1
00:00:05,749 --> 00:00:03,669
well good morning everybody and welcome

2
00:00:08,790 --> 00:00:05,759
to nasa's johnson space center and our

3
00:00:10,310 --> 00:00:08,800
pre-flight press briefings for atlantis

4
00:00:12,870 --> 00:00:10,320
voyage to the international space

5
00:00:14,390 --> 00:00:12,880
station sts-132

6
00:00:16,230 --> 00:00:14,400
international space station assembly

7
00:00:18,550 --> 00:00:16,240
flight ulf4

8
00:00:20,470 --> 00:00:18,560
joining us for the first briefing is the

9
00:00:23,029 --> 00:00:20,480
for the program overview is john shannon

10
00:00:24,870 --> 00:00:23,039
and mike sufferdini john shannon is the

11
00:00:26,950 --> 00:00:24,880
program manager for the space shuttle

12
00:00:28,710 --> 00:00:26,960
program and mike subradini is the

13
00:00:30,550 --> 00:00:28,720

program manager for the international

14
00:00:32,229 --> 00:00:30,560
space station program

15
00:00:33,990 --> 00:00:32,239
we'll hear from both and then we'll take

16
00:00:35,430 --> 00:00:34,000
questions here and at the other nasa

17
00:00:36,389 --> 00:00:35,440
centers with that i'll turn it over to

18
00:00:37,910 --> 00:00:36,399
john

19
00:00:40,549 --> 00:00:37,920
okay thanks kyle

20
00:00:43,750 --> 00:00:40,559
we're doing very well in in our

21
00:00:47,670 --> 00:00:43,760
preparations for the the may 14th launch

22
00:00:51,430 --> 00:00:49,350
if you remember we had a little bit of

23
00:00:54,150 --> 00:00:51,440
difficulty getting atlantis out to the

24
00:00:56,389 --> 00:00:54,160
pad due to due to weather and and some

25
00:00:58,389 --> 00:00:56,399
other issues and the team at kennedy

26
00:00:59,830 --> 00:00:58,399
space center did a really nice job

27
00:01:02,069 --> 00:00:59,840
of protecting the hardware and making

28
00:01:04,229 --> 00:01:02,079
sure that we got out there safely

29
00:01:07,429 --> 00:01:04,239
but what happened is it reduced our

30
00:01:09,590 --> 00:01:07,439
contingency time down to about one day

31
00:01:11,270 --> 00:01:09,600
the team has been doing a great job of

32
00:01:12,870 --> 00:01:11,280
processing the vehicle we've had no

33
00:01:14,469 --> 00:01:12,880
issues that have taken up that

34
00:01:16,070 --> 00:01:14,479
contingency day

35
00:01:19,510 --> 00:01:16,080
but we're watching that but so far

36
00:01:21,190 --> 00:01:19,520
things are looking looking really good

37
00:01:23,830 --> 00:01:21,200
there's some additional work that's been

38
00:01:26,469 --> 00:01:23,840

going on since we just landed 13 days

39
00:01:27,670 --> 00:01:26,479
ago and it's been a been a real quick

40
00:01:28,710 --> 00:01:27,680
turnaround

41
00:01:29,510 --> 00:01:28,720
the uh

42
00:01:32,069 --> 00:01:29,520
the

43
00:01:33,030 --> 00:01:32,079
fact that discovery uh

44
00:01:35,109 --> 00:01:33,040
mission

45
00:01:36,789 --> 00:01:35,119
two weeks ago really went so well and we

46
00:01:39,190 --> 00:01:36,799
had so few issues

47
00:01:40,550 --> 00:01:39,200
uh has really enabled us to uh to be

48
00:01:43,030 --> 00:01:40,560
able to

49
00:01:44,389 --> 00:01:43,040
look at all of uh all of the uh the

50
00:01:46,630 --> 00:01:44,399
flight performance and make sure that

51
00:01:50,310 --> 00:01:46,640
atlantis is ready to go as well we got

52
00:01:52,710 --> 00:01:50,320
the the ku band antenna electronics out

53
00:01:55,910 --> 00:01:52,720
of discovery and took it to our depot

54
00:01:57,830 --> 00:01:55,920
where we do repairs over the weekend and

55
00:02:01,350 --> 00:01:57,840
determined that the the issue was a

56
00:02:03,590 --> 00:02:01,360
faulty transistor inside the the exciter

57
00:02:05,030 --> 00:02:03,600
circuit so basically the the antenna

58
00:02:06,789 --> 00:02:05,040
could not radiate

59
00:02:08,710 --> 00:02:06,799
we've done all the checks on atlantis

60
00:02:11,350 --> 00:02:08,720
kuban antenna and we do not believe that

61
00:02:13,350 --> 00:02:11,360
we have any type of a similar problem

62
00:02:16,390 --> 00:02:13,360
that transistor is the is the same type

63
00:02:17,990 --> 00:02:16,400

of transistor that failed back on sts-92

64
00:02:19,750 --> 00:02:18,000
i believe the last time we lost a ku

65
00:02:22,470 --> 00:02:19,760
band antenna

66
00:02:23,670 --> 00:02:22,480
we also had had a loss of

67
00:02:25,830 --> 00:02:23,680
a small

68
00:02:28,150 --> 00:02:25,840
ceramic plug that goes over the top of

69
00:02:29,670 --> 00:02:28,160
the fasteners around the windows and the

70
00:02:32,309 --> 00:02:29,680
in the side hatch

71
00:02:34,949 --> 00:02:32,319
and the payload bay door hinge line

72
00:02:37,509 --> 00:02:34,959
any areas where we want to take

73
00:02:39,030 --> 00:02:37,519
tiles or carrier panels off we'll have a

74
00:02:40,150 --> 00:02:39,040
fastener but over that fastener for

75
00:02:42,070 --> 00:02:40,160
thermal protection we'll put a little

76
00:02:43,910 --> 00:02:42,080
ceramic plug

77
00:02:45,910 --> 00:02:43,920
we had changed out

78
00:02:47,910 --> 00:02:45,920
a number of those plugs prior to

79
00:02:49,110 --> 00:02:47,920
discovery's mission so that we could

80
00:02:50,949 --> 00:02:49,120
make sure that we were not putting too

81
00:02:52,869 --> 00:02:50,959
much pressure on them so they come out

82
00:02:54,229 --> 00:02:52,879
we actually lost one and we think it's

83
00:02:57,509 --> 00:02:54,239
because the retaining feature that we

84
00:03:00,470 --> 00:02:57,519
had was not uh was not sufficient so

85
00:03:02,869 --> 00:03:00,480
we're being proactive and going in to

86
00:03:04,550 --> 00:03:02,879
atlantis ceramic plugs and replacing all

87
00:03:06,070 --> 00:03:04,560
of them around the windows all of them

88
00:03:07,990 --> 00:03:06,080

around the side hatch

89
00:03:09,589 --> 00:03:08,000
and i i'm just really proud of the team

90
00:03:12,390 --> 00:03:09,599
i there was probably a case to be made

91
00:03:14,070 --> 00:03:12,400
where we did not have to go do that work

92
00:03:16,149 --> 00:03:14,080
but even though it's the last planned

93
00:03:17,910 --> 00:03:16,159
flight of atlantis the team is is

94
00:03:20,390 --> 00:03:17,920
continuing to do all the things that we

95
00:03:23,110 --> 00:03:20,400
can to to make sure the vehicle is in as

96
00:03:25,149 --> 00:03:23,120
good a shape as as possible

97
00:03:29,110 --> 00:03:25,159
other news in the program

98
00:03:31,030 --> 00:03:29,120
et-137 which is our next to last

99
00:03:34,149 --> 00:03:31,040
external tank for the program that we

100
00:03:37,030 --> 00:03:34,159
expect to fly it's on the barge pegasus

101
00:03:39,190 --> 00:03:37,040
out at michoud assembly facility

102
00:03:40,949 --> 00:03:39,200
the freedom star which is our solid

103
00:03:43,190 --> 00:03:40,959
rocket booster recovery ship that would

104
00:03:45,430 --> 00:03:43,200
go get that barge with the et on it and

105
00:03:47,990 --> 00:03:45,440
bring it around to kennedy space center

106
00:03:50,149 --> 00:03:48,000
it is it's kind of stuck in in gulfport

107
00:03:52,390 --> 00:03:50,159
mississippi right now

108
00:03:54,070 --> 00:03:52,400
because of the oil slick they'd have to

109
00:03:56,390 --> 00:03:54,080
take a little different path with the

110
00:03:57,990 --> 00:03:56,400
barge and the the freedom star cannot do

111
00:03:58,830 --> 00:03:58,000
that shallow water

112
00:04:05,830 --> 00:03:58,840
uh

113
00:04:08,070 --> 00:04:05,840

external tank team has done a really

114
00:04:10,229 --> 00:04:08,080
nice job of of uh getting some

115
00:04:12,789 --> 00:04:10,239
commercial tugs to be able to take

116
00:04:14,470 --> 00:04:12,799
pegasus over to uh to gulfport where

117
00:04:16,069 --> 00:04:14,480
we'll hook up with the with the freedom

118
00:04:18,550 --> 00:04:16,079
star and then freedom star will bring it

119
00:04:20,469 --> 00:04:18,560
around to kennedy space center

120
00:04:22,710 --> 00:04:20,479
we're going to start that

121
00:04:25,909 --> 00:04:22,720
that journey uh tonight at about seven

122
00:04:28,070 --> 00:04:25,919
o'clock and that will allow freedom star

123
00:04:29,670 --> 00:04:28,080
to uh to start the move around to

124
00:04:31,830 --> 00:04:29,680
kennedy space center during the daylight

125
00:04:33,189 --> 00:04:31,840
so they can look for any oil slicks

126
00:04:34,870 --> 00:04:33,199
additionally the team has kind of gone

127
00:04:37,670 --> 00:04:34,880
above and beyond they've looked at any

128
00:04:40,070 --> 00:04:37,680
impacts of any oil off-gassing from sea

129
00:04:41,670 --> 00:04:40,080
water on external tank foam or any of

130
00:04:43,909 --> 00:04:41,680
the systems on the

131
00:04:45,510 --> 00:04:43,919
on the barge or on freedom star and and

132
00:04:47,670 --> 00:04:45,520
all those studies are complete and it

133
00:04:49,590 --> 00:04:47,680
all looks really good so you know even

134
00:04:52,390 --> 00:04:49,600
though we we dealt with weather for the

135
00:04:54,469 --> 00:04:52,400
roll out uh the team worked around it

136
00:04:55,990 --> 00:04:54,479
extremely well even though we have a

137
00:04:58,310 --> 00:04:56,000
small turnaround between these two

138
00:05:00,550 --> 00:04:58,320

flights the team has has done all of the

139
00:05:02,629 --> 00:05:00,560
work they needed to do to to assess any

140
00:05:05,510 --> 00:05:02,639
anomalies and has done well and even

141
00:05:07,110 --> 00:05:05,520
though we have this this unexpected uh

142
00:05:09,029 --> 00:05:07,120
oil spill out in the gulf the team is

143
00:05:11,189 --> 00:05:09,039
just working around that so it's just a

144
00:05:13,350 --> 00:05:11,199
it's a very robust very intelligent team

145
00:05:15,350 --> 00:05:13,360
that is uh is doing what is required to

146
00:05:18,310 --> 00:05:15,360
keep the program on track

147
00:05:20,870 --> 00:05:18,320
um we're going to meet this friday to do

148
00:05:23,189 --> 00:05:20,880
our one of our final budget reviews for

149
00:05:25,590 --> 00:05:23,199
the uh for the

150
00:05:26,950 --> 00:05:25,600
middle of the year here and we track our

151
00:05:29,749 --> 00:05:26,960
human capital

152
00:05:31,990 --> 00:05:29,759
and all of the indications are that the

153
00:05:34,070 --> 00:05:32,000
human capital for the shuttle program

154
00:05:35,590 --> 00:05:34,080
execution is going very well

155
00:05:37,990 --> 00:05:35,600
we track our critical skills very

156
00:05:40,390 --> 00:05:38,000
closely and and that all looks really

157
00:05:42,870 --> 00:05:40,400
good so we don't see any any issues with

158
00:05:47,990 --> 00:05:42,880
finishing out the program this year

159
00:05:52,629 --> 00:05:50,790
well good morning uh it's uh we're

160
00:05:54,629 --> 00:05:52,639
leading up to our

161
00:05:56,950 --> 00:05:54,639
third to our last shuttle flight to iss

162
00:05:59,670 --> 00:05:56,960
all of these flights bring us a number

163
00:06:01,990 --> 00:05:59,680

of um critical components because of the

164
00:06:03,990 --> 00:06:02,000
upload capability iss we do quite a bit

165
00:06:05,749 --> 00:06:04,000
of things on each one of these flights

166
00:06:07,830 --> 00:06:05,759
as you've all become accustomed to this

167
00:06:10,629 --> 00:06:07,840
particular flight is no different

168
00:06:13,029 --> 00:06:10,639
uh we're installing an extension to the

169
00:06:16,230 --> 00:06:13,039
fgb nadir port uh referred to as the

170
00:06:20,070 --> 00:06:16,240
mini research module 2 or mrm2 you'll

171
00:06:21,270 --> 00:06:20,080
