1
00:00:05,670 --> 00:00:03,669
good morning and welcome back to nasa's

2
00:00:07,510 --> 00:00:05,680
johnson space center for today's mission

3
00:00:09,270 --> 00:00:07,520
status briefing this is flight day 9 of

4
00:00:11,030 --> 00:00:09,280
the sts-134

5
00:00:13,589 --> 00:00:11,040
mission to the international space

6
00:00:16,550 --> 00:00:13,599
station we'll talk about the activities

7
00:00:18,230 --> 00:00:16,560
onboard the complex earlier today that

8
00:00:19,830 --> 00:00:18,240
went on and also look ahead at the

9
00:00:22,230 --> 00:00:19,840
mission's third spacewalk coming up

10
00:00:23,910 --> 00:00:22,240
overnight so to do that we have the lead

11
00:00:26,470 --> 00:00:23,920
space station flight director derek

12
00:00:28,710 --> 00:00:26,480
hossman and the lead spacewalk officer

13
00:00:30,230 --> 00:00:28,720

allison bollinger so we'll start out

14
00:00:32,310 --> 00:00:30,240
with comments and then take questions

15
00:00:35,190 --> 00:00:32,320
derek okay thanks kylie and good morning

16
00:00:37,430 --> 00:00:35,200
everybody well after a relatively quiet

17
00:00:39,510 --> 00:00:37,440
day yesterday uh the

18
00:00:41,430 --> 00:00:39,520
shuttle endeavor crew plus their adopted

19
00:00:43,910 --> 00:00:41,440
crew member ron guerin

20
00:00:45,590 --> 00:00:43,920
got back to work today

21
00:00:46,790 --> 00:00:45,600
as you may recall we discussed yesterday

22
00:00:48,709 --> 00:00:46,800
ron garan has been on the shuttle

23
00:00:50,389 --> 00:00:48,719
schedule all along so he woke up with a

24
00:00:52,869 --> 00:00:50,399
shuttle crew today

25
00:00:55,750 --> 00:00:52,879
now that the 25 s crew is safely on the

26
00:00:57,270 --> 00:00:55,760
ground uh the remaining uh two russian

27
00:00:59,910 --> 00:00:57,280
crew members who are of course ron

28
00:01:02,470 --> 00:00:59,920
guerin's uh expedition crewmates

29
00:01:04,070 --> 00:01:02,480
uh are in for a long sleep uh they were

30
00:01:05,189 --> 00:01:04,080
asleep all day while i was on council

31
00:01:06,870 --> 00:01:05,199
they're gonna sleep through the night

32
00:01:08,950 --> 00:01:06,880
and then when they wake up tomorrow

33
00:01:11,030 --> 00:01:08,960
they'll be back on on the

34
00:01:12,950 --> 00:01:11,040
shuttle crew schedule so starting

35
00:01:14,950 --> 00:01:12,960
tomorrow we have a normal sleep shift

36
00:01:15,990 --> 00:01:14,960
will be which will be a a nice thing to

37
00:01:18,390 --> 00:01:16,000
have back

38
00:01:20,870 --> 00:01:18,400

um as i mentioned the the shuttle crew

39
00:01:23,910 --> 00:01:20,880
stayed busy on the space station today

40
00:01:25,749 --> 00:01:23,920
um as as i'm sure most of you know

41
00:01:28,149 --> 00:01:25,759
greg shamatoff and mike fink are both

42
00:01:30,950 --> 00:01:28,159
veteran international space station long

43
00:01:32,710 --> 00:01:30,960
duration crew members so uh we leveraged

44
00:01:34,710 --> 00:01:32,720
on their experience onboard the station

45
00:01:36,710 --> 00:01:34,720
and put them to work today

46
00:01:38,550 --> 00:01:36,720
one of the one of the critical station

47
00:01:41,429 --> 00:01:38,560
maintenance tasks that we got at least

48
00:01:44,389 --> 00:01:41,439
started today was repair work on the

49
00:01:46,630 --> 00:01:44,399
node 3 carbon dioxide removal assembly

50
00:01:49,109 --> 00:01:46,640
these carbon dioxide removal assemblies

51
00:01:51,270 --> 00:01:49,119
or cdrs as we call them have two

52
00:01:53,830 --> 00:01:51,280
desiccant beds that actually do the

53
00:01:56,630 --> 00:01:53,840
removal of the carbon dioxide one of the

54
00:01:57,990 --> 00:01:56,640
two beds in this note 3 cedric is beyond

55
00:02:00,230 --> 00:01:58,000
its useful life

56
00:02:02,870 --> 00:02:00,240
so we brought up a new replacement bed

57
00:02:06,870 --> 00:02:02,880
or replacement cartridge on on ulf6 on

58
00:02:08,949 --> 00:02:06,880
this flight and what the crew did today

59
00:02:11,510 --> 00:02:08,959
spanky taz and ron working together

60
00:02:13,670 --> 00:02:11,520
taking turns was to remove the actual

61
00:02:15,670 --> 00:02:13,680
carbon dioxide removal assembly unit

62
00:02:18,150 --> 00:02:15,680
from its from the rack where it resides

63
00:02:21,030 --> 00:02:18,160

in node three they took it to the to the

64
00:02:22,390 --> 00:02:21,040
jpm area of the gym

65
00:02:23,990 --> 00:02:22,400
they tied it down to a maintenance

66
00:02:25,990 --> 00:02:24,000
workstation and then

67
00:02:27,830 --> 00:02:26,000
after eva 3 2 days from now they're

68
00:02:29,270 --> 00:02:27,840
actually going to pull this desk in bed

69
00:02:30,390 --> 00:02:29,280
out of the carbon dioxide removal

70
00:02:31,830 --> 00:02:30,400
assembly and then replace it with the

71
00:02:34,630 --> 00:02:31,840
new bed and then we're going to bring

72
00:02:37,509 --> 00:02:34,640
that failed bed home so that's important

73
00:02:38,949 --> 00:02:37,519
work to get us back to normal redundancy

74
00:02:41,270 --> 00:02:38,959
of course we have a second seizure in

75
00:02:43,750 --> 00:02:41,280
the lab so we're using that labsidra in

76
00:02:45,430 --> 00:02:43,760
addition to the the bosdouq unit in the

77
00:02:47,430 --> 00:02:45,440
russian segment to do carbon dioxide

78
00:02:49,110 --> 00:02:47,440
removal assembly but we

79
00:02:51,190 --> 00:02:49,120
after this mission we'll be back to

80
00:02:53,430 --> 00:02:51,200
fully redundant carbon dioxide scrubbing

81
00:02:54,710 --> 00:02:53,440
capability on the u.s segment

82
00:02:56,229 --> 00:02:54,720
the other piece of maintenance work that

83
00:02:59,430 --> 00:02:56,239
we did today was on the oxygen

84
00:03:00,710 --> 00:02:59,440
generation system uh again some of you

85
00:03:02,309 --> 00:03:00,720
who have been involved in the past

86
00:03:04,390 --> 00:03:02,319
missions and and keeping track of what's

87
00:03:05,509 --> 00:03:04,400
going on in the station know that we're

88
00:03:07,750 --> 00:03:05,519

having some challenges with

89
00:03:10,390 --> 00:03:07,760
contamination in the oxygen generation

