



1  
00:00:03,270 --> 00:00:01,829  
and recovery of the team as well so

2  
00:00:05,030 --> 00:00:03,280  
don't go anywhere

3  
00:00:07,670 --> 00:00:05,040  
we are just waiting on a couple of major

4  
00:00:09,910 --> 00:00:07,680  
events here enjoying some views of the

5  
00:00:23,290 --> 00:00:09,920  
crew inside the capsule as you can see

6  
00:03:04,790 --> 00:00:46,650  
[Music]

7  
00:03:11,990 --> 00:03:06,869  
dragon the orbit sequence start in five

8  
00:03:12,000 --> 00:03:18,640  
copy

9  
00:03:57,830 --> 00:03:36,680  
[Music]

10  
00:03:59,030 --> 00:03:57,840  
all right so we are continuing to track

11  
00:04:01,509 --> 00:03:59,040  
the uh

12  
00:04:03,830 --> 00:04:01,519  
return of crew 2 and the astronauts back

13  
00:04:05,750 --> 00:04:03,840

to planet earth we just heard we are

14

00:04:07,270 --> 00:04:05,760

just moments away from entering the d

15

00:04:09,270 --> 00:04:07,280

orbit sequence

16

00:04:10,710 --> 00:04:09,280

we did a quick fact check on some of the

17

00:04:12,070 --> 00:04:10,720

burns that we've been monitoring

18

00:04:14,309 --> 00:04:12,080

throughout today's flight as we've been

19

00:04:16,870 --> 00:04:14,319

providing continuous coverage and we did

20

00:04:19,349 --> 00:04:16,880

get confirmation that that uh departure

21

00:04:22,790 --> 00:04:19,359

phase burn which we have discussed

22

00:04:25,510 --> 00:04:22,800

takes the dragon out of the coalitic

23

00:04:27,670 --> 00:04:25,520

phasing that is really uh matching the

24

00:04:29,830 --> 00:04:27,680

international space station with both

25

00:04:32,790 --> 00:04:29,840

the perigee and apogee and puts it on a

26

00:04:35,830 --> 00:04:32,800

course uh with that landing site which

27

00:04:38,230 --> 00:04:35,840

is pensacola florida that did happen uh

28

00:04:40,070 --> 00:04:38,240

so so we do have confirmation that all

29

00:04:42,469 --> 00:04:40,080

of the phasing burns the departure burns

30

00:04:44,710 --> 00:04:42,479

that are necessary to line dragon up for

31

00:04:46,790 --> 00:04:44,720

the d orbit sequence which we're hearing

32

00:04:49,189 --> 00:04:46,800

is about to uh take place here

33

00:04:50,950 --> 00:04:49,199

momentarily uh that we are all lined up

34

00:04:52,870 --> 00:04:50,960

all of the burns have taken place dragon

35

00:04:54,950 --> 00:04:52,880

is in a good phase a good position to

36

00:04:57,270 --> 00:04:54,960

get ready for this next sequence of very

37

00:04:59,670 --> 00:04:57,280

critical events and what that means is

38

00:05:01,110 --> 00:04:59,680

we have just one more burn left the

39

00:05:03,749 --> 00:05:01,120

deorbit burn right a couple of things

40

00:05:05,830 --> 00:05:03,759

need to happen again before we um start

41

00:05:07,590 --> 00:05:05,840

this uh in

42

00:05:10,629 --> 00:05:07,600

about three minutes we'll begin to

43

00:05:12,629 --> 00:05:10,639

maneuver or slow the dragon uh to the

44

00:05:14,950 --> 00:05:12,639

appropriate um

45

00:05:17,510 --> 00:05:14,960

attitude in order to prep for claw

46

00:05:19,670 --> 00:05:17,520

separation and then trunk separation

47

00:05:20,790 --> 00:05:19,680

after that we'll slew back

48

00:05:23,830 --> 00:05:20,800

the uh

49

00:05:25,510 --> 00:05:23,840

the four forward bulkhead thrusters

50

00:05:27,749 --> 00:05:25,520

underneath the nose cone

51  
00:05:28,629 --> 00:05:27,759  
will fire for about 16 and a half

52  
00:05:30,870 --> 00:05:28,639  
minutes

53  
00:05:33,590 --> 00:05:30,880  
that will be what slows down dragon and

54  
00:05:35,350 --> 00:05:33,600  
brings its altitude down enough to start

55  
00:05:39,350 --> 00:05:35,360  
to

56  
00:05:43,110 --> 00:05:39,360  
sort of hit some of the atmospheric

57  
00:05:44,950 --> 00:05:43,120  
particles of earth and then from there

58  
00:05:47,909 --> 00:05:44,960  
we'll start to re-enter the earth's

59  
00:05:49,830 --> 00:05:47,919  
atmosphere enter that blackout period

60  
00:05:52,390 --> 00:05:49,840  
for about seven minutes where there's

61  
00:05:54,710 --> 00:05:52,400  
just plasma being built up around the

62  
00:05:56,790 --> 00:05:54,720  
exterior of dragon so we'll lose

63  
00:06:00,150 --> 00:05:56,800

communications for about seven minutes

64

00:06:02,390 --> 00:06:00,160

after that we'll regain communications

65

00:06:04,390 --> 00:06:02,400

uh we have uh parachute deploys we have

66

00:06:07,110 --> 00:06:04,400

two sets uh first up is the dro shoots

67

00:06:09,749 --> 00:06:07,120

that will take the dragon uh veloci the

68

00:06:12,950 --> 00:06:09,759

dragon capsule velocity from about 350

69

00:06:14,070 --> 00:06:12,960

miles per hour to 120 miles an hour from

70

00:06:16,150 --> 00:06:14,080

there the

71

00:06:20,150 --> 00:06:16,160

main shoots will deploy taking us from

72

00:06:23,110 --> 00:06:20,160

120 miles an hour down to about 15

73

00:06:24,550 --> 00:06:23,120

for a nice soft landing uh on off the go

74

00:06:26,790 --> 00:06:24,560

off the co

75

00:06:28,950 --> 00:06:26,800

the gulf of mexico

76

00:06:31,110 --> 00:06:28,960

so that is uh going to kick off here

77

00:06:33,830 --> 00:06:31,120

very shortly we're coming up on just

78

00:06:36,390 --> 00:06:33,840

about an hour from the predicted

79

00:06:38,070 --> 00:06:36,400

splashdown time uh we did hear there

80

00:06:39,909 --> 00:06:38,080

were slight adjustments in some of the

81

00:06:41,510 --> 00:06:39,919

sequence and that sequence the deorbit

82

00:06:43,670 --> 00:06:41,520

sequence itself about to begin here

83

00:06:45,590 --> 00:06:43,680

momentarily uh with starting with the

84

00:06:47,350 --> 00:06:45,600

claw separation and trunk separation but

85

00:06:50,150 --> 00:06:47,360

that'll kick off once that sequence

86

00:06:51,830 --> 00:06:50,160

starts it's about an hour timeline uh

87

00:06:53,990 --> 00:06:51,840

from the time that that sequence starts

88

00:06:57,110 --> 00:06:54,000

to the time that we are in the water

89

00:07:00,469 --> 00:06:57,120

we're still targeting 7 33 p.m pacific

90

00:07:01,670 --> 00:07:00,479

standard time 10 33 pm eastern standard

91

00:07:04,150 --> 00:07:01,680

time

92

00:07:05,749 --> 00:07:04,160

yeah so again uh everything that we just

93

00:07:07,029 --> 00:07:05,759

talked about is going to happen in that

94

00:07:08,790 --> 00:07:07,039

hour so like

95

00:07:10,390 --> 00:07:08,800

you know we we we saw the crew enjoy

96

00:07:13,510 --> 00:07:10,400

their meal they don their spacesuits

97

00:07:15,990 --> 00:07:13,520

once again uh and i really had a bit of

98

00:07:17,990 --> 00:07:16,000

a respite before right these very

99

00:07:20,230 --> 00:07:18,000

dynamic portions of

100

00:07:21,589 --> 00:07:20,240

of the the operation so things will

101  
00:07:23,270 --> 00:07:21,599  
definitely get exciting here in the next

102  
00:07:24,550 --> 00:07:23,280  
couple of minutes

103  
00:07:26,790 --> 00:07:24,560  
and we'll be with you every step of the

104  
00:07:28,710 --> 00:07:26,800  
way uh we're expecting communications

105  
00:07:31,110 --> 00:07:28,720  
with the crew throughout each of these

106  
00:07:33,350 --> 00:07:31,120  
different phases confirmation of trunk

107  
00:07:35,990 --> 00:07:33,360  
separation uh the claw the claw opening

108  
00:07:38,230 --> 00:07:36,000  
the claw separation trunk separation uh

109  
00:07:40,870 --> 00:07:38,240  
when the deorbit burn starts it's going

110  
00:07:43,029 --> 00:07:40,880  
to be uh quite uh quite a long time that

111  
00:07:45,110 --> 00:07:43,039  
those forward bulkhead dracos will fire

112  
00:07:47,110 --> 00:07:45,120  
it is the longest burn of the entire

113  
00:07:48,869 --> 00:07:47,120

flight the eight and a half hour journey

114

00:07:50,790 --> 00:07:48,879

from undocking from the international

115

00:07:53,189 --> 00:07:50,800

space station to splashing down off the

116

00:07:55,029 --> 00:07:53,199

coast of florida 16 and a half minutes

117

00:07:57,350 --> 00:07:55,039

in this particular phasing because of

118

00:07:59,749 --> 00:07:57,360

the short flight uh that is a much

119

00:08:01,749 --> 00:07:59,759

longer burn uh with some of the longer

120

00:08:04,150 --> 00:08:01,759

phases when we're talking about eighteen

121

00:08:05,670 --> 00:08:04,160

or nineteen hours uh

122

00:08:21,909 --> 00:08:05,680

sequence

123

00:08:26,309 --> 00:08:24,309

so again that was confirmation of the

124

00:08:29,510 --> 00:08:26,319

beginning of the deorbit sequence again

125

00:08:31,990 --> 00:08:29,520

it involves a a number of different

126  
00:08:34,550 --> 00:08:32,000  
items to occur right now again the the

127  
00:08:37,350 --> 00:08:34,560  
dragon is starting to maneuver itself

128  
00:08:39,110 --> 00:08:37,360  
