
on Space Cen
Center

1
00:00:05,749 --> 00:00:03,590
good afternoon and welcome back to

2
00:00:08,230 --> 00:00:05,759
nasa's johnson space center today we're

3
00:00:10,390 --> 00:00:08,240
having the post mission management team

4
00:00:13,589 --> 00:00:10,400
briefing this is for flight day two of

5
00:00:15,669 --> 00:00:13,599
the sts-134 mission and with us we have

6
00:00:17,910 --> 00:00:15,679
leroy kane who was the chairman of that

7
00:00:20,150 --> 00:00:17,920
meeting and also is the deputy program

8
00:00:22,870 --> 00:00:20,160
manager for the space shuttle we'll open

9
00:00:24,390 --> 00:00:22,880
up with comments and then take questions

10
00:00:26,390 --> 00:00:24,400
okay thank you very much well good

11
00:00:27,830 --> 00:00:26,400
afternoon it's great to have endeavour

12
00:00:29,349 --> 00:00:27,840
back in orbit

13
00:00:31,990 --> 00:00:29,359

i think most of you probably saw the

14
00:00:34,630 --> 00:00:32,000
launch yesterday it was

15
00:00:36,950 --> 00:00:34,640
after a very uneventful and flawless

16
00:00:39,510 --> 00:00:36,960
launch countdown

17
00:00:42,470 --> 00:00:39,520
the launch itself and the

18
00:00:44,470 --> 00:00:42,480
endeavors climb ascent into orbit was

19
00:00:46,950 --> 00:00:44,480
uneventful it was

20
00:00:49,110 --> 00:00:46,960
completely nominal and

21
00:00:51,270 --> 00:00:49,120
the performance of the vehicle

22
00:00:53,110 --> 00:00:51,280
to include all of the elements the the

23
00:00:55,350 --> 00:00:53,120
engines the solid rocket boosters the

24
00:00:57,189 --> 00:00:55,360
orbiter of course endeavor

25
00:00:59,349 --> 00:00:57,199
and and the external tank was just

26
00:01:00,150 --> 00:00:59,359
outstanding

27
00:01:01,670 --> 00:01:00,160
we

28
00:01:04,390 --> 00:01:01,680
i want to say a few more words about the

29
00:01:07,510 --> 00:01:04,400
external tank you'll recall this was

30
00:01:09,750 --> 00:01:07,520
excuse me external tank 122

31
00:01:12,230 --> 00:01:09,760
which has commonly been referred to as

32
00:01:14,230 --> 00:01:12,240
the katrina tank

33
00:01:16,310 --> 00:01:14,240
the performance of the tank as i said

34
00:01:18,710 --> 00:01:16,320
was outstanding

35
00:01:21,510 --> 00:01:18,720
we had to do some work on that tank

36
00:01:22,630 --> 00:01:21,520
after it was damaged in the hurricane

37
00:01:23,429 --> 00:01:22,640
and

38
00:01:27,270 --> 00:01:23,439

the

39
00:01:29,429 --> 00:01:27,280
entire team that that got that tank

40
00:01:31,350 --> 00:01:29,439
ready to fly again frankly there were

41
00:01:33,270 --> 00:01:31,360
some folks who questioned whether we

42
00:01:34,950 --> 00:01:33,280
would ever be able to fly that tank as a

43
00:01:37,270 --> 00:01:34,960
as a flight element

44
00:01:39,030 --> 00:01:37,280
in the early stages and

45
00:01:40,469 --> 00:01:39,040
it's just a lot of hard work by a lot of

46
00:01:42,230 --> 00:01:40,479
folks

47
00:01:44,870 --> 00:01:42,240
of course those that

48
00:01:45,990 --> 00:01:44,880
that execute the manufacturing the

49
00:01:47,670 --> 00:01:46,000
processing

50
00:01:49,350 --> 00:01:47,680
at the michoud assembly facility just

51
00:01:51,030 --> 00:01:49,360
did an outstanding job getting that tank

52
00:01:52,789 --> 00:01:51,040
ready to fly

53
00:01:54,389 --> 00:01:52,799
a lot of engineering and integration

54
00:01:56,709 --> 00:01:54,399
work done

55
00:01:59,510 --> 00:01:56,719
as well as by the safety teams and

56
00:02:03,749 --> 00:01:59,520
various risk-based assessments were done

57
00:02:05,510 --> 00:02:03,759
and so just a lot of credit goes to to

58
00:02:08,550 --> 00:02:05,520
all those folks that work so hard on on

59
00:02:11,910 --> 00:02:08,560
getting et-122 ready to fly

60
00:02:13,670 --> 00:02:11,920
and as i said all of the all of the uh

61
00:02:14,790 --> 00:02:13,680
sts elements performed outstanding

62
00:02:16,869 --> 00:02:14,800
yesterday

63
00:02:18,630 --> 00:02:16,879

and so endeavor is on orbit

64
00:02:20,229 --> 00:02:18,640
and the crew and endeavor are in great

65
00:02:22,550 --> 00:02:20,239
shape

66
00:02:25,190 --> 00:02:22,560
we had very little to talk about in the

67
00:02:27,670 --> 00:02:25,200
mission management team today

68
00:02:29,830 --> 00:02:27,680
the the items of interest that we have

69
00:02:31,750 --> 00:02:29,840
are are very very minor

70
00:02:33,190 --> 00:02:31,760
in and of themselves and

71
00:02:34,710 --> 00:02:33,200
present no

72
00:02:36,790 --> 00:02:34,720
no impact to

73
00:02:38,550 --> 00:02:36,800
any phase of the mission so the

74
00:02:41,990 --> 00:02:38,560
performance of the crew and the vehicle

75
00:02:43,910 --> 00:02:42,000
is is outstanding at this point

76
00:02:45,589 --> 00:02:43,920
we are the crew of course when they got

77
00:02:47,670 --> 00:02:45,599
on over yesterday did their normal

78
00:02:49,830 --> 00:02:47,680
flight day one activities

79
00:02:51,670 --> 00:02:49,840
today they got up and and did the normal

80
00:02:53,430 --> 00:02:51,680
flight day two activities to include the

81
00:02:55,270 --> 00:02:53,440
inspection of the

82
00:02:57,190 --> 00:02:55,280
thermal protection system uh the

83
00:02:59,910 --> 00:02:57,200
reinforced carbon carbon wing leading

84
00:03:01,350 --> 00:02:59,920
edge all that work has been complete and

85
00:03:02,550 --> 00:03:01,360
we're getting all of that data to the

86
00:03:05,270 --> 00:03:02,560
ground and we'll do our normal

87
00:03:06,949 --> 00:03:05,280
assessment of all that data

88
00:03:08,309 --> 00:03:06,959

in the mission management team today we

89
00:03:10,710 --> 00:03:08,319
we didn't review any of that because

90
00:03:14,070 --> 00:03:10,720
it's not available yet

91
00:03:15,830 --> 00:03:14,080
the preliminary assessments that we have

92
00:03:17,110 --> 00:03:15,840
is that everything looks really really

93
00:03:18,790 --> 00:03:17,120
good so far

94
00:03:20,949 --> 00:03:18,800
and we're not tracking any issues as far

95
00:03:23,190 --> 00:03:20,959