90
00:03:12,229 --> 00:03:10,400
system and we flew at

91
00:03:14,390 --> 00:03:12,239
what we call a remediation cartridge

92
00:03:16,550 --> 00:03:14,400
it's basically a filter that is plumbed

93
00:03:18,949 --> 00:03:16,560
into the water line associated with the

94
00:03:20,949 --> 00:03:18,959
oxygen generation system

95
00:03:24,390 --> 00:03:20,959
the crew today uh

96
00:03:26,949 --> 00:03:24,400
bo again are our go-to station veterans

97
00:03:29,509 --> 00:03:26,959
uh spanky and taz in concert with ron

98
00:03:31,190 --> 00:03:29,519
garan worked on the oxygen generation

99
00:03:33,430 --> 00:03:31,200
system

100
00:03:35,509 --> 00:03:33,440
to install this cartridge and the

101
00:03:37,910 --> 00:03:35,519
associated plumbing um we're going to

102
00:03:39,589 --> 00:03:37,920
wait for the eva to eva 3 to be behind

103
00:03:42,149 --> 00:03:39,599
us and then we're going to activate the

104
00:03:44,070 --> 00:03:42,159
oxygen generation system have the crew

105
00:03:46,390 --> 00:03:44,080
check for leaks and then start running

106
00:03:47,990 --> 00:03:46,400
the water loops through this remediation

107
00:03:49,350 --> 00:03:48,000
cartridge or filter

108
00:03:51,830 --> 00:03:49,360
in order to see what we can do about

109
00:03:53,429 --> 00:03:51,840
that contamination

110
00:03:55,830 --> 00:03:53,439
in the briefing

111
00:03:57,190 --> 00:03:55,840
last night from dana weigel she

112
00:03:59,110 --> 00:03:57,200
mentioned briefly that we had an

113
00:04:02,949 --> 00:03:59,120

electrical power system

114
00:04:05,429 --> 00:04:02,959
failure last night and basically we have

115
00:04:06,550 --> 00:04:05,439
banks of switches if you will or circuit

116
00:04:08,550 --> 00:04:06,560
breakers

117
00:04:11,190 --> 00:04:08,560
called remote power controller modules

118
00:04:12,869 --> 00:04:11,200
or rpcms one of those one of the

119
00:04:15,589 --> 00:04:12,879
individual switches in that banker

120
00:04:18,390 --> 00:04:15,599
switch is tripped and it removed power

121
00:04:20,390 --> 00:04:18,400
to a video switching device

122
00:04:22,710 --> 00:04:20,400
and it's more than videos video and its

123
00:04:24,629 --> 00:04:22,720
payload data so once once this switch

124
00:04:26,790 --> 00:04:24,639
opened we were unable to downlink high

125
00:04:29,430 --> 00:04:26,800
definition video to the ground

126
00:04:30,950 --> 00:04:29,440
we were unable to downlink payload data

127
00:04:32,870 --> 00:04:30,960
the payloads continued to operate on

128
00:04:34,950 --> 00:04:32,880
station but

129
00:04:36,310 --> 00:04:34,960
the payload operations integration

130
00:04:38,390 --> 00:04:36,320
center and marshall

131
00:04:39,830 --> 00:04:38,400
space flight center in huntsville was

132
00:04:41,350 --> 00:04:39,840
not able to get the data from the

133
00:04:44,950 --> 00:04:41,360
payloads while this

134
00:04:46,550 --> 00:04:44,960
device was not powered so it was

135
00:04:47,830 --> 00:04:46,560
relatively important to us that we get

136
00:04:49,189 --> 00:04:47,840
it back quickly

137
00:04:51,110 --> 00:04:49,199
in addition to that payload data i

138
00:04:53,510 --> 00:04:51,120

should mention that it also affects our

139
00:04:55,430 --> 00:04:53,520
ability to uplink files to the station

140
00:04:57,350 --> 00:04:55,440
uplink procedures and messages and such

141
00:04:59,590 --> 00:04:57,360
that the crew needs during the day and

142
00:05:01,110 --> 00:04:59,600
also the ip phone which is of course the

143
00:05:03,670 --> 00:05:01,120
way the crew uses

144
00:05:05,430 --> 00:05:03,680
uh the uh the device that the crew uses

145
00:05:07,510 --> 00:05:05,440
to communicate with friends family on

146
00:05:09,990 --> 00:05:07,520
the ground so pretty significant impacts

147
00:05:11,590 --> 00:05:10,000
to day-to-day operations although we

148
00:05:13,350 --> 00:05:11,600
don't consider those systems critical

149
00:05:15,350 --> 00:05:13,360
they're certainly important in our

150
00:05:16,950 --> 00:05:15,360
day-to-day work

151
00:05:19,270 --> 00:05:16,960
overnight the team put together

152
00:05:21,189 --> 00:05:19,280
procedures needed to change out that

153
00:05:23,430 --> 00:05:21,199
rpcm or that

154
00:05:25,670 --> 00:05:23,440
circuit breaker device and then

155
00:05:27,909 --> 00:05:25,680
at the beginning of the day today we got

156
00:05:29,670 --> 00:05:27,919
that rpcm switched out we powered on all

157
00:05:32,310 --> 00:05:29,680
all the components and now we're back to

158
00:05:34,070 --> 00:05:32,320
uh 100 in terms of

159
00:05:36,629 --> 00:05:34,080
the video downlink and also the the

160
00:05:39,510 --> 00:05:36,639
payload data the ip phone file uplink

161
00:05:40,870 --> 00:05:39,520
etc so another good relatively small in

162
00:05:43,110 --> 00:05:40,880
the grand scheme of things but another

163
00:05:46,550 --> 00:05:43,120

good example of how the teams can react

164
00:05:48,790 --> 00:05:46,560
quickly to problems in real time

165
00:05:51,029 --> 00:05:48,800
and of course looking ahead we have eba

166
00:05:54,070 --> 00:05:51,039
3 in front of us tomorrow

167
00:05:56,629 --> 00:05:54,080
eva 3 will uh beat in terms of the space

168
00:05:59,029 --> 00:05:56,639
walkers will be a repeat of eva2 with

169
00:06:01,670 --> 00:05:59,039
foysteel and fink going outside and

170
00:06:03,430 --> 00:06:01,680
shamataw running the show from inside

171
00:06:06,390 --> 00:06:03,440
and of course we'll be using the new

172
00:06:07,590 --> 00:06:06,400
pre-breathe protocol for this eva

173
00:06:09,029 --> 00:06:07,600
we're not going to do camp out we're

174
00:06:11,110 --> 00:06:09,039
going to use the institute light

175
00:06:12,469 --> 00:06:11,120
exercise protocol and for the timeline

176
00:06:14,790 --> 00:06:12,479
and for the new protocol i'll hand over

177
00:06:16,309 --> 00:06:14,800
to allison to talk about the details

178
00:06:17,749 --> 00:06:16,319
all right thank you derek

179
00:06:19,909 --> 00:06:17,759
all right i'll go ahead and get started

180
00:06:21,189 --> 00:06:19,919
