



Liberty

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
garan 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
anatola 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

00:02:50,309 --> 00:02:46,560

tomorrow's explorers will dream of one

66

00:02:52,790 --> 00:02:50,319

day walking on mars

67

00:02:55,270 --> 00:02:52,800

construction began recently on the first

68

00:02:57,430 --> 00:02:55,280

new nasa human spacecraft bound for

69

00:03:00,630 --> 00:02:57,440

orbit to be built since space shuttle

70

00:03:02,949 --> 00:03:00,640

endeavour left the factory in 1991

71

00:03:05,350 --> 00:03:02,959

engineers at nasa's misshud assembly

72

00:03:07,589 --> 00:03:05,360

facility in new orleans started welding

73

00:03:09,830 --> 00:03:07,599

together the first space-bound orion

74

00:03:12,309 --> 00:03:09,840

multi-purpose crew vehicle

75

00:03:14,550 --> 00:03:12,319

after welding is completed at michoud

76

00:03:16,149 --> 00:03:14,560

the orion spacecraft orbital test

77

00:03:18,470 --> 00:03:16,159

article will be shipped to the kennedy

78

00:03:19,750 --> 00:03:18,480

space center where its heat shield will

79

00:03:21,990 --> 00:03:19,760

be installed

80

00:03:24,789 --> 00:03:22,000

at kennedy it will then undergo final

81

00:03:28,149 --> 00:03:24,799

assembly and checkout operations for

82

00:03:32,710 --> 00:03:30,309

nasa has agreed to collaborate with

83

00:03:35,030 --> 00:03:32,720

alliant tech systems on the development

84

00:03:35,910 --> 00:03:35,040

of atk's commercial liberty launch

85

00:03:37,750 --> 00:03:35,920

system

86

00:03:40,390 --> 00:03:37,760

part of the agency's commercial crew

87

00:03:42,949 --> 00:03:40,400

development round 2 activities we are on

88

00:03:45,190 --> 00:03:42,959

time and on budget across the board on

89

00:03:48,390 --> 00:03:45,200

our milestones that we have projected

90

00:03:50,869 --> 00:03:48,400

nasa and atk will review and discuss all

91

00:03:53,110 --> 00:03:50,879

technical aspects of atk's liberty

92

00:03:55,509 --> 00:03:53,120

system design which could become a

93

00:03:57,030 --> 00:03:55,519

commercial launch vehicle for crew cargo

94

00:03:59,350 --> 00:03:57,040

and satellites

95

00:04:01,350 --> 00:03:59,360

milestones begin in october and are

96

00:04:04,309 --> 00:04:01,360

scheduled to run through march of next

97

00:04:06,550 --> 00:04:04,319

year if you look at our liberty system

98

00:04:08,789 --> 00:04:06,560

nasa developed the first stage the five

99

00:04:10,949 --> 00:04:08,799

segment booster the upper stage was

100

00:04:13,429 --> 00:04:10,959

developed by esa the european space

101
00:04:15,429 --> 00:04:13,439
agency two commercial companies now are

102
00:04:18,310 --> 00:04:15,439
taking that and applying it commercially

103
00:04:20,870 --> 00:04:18,320
so we feel very fortunate to have what

104
00:04:22,310 --> 00:04:20,880
we believe is a very rigorous design

105
00:04:26,390 --> 00:04:22,320
unlike any other out there that was

106
00:04:30,790 --> 00:04:28,390
nasa's kepler space telescope

107
00:04:34,310 --> 00:04:30,800
has discovered its first circumbinary

108
00:04:36,629 --> 00:04:34,320
planet a planet that orbits two suns

109
00:04:38,950 --> 00:04:36,639
the coal saturn-sized planet is not in

110
00:04:40,950 --> 00:04:38,960
the star systems habitable zone but

111
00:04:43,670 --> 00:04:40,960
someone near the planet's surface could

112
00:04:46,870 --> 00:04:43,680
see double sunrises and sunsets similar

113
00:04:49,350 --> 00:04:46,880

to what luke skywalker saw in the 1977

114

00:04:51,030 --> 00:04:49,360

movie star wars

