23,359
safely to earth with a landing on the

7
00:00:28,070 --> 00:00:25,359
steppe of kazakhstan

8
00:00:30,790 --> 00:00:28,080
garen and astronauts andre borjenko and

9
00:00:32,950 --> 00:00:30,800
alexander somakutyaev had been on the

10
00:00:33,830 --> 00:00:32,960
international space station since april

11
00:00:35,910 --> 00:00:33,840
6.

12
00:00:37,990 --> 00:00:35,920
remaining on the orbiting laboratory is

13
00:00:40,950 --> 00:00:38,000

nasa's mike fossum and his two

14
00:00:43,590 --> 00:00:40,960
expedition 2829 colleagues russian

15
00:00:45,830 --> 00:00:43,600
sergei volkov and satoshi furukawa of

16
00:00:48,389 --> 00:00:45,840
the japanese aerospace exploration

17
00:00:50,950 --> 00:00:48,399
agency the return of garen and his two

18
00:00:53,270 --> 00:00:50,960
crewmates was delayed just over a week

19
00:00:55,990 --> 00:00:53,280
by the august 24th failure of the

20
00:00:58,389 --> 00:00:56,000
progress 44 cargo craft to reach the

21
00:01:00,869 --> 00:00:58,399
station now that the russian federal

22
00:01:03,750 --> 00:01:00,879
space agency has identified the cause of

23
00:01:07,109 --> 00:01:03,760
the mishap crew flights to the iss will

24
00:01:09,990 --> 00:01:07,119
tentatively resume on november 14th

25
00:01:12,710 --> 00:01:10,000
that's when the soyuz 28 spacecraft

26
00:01:15,910 --> 00:01:12,720
carrying nasa's dan burbank and russia's

27
00:01:17,429 --> 00:01:15,920
anatolia ivanishin and anton shkaplerov

28
00:01:20,149 --> 00:01:17,439
is scheduled to lift off from the

29
00:01:22,070 --> 00:01:20,159
baikonur cosmodrome in kazakhstan

30
00:01:24,789 --> 00:01:22,080
they'll reach the station on november

31
00:01:28,789 --> 00:01:26,630
the next chapter of america's space

32
00:01:30,870 --> 00:01:28,799
exploration story is being written today

33
00:01:33,190 --> 00:01:30,880
administrator charlie bolden was on

34
00:01:35,749 --> 00:01:33,200
capitol hill for the announcement of

35
00:01:39,990 --> 00:01:35,759
nasa's selected design of its new space

36
00:01:44,789 --> 00:01:42,469
the new heavy lift rocket will take nasa

37
00:01:47,190 --> 00:01:44,799
astronauts farther into space than ever

38
00:01:49,749 --> 00:01:47,200

before the booster will be america's

39
00:01:51,670 --> 00:01:49,759
most powerful since the saturn v rocket

40
00:01:54,310 --> 00:01:51,680
that carried apollo astronauts to the

41
00:01:56,230 --> 00:01:54,320
moon and will launch humans to places no

42
00:01:57,910 --> 00:01:56,240
one has gone before

43
00:01:59,030 --> 00:01:57,920
we've got near-earth asteroids to go

44
00:02:01,429 --> 00:01:59,040
look at

45
00:02:03,350 --> 00:02:01,439
possible visits to the moon

46
00:02:06,469 --> 00:02:03,360
lagrangian points

47
00:02:08,150 --> 00:02:06,479
high earth orbit geosync orbit

48
00:02:10,309 --> 00:02:08,160
lots of opportunities out there we just

49
00:02:12,070 --> 00:02:10,319
have to sort out what makes sense the

50
00:02:13,910 --> 00:02:12,080
selection ended a month-long

51
00:02:16,229 --> 00:02:13,920
comprehensive review of potential

52
00:02:18,710 --> 00:02:16,239
designs to ensure the nation gets a

53
00:02:21,270 --> 00:02:18,720
rocket that is not only powerful but as

54
00:02:24,070 --> 00:02:21,280
new technologies are developed adaptable

55
00:02:26,869 --> 00:02:24,080
for different missions and destinations

56
00:02:29,750 --> 00:02:26,879
the new sls will also create high

57
00:02:31,990 --> 00:02:29,760
quality jobs here at home as it provides

58
00:02:34,470 --> 00:02:32,000
the cornerstone for america's future

59
00:02:36,550 --> 00:02:34,480
human space exploration efforts

60
00:02:38,630 --> 00:02:36,560
president obama has challenged us at