with a brief summary of what eva 3 will

181
00:06:22,550 --> 00:06:21,199
look like since it's a little bit

182
00:06:24,469 --> 00:06:22,560
different from what we originally

183
00:06:26,710 --> 00:06:24,479
planned pre-flight we'll start out the

184
00:06:29,350 --> 00:06:26,720
day as derek mentioned with drew and

185
00:06:31,350 --> 00:06:29,360
spanky performing this eva it'll it'll

186
00:06:33,590 --> 00:06:31,360
start out looking very similar where our

187
00:06:35,749 --> 00:06:33,600
first major task is to install the power

188
00:06:38,309 --> 00:06:35,759

and data grapple fixture pdgf on the

189
00:06:40,150 --> 00:06:38,319
russian fgb segment so the two crew

190
00:06:43,189 --> 00:06:40,160
members will translate with some tool

191
00:06:44,629 --> 00:06:43,199
bags out to the port side of the fgb

192
00:06:46,710 --> 00:06:44,639
they will remove some multi-layer

193
00:06:48,629 --> 00:06:46,720
insulation and also caps

194
00:06:50,150 --> 00:06:48,639
that that open up the receptacles where

195
00:06:52,070 --> 00:06:50,160
the the power and data grapple fixture

196
00:06:53,350 --> 00:06:52,080
will be installed both crew members will

197
00:06:55,029 --> 00:06:53,360
then head back to the airlock and

198
00:06:57,350 --> 00:06:55,039
they'll retrieve the pdgf and its

199
00:06:58,950 --> 00:06:57,360
associated frame and its cabling then

200
00:07:00,790 --> 00:06:58,960
they'll work together to inch worm that

201
00:07:03,589 --> 00:07:00,800
grapple fixture back to its install

202
00:07:05,270 --> 00:07:03,599
location on the on the fgb

203
00:07:06,550 --> 00:07:05,280
once it's in position they'll soft dock

204
00:07:09,830 --> 00:07:06,560
it and then they'll tighten the three

205
00:07:11,110 --> 00:07:09,840
feet that hold the pdgf onto the fgb

206
00:07:12,950 --> 00:07:11,120
after they complete with that they'll

207
00:07:15,589 --> 00:07:12,960
install a vsc or video signal

208
00:07:18,469 --> 00:07:15,599
conditioner which is used uh

209
00:07:20,390 --> 00:07:18,479
in combination with the pdgf to allow

210
00:07:24,469 --> 00:07:20,400
the pgf to be a future base for the

211
00:07:26,629 --> 00:07:24,479
ssrms uh once they install that uh vsc

212
00:07:28,150 --> 00:07:26,639
they'll route some cables to it um and

213
00:07:31,029 --> 00:07:28,160

that that'll complete the work that we

214
00:07:33,350 --> 00:07:31,039
will perform on on the pdgf for that day

215
00:07:34,870 --> 00:07:33,360
we'll then start working on re rewiring

216
00:07:36,870 --> 00:07:34,880
some of the power that's heading to the

217
00:07:38,870 --> 00:07:36,880
fgb these are the y-jumpers as we call

218
00:07:40,629 --> 00:07:38,880
them we have a port and a starboard set

219
00:07:42,870 --> 00:07:40,639
we'll first start out installing the

220
00:07:44,790 --> 00:07:42,880
port side of those jumpers the two

221
00:07:46,550 --> 00:07:44,800
spanky will make his way forward on node

222
00:07:48,469 --> 00:07:46,560
one and he'll demate two connectors on

223
00:07:50,629 --> 00:07:48,479
node one while drew's standing by once

224
00:07:52,629 --> 00:07:50,639
those two connectors are demated drew

225
00:07:54,790 --> 00:07:52,639
will then uh demate a connection at the

226
00:07:56,629 --> 00:07:54,800
pma fgb interface and he'll hook up this

227
00:07:59,189 --> 00:07:56,639
new y-jumper and then give spanky a go

228
00:08:00,790 --> 00:07:59,199
to hook up his ends of the y-jumper once

229
00:08:02,390 --> 00:08:00,800
we're complete with the port side y

230
00:08:03,749 --> 00:08:02,400
jumper installed the ground will do some

231
00:08:05,749 --> 00:08:03,759
commanding to check out the new

232
00:08:07,029 --> 00:08:05,759
connections that we just made as well as

233
00:08:08,790 --> 00:08:07,039
put the inhibits in place for the

234
00:08:10,710 --> 00:08:08,800
starboard side

235
00:08:13,430 --> 00:08:10,720
on the original eva3 our plan at this

236
00:08:16,150 --> 00:08:13,440
time was to install the 1553 data cable

237
00:08:17,430 --> 00:08:16,160
that runs from node 3 to the pdgf but

238
00:08:19,990 --> 00:08:17,440

since we weren't able to complete all

239
00:08:21,430 --> 00:08:20,000
the tasks on eva 1 now during this time

240
00:08:22,950 --> 00:08:21,440
that the ground is performing the

241
00:08:25,110 --> 00:08:22,960
checkouts and putting the inhibits in

242
00:08:26,869 --> 00:08:25,120
place for the second y jumper drew and

243
00:08:29,189 --> 00:08:26,879
spanky will head back to the lab to

244
00:08:31,029 --> 00:08:29,199
finish up that lab ewc or external

245
00:08:34,070 --> 00:08:31,039
wireless communications task that we did

246
00:08:35,909 --> 00:08:34,080
not complete on eva one all the cable

247
00:08:37,589 --> 00:08:35,919
that we need to install is out there the

248
00:08:39,269 --> 00:08:37,599
handrails with the antennas are already

249
00:08:41,190 --> 00:08:39,279
installed the two crew members will just

250
00:08:43,509 --> 00:08:41,200
need to work together to release a

251
00:08:45,350 --> 00:08:43,519
micrometer or debris or mmod shield

252
00:08:47,430 --> 00:08:45,360
that's covering the connectors that we

253
00:08:50,389 --> 00:08:47,440
need to get to on the lab they'll open

254
00:08:51,829 --> 00:08:50,399
up that uh that mmod shield then they'll

255
00:08:54,630 --> 00:08:51,839
need to put inhibit in place which

256
00:08:56,790 --> 00:08:54,640
inhibits iss uhf communications upon

257
00:08:58,550 --> 00:08:56,800
which time will be relying on

258
00:09:00,790 --> 00:08:58,560
shuttle assets in order to talk to the

259
00:09:03,030 --> 00:09:00,800
ev crew we'll demate two existing

260
00:09:05,110 --> 00:09:03,040
connectors that are part of the uhf

261
00:09:07,670 --> 00:09:05,120
system as well as part of the existing

262
00:09:10,470 --> 00:09:07,680
external eos system once we demate those

263
00:09:12,310 --> 00:09:10,480

we'll install the new ewc antenna close

264
00:09:14,790 --> 00:09:12,320
up the mmod shield and then work on

265
00:09:16,870 --> 00:09:14,800
coiling the old e-with cable and

266