hear us talk about it it is not only is

172
00:06:22,550 --> 00:06:21,280
it act as

173
00:06:25,270 --> 00:06:22,560
an extension

174
00:06:27,270 --> 00:06:25,280
so we can clear an interference between

175
00:06:28,469 --> 00:06:27,280
uh with the node 1 nader port when we

176
00:06:30,550 --> 00:06:28,479
put the

177
00:06:33,510 --> 00:06:30,560
new permanent

178
00:06:36,150 --> 00:06:33,520
stowage module the pmm on there

179
00:06:37,590 --> 00:06:36,160
but also it's carrying about 1.4 metric

180
00:06:39,430 --> 00:06:37,600
tons of

181
00:06:41,110 --> 00:06:39,440
of cargo inside

182
00:06:43,270 --> 00:06:41,120
and we won't get to that until after the

183
00:06:46,070 --> 00:06:43,280
shuttle leaves but that is critical

184
00:06:48,390 --> 00:06:46,080
logistics for us as well

185
00:06:50,309 --> 00:06:48,400
and of course in addition to uh to that

186
00:06:52,550 --> 00:06:50,319
for this flight we're changing out the

187
00:06:55,029 --> 00:06:52,560
batteries uh the other set of batteries

188
00:06:56,230 --> 00:06:55,039

on the on the p6 module uh we have quite

189
00:06:58,070 --> 00:06:56,240
a bit of experience with that from the

190
00:07:00,870 --> 00:06:58,080
last flight we learned a lot

191
00:07:02,950 --> 00:07:00,880
uh we've been we've included those

192
00:07:04,390 --> 00:07:02,960
lessons learned into into this

193
00:07:06,070 --> 00:07:04,400
particular

194
00:07:09,510 --> 00:07:06,080
mission and have high degree of

195
00:07:12,390 --> 00:07:09,520
confidence that the battery change out

196
00:07:14,309 --> 00:07:12,400
will go according to plan

197
00:07:16,469 --> 00:07:14,319
in addition to that we have

198
00:07:17,990 --> 00:07:16,479
the backup ku band system is something

199
00:07:19,350 --> 00:07:18,000
we actually added to the program a

200
00:07:21,749 --> 00:07:19,360
couple years ago

201
00:07:25,029 --> 00:07:21,759
uh it's flying up and we'll uh we'll

202
00:07:27,510 --> 00:07:25,039
install that on the uh on the z1 truss

203
00:07:30,309 --> 00:07:27,520
uh it's a cold backup capability until

204
00:07:32,469 --> 00:07:30,319
we get our new avionics system on board

205
00:07:34,469 --> 00:07:32,479
in about the 2011 time frame and at that

206
00:07:36,550 --> 00:07:34,479
point it'll be a kind of a warm backup

207
00:07:38,390 --> 00:07:36,560
if the other ku band

208
00:07:41,430 --> 00:07:38,400
has a problem we can quickly switch to

209
00:07:43,670 --> 00:07:41,440
this uh this backup system

210
00:07:45,189 --> 00:07:43,680
in addition to that we're flying up a

211
00:07:48,469 --> 00:07:45,199
small device

212
00:07:51,510 --> 00:07:48,479
that will attach to the dexter

213
00:07:53,749 --> 00:07:51,520

arms and hold the orus for us when

214
00:07:55,749 --> 00:07:53,759
they're doing changeouts that's we call

215
00:07:57,350 --> 00:07:55,759
it the eotp

216
00:07:59,029 --> 00:07:57,360
all of these components are installed in

217
00:08:02,309 --> 00:07:59,039
the payload bay there all the checkouts

218
00:08:05,749 --> 00:08:02,319
are complete we completed our sorr which

219
00:08:10,309 --> 00:08:05,759
is a station version of a pre-frr

220
00:08:14,550 --> 00:08:12,629
on orbit as we prepare for the launch we

221
00:08:16,230 --> 00:08:14,560
have a few things left to do it seems

222
00:08:18,390 --> 00:08:16,240
like it's always the case we're very

223
00:08:21,990 --> 00:08:18,400
busy traffic wise uh

224
00:08:24,710 --> 00:08:22,000
uh on iss because we need to clear

225
00:08:27,510 --> 00:08:24,720
uh the port that this uh this new module

226
00:08:30,070 --> 00:08:27,520
is gonna go to on the fgb nader

227
00:08:31,990 --> 00:08:30,080
we have to move the 21 soyuz in order to

228
00:08:33,509 --> 00:08:32,000
move the 21 soyuz we have to have a port

229
00:08:34,870 --> 00:08:33,519
clear to put it in

230
00:08:37,589 --> 00:08:34,880
and that port is going to be where the

231
00:08:40,389 --> 00:08:37,599
36p progress

232
00:08:42,870 --> 00:08:40,399
sits today which is the sm aft port so

233
00:08:45,910 --> 00:08:42,880
on may 10th the plan is to

234
00:08:48,150 --> 00:08:45,920
to go ahead and undock the 36 progress

235
00:08:51,670 --> 00:08:48,160
and and send it home and then on the

236
00:08:54,150 --> 00:08:51,680
12th we'll relocate 21 soyuz from fgb

237
00:08:55,190 --> 00:08:54,160
nader put it to the sm aft and that will

238
00:08:56,230 --> 00:08:55,200

clear the way

239
00:09:02,630 --> 00:08:56,240
for the

240
00:09:05,190 --> 00:09:02,640
so those those activities are planned uh

241
00:09:08,790 --> 00:09:05,200
over the weekend as you witnessed we had

242
00:09:10,790 --> 00:09:08,800
the docking of the 37 progress

243
00:09:12,949 --> 00:09:10,800
about a kilometer out

244
00:09:14,949 --> 00:09:12,959
the one of the one of the thrusters on

245
00:09:16,389 --> 00:09:14,959
the progress had a problem

246
00:09:19,110 --> 00:09:16,399
uh the

247
00:09:21,190 --> 00:09:19,120
the automated system lost track with the

248
00:09:23,990 --> 00:09:21,200
station and so the crew was asked to

249
00:09:26,870 --> 00:09:24,000
take manual control of the progress

250
00:09:28,630 --> 00:09:26,880
which they did and oleg flew it

251
00:09:30,710 --> 00:09:28,640
flew it in and docked it

252
00:09:31,910 --> 00:09:30,720
safely to the iss he did a magnificent

253
00:09:33,030 --> 00:09:31,920
job and according to our russian

254
00:09:34,630 --> 00:09:33,040
counterparts

255
00:09:36,710 --> 00:09:34,640
that's the furthest away a crew has

256
00:09:38,949 --> 00:09:36,720
flown a progress into

257
00:09:41,110 --> 00:09:38,959
to dock to the iss so

258
00:09:42,870 --> 00:09:41,120
our our hats off to the crew and our

259
00:09:46,230 --> 00:09:42,880
russian colleagues for

260
00:09:49,030 --> 00:09:46,240
for performing that to activity

261
00:09:50,630 --> 00:09:49,040
but of course the thruster question is

262
00:09:52,150 --> 00:09:50,640
uh is an issue being worked by our

263
00:09:54,550 --> 00:09:52,160

russian colleagues

264
00:09:56,070 --> 00:09:54,560
in addition to that particular thruster

265
00:09:57,190 --> 00:09:56,080
issue

266
00:09:59,350 --> 00:09:57,200
we

267
00:10:02,150 --> 00:09:59,360
had installed the new service module

268
00:10:04,630 --> 00:10:02,160
thrusters i mean sorry software

269
00:10:05,829 --> 00:10:04,640
to the new service module computers and

270
00:10:07,670 --> 00:10:05,839
uh

271
00:10:09,910 --> 00:10:07,680
after we installed it's referred to as

272
00:10:12,630 --> 00:10:09,920
sm 8.04

273
00:10:14,230 --> 00:10:12,640
the 36 progress thrusters of the time

274
00:10:15,829 --> 00:10:14,240
went offline

275
00:10:18,389 --> 00:10:15,839
uh they have they have

276
00:10:19,750 --> 00:10:18,399
subsequently been regained

277
00:10:21,590 --> 00:10:19,760
but our russian colleagues are trying to

278
00:10:22,710 --> 00:10:21,600
understand is there any relationship

279
00:10:25,350 --> 00:10:22,720
between

280
00:10:27,910 --> 00:10:25,360
this new software the 36p anomaly and

281
00:10:29,670 --> 00:10:27,920
the 37p anomalies and they're

282
00:10:31,269 --> 00:10:29,680
they've formed a commission to go sort

283
00:10:32,470 --> 00:10:31,279
this out and try to understand the

284
00:10:34,230 --> 00:10:32,480
implications

285
00:10:36,630 --> 00:10:34,240
in the meantime we'll use the the

286
00:10:39,430 --> 00:10:36,640
service module thrusters for uh control

287
00:10:42,069 --> 00:10:39,440
of the vehicle until they they complete

288
00:10:44,550 --> 00:10:42,079

uh their analysis and get back with us

289
00:10:46,790 --> 00:10:44,560
with us on that

290
00:10:48,870 --> 00:10:46,800
right now the station's in good shape

291
00:10:50,470 --> 00:10:48,880
uh in fact we had a little bit of as

292
00:10:52,069 --> 00:10:50,480
mentioned one of you today uh we had a

293
00:10:53,750 --> 00:10:52,079
little bit of luck which we also take in

294
00:10:54,630 --> 00:10:53,760
the in the program whenever it's given

295
00:10:57,110 --> 00:10:54,640
to us

296
00:11:00,230 --> 00:10:57,120
we were able to finally free up

297
00:11:02,470 --> 00:11:00,240
a regulator that is in the nitrogen tank

298
00:11:03,430 --> 00:11:02,480
assembly that would not open back up for

299
00:11:06,069 --> 00:11:03,440
us

300
00:11:07,990 --> 00:11:06,079
during the last mission we did manage to

301
00:11:11,750 --> 00:11:08,000
finally free it up after making it very

302
00:11:14,630 --> 00:11:11,760
cold and then commanding it it did react

303
00:11:16,630 --> 00:11:14,640
we put it in a position a fixed position

304
00:11:18,389 --> 00:11:16,640
and powered it down and so we have

305
00:11:19,350 --> 00:11:18,399
pressure to the system the ammonia tank

306
00:11:22,310 --> 00:11:19,360
is now

307
00:11:25,829 --> 00:11:22,320
integrated into the into the cooling

308
00:11:27,670 --> 00:11:25,839
system and we're good to go for the long

309
00:11:30,310 --> 00:11:27,680
term the team is off

310
00:11:32,150 --> 00:11:30,320
assessing whether or not we can live

311
00:11:34,630 --> 00:11:32,160
with the nitrogen tank in a fixed

312
00:11:36,790 --> 00:11:34,640
position for the life of the tank

313
00:11:38,230 --> 00:11:36,800

early indications are that

314
00:11:39,670 --> 00:11:38,240
we will be able to do that and that

315
00:11:41,110 --> 00:11:39,680
would be great news that tank's

316
00:11:43,670 --> 00:11:41,120
relatively new

317
00:11:45,350 --> 00:11:43,680
we really would hate to have

318
00:11:46,790 --> 00:11:45,360
had to bring it home or at least take it

319
00:11:48,389 --> 00:11:46,800
out and replace it with the spare this

320
00:11:49,670 --> 00:11:48,399
early in its life

321
00:11:51,670 --> 00:11:49,680
so that's

322
00:11:53,430 --> 00:11:51,680
that was good news for us

323
00:11:56,949 --> 00:11:53,440
in addition to that

324
00:11:59,590 --> 00:11:56,959
we reconfigured the space station to put

325
00:12:01,190 --> 00:11:59,600
put the fourth crew quarter in place in

326
00:12:02,870 --> 00:12:01,200
node two

327
00:12:06,310 --> 00:12:02,880
in order to do that unfortunately we had

328
00:12:07,829 --> 00:12:06,320
to move uh the t2 and

329
00:12:10,069 --> 00:12:07,839
before we did that we wanted to make

330
00:12:11,990 --> 00:12:10,079
sure that the yearly maintenance on the

331
00:12:14,629 --> 00:12:12,000
tvis was done and so

332
00:12:16,310 --> 00:12:14,639
over the last couple couple of weeks the

333
00:12:17,990 --> 00:12:16,320
team has worked very hard in the crew

334
00:12:19,990 --> 00:12:18,000
too because they did it

335
00:12:21,829 --> 00:12:20,000
partly on their their days off over the

336
00:12:23,910 --> 00:12:21,839
weekends

337
00:12:26,710 --> 00:12:23,920
we we did the maintenance on the on the

338
00:12:29,750 --> 00:12:26,720

tvs uh which was uh quite a bit of work

339
00:12:32,550 --> 00:12:29,760
for the for the uh crew they got it back

340
00:12:34,069 --> 00:12:32,560
together and uh operating and at that

341
00:12:35,750 --> 00:12:34,079
point then uh

342
00:12:37,829 --> 00:12:35,760
not not this last weekend but the

343
00:12:40,150 --> 00:12:37,839
weekend before we went ahead and moved

344
00:12:44,150 --> 00:12:40,160
t2

345
00:12:46,069 --> 00:12:44,160
in

346
00:12:48,550 --> 00:12:46,079
it's not really a pit we don't refer to

347
00:12:51,750 --> 00:12:48,560
that part as a pit it's a rack location

348
00:12:54,069 --> 00:12:51,760
in note 3 we we thought it looked like

349
00:12:55,430 --> 00:12:54,079