orient itself uh to prep for claw and

129  
00:08:42,310 --> 00:08:39,120  
trunk separation

130  
00:08:44,550 --> 00:08:42,320  
so the first step is the claw separation

131  
00:08:46,470 --> 00:08:44,560  
right now we're in the preparation phase

132  
00:08:49,030 --> 00:08:46,480  
uh this is an automatic sequence now

133  
00:08:51,110 --> 00:08:49,040  
that we're in the uh d orbit sequence

134  
00:08:53,269 --> 00:08:51,120  
which just kicked off uh it's an

135  
00:08:56,070 --> 00:08:53,279  
automatic sequence that starts with claw

136  
00:08:58,949 --> 00:08:56,080  
separation the claw is uh essentially

137  
00:09:01,910 --> 00:08:58,959  
the umbilic the umbilical that routes uh

138  
00:09:04,150 --> 00:09:01,920

uh power to the dragon capsule it's

139

00:09:06,710 --> 00:09:04,160

connected as part of the trunk

140

00:09:08,949 --> 00:09:06,720

so we'll disconnect that first

141

00:09:11,829 --> 00:09:08,959

pop off the uh trunk so to speak and

142

00:09:14,790 --> 00:09:11,839

once that happens the dragon capsule is

143

00:09:16,630 --> 00:09:14,800

um uh running exclusively

144

00:09:22,230 --> 00:09:16,640

exclusively on its own um internal

145

00:09:25,750 --> 00:09:24,230

and there's plenty to spare too through

146

00:09:27,750 --> 00:09:25,760

the uh

147

00:09:29,509 --> 00:09:27,760

six months or so that the

148

00:09:31,590 --> 00:09:29,519

uh dragon has been attached to the

149

00:09:33,750 --> 00:09:31,600

international space station it really

150

00:09:35,670 --> 00:09:33,760

hasn't had to rely on its own power at

151  
00:09:39,430 --> 00:09:35,680  
all the international space station has

152  
00:09:41,430 --> 00:09:39,440  
gigantic basketball court sized uh solar

153  
00:09:43,350 --> 00:09:41,440  
arrays in addition to a couple of new

154  
00:09:45,430 --> 00:09:43,360  
solar arrays that some of the crew 2

155  
00:09:47,509 --> 00:09:45,440  
astronauts themselves installed and

156  
00:09:49,430 --> 00:09:47,519  
deployed on the outside of the station

157  
00:09:51,430 --> 00:09:49,440  
all providing power not only to the

158  
00:09:53,670 --> 00:09:51,440  
international space station but to the

159  
00:09:55,910 --> 00:09:53,680  
dragon while it's been docked uh during

160  
00:09:58,870 --> 00:09:55,920  
the docked phase the dragon itself is

161  
00:10:01,590 --> 00:09:58,880  
connected via umbilical that provides

162  
00:10:03,590 --> 00:10:01,600  
communication and of course power uh to

163  
00:10:05,750 --> 00:10:03,600

the vehicle so the batteries were fully

164

00:10:08,389 --> 00:10:05,760

charged uh for the ride home and then

165

00:10:09,509 --> 00:10:08,399

even upon separation you can see uh you

166

00:10:10,470 --> 00:10:09,519

were able to see through some of the

167

00:10:12,069 --> 00:10:10,480

views

168

00:10:14,470 --> 00:10:12,079

the uh uh

169

00:10:16,310 --> 00:10:14,480

trunk itself has a series of solar

170

00:10:18,949 --> 00:10:16,320

arrays that are on one side of the trunk

171

00:10:21,509 --> 00:10:18,959

able to provide a small amount of power

172

00:10:28,470 --> 00:10:21,519

throughout this uh the this phase of

173

00:10:33,670 --> 00:10:31,509

so we are expecting to get confirmation

174

00:10:35,350 --> 00:10:33,680

of call separation and then shortly

175

00:10:45,030 --> 00:10:35,360

after trunk separation

176

00:10:48,710 --> 00:10:47,030

dragon is now automatically

177

00:11:02,949 --> 00:10:48,720

going into the preparations for trunk

178

00:11:06,790 --> 00:11:04,870

the trunk itself um

179

00:11:09,750 --> 00:11:06,800

separating it exposes the heat shield

180

00:11:12,829 --> 00:11:09,760

again that is very necessary uh to

181

00:11:14,949 --> 00:11:12,839

protect the capsule from the high

182

00:11:17,509 --> 00:11:14,959

temperatures that

183

00:11:19,990 --> 00:11:17,519

it will be experiencing during

184

00:11:25,829 --> 00:11:20,000

re-entry

185

00:11:25,839 --> 00:11:33,110

copy and animal drum testing

186

00:11:37,269 --> 00:11:34,230

it's a great way to start off the

187

00:11:38,790 --> 00:11:37,279

deorbit sequence the trunk is off

188

00:11:41,670 --> 00:11:38,800

and everything is

189

00:11:43,910 --> 00:11:41,680

going smoothly so far

190

00:11:47,030 --> 00:11:43,920

coming up next uh we're going to be

191

00:11:49,829 --> 00:11:47,040

reorienting the dragon and then starting

192

00:11:52,710 --> 00:11:49,839

up the deorbit burn

193

00:11:54,949 --> 00:11:52,720

right now we are in a slew so now that

194

00:11:56,949 --> 00:11:54,959

the dragon has

195

00:11:59,509 --> 00:11:56,959

physically separated the trunk the trunk

196

00:12:02,710 --> 00:11:59,519

has confirmed to have separated itself

197

00:12:05,030 --> 00:12:02,720

from the dragon capsule uh that slough

198

00:12:08,230 --> 00:12:05,040

had dragon oriented slightly to the side

199

00:12:09,910 --> 00:12:08,240

relative to how it is orbiting to allow

200

00:12:12,069 --> 00:12:09,920

there not to be a conjunction between

201  
00:12:14,790 --> 00:12:12,079  
the two

202  
00:12:17,590 --> 00:12:14,800  
bodies as they now enter into the

203  
00:12:19,590 --> 00:12:17,600  
deorbit phase so now the dragon itself

204  
00:12:21,670 --> 00:12:19,600  
is slowing into a position with the

205  
00:12:23,430 --> 00:12:21,680  
forward bulkhead dracos pointing

206  
00:12:25,269 --> 00:12:23,440  
straight on the velocity bar or the v

207  
00:12:28,150 --> 00:12:25,279  
bar essentially the same direction that

208  
00:12:31,670 --> 00:12:28,160  
the dragon is orbiting uh to be prepared

209  
00:12:34,470 --> 00:12:31,680  
to fire the four bulkhead dracos for

210  
00:12:36,389 --> 00:12:34,480  
16 and a half minutes uh that sequence

211  
00:12:37,829 --> 00:12:36,399  
should be coming up here in about two

212  
00:12:40,310 --> 00:12:37,839  
minutes we should be hearing the

213  
00:12:43,110 --> 00:12:40,320

confirmation that the forward bulkhead

214

00:12:44,629 --> 00:12:43,120

dracos are firing and we'll so we'll

215

00:12:46,389 --> 00:12:44,639

we'll monitor that make sure that the

216

00:12:49,430 --> 00:12:46,399

deorbit burn is good and then we have a

217

00:12:52,069 --> 00:12:49,440

good burn uh once that burn is complete

218

00:12:53,990 --> 00:12:52,079

dragon is committed to re-enter the

219

00:12:56,310 --> 00:12:54,000

earth's atmosphere and splash down off

220

00:12:58,069 --> 00:12:56,320

the coast of pensacola florida yeah

221

00:13:00,310 --> 00:12:58,079

that's going to be the last time that we

222

00:13:02,870 --> 00:13:00,320

fire the the forward bulkhead thrusters

223

00:13:05,430 --> 00:13:02,880

on the dragon vehicle uh and so again

224

00:13:07,269 --> 00:13:05,440

after we we finished the deorbit burn

225

00:13:09,190 --> 00:13:07,279

the nose cone which is currently open

226

00:13:11,110 --> 00:13:09,200

right now we're going to be closing that

227

00:13:13,110 --> 00:13:11,120

it takes a couple of minutes to close

228

00:13:15,829 --> 00:13:13,120

and then it latches shut

229

00:13:16,710 --> 00:13:15,839

this protects the avionics and all of

230

00:13:20,870 --> 00:13:16,720

the

231

00:13:22,870 --> 00:13:20,880

we'll latch that shot because we're not

232

00:13:25,509 --> 00:13:22,880

going to be firing the dracos anymore

233

00:13:27,430 --> 00:13:25,519

and then dragon really will be

234

00:13:29,590 --> 00:13:27,440

on its trajectory towards the primary

235

00:13:31,350 --> 00:13:29,600

landings off the coast of pensacola and

236

00:13:33,350 --> 00:13:31,360

we're hearing confirmation from the

237

00:13:35,910 --> 00:13:33,360

flight control teams here in hawthorne

238

00:13:38,310 --> 00:13:35,920

the dragon capsule is now switched its

239

00:13:41,350 --> 00:13:38,320

attitude it's slewed into the deorbit

240

00:13:43,750 --> 00:13:41,360

position and is in the deorbit attitude

241

00:13:46,550 --> 00:13:43,760

now standing by for about a minute from

242

00:13:48,949 --> 00:13:46,560

now uh where the dragon itself will fire

243

00:13:51,030 --> 00:13:48,959

those four for forward bulkhead dracos

244

00:14:10,310 --> 00:13:51,040

beginning the deorbit sequence a very

245

00:14:15,430 --> 00:14:12,389

so we will be bringing continuous

246

00:14:17,509 --> 00:14:15,440

coverage all the way through splash down

247

00:14:19,590 --> 00:14:17,519

and recovery of the crew

248

00:14:21,590 --> 00:14:19,600

on screen right now is a view of

249

00:14:23,590 --> 00:14:21,600

hawthorne mission control

250

00:14:26,470 --> 00:14:23,600

folks are starting to gather around

251  
00:14:28,870 --> 00:14:26,480  
anticipating uh crew 2's return

252  
00:14:30,310 --> 00:14:28,880  
again off the coast of florida

253  
00:14:32,310 --> 00:14:30,320  
[Music]