00:09:18,389 --> 00:09:16,880
bringing that inside once we're complete

267
00:09:19,670 --> 00:09:18,399
with that task and once the ground is

268
00:09:22,150 --> 00:09:19,680
complete with putting the inhibits in

269
00:09:24,150 --> 00:09:22,160
place for the starboard y jumper install

270
00:09:26,790 --> 00:09:24,160
the crew members will head back back to

271
00:09:28,470 --> 00:09:26,800
the fgb node one pma area then they'll

272
00:09:30,630 --> 00:09:28,480
work on performing the starboard side of

273
00:09:32,790 --> 00:09:30,640
those jumpers with spanky demating two

274
00:09:34,710 --> 00:09:32,800
connectors on node one giving drew the

275
00:09:36,710 --> 00:09:34,720
go to make his connections at the pma

276
00:09:39,430 --> 00:09:36,720
fgb interface and then they'll work to

277
00:09:41,350 --> 00:09:39,440
get that new y-jumper cable installed

278
00:09:43,030 --> 00:09:41,360
once we're complete with the starboard

279
00:09:44,790 --> 00:09:43,040
side of the y-jumper we'll work on

280
00:09:46,550 --> 00:09:44,800
cleaning up the work site we'll ensure

281
00:09:48,550 --> 00:09:46,560
that we get all the tool bags back near

282
00:09:50,710 --> 00:09:48,560
the airlock and then another change to

283
00:09:52,710 --> 00:09:50,720
the end of this eva we had nominally

284
00:09:54,389 --> 00:09:52,720
planned on heading out to elc 3 on the

285
00:09:57,110 --> 00:09:54,399
port side of the trust to take still

286
00:09:59,670 --> 00:09:57,120
photos of stph3 which is an experiment

287
00:10:00,949 --> 00:09:59,680
on the newly installed elc3 carrier but

288
00:10:03,110 --> 00:10:00,959

actually we're going to change that up

289
00:10:04,790 --> 00:10:03,120
and instead of using the eva digital

290
00:10:07,430 --> 00:10:04,800
still camera we'll actually be using the

291
00:10:09,590 --> 00:10:07,440
eva ir camera infrared camera to take

292
00:10:10,949 --> 00:10:09,600
some infrared imagery of the vader

293
00:10:13,590 --> 00:10:10,959
experiment which is a part of the

294
00:10:15,590 --> 00:10:13,600
experiment on the on the overall stp h3

295
00:10:17,670 --> 00:10:15,600
complement drew will be using this ir

296
00:10:19,350 --> 00:10:17,680
camera to get some imagery that the

297
00:10:21,110 --> 00:10:19,360
ground teams will use to help regain

298
00:10:22,949 --> 00:10:21,120
science on their experiment and

299
00:10:24,470 --> 00:10:22,959
meanwhile spanky will be installing a

300
00:10:26,710 --> 00:10:24,480
multi-layer insulation cover on the

301
00:10:28,389 --> 00:10:26,720
grapple fixture on the high pressure gas

302
00:10:30,470 --> 00:10:28,399
tank which we also launched on that

303
00:10:31,910 --> 00:10:30,480
spare elc-3

304
00:10:34,389 --> 00:10:31,920
so once those crew members are complete

305
00:10:36,870 --> 00:10:34,399
with the tasks on elc 3 we'll head back

306
00:10:39,670 --> 00:10:36,880
to the airlock and and call today call

307
00:10:41,350 --> 00:10:39,680
it a day and we'll still have with us

308
00:10:43,670 --> 00:10:41,360
at the airlock in case we get a chance

309
00:10:45,750 --> 00:10:43,680
we will have that 1553 data cable which

310
00:10:46,470 --> 00:10:45,760
we weren't able to install we will have

311
00:10:50,710 --> 00:10:46,480
that

312
00:10:53,750 --> 00:10:50,720
have about 45 minutes left at the end of

313
00:10:55,509 --> 00:10:53,760

the eva we might get a chance to install

314
00:10:58,630 --> 00:10:55,519
that cable if not we could also take

315
00:11:01,829 --> 00:10:58,640
still photos of the stph3 task which we

316
00:11:04,310 --> 00:11:01,839
had deferred as well as possibly to stow

317
00:11:06,470 --> 00:11:04,320
some tools in the uh in the in the

318
00:11:08,470 --> 00:11:06,480
airlock toolbox so with that that

319
00:11:10,069 --> 00:11:08,480
summarizes eva three i'll go ahead and

320
00:11:12,389 --> 00:11:10,079
talk a little bit more about aisle or

321
00:11:14,069 --> 00:11:12,399
the in light exercise pre-breathe

322
00:11:15,990 --> 00:11:14,079
protocol that we'll be trying out for

323
00:11:17,829 --> 00:11:16,000
the first time tomorrow just to give

324
00:11:19,350 --> 00:11:17,839
everyone a refresher on the campout

325
00:11:21,990 --> 00:11:19,360
pre-breathe protocol which we've used

326
00:11:23,670 --> 00:11:22,000
about 70 times on the space station so

327
00:11:25,509 --> 00:11:23,680
this protocol starts the night before

328
00:11:27,590 --> 00:11:25,519
the eva where the crew members don

329
00:11:29,670 --> 00:11:27,600
oxygen masks and they're on those masks

330
00:11:32,630 --> 00:11:29,680
for about 60 minutes at which time we

331
00:11:35,350 --> 00:11:32,640
depress the airlock down to 10.2 psi

332
00:11:37,110 --> 00:11:35,360
then the crew members remain at 10.2 psi

333
00:11:38,710 --> 00:11:37,120
for 8 hours and 40 minutes they're

334
00:11:40,630 --> 00:11:38,720
isolated in the airlock by themselves

335
00:11:42,949 --> 00:11:40,640
overnight they wake up in the morning

336
00:11:45,030 --> 00:11:42,959
they don those oxygen masks again this

337
00:11:47,110 --> 00:11:45,040
time for about 70 minutes during that

338
00:11:50,069 --> 00:11:47,120

time we repress the airlock back up to

339
00:11:52,310 --> 00:11:50,079
14.7 psi the crew members while still on

340
00:11:53,910 --> 00:11:52,320
masks are able to head out and maybe

341
00:11:55,269 --> 00:11:53,920
grab some food that they can eat later

342
00:11:57,110 --> 00:11:55,279
on and also take care of personal

343
00:11:59,670 --> 00:11:57,120
hygiene items then they'll head back to

344
00:12:02,310 --> 00:11:59,680
the airlock we depress back down to 10.2

345
00:12:04,470 --> 00:12:02,320
psi they doff the oxygen masks then they

346
00:12:06,629 --> 00:12:04,480
work on donning their suits once their

347
00:12:08,389 --> 00:12:06,639
suits are donned at 10.2 psi and they're

348
00:12:10,389 --> 00:12:08,399
all buttoned up and pressurized we start

349
00:12:13,990 --> 00:12:10,399
purging the suit as we repress back up

350
00:12:16,150 --> 00:12:14,000
to 14.7 psi and then we spend 50 minutes

351
00:12:17,990 --> 00:12:16,160