we didn't have enough sway space

350
00:12:57,670 --> 00:12:55,440
so at that point

351
00:12:59,590 --> 00:12:57,680
we we took some measurements and sent

352
00:13:02,790 --> 00:12:59,600
those down to the ground while the team

353
00:13:06,470 --> 00:13:02,800
installed the crew quarter into node two

354
00:13:08,949 --> 00:13:06,480
they completed the crew quarter install

355
00:13:10,310 --> 00:13:08,959
and meanwhile the the ground team took a

356
00:13:12,550 --> 00:13:10,320
look at the data

357
00:13:15,670 --> 00:13:12,560
it has since been determined that we do

358
00:13:18,069 --> 00:13:15,680
have the adequate sway space inside the

359
00:13:20,470 --> 00:13:18,079
location where the t2 is at

360
00:13:23,990 --> 00:13:20,480
because we're focusing on on some

361
00:13:25,910 --> 00:13:24,000
research work this week uh er by early

362
00:13:28,629 --> 00:13:25,920
next week we'll complete the about three

363
00:13:30,629 --> 00:13:28,639

hours worth of work we have yet to go to

364
00:13:33,269 --> 00:13:30,639
complete the install and do the checkout

365
00:13:35,269 --> 00:13:33,279
of t2 so we don't expect to have it

366
00:13:36,790 --> 00:13:35,279
up and run until early next week if we

367
00:13:39,430 --> 00:13:36,800
had a need for it we could certainly

368
00:13:41,910 --> 00:13:39,440
finish that work in the near term but

369
00:13:44,150 --> 00:13:41,920
we're because this stage has been so

370
00:13:45,990 --> 00:13:44,160
short we're trying to make time

371
00:13:47,829 --> 00:13:46,000
for research

372
00:13:51,509 --> 00:13:47,839
the final final thing i'll mention to

373
00:13:54,550 --> 00:13:51,519
you uh is uh we just flew 19a as you're

374
00:13:55,590 --> 00:13:54,560
all well aware and and that mplm did

375
00:13:57,829 --> 00:13:55,600
very well

376
00:13:59,509 --> 00:13:57,839
for us on orbit in fact that mplm is in

377
00:14:02,310 --> 00:13:59,519
the process of being modified to be the

378
00:14:03,829 --> 00:14:02,320
permanent module and it's on track to

379
00:14:04,870 --> 00:14:03,839
have all that work done and be ready to

380
00:14:06,230 --> 00:14:04,880
fly

381
00:14:08,310 --> 00:14:06,240
in the september

382
00:14:11,590 --> 00:14:08,320
time slot that's that we're currently

383
00:14:14,150 --> 00:14:11,600
scheduled for ulf-5

384
00:14:15,670 --> 00:14:14,160
and that completes my status

385
00:14:16,790 --> 00:14:15,680
okay thanks gentlemen we'll take

386
00:14:19,750 --> 00:14:16,800
questions here and then at the other

387
00:14:21,670 --> 00:14:19,760
nasa centers we have about uh 30 minutes

388
00:14:23,350 --> 00:14:21,680

or 35 minutes for questions so let's

389
00:14:26,870 --> 00:14:23,360
start over here with mark

390
00:14:27,750 --> 00:14:26,880
oh thank you mark caro for aviation week

391
00:14:29,430 --> 00:14:27,760
um

392
00:14:31,829 --> 00:14:29,440
it's a space station question could you

393
00:14:34,150 --> 00:14:31,839
sort of update us on the water recovery

394
00:14:36,470 --> 00:14:34,160
system what's working and not

395
00:14:37,910 --> 00:14:36,480
or if it's all working and sort of take

396
00:14:39,910 --> 00:14:37,920
a look at the

397
00:14:41,829 --> 00:14:39,920
missions you have left if there's more

398
00:14:44,629 --> 00:14:41,839
troubleshooting to do and sort of

399
00:14:47,829 --> 00:14:44,639
discuss what what options you have or

400
00:14:50,949 --> 00:14:49,269
well mark that's a

401
00:14:53,269 --> 00:14:50,959
that's a big question

402
00:14:55,030 --> 00:14:53,279
let me start with the the water

403
00:14:57,910 --> 00:14:55,040
processing system including the urine

404
00:14:59,910 --> 00:14:57,920
processors is relatively new a system to

405
00:15:01,750 --> 00:14:59,920
iss and so

406
00:15:03,910 --> 00:15:01,760
and it's also a new process for us to

407
00:15:06,069 --> 00:15:03,920
implement on orbit

408
00:15:08,790 --> 00:15:06,079
as an agency as a team

409
00:15:10,069 --> 00:15:08,800
and so we would expect to continue to

410
00:15:12,949 --> 00:15:10,079
learn

411
00:15:15,990 --> 00:15:12,959
how these things operate uh not only in

412
00:15:17,829 --> 00:15:16,000
orbit but in the conditions that you

413
00:15:19,350 --> 00:15:17,839

that you simulate on the ground and then

414
00:15:21,750 --> 00:15:19,360
find out what real life is about on

415
00:15:24,150 --> 00:15:21,760
orbit so the first part of the answer is

416
00:15:26,790 --> 00:15:24,160
everything's working today on orbit uh

417
00:15:28,230 --> 00:15:26,800
both the urine processor and the in the

418
00:15:29,749 --> 00:15:28,240
water processor

419
00:15:32,069 --> 00:15:29,759
we had a little hiccup on the urine

420
00:15:34,790 --> 00:15:32,079
processor over the weekend that we've

421
00:15:36,949 --> 00:15:34,800
we've since uh recovered from and we're

422
00:15:38,790 --> 00:15:36,959
trying to understand uh

423
00:15:41,430 --> 00:15:38,800
that anomaly but but we're still

424
00:15:42,870 --> 00:15:41,440
processing as necessary i'm not sure

425
00:15:44,470 --> 00:15:42,880
actually if the upa is back up right

426
00:15:46,629 --> 00:15:44,480
this instant but we can use it when we

427
00:15:47,269 --> 00:15:46,639
get the levels in the tank that are that

428
00:15:49,269 --> 00:15:47,279
are

429
00:15:51,350 --> 00:15:49,279
necessary to begin processing the next

430
00:15:53,749 --> 00:15:51,360
batch

431
00:15:54,949 --> 00:15:53,759
we have returned so let's do this a

432
00:15:56,949 --> 00:15:54,959
piece of time we'll start with the water

433
00:15:58,870 --> 00:15:56,959
processor we had the leak

434
00:16:01,269 --> 00:15:58,880
of the catalytic bed we have returned

435
00:16:03,509 --> 00:16:01,279
that bed we have begun our our failure

436
00:16:05,670 --> 00:16:03,519
analysis we have we have done some tear

437
00:16:07,990 --> 00:16:05,680
down and we don't have conclusive

438
00:16:10,150 --> 00:16:08,000

evidence yet but it's starting to point

439
00:16:12,310 --> 00:16:10,160
to perhaps the seal wasn't quite correct

440
00:16:14,150 --> 00:16:12,320
for the application but we'll uh more to

441
00:16:17,110 --> 00:16:14,160
come on that

442
00:16:20,150 --> 00:16:17,120
we did take piece parts up along with

443
00:16:22,790 --> 00:16:20,160
the other uh cat bed the spare cat bed

444
00:16:24,470 --> 00:16:22,800
that we flew so that in the event that

445
00:16:25,829 --> 00:16:24,480
we needed to change seals or something

446
00:16:28,550 --> 00:16:25,839
we could do that

447
00:16:29,590 --> 00:16:28,560
on orbit if it came to that

448
00:16:31,430 --> 00:16:29,600
so far

449
00:16:33,350 --> 00:16:31,440
everything seems to be working

450
00:16:36,790 --> 00:16:33,360
well with that system in addition to

451
00:16:39,189 --> 00:16:36,800
that we've been struggling a little bit

452
00:16:43,430 --> 00:16:41,350
with microbes really in the water line

453
00:16:46,150 --> 00:16:43,440
from the waste tank into the processor

454
00:16:49,110 --> 00:16:46,160
itself as you recall we changed out

455
00:16:52,470 --> 00:16:49,120
the mls which is which we had a pump it

456
00:16:54,550 --> 00:16:52,480
also has a a vent for uh for free gas to

457
00:16:56,230 --> 00:16:54,560
get back into the cabin

458
00:16:58,550 --> 00:16:56,240
we changed out that whole system we put

459
00:17:01,110 --> 00:16:58,560
a filter in place

460
00:17:03,350 --> 00:17:01,120
there there there was still some

461
00:17:07,110 --> 00:17:03,360
indications of minor restrictions not

462
00:17:09,189 --> 00:17:07,120
enough to prevent it from from operating

463
00:17:10,949 --> 00:17:09,199

but over time that's gotten better and

464
00:17:13,510 --> 00:17:10,959
better so we're thinking we're clearing

465
00:17:15,270 --> 00:17:13,520
that out but but we need a long-term

466
00:17:17,669 --> 00:17:15,280
plan which we're working on to deal with

467
00:17:19,350 --> 00:17:17,679
microbes in this waste tank and it might

468
00:17:21,590 --> 00:17:19,360
be as simple as just changing out the

469
00:17:23,270 --> 00:17:21,600
filter regularly

470
00:17:25,750 --> 00:17:23,280
but we're just not certain

471
00:17:27,669 --> 00:17:25,760
yet we do have a process in place now

472
00:17:31,430 --> 00:17:27,679
where we've changed a little bit

473
00:17:33,350 --> 00:17:31,440
at the end of each process

474
00:17:36,549 --> 00:17:33,360
the simple way to say it is we take the

475
00:17:38,470 --> 00:17:36,559
the processed water and flow it back

476
00:17:39,990 --> 00:17:38,480
through the whole loop again all the way

477
00:17:41,909 --> 00:17:40,000
back to almost to the waste tank and

478
00:17:43,909 --> 00:17:41,919
then through the system and what that's

479
00:17:45,590 --> 00:17:43,919
doing is bringing iodinated water now

480
00:17:47,669 --> 00:17:45,600
back into that line and helping killing

481
00:17:49,510 --> 00:17:47,679
some of the the microbes in the water

482
00:17:50,870 --> 00:17:49,520
processor so that is one step we've

483
00:17:52,710 --> 00:17:50,880
already taken

484
00:17:54,150 --> 00:17:52,720
in addition to that there's a valve very

485
00:17:56,549 --> 00:17:54,160
similar to the one that we changed out

486
00:17:58,789 --> 00:17:56,559
when we changed the mls that's just

487
00:18:00,230 --> 00:17:58,799
downstream of the waste tank

488
00:18:03,110 --> 00:18:00,240

we have determined that we can remove

489
00:18:04,710 --> 00:18:03,120
that valve basically and just leave an

490
00:18:06,710 --> 00:18:04,720
open port there

491
00:18:09,430 --> 00:18:06,720
and that is the step we'll take if that

492
00:18:11,750 --> 00:18:09,440
valve becomes

493
00:18:13,110 --> 00:18:11,760
stopped up due to a microbe so far that

494
00:18:14,950 --> 00:18:13,120
has not been an issue but it's a very

495
00:18:16,789 --> 00:18:14,960
similar valve with very small clearances

496
00:18:19,190 --> 00:18:16,799
so it's not unlikely that that might

497
00:18:20,470 --> 00:18:19,200
eventually cause us a problem

498
00:18:22,310 --> 00:18:20,480
and then of course we have the filter in

499
00:18:24,070 --> 00:18:22,320
place which we can change out regularly

500
00:18:25,750 --> 00:18:24,080
so we're working through the cat bed

501
00:18:28,310 --> 00:18:25,760
issue we're looking at long-term plans

502
00:18:30,230 --> 00:18:28,320
for to control the microbial growth in

503
00:18:32,070 --> 00:18:30,240
the water processor and i think we're

504
00:18:34,390 --> 00:18:32,080
starting to get our arms around that on

505
00:18:36,390 --> 00:18:34,400
the up upa the biggest challenge that

506
00:18:39,430 --> 00:18:36,400
we're working with there is the calcium

507
00:18:41,990 --> 00:18:39,440
concentrations um

508
00:18:44,630 --> 00:18:42,000
we found that the da that we brought

509
00:18:47,350 --> 00:18:44,640
home the second time was uh had quite a

510
00:18:48,870 --> 00:18:47,360
bit of calcium deposits inside

511
00:18:51,990 --> 00:18:48,880
and this has been the challenge for the

512
00:18:54,070 --> 00:18:52,000
team for some time we we operated the

513
00:18:57,350 --> 00:18:54,080

last several tanks

514
00:18:58,870 --> 00:18:57,360
at 65 percent recovery in order to

515
00:19:01,029 --> 00:18:58,880
ensure that the we kept the

516
00:19:01,990 --> 00:19:01,039
concentrations down so we wouldn't begin

517
00:19:11,190 --> 00:19:02,000
to

518
00:19:13,270 --> 00:19:11,200
our logistics

519
00:19:14,390 --> 00:19:13,280
we're doing some final analysis on water

520
00:19:16,150 --> 00:19:14,400