as that's concerned

96
00:03:25,350 --> 00:03:23,200
we will turn our attention here toward

97
00:03:26,630 --> 00:03:25,360
the rendezvous and docking which will

98
00:03:27,990 --> 00:03:26,640
occur

99
00:03:29,910 --> 00:03:28,000
starting tonight

100
00:03:31,350 --> 00:03:29,920
the crew gets up i think about 10 pm

101
00:03:33,509 --> 00:03:31,360
local time

102
00:03:35,910 --> 00:03:33,519
and gets into their renovated procedures

103
00:03:37,190 --> 00:03:35,920
in earnest shortly after that

104
00:03:40,229 --> 00:03:37,200
with the docking

105
00:03:41,430 --> 00:03:40,239
around 5 15 local time tomorrow so

106
00:03:43,589 --> 00:03:41,440
we're very much looking forward to

107
00:03:45,670 --> 00:03:43,599
getting back to space station this is an

108
00:03:47,110 --> 00:03:45,680
extremely important mission for us

109
00:03:47,990 --> 00:03:47,120
i went down the hall in the control

110
00:03:50,390 --> 00:03:48,000
center

111
00:03:52,149 --> 00:03:50,400
and talked to the alpha magnetic

112
00:03:54,070 --> 00:03:52,159
spectrometer folks they have their own

113
00:03:55,990 --> 00:03:54,080

little shop set up there around the

114
00:03:56,869 --> 00:03:56,000
corner from the the main mission control

115
00:03:58,949 --> 00:03:56,879
center

116
00:04:02,070 --> 00:03:58,959
and they're very excited

117
00:04:03,509 --> 00:04:02,080
they're ready to get ams safely on board

118
00:04:05,110 --> 00:04:03,519
the space station and get it activated

119
00:04:07,990 --> 00:04:05,120
so that's an extremely

120
00:04:10,869 --> 00:04:08,000
important milestone for us

121
00:04:12,789 --> 00:04:10,879
not just the agency or not even just for

122
00:04:14,309 --> 00:04:12,799
our nation frankly

123
00:04:15,429 --> 00:04:14,319
and so a lot of folks around the world

124
00:04:17,590 --> 00:04:15,439
are watching

125
00:04:20,629 --> 00:04:17,600
uh intently and we look very much

126
00:04:22,710 --> 00:04:20,639
forward to that that activity

127
00:04:24,150 --> 00:04:22,720
so things are are going very well on

128
00:04:25,110 --> 00:04:24,160
orbit

129
00:04:27,030 --> 00:04:25,120
and

130
00:04:29,670 --> 00:04:27,040
just as a programming note

131
00:04:31,189 --> 00:04:29,680
you may know that this morning and today

132
00:04:32,870 --> 00:04:31,199
we rolled out

133
00:04:34,629 --> 00:04:32,880
atlantis rolled out of the orbiter

134
00:04:36,629 --> 00:04:34,639
processing facility and rolled over to

135
00:04:39,110 --> 00:04:36,639
the vehicle assembly building

136
00:04:41,110 --> 00:04:39,120
and she's in the transfer aisle now in

137
00:04:43,590 --> 00:04:41,120
the vehicle assembly building will will

138
00:04:45,430 --> 00:04:43,600

start the mate operations for uh for

139
00:04:48,390 --> 00:04:45,440
atlantis to uh

140
00:04:53,270 --> 00:04:48,400
to her stack and in preparation for for

141
00:04:54,790 --> 00:04:53,280
the next and final mission uh sts-135 so

142
00:04:56,710 --> 00:04:54,800
all right we anticipate that we'll roll

143
00:04:59,590 --> 00:04:56,720
out to the launch pad

144
00:05:01,510 --> 00:04:59,600
on may 31st if if the schedule holds for

145
00:05:03,670 --> 00:05:01,520
where we are right now and of course

146
00:05:06,550 --> 00:05:03,680
that's the day before it'll be in the

147
00:05:08,230 --> 00:05:06,560
evening of that day

148
00:05:09,590 --> 00:05:08,240
that will be the day before our planned

149
00:05:11,189 --> 00:05:09,600
intermission for

150
00:05:12,629 --> 00:05:11,199
for this mission that we have in orbit

151
00:05:14,390 --> 00:05:12,639
so

152
00:05:15,830 --> 00:05:14,400
a lot of activity going on at the launch

153
00:05:17,350 --> 00:05:15,840
site um

154
00:05:19,270 --> 00:05:17,360
obviously a lot of activity going on

155
00:05:20,230 --> 00:05:19,280
here and in orbit and that's the way we

156
00:05:21,029 --> 00:05:20,240
like it

157
00:05:22,710 --> 00:05:21,039
so

158
00:05:25,270 --> 00:05:22,720
things are going really well kylie and i

159
00:05:26,469 --> 00:05:25,280
think that's all i have thank you

160
00:05:28,150 --> 00:05:26,479
we'll start with questions here at the

161
00:05:29,510 --> 00:05:28,160
johnson space center

162
00:05:32,390 --> 00:05:29,520
back

163
00:05:33,830 --> 00:05:32,400

oh thank you mark caro for aviation week

164
00:05:35,029 --> 00:05:33,840
and i just

165
00:05:37,909 --> 00:05:35,039
i think

166
00:05:39,670 --> 00:05:37,919
followed you on the tps evaluations and

167
00:05:43,029 --> 00:05:39,680
just sort of looking at

168
00:05:44,870 --> 00:05:43,039
a sense of when the mmt would like to

169
00:05:47,110 --> 00:05:44,880
be able to clear or not clear the

170
00:05:49,029 --> 00:05:47,120
vehicle so the rest of the mission

171
00:05:51,110 --> 00:05:49,039
activities can follow the schedule you

172
00:05:53,830 --> 00:05:51,120
laid out

173
00:05:56,309 --> 00:05:53,840
okay mark the um the timeline that we

174
00:05:58,790 --> 00:05:56,319
kind of have established is a

175
00:06:00,550 --> 00:05:58,800
summer honor about flight day five

176
00:06:02,790 --> 00:06:00,560
is when i would like to know whether or

177
00:06:04,230 --> 00:06:02,800
not the team

178
00:06:06,870 --> 00:06:04,240
thinks that we need any kind of focused

179
00:06:10,870 --> 00:06:08,870
starting tomorrow i think that there's a

180
00:06:11,749 --> 00:06:10,880
good chance sometime between tomorrow

181
00:06:16,070 --> 00:06:11,759
and

182
00:06:17,749 --> 00:06:16,080
thursday we'll have our answer

183
00:06:19,749 --> 00:06:17,759
that assumes that all the data comes

184
00:06:21,350 --> 00:06:19,759
down as planned in our normal evaluation

185
00:06:23,270 --> 00:06:21,360
timeline is

186
00:06:25,189 --> 00:06:23,280
is that we're able to follow our normal

187
00:06:26,870 --> 00:06:25,199
timeline

188
00:06:29,350 --> 00:06:26,880

in some cases the team is able to get

189
00:06:31,350 --> 00:06:29,360
through it more quickly

190
00:06:33,110 --> 00:06:31,360
but if not it's kind of in the friday