61
00:02:41,030 --> 00:02:38,640
nasa to be bold and to dream big and

62
00:02:43,270 --> 00:02:41,040
that's exactly what we do

63
00:02:44,470 --> 00:02:43,280

while i was proud to fly on the space

64
00:02:46,550 --> 00:02:44,480
shuttle

65
00:02:50,630 --> 00:02:46,560
tomorrow's explorers will dream of one

66
00:02:55,750 --> 00:02:53,190
construction's begun on the first new

67
00:02:58,790 --> 00:02:55,760
nasa orbit bound human spacecraft to be

68
00:03:00,710 --> 00:02:58,800
built in 20 years

69
00:03:03,030 --> 00:03:00,720
engineers at the michoud assembly

70
00:03:04,869 --> 00:03:03,040
facility in new orleans have started

71
00:03:06,949 --> 00:03:04,879
welding together the first orion

72
00:03:08,869 --> 00:03:06,959
multi-purpose crew vehicle

73
00:03:11,670 --> 00:03:08,879
the craft is scheduled for a test flight

74
00:03:13,750 --> 00:03:11,680
in 2013 during which the unmanned

75
00:03:16,470 --> 00:03:13,760
vehicle will orbit the earth several

76
00:03:18,869 --> 00:03:16,480
times after orion's systems and

77
00:03:21,430 --> 00:03:18,879
components are checked out the craft

78
00:03:23,670 --> 00:03:21,440
heat shield will be tested by a re-entry

79
00:03:26,229 --> 00:03:23,680
similar to what orion would endure

80
00:03:28,390 --> 00:03:26,239
during the returns from the moon mars or

81
00:03:30,789 --> 00:03:28,400
a near-earth asteroid

82
00:03:33,430 --> 00:03:30,799
nasa's last spacecraft built to orbit

83
00:03:37,750 --> 00:03:33,440
humans was space shuttle endeavour which

84
00:03:42,309 --> 00:03:39,910
nasa has agreed to collaborate with

85
00:03:44,630 --> 00:03:42,319
alliant tech systems on the development

86
00:03:47,110 --> 00:03:44,640
of atk's commercial liberty launch

87
00:03:49,509 --> 00:03:47,120
system part of the agency's commercial

88
00:03:51,589 --> 00:03:49,519

crew development round two activities

89
00:03:53,750 --> 00:03:51,599
we're on time and on budget across the

90
00:03:54,869 --> 00:03:53,760
board on our milestones that we have

91
00:03:58,070 --> 00:03:54,879
projected

92
00:04:00,550 --> 00:03:58,080
nasa and atk will review and discuss all

93
00:04:01,910 --> 00:04:00,560
technical aspects of atk's liberty

94
00:04:03,670 --> 00:04:01,920
system design

95
00:04:06,710 --> 00:04:03,680
which could become a commercial launch

96
00:04:08,949 --> 00:04:06,720
vehicle for crew cargo and satellites

97
00:04:11,030 --> 00:04:08,959
milestones begin in october and are

98
00:04:13,990 --> 00:04:11,040
scheduled to run through march of next

99
00:04:16,150 --> 00:04:14,000
year if you look at our liberty system

100
00:04:18,469 --> 00:04:16,160
nasa developed the first stage the five

101
00:04:20,550 --> 00:04:18,479
segment booster the upper stage was

102
00:04:23,110 --> 00:04:20,560
developed by esa the european space

103
00:04:25,110 --> 00:04:23,120
agency two commercial companies now are

104
00:04:27,990 --> 00:04:25,120
taking that and applying it commercially

105
00:04:30,469 --> 00:04:28,000
so we feel very fortunate to have what

106
00:04:31,990 --> 00:04:30,479
we believe is a very rigorous design

107
00:04:35,990 --> 00:04:32,000
unlike any other out there that was

108
00:04:41,270 --> 00:04:38,310
nasa's kepler space telescope has

109
00:04:43,909 --> 00:04:41,280
discovered its first circumbinary planet

110
00:04:46,230 --> 00:04:43,919
a planet that orbits two suns

111
00:04:48,629 --> 00:04:46,240
the cold saturn-sized planet is not in

112
00:04:50,629 --> 00:04:48,639
the star systems habitable zone but

113
00:04:53,350 --> 00:04:50,639

someone near the planet's surface could

114
00:04:56,469 --> 00:04:53,360
see double sunrises and sunsets similar

115