254  
00:14:42,949 --> 00:14:32,320  
under an hour now

255  
00:14:48,310 --> 00:14:44,710  
so it is worth mentioning again that the

256  
00:14:50,710 --> 00:14:48,320  
dragon vehicle itself is a a very um

257  
00:14:52,310 --> 00:14:50,720  
sophisticated intelligent vehicle um the

258  
00:14:53,750 --> 00:14:52,320  
maneuvers that

259  
00:14:56,310 --> 00:14:53,760  
it has been doing throughout its

260  
00:14:59,110 --> 00:14:56,320  
undocking phase and a part of its

261  
00:15:00,310 --> 00:14:59,120  
downhill sequences are really are

262  
00:15:01,829 --> 00:15:00,320  
autonomous

263  
00:15:03,829 --> 00:15:01,839

the crew

264

00:15:05,670 --> 00:15:03,839  
are definitely trained uh to help

265

00:15:07,829 --> 00:15:05,680  
support dragon in case

266

00:15:10,230 --> 00:15:07,839  
things go off nominal but really for the

267

00:15:12,230 --> 00:15:10,240  
most part dragon is piloting itself it

268

00:15:13,509 --> 00:15:12,240  
knows where it's at where it wants to go

269

00:15:16,470 --> 00:15:13,519  
and it's making all these minor

270

00:15:18,870 --> 00:15:16,480  
adjustments um as needed so the crew is

271

00:15:21,030 --> 00:15:18,880  
in good hands uh they are

272

00:15:23,670 --> 00:15:21,040  
definitely on the trajectory they need

273

00:15:36,470 --> 00:15:23,680  
to be uh to return home safely back here

274

00:15:41,189 --> 00:15:38,790  
so we're just moments away again the d

275

00:15:42,550 --> 00:15:41,199  
orbit sequence has started

276

00:15:44,629 --> 00:15:42,560

right on time

277

00:15:46,629 --> 00:15:44,639

so we had a confirmed claw separation

278

00:15:48,629 --> 00:15:46,639

and trunk separation

279

00:15:50,629 --> 00:15:48,639

dragon is now in an orientation with a

280

00:15:52,710 --> 00:15:50,639

forward bulkhead dracos pointed where

281

00:15:54,870 --> 00:15:52,720

they need to be for this very critical

282

00:15:56,150 --> 00:15:54,880

burn the deorbit burn

283

00:15:58,069 --> 00:15:56,160

we've been waiting for this moment for

284

00:15:59,430 --> 00:15:58,079

quite some time a lot of the departure

285

00:16:01,509 --> 00:15:59,440

burns that we've been following over the

286

00:16:03,590 --> 00:16:01,519

past couple of hours have been really in

287

00:16:05,910 --> 00:16:03,600

anticipation of this moment we've been

288

00:16:08,230 --> 00:16:05,920

following weather all along the way

289

00:16:10,069 --> 00:16:08,240

because once we start this deorbit burn

290

00:16:12,150 --> 00:16:10,079

really there's no going back

291

00:16:13,269 --> 00:16:12,160

that means that the dragon itself is

292

00:16:18,069 --> 00:16:13,279

committed

293

00:16:21,590 --> 00:16:20,069

and confirm that the deorbit burn has

294

00:16:23,990 --> 00:16:21,600

started

295

00:16:25,590 --> 00:16:24,000

initial checks show that the dynamics of

296

00:16:27,990 --> 00:16:25,600

that burn are looking pretty good this

297

00:16:30,069 --> 00:16:28,000

is going to be a long burn 16 and a half

298

00:16:31,910 --> 00:16:30,079

minutes

299

00:16:34,069 --> 00:16:31,920

so a quick recap within the last 10

300

00:16:35,829 --> 00:16:34,079

minutes a lot has happened the dragon

301  
00:16:37,749 --> 00:16:35,839  
has jettisoned its trunk and initiated

302  
00:16:41,030 --> 00:16:37,759  
the d orbit burn

303  
00:16:42,710 --> 00:16:41,040  
which started now at about 6 40 pm uh

304  
00:16:44,790 --> 00:16:42,720  
pacific standard time

305  
00:16:46,310 --> 00:16:44,800  
for these operations dragon and spacex

306  
00:16:48,470 --> 00:16:46,320  
closely coordinate with the united

307  
00:16:50,230 --> 00:16:48,480  
states coast guard to establish a 10

308  
00:16:52,310 --> 00:16:50,240  
nautical mile safety zone to ensure

309  
00:16:53,670 --> 00:16:52,320  
public safety and for the safety of

310  
00:16:55,829 --> 00:16:53,680  
those involved in the recovery

311  
00:16:57,670 --> 00:16:55,839  
operations as well as the crew on board

312  
00:16:59,350 --> 00:16:57,680  
their returning spacecraft

313  
00:17:02,069 --> 00:16:59,360

multiple notices are issued to the

314

00:17:03,829 --> 00:17:02,079

mariners in the in advance and during

315

00:17:06,470 --> 00:17:03,839

recovery operations and the coast guard

316

00:17:08,630 --> 00:17:06,480

patrol boats are deployed to discourage

317

00:17:10,549 --> 00:17:08,640

boaters from entering the splashdown

318

00:17:12,870 --> 00:17:10,559

zones we really want to stress to the

319

00:17:14,949 --> 00:17:12,880

public the need to respect this safety

320

00:17:17,829 --> 00:17:14,959

zone recovering a spacecraft from the

321

00:17:19,590 --> 00:17:17,839

water is a hazardous operation and any

322

00:17:21,189 --> 00:17:19,600

other boats interfering increases the

323

00:17:22,949 --> 00:17:21,199

risk to astronauts in the capsule the

324

00:17:25,429 --> 00:17:22,959

teams working to recover them from the

325

00:17:26,630 --> 00:17:25,439

water and the safety of those that come

326

00:17:28,630 --> 00:17:26,640

to close

327

00:17:30,710 --> 00:17:28,640

for the safety of the crew and your

328

00:17:32,390 --> 00:17:30,720

safety we recommend that you sit back

329

00:17:34,549 --> 00:17:32,400

and watch and we'll be bringing you the

330

00:17:35,830 --> 00:17:34,559

best possible coverage of our astronauts

331

00:17:37,750 --> 00:17:35,840

homecoming

332

00:17:40,230 --> 00:17:37,760

and like i mentioned earlier this dealer

333

00:17:42,549 --> 00:17:40,240

burn is the last time that those four

334

00:17:44,870 --> 00:17:42,559

forward draco thrusters will fire uh

335

00:17:46,549 --> 00:17:44,880

dragon endeavor has not yet entered

336

00:17:48,310 --> 00:17:46,559

earth's atmosphere yet

337

00:17:49,909 --> 00:17:48,320

this dior vern is what will line the

338

00:17:52,230 --> 00:17:49,919

vehicle up and put it on its final

339

00:17:54,470 --> 00:17:52,240

trajectory to the landing so to the

340

00:17:56,789 --> 00:17:54,480

landing site in the gulf of mexico just

341

00:17:59,909 --> 00:17:56,799

off the coast of pensacola florida so

342

00:18:01,669 --> 00:17:59,919

right now shane megan aki and tomah

343

00:18:04,310 --> 00:18:01,679

they're using their screens to keep tabs

344

00:18:06,230 --> 00:18:04,320

on the burn durations uh draco thrusts

345

00:18:08,950 --> 00:18:06,240

their firings and trajectory details

346

00:18:10,950 --> 00:18:08,960

like entry angle capsule perigee and how

347

00:18:12,390 --> 00:18:10,960

much distance remaining until the

348

00:18:14,150 --> 00:18:12,400

de-orbit burn

349

00:18:16,230 --> 00:18:14,160

is terminated they have access to that

350

00:18:18,070 --> 00:18:16,240

uh with the displays in front of them uh

351

00:18:20,549 --> 00:18:18,080

again dragon is essentially flying

352

00:18:22,630 --> 00:18:20,559

itself so all the crew has to do is uh

353

00:18:24,950 --> 00:18:22,640

stay strapped into their seats and keep

354

00:18:28,070 --> 00:18:24,960

tabs on things uh so we're waiting to

355

00:18:30,070 --> 00:18:28,080

hear the callout for uh nominal burn uh

356

00:18:32,310 --> 00:18:30,080

to confirm completion of the deal rip

357

00:18:35,350 --> 00:18:32,320