in the suit doing a resting in-suit

352
00:12:19,910 --> 00:12:18,000
pre-breathe before we head out the door

353
00:12:21,590 --> 00:12:19,920
to do the eva

354
00:12:23,990 --> 00:12:21,600
for the in-suit light exercise pre-booth

355
00:12:25,990 --> 00:12:24,000
protocol however we start the day of the

356
00:12:27,350 --> 00:12:26,000
eva the morning looks fairly similar to

357
00:12:28,629 --> 00:12:27,360
the camp out

358
00:12:30,310 --> 00:12:28,639
protocol with the exception that the

359
00:12:31,910 --> 00:12:30,320
crew members are able to wake up have a

360
00:12:33,590 --> 00:12:31,920
normal post sleep where they're not

361
00:12:34,949 --> 00:12:33,600
wearing oxygen masks they can go ahead

362
00:12:36,790 --> 00:12:34,959
and grab breakfast and take care of

363
00:12:38,470 --> 00:12:36,800

personal hygiene items when they're

364
00:12:40,550 --> 00:12:38,480
ready and per the timeline they'll go

365
00:12:42,949 --> 00:12:40,560
ahead and don their oxygen masks this

366
00:12:44,949 --> 00:12:42,959
time they're on the mask for 60 minutes

367
00:12:47,750 --> 00:12:44,959
during that time similar to campout we

368
00:12:49,430 --> 00:12:47,760
depress the airlock down to 10.2 psi and

369
00:12:51,269 --> 00:12:49,440
this will be the two ev crew members as

370
00:12:52,870 --> 00:12:51,279
well as three additional iv crew members

371
00:12:55,269 --> 00:12:52,880
who will help with the suit donning

372
00:12:57,190 --> 00:12:55,279
while they're at 10.2 psi they'll don

373
00:12:58,550 --> 00:12:57,200
their suits with the assistance of those

374
00:13:00,389 --> 00:12:58,560
other crew members

375
00:13:01,990 --> 00:13:00,399
once complete with the donning

376
00:13:03,190 --> 00:13:02,000
just like campout we'll go ahead and

377
00:13:05,670 --> 00:13:03,200
once the suits are buttoned up and

378
00:13:08,470 --> 00:13:05,680
pressurized we'll start the emu purge

379
00:13:10,069 --> 00:13:08,480
and we'll repress back up to 14.7 that's

380
00:13:13,430 --> 00:13:10,079
at this point in time once we're back up

381
00:13:15,670 --> 00:13:13,440
at 14.7 where we'll start 50 minutes of

382
00:13:20,790 --> 00:13:15,680
the light exercise

383
00:13:23,190 --> 00:13:20,800
judge this it's based on a rate of

384
00:13:25,910 --> 00:13:23,200
perceived exertion or rpe scale which

385
00:13:27,430 --> 00:13:25,920
ranges from six to twenty six is you're

386
00:13:29,110 --> 00:13:27,440
you're sitting there not doing anything

387
00:13:31,750 --> 00:13:29,120
and we're asking crew members to target

388
00:13:33,910 --> 00:13:31,760

an rpe of seven so this is equivalent to

389
00:13:36,310 --> 00:13:33,920
walking a mile in about 70 minutes so

390
00:13:39,030 --> 00:13:36,320
it's a very light exercise so with that

391
00:13:41,110 --> 00:13:39,040
if we could go ahead and roll that video

392
00:13:42,870 --> 00:13:41,120
this video that we're going to show is

393
00:13:44,470 --> 00:13:42,880
the crew members receiving the training

394
00:13:46,710 --> 00:13:44,480
at the neutral buoyancy lab you can see

395
00:13:48,710 --> 00:13:46,720
spanky on the left and drew on the right

396
00:13:50,470 --> 00:13:48,720
during this 50 minutes of exercise

397
00:13:52,389 --> 00:13:50,480
they'll be mark will be running the show

398
00:13:54,230 --> 00:13:52,399
they'll be exercising for four minutes

399
00:13:55,750 --> 00:13:54,240
and then resting for a minute and then

400
00:13:57,189 --> 00:13:55,760
exercising for another four minutes and

401
00:13:58,150 --> 00:13:57,199
they'll repeat this process for 50

402
00:13:59,590 --> 00:13:58,160
minutes

403
00:14:01,110 --> 00:13:59,600
this is what we call the slow motion

404
00:14:02,629 --> 00:14:01,120
hokey pokey

405
00:14:04,550 --> 00:14:02,639
so the crew members will be we'll be

406
00:14:06,870 --> 00:14:04,560
doing this for 50 minutes once they're

407
00:14:09,910 --> 00:14:06,880
complete with that exercise they'll then

408
00:14:12,710 --> 00:14:09,920
do a 50-minute uh in-suit resting

409
00:14:13,910 --> 00:14:12,720
pre-breathe similar to the campout

410
00:14:15,670 --> 00:14:13,920
see spank you threw in a little arm

411
00:14:17,430 --> 00:14:15,680
motions there at the end

412
00:14:19,110 --> 00:14:17,440
so after the 50 minutes of exercise

413
00:14:20,710 --> 00:14:19,120

we'll do 50 minutes of in-suit resting

414
00:14:22,150 --> 00:14:20,720
pre-breathe and then we'll head out the

415
00:14:23,829 --> 00:14:22,160
door we'll depress the airlock and head

416
00:14:25,670 --> 00:14:23,839
at the door we're doing things slightly

417
00:14:27,509 --> 00:14:25,680
differently tomorrow though for eva 3

418
00:14:29,189 --> 00:14:27,519
since this is the first use of this

419
00:14:31,430 --> 00:14:29,199
protocol we're actually going to divide

420
00:14:32,870 --> 00:14:31,440
up the resting pre-breath into two

421
00:14:33,590 --> 00:14:32,880
different portions we'll start out we'll

422
00:14:38,790 --> 00:14:33,600
do

423
00:14:40,550 --> 00:14:38,800
10.2 psi and we repress back up to 14.7

424
00:14:42,629 --> 00:14:40,560
they'll do just a 20 minutes of a

425
00:14:44,550 --> 00:14:42,639
resting pre-breathe and that will allow

426
00:14:46,470 --> 00:14:44,560
us to get some data hopefully get some

427
00:14:48,310 --> 00:14:46,480
data on the ground to see how the oxygen

428
00:14:49,670 --> 00:14:48,320
tanks respond

429
00:14:51,670 --> 00:14:49,680
and this is just nice to have data that

430
00:14:53,430 --> 00:14:51,680
the engineers are interested in in

431
00:14:55,189 --> 00:14:53,440
getting so we'll do 20 minutes of

432
00:14:57,750 --> 00:14:55,199
resting followed by the 50 minutes of

433
00:14:59,430 --> 00:14:57,760
exercise followed by the 30 minutes of

434
00:15:00,629 --> 00:14:59,440
resting pre-breathe before we head at

435
00:15:02,870 --> 00:15:00,639
the door so that'll look slightly

436
00:15:04,470 --> 00:15:02,880
different than a future evas

437
00:15:06,230 --> 00:15:04,480
so just a few things to talk about the

438
00:15:07,910 --> 00:15:06,240

benefits of using this pre-breathe