191
00:06:37,670 --> 00:06:33,120
time frame that i'd like to be able to

192
00:06:44,550 --> 00:06:41,510
uh phil sloss with nasaspaceflight.com

193
00:06:46,550 --> 00:06:44,560
for the soyuz undocking and possible

194
00:06:48,629 --> 00:06:46,560
photo imagery on that

195
00:06:52,469 --> 00:06:48,639
what what's the timeline for the mmt in

196
00:06:54,469 --> 00:06:52,479
terms of making a final decision on that

197
00:06:55,909 --> 00:06:54,479
yep felt we're working on that timeline

198
00:06:57,270 --> 00:06:55,919
right now

199
00:07:02,309 --> 00:06:57,280
the

200
00:07:04,390 --> 00:07:02,319
since launch day in terms of what we

201
00:07:05,990 --> 00:07:04,400
would like to do and how that lays out

202
00:07:08,950 --> 00:07:06,000
and so we want the teams to be able to

203
00:07:12,309 --> 00:07:08,960
have the time to evaluate that

204
00:07:14,309 --> 00:07:12,319
the normal plan would be for for any

205
00:07:16,790 --> 00:07:14,319
vehicle undocking from the space station

206
00:07:18,070 --> 00:07:16,800
they would do their normal process

207
00:07:20,070 --> 00:07:18,080
through their

208
00:07:22,469 --> 00:07:20,080
iss mmt

209
00:07:24,309 --> 00:07:22,479
and they would schedule it

210
00:07:26,309 --> 00:07:24,319
the undocking go no go for a couple of

211
00:07:29,909 --> 00:07:26,319
days before that activity

212
00:07:31,350 --> 00:07:29,919
in this case with undock on monday

213
00:07:33,270 --> 00:07:31,360

they would normally do that in the

214
00:07:35,589 --> 00:07:33,280
saturday time frame

215
00:07:37,029 --> 00:07:35,599
they might like to move that up a day

216
00:07:39,029 --> 00:07:37,039
so right now

217
00:07:40,469 --> 00:07:39,039
i anticipate that we'll probably have

218
00:07:41,830 --> 00:07:40,479
that discussion

219
00:07:42,710 --> 00:07:41,840
on friday

220
00:07:45,110 --> 00:07:42,720
and

221
00:07:47,990 --> 00:07:45,120
leading up to friday then we'll have our

222
00:07:50,230 --> 00:07:48,000
our mmt discussion

223
00:07:52,070 --> 00:07:50,240
where the shuttle piece of this is

224
00:07:54,230 --> 00:07:52,080
concerned from a dual dock ops we call

225
00:07:56,790 --> 00:07:54,240
it dual dock ops because

226
00:07:58,790 --> 00:07:56,800
we're docked while another vehicle is is

227
00:08:00,469 --> 00:07:58,800
is undocking if you will

228
00:08:03,029 --> 00:08:00,479
so we'll have those discussions this

229
00:08:04,230 --> 00:08:03,039
week i can't give you the detailed um

230
00:08:05,830 --> 00:08:04,240
exactly

231
00:08:08,070 --> 00:08:05,840
when the meetings will occur because the

232
00:08:10,070 --> 00:08:08,080
team is off assessing how much more time

233
00:08:11,510 --> 00:08:10,080
they need and i've asked them to come

234
00:08:13,110 --> 00:08:11,520
back

235
00:08:14,309 --> 00:08:13,120
later today probably not later than

236
00:08:17,589 --> 00:08:14,319
tomorrow morning and let me know what

237
00:08:21,749 --> 00:08:19,990
any more questions here

238
00:08:23,110 --> 00:08:21,759

seeing none i know we have folks on the

239
00:08:32,389 --> 00:08:23,120
line so we'll start with bill harwood

240
00:08:32,399 --> 00:08:35,750
sorry about that can you hear me now

241
00:08:35,760 --> 00:08:46,550
uh yes i'm here do you hear me cup yes

242
00:08:51,829 --> 00:08:48,470
hey i'm sorry i apologize do you hear me

243
00:08:54,949 --> 00:08:53,430
we can hear you bill

244
00:08:56,710 --> 00:08:54,959
i think i need to sell telephones or

245
00:08:57,910 --> 00:08:56,720
something okay uh leroy let me just

246
00:09:02,550 --> 00:08:57,920
fight off on the last question if i

247
00:09:03,829 --> 00:09:02,560
could i i'm i'm confused as to why

248
00:09:05,750 --> 00:09:03,839
you guys would even consider a fly

249
00:09:07,670 --> 00:09:05,760
around on short notice

250
00:09:09,430 --> 00:09:07,680
given all the sleep shifting issues you

251
00:09:12,150 --> 00:09:09,440
have dual doc dops everything that's on

252
00:09:13,430 --> 00:09:12,160
the plate it really seems like a hurried

253
00:09:15,030 --> 00:09:13,440
effort given all the time you've already

254
00:09:16,710 --> 00:09:15,040
put into this earlier

255
00:09:18,230 --> 00:09:16,720
and i just don't get it so i'm just

256
00:09:20,870 --> 00:09:18,240
hoping you can give me some rationale

257
00:09:22,630 --> 00:09:20,880
for why you need to do it now if you do

258
00:09:23,590 --> 00:09:22,640
it at all

259
00:09:26,310 --> 00:09:23,600
sure

260
00:09:28,470 --> 00:09:26,320
okay bill yeah we um we have spent a

261
00:09:31,030 --> 00:09:28,480
great deal of time on on dual docked

262
00:09:33,030 --> 00:09:31,040
operations just generically

263
00:09:34,550 --> 00:09:33,040

uh for various different kinds of

264
00:09:36,949 --> 00:09:34,560
vehicle activities while the shuttle is

265
00:09:39,350 --> 00:09:36,959
present at the space station

266
00:09:41,110 --> 00:09:39,360
we really leveraged off of all that work

267
00:09:43,269 --> 00:09:41,120
which has been going on for a couple of

268
00:09:45,110 --> 00:09:43,279
years

269
00:09:47,030 --> 00:09:45,120
we leveraged off of that pretty heavily

270
00:09:48,949 --> 00:09:47,040
when we had our discussions

271
00:09:51,350 --> 00:09:48,959
during the last mission as you know we

272
00:09:53,829 --> 00:09:51,360
talked about doing this

273
00:09:56,949 --> 00:09:53,839
this fly about if you will

274
00:09:59,509 --> 00:09:56,959
sort of a pseudo fly around

275
00:10:01,509 --> 00:09:59,519
and so a great deal of the work that we

276
00:10:03,990 --> 00:10:01,519
had to perform from a

277
00:10:07,110 --> 00:10:04,000
a shuttle

278
00:10:08,870 --> 00:10:07,120
mission specific standpoint we did

279
00:10:11,829 --> 00:10:08,880
in preparation for doing that fly about

280
00:10:14,230 --> 00:10:11,839
on scs-133

281
00:10:15,910 --> 00:10:14,240
what the team is proposing that we do

282
00:10:17,269 --> 00:10:15,920
here on this mission is really just a

283
00:10:19,190 --> 00:10:17,279
variation