burn for uh dragon endeavor that's going

358

00:18:38,549 --> 00:18:35,360

to be coming up uh in about 12 minutes

359

00:18:40,710 --> 00:18:38,559

13 minutes uh so it's still a bit longer

360

00:18:42,789 --> 00:18:40,720

to go on the steel repair that's right

361

00:18:45,110 --> 00:18:42,799

we're coming up on about three minutes

362

00:18:47,350 --> 00:18:45,120

into the deorbit burn and it is a very

363

00:18:49,510 --> 00:18:47,360

long burn particularly with this phasing

364

00:18:51,750 --> 00:18:49,520

uh which is the short trip from

365

00:18:53,750 --> 00:18:51,760

undocking to splashdown that doesn't

366

00:18:54,950 --> 00:18:53,760

include a sleep period or anything for

367

00:18:57,190 --> 00:18:54,960

the crew they're really in it for the

368

00:18:59,750 --> 00:18:57,200

long haul um these forward bulkhead

369

00:19:02,150 --> 00:18:59,760

dragos need to fire for about 16 and a

370

00:19:03,990 --> 00:19:02,160

half minutes we've seen very similar

371

00:19:06,070 --> 00:19:04,000

profiles for some of the other missions

372

00:19:08,390 --> 00:19:06,080

crew one and i believe crew 2 had a

373

00:19:11,270 --> 00:19:08,400

pretty similar profile or not crew 2

374

00:19:14,150 --> 00:19:11,280

demo 2 had a very similar profile about

375

00:19:15,830 --> 00:19:14,160

roughly the same period of time uh from

376

00:19:17,590 --> 00:19:15,840

the time of undocking to the time of

377

00:19:19,750 --> 00:19:17,600

splashdown so it seems to be a pretty

378

00:19:22,230 --> 00:19:19,760

popular profile so we'll just sit back

379

00:19:24,070 --> 00:19:22,240

and uh make sure that the deorbit burn

380

00:19:25,510 --> 00:19:24,080

is is continuing to look good and so far

381

00:19:27,590 --> 00:19:25,520

teams are tracking that it is we're

382

00:19:30,070 --> 00:19:27,600

about four minutes in at this point um

383

00:19:31,190 --> 00:19:30,080

and which is into a 16 and a half minute

384

00:19:34,470 --> 00:19:31,200

burn

385

00:19:36,789 --> 00:19:34,480

and on screen is uh rr4 astronauts on

386

00:19:38,230 --> 00:19:36,799

board dragon uh left to right issa's

387

00:19:40,789 --> 00:19:38,240

tomah thomas

388

00:19:43,750 --> 00:19:40,799

he is the mission specialist uh then we

389

00:19:45,830 --> 00:19:43,760

have the pilot megan macarthur and uh

390

00:19:48,310 --> 00:19:45,840

the commander shane kimbrough both from

391

00:19:50,230 --> 00:19:48,320

nasa and then we have jaxa astronaut

392

00:19:52,310 --> 00:19:50,240

akihiko hoshide

393

00:19:55,029 --> 00:19:52,320

who is also the mission specialist so

394

00:19:59,270 --> 00:19:55,039

again they are both uh they are all in

395

00:20:01,830 --> 00:19:59,280

their suits um strapped in and um

396

00:20:02,630 --> 00:20:01,840

eagerly awaiting their their return and

397

00:20:08,230 --> 00:20:02,640

uh

398

00:20:10,870 --> 00:20:08,240

45 minutes oh excuse me um 45 minutes

399

00:20:13,590 --> 00:20:10,880

until splashdown about an hour until

400

00:20:15,430 --> 00:20:13,600

they can egress the vehicle

401  
00:20:17,110 --> 00:20:15,440  
each of them has had a long journey on

402  
00:20:19,870 --> 00:20:17,120  
board the international space station

403  
00:20:24,470 --> 00:20:19,880  
they've been in space for

404  
00:20:26,630 --> 00:20:24,480  
199 days 198 of those were attached to

405  
00:20:29,510 --> 00:20:26,640  
the international space station each of

406  
00:20:31,669 --> 00:20:29,520  
them have had very critical roles uh in

407  
00:20:33,430 --> 00:20:31,679  
the some of the activities that have

408  
00:20:34,870 --> 00:20:33,440  
taken place on board

409  
00:20:36,710 --> 00:20:34,880  
tomorrow pesquet

410  
00:20:38,230 --> 00:20:36,720  
just handed over command of the

411  
00:20:40,310 --> 00:20:38,240  
international space station he was

412  
00:20:43,750 --> 00:20:40,320  
commander for just a little bit uh for

413  
00:20:45,990 --> 00:20:43,760

the very beginning of expedition 66

414

00:20:48,070 --> 00:20:46,000

he handed he took over command of the

415

00:20:50,390 --> 00:20:48,080

international space station from aki

416

00:20:52,870 --> 00:20:50,400

hoshide who had it for quite some time

417

00:20:55,590 --> 00:20:52,880

during expedition 65 he was the

418

00:20:58,070 --> 00:20:55,600

international space station commander uh

419

00:20:59,990 --> 00:20:58,080

of course we heard that shane kimbrough

420

00:21:02,630 --> 00:21:00,000

is the commander for the

421

00:21:04,549 --> 00:21:02,640

crew dragon vehicle uh and each of those

422

00:21:06,390 --> 00:21:04,559

three have conducted uh several

423

00:21:07,830 --> 00:21:06,400

spacewalks onboard the international

424

00:21:10,070 --> 00:21:07,840

space station there have been four

425

00:21:12,470 --> 00:21:10,080

spacewalks completed uh that each of

426  
00:21:15,190 --> 00:21:12,480  
them took part in tomah pesquet taking

427  
00:21:18,070 --> 00:21:15,200  
place taking part in all four of them

428  
00:21:21,029 --> 00:21:18,080  
there was one uh spacewalk that was to

429  
00:21:23,270 --> 00:21:21,039  
set up uh one of the station's power

430  
00:21:25,029 --> 00:21:23,280  
systems with a modification kit in

431  
00:21:27,430 --> 00:21:25,039  
preparation for future solar arrays that

432  
00:21:28,789 --> 00:21:27,440  
was done by tomokosuke and aki hoshide

433  
00:21:30,710 --> 00:21:28,799  
the first time

434  
00:21:32,390 --> 00:21:30,720  
that international astronauts not from

435  
00:21:34,390 --> 00:21:32,400  
the us or russia

436  
00:21:36,230 --> 00:21:34,400  
were part of a uh

437  
00:21:37,110 --> 00:21:36,240  
a spacewalk so they did make history

438  
00:21:39,350 --> 00:21:37,120

there

439

00:21:41,990 --> 00:21:39,360

and then of course uh shane kimbrough

440

00:21:44,470 --> 00:21:42,000

conducted three of those himself

441

00:21:47,029 --> 00:21:44,480

so he has nine spacewalks under his belt

442

00:21:49,909 --> 00:21:47,039

and he has uh one of the all-time

443

00:21:52,430 --> 00:21:49,919

records for most amount of time in space

444

00:21:54,390 --> 00:21:52,440

for any us astronaut he's sitting at

445

00:21:57,029 --> 00:21:54,400

388 days

446

00:21:59,270 --> 00:21:57,039

of his career total over his

447

00:22:00,870 --> 00:21:59,280

three space flights to the inter

448

00:22:08,470 --> 00:22:00,880

well to the international space station

449

00:22:13,430 --> 00:22:10,870

six minutes into the 16 minute deorbit

450

00:22:15,990 --> 00:22:13,440

burn we're looking good

451  
00:22:18,390 --> 00:22:16,000  
yeah earlier we had a um out of plane

452  
00:22:21,110 --> 00:22:18,400  
burn and that was also used as a

453  
00:22:22,710 --> 00:22:21,120  
propellant wasting burn and so we dumped

454  
00:22:24,870 --> 00:22:22,720  
a lot of mass with the propellant

455  
00:22:26,950 --> 00:22:24,880  
propellants that we don't need anymore

456  
00:22:27,830 --> 00:22:26,960  
that in combination with the drug the

457  
00:22:30,470 --> 00:22:27,840  
trunk

458  
00:22:32,470 --> 00:22:30,480  
uh jettison that we just had sheds a lot

459  
00:22:34,310 --> 00:22:32,480  
of mass from the vehicle it actually

460  