439
00:15:10,870 --> 00:15:07,920
protocol it's estimated that we're going

440
00:15:12,949 --> 00:15:10,880
to use less oxygen during this protocol

441
00:15:14,790 --> 00:15:12,959
so post shuttle retirement this is this

442
00:15:16,550 --> 00:15:14,800
will be a big deal for station the crew

443
00:15:18,550 --> 00:15:16,560
members also spend less time on the

444
00:15:20,150 --> 00:15:18,560
oxygen masks which for some crew members

445
00:15:21,990 --> 00:15:20,160
can be uncomfortable they're not

446
00:15:24,310 --> 00:15:22,000
isolated in the airlock overnight which

447
00:15:26,470 --> 00:15:24,320
is which is also a benefit though the

448
00:15:27,990 --> 00:15:26,480
one drawback to this protocol though is

449
00:15:29,269 --> 00:15:28,000
that it does take longer in the morning

450
00:15:31,509 --> 00:15:29,279
to get out the door than it does with

451
00:15:33,189 --> 00:15:31,519
the camp up protocol so the egress we

452
00:15:35,269 --> 00:15:33,199
estimate to be about 30 minutes later

453
00:15:36,790 --> 00:15:35,279
than if we had done camp out protocol on

454
00:15:39,509 --> 00:15:36,800
this eva

455
00:15:41,189 --> 00:15:39,519
so with that that's uh my summary of of

456
00:15:43,430 --> 00:15:41,199
aisle so we can go ahead and take

457
00:15:44,949 --> 00:15:43,440
questions okay we'll start here in the

458
00:15:48,310 --> 00:15:44,959
johnson space center do you have a

459
00:15:50,790 --> 00:15:48,949
phillip sloss with

460
00:15:52,150 --> 00:15:50,800
nasaspaceflight.comforward

461
00:15:55,829 --> 00:15:52,160
derek

462
00:15:58,550 --> 00:15:55,839
on the rpc the rpc trips yesterday um

463
00:16:01,910 --> 00:15:58,560

is this something that's common uh

464
00:16:04,150 --> 00:16:01,920
and and also where where is this rpcm in

465
00:16:06,550 --> 00:16:04,160
the in the station thanks

466
00:16:07,829 --> 00:16:06,560
yeah it's uh it's related to a generic

467
00:16:09,829 --> 00:16:07,839
problem

468
00:16:12,710 --> 00:16:09,839
that we know exists in the firmware that

469
00:16:15,110 --> 00:16:12,720
controls this bank of switches

470
00:16:17,189 --> 00:16:15,120
and the way it manifests itself is is

471
00:16:19,509 --> 00:16:17,199
kind of a spontaneous trip without any

472
00:16:21,110 --> 00:16:19,519
kind of associated current signature

473
00:16:22,949 --> 00:16:21,120
it's essentially just a bit flip in the

474
00:16:24,230 --> 00:16:22,959
firmware that results in one of the

475
00:16:26,310 --> 00:16:24,240
switches open

476
00:16:27,670 --> 00:16:26,320
opening and the way we recognize is that

477
00:16:29,430 --> 00:16:27,680
we look we look at data and see no

478
00:16:31,430 --> 00:16:29,440
current spike so there's no

479
00:16:34,710 --> 00:16:31,440
signature indication that would that

480
00:16:36,710 --> 00:16:34,720
would point to a real trip

481
00:16:39,189 --> 00:16:36,720
over time we've been changing out these

482
00:16:42,310 --> 00:16:39,199
older style rpcms with the known issue

483
00:16:45,829 --> 00:16:42,320
with the firmware with updated rpcms

484
00:16:49,030 --> 00:16:45,839
with uh with the this problem addressed

485
00:16:50,710 --> 00:16:49,040
this this particular rpcm i believe is

486
00:16:52,629 --> 00:16:50,720
in the lab so it you know it's obviously

487
00:17:01,590 --> 00:16:52,639
an iv a change on it and i'm pretty

488
00:17:05,510 --> 00:17:03,590

denise ciao with space.com um the

489
00:17:07,350 --> 00:17:05,520
changes that you made to the eva3

490
00:17:08,949 --> 00:17:07,360
timeline were those mainly get a head

491
00:17:10,789 --> 00:17:08,959
test or were those going to be added to

492
00:17:13,270 --> 00:17:10,799
the the fourth dva

493
00:17:15,270 --> 00:17:13,280
they get ahead tasks 3v3 yeah the tasks

494
00:17:18,549 --> 00:17:15,280
that we deferred from eva 3 the

495
00:17:20,710 --> 00:17:18,559
installation of the 1553 data cable

496
00:17:22,549 --> 00:17:20,720
that will possibly remain a get ahead

497
00:17:24,390 --> 00:17:22,559
for eva4 but there currently are not any

498
00:17:26,309 --> 00:17:24,400
plans to change what's nominally planned

499
00:17:32,230 --> 00:17:26,319
for eva for right now so that timeline

500
00:17:36,789 --> 00:17:34,630
gina cinceri abc news i had a question

501
00:17:39,190 --> 00:17:36,799
when someone in new york asked me to ask

502
00:17:41,270 --> 00:17:39,200
this for radio which is just what makes

503
00:17:42,310 --> 00:17:41,280
a space walk so hard we talk about eight

504
00:17:43,830 --> 00:17:42,320
hours and they say well they're out

505
00:17:45,430 --> 00:17:43,840
there floating around in these puffy

506
00:17:47,350 --> 00:17:45,440
marshmallow suits why is that so

507
00:17:49,110 --> 00:17:47,360
difficult would you mind giving us kind

508
00:17:51,270 --> 00:17:49,120
of a definition for our radio audience

509
00:17:52,150 --> 00:17:51,280
please about why why it's difficult oh

510
00:17:53,990 --> 00:17:52,160
wow

511
00:17:55,830 --> 00:17:54,000
uh well i guess so while you are

512
00:17:58,150 --> 00:17:55,840
floating out there in space you are in a

513
00:17:59,990 --> 00:17:58,160

pressurized suit so as you're bending

514
00:18:01,909 --> 00:18:00,000
your fingers you know i think the the

515
00:18:03,350 --> 00:18:01,919
main fatigue issue that crew members

516
00:18:04,710 --> 00:18:03,360
talk about is their hands getting tired

517
00:18:06,549 --> 00:18:04,720
you know your legs aren't getting tired

518
00:18:07,909 --> 00:18:06,559
because you're not walking around your

519
00:18:09,830 --> 00:18:07,919
arms aren't getting too tired but it's

520
00:18:12,549 --> 00:18:09,840
mainly your hair your hands because

521
00:18:13,990 --> 00:18:12,559
you're pressurized to 4.3 psi so you're

522
00:18:16,310 --> 00:18:14,000
actually as you're bending your fingers

523
00:18:17,990 --> 00:18:16,320
you know your natural suit glove wants

524
00:18:19,590 --> 00:18:18,000
to just kind of be outstretched so as

525
00:18:21,029 --> 00:18:19,600
you're bending your fingers to grasp

526
00:18:23,029 --> 00:18:21,039