115

00:04:52,150 --> 00:04:51,040

there's a great moment in new hope where

116

00:04:55,670 --> 00:04:52,160

luke is

117

00:04:57,830 --> 00:04:55,680

watching a twin sunset on tatooine

118

00:04:59,909 --> 00:04:57,840

and it's a it's a great way to show that

119

00:05:03,110 --> 00:04:59,919

we're not on earth that it's this exotic

120

00:05:05,670 --> 00:05:03,120

environment um but that was never really

121

00:05:07,909 --> 00:05:05,680

thought to be possible and it's

122

00:05:11,510 --> 00:05:07,919

exciting to see that science is uh

123

00:05:14,150 --> 00:05:11,520

caught up with with the fantasy that

124

00:05:16,390 --> 00:05:14,160

it's real it's possible the kepler 16

125

00:05:19,270 --> 00:05:16,400

star system is located in the cygnus

126
00:05:20,950 --> 00:05:19,280
constellation about 200 light years from

127
00:05:22,710 --> 00:05:20,960
earth well this is a very exciting

128
00:05:24,310 --> 00:05:22,720
discovery for me

129
00:05:26,230 --> 00:05:24,320
in part because i've been looking for

130
00:05:27,350 --> 00:05:26,240
circumbinary planets for over two

131
00:05:29,430 --> 00:05:27,360
decades

132
00:05:31,590 --> 00:05:29,440
but it doesn't feel like an ending it

133
00:05:33,430 --> 00:05:31,600
feels like a beginning because what it

134
00:05:35,189 --> 00:05:33,440
has done is opened up a whole new type

135
00:05:37,590 --> 00:05:35,199
of planetary system that can form in the

136
00:05:41,990 --> 00:05:37,600
galaxy there must be millions of these

137
00:05:46,790 --> 00:05:44,070
the nasa team that helped with last

138
00:05:48,790 --> 00:05:46,800

year's rescue of 33 chilean miners

139

00:05:51,430 --> 00:05:48,800

trapped underground for more than nine

140

00:05:53,749 --> 00:05:51,440

weeks has received the national security

141

00:05:55,670 --> 00:05:53,759

and international affairs medal from the

142

00:05:56,710 --> 00:05:55,680

non-profit partnership for public

143

00:05:59,270 --> 00:05:56,720

service

144

00:06:01,110 --> 00:05:59,280

the team led by michael duncan former

145

00:06:03,590 --> 00:06:01,120

deputy chief medical officer at the

146

00:06:06,230 --> 00:06:03,600

johnson space center was recognized at

147

00:06:09,590 --> 00:06:06,240

the samuel j heyman's service to america

148

00:06:12,469 --> 00:06:09,600

medals or sami's gala in washington

149

00:06:14,230 --> 00:06:12,479

also cited as a sammy award finalist was

150

00:06:16,230 --> 00:06:14,240

nasa's launch team

151
00:06:18,469 --> 00:06:16,240
launch is a global initiative to

152
00:06:21,189 --> 00:06:18,479
identify and support innovations and

153
00:06:24,230 --> 00:06:21,199
solutions to urgent challenges facing

154
00:06:28,870 --> 00:06:26,230
nasa participated in a macarthur

155
00:06:31,350 --> 00:06:28,880
foundation sponsored event to culminate

156
00:06:33,990 --> 00:06:31,360
a digital badges competition

157
00:06:35,590 --> 00:06:34,000
held at the hershon museum in washington

158
00:06:37,909 --> 00:06:35,600
the digital media and learning

159
00:06:40,150 --> 00:06:37,919
competition highlighted how the concept

160
00:06:43,110 --> 00:06:40,160
of digital badges is becoming an

161
00:06:45,510 --> 00:06:43,120
exciting new learning tool for students

162
00:06:47,990 --> 00:06:45,520
similar to scouting badges only more

163
00:06:50,150 --> 00:06:48,000

rigorous a digital badge can be earned

164

00:06:51,670 --> 00:06:50,160

for mastering a skill in formal and

165

00:06:54,070 --> 00:06:51,680

informal settings

166

00:06:56,150 --> 00:06:54,080

virtually and in physical spaces in

167

00:06:58,230 --> 00:06:56,160

schools and workplaces

168