284
00:10:21,190 --> 00:10:19,200
of that activity

285
00:10:23,350 --> 00:10:21,200
and it's really not a fly about or even

286
00:10:24,870 --> 00:10:23,360
a fly around per se as we've talked

287
00:10:26,870 --> 00:10:24,880
about before

288
00:10:28,310 --> 00:10:26,880

the soyuz will undock

289
00:10:31,269 --> 00:10:28,320
we will do a

290
00:10:32,790 --> 00:10:31,279
small maneuver with the space station

291
00:10:34,630 --> 00:10:32,800
and then we'll take some some

292
00:10:36,630 --> 00:10:34,640
photographs from the soyuz

293
00:10:37,350 --> 00:10:36,640
and then the station will dock

294
00:10:39,269 --> 00:10:37,360
will

295
00:10:41,590 --> 00:10:39,279
maneuver back to

296
00:10:42,710 --> 00:10:41,600
attitude and that's really the extent of

297
00:10:45,750 --> 00:10:42,720
the activity

298
00:10:48,069 --> 00:10:45,760
so from a shuttle preparation standpoint

299
00:10:49,990 --> 00:10:48,079
we really just are going and reviewing

300
00:10:53,030 --> 00:10:50,000
the exact

301
00:10:55,430 --> 00:10:53,040
details of this plan to include

302
00:10:58,230 --> 00:10:55,440
as i said the attitude changes

303
00:11:00,069 --> 00:10:58,240
the profile of the soyuz

304
00:11:01,750 --> 00:11:00,079
what the shuttle and station crew

305
00:11:03,430 --> 00:11:01,760
members are doing immediately before

306
00:11:04,630 --> 00:11:03,440
during and then following the undock

307
00:11:06,389 --> 00:11:04,640
activity

308
00:11:07,910 --> 00:11:06,399
to be able to support it appropriately

309
00:11:12,790 --> 00:11:07,920
so

310
00:11:15,110 --> 00:11:12,800
it's really not a hurried up activity

311
00:11:16,790 --> 00:11:15,120
and and that's primarily because we are

312
00:11:18,230 --> 00:11:16,800
leveraging off of all of the work that's

313
00:11:19,110 --> 00:11:18,240

been done for literally a couple of

314
00:11:21,430 --> 00:11:19,120
years

315
00:11:23,590 --> 00:11:21,440
and then to include a lot of work that

316
00:11:25,030 --> 00:11:23,600
we did for sts-133

317
00:11:27,030 --> 00:11:25,040
and then this is really kind of a

318
00:11:29,030 --> 00:11:27,040
variation of what we were going to do on

319
00:11:31,269 --> 00:11:29,040
133 and it's actually

320
00:11:32,790 --> 00:11:31,279
what we're doing here is actually

321
00:11:34,389 --> 00:11:32,800
less complex

322
00:11:36,150 --> 00:11:34,399
in terms of the station maneuvers that

323
00:11:38,710 --> 00:11:36,160
we're going to do

324
00:11:41,430 --> 00:11:38,720
and what was going to be a fly around

325
00:11:43,750 --> 00:11:41,440
on sts-133

326
00:11:46,150 --> 00:11:43,760
okay uh thanks and could you give me a

327
00:11:47,430 --> 00:11:46,160
an update on uh on et i know you talked

328
00:11:48,949 --> 00:11:47,440
about dp performance and it was

329
00:11:50,949 --> 00:11:48,959
obviously i didn't see very much but i

330
00:11:52,710 --> 00:11:50,959
know you guys are tracking a few objects

331
00:11:54,310 --> 00:11:52,720
that came off can you update us on what

332
00:11:57,269 --> 00:11:54,320
you guys saw and what time frames you

333
00:11:59,430 --> 00:11:57,279
saw it in thanks

334
00:12:02,550 --> 00:11:59,440
we really only saw

335
00:12:04,389 --> 00:12:02,560
a handful of uh of items

336
00:12:07,110 --> 00:12:04,399
in the pre in the preliminary look of

337
00:12:07,829 --> 00:12:07,120
the at the ascent data bill

338
00:12:11,590 --> 00:12:07,839

and

339
00:12:13,190 --> 00:12:11,600
not changed that we did not brief that

340
00:12:14,069 --> 00:12:13,200
in detail at the mission management team

341
00:12:16,389 --> 00:12:14,079
today

342
00:12:18,790 --> 00:12:16,399
um i know we have those events available

343
00:12:20,710 --> 00:12:18,800
and we can we can give those to you but

344
00:12:23,030 --> 00:12:20,720
uh in summary there were a couple of

345
00:12:26,069 --> 00:12:23,040
debris items um from around the ice

346
00:12:28,069 --> 00:12:26,079
frost ramp and around the the the liquid

347
00:12:30,550 --> 00:12:28,079
oxygen feed line

348
00:12:33,670 --> 00:12:30,560
that were inside of the astt and there

349
00:12:36,629 --> 00:12:33,680
were a couple that were outside of astt

350
00:12:38,710 --> 00:12:36,639
for a total of i believe five five items

351
00:12:40,949 --> 00:12:38,720
on what we're calling four events

352
00:12:42,150 --> 00:12:40,959
because one of the events had had two

353
00:12:43,509 --> 00:12:42,160
items

354
00:12:45,430 --> 00:12:43,519
so

355
00:12:48,790 --> 00:12:45,440
that's unchanged from our preliminary

356
00:12:49,990 --> 00:12:48,800
report that i think you got

357
00:12:51,670 --> 00:12:50,000
that i think

358
00:12:55,190 --> 00:12:51,680
that bill gerstmeyer and mike moses

359
00:12:56,470 --> 00:12:55,200
reported on after the launch yesterday

360
00:13:01,590 --> 00:12:56,480
what i would

361
00:13:02,550 --> 00:13:01,600
that the performance of this tank really

362
00:13:04,069 --> 00:13:02,560
was

363
00:13:05,030 --> 00:13:04,079

outstanding

364
00:13:08,710 --> 00:13:05,040
the

365
00:13:10,550 --> 00:13:08,720
um

366
00:13:12,470 --> 00:13:10,560
were done in such a ways we were able to

367
00:13:14,870 --> 00:13:12,480
evaluate where we thought we would have

368
00:13:17,509 --> 00:13:14,880
some potential phone losses

369
00:13:19,910 --> 00:13:17,519
both in terms of the area

370
00:13:20,949 --> 00:13:19,920
and and to some extent the the number of

371
00:13:21,990 --> 00:13:20,959
losses

372
00:13:27,350 --> 00:13:22,000
um

373
00:13:29,509 --> 00:13:27,360
size of those losses

374
00:13:31,750 --> 00:13:29,519
and that's how we did our risk uh based

375
00:13:33,190 --> 00:13:31,760
assessment to be able to to go fly this

376
00:13:37,030 --> 00:13:33,200
tank safely

377
00:13:38,629 --> 00:13:37,040
and so what the team uh assessed

378
00:13:40,310 --> 00:13:38,639
in terms of uh

379
00:13:42,230 --> 00:13:40,320
of the performance and the expectations

380
00:13:45,269 --> 00:13:42,240
for the tank really we

381