balance

521
00:19:18,230 --> 00:19:16,160
uh and make sure we can stay on the

522
00:19:20,070 --> 00:19:18,240
positive side when we need to

523
00:19:21,669 --> 00:19:20,080
while looking at mitigation steps but

524
00:19:25,510 --> 00:19:21,679
we're trying to get ourselves to 70

525
00:19:27,270 --> 00:19:25,520
percent in the in the rfta

526
00:19:28,789 --> 00:19:27,280
and then meanwhile the team is off

527
00:19:29,909 --> 00:19:28,799
trying to understand is there anything

528
00:19:32,310 --> 00:19:29,919
we can do

529
00:19:35,110 --> 00:19:32,320
to keep the calcium down and this is

530
00:19:36,390 --> 00:19:35,120
also related we believe to the ph levels

531
00:19:37,909 --> 00:19:36,400
that we had

532
00:19:39,990 --> 00:19:37,919
that the team is also dealing with so

533
00:19:42,870 --> 00:19:40,000
we're we're knee-deep in chemistry with

534
00:19:43,750 --> 00:19:42,880
the with the um upa

535
00:19:46,630 --> 00:19:43,760
um

536
00:19:48,789 --> 00:19:46,640
and that has to do with uh using the

537
00:19:49,669 --> 00:19:48,799
actual flush water

538
00:19:53,190 --> 00:19:49,679

um

539
00:19:54,390 --> 00:19:53,200
that we use uh on orbit with actual crew

540
00:19:56,870 --> 00:19:54,400
usage

541
00:19:59,990 --> 00:19:56,880
some of that was simulated on on the

542
00:20:02,390 --> 00:20:00,000
ground and also the crews the bodies of

543
00:20:05,669 --> 00:20:02,400
long duration astronauts tend to

544
00:20:11,750 --> 00:20:09,110
minerals into uh their their deposits if

545
00:20:13,750 --> 00:20:11,760
you will and uh on orbit then what

546
00:20:16,310 --> 00:20:13,760
happens on the ground and that's

547
00:20:17,669 --> 00:20:16,320
that's uh showing us that it's making a

548
00:20:20,789 --> 00:20:17,679
significant

549
00:20:22,549 --> 00:20:20,799
impact into the operation so that one's

550
00:20:24,390 --> 00:20:22,559
still in front of us we think we can

551
00:20:26,390 --> 00:20:24,400
manage the risk by keeping the

552
00:20:29,190 --> 00:20:26,400
concentration down in the rfta and

553
00:20:30,710 --> 00:20:29,200
that's an impact to rfta's

554
00:20:32,390 --> 00:20:30,720
processing of rftas and getting them

555
00:20:35,270 --> 00:20:32,400
back to orbit but we think we can manage

556
00:20:37,430 --> 00:20:35,280
our way through that

557
00:20:38,950 --> 00:20:37,440
uh bill harwood cbs with a couple for

558
00:20:41,110 --> 00:20:38,960
john and one for

559
00:20:42,470 --> 00:20:41,120
uh mike um looking ahead

560
00:20:44,230 --> 00:20:42,480
i heard some talk a little bit back

561
00:20:45,750 --> 00:20:44,240
about the pmm and having a little i'm

562
00:20:47,510 --> 00:20:45,760
not sure you can make the 16th is the

563
00:20:49,270 --> 00:20:47,520

16th doable in the under the current

564
00:20:50,549 --> 00:20:49,280
schedule

565
00:20:52,230 --> 00:20:50,559
the way it's laid out right now that's

566
00:20:54,870 --> 00:20:52,240
your question

567
00:20:56,070 --> 00:20:54,880
the pmm will make yes we have a couple

568
00:20:58,549 --> 00:20:56,080
of

569
00:21:00,710 --> 00:20:58,559
major oru's that we'd like to fly that

570
00:21:03,510 --> 00:21:00,720
are very tight

571
00:21:04,549 --> 00:21:03,520
and uh so if we got the opportunity to

572
00:21:06,870 --> 00:21:04,559
let that

573
00:21:09,029 --> 00:21:06,880
uh flight slip a little bit we would put

574
00:21:11,669 --> 00:21:09,039
those orus uh

575
00:21:13,270 --> 00:21:11,679
inside and fly them uh so

576
00:21:14,950 --> 00:21:13,280
we have talked about that and kicking

577
00:21:17,590 --> 00:21:14,960
around different options we we've talked

578
00:21:19,190 --> 00:21:17,600
about that if if if we can't slip then

579
00:21:22,149 --> 00:21:19,200
we'll fly what we have

580
00:21:25,029 --> 00:21:22,159
uh and fly those orus later but the pmn

581
00:21:27,909 --> 00:21:25,039
is it will make the 16. thanks and and

582
00:21:29,909 --> 00:21:27,919
on the uh on 134 um looking at when the

583
00:21:32,870 --> 00:21:29,919
beta cutout ends and when you go into

584
00:21:34,310 --> 00:21:32,880
the end of your rollover thing

585
00:21:36,149 --> 00:21:34,320
i know you don't have a date but i mean

586
00:21:37,750 --> 00:21:36,159
if i assume somewhere around the 26th of

587
00:21:39,350 --> 00:21:37,760
november would i be would that be

588
00:21:41,510 --> 00:21:39,360

accurate number one

589
00:21:44,149 --> 00:21:41,520
and number two

590
00:21:47,430 --> 00:21:44,159
number two is there any talk still going

591
00:21:48,630 --> 00:21:47,440
on about uh launching 135 um where does

592
00:21:50,470 --> 00:21:48,640
that stand

593
00:21:51,830 --> 00:21:50,480
and if if it

594
00:21:53,190 --> 00:21:51,840
if it's been ruled out completely then

595
00:21:54,470 --> 00:21:53,200
i'll ignore my next question but if it

596
00:21:56,630 --> 00:21:54,480
hasn't been ruled out completely for

597
00:22:00,470 --> 00:21:56,640
suffradini what would you put on there

598
00:22:04,870 --> 00:22:03,190
you want to take any a part of this

599
00:22:07,190 --> 00:22:04,880
how about that

600
00:22:09,990 --> 00:22:07,200
as far as ams is concerned

601
00:22:11,909 --> 00:22:10,000
bill we we targeted

602
00:22:13,669 --> 00:22:11,919
no earlier than november but we're going

603
00:22:16,390 --> 00:22:13,679
to let them get a little further along

604
00:22:17,909 --> 00:22:16,400
and the permanent magnet change out

605
00:22:19,430 --> 00:22:17,919
to see when we really believe they'll

606
00:22:20,710 --> 00:22:19,440
deliver to the cape right now they're

607
00:22:22,630 --> 00:22:20,720
looking at august

608
00:22:24,310 --> 00:22:22,640
if they make august then november is a

609
00:22:25,590 --> 00:22:24,320
is a reasonable time frame for us to go

610
00:22:27,909 --> 00:22:25,600
fly that flight but we're going to hold

611
00:22:29,590 --> 00:22:27,919
off on on really setting a firm date

612
00:22:32,350 --> 00:22:29,600
until after ams gets a little bit

613
00:22:36,149 --> 00:22:32,360

further along uh as far as

614
00:22:37,669 --> 00:22:36,159
sts-135 or the launch on need mission

615
00:22:39,990 --> 00:22:37,679
we're preparing it just like we would

616
00:22:42,070 --> 00:22:40,000
prepare for any

617
00:22:44,149 --> 00:22:42,080
any regular flight

618
00:22:46,230 --> 00:22:44,159
if we have to go fly it the vehicle will

619
00:22:48,230 --> 00:22:46,240
be all configured and ready to go

620
00:22:50,710 --> 00:22:48,240
but we're not currently working on any

621
00:22:54,070 --> 00:22:50,720
plans to to fly it as a as a flight

622
00:22:55,350 --> 00:22:54,080
except for a rescue vehicle

623
00:22:58,870 --> 00:22:55,360
but if you did

624
00:23:02,310 --> 00:23:00,789
so i was king for the day and you said

625
00:23:03,510 --> 00:23:02,320
mike you could have this extra flight

626
00:23:06,070 --> 00:23:03,520
you have anywhere you want to i'd ask

627
00:23:09,270 --> 00:23:06,080
for about the summer time of next year

628
00:23:12,549 --> 00:23:09,280
i have quite a bit of logistics flights

629
00:23:15,830 --> 00:23:12,559
and capabilities between now and

630
00:23:18,390 --> 00:23:15,840
and next spring-ish

631
00:23:21,110 --> 00:23:18,400
time frame

632
00:23:23,270 --> 00:23:21,120
and given where we have to deliver cargo

633
00:23:25,750 --> 00:23:23,280
in order to fly on atvs and htvs and

634
00:23:27,909 --> 00:23:25,760
progresses and shuttles

635
00:23:29,830 --> 00:23:27,919
if if somebody said hey you have this

636
00:23:31,270 --> 00:23:29,840
extra flight i'd tell them well okay but

637
00:23:35,990 --> 00:23:31,280
don't give it to me until next summer

638
00:23:39,830 --> 00:23:38,070

hi robert perlman with collectspace.com

639
00:23:41,590 --> 00:23:39,840
uh a couple of questions for john uh

640
00:23:44,390 --> 00:23:41,600
sort of working off that last answer

641
00:23:46,789 --> 00:23:44,400
about launch on need um does atlantis

642
00:23:49,029 --> 00:23:46,799
remain the launch on need vehicle for

643
00:23:51,350 --> 00:23:49,039
134 given the delay to launching

644
00:23:53,110 --> 00:23:51,360
endeavor and is there a point where that

645
00:23:55,190 --> 00:23:53,120
would change on the schedule where

646
00:23:56,390 --> 00:23:55,200
discovery would take over as the launch

647
00:23:58,630 --> 00:23:56,400
on need

648
00:24:01,110 --> 00:23:58,640
yeah right now atlantis is the is the

649
00:24:03,830 --> 00:24:01,120
launch on need vehicle for 134 that's

650
00:24:07,669 --> 00:24:03,840
where processing flow is set up

651
00:24:09,909 --> 00:24:07,679
we always look at the uh at the um

652
00:24:11,669 --> 00:24:09,919
the overall manifest to try and optimize

653
00:24:13,669 --> 00:24:11,679
and give ourselves you know enough time

654
00:24:15,510 --> 00:24:13,679
to process the vehicle between missions

655
00:24:16,549 --> 00:24:15,520
uh atlantis would have plenty of time

656
00:24:19,510 --> 00:24:16,559
right now

657
00:24:20,870 --> 00:24:19,520
uh we'll we'll reconsider it if things

658
00:24:21,990 --> 00:24:20,880
change but right now that's the plan

659
00:24:26,149 --> 00:24:22,000
yeah

660
00:24:27,590 --> 00:24:26,159
morning uh saying that they have a

661
00:24:29,750 --> 00:24:27,600
possibility yes you're looking at a

662
00:24:32,149 --> 00:24:29,760
software issue with uh

663
00:24:34,149 --> 00:24:32,159

controlling progress thrusters for

664
00:24:36,710 --> 00:24:34,159
attitude control using service module

665
00:24:39,350 --> 00:24:36,720
faster would that be the same case for a

666
00:24:40,230 --> 00:24:39,360
debris avoidance maneuver

667
00:24:41,990 --> 00:24:40,240
um

668
00:24:43,909 --> 00:24:42,000
in fact we just first of all thank you

669
00:24:45,190 --> 00:24:43,919
jim jim's reminding me with this with

670
00:24:47,830 --> 00:24:45,200
this cheat sheet here that i've been

671
00:24:51,110 --> 00:24:47,840
saying mrm2 the vehicle flying in the

672
00:24:53,909 --> 00:24:51,120
payload bay is mrm1 we mrim2 is on the

673
00:24:55,190 --> 00:24:53,919
linux port of the service module

674
00:24:57,110 --> 00:24:55,200
and ever since the russians gave them

675
00:24:59,590 --> 00:24:57,120
mrem 1 and 2 i've always kind of

676
00:25:01,350 --> 00:24:59,600
struggled to remember which ones which

677
00:25:03,909 --> 00:25:01,360
and i have a little way to do that but

678
00:25:04,870 --> 00:25:03,919
it wasn't working for me this morning

679
00:25:06,549 --> 00:25:04,880
let's see

680
00:25:10,870 --> 00:25:06,559
we in fact worked through a degree

681
00:25:13,590 --> 00:25:10,880
avoidance maneuver possibility friday

682
00:25:16,630 --> 00:25:13,600
and this very issue came up

683
00:25:17,909 --> 00:25:16,640
there were there were two options one

684
00:25:19,750 --> 00:25:17,919
was to

685
00:25:22,470 --> 00:25:19,760
look at using the

686
00:25:23,669 --> 00:25:22,480
service module thrusters the other

687
00:25:25,190 --> 00:25:23,679
was to

688
00:25:27,350 --> 00:25:25,200

there was actually

689
00:25:30,390 --> 00:25:27,360
three or four options discussed but

690
00:25:32,390 --> 00:25:30,400
the other was to actually send up a

691
00:25:34,310 --> 00:25:32,400
radiogram directly to the progress so

692
00:25:36,070 --> 00:25:34,320
that the progress do the burn at that

693
00:25:38,149 --> 00:25:36,080
time we thought this was related to the

694
00:25:40,390 --> 00:25:38,159
sm04 software and it may still be

695
00:25:42,310 --> 00:25:40,400
related to that

696
00:25:45,669 --> 00:25:42,320