onto handrails or to hang onto your

527
00:18:24,710 --> 00:18:23,039
pistol grip tool or to perform other

528
00:18:27,430 --> 00:18:24,720
activities you're having to fight

529
00:18:29,029 --> 00:18:27,440
against the pressurization of that suit

530
00:18:30,630 --> 00:18:29,039
so i think that's kind of what what

531
00:18:32,710 --> 00:18:30,640
causes crew members to get most tired

532
00:18:34,950 --> 00:18:32,720
after the after the evas is is the

533
00:18:39,830 --> 00:18:34,960
constant hand fatigue of having to fight

534
00:18:44,710 --> 00:18:42,470
uh rob perlman with collectspace.com um

535
00:18:46,630 --> 00:18:44,720
with regards to the 1553 cable can you

536
00:18:47,990 --> 00:18:46,640
just explain what that does and if you

537
00:18:50,470 --> 00:18:48,000
don't get to it

538
00:18:52,710 --> 00:18:50,480

how important it is for the station

539
00:18:54,390 --> 00:18:52,720
do you want to field that sure it's a

540
00:18:56,230 --> 00:18:54,400
it's essentially the data connection

541
00:18:57,270 --> 00:18:56,240
between the the power data grapple

542
00:18:59,990 --> 00:18:57,280
fixture

543
00:19:01,029 --> 00:19:00,000
and computers in in the us segment that

544
00:19:03,590 --> 00:19:01,039
allow

545
00:19:04,630 --> 00:19:03,600
the robotics officer and mcc or or the

546
00:19:06,710 --> 00:19:04,640
crew

547
00:19:09,590 --> 00:19:06,720
to grapple that pdgf

548
00:19:10,789 --> 00:19:09,600
um on the fgb and then use it as a base

549
00:19:13,909 --> 00:19:10,799
for the arm

550
00:19:16,310 --> 00:19:13,919
so without that 1553 data connection we

551
00:19:18,310 --> 00:19:16,320
can't use that fgb grapple fixture as a

552
00:19:21,669 --> 00:19:18,320
full-blown base i.e

553
00:19:24,150 --> 00:19:21,679
from a from a pdgf on the ux us segment

554
00:19:25,990 --> 00:19:24,160
grapple that fgb pdgf and then ungrapple

555
00:19:28,710 --> 00:19:26,000
on the us side and have a fully

556
00:19:31,350 --> 00:19:28,720
functional arm on that pdgf so before we

557
00:19:32,950 --> 00:19:31,360
use that new grapple fixture as a base

558
00:19:34,789 --> 00:19:32,960
for the robotic arm

559
00:19:39,430 --> 00:19:34,799
there will need to be a subsequent space

560
00:19:41,029 --> 00:19:39,440
walk to connect that 1553 data cable

561
00:19:42,870 --> 00:19:41,039
any other questions here

562
00:19:44,789 --> 00:19:42,880
okay we'll go to the fun bridge marcia

563
00:19:45,909 --> 00:19:44,799

dunn

564
00:19:48,150 --> 00:19:45,919
good morning

565
00:19:49,430 --> 00:19:48,160
i'm wondering

566
00:19:51,190 --> 00:19:49,440
when those

567
00:19:53,350 --> 00:19:51,200
pictures of the

568
00:19:55,750 --> 00:19:53,360
space station shuttle that

569
00:19:56,870 --> 00:19:55,760
landed in kazakhstan when might those be

570
00:19:58,870 --> 00:19:56,880
available

571
00:20:01,350 --> 00:19:58,880
in the world yeah i know the the us

572
00:20:02,789 --> 00:20:01,360
folks in in moscow and the folks who are

573
00:20:04,710 --> 00:20:02,799
at the landing site are working to get

574
00:20:07,029 --> 00:20:04,720
those images transmitted to the united

575
00:20:10,950 --> 00:20:07,039
states i i don't have an update uh today

576
00:20:12,950 --> 00:20:10,960
on on what the expected availability is

577
00:20:13,990 --> 00:20:12,960
oh great thank you and a question for

578
00:20:15,430 --> 00:20:14,000
kylie

579
00:20:16,470 --> 00:20:15,440
are you guys going to how are you going

580
00:20:18,230 --> 00:20:16,480
to

581
00:20:19,990 --> 00:20:18,240
alert people that those are available

582
00:20:22,149 --> 00:20:20,000
will you be sending out a news advisory

583
00:20:23,350 --> 00:20:22,159
or do we just need to keep checking the

584
00:20:24,789 --> 00:20:23,360
website

585
00:20:28,870 --> 00:20:24,799
uh it's expected that they would be

586
00:20:31,669 --> 00:20:28,880
posted on the website at www.nasa.gov

587
00:20:35,510 --> 00:20:31,679
thank you and one last question derek um

588
00:20:38,149 --> 00:20:35,520

how much time passed um yesterday

589
00:20:40,789 --> 00:20:38,159
without with the lack of all the payload

590
00:20:42,470 --> 00:20:40,799
data et cetera um

591
00:20:43,669 --> 00:20:42,480
you know with with the uh

592
00:20:45,510 --> 00:20:43,679
with the breakdown that occurred how

593
00:20:47,350 --> 00:20:45,520
many hours did all told before it was

594
00:20:49,430 --> 00:20:47,360
fixed

595
00:20:51,270 --> 00:20:49,440
see i it it's

596
00:20:53,029 --> 00:20:51,280
the failure occurred like

597
00:20:55,669 --> 00:20:53,039
right at the beginning of my hand over

598
00:20:56,549 --> 00:20:55,679
to to dina the orbit three team and then

599
00:20:58,630 --> 00:20:56,559
it was

600
00:21:00,390 --> 00:20:58,640
the repair happened early on the next

601
00:21:02,950 --> 00:21:00,400
shift so i would estimate on the order

602
00:21:04,870 --> 00:21:02,960
of eight to nine hours thank you that's

603
00:21:09,590 --> 00:21:04,880
all for me

604
00:21:14,630 --> 00:21:13,430
thanks todd halverson of florida today

605
00:21:16,070 --> 00:21:14,640
i was

606
00:21:19,029 --> 00:21:16,080
wondering if you might be able to tell

607
00:21:21,830 --> 00:21:19,039
us what the earliest time those uh

608
00:21:24,630 --> 00:21:21,840
photos from the high-flying photo

609
00:21:27,350 --> 00:21:24,640
opportunity might be available um might

610
00:21:28,950 --> 00:21:27,360
they be available before the

611
00:21:33,750 --> 00:21:28,960
business today or in time for

612
00:21:38,149 --> 00:21:35,830
i think it's a matter of days as they're

613
00:21:42,630 --> 00:21:38,159

recovered as part of the cargo that was

614
00:21:47,750 --> 00:21:45,270
okay and so then kyla you do not expect

615
00:21:50,149 --> 00:21:47,760
that they would be available uh today

616
00:21:55,110 --> 00:21:50,159
not that we are aware of

617
00:22:01,029 --> 00:21:58,470
okay and bill harwood then

618
00:22:02,710 --> 00:22:01,039
um yeah thank you a question for alison

619
00:22:03,590 --> 00:22:02,720
for those of us who timelined these

620
00:22:05,590 --> 00:22:03,600
things

621