00:13:47,750 --> 00:13:45,279
exceeded that by by quite a bit

382
00:13:50,949 --> 00:13:47,760
and what i mean by that specifically is

383
00:13:53,350 --> 00:13:50,959
we didn't have but only a few

384
00:13:56,389 --> 00:13:53,360
debris events and the events that we had

385
00:13:58,629 --> 00:13:56,399
of course were we believe preliminarily

386
00:14:00,790 --> 00:13:58,639
less than the allowable in terms of size

387
00:14:01,590 --> 00:14:00,800
and mass

388
00:14:04,790 --> 00:14:01,600

and

389
00:14:07,910 --> 00:14:04,800
so we were we were well inside of of the

390
00:14:09,750 --> 00:14:07,920
risk uh that we were willing to accept

391
00:14:12,629 --> 00:14:09,760
and that we thought was acceptable

392
00:14:13,509 --> 00:14:12,639
in terms of uh of debris from this tank

393
00:14:15,590 --> 00:14:13,519
so

394
00:14:19,030 --> 00:14:15,600
that's really the part i would highlight

395
00:14:20,230 --> 00:14:19,040
in the story about et122

396
00:14:22,389 --> 00:14:20,240
and

397
00:14:24,870 --> 00:14:22,399
as we go forward bill we'll have

398
00:14:30,310 --> 00:14:24,880
every single detail on every every event

399
00:14:33,430 --> 00:14:32,069
okay we'll move on to seth bernstein

400
00:14:35,509 --> 00:14:33,440
please

401
00:14:38,629 --> 00:14:35,519
yes thank you actually leroy continuing

402
00:14:39,350 --> 00:14:38,639
on the katrina tank here um could you

403
00:14:41,350 --> 00:14:39,360
say

404
00:14:42,949 --> 00:14:41,360
if you look at it with only uh

405
00:14:45,509 --> 00:14:42,959
uh obviously it's preliminary but only

406
00:14:48,069 --> 00:14:45,519
five foam events did that sort of

407
00:14:49,509 --> 00:14:48,079
outperform the normal tanks especially

408
00:14:51,829 --> 00:14:49,519
the normal post

409
00:14:55,189 --> 00:14:51,839
um columbia tent you know the redesigned

410
00:14:56,629 --> 00:14:55,199
tanks yeah so i'm wondering not only did

411
00:14:59,110 --> 00:14:56,639
you exceed

412
00:15:02,389 --> 00:14:59,120
your expectations get to perform better

413
00:15:04,069 --> 00:15:02,399

than the redesigned tanks

414
00:15:06,710 --> 00:15:04,079
well i i don't know that i have enough

415
00:15:08,550 --> 00:15:06,720
data to say that um

416
00:15:10,310 --> 00:15:08,560
and and it would be premature for me to

417
00:15:12,629 --> 00:15:10,320
say that

418
00:15:15,509 --> 00:15:12,639
but certainly um

419
00:15:18,230 --> 00:15:15,519
it it performed better than than

420
00:15:19,990 --> 00:15:18,240
what what most of our expectation was

421
00:15:22,389 --> 00:15:20,000
and our expectation was that it would

422
00:15:24,710 --> 00:15:22,399
have very very good performance

423
00:15:26,949 --> 00:15:24,720
and and that it was

424
00:15:29,749 --> 00:15:26,959
a perfectly good safe tank to go fly

425
00:15:31,749 --> 00:15:29,759
because of the work that the team did

426
00:15:33,590 --> 00:15:31,759
not only the touch labor and the actual

427
00:15:36,550 --> 00:15:33,600
modifications that we did after the tank

428
00:15:39,509 --> 00:15:36,560
was damaged but all the work that we did

429
00:15:41,590 --> 00:15:39,519
in putting it side by side with with our

430
00:15:43,430 --> 00:15:41,600
return to flight tanks

431
00:15:45,590 --> 00:15:43,440
and the various modifications that we

432
00:15:46,790 --> 00:15:45,600
did some of which we did on et 122 but

433
00:15:49,110 --> 00:15:46,800
not all

434
00:15:51,269 --> 00:15:49,120
as you know and so

435
00:15:53,189 --> 00:15:51,279
i'm not quite it would be premature for

436
00:15:55,430 --> 00:15:53,199
me to give you that kind of assessment

437
00:15:58,150 --> 00:15:55,440
that would require me to have

438
00:15:58,949 --> 00:15:58,160

really all of the data in hand

439
00:16:00,150 --> 00:15:58,959
but

440
00:16:02,389 --> 00:16:00,160
overall

441
00:16:04,150 --> 00:16:02,399
it's very easy to say and very easy to

442
00:16:06,230 --> 00:16:04,160
see at this point that the performance

443
00:16:08,389 --> 00:16:06,240
was outstanding

444
00:16:09,990 --> 00:16:08,399
just a second one a second question and

445
00:16:13,749 --> 00:16:10,000
last one for me

446
00:16:15,670 --> 00:16:13,759
um any word from the pat um you know pad

447
00:16:19,110 --> 00:16:15,680
damage and more importantly what does

448
00:16:20,389 --> 00:16:19,120
that mean for uh 135 scheduled was there

449
00:16:22,629 --> 00:16:20,399
any discussion

450
00:16:25,910 --> 00:16:22,639
135 schedule

451
00:16:29,749 --> 00:16:28,069
well see the pad the preliminary

452
00:16:31,110 --> 00:16:29,759
assessment of the pad that we we got a

453
00:16:33,189 --> 00:16:31,120
verbal

454
00:16:34,710 --> 00:16:33,199
report on today is that it looks very

455
00:16:37,590 --> 00:16:34,720
good

456
00:16:39,350 --> 00:16:37,600
there's no major damage um

457
00:16:41,430 --> 00:16:39,360
preliminarily we're seeing the kinds of

458
00:16:42,710 --> 00:16:41,440
small uh very minor items that we

459
00:16:45,670 --> 00:16:42,720
typically see and we'll get a full

460
00:16:47,269 --> 00:16:45,680
report on that uh in in a few days

461
00:16:49,350 --> 00:16:47,279
um so there doesn't appear to be

462
00:16:51,269 --> 00:16:49,360
anything that's that's uh out of family

463
00:16:53,350 --> 00:16:51,279

or outside of the realm of what we

464
00:16:55,269 --> 00:16:53,360
expect for normal quote normal pad

465
00:16:57,430 --> 00:16:55,279
damage

466
00:17:01,110 --> 00:16:57,440
and as it relates to the schedule you

467
00:17:02,310 --> 00:17:01,120
you may know that the pad turn around

468
00:17:08,630 --> 00:17:02,320
is

469
00:17:11,110 --> 00:17:08,640
once we get out of the vertical

470
00:17:13,029 --> 00:17:11,120
integrated flow and and head toward the

471
00:17:14,630 --> 00:17:13,039
pad

472
00:17:21,669 --> 00:17:14,640
the

473
00:17:24,150 --> 00:17:21,679
looks really good so

474
00:17:26,789 --> 00:17:24,160
we didn't talk too much about schedule

475
00:17:28,470 --> 00:17:26,799
in terms of the launch date for 135.