and and of course the third was to

697
00:25:48,230 --> 00:25:45,679
decide just to to let the crew

698
00:25:50,789 --> 00:25:48,240
reside in the soyuz uh through the event

699
00:25:53,269 --> 00:25:50,799
but the team was off work in the plan to

700
00:25:55,110 --> 00:25:53,279
either do the maneuver with the uh

701
00:25:57,510 --> 00:25:55,120
commanding it through the service module

702
00:26:00,230 --> 00:25:57,520
using 36 progress

703
00:26:01,750 --> 00:26:00,240
or sending a radiogram up directly to

704
00:26:03,430 --> 00:26:01,760
the progress from the ground control to

705
00:26:05,269 --> 00:26:03,440
do the burn

706
00:26:06,710 --> 00:26:05,279
with 36p and one of the things our

707
00:26:08,950 --> 00:26:06,720
russian colleagues are looking at right

708
00:26:11,669 --> 00:26:08,960
now is if we ask them to do another one

709
00:26:12,950 --> 00:26:11,679
today given what happened with 37

710
00:26:14,950 --> 00:26:12,960
progress

711
00:26:16,950 --> 00:26:14,960
would you still have the same

712
00:26:18,149 --> 00:26:16,960
set of options or should we be thinking

713
00:26:19,510 --> 00:26:18,159

about something else and so that's

714
00:26:21,669 --> 00:26:19,520
forward work for the team deal sort

715
00:26:25,029 --> 00:26:21,679
through it's not boring yet

716
00:26:27,430 --> 00:26:25,039
no not not remotely again

717
00:26:29,269 --> 00:26:27,440
i think and and uh and i've only talked

718
00:26:32,390 --> 00:26:29,279
and talked to a couple of the the

719
00:26:34,310 --> 00:26:32,400
working level troops on this so far but

720
00:26:36,390 --> 00:26:34,320
but i think what happened with 37

721
00:26:38,230 --> 00:26:36,400
progress docking now they're beginning

722
00:26:40,950 --> 00:26:38,240
to believe there's some relation to

723
00:26:43,750 --> 00:26:40,960
maybe it's in the progress itself

724
00:26:45,510 --> 00:26:43,760
both 37p and 36p are the first

725
00:26:47,830 --> 00:26:45,520
progresses without this matching unit

726
00:26:51,110 --> 00:26:47,840
that we used to do they have a

727
00:26:53,029 --> 00:26:51,120
version of the 7am computer on board

728
00:26:54,789 --> 00:26:53,039
and there's some i guess some

729
00:26:56,549 --> 00:26:54,799
speculation that maybe there's something

730
00:26:58,549 --> 00:26:56,559
related between the two because of this

731
00:27:01,110 --> 00:26:58,559
new new software but

732
00:27:02,549 --> 00:27:01,120
first first digital soyuz

733
00:27:05,669 --> 00:27:02,559
um

734
00:27:07,669 --> 00:27:05,679
well we were about there yeah

735
00:27:09,590 --> 00:27:07,679
okay my question then uh second question

736
00:27:11,669 --> 00:27:09,600
in terms of long-term management you've

737
00:27:13,590 --> 00:27:11,679
got a coin-operated sabbati reactor on

738
00:27:15,590 --> 00:27:13,600

board now right it's commercially owned

739
00:27:17,990 --> 00:27:15,600
and you pay for it that per hour what's

740
00:27:19,909 --> 00:27:18,000
your plan to make use of that of that

741
00:27:23,190 --> 00:27:19,919
resource and how is it going to ease

742
00:27:25,669 --> 00:27:23,200
your logistics uh issue uh yes the body

743
00:27:27,669 --> 00:27:25,679
a is on orbit uh we were finishing up

744
00:27:28,710 --> 00:27:27,679
our effort to make sure

745
00:27:30,310 --> 00:27:28,720
um

746
00:27:32,389 --> 00:27:30,320
sabatier was

747
00:27:35,190 --> 00:27:32,399
that we had done the work necessary to

748
00:27:37,430 --> 00:27:35,200
ensure it was safe and uh

749
00:27:40,230 --> 00:27:37,440
recently i asked the nesc to take one

750
00:27:42,549 --> 00:27:40,240
more look for us and that's because the

751
00:27:45,269 --> 00:27:42,559
the way this a body a is is plumbed into

752
00:27:47,510 --> 00:27:45,279
the system once it's installed is um

753
00:27:48,950 --> 00:27:47,520
it's sort of it sort of tells us when

754
00:27:50,470 --> 00:27:48,960
it's working and not working which is

755
00:27:52,789 --> 00:27:50,480
kind of important

756
00:27:54,630 --> 00:27:52,799
uh for the the oxygen generator to know

757
00:27:56,070 --> 00:27:54,640
which way to send the hydrogen it is

758
00:27:58,149 --> 00:27:56,080
venting overboard

759
00:27:59,990 --> 00:27:58,159
um and so before we install it and

760
00:28:02,870 --> 00:28:00,000
activate it we asked to take one more

761
00:28:04,310 --> 00:28:02,880
look we we sort of step back as you said

762
00:28:06,470 --> 00:28:04,320
it's a it's a

763
00:28:08,070 --> 00:28:06,480

one of these uh commercial i'll call it

764
00:28:10,470 --> 00:28:08,080
sort of first step in the commercial

765
00:28:11,430 --> 00:28:10,480
world where um

766
00:28:13,190 --> 00:28:11,440
our

767
00:28:14,549 --> 00:28:13,200
friends at hamilton sunstrand built it

768
00:28:16,149 --> 00:28:14,559
and flew it and we agreed to pay a

769
00:28:17,430 --> 00:28:16,159
certain amount and we'd get water from

770
00:28:19,350 --> 00:28:17,440
it

771
00:28:20,950 --> 00:28:19,360
and like you said we'd sort of pay as we

772
00:28:23,990 --> 00:28:20,960
go

773
00:28:25,350 --> 00:28:24,000
and so once nesc is complete with that

774
00:28:26,870 --> 00:28:25,360
we've now completed our integrated

775
00:28:28,710 --> 00:28:26,880
hazard which was our last step that we

776
00:28:30,470 --> 00:28:28,720
had to do internally so once the nesc is

777
00:28:31,830 --> 00:28:30,480
finished with their review

778
00:28:33,430 --> 00:28:31,840
then we'll begin the process of

779
00:28:35,750 --> 00:28:33,440
installing it and activating it and it

780
00:28:37,350 --> 00:28:35,760
will provide more water

781
00:28:38,789 --> 00:28:37,360
than we than we get today i don't have

782
00:28:41,190 --> 00:28:38,799
the numbers off the top of my head but

783
00:28:44,149 --> 00:28:41,200
we would expect to get more water

784
00:28:46,470 --> 00:28:44,159
as it processes the the um

785
00:28:47,590 --> 00:28:46,480
the co2 from the cedria and the hydrogen

786
00:28:53,430 --> 00:28:47,600
from the

787
00:28:55,269 --> 00:28:53,440
uh to water and methane

788
00:28:56,549 --> 00:28:55,279

it's very cool yeah

789
00:28:58,389 --> 00:28:56,559
good morning eric berger with the

790
00:28:59,990 --> 00:28:58,399
houston chronicle one for uh john and

791
00:29:02,149 --> 00:29:00,000
one from mike first of all john

792
00:29:05,029 --> 00:29:02,159
following up on bill's question about

793
00:29:06,630 --> 00:29:05,039
four flights possibly instead of three

794
00:29:08,149 --> 00:29:06,640
again there's they're still talking

795
00:29:10,710 --> 00:29:08,159
congress about maybe trying to stretch

796
00:29:12,230 --> 00:29:10,720
the shuttle flight through 2012 by

797
00:29:13,430 --> 00:29:12,240
extending the current manifest and

798
00:29:14,549 --> 00:29:13,440
adding one

799
00:29:16,389 --> 00:29:14,559
and i guess

800
00:29:18,310 --> 00:29:16,399
previously i know you've talked about

801
00:29:20,310 --> 00:29:18,320
the fixed costs of the shuttle program

802
00:29:23,510 --> 00:29:20,320
and that those don't go down much if you

803
00:29:25,269 --> 00:29:23,520
reduce the flight i'm just wondering

804
00:29:27,750 --> 00:29:25,279
in terms of funding how much it would

805
00:29:29,669 --> 00:29:27,760
actually cost to fly

806
00:29:31,590 --> 00:29:29,679
four shuttle missions over the next two

807
00:29:34,310 --> 00:29:31,600
years as opposed to three shuttle

808
00:29:36,070 --> 00:29:34,320
missions between now and november

809
00:29:37,510 --> 00:29:36,080
okay

810
00:29:39,430 --> 00:29:37,520
at our current rate where we're not

811
00:29:41,590 --> 00:29:39,440
doing a lot of production but we're

812
00:29:44,630 --> 00:29:41,600
doing a lot of operations

813
00:29:47,750 --> 00:29:44,640

we can get the overall cost of the

814
00:29:51,029 --> 00:29:47,760
program down to about 1.8 billion

815
00:29:54,950 --> 00:29:51,039
per year and that's at a two

816
00:29:56,470 --> 00:29:54,960
two flights per year kind of rate

817
00:29:59,350 --> 00:29:56,480
as far as

818
00:30:00,870 --> 00:29:59,360
is you know any any short-term extension

819
00:30:02,470 --> 00:30:00,880
you know we're good from our budget

820
00:30:05,669 --> 00:30:02,480
standpoint

821
00:30:10,230 --> 00:30:08,789
we also will probably have us

822
00:30:11,909 --> 00:30:10,240
we've been trying to save money wherever

823
00:30:13,909 --> 00:30:11,919
we can in case we had some kind of issue

824
00:30:15,990 --> 00:30:13,919
where we had to slip out past

825
00:30:17,669 --> 00:30:16,000
the the new year

826
00:30:19,350 --> 00:30:17,679
so we could probably

827
00:30:20,950 --> 00:30:19,360
uh without asking for any additional

828
00:30:23,909 --> 00:30:20,960
money go out through

829
00:30:25,669 --> 00:30:23,919
february time frame

830
00:30:27,830 --> 00:30:25,679
but anything beyond that we would we

831
00:30:30,470 --> 00:30:27,840
would need additional money

832
00:30:32,310 --> 00:30:30,480
and uh and depending the number of

833
00:30:34,149 --> 00:30:32,320
flights or or if we wanted to get back

834
00:30:35,750 --> 00:30:34,159
in production or if we just wanted to

835
00:30:38,070 --> 00:30:35,760
stretch out what we had it could be

836
00:30:40,549 --> 00:30:38,080
anywhere from from the 1.8 billion a

837
00:30:42,870 --> 00:30:40,559
year just for operations up to

838
00:30:44,149 --> 00:30:42,880

you know around the the 2.8 billion if

839
00:30:45,830 --> 00:30:44,159
we're going to actually get back into

840
00:30:47,909 --> 00:30:45,840
any kind of a production

841
00:30:49,669 --> 00:30:47,919
cadence at all

842
00:30:52,149 --> 00:30:49,679
and then and then from mike from an

843
00:30:54,230 --> 00:30:52,159
operational standpoint would having

844
00:30:55,430 --> 00:30:54,240
orion solely as a lifeboat on the

845
00:30:57,430 --> 00:30:55,440
station

846
00:30:59,590 --> 00:30:57,440
be of a functional utility to you or are

847
00:31:03,430 --> 00:30:59,600
you sort of satisfied with the soyuz

848
00:31:03,440 --> 00:31:08,149
um

849
00:31:11,830 --> 00:31:10,470
okay they're not really related but but

850
00:31:13,269 --> 00:31:11,840
i'll i'll talk to that first of all i'm

851
00:31:17,509 --> 00:31:13,279
absolutely satisfied with the

852
00:31:20,230 --> 00:31:17,519
capabilities of uh of the soyuz um

853
00:31:22,870 --> 00:31:20,240
i think the id the idea behind the orion

854
00:31:23,990 --> 00:31:22,880
was it could be the rescue function for

855
00:31:26,310 --> 00:31:24,000
when we

856
00:31:29,190 --> 00:31:26,320
uh if we were able to get commercial

857
00:31:31,669 --> 00:31:29,200
crew capability and the commercial crew

858
00:31:33,509 --> 00:31:31,679
vehicles could not reside on orbit for a

859
00:31:34,470 --> 00:31:33,519
long period of time in that case of

860
00:31:37,029 --> 00:31:34,480
course

861
00:31:39,029 --> 00:31:37,039
you'd have a lifeboat in conjunction

862
00:31:40,149 --> 00:31:39,039
with with crude vehicles coming and

863
00:31:43,830 --> 00:31:40,159

going

864
00:31:47,430 --> 00:31:45,669
for us and

865
00:31:49,669 --> 00:31:47,440
and some version of orion would

866
00:31:51,110 --> 00:31:49,679
certainly do what the soyuz did for us

867
00:31:53,430 --> 00:31:51,120
today

868
00:31:55,590 --> 00:31:53,440
assuming it landed on on land which is

869
00:31:57,269 --> 00:31:55,600
my understanding was being considered

870
00:31:58,310 --> 00:31:57,279
for the rescue boat capability but

871
00:32:01,110 --> 00:31:58,320
that's a

872
00:32:02,870 --> 00:32:01,120