00:04:58,950 --> 00:04:56,479
to what luke skywalker saw in the 1977

116
00:05:00,629 --> 00:04:58,960
movie star wars

117
00:05:01,749 --> 00:05:00,639
there's a great moment in new hope where

118
00:05:05,510 --> 00:05:01,759
luke is

119
00:05:07,430 --> 00:05:05,520
watching a twin sunset on tatooine

120
00:05:09,510 --> 00:05:07,440
it's a it's a great way to show that

121
00:05:11,430 --> 00:05:09,520
we're not on earth that it's this exotic

122
00:05:13,270 --> 00:05:11,440
environment

123
00:05:15,350 --> 00:05:13,280
but that was never really thought to be

124
00:05:17,590 --> 00:05:15,360
possible and it's

125
00:05:18,870 --> 00:05:17,600
exciting to see that science is uh

126
00:05:21,189 --> 00:05:18,880
caught up with

127
00:05:23,749 --> 00:05:21,199
with the fantasy that

128
00:05:25,990 --> 00:05:23,759
it's real it's possible the kepler 16

129
00:05:28,870 --> 00:05:26,000
star system is located in the cygnus

130
00:05:30,629 --> 00:05:28,880
constellation about 200 light years from

131
00:05:32,310 --> 00:05:30,639
earth well this is a very exciting

132
00:05:33,990 --> 00:05:32,320
discovery for me

133
00:05:35,909 --> 00:05:34,000
in part because i've been looking for

134
00:05:37,029 --> 00:05:35,919
circumbinary planets for over two

135
00:05:39,029 --> 00:05:37,039
decades

136
00:05:41,189 --> 00:05:39,039
but it doesn't feel like an ending it

137
00:05:43,029 --> 00:05:41,199
feels like a beginning because what it

138
00:05:44,870 --> 00:05:43,039

has done is opened up a whole new type

139
00:05:47,270 --> 00:05:44,880
of planetary system that can form in the

140
00:05:51,590 --> 00:05:47,280
galaxy there must be millions of these

141
00:05:56,390 --> 00:05:53,670
the nasa team that helped with last

142
00:05:58,390 --> 00:05:56,400
year's rescue of 33 chilean miners

143
00:06:01,110 --> 00:05:58,400
trapped underground for more than nine

144
00:06:03,430 --> 00:06:01,120
weeks has received the national security

145
00:06:05,350 --> 00:06:03,440
and international affairs medal from the

146
00:06:06,390 --> 00:06:05,360
non-profit partnership for public

147
00:06:08,950 --> 00:06:06,400
service

148
00:06:10,710 --> 00:06:08,960
the team led by michael duncan former

149
00:06:13,270 --> 00:06:10,720
deputy chief medical officer at the

150
00:06:15,830 --> 00:06:13,280
johnson space center was recognized at

151
00:06:19,189 --> 00:06:15,840
the samuel j hayman service to america

152
00:06:22,150 --> 00:06:19,199
medals or sami's gala in washington

153
00:06:23,909 --> 00:06:22,160
also cited as a sami award finalist was

154
00:06:25,830 --> 00:06:23,919
nasa's launch team

155
00:06:28,150 --> 00:06:25,840
launch is a global initiative to

156
00:06:30,870 --> 00:06:28,160
identify and support innovations and

157
00:06:34,230 --> 00:06:30,880
solutions to urgent challenges facing

158
00:06:39,110 --> 00:06:36,469
participated in a macarthur foundation

159
00:06:41,029 --> 00:06:39,120
sponsored event to culminate a digital

160
00:06:43,590 --> 00:06:41,039
badges competition

161
00:06:45,270 --> 00:06:43,600
held at the hershon museum in washington

162
00:06:47,510 --> 00:06:45,280
the digital media and learning

163
00:06:49,749 --> 00:06:47,520

competition highlighted how the concept

164
00:06:52,710 --> 00:06:49,759
of digital badges is becoming an

165
00:06:55,110 --> 00:06:52,720
exciting new learning tool for students

166
00:06:57,670 --> 00:06:55,120
similar to scouting badges only more

167
00:06:59,830 --> 00:06:57,680
rigorous a digital badge can be earned

168
00:07:02,230 --> 00:06:59,840
for mastering a skill in formal and

169
00:07:04,390 --> 00:07:02,240
informal settings virtually and in

170
00:07:05,749 --> 00:07:04,400