476
00:17:31,190 --> 00:17:28,480
i can tell you that

477
00:17:33,029 --> 00:17:31,200
in very broad terms

478
00:17:35,029 --> 00:17:33,039
we're probably looking at somewhere in

479
00:17:36,470 --> 00:17:35,039
the area of the the first

480
00:17:37,909 --> 00:17:36,480
somewhere between the first and second

481
00:17:40,230 --> 00:17:37,919
week of july

482
00:17:41,270 --> 00:17:40,240
but we have to lay all that out and and

483
00:17:43,990 --> 00:17:41,280
look at

484
00:17:46,710 --> 00:17:44,000
all of the things that are necessary

485
00:17:48,390 --> 00:17:46,720
in a normal vertical and pad flow and

486
00:17:50,870 --> 00:17:48,400
then some things that are particular for

487
00:17:53,350 --> 00:17:50,880
this flow to include the uh there's a

488
00:17:54,230 --> 00:17:53,360

there was one or two holidays of course

489
00:17:55,590 --> 00:17:54,240
um

490
00:17:57,510 --> 00:17:55,600
we would like to understand how many

491
00:17:59,750 --> 00:17:57,520
contingency days we have

492
00:18:00,870 --> 00:17:59,760
and then we're going to do

493
00:18:03,750 --> 00:18:00,880
the

494
00:18:05,110 --> 00:18:03,760
test

495
00:18:07,190 --> 00:18:05,120
nde

496
00:18:09,029 --> 00:18:07,200
and so all of those things we need a

497
00:18:10,549 --> 00:18:09,039
little bit more detail on

498
00:18:12,470 --> 00:18:10,559
before we can come up with a definitive

499
00:18:13,750 --> 00:18:12,480
launch date that we would like to target

500
00:18:16,230 --> 00:18:13,760
as an net

501
00:18:17,669 --> 00:18:16,240
launch date and i anticipate

502
00:18:19,350 --> 00:18:17,679
maybe about about this time next week

503
00:18:23,029 --> 00:18:19,360
we'll be able to have that discussion if

504
00:18:23,039 --> 00:18:26,950
okay next is robert pullman

505
00:18:31,990 --> 00:18:28,070
hi uh

506
00:18:33,510 --> 00:18:32,000
provide an update on srb recovery and

507
00:18:37,510 --> 00:18:33,520
when you expect to see the footage from

508
00:18:43,190 --> 00:18:40,789
okay robert the the boosters are in tow

509
00:18:45,190 --> 00:18:43,200
we expect them to be in in port tonight

510
00:18:45,990 --> 00:18:45,200
is what was reported today

511
00:18:47,430 --> 00:18:46,000
um

512
00:18:50,710 --> 00:18:47,440
and then uh

513
00:18:53,110 --> 00:18:50,720

and probably at hangar af um

514
00:18:54,549 --> 00:18:53,120
within a day or so of then so

515
00:18:56,870 --> 00:18:54,559
somewhere

516
00:18:59,909 --> 00:18:56,880
in the probably 24 to 48 hours from now

517
00:19:08,950 --> 00:19:02,470
that folks can transfer over to us and

518
00:19:08,960 --> 00:19:13,029
okay next is denise chow

519
00:19:18,390 --> 00:19:16,150
hi um denise ciao space.com um i was

520
00:19:20,630 --> 00:19:18,400
just wondering if there is a need for

521
00:19:22,310 --> 00:19:20,640
focusing session how will that fit into

522
00:19:23,830 --> 00:19:22,320
the timeline it seems like a very packed

523
00:19:26,230 --> 00:19:23,840
mission i'm just wondering what flight

524
00:19:29,590 --> 00:19:26,240
day that might occur on and if you see

525
00:19:32,390 --> 00:19:30,789
i don't see any problems with the

526
00:19:34,549 --> 00:19:32,400
schedule the

527
00:19:37,830 --> 00:19:34,559
as you know we had

528
00:19:40,070 --> 00:19:37,840
some additional capability

529
00:19:43,110 --> 00:19:40,080
that we were looking at in terms of plus

530
00:19:43,909 --> 00:19:43,120
two days on our previous launch attempt

531
00:19:46,549 --> 00:19:43,919
and

532
00:19:48,150 --> 00:19:46,559
as we moved to this launch attempt

533
00:19:49,590 --> 00:19:48,160
yesterday

534
00:19:51,029 --> 00:19:49,600
all of our assessments said that it

535
00:19:52,470 --> 00:19:51,039
would be best if we just go ahead and

536
00:19:53,909 --> 00:19:52,480
add those two days so we started out

537
00:19:56,230 --> 00:19:53,919
with a 16

538
00:19:58,310 --> 00:19:56,240

day mission it's really 16 plus zero

539
00:20:00,390 --> 00:19:58,320
plus two the plus two being

540
00:20:03,190 --> 00:20:00,400
um on doc days at the end of the mission

541
00:20:05,190 --> 00:20:03,200
to to give us our normal capability for

542
00:20:07,590 --> 00:20:05,200
uh for end emission and weather delays

543
00:20:09,830 --> 00:20:07,600
and systems problems

544
00:20:11,590 --> 00:20:09,840
we have a lot of capability

545
00:20:13,590 --> 00:20:11,600
above that

546
00:20:16,310 --> 00:20:13,600
on orbit because we had an on time

547
00:20:17,830 --> 00:20:16,320
launch and because

548
00:20:20,710 --> 00:20:17,840
several other factors are coming into

549
00:20:23,029 --> 00:20:20,720
play to include the ams power

550
00:20:24,390 --> 00:20:23,039
consumption is not what it was

551
00:20:25,750 --> 00:20:24,400
anticipated

552
00:20:27,110 --> 00:20:25,760
and so we've got some additional

553
00:20:29,590 --> 00:20:27,120
capability

554
00:20:31,590 --> 00:20:29,600
beyond all of that

555
00:20:33,029 --> 00:20:31,600
we have some opportunity in this

556
00:20:34,870 --> 00:20:33,039
timeline to be able to move things

557
00:20:37,990 --> 00:20:34,880
around you know because

558
00:20:40,950 --> 00:20:38,000
of the launch delay because of

559
00:20:42,390 --> 00:20:40,960
the two additional days that we added

560
00:20:44,390 --> 00:20:42,400
the teams worked very hard to come up

561
00:20:46,230 --> 00:20:44,400
with a timeline where they could take

562
00:20:48,230 --> 00:20:46,240
individual flight days and kind of plug

563
00:20:49,830 --> 00:20:48,240

and play them at various places

564
00:20:52,310 --> 00:20:49,840
throughout the mission to be able to

565
00:20:53,909 --> 00:20:52,320
optimize the performance of the crew

566
00:20:56,070 --> 00:20:53,919
the shuttle and the station crew as well

567
00:20:57,350 --> 00:20:56,080
as the guys on the ground

568
00:20:59,350 --> 00:20:57,360
so it's really

569
00:21:01,750 --> 00:20:59,360
a pretty good setup in terms of us being

570
00:21:04,230 --> 00:21:01,760
able to to change things as we go along

571
00:21:06,710 --> 00:21:04,240
if we see a need for that

572
00:21:10,390 --> 00:21:06,720
with respect to focus inspection i think

573
00:21:12,070 --> 00:21:10,400
we have it penciled in on flight day six

574
00:21:13,590 --> 00:21:12,080
and

575
00:21:15,830 --> 00:21:13,600
depending on

576
00:21:17,590 --> 00:21:15,840
what the area is and why we think we

577
00:21:19,590 --> 00:21:17,600
need a focused inspection and all of the

578
00:21:20,710 --> 00:21:19,600
particulars around that

579
00:21:22,549 --> 00:21:20,720
um

580
00:21:24,310 --> 00:21:22,559
you know we'll add as much time to that

581
00:21:25,590 --> 00:21:24,320
activity as we need because obviously at

582
00:21:28,230 --> 00:21:25,600
that point it's

583
00:21:31,029 --> 00:21:28,240