and that's brand new uh introduction for

873
00:32:04,389 --> 00:32:02,880
us and we're not very far in assessing

874
00:32:05,990 --> 00:32:04,399
it and talking to our constellation

875
00:32:07,430 --> 00:32:06,000
friends about that so

876
00:32:09,750 --> 00:32:07,440
that's really forward work for us to

877
00:32:10,549 --> 00:32:09,760
sort that out

878
00:32:14,630 --> 00:32:10,559
mark

879
00:32:16,310 --> 00:32:14,640
a two-part question for john

880
00:32:18,149 --> 00:32:16,320
with the shuttle program winding down i

881
00:32:20,630 --> 00:32:18,159
was wondering if you can take me through

882
00:32:23,029 --> 00:32:20,640
the process of dispositioning all the

883
00:32:25,350 --> 00:32:23,039
the shuttle program assets

884
00:32:27,190 --> 00:32:25,360
in terms of you know any institution

885
00:32:29,750 --> 00:32:27,200
individual whoever wants it how do they

886
00:32:32,149 --> 00:32:29,760
go about uh requesting it and how who

887
00:32:33,830 --> 00:32:32,159
how and who within the program decides

888
00:32:35,509 --> 00:32:33,840

when and how that will be done

889
00:32:37,190 --> 00:32:35,519
and with that in mind i guess word on

890
00:32:39,669 --> 00:32:37,200
the street is that the aggies are going

891
00:32:41,750 --> 00:32:39,679
to get a hold of the sms i was wondering

892
00:32:42,710 --> 00:32:41,760
how that came about and

893
00:32:46,470 --> 00:32:42,720
when

894
00:32:48,070 --> 00:32:46,480
getting the sms do they retain ownership

895
00:32:49,830 --> 00:32:48,080
of it once once they get it are they

896
00:32:52,950 --> 00:32:49,840
just going to operate it and it's still

897
00:32:54,310 --> 00:32:52,960
owned by uh somebody else

898
00:32:55,830 --> 00:32:54,320
okay

899
00:32:57,110 --> 00:32:55,840
it's a little bit

900
00:32:58,870 --> 00:32:57,120
far afield from what i do on a

901
00:32:59,669 --> 00:32:58,880
day-to-day because i

902
00:33:07,430 --> 00:32:59,679
i

903
00:33:08,470 --> 00:33:07,440
but we can get you those answers

904
00:33:09,990 --> 00:33:08,480
from a

905
00:33:12,149 --> 00:33:10,000
dispositioning the shuttle program

906
00:33:14,870 --> 00:33:12,159
assets there is a team

907
00:33:17,350 --> 00:33:14,880
that is comprised of headquarters

908
00:33:19,269 --> 00:33:17,360
and shuttle program and legal and

909
00:33:23,190 --> 00:33:19,279
procurement and everything else

910
00:33:25,509 --> 00:33:23,200
they go through and identify

911
00:33:26,230 --> 00:33:25,519
shuttle program assets

912
00:33:35,509 --> 00:33:26,240
that

913
00:33:37,750 --> 00:33:35,519

we will use in the near term if there is

914
00:33:39,110 --> 00:33:37,760
we take it off the list immediately

915
00:33:41,350 --> 00:33:39,120
and they're they're still working

916
00:33:44,310 --> 00:33:41,360
through the process of how

917
00:33:46,549 --> 00:33:44,320
museums schools uh other

918
00:33:48,470 --> 00:33:46,559
non-profit kind of agencies could use

919
00:33:49,909 --> 00:33:48,480
that kind of hardware and the process

920
00:33:50,830 --> 00:33:49,919
for how they get it

921
00:33:53,029 --> 00:33:50,840
as far

922
00:33:55,430 --> 00:33:53,039
as specific

923
00:33:56,710 --> 00:33:55,440
organizations getting any hardware i

924
00:33:58,389 --> 00:33:56,720
don't know and

925
00:34:00,789 --> 00:33:58,399
and the team up at headquarters we'll

926
00:34:02,549 --> 00:34:00,799
work through that so we can we can let

927
00:34:04,950 --> 00:34:02,559
them talk to you if you have specific

928
00:34:07,430 --> 00:34:04,960
questions so you don't know about that

929
00:34:09,349 --> 00:34:07,440
no idea

930
00:34:10,869 --> 00:34:09,359
i'm still using it by the way so they

931
00:34:12,550 --> 00:34:10,879
can't have it yet

932
00:34:15,270 --> 00:34:12,560
stephen clark with space flight now a

933
00:34:16,550 --> 00:34:15,280
question for mike suffordini uh based on

934
00:34:18,230 --> 00:34:16,560
the current projections of what you

935
00:34:21,109 --> 00:34:18,240
think you're going to need in terms of

936
00:34:21,990 --> 00:34:21,119
supplies and science on space station

937
00:34:24,230 --> 00:34:22,000
when

938
00:34:26,869 --> 00:34:24,240

do you think you're going to need a

939
00:34:28,149 --> 00:34:26,879
operational commercial cargo

940
00:34:33,190 --> 00:34:28,159
capability

941
00:34:38,790 --> 00:34:36,310
well uh we like the current plan we have

942
00:34:40,069 --> 00:34:38,800
um which has them coming uh

943
00:34:41,589 --> 00:34:40,079
um

944
00:34:43,109 --> 00:34:41,599
next year

945
00:34:44,629 --> 00:34:43,119
uh to iss

946
00:34:46,310 --> 00:34:44,639
and uh

947
00:34:48,629 --> 00:34:46,320
and that plan works we have done a

948
00:34:52,310 --> 00:34:48,639
number of assessments to try to

949
00:34:54,230 --> 00:34:52,320
understand our flexibility if they slip

950
00:34:55,829 --> 00:34:54,240
to some degree and we can

951
00:34:57,910 --> 00:34:55,839
we can stand a certain amount of

952
00:34:59,750 --> 00:34:57,920
movement to the right

953
00:35:01,349 --> 00:34:59,760
the kind of movement you'd expect in new

954
00:35:03,270 --> 00:35:01,359
programs

955
00:35:05,270 --> 00:35:03,280
as they try to get started and get off

956
00:35:09,990 --> 00:35:05,280
the ground so i'd say we have a certain

957
00:35:14,870 --> 00:35:11,829
give or take maybe a year's worth of

958
00:35:16,710 --> 00:35:14,880
slip from the original dates

959
00:35:18,310 --> 00:35:16,720
that i think we could we could stand and

960
00:35:20,790 --> 00:35:18,320
after that we'd have to start thinking

961
00:35:22,630 --> 00:35:20,800
of creative ways um

962
00:35:24,950 --> 00:35:22,640
i will tell you that one of the things

963
00:35:27,030 --> 00:35:24,960

we've tried to protect for is

964
00:35:29,510 --> 00:35:27,040
a certain level of maintenance onboard

965
00:35:30,870 --> 00:35:29,520
iss and in spite of the challenges with

966
00:35:32,710 --> 00:35:30,880
the water processors actually

967
00:35:34,950 --> 00:35:32,720
maintenance on board iss has been much

968
00:35:37,109 --> 00:35:34,960
lower than we had estimated

969
00:35:39,510 --> 00:35:37,119
so there's a little bit of margin in our

970
00:35:42,470 --> 00:35:39,520
in our maintenance numbers which if if

971
00:35:43,910 --> 00:35:42,480
we continue to be blessed

972
00:35:46,710 --> 00:35:43,920
will provide us a little additional

973
00:35:52,630 --> 00:35:48,150
okay let's go to the kennedy space

974
00:35:55,829 --> 00:35:54,630
uh yes marcia dunn of the associated

975
00:35:57,750 --> 00:35:55,839
press

976
00:35:59,829 --> 00:35:57,760
this is atlantis's last flight and i'm

977
00:36:02,230 --> 00:35:59,839
wondering if you could just talk about

978
00:36:04,230 --> 00:36:02,240
that for a few minutes each of you and

979
00:36:06,790 --> 00:36:04,240
whether that adds a sense of melancholy

980
00:36:09,990 --> 00:36:06,800
to all of this or really makes it sink

981
00:36:12,390 --> 00:36:10,000
in that the end is really near

982
00:36:14,069 --> 00:36:12,400
okay i can start out marcia the um it's

983
00:36:15,190 --> 00:36:14,079
the last planned flight of atlantis of

984
00:36:18,069 --> 00:36:15,200
course we're going to continue to

985
00:36:20,510 --> 00:36:18,079
process it after the sts-132 mission is

986
00:36:22,470 --> 00:36:20,520
the uh the launch on need vehicle for

987
00:36:23,349 --> 00:36:22,480
sts-134 now

988
00:36:26,310 --> 00:36:23,359

um

989
00:36:29,109 --> 00:36:26,320
and and i i have not spent a lot of time

990
00:36:31,589 --> 00:36:29,119
uh thinking about you know last this or

991
00:36:33,910 --> 00:36:31,599
last that since we landed 13 days ago

992
00:36:35,270 --> 00:36:33,920
and and we launched in 11 days it's been

993
00:36:37,670 --> 00:36:35,280
a been a great

994
00:36:39,990 --> 00:36:37,680
uh a great turnaround a great cadence

995
00:36:42,390 --> 00:36:40,000
the team has never been working uh

996
00:36:44,310 --> 00:36:42,400
better than they are right now uh and

997
00:36:47,030 --> 00:36:44,320
it's just been a been a great thing to

998
00:36:49,109 --> 00:36:47,040
be a part of so i think maybe after uh

999
00:36:50,630 --> 00:36:49,119
after we get all done then we'll we'll

1000
00:36:52,230 --> 00:36:50,640
release the big

1001
00:36:56,150 --> 00:36:52,240
the big

1002
00:36:57,990 --> 00:36:56,160
think about what it all meant to us but

1003
00:37:00,230 --> 00:36:58,000
not while we're in the middle of uh of

1004
00:37:02,790 --> 00:37:00,240
uh actually processing and flying these

1005
00:37:05,829 --> 00:37:02,800
vehicles like you have anything

1006
00:37:08,790 --> 00:37:05,839
uh well i think of it similarly uh i i'm

1007
00:37:10,870 --> 00:37:08,800
uh i'm expecting atlantis to uh

1008
00:37:12,870 --> 00:37:10,880
to fly this mission and then do what

1009
00:37:14,630 --> 00:37:12,880
she's always done and then the little

1010
00:37:16,230 --> 00:37:14,640
land and be ready for the next thing we

1011
00:37:17,510 --> 00:37:16,240
ask you to do and i really haven't

1012
00:37:19,349 --> 00:37:17,520
thought about it much as being the last

1013
00:37:22,150 --> 00:37:19,359

one coming to station

1014
00:37:24,150 --> 00:37:22,160
uh either i'm sure at some point i'll

1015
00:37:28,550 --> 00:37:24,160
i'll give it a lot of thought but but

1016
00:37:33,510 --> 00:37:31,670
and and for mike suffredini if you

1017
00:37:36,470 --> 00:37:33,520
if you were king and you got your wish

1018
00:37:37,829 --> 00:37:36,480
of having a shuttle mission next summer

1019
00:37:40,150 --> 00:37:37,839
what would you put on it you mentioned

1020
00:37:42,390 --> 00:37:40,160
you'd have a lot of orus and things but

1021
00:37:46,230 --> 00:37:42,400
what specifically do you see the need as

1022
00:37:48,790 --> 00:37:47,030
well

1023
00:37:51,109 --> 00:37:48,800
okay so the first assumption i make is

1024
00:37:52,790 --> 00:37:51,119
perhaps some of our our commercial cargo

1025
00:37:54,550 --> 00:37:52,800
guys aren't aren't quite flying as

1026
00:37:55,990 --> 00:37:54,560
regularly as we hoped

1027
00:37:57,430 --> 00:37:56,000
uh and so there would be normal

1028
00:37:58,550 --> 00:37:57,440
logistics

1029
00:38:15,109 --> 00:37:58,560
the

1030
00:38:17,349 --> 00:38:15,119
that can be offloaded on orbit

1031
00:38:19,030 --> 00:38:17,359
so the first thing i would do is fly as

1032
00:38:21,510 --> 00:38:19,040
many of those as i could

1033
00:38:24,310 --> 00:38:21,520
to orbit and bring home all the ones

1034
00:38:26,630 --> 00:38:24,320
that were on orbit in an mplm so we we

1035
00:38:27,990 --> 00:38:26,640
would fly an mplm

1036
00:38:30,630 --> 00:38:28,000
we would fly

1037
00:38:32,550 --> 00:38:30,640
some other orus we have coming perhaps

1038
00:38:33,750 --> 00:38:32,560

depending on on what's happening with

1039
00:38:36,310 --> 00:38:33,760
the uh

1040
00:38:38,630 --> 00:38:36,320
with the logistics vehicles

1041
00:38:40,870 --> 00:38:38,640
i hope to fill it up with research uh

1042
00:38:45,349 --> 00:38:40,880
and i'd probably put an lmc in there as

1043
00:38:47,670 --> 00:38:45,359
well uh in case i had a an external oru

1044
00:38:49,349 --> 00:38:47,680
that had a problem i could perhaps bring

1045
00:38:51,030 --> 00:38:49,359
up its replacement now

1046
00:38:52,710 --> 00:38:51,040
now with that said i have replacements

1047
00:38:56,150 --> 00:38:52,720
on orbit but what i would do basically

1048
00:38:57,589 --> 00:38:56,160
is replace the the spare

1049
00:38:59,589 --> 00:38:57,599