00:07:00,950 --> 00:06:58,240

digital badges can also open new

169

00:07:03,909 --> 00:07:00,960

pipelines for talent and create job

170

00:07:05,909 --> 00:07:03,919

educational and civic opportunities

171

00:07:07,990 --> 00:07:05,919

nasa administrator charles bolden an

172

00:07:12,390 --> 00:07:08,000

associate administrator for education

173

00:07:12,400 --> 00:07:16,710

and now centerpieces

174

00:07:21,510 --> 00:07:18,309

during an elegant evening at the

175

00:07:23,589 --> 00:07:21,520

historic caltech athenaeum jpl director

176

00:07:26,230 --> 00:07:23,599

charles alachi was inducted into the

177

00:07:28,830 --> 00:07:26,240

french legion the highest honor awarded

178

00:07:31,270 --> 00:07:28,840

by france in recognition of your

179

00:07:34,309 --> 00:07:31,280

extraordinary achievements as a

180

00:07:39,110 --> 00:07:34,319

scientist and also again to promote

181

00:07:43,670 --> 00:07:41,029

the french award has special meaning for

182

00:07:45,670 --> 00:07:43,680

alachi who grew up in lebanon being

183

00:07:48,550 --> 00:07:45,680

honored as that country's top science

184

00:07:51,110 --> 00:07:48,560

student at the age of 16 enabled him to

185

00:07:52,790 --> 00:07:51,120

attend college in france the ties

186

00:07:55,029 --> 00:07:52,800

continued throughout his career

187

00:07:58,230 --> 00:07:55,039

including joint nasa jpl french

188

00:08:00,230 --> 00:07:58,240

breakthroughs in satellite oceanography

189

00:08:02,790 --> 00:08:00,240

and using space was a completely new

190

00:08:05,110 --> 00:08:02,800

revolution and today it's one of the

191

00:08:07,510 --> 00:08:05,120

most established scientific field the

192

00:08:09,990 --> 00:08:07,520

mars science laboratory launching later

193

00:08:13,589 --> 00:08:10,000

this year will carry a french laser to

194

00:08:15,510 --> 00:08:13,599

reveal the composition of martian rocks

195

00:08:17,990 --> 00:08:15,520

so one thing we plan to do because now

196

00:08:19,430 --> 00:08:18,000

that i got this award every time we zap

197

00:08:24,070 --> 00:08:19,440

iraq there will be a little sound which

198

00:08:38,389 --> 00:08:26,469

merci beaucoup and viv la meteo franco

199

00:08:45,110 --> 00:08:41,829

a new interactive online program called

200

00:08:47,750 --> 00:08:45,120

rockets to race cars introduces nascar

201
00:08:50,230 --> 00:08:47,760
fans to nasa created products making

202
00:08:52,550 --> 00:08:50,240
auto racing faster and safer

203
00:08:54,710 --> 00:08:52,560
site visitors navigate through the nasa

204
00:08:57,350 --> 00:08:54,720
garage to learn about heat resistant

205
00:08:59,190 --> 00:08:57,360
paint fire resistant materials the

206
00:09:01,829 --> 00:08:59,200
development of better breaks and other

207
00:09:04,550 --> 00:09:01,839
spin-offs from nasa research

208
00:09:07,190 --> 00:09:04,560
in 1996 the agency worked with the

209
00:09:08,550 --> 00:09:07,200
penske racing team to use scrap material

210
00:09:10,949 --> 00:09:08,560
from the space shuttle's thermal

211
00:09:14,389 --> 00:09:10,959
protection system blankets to cool

212
00:09:16,949 --> 00:09:14,399
drivers cockpits by 30 to 50 degrees

213
00:09:19,430 --> 00:09:16,959

since then the tps material has been a

214

00:09:21,030 --> 00:09:19,440

regular cockpit feature of race cars

215

00:09:23,190 --> 00:09:21,040

around the nation

216

00:09:25,630 --> 00:09:23,200

to find out more about rockets to race

217

00:09:29,590 --> 00:09:25,640

cars visit

218

00:09:32,870 --> 00:09:29,600

www.nasa.gov slash r2r

219

00:09:35,670 --> 00:09:32,880

and that's this week at nasa for more on