uh it's a critical uh or at least a a

584
00:21:32,789 --> 00:21:31,039
very important and high of high interest

585
00:21:35,029 --> 00:21:32,799
activity for us so

586
00:21:36,310 --> 00:21:35,039
um i think this timeline

587
00:21:38,470 --> 00:21:36,320
um

588
00:21:41,270 --> 00:21:38,480

you know will accommodate

589
00:21:42,390 --> 00:21:41,280
will accommodate us if it comes to that

590
00:21:44,950 --> 00:21:42,400
um

591
00:21:46,310 --> 00:21:44,960
and and beyond that i wouldn't want to

592
00:21:47,590 --> 00:21:46,320
speculate because

593
00:21:49,029 --> 00:21:47,600
i'd have to have some significant

594
00:21:50,230 --> 00:21:49,039
problem before that even becomes an

595
00:21:51,029 --> 00:21:50,240
issue so

596
00:21:52,390 --> 00:21:51,039
um

597
00:21:57,590 --> 00:21:52,400
we're in really very good shape with

598
00:21:57,600 --> 00:22:03,750
okay next is todd halverson please

599
00:22:08,630 --> 00:22:07,350
uh hi todd halperson of florida today

600
00:22:11,029 --> 00:22:08,640
um

601
00:22:13,909 --> 00:22:11,039
leroy i was wondering if you could speak

602
00:22:15,430 --> 00:22:13,919
in general about um

603
00:22:17,990 --> 00:22:15,440
about uh

604
00:22:21,110 --> 00:22:18,000
what the concerns are for with other

605
00:22:23,590 --> 00:22:21,120
vehicles docking or undocking

606
00:22:24,310 --> 00:22:23,600
with a shuttle president at the station

607
00:22:26,710 --> 00:22:24,320
and

608
00:22:29,830 --> 00:22:26,720
what in particular makes the soyuz

609
00:22:35,270 --> 00:22:29,840
departure in this case acceptable and

610
00:22:35,280 --> 00:22:37,909
well the

611
00:22:40,870 --> 00:22:39,190
when when

612
00:22:41,990 --> 00:22:40,880
vehicles are at space station and they

613
00:22:43,270 --> 00:22:42,000

undock and then they have to do

614
00:22:45,190 --> 00:22:43,280
maneuvers and

615
00:22:47,510 --> 00:22:45,200
separation and in some cases at least

616
00:22:49,590 --> 00:22:47,520
some portion of a fly around to get on

617
00:22:50,870 --> 00:22:49,600
their proper trajectory to depart from

618
00:22:53,029 --> 00:22:50,880
the area

619
00:22:54,950 --> 00:22:53,039
they have to fire thrusters or whatever

620
00:22:56,149 --> 00:22:54,960
attitude maneuvering system that they

621
00:22:58,230 --> 00:22:56,159
have

622
00:22:59,669 --> 00:22:58,240
when you do that

623
00:23:01,350 --> 00:22:59,679
then you just want to make sure that the

624
00:23:02,870 --> 00:23:01,360
the other vehicles to include the space

625
00:23:04,070 --> 00:23:02,880
station frankly but

626
00:23:06,149 --> 00:23:04,080
in the solar arrays and the other

627
00:23:07,750 --> 00:23:06,159
vehicles that are docked there

628
00:23:10,070 --> 00:23:07,760
are our

629
00:23:10,870 --> 00:23:10,080
clear of the the zones where you might

630
00:23:11,750 --> 00:23:10,880
have

631
00:23:16,310 --> 00:23:11,760
um

632
00:23:17,510 --> 00:23:16,320
of that nature so that that's one of the

633
00:23:19,750 --> 00:23:17,520
concerns

634
00:23:21,830 --> 00:23:19,760
um so what you have to begin to look at

635
00:23:24,230 --> 00:23:21,840
is for an activity like this you know

636
00:23:25,830 --> 00:23:24,240
what port is the vehicle coming from on

637
00:23:29,190 --> 00:23:25,840
the space station

638
00:23:31,270 --> 00:23:29,200

relative to where the shuttle is docked

639
00:23:33,750 --> 00:23:31,280
and what profile does it fly in other

640
00:23:35,510 --> 00:23:33,760
words when it when it undocks and then

641
00:23:37,590 --> 00:23:35,520
separates

642
00:23:39,750 --> 00:23:37,600
you know which direction does it go

643
00:23:42,789 --> 00:23:39,760
and then you have to analyze

644
00:23:44,630 --> 00:23:42,799
plumes and when we do that we don't just

645
00:23:46,549 --> 00:23:44,640
analyze the nominal trajectory we

646
00:23:49,029 --> 00:23:46,559
analyze it off nominal with an envelope

647
00:23:50,950 --> 00:23:49,039
around that with some uncertainty

648
00:23:52,789 --> 00:23:50,960
and so

649
00:23:55,510 --> 00:23:52,799
we do it in a way that's that's

650
00:23:58,070 --> 00:23:55,520
relatively conservative

651
00:24:00,630 --> 00:23:58,080
although that's how we that's where our

652
00:24:03,110 --> 00:24:00,640
confidence is derived from

653
00:24:04,630 --> 00:24:03,120
is that we can handle the you know the

654
00:24:06,950 --> 00:24:04,640
worst case if you will if you want to

655
00:24:08,710 --> 00:24:06,960
think about it that way

656
00:24:10,310 --> 00:24:08,720
in this case it's been looked at

657
00:24:14,549 --> 00:24:10,320
extensively

658
00:24:16,070 --> 00:24:14,559
for a soyuz undocking from this port

659
00:24:17,029 --> 00:24:16,080
with the shuttle docked

660
00:24:21,029 --> 00:24:17,039
and

661
00:24:22,710 --> 00:24:21,039
again as i mentioned earlier we've

662
00:24:24,390 --> 00:24:22,720
leveraged leveraged off a lot of the

663
00:24:25,990 --> 00:24:24,400

dual doc ops activities that's been done

664
00:24:27,590 --> 00:24:26,000
for the last couple of years

665
00:24:29,909 --> 00:24:27,600
and and those are the kinds of things

666
00:24:34,950 --> 00:24:29,919
that we look at analytically and and the

667
00:24:39,110 --> 00:24:36,149
thanks and

668
00:24:41,909 --> 00:24:39,120
just a couple more from me

669
00:24:43,510 --> 00:24:41,919
i was wondering if clearances between

670
00:24:46,070 --> 00:24:43,520
docking ports are

671
00:24:49,110 --> 00:24:46,080
of any concern physical clearances

672
00:24:51,909 --> 00:24:49,120
between vehicles at this point and to

673
00:24:54,950 --> 00:24:51,919
follow one of mr harwood's questions

674
00:24:57,590 --> 00:24:54,960
you were talking about if you did decide

675
00:25:00,149 --> 00:24:57,600
to go do a soyuz fly around that you

676
00:25:02,470 --> 00:25:00,159
would undock and then the station would

677
00:25:03,750 --> 00:25:02,480
make a small maneuver before pictures

678
00:25:05,110 --> 00:25:03,760
were taken

679
00:25:07,750 --> 00:25:05,120
is that a

680
00:25:09,750 --> 00:25:07,760
pose being taken by the

681
00:25:13,190 --> 00:25:09,760
space station or exactly why do you do

682
00:25:17,510 --> 00:25:14,870
uh well let's even let me address your

683
00:25:19,350 --> 00:25:17,520
first question about vehicle separation

684
00:25:21,110 --> 00:25:19,360
it turns out

685
00:25:24,070 --> 00:25:21,120
when you go do these kind of activities

686
00:25:26,950 --> 00:25:24,080
at least from a shuttle

687
00:25:29,830 --> 00:25:26,960
centric standpoint

688
00:25:31,669 --> 00:25:29,840

if you if you have enough capability and

689
00:25:32,710 --> 00:25:31,679
enough clearance from a

690
00:25:34,549 --> 00:25:32,720
and we'll just go back to plume

691
00:25:36,710 --> 00:25:34,559
impingement for a minute

692
00:25:38,630 --> 00:25:36,720