i would take the failed one home and

1050
00:39:01,109 --> 00:38:59,599
replace it with a new spare

1051
00:39:02,069 --> 00:39:01,119
but it would be nice to be able to do

1052
00:39:06,630 --> 00:39:02,079
all that

1053
00:39:12,069 --> 00:39:09,510
hi it's irene klotz with reuters um

1054
00:39:14,550 --> 00:39:12,079
mike are you involved in drawing up the

1055
00:39:17,829 --> 00:39:14,560
criteria for what orion light's

1056
00:39:18,630 --> 00:39:17,839
capabilities will be

1057
00:39:20,150 --> 00:39:18,640
i'm

1058
00:39:24,310 --> 00:39:20,160
yes we're responsible requirements for

1059
00:39:31,829 --> 00:39:26,150
so can you describe a little bit what

1060
00:39:37,510 --> 00:39:34,710
well in general we ask rescue vehicles

1061
00:39:40,310 --> 00:39:37,520
to be able to bring the crew home

1062
00:39:41,589 --> 00:39:40,320
to a location that can be relatively

1063
00:39:45,190 --> 00:39:41,599

quickly

1064
00:39:47,829 --> 00:39:45,200
gotten to by search and rescue and

1065
00:39:48,950 --> 00:39:47,839
medical personnel

1066
00:39:53,670 --> 00:39:48,960
we

1067
00:39:56,230 --> 00:39:53,680
expect it to be able to have a short

1068
00:39:59,190 --> 00:39:56,240
period of time

1069
00:40:01,910 --> 00:39:59,200
as a place the crew can can habitate an

1070
00:40:03,670 --> 00:40:01,920
event of emergency but not leave

1071
00:40:05,109 --> 00:40:03,680
so you know several hours where they can

1072
00:40:06,550 --> 00:40:05,119
just close the hatch and wait for things

1073
00:40:07,829 --> 00:40:06,560
to settle down on orbit where we can

1074
00:40:08,950 --> 00:40:07,839
talk about what we're doing and see if

1075
00:40:11,270 --> 00:40:08,960
there's something we want to do to go

1076
00:40:13,190 --> 00:40:11,280
back in and recover the vehicle or

1077
00:40:15,030 --> 00:40:13,200
whether we really want to leave so we've

1078
00:40:17,030 --> 00:40:15,040
heard that as a safe haven function and

1079
00:40:19,349 --> 00:40:17,040
so we would expect that

1080
00:40:20,870 --> 00:40:19,359
we'd also expect it to have any

1081
00:40:23,109 --> 00:40:20,880
orbit

1082
00:40:25,270 --> 00:40:23,119
entry capability

1083
00:40:27,349 --> 00:40:25,280
and while that's uh that's not something

1084
00:40:29,430 --> 00:40:27,359
that you want to have to do

1085
00:40:31,990 --> 00:40:29,440
uh and we would try really hard to wait

1086
00:40:33,589 --> 00:40:32,000
until we were at orbit that was uh gave

1087
00:40:35,990 --> 00:40:33,599
us the best chance of getting to the

1088
00:40:39,430 --> 00:40:36,000

crew as quickly as possible uh we would

1089
00:40:43,270 --> 00:40:39,440
like to to have any orbit any deorbit

1090
00:40:45,349 --> 00:40:43,280
any orbit deorbit capability

1091
00:40:46,230 --> 00:40:45,359
and

1092
00:40:51,510 --> 00:40:46,240
if

1093
00:40:52,550 --> 00:40:51,520
we would like it to be able to

1094
00:40:54,550 --> 00:40:52,560
provide

1095
00:40:56,790 --> 00:40:54,560
for the capability to continue to keep

1096
00:40:59,109 --> 00:40:56,800
an iv to keep a respirator going those

1097
00:41:01,190 --> 00:40:59,119
sorts of things we can't do that in the

1098
00:41:02,069 --> 00:41:01,200
soyuz today it's something we hope to do

1099
00:41:06,390 --> 00:41:02,079
in our

1100
00:41:09,829 --> 00:41:09,030
thanks and um for john uh you mentioned

1101
00:41:13,270 --> 00:41:09,839
that

1102
00:41:15,990 --> 00:41:13,280
you've got budget to go through february

1103
00:41:19,190 --> 00:41:16,000
20 wait i'm getting my years mixed up

1104
00:41:21,990 --> 00:41:19,200
2011. um if needed does that include

1105
00:41:24,950 --> 00:41:22,000
this 600 million dollars which i don't

1106
00:41:27,829 --> 00:41:24,960
think has been appropriated yet and what

1107
00:41:31,430 --> 00:41:27,839
would happen um if the nasa

1108
00:41:34,950 --> 00:41:31,440
20 fiscal 2010 budget is not

1109
00:41:37,510 --> 00:41:34,960
in place by october 1st with the

1110
00:41:40,550 --> 00:41:37,520
shuttle shuttle people on existing

1111
00:41:42,630 --> 00:41:40,560
contracts that technically would be

1112
00:41:45,270 --> 00:41:42,640
getting their layoff notices effective

1113
00:41:49,430 --> 00:41:47,670

it does include the supplemental 600

1114
00:41:53,109 --> 00:41:49,440
million dollars to fly through the end

1115
00:41:55,990 --> 00:41:53,119
of december we've received um assurances

1116
00:41:58,550 --> 00:41:56,000
from from the administration that uh

1117
00:42:01,270 --> 00:41:58,560
that that money will uh will be becoming

1118
00:42:03,109 --> 00:42:01,280
if it's excuse me if it's required i

1119
00:42:05,589 --> 00:42:03,119
think that the

1120
00:42:07,349 --> 00:42:05,599
the rationale behind that is very sound

1121
00:42:09,670 --> 00:42:07,359
and that everyone agrees with that we

1122
00:42:10,950 --> 00:42:09,680
take the pressure off of the the program

1123
00:42:12,390 --> 00:42:10,960
to make sure that we get everything done

1124
00:42:14,870 --> 00:42:12,400
by september

1125
00:42:17,670 --> 00:42:14,880
um and and having that money allows us

1126
00:42:19,829 --> 00:42:17,680
to to to not worry about schedule very

1127
00:42:21,109 --> 00:42:19,839
much and and the team is not as as far

1128
00:42:23,910 --> 00:42:21,119
as i can tell

1129
00:42:25,750 --> 00:42:23,920
um if that did not show up then we would

1130
00:42:27,510 --> 00:42:25,760
uh we would be out of fun shortly after

1131
00:42:28,550 --> 00:42:27,520
the fiscal year maybe we could go with

1132
00:42:29,829 --> 00:42:28,560
the

1133
00:42:32,150 --> 00:42:29,839
amount of money we're trying to save

1134
00:42:34,309 --> 00:42:32,160
this year we could probably go another

1135
00:42:35,430 --> 00:42:34,319
month six weeks two week two months

1136
00:42:37,829 --> 00:42:35,440
something like that

1137
00:42:39,430 --> 00:42:37,839
and uh whether that would encompass all

1138
00:42:41,910 --> 00:42:39,440

of them the missions or not just depends

1139
00:42:43,829 --> 00:42:41,920
on how the processing goes so we do we

1140
00:42:47,030 --> 00:42:43,839
do include that 600 million in the in

1141
00:42:50,710 --> 00:42:49,030
and as far as the shuttle uh the

1142
00:42:52,309 --> 00:42:50,720
contracts um

1143
00:42:53,510 --> 00:42:52,319
people would

1144
00:42:54,790 --> 00:42:53,520
still

1145
00:42:55,910 --> 00:42:54,800
there's no there's no mechanism

1146
00:42:57,829 --> 00:42:55,920
mechanism

1147
00:43:00,550 --> 00:42:57,839
in place that people are automatically

1148
00:43:01,510 --> 00:43:00,560
laid off at the end of the fiscal year

1149
00:43:03,109 --> 00:43:01,520
no it's

1150
00:43:04,630 --> 00:43:03,119
um

1151
00:43:06,630 --> 00:43:04,640
we have very

1152
00:43:08,630 --> 00:43:06,640
uh we have concentrated a tremendous

1153
00:43:10,150 --> 00:43:08,640
amount on the on the contracts in our

1154
00:43:11,829 --> 00:43:10,160
workforce profile

1155
00:43:14,470 --> 00:43:11,839
and we we have been following that

1156
00:43:16,470 --> 00:43:14,480
workforce profile very closely um as a

1157
00:43:19,589 --> 00:43:16,480
matter of fact this uh this week we'll

1158
00:43:21,670 --> 00:43:19,599
be uh laying off about 800 employees

1159
00:43:23,829 --> 00:43:21,680
across the entire program

1160
00:43:26,790 --> 00:43:23,839
uh mostly in production areas but but

1161
00:43:28,630 --> 00:43:26,800
also in some of our logistics areas and

1162
00:43:29,750 --> 00:43:28,640
in launch and landing that was all

1163
00:43:31,349 --> 00:43:29,760

expected

1164
00:43:33,829 --> 00:43:31,359
there is nothing that that we've

1165
00:43:36,230 --> 00:43:33,839
deviated from if we extended the program

1166
00:43:38,390 --> 00:43:36,240
we have a mechanism in place to

1167
00:43:39,510 --> 00:43:38,400
to be able to do one-month contract

1168
00:43:41,190 --> 00:43:39,520
extensions

1169
00:43:43,990 --> 00:43:41,200
we've worked that with all of our our

1170
00:43:46,309 --> 00:43:44,000
contractor partners and and understand

1171
00:43:48,390 --> 00:43:46,319
exactly how to go do that

1172
00:43:50,470 --> 00:43:48,400
once we

1173
00:43:52,230 --> 00:43:50,480
finish flying it's it's pretty clear

1174
00:43:54,630 --> 00:43:52,240
exactly what the workforce profile looks

1175
00:43:55,349 --> 00:43:54,640
like the the operations team which has

1176
00:43:57,270 --> 00:43:55,359
been

1177
00:43:59,190 --> 00:43:57,280
kept very high while we go through this

1178
00:44:01,510 --> 00:43:59,200
this flight rate

1179
00:44:03,349 --> 00:44:01,520
will be let go on the contractor side

1180
00:44:09,589 --> 00:44:03,359
and and that's that's very well

1181
00:44:13,750 --> 00:44:12,150
hi this is james dean from florida today

1182
00:44:16,710 --> 00:44:13,760
i'm just quickly following up ms shannon

1183
00:44:18,950 --> 00:44:16,720
on irene's question um

1184
00:44:20,069 --> 00:44:18,960
how many if any of those 800 do you know

1185
00:44:23,109 --> 00:44:20,079
are

1186
00:44:24,390 --> 00:44:23,119
based here in florida and uh

1187
00:44:25,910 --> 00:44:24,400
again you were just talking about this

1188
00:44:28,390 --> 00:44:25,920

but um i was just curious how the

1189
00:44:31,589 --> 00:44:28,400
revised manifest is likely to

1190
00:44:33,109 --> 00:44:31,599
change if at all uh the the schedule of

1191
00:44:35,109 --> 00:44:33,119
layoffs um

1192
00:44:36,790 --> 00:44:35,119
for the the workforce especially here at

1193
00:44:38,309 --> 00:44:36,800
ksc

1194
00:44:40,790 --> 00:44:38,319
it's uh about

1195
00:44:42,069 --> 00:44:40,800
about 300 and all of them

1196
00:44:43,430 --> 00:44:42,079
excuse me

1197
00:44:44,710 --> 00:44:43,440
all of them that

1198
00:44:46,790 --> 00:44:44,720
i believe we're going to be able to do

1199
00:44:49,670 --> 00:44:46,800
with voluntary retirements so it will

1200
00:44:51,190 --> 00:44:49,680
not be any any forced layoffs that

1201
00:44:54,069 --> 00:44:51,200
that we could see although that's you

1202
00:44:55,829 --> 00:44:54,079
know the numbers change on a daily basis

1203
00:44:57,270 --> 00:44:55,839
um

1204
00:44:59,109 --> 00:44:57,280
what i would suspect is that if we

1205
00:45:00,309 --> 00:44:59,119
extended the program

1206
00:45:01,670 --> 00:45:00,319
it would not change our workforce

1207
00:45:03,190 --> 00:45:01,680
profile very much

1208
00:45:05,109 --> 00:45:03,200
uh it might

1209
00:45:07,670 --> 00:45:05,119
excuse me

1210
00:45:09,109 --> 00:45:07,680
it might allow us to uh to reduce the

1211
00:45:10,950 --> 00:45:09,119
the workforce even more because you're

1212
00:45:12,950 --> 00:45:10,960
spreading the work out over

1213
00:45:14,550 --> 00:45:12,960

over a longer period of time

1214
00:45:16,950 --> 00:45:14,560
but you would keep that core group

1215
00:45:18,390 --> 00:45:16,960
around for uh for the extended period

1216
00:45:21,270 --> 00:45:18,400
while you're while you're still flying

1217
00:45:23,030 --> 00:45:21,280
so you know the benefit of of

1218
00:45:25,670 --> 00:45:23,040
of extending is that you can keep that

1219
00:45:27,670 --> 00:45:25,680
core group around for a while um you

1220
00:45:29,190 --> 00:45:27,680
know whereas if you finished earlier on

1221
00:45:34,069 --> 00:45:29,200
you would you would let that whole team

1222
00:45:39,829 --> 00:45:37,109
thanks and um following up i think

1223
00:45:41,910 --> 00:45:39,839
bill's question early on there um could

1224
00:45:44,309 --> 00:45:41,920
you explain uh

1225
00:45:46,950 --> 00:45:44,319