00:22:35,350 --> 00:22:34,320  
makes this deorbit burn a lot more

461  
00:22:37,510 --> 00:22:35,360  
efficient

462  
00:22:39,430 --> 00:22:37,520  
so that way

463  
00:22:41,350 --> 00:22:39,440

we can

464

00:22:43,669 --> 00:22:41,360

be yes again as efficient as possible to

465

00:22:46,070 --> 00:22:43,679

slow down the vehicle bring its altitude

466

00:22:50,470 --> 00:22:46,080

down uh in order for it to begin its

467

00:22:54,230 --> 00:22:52,070

this is a very critical phase we've

468

00:22:55,830 --> 00:22:54,240

we've seen a lot of action over these uh

469

00:22:58,230 --> 00:22:55,840

past couple of hours as we've been

470

00:23:00,950 --> 00:22:58,240

providing some continuous coverage

471

00:23:04,549 --> 00:23:00,960

it all started with some hatch closure

472

00:23:05,909 --> 00:23:04,559

uh where the dragon crew said goodbye to

473

00:23:07,909 --> 00:23:05,919

the crew on board the international

474

00:23:09,990 --> 00:23:07,919

space station only three crew members on

475

00:23:12,470 --> 00:23:10,000

board now that includes uh commander

476  
00:23:15,270 --> 00:23:12,480  
anton shkaplerov from roscosmos as well

477  
00:23:17,190 --> 00:23:15,280  
as piotr du bravo vs cosmos and then

478  
00:23:18,789 --> 00:23:17,200  
mark vande high who is pulling the long

479  
00:23:21,029 --> 00:23:18,799  
haul here he's going to be on station

480  
00:23:22,870 --> 00:23:21,039  
for almost a year uh

481  
00:23:25,830 --> 00:23:22,880  
and he'll be really

482  
00:23:28,070 --> 00:23:25,840  
the responsible for the handover uh that

483  
00:23:31,029 --> 00:23:28,080  
the crew two astronauts would have done

484  
00:23:32,789 --> 00:23:31,039  
if they were to uh um have the crew

485  
00:23:34,070 --> 00:23:32,799  
three astronauts arrive before them but

486  
00:23:35,350 --> 00:23:34,080  
again we've we've mentioned this a

487  
00:23:37,510 --> 00:23:35,360  
couple of times andy throughout our

488  
00:23:39,909 --> 00:23:37,520

coverage part of the reason why we're

489

00:23:42,149 --> 00:23:39,919

executing a de-orbit burn right now

490

00:23:44,070 --> 00:23:42,159

heading for a splashdown off the coast

491

00:23:46,710 --> 00:23:44,080

of pensacola is because the weather

492

00:23:47,430 --> 00:23:46,720

looks really really good and weather is

493

00:24:06,149 --> 00:23:47,440

a

494

00:24:08,710 --> 00:24:06,159

well so we might even get some pretty

495

00:24:11,669 --> 00:24:08,720

good views from the wb-57 as well as the

496

00:24:14,070 --> 00:24:11,679

ship uh the recovery ship go navigator

497

00:24:16,230 --> 00:24:14,080

as the crew is entering um it's it's

498

00:24:18,630 --> 00:24:16,240

really just it's too perfect to pass up

499

00:24:19,990 --> 00:24:18,640

yeah and that's really uh sort of the

500

00:24:22,630 --> 00:24:20,000

the um

501  
00:24:26,230 --> 00:24:22,640  
the story here um we originally planned

502  
00:24:27,669 --> 00:24:26,240  
to launch crew 3 right prior to crew 2

503  
00:24:29,269 --> 00:24:27,679  
coming home and they were going to do

504  
00:24:31,590 --> 00:24:29,279  
the handoff in person at the

505  
00:24:33,830 --> 00:24:31,600  
international space station whether

506  
00:24:36,390 --> 00:24:33,840  
wasn't quite cooperating with us

507  
00:24:38,950 --> 00:24:36,400  
halloween weekend uh but again gary you

508  
00:24:41,190 --> 00:24:38,960  
mentioned this this recovery weather is

509  
00:24:42,870 --> 00:24:41,200  
too good to pass up right and so um the

510  
00:24:43,750 --> 00:24:42,880  
the teams that have been supporting this

511  
00:24:48,950 --> 00:24:43,760  
mission

512  
00:24:50,630 --> 00:24:48,960  
this is a testament to their flexibility

513  
00:24:52,390 --> 00:24:50,640

um to be able to

514

00:24:55,430 --> 00:24:52,400

get this together and make sure that the

515

00:24:57,430 --> 00:24:55,440

crew too can come home safely in the

516

00:25:00,390 --> 00:24:57,440

midst of again this really optimal

517

00:25:02,470 --> 00:25:00,400

weather very very true and and again we

518

00:25:04,230 --> 00:25:02,480

are monitoring the weather and it does

519

00:25:06,230 --> 00:25:04,240

look good out in the gulf coast part of

520

00:25:08,070 --> 00:25:06,240

the reason that we're uh landing the

521

00:25:09,510 --> 00:25:08,080

crew right now in the gulf is because

522

00:25:11,350 --> 00:25:09,520

the weather over there looks good and

523

00:25:13,350 --> 00:25:11,360

the reason why we're uh we're gonna wait

524

00:25:15,350 --> 00:25:13,360

to launch the crew 3 astronauts no

525

00:25:16,789 --> 00:25:15,360

earlier than november 10th

526

00:25:18,390 --> 00:25:16,799

is because the weather out there is

527

00:25:21,269 --> 00:25:18,400

something that we continue to monitor

528

00:25:22,789 --> 00:25:21,279

it's not only the weather out at the

529

00:25:25,110 --> 00:25:22,799

east coast

530

00:25:27,269 --> 00:25:25,120

off the coast of cape canaveral in

531

00:25:28,950 --> 00:25:27,279

florida that we're looking at but really

532

00:25:30,870 --> 00:25:28,960

the weather all along the ascent

533

00:25:32,390 --> 00:25:30,880

corridor has to cooperate as well so

534

00:25:34,149 --> 00:25:32,400

that includes all along the eastern

535

00:25:36,710 --> 00:25:34,159

seaboard that includes uh the north

536

00:25:40,149 --> 00:25:36,720

pacific all of that has to look good uh

537

00:25:42,070 --> 00:25:40,159

because uh really in any abort scenario

538

00:25:44,390 --> 00:25:42,080

uh you'd be looking at the crew um

539

00:25:46,070 --> 00:25:44,400

escaping from the top of the falcon 9

540

00:25:47,430 --> 00:25:46,080

rocket using those super dracos we were

541

00:25:49,830 --> 00:25:47,440

talking about super dracos a little

542

00:25:51,350 --> 00:25:49,840

earlier and splashing down anywhere

543

00:25:52,789 --> 00:25:51,360

along the site and so you have to make

544

00:25:54,470 --> 00:25:52,799

sure that the weather is cooperating

545

00:25:56,470 --> 00:25:54,480

really all along the way so it's got to

546

00:25:58,710 --> 00:25:56,480

be the right conditions

547

00:26:00,710 --> 00:25:58,720

yeah there are um

548

00:26:02,950 --> 00:26:00,720

multiple teams that plan for all sorts

549

00:26:05,190 --> 00:26:02,960

of these types of contingencies it is

550

00:26:07,830 --> 00:26:05,200

fantastic when things go well as we've

551  
00:26:10,390 --> 00:26:07,840  
i've been seeing for a very long time

552  
00:26:13,269 --> 00:26:10,400  
and and we love that but we want to make

553  
00:26:15,430 --> 00:26:13,279  
sure that in case um anything were to go

554  
00:26:16,789 --> 00:26:15,440  
awry we have plans for that and weather

555  
00:26:21,190 --> 00:26:16,799  
again is one of the things that we need

556  
00:26:26,149 --> 00:26:23,750  
so we're about six six minutes away from

557  
00:26:28,549 --> 00:26:26,159  
right uh finishing this deorbit burn

558  
00:26:30,390 --> 00:26:28,559  
again this is the last burn for the

559  
00:26:33,350 --> 00:26:30,400  
dragon vehicle after this we'll close

560  
00:26:35,269 --> 00:26:33,360  
the nose cone flip the dragon around and

561  
00:26:36,470 --> 00:26:35,279  