um by the time you you have the

693
00:25:39,750 --> 00:25:38,640
clearance and the capability you need or

694
00:25:42,630 --> 00:25:39,760
if you want to think of it the

695
00:25:45,110 --> 00:25:42,640
protection for the shuttle

696
00:25:47,190 --> 00:25:45,120
you by definition have enough physical

697
00:25:48,630 --> 00:25:47,200
separation of the vehicles because what

698
00:25:49,990 --> 00:25:48,640
you find out is when you begin to

699
00:25:52,070 --> 00:25:50,000
envelope

700
00:25:53,710 --> 00:25:52,080
and then put some uncertainty on those

701
00:25:56,870 --> 00:25:53,720
envelopes for the actual plume

702
00:25:58,230 --> 00:25:56,880
environments um you are physically

703
00:26:00,149 --> 00:25:58,240
separated

704
00:26:02,310 --> 00:26:00,159
a pretty good distance

705
00:26:04,070 --> 00:26:02,320
from one vehicle to the next so

706
00:26:05,750 --> 00:26:04,080
the actual you know how close to the

707
00:26:07,590 --> 00:26:05,760
vehicles get really doesn't become an

708
00:26:09,350 --> 00:26:07,600
issue because

709
00:26:12,390 --> 00:26:09,360
because of what you're doing to protect

710
00:26:14,710 --> 00:26:12,400
for for the plume impingement

711
00:26:17,190 --> 00:26:14,720
with respect to the maneuver

712
00:26:18,549 --> 00:26:17,200
it's really as i understand the plan

713
00:26:20,870 --> 00:26:18,559

that the folks are working on it's

714
00:26:22,390 --> 00:26:20,880
really a maneuver that will just allow

715
00:26:25,830 --> 00:26:22,400
the

716
00:26:27,269 --> 00:26:25,840
allow

717
00:26:28,549 --> 00:26:27,279
the crew on the soyuz to get a little

718
00:26:30,310 --> 00:26:28,559
bit better

719
00:26:31,830 --> 00:26:30,320
photo in terms of getting a better

720
00:26:35,269 --> 00:26:31,840
perspective

721
00:26:37,190 --> 00:26:35,279
of the entire space station

722
00:26:39,750 --> 00:26:37,200
and and the vehicles that are docked to

723
00:26:42,149 --> 00:26:39,760
it so rather than just looking

724
00:26:45,269 --> 00:26:42,159
straight up or down one axis or

725
00:26:46,549 --> 00:26:45,279
or in plane if you will

726
00:26:48,950 --> 00:26:46,559
it's just to get a little bit better

727
00:26:50,470 --> 00:26:48,960
perspective

728
00:26:52,549 --> 00:26:50,480
and to get a little bit better

729
00:26:54,870 --> 00:26:52,559
photography overall in terms of lighting

730
00:26:58,310 --> 00:26:54,880
and and all the things all of the all

731
00:27:00,390 --> 00:26:58,320
the considerations in that regard

732
00:27:01,990 --> 00:27:00,400
thanks that's all

733
00:27:10,630 --> 00:27:02,000
okay thank you that's all on the line

734
00:27:14,710 --> 00:27:12,950
i think some of the discussion last week

735
00:27:15,990 --> 00:27:14,720
was that

736
00:27:18,549 --> 00:27:16,000
that

737
00:27:21,029 --> 00:27:18,559
you might not be able to get the quote

738
00:27:22,470 --> 00:27:21,039

high quality window view for the

739
00:27:24,389 --> 00:27:22,480
photography

740
00:27:25,750 --> 00:27:24,399
that may have all changed and i just

741
00:27:27,029 --> 00:27:25,760
don't know if there's anything you might

742
00:27:28,789 --> 00:27:27,039
be able to

743
00:27:30,470 --> 00:27:28,799
update with regard to that in other

744
00:27:33,750 --> 00:27:30,480
words it was sort of like you could get

745
00:27:36,070 --> 00:27:33,760
a good shot but it might not be of the

746
00:27:37,510 --> 00:27:36,080
the highest quality that maybe would

747
00:27:39,110 --> 00:27:37,520
have from the

748
00:27:42,470 --> 00:27:39,120
previous planning

749
00:27:43,750 --> 00:27:42,480
and i just wondered if that's changed or

750
00:27:46,389 --> 00:27:43,760
you're still

751
00:27:48,710 --> 00:27:46,399
your goal is is the highest quality or a

752
00:27:50,789 --> 00:27:48,720
good shot

753
00:27:52,549 --> 00:27:50,799
uh well you you

754
00:27:55,990 --> 00:27:52,559
you're talking about details of the plan

755
00:27:57,750 --> 00:27:56,000
that that you know frankly um

756
00:27:59,590 --> 00:27:57,760
the team still needs to brief to us i

757
00:28:01,350 --> 00:27:59,600
can tell you that that

758
00:28:02,549 --> 00:28:01,360
my understanding is obviously we want to

759
00:28:04,389 --> 00:28:02,559
get a

760
00:28:06,389 --> 00:28:04,399
high quality

761
00:28:07,830 --> 00:28:06,399
photograph there wouldn't be much point

762
00:28:13,190 --> 00:28:07,840
in

763
00:28:15,110 --> 00:28:13,200

like this if that wasn't our plan

764
00:28:17,830 --> 00:28:15,120
i think that

765
00:28:20,549 --> 00:28:17,840
in looking at it in a little bit greater

766
00:28:21,830 --> 00:28:20,559
depth depth and detail the team was able

767
00:28:23,110 --> 00:28:21,840
to

768
00:28:25,510 --> 00:28:23,120
figure out a way that we can get the

769
00:28:27,669 --> 00:28:25,520
crew member crew members

770
00:28:29,110 --> 00:28:27,679
in the in the soyuz in the right places

771
00:28:30,870 --> 00:28:29,120
at the right time to be able to take

772
00:28:32,230 --> 00:28:30,880
high quality photos

773
00:28:35,029 --> 00:28:32,240
and

774
00:28:37,269 --> 00:28:35,039
so we're going to have

775
00:28:39,510 --> 00:28:37,279
a lot more detail on exactly what we're

776
00:28:41,669 --> 00:28:39,520
doing and how it's timelined and and

777
00:28:42,870 --> 00:28:41,679
who's doing what and which vehicles and

778
00:28:45,190 --> 00:28:42,880
on and on

779
00:28:47,190 --> 00:28:45,200
and we can report that out to you and i

780
00:28:49,110 --> 00:28:47,200
would intend to report that out to you

781
00:28:51,110 --> 00:28:49,120
before we get to that point

782
00:28:53,110 --> 00:28:51,120
this is an activity that will be

783
00:28:54,470 --> 00:28:53,120
performed and we would execute this on

784
00:28:55,909 --> 00:28:54,480
monday

785
00:28:57,669 --> 00:28:55,919
of next week so

786
00:28:59,350 --> 00:28:57,679
we have a little bit of time

787
00:29:05,669 --> 00:28:59,360
and i anticipate we'll get some more

788
00:29:09,510 --> 00:29:07,350

okay with that that will wrap up our

789
00:29:11,110 --> 00:29:09,520
flight day two coverage in our briefings

790
00:29:12,389 --> 00:29:11,120
we'll send it back to mission control

791
00:29:15,029 --> 00:29:12,399
here momentarily

792
00:29:16,870 --> 00:29:15,039
and during the crew sleep shift we'll be

793
00:29:19,350 --> 00:29:16,880
playing the video highlights from flight

794
00:29:21,110 --> 00:29:19,360
day 2 at the top of the hour and then

795
00:29:23,750 --> 00:29:21,120
the crew the shuttle crew is scheduled

796
00:29:26,230 --> 00:29:23,760
to awaken at 9 56 pm central time

797
00:29:28,070 --> 00:29:26,240
tonight and start getting ready for

798
00:29:29,669 --> 00:29:28,080
docking and endeavors docking to the

799
00:29:32,470 --> 00:29:29,679
international space station is scheduled