what the opportunities for

1226
00:45:48,950 --> 00:45:46,960
launching endeavor are in in november

1227
00:45:51,430 --> 00:45:48,960
and december with the the cut out the

1228
00:45:53,510 --> 00:45:51,440
beta cutout and and the

1229
00:45:55,589 --> 00:45:53,520
traffic various different vehicles going

1230
00:45:57,349 --> 00:45:55,599
up and down to the station

1231
00:45:59,510 --> 00:45:57,359
yeah it gets pretty thin towards the end

1232
00:46:01,510 --> 00:45:59,520
of the end of the year as far as lunch

1233
00:46:03,349 --> 00:46:01,520
opportunities are concerned

1234
00:46:04,870 --> 00:46:03,359
bill had to write that november 26 would

1235
00:46:06,710 --> 00:46:04,880
be probably the only window that we

1236
00:46:08,630 --> 00:46:06,720
would really want to go for

1237
00:46:10,630 --> 00:46:08,640
because of a beta cut out in the year in

1238
00:46:13,190 --> 00:46:10,640

rollover

1239
00:46:15,349 --> 00:46:13,200
we're just going to stand by and ams has

1240
00:46:17,190 --> 00:46:15,359
a lot of the alpha magnetic spectrometer

1241
00:46:19,670 --> 00:46:17,200
has a lot of work ahead of them

1242
00:46:21,670 --> 00:46:19,680
uh to replace the uh the cryo-cooled

1243
00:46:23,510 --> 00:46:21,680
magnet with the permanent magnet

1244
00:46:25,670 --> 00:46:23,520
i think they'll be through most of that

1245
00:46:26,790 --> 00:46:25,680
activity as we we get into the summer

1246
00:46:29,430 --> 00:46:26,800
months

1247
00:46:31,589 --> 00:46:29,440
by that time we'll have flown sts-132

1248
00:46:33,270 --> 00:46:31,599
and the the work we'll have the

1249
00:46:35,670 --> 00:46:33,280
the pmm

1250
00:46:37,589 --> 00:46:35,680
uh cargo discussion

1251
00:46:39,910 --> 00:46:37,599
will be more clear so we're going to

1252
00:46:41,510 --> 00:46:39,920
hold off on really setting a date for

1253
00:46:42,870 --> 00:46:41,520
ams until they get a little further

1254
00:46:45,670 --> 00:46:42,880
along and we understand where we are in

1255
00:46:47,270 --> 00:46:45,680
our manifest and i would suspect by

1256
00:46:51,109 --> 00:46:47,280
by early summer time we'll have a we'll

1257
00:46:54,870 --> 00:46:53,270
okay and i'm sorry i don't mean to

1258
00:46:56,710 --> 00:46:54,880
overdo it here but

1259
00:46:59,510 --> 00:46:56,720
i know you're not setting a date but

1260
00:47:01,510 --> 00:46:59,520
when you say november 26 window is that

1261
00:47:03,270 --> 00:47:01,520
a few days or is there two two or three

1262
00:47:04,870 --> 00:47:03,280
weeks there that you have

1263
00:47:06,309 --> 00:47:04,880

i'll have to get it to you because it's

1264
00:47:09,109 --> 00:47:06,319
it's fairly complicated we can give you

1265
00:47:11,030 --> 00:47:09,119
exactly what uh what little slivers of

1266
00:47:12,390 --> 00:47:11,040
window we have through through the end

1267
00:47:14,870 --> 00:47:12,400
of november we actually have a real

1268
00:47:17,270 --> 00:47:14,880
small sliver in in early december so

1269
00:47:19,109 --> 00:47:17,280
we'll get that to you

1270
00:47:25,030 --> 00:47:19,119
okay final questions from nasa

1271
00:47:29,270 --> 00:47:27,030
thank you this is uh tarik malik from

1272
00:47:30,630 --> 00:47:29,280
space.com and space news and i think i

1273
00:47:33,430 --> 00:47:30,640
have just a couple of questions to

1274
00:47:35,430 --> 00:47:33,440
follow up with uh with john uh john uh

1275
00:47:38,790 --> 00:47:35,440
you're coming up on um i guess a few

1276
00:47:41,510 --> 00:47:38,800
months lol after what would be uh

1277
00:47:43,270 --> 00:47:41,520
almost uh three missions in as many

1278
00:47:45,349 --> 00:47:43,280
months and i'm just wondering how you're

1279
00:47:48,230 --> 00:47:45,359
keeping the team focused knowing that

1280
00:47:50,230 --> 00:47:48,240
you'd have a maybe a pretty light summer

1281
00:47:52,630 --> 00:47:50,240
with just two two flights left uh

1282
00:47:54,390 --> 00:47:52,640
sometime in the fall

1283
00:47:57,030 --> 00:47:54,400
the team is uh has been staying very

1284
00:47:59,430 --> 00:47:57,040
focused we'll use it to do some training

1285
00:48:00,950 --> 00:47:59,440
some some maintenance uh we'll continue

1286
00:48:02,390 --> 00:48:00,960
to work any issues on the vehicle you

1287
00:48:04,870 --> 00:48:02,400
know

1288
00:48:06,630 --> 00:48:04,880

part of the the um

1289
00:48:08,790 --> 00:48:06,640
the thing that amazes me about this team

1290
00:48:10,470 --> 00:48:08,800
is they do not treat any of these flows

1291
00:48:12,069 --> 00:48:10,480
like last flows

1292
00:48:14,150 --> 00:48:12,079
they continue to investigate they

1293
00:48:15,910 --> 00:48:14,160
continue to improve the vehicles

1294
00:48:17,829 --> 00:48:15,920
i expect that our tempo even though

1295
00:48:20,950 --> 00:48:17,839
we're not flying for

1296
00:48:22,470 --> 00:48:20,960
uh really from may to september

1297
00:48:24,230 --> 00:48:22,480
i don't expect that the tempo will

1298
00:48:25,750 --> 00:48:24,240
decrease much and that the team will

1299
00:48:27,190 --> 00:48:25,760
continue to keep

1300
00:48:28,549 --> 00:48:27,200
keep

1301
00:48:30,069 --> 00:48:28,559
doing all the things that they've been

1302
00:48:32,549 --> 00:48:30,079
doing to to make sure the vehicles are

1303
00:48:34,390 --> 00:48:32,559
as safe as possible and of course our

1304
00:48:36,710 --> 00:48:34,400
training template will be the same

1305
00:48:38,390 --> 00:48:36,720
the the mission in september and then

1306
00:48:40,390 --> 00:48:38,400
the follow-on ams mission are very

1307
00:48:41,510 --> 00:48:40,400
challenging missions and uh it'll be

1308
00:48:43,910 --> 00:48:41,520
nice to have a little bit of time to

1309
00:48:45,910 --> 00:48:43,920
prepare and train and really uh really

1310
00:48:48,870 --> 00:48:45,920
get set for those so i don't expect a

1311
00:48:53,829 --> 00:48:48,880
big a big downturn in activity over the

1312
00:48:53,839 --> 00:48:57,349
thank you and my last question

1313
00:48:59,990 --> 00:48:58,630

refers to the

1314
00:49:03,190 --> 00:49:00,000
the et delivery that you mentioned

1315
00:49:04,790 --> 00:49:03,200
earlier i'm just wondering how uh the

1316
00:49:07,030 --> 00:49:04,800
oil slick kind of contingency work you

1317
00:49:09,190 --> 00:49:07,040
did has either slowed that process or

1318
00:49:11,349 --> 00:49:09,200
how different it is from say a normal

1319
00:49:12,470 --> 00:49:11,359
tank delivering

1320
00:49:14,950 --> 00:49:12,480
if you have to check it out when it

1321
00:49:18,470 --> 00:49:14,960
arrives at the cape as well thank you

1322
00:49:20,069 --> 00:49:18,480
okay the uh et-137 is currently on the

1323
00:49:21,510 --> 00:49:20,079
pegasus barge

1324
00:49:23,670 --> 00:49:21,520
um

1325
00:49:26,309 --> 00:49:23,680
they're always towed from the dock at

1326
00:49:27,990 --> 00:49:26,319
michoud assembly facility around to

1327
00:49:29,829 --> 00:49:28,000
kennedy space center

1328
00:49:30,710 --> 00:49:29,839
by the solid rocket booster recovery

1329
00:49:32,069 --> 00:49:30,720
ship

1330
00:49:34,150 --> 00:49:32,079
and

1331
00:49:35,910 --> 00:49:34,160
because of the oil spill

1332
00:49:37,829 --> 00:49:35,920
that path they would normally take which

1333
00:49:40,309 --> 00:49:37,839
is a deep water path for the srb

1334
00:49:43,270 --> 00:49:40,319
recovery ship is not available

1335
00:49:44,870 --> 00:49:43,280
and so there's a little more shallow

1336
00:49:46,950 --> 00:49:44,880
draft path and we're going to use

1337
00:49:49,349 --> 00:49:46,960
commercial tugs to take pegasus over to

1338
00:49:51,349 --> 00:49:49,359

gulfport where freedom star is is

1339
00:49:54,470 --> 00:49:51,359
waiting for it

1340
00:49:56,870 --> 00:49:54,480
the team did a nice job in

1341
00:49:59,109 --> 00:49:56,880
in assessing would there be any if you

1342
00:50:01,109 --> 00:49:59,119
went through an oil slick patch would

1343
00:50:03,829 --> 00:50:01,119
that cause any any problems to freedom

1344
00:50:05,829 --> 00:50:03,839
star or pegasus or or the external tank

1345
00:50:08,309 --> 00:50:05,839
and that work was uh was done really

1346
00:50:09,990 --> 00:50:08,319
from just an off-gassing standpoint

1347
00:50:11,510 --> 00:50:10,000
you may end up having to clean the barge

1348
00:50:12,790 --> 00:50:11,520
in the ship a little bit more but that's

1349
00:50:15,589 --> 00:50:12,800
that's okay

1350
00:50:17,030 --> 00:50:15,599
um and every time every et regardless of

1351
00:50:19,109 --> 00:50:17,040
what uh

1352
00:50:21,910 --> 00:50:19,119
uh

1353
00:50:24,309 --> 00:50:21,920
the the trip or or any issues during the

1354
00:50:26,470 --> 00:50:24,319
transport every time it is unloaded we

1355
00:50:28,309 --> 00:50:26,480
take it into the vertical assembly

1356
00:50:31,270 --> 00:50:28,319
building at kennedy space center into

1357
00:50:33,510 --> 00:50:31,280
the checkout cell and run a a systems

1358
00:50:35,190 --> 00:50:33,520
check on it and and look at it very

1359
00:50:36,470 --> 00:50:35,200
closely and make sure that that it

1360
00:50:38,870 --> 00:50:36,480
didn't have any issues during the

1361
00:50:40,390 --> 00:50:38,880
transport and the team is very good at

1362
00:50:41,910 --> 00:50:40,400
it doing that

1363
00:50:43,670 --> 00:50:41,920

and that's before it would go into the

1364
00:50:45,270 --> 00:50:43,680
integration cell to be

1365
00:50:46,950 --> 00:50:45,280
to be made it up to the solid rocket

1366
00:50:49,030 --> 00:50:46,960
boosters you know things are just we're

1367
00:50:51,309 --> 00:50:49,040
just continuing to uh to process

1368
00:50:55,190 --> 00:50:51,319
continuing to do things uh for the

1369
00:50:57,750 --> 00:50:55,200
sts-133 flight currently in september

1370
00:50:59,589 --> 00:50:57,760
mobile lodge platform number three is in

1371
00:51:02,069 --> 00:50:59,599
high bay three we're starting stacking

1372
00:51:03,270 --> 00:51:02,079
on it this week we're getting the et out

1373
00:51:04,950 --> 00:51:03,280
there

1374
00:51:06,549 --> 00:51:04,960
it's just it's just a lot of fun to

1375
00:51:08,870 --> 00:51:06,559
watch the the folks at the cape do the

1376
00:51:11,030 --> 00:51:08,880
job that they do so extremely well and

1377
00:51:13,109 --> 00:51:11,040
uh and get ready for the next flight and

1378
00:51:14,710 --> 00:51:13,119
um so it's you know

1379
00:51:15,910 --> 00:51:14,720
the team they know what to do and

1380
00:51:17,109 --> 00:51:15,920
they're they they go through the

1381
00:51:18,870 --> 00:51:17,119
processes and even though you have

1382
00:51:20,390 --> 00:51:18,880
weather issues or oil slicks or who

1383
00:51:22,230 --> 00:51:20,400
knows what you know coming up they're

1384
00:51:23,589 --> 00:51:22,240
able to uh to do the appropriate

1385
00:51:25,990 --> 00:51:23,599
analyses and make sure that we're going

1386
00:51:28,309 --> 00:51:26,000
to be uh be good to go on the on the

1387
00:51:29,589 --> 00:51:28,319
dates that we set

1388
00:51:31,270 --> 00:51:29,599

okay that's all the time we have for

1389
00:51:32,950 --> 00:51:31,280
this briefing the next briefing up is

1390
00:51:34,870 --> 00:51:32,960
the mission overview with the two flight

1391
00:51:36,230 --> 00:51:34,880
directors they also have a special guest

1392
00:51:38,950 --> 00:51:36,240
that's going to join that panel that'll

1393
00:51:40,870 --> 00:51:38,960
be a surprise for you and

1394
00:51:43,030 --> 00:51:40,880
so look for that at the top of the hour