physical spaces in schools and

171
00:07:07,909 --> 00:07:05,759
workplaces

172
00:07:10,550 --> 00:07:07,919
digital badges can also open new

173
00:07:13,510 --> 00:07:10,560
pipelines for talent and create job

174
00:07:15,589 --> 00:07:13,520
educational and civic opportunities

175
00:07:17,589 --> 00:07:15,599
nasa administrator charles bolden an

176
00:07:22,070 --> 00:07:17,599
associate administrator for education

177
00:07:22,080 --> 00:07:26,390
and now centerpieces

178
00:07:31,189 --> 00:07:27,990
during an elegant evening at the

179
00:07:33,189 --> 00:07:31,199
historic caltech athenaeum jpl director

180
00:07:35,909 --> 00:07:33,199
charles alachi was inducted into the

181
00:07:38,309 --> 00:07:35,919
french legion the highest honor awarded

182
00:07:40,870 --> 00:07:38,319
by france in recognition of your

183
00:07:43,990 --> 00:07:40,880
extraordinary achievements as a

184
00:07:48,790 --> 00:07:44,000
scientist and also again to promote

185
00:07:53,350 --> 00:07:50,710
the french award has special meaning for

186
00:07:55,270 --> 00:07:53,360
alachi who grew up in lebanon being

187
00:07:58,150 --> 00:07:55,280
honored as that country's top science

188
00:08:00,230 --> 00:07:58,160

student at the age of 16 enabled him to

189
00:08:02,390 --> 00:08:00,240
attend college in france

190
00:08:04,710 --> 00:08:02,400
the ties continued throughout his career

191
00:08:07,830 --> 00:08:04,720
including joint nasa jpl french

192
00:08:09,909 --> 00:08:07,840
breakthroughs in satellite oceanography

193
00:08:12,469 --> 00:08:09,919
and using space was a completely new

194
00:08:14,790 --> 00:08:12,479
revolution and today it's one of the

195
00:08:17,189 --> 00:08:14,800
most established scientific field the

196
00:08:19,670 --> 00:08:17,199
mars science laboratory launching later

197
00:08:23,189 --> 00:08:19,680
this year will carry a french laser to

198
00:08:25,189 --> 00:08:23,199
reveal the composition of martian rocks

199
00:08:27,670 --> 00:08:25,199
so one thing we plan to do because now

200
00:08:29,110 --> 00:08:27,680
that i got this award every time we zap

201
00:08:33,750 --> 00:08:29,120
iraq there will be a little sound which

202
00:08:47,990 --> 00:08:36,149
merci beaucoup and viv la mitier franco

203
00:08:54,790 --> 00:08:51,509
a new interactive online program called

204
00:08:57,430 --> 00:08:54,800
rockets to race cars introduces nascar

205
00:08:59,910 --> 00:08:57,440
fans to nasa created products making

206
00:09:02,230 --> 00:08:59,920
auto racing faster and safer

207
00:09:04,310 --> 00:09:02,240
site visitors navigate through the nasa

208
00:09:06,949 --> 00:09:04,320
garage to learn about heat resistant

209
00:09:08,790 --> 00:09:06,959
paint fire resistant materials the

210
00:09:11,430 --> 00:09:08,800
development of better brakes and other

211
00:09:14,230 --> 00:09:11,440
spin-offs from nasa research

212
00:09:16,790 --> 00:09:14,240
in 1996 the agency worked with the

213
00:09:18,230 --> 00:09:16,800

penske racing team to use scrap material

214
00:09:20,630 --> 00:09:18,240
from the space shuttle's thermal

215
00:09:23,990 --> 00:09:20,640
protection system blankets to cool

216
00:09:26,550 --> 00:09:24,000
drivers cockpits by 30 to 50 degrees

217
00:09:29,030 --> 00:09:26,560
since then the tps material has been a

218
00:09:30,630 --> 00:09:29,040
regular cockpit feature of race cars

219
00:09:32,790 --> 00:09:30,640
around the nation

220
00:09:35,670 --> 00:09:32,800
to find out more about rockets to race

221
00:09:36,949 --> 00:09:35,680
cars visit www

222
00:09:39,269 --> 00:09:36,959
dot

223
00:09:42,550 --> 00:09:39,279
r2r

224
00:09:45,269 --> 00:09:42,560
and that's this week at nasa for more on