uh start to head into the earth's

562  
00:26:39,510 --> 00:26:36,480  
atmosphere

563  
00:26:41,430 --> 00:26:39,520

and um really after this it's really

564

00:26:44,789 --> 00:26:41,440

about 30 minutes about 40 30 or 40

565

00:26:47,350 --> 00:26:44,799

minutes until we see the dragon capsule

566

00:26:49,029 --> 00:26:47,360

in the gulf of mexico that's right it's

567

00:26:51,990 --> 00:26:49,039

going to happen very quickly

568

00:26:54,549 --> 00:26:52,000

it is a lot is going to happen in fact

569

00:26:56,549 --> 00:26:54,559

when it comes to the parachutes they are

570

00:26:59,110 --> 00:26:56,559

that sequence is automatic but it

571

00:27:01,590 --> 00:26:59,120

happens seconds from each other the

572

00:27:04,390 --> 00:27:01,600

mortars themselves are deployed to uh

573

00:27:07,510 --> 00:27:04,400

release two drogue parachutes that slows

574

00:27:10,149 --> 00:27:07,520

the dragon capsule down from 350 miles

575

00:27:12,390 --> 00:27:10,159

per hour initially those are the the

576

00:27:15,510 --> 00:27:12,400

right after we get outside of the

577

00:27:17,510 --> 00:27:15,520

blackout zone which is uh when the

578

00:27:19,830 --> 00:27:17,520

uh dragon itself is entering through the

579

00:27:22,230 --> 00:27:19,840

atmosphere engulfed in plasma so the

580

00:27:23,909 --> 00:27:22,240

communications can't get through but uh

581

00:27:25,590 --> 00:27:23,919

right when we exit out of that we get an

582

00:27:28,070 --> 00:27:25,600

acquisition of signal and are able to

583

00:27:30,789 --> 00:27:28,080

talk to the crew inside dragon again uh

584

00:27:32,789 --> 00:27:30,799

they should be traveling a roughly 350

585

00:27:34,950 --> 00:27:32,799

miles an hour but once we deploy those

586

00:27:37,430 --> 00:27:34,960

drove shoots all of that's going to

587

00:27:38,549 --> 00:27:37,440

really happen at about

588

00:27:39,750 --> 00:27:38,559

7

589

00:27:46,310 --> 00:27:39,760

29

590

00:27:47,669 --> 00:27:46,320

the drogue parachutes will deploy

591

00:27:50,310 --> 00:27:47,679

they'll stay out for a little bit and

592

00:27:52,710 --> 00:27:50,320

then 40 seconds later the mate the four

593

00:27:55,350 --> 00:27:52,720

main parachutes will deploy uh and from

594

00:27:57,190 --> 00:27:55,360

350 miles an hour and with that sequence

595

00:27:59,350 --> 00:27:57,200

that's happening really in the matter of

596

00:28:02,470 --> 00:27:59,360

one minute uh with all of the parachutes

597

00:28:05,430 --> 00:28:02,480

that'll gently slow down the dragon and

598

00:28:07,269 --> 00:28:05,440

its crew down to about 15 miles an hour

599

00:28:08,630 --> 00:28:07,279

yeah and we we mentioned safety we've

600

00:28:10,549 --> 00:28:08,640

been talking about safety throughout

601  
00:28:12,630 --> 00:28:10,559  
this whole broadcast as soon as the

602  
00:28:14,149 --> 00:28:12,640  
dragon capsule hits the water one of the

603  
00:28:17,190 --> 00:28:14,159  
first things that happens is the main

604  
00:28:19,110 --> 00:28:17,200  
shoots get cut and what this means is

605  
00:28:20,870 --> 00:28:19,120  
today there are really no wins

606  
00:28:23,269 --> 00:28:20,880  
essentially but

607  
00:28:25,029 --> 00:28:23,279  
we don't want uh we wouldn't want that

608  
00:28:26,149 --> 00:28:25,039  
dragon capsule to be pulled by wind in

609  
00:28:28,789 --> 00:28:26,159  
any direction so we'll cut the

610  
00:28:30,789 --> 00:28:28,799  
parachutes immediately upon splashdown

611  
00:28:32,310 --> 00:28:30,799  
and there's a there's a boat that is

612  
00:28:34,870 --> 00:28:32,320  
part of its main function is to go out

613  
00:28:35,669 --> 00:28:34,880

and recover that parachute

614

00:28:37,350 --> 00:28:35,679

that

615

00:28:39,830 --> 00:28:37,360

uh cutting of the main parachutes

616

00:28:41,750 --> 00:28:39,840

happens automatically on board the

617

00:28:43,990 --> 00:28:41,760

dragon but when we were talking about

618

00:28:46,310 --> 00:28:44,000

some of the physical buttons that the

619

00:28:47,990 --> 00:28:46,320

crew have on their display panel one of

620

00:28:49,510 --> 00:28:48,000

those physical buttons which is really

621

00:28:50,630 --> 00:28:49,520

important to have instead of having it

622

00:28:53,190 --> 00:28:50,640

on a touch screen that you have to

623

00:28:55,269 --> 00:28:53,200

navigate to really easy access to a

624

00:28:56,630 --> 00:28:55,279

button that says cut the parachutes if

625

00:28:57,990 --> 00:28:56,640

for whatever reason they want to

626

00:29:01,029 --> 00:28:58,000

automatically do it themselves which

627

00:29:02,870 --> 00:29:01,039

we've seen on some of the uh previous

628

00:29:04,310 --> 00:29:02,880

crude missions they did automatically

629

00:29:06,630 --> 00:29:04,320

cut

630

00:29:09,430 --> 00:29:06,640

they do have the ability to do so

631

00:29:11,669 --> 00:29:09,440

and these parachutes have been tested uh

632

00:29:13,750 --> 00:29:11,679

hundreds of times

633

00:29:15,830 --> 00:29:13,760

and so uh you know the design the

634

00:29:18,230 --> 00:29:15,840

parachutes can be tricky but uh you know

635

00:29:20,389 --> 00:29:18,240

we've we've used these parachutes as a

636

00:29:22,070 --> 00:29:20,399

part of all the cargo missions prior to

637

00:29:27,190 --> 00:29:22,080

the upgraded dragon and now we're using

638

00:29:30,630 --> 00:29:27,200

them um as part of this operations too

639

00:29:33,110 --> 00:29:30,640

as you mentioned uh as the right after

640

00:29:35,430 --> 00:29:33,120

the uh dragon splashes down in the ocean

641

00:29:37,350 --> 00:29:35,440

there are two what are called fast boats

642

00:29:39,350 --> 00:29:37,360

that will uh that are part of the uh

643

00:29:40,870 --> 00:29:39,360

prime recovery team that'll immediately

644

00:29:43,029 --> 00:29:40,880

go out to

645

00:29:44,789 --> 00:29:43,039

the capsule

646

00:29:46,389 --> 00:29:44,799

one of the boats will go right over to

647

00:29:47,510 --> 00:29:46,399

the capsule and start out to start

648

00:29:49,909 --> 00:29:47,520

outfitting it

649

00:29:51,269 --> 00:29:49,919

with some rigging equipment they'll do a

650

00:29:53,269 --> 00:29:51,279

sniff check to make sure there are no

651  
00:29:55,029 --> 00:29:53,279  
hazardous gases that are leaking from

652  
00:29:57,190 --> 00:29:55,039  
the spacecraft make sure it's safe for

653  
00:29:59,510 --> 00:29:57,200  
the next uh series of events where the

654  
00:30:01,830 --> 00:29:59,520  
go navigators uh recovery ship will go

655  
00:30:03,590 --> 00:30:01,840  
out and hoist it onto the ship itself

656  
00:30:05,350 --> 00:30:03,600  
but you were mentioning the other fast

657  
00:30:07,430 --> 00:30:05,360  
boat it serves as a backup to that boat

658  
00:30:09,110 --> 00:30:07,440  
just in case it were you know some motor

659  
00:30:11,350 --> 00:30:09,120  
function were to happen and it can't get

660  
00:30:13,029 --> 00:30:11,360  
out to the capsule in time but uh it's

661  
00:30:15,029 --> 00:30:13,039  
prime function if the other boat is

662  
00:30:19,750 --> 00:30:15,039  
looking pretty good uh is to go collect

663  
00:30:22,710 --> 00:30:21,029

so again about about two minutes two

664

00:30:24,470 --> 00:30:22,720

minutes

665

00:30:25,510 --> 00:30:24,480

for the end of the final burn

666

00:30:26,630 --> 00:30:25,520

um

667

00:30:28,549 --> 00:30:26,640

the dragon

668

00:30:29,830 --> 00:30:28,559

and the crew have gone through

669

00:30:38,230 --> 00:30:29,840

um

670

00:30:40,549 --> 00:30:38,240

nearing the end of sort of the marathon

671

00:30:42,549 --> 00:30:40,559

here uh so this must be exciting for the

672

00:30:44,549 --> 00:30:42,559

crew uh on board the dragon as well

673

00:30:46,230 --> 00:30:44,559

knowing that uh this is the last burn

674

00:30:48,310 --> 00:30:46,240

that they're gonna feel uh last burn

675

00:30:50,870 --> 00:30:48,320

that they're gonna hear and uh after

676

00:30:52,870 --> 00:30:50,880

this it's really going to be

677

00:30:55,669 --> 00:30:52,880

a smooth smooth sailing

678

00:30:57,750 --> 00:30:55,679

so to speak uh into the atlantic ocean

679

00:30:59,509 --> 00:30:57,760

or into the gulf of mexico

680

00:31:02,630 --> 00:30:59,519

so the words we're waiting to hear right

681

00:31:04,149 --> 00:31:02,640

now are nominal de-orbit burn

682

00:31:06,950 --> 00:31:04,159

those are very important words that will

683

00:31:09,029 --> 00:31:06,960

be uh sent over to the crew

684

00:31:11,509 --> 00:31:09,039

right now the nose cone has been opened

685

00:31:12,870 --> 00:31:11,519

to expose the four forward bulkhead

686

00:31:15,029 --> 00:31:12,880

dracos that have been doing a lot of the

687

00:31:17,669 --> 00:31:15,039

hefty heavy lifting with this the orbit

688

00:31:19,029 --> 00:31:17,679

burn uh pointing straight at the

689

00:31:21,909 --> 00:31:19,039

velocity

690

00:31:24,630 --> 00:31:21,919

bar it's a retro firing of the of the

691

00:31:27,269 --> 00:31:24,640

thrusters to slow the vehicle down and

692

00:31:29,029 --> 00:31:27,279

really ultimately make contact with the

693

00:31:29,990 --> 00:31:29,039

atmosphere that's the point of this burn

694

00:31:32,149 --> 00:31:30,000

but

695

00:31:34,070 --> 00:31:32,159

as long as we have a good burn uh it'll

696

00:31:36,389 --> 00:31:34,080

be just a matter of a couple of minutes

697

00:31:38,070 --> 00:31:36,399

it's it's a very quick sequence to close

698

00:31:40,230 --> 00:31:38,080

the nose cone it's a very important

699

00:31:42,710 --> 00:31:40,240

function uh to close the nose cone it

700

00:31:44,630 --> 00:31:42,720

protects the forward bulkhead dracos uh

701  
00:31:46,549 --> 00:31:44,640  
it protects the docking mechanism that

702  
00:31:47,990 --> 00:31:46,559  
it's been that's been used to keep

703  
00:31:50,310 --> 00:31:48,000  
dragon attached to the international

704  
00:31:51,669 --> 00:31:50,320  
space station for six months it protects

705  
00:31:53,990 --> 00:31:51,679  
some of the guidance and navigation

706  
00:31:55,830 --> 00:31:54,000  
equipment of course this vehicle is uh

707  
00:31:57,350 --> 00:31:55,840  
reusable we're seeing it now this is a

708  
00:31:59,750 --> 00:31:57,360  
reused vehicle

709  
00:32:01,830 --> 00:31:59,760  
it was used originally on on the demo2

710  
00:32:03,909 --> 00:32:01,840  
mission uh so all critical functions

711  
00:32:06,950 --> 00:32:03,919  
that need to be protected before it

712  
00:32:08,310 --> 00:32:06,960  
slews to the position uh where the heat

713  
00:32:10,149 --> 00:32:08,320

shield is pointed right towards the

714

00:32:12,789 --> 00:32:10,159

earth and does the heavy lifting of

715

00:32:15,190 --> 00:32:12,799

protecting the the capsule and of course

716

00:32:17,190 --> 00:32:15,200

more importantly the crew inside uh from

717

00:32:19,590 --> 00:32:17,200

the 3 500 degrees fahrenheit that's

718

00:32:21,350 --> 00:32:19,600

going to be experienced as the dragon

719

00:32:24,789 --> 00:32:21,360

capsule enters the earth

720

00:32:28,149 --> 00:32:24,799

as part of the recovery operations

721

00:32:29,590 --> 00:32:28,159

after um

722

00:32:31,590 --> 00:32:29,600

dragon do you want to burn complete

723

00:32:36,870 --> 00:32:31,600

performance nominal nose gun closure has

724

00:32:36,880 --> 00:32:41,830

copy all good the orbit burn

725

00:32:47,029 --> 00:32:43,909

that is the news that we were looking

726

00:32:50,149 --> 00:32:47,039

for andy uh nominal de-orbit burn uh

727

00:32:51,909 --> 00:32:50,159

that means that that burn did its job uh

728

00:32:53,830 --> 00:32:51,919

you see immediately we're going into

729

00:32:55,909 --> 00:32:53,840

closing the nose cone so now that it's

730

00:32:57,909 --> 00:32:55,919

done its job uh the forward bulkhead

731

00:33:00,230 --> 00:32:57,919

dracos will not be fired again we're

732

00:33:02,310 --> 00:33:00,240

gonna close uh the nose cone and protect

733

00:33:04,630 --> 00:33:02,320

some of those critical equipment uh and

734

00:33:07,110 --> 00:33:04,640

get the dragon oriented in a position

735

00:33:09,029 --> 00:33:07,120

ready for entry yeah so it takes a

736

00:33:11,909 --> 00:33:09,039

couple of minutes for the nose going to

737

00:33:13,430 --> 00:33:11,919

close it doesn't just swing shut um and

738

00:33:14,950 --> 00:33:13,440

so it'll be closed and then there will

739

00:33:16,070 --> 00:33:14,960

be latches that will secure it into

740

00:33:17,350 --> 00:33:16,080

position

741

00:33:19,590 --> 00:33:17,360

from there

742

00:33:21,110 --> 00:33:19,600

we will

743

00:33:23,029 --> 00:33:21,120

slew the dragon

744

00:33:24,470 --> 00:33:23,039

uh

745

00:33:25,909 --> 00:33:24,480

into his orientation to make sure that

746

00:33:28,149 --> 00:33:25,919

the heat shields are

747

00:33:29,909 --> 00:33:28,159

are facing forward so to speak um they

748

00:33:31,669 --> 00:33:29,919

will the heat shield will be what meets

749

00:33:33,909 --> 00:33:31,679

the earth's atmosphere first it'll

750

00:33:37,029 --> 00:33:33,919

absorb and dissipate all the heat upon

751  
00:33:38,950 --> 00:33:37,039  
re-entry and then um you know we'll

752  
00:33:42,149 --> 00:33:38,960  
enter our we'll go through the the the

753  
00:33:43,830 --> 00:33:42,159  
blackout period uh uh where we won't

754  
00:33:46,070 --> 00:33:43,840  
have comms

755  
00:33:47,830 --> 00:33:46,080  
to uh from dragon to ground or direct or

756  
00:33:51,029 --> 00:33:47,840  
ground to dragon and then after that

757  
00:33:53,029 --> 00:33:51,039  
we'll deploy our parachutes and land

758  
00:33:54,710 --> 00:33:53,039  
so the atmosphere is going to do a lot

759  
00:33:55,990 --> 00:33:54,720  
of the work here to slow the vehicle

760  
00:33:57,750 --> 00:33:56,000  
down we're still

761  
00:33:59,430 --> 00:33:57,760  
close to orbital velocity of course

762  
00:34:01,110 --> 00:33:59,440  
we're a little bit slower because we're

763  
00:34:03,509 --> 00:34:01,120

dropping in altitude and that is

764

00:34:05,750 --> 00:34:03,519

purposeful uh the dragon and the crew

765

00:34:07,990 --> 00:34:05,760

inside is now committed to enter the

766

00:34:10,389 --> 00:34:08,000

earth's atmosphere and splash down off

767

00:34:12,230 --> 00:34:10,399

the coast of pensacola florida uh dragon

768

00:34:14,149 --> 00:34:12,240

systems look good the crew is uh

769

00:34:15,750 --> 00:34:14,159

monitoring every step of the way and

770

00:34:17,510 --> 00:34:15,760

checking in and saying that they are

771

00:34:18,950 --> 00:34:17,520

following closely everything's looking

772

00:34:21,190 --> 00:34:18,960

good on that end and of course the

773

00:34:22,389 --> 00:34:21,200

weather is is cooperating which is super

774

00:34:24,950 --> 00:34:22,399

essential

775

00:34:27,190 --> 00:34:24,960

so we're about to uh enter into the

776

00:34:29,430 --> 00:34:27,200

atmosphere and slow down all the way

777

00:34:31,030 --> 00:34:29,440

down to 350 miles per hour it's going to

778

00:34:32,950 --> 00:34:31,040

be a number of minutes

779

00:34:35,109 --> 00:34:32,960

for that procedure to take place it

780

00:34:36,790 --> 00:34:35,119

takes about seven minutes uh from the

781

00:34:39,589 --> 00:34:36,800

time that we enter into the earth's

782

00:34:41,750 --> 00:34:39,599

atmosphere uh and lose the signal with

783

00:34:43,750 --> 00:34:41,760

the crew so don't worry um that is

784

00:34:45,030 --> 00:34:43,760

normal we expect a loss of signal for

785

00:34:46,310 --> 00:34:45,040

about seven minutes uh the

786

00:34:49,270 --> 00:34:46,320

communications can't get through the

787

00:34:52,069 --> 00:34:49,280

plasma that's engulfing uh the dragon on

788

00:34:53,909 --> 00:34:52,079

its way uh in uh but it should be about

789

00:34:55,669 --> 00:34:53,919

a seven minute period as predicted right

790

00:34:57,670 --> 00:34:55,679

so there may be a little extra lag time

791

00:34:59,990 --> 00:34:57,680

in there just depending on a series of

792

00:35:01,910 --> 00:35:00,000

events but uh they'll be calling to the

793

00:35:04,870 --> 00:35:01,920

crew at the end of that anticipated

794

00:35:06,470 --> 00:35:04,880

period to check in and and hear how that

795

00:35:08,470 --> 00:35:06,480

sequence went and make sure everything

796

00:35:10,069 --> 00:35:08,480

is good for the next series of automatic

797

00:35:12,150 --> 00:35:10,079

events which is the deployment of the

798

00:35:14,310 --> 00:35:12,160

parachutes and eventual splashdown yeah

799

00:35:16,310 --> 00:35:14,320

it is important to note that uh prior to

800

00:35:18,710 --> 00:35:16,320

the deorbit sequence we did hear

801  
00:35:21,030 --> 00:35:18,720  
communications from the crew to the uh

802  
00:35:23,270 --> 00:35:21,040  
to the core here they were updated on

803  
00:35:25,109 --> 00:35:23,280  
timelines so the crew

804  
00:35:27,190 --> 00:35:25,119  
onboard dragon knows exactly what to

805  
00:35:29,589 --> 00:35:27,200  
expect too they know when the blackout

806  
00:35:31,430 --> 00:35:29,599  
period is going to happen they know when

807  
00:35:34,230 --> 00:35:31,440  
approximately the sigma is going to be

808  
00:35:36,230 --> 00:35:34,240  
coming back and we typically hear pings

809  
00:35:38,870 --> 00:35:36,240  
sometimes from dragon to ground or and

810  
00:35:42,069 --> 00:35:38,880  
sometimes from ground to dragon

811  
00:35:44,150 --> 00:35:42,079  
waiting for the acquisition of signal

812  
00:35:45,510 --> 00:35:44,160  
so there are no surprises every every

813  
00:35:47,750 --> 00:35:45,520

really every every party that's

814

00:35:50,630 --> 00:35:47,760

supporting this mission is well aware of

815

00:35:52,069 --> 00:35:50,640

what is about to happen

816

00:35:54,310 --> 00:35:52,079

so it's going to be a number of minutes

817

00:35:56,630 --> 00:35:54,320

until we actually get into the entry

818

00:35:59,829 --> 00:35:56,640

sequence uh right now we're coming up at

819

00:36:03,030 --> 00:35:59,839

about 7 p.m pacific time uh which is 10

820

00:36:05,589 --> 00:36:03,040

p.m uh eastern standard time it's about

821

00:36:07,349 --> 00:36:05,599

uh roughly another 20 minutes uh until

822

00:36:10,150 --> 00:36:07,359

we actually get into that entry

823

00:36:12,230 --> 00:36:10,160

interface um uh so so it's still some

824

00:36:14,710 --> 00:36:12,240

time we we are right now in a good

825

00:36:17,990 --> 00:36:14,720

position with the uh deorbit burn

826

00:36:20,069 --> 00:36:18,000

sequence initiated and uh it puts uh

827

00:36:23,349 --> 00:36:20,079

dragon in an orientation getting ready

828

00:36:26,310 --> 00:36:23,359

uh we can see it slewing now uh uh to

829

00:36:27,670 --> 00:36:26,320

get ready for that entry prep

830

00:36:29,190 --> 00:36:27,680

really with the heat shield pointed

831

00:36:30,950 --> 00:36:29,200

towards the earth so we're in the final

832

00:36:32,230 --> 00:36:30,960

stretch here andy it's uh it's really

833

00:36:34,630 --> 00:36:32,240

happening

834

00:36:37,829 --> 00:36:34,640

so we should get confirmation um

835

00:36:39,270 --> 00:36:37,839

uh if not already that the nosecone

836

00:36:41,670 --> 00:36:39,280

has closed and we are getting

837

00:36:43,430 --> 00:36:41,680

confirmation nose cone is closed and so

838

00:36:46,150 --> 00:36:43,440

again we are slowing to the right

839

00:36:48,710 --> 00:36:46,160

orientation and um during this uh for

840

00:36:51,750 --> 00:36:48,720

the next 19 minutes or so dragon's

841

00:36:53,670 --> 00:36:51,760

altitude is decreasing uh and then once

842

00:36:55,589 --> 00:36:53,680

we get low enough and start building

843

00:36:58,069 --> 00:36:55,599

that friction uh we will enter the

844

00:37:00,870 --> 00:36:58,079

blackout communication so around 7

845

00:37:03,109 --> 00:37:00,880

uh 19 p.m pacific time is when we're

846

00:37:05,430 --> 00:37:03,119

expecting the blackout communications

847

00:37:08,150 --> 00:37:05,440

period

848

00:37:11,270 --> 00:37:08,160

so as we begin the second half of entry

849

00:37:13,670 --> 00:37:11,280

dragon is now beginning to flush nitrox

850

00:37:16,230 --> 00:37:13,680

into the cabin and continuing to top off

851  
00:37:18,870 --> 00:37:16,240  
shane magenaki and tomas suits with cool

852  
00:37:20,710 --> 00:37:18,880  
air again this is what we what will

853  
00:37:22,870 --> 00:37:20,720  
allow the cabin temperature to remain

854  
00:37:25,750 --> 00:37:22,880  
comfortable while external temperatures

855  
00:37:27,829 --> 00:37:25,760  
reach 3 500 degrees fahrenheit that heat

856  
00:37:30,390 --> 00:37:27,839  
shield is pointed forward leading the

857  
00:37:32,550 --> 00:37:30,400  
capsule to that landing site

858  
00:37:33,910 --> 00:37:32,560  
yes we are targeting the primary site

859  
00:37:36,470 --> 00:37:33,920  
today

860  
00:37:37,589 --> 00:37:36,480  
tonight off the coast of pensacola

861  
00:37:38,550 --> 00:37:37,599  
florida

862  
00:37:40,710 --> 00:37:38,560  
um

863  
00:37:44,150 --> 00:37:40,720

so very exciting under 30 minutes or

864

00:37:46,630 --> 00:37:44,160

just over 30 minutes uh 7 33 p.m pacific

865

00:37:48,470 --> 00:37:46,640

time is our targeted uh splashdown time

866

00:37:49,910 --> 00:37:48,480

right we did hear that go

867

00:37:51,910 --> 00:37:49,920

call up to the crew that we're still

868

00:37:54,150 --> 00:37:51,920

targeting that same exact site even with

869

00:37:57,589 --> 00:37:54,160

a slight shifts in