00:22:08,149 --> 00:22:05,600
does the antenna install simply fit in

622
00:22:09,430 --> 00:22:08,159
the block where the 1553 cable had been

623
00:22:11,350 --> 00:22:09,440
and i want to make sure the only other

624
00:22:12,870 --> 00:22:11,360
changes for the stp

625
00:22:14,870 --> 00:22:12,880
visible light photography you guys are

626
00:22:16,310 --> 00:22:14,880
going to you're just swapping an ir but

627
00:22:17,909 --> 00:22:16,320
the timing of those events then would

628
00:22:19,430 --> 00:22:17,919
stay the same

629
00:22:22,390 --> 00:22:19,440
right and so the timeline does look

630
00:22:25,029 --> 00:22:22,400
slightly different the 1553 data cable

631
00:22:27,110 --> 00:22:25,039
task was timelined for 45 minutes and so

632
00:22:28,950 --> 00:22:27,120
the the lab work that we insert in there

633
00:22:30,950 --> 00:22:28,960
takes about an hour

634
00:22:33,510 --> 00:22:30,960
so what we did was we just shifted all

635
00:22:35,510 --> 00:22:33,520
the tasks that come after that lab ewc

636
00:22:38,070 --> 00:22:35,520
work down a little bit and this is what

637
00:22:41,190 --> 00:22:38,080
caused us to defer in addition to the

638
00:22:43,190 --> 00:22:41,200

1553 data cable we also deferred on

639
00:22:44,710 --> 00:22:43,200
spanky's timeline i mentioned that

640
00:22:46,789 --> 00:22:44,720
restoring of the tools in the airlock

641
00:22:48,470 --> 00:22:46,799
toolbox we deferred that task to a

642
00:22:50,310 --> 00:22:48,480
get-ahead so that allowed us to shift

643
00:22:51,510 --> 00:22:50,320
all the activities down we're also

644
00:22:53,190 --> 00:22:51,520
showing a

645
00:22:55,270 --> 00:22:53,200
slightly longer time we had 30 minutes

646
00:22:56,870 --> 00:22:55,280
for the still photos of stph3 and now

647
00:22:58,230 --> 00:22:56,880
we're showing 40 minutes

648
00:23:00,789 --> 00:22:58,240
uh

649
00:23:02,470 --> 00:23:00,799
for the activity at the end of the eva

650
00:23:04,710 --> 00:23:02,480
the thruster photo

651
00:23:07,029 --> 00:23:04,720
does that go

652
00:23:09,350 --> 00:23:07,039
we it's it's still we still have the

653
00:23:11,990 --> 00:23:09,360
pdgf and fgb thruster photos slash

654
00:23:14,630 --> 00:23:12,000
cleanup shown for 15 minutes i i don't

655
00:23:17,029 --> 00:23:14,640
have a hand at what it was before we do

656
00:23:18,549 --> 00:23:17,039
have the photos as a opportunity as time

657
00:23:20,070 --> 00:23:18,559
permits since drew will have the camera

658
00:23:21,750 --> 00:23:20,080
with him actually taking those photos

659
00:23:23,750 --> 00:23:21,760
will only take a couple minutes but the

660
00:23:25,510 --> 00:23:23,760
main the main purpose of that task was

661
00:23:27,029 --> 00:23:25,520
to help clean up the work site put all

662
00:23:29,510 --> 00:23:27,039
the tools back inside the tool bags and

663
00:23:31,990 --> 00:23:29,520

get them back to the airlock

664
00:23:33,190 --> 00:23:32,000
thanks and one question for derek is uh

665
00:23:35,110 --> 00:23:33,200
where do you guys stand today on

666
00:23:37,190 --> 00:23:35,120
discussions rather not to add a date of

667
00:23:39,909 --> 00:23:37,200
this mission

668
00:23:42,310 --> 00:23:39,919
as i was walking in the briefing bill

669
00:23:44,710 --> 00:23:42,320
what i my understanding is and what was

670
00:23:46,310 --> 00:23:44,720
announced to immt is that the decision

671
00:23:53,269 --> 00:23:46,320
has been made by both programs not to

672
00:23:55,830 --> 00:23:54,870
okay that must be all the questions on

673
00:23:57,350 --> 00:23:55,840
the phone bridge do we have any

674
00:23:59,750 --> 00:23:57,360
follow-ups here

675
00:24:03,669 --> 00:24:01,669
phillip sloss with nasa spaceflight.com

676
00:24:05,990 --> 00:24:03,679
again for uh for derek could you give us

677
00:24:08,390 --> 00:24:06,000
uh just a transfer status and i noticed

678
00:24:10,390 --> 00:24:08,400
in the execute package uh sort of

679
00:24:11,590 --> 00:24:10,400
juggling some of the tasks i know they

680
00:24:13,269 --> 00:24:11,600
talked about

681
00:24:15,430 --> 00:24:13,279
uh obviously because the russian crew

682
00:24:17,110 --> 00:24:15,440
members are sleeping not to do atv

683
00:24:18,470 --> 00:24:17,120
unpack today are you still gonna be able

684
00:24:20,149 --> 00:24:18,480
to get to all of that during the

685
00:24:22,870 --> 00:24:20,159
documentation yeah the the mid deck

686
00:24:24,549 --> 00:24:22,880
transfer is going per the plan so we

687
00:24:25,909 --> 00:24:24,559
expect to finish all that i'm i think

688
00:24:29,110 --> 00:24:25,919

we're we're probably an hour or two

689
00:24:31,669 --> 00:24:29,120
ahead on mid deck stuff and we expect to

690
00:24:33,110 --> 00:24:31,679
completely unpack the atv or at least

691
00:24:35,430 --> 00:24:33,120
come very close

692
00:24:40,149 --> 00:24:35,440
by the time endeavor undocks so transfer

693
00:24:43,909 --> 00:24:41,669
with that we'll wrap up this briefing

694
00:24:45,430 --> 00:24:43,919
with a few programming notes the

695
00:24:46,870 --> 00:24:45,440
shuttle crew and rongaran again are

696
00:24:49,430 --> 00:24:46,880
wrapping up their morning on board the

697
00:24:52,070 --> 00:24:49,440
station at 11 a.m then we'll have a

698
00:24:54,789 --> 00:24:52,080
video file from the soyuz landing events

699
00:24:56,630 --> 00:24:54,799
that will air on nasa tv then the flight

700
00:24:59,350 --> 00:24:56,640
day nine highlights will begin airing at

701
00:25:01,110 --> 00:24:59,360
12 pm central time and we have an update

702
00:25:03,350 --> 00:25:01,120
from the international space station

703
00:25:07,110 --> 00:25:03,360
flight director on console uh in mission

704
00:25:09,830 --> 00:25:07,120
control at 4 45 pm and that crew then is

705
00:25:11,830 --> 00:25:09,840
scheduled to wake in at 6 56 pm and

706
00:25:13,350 --> 00:25:11,840
begin the preparations with that aisle

707
00:25:16,149 --> 00:25:13,360
activity to get ready for the third

708
00:25:17,110 --> 00:25:16,159
spacewalk which is set to begin at 12 46

709
00:25:18,230 --> 00:25:17,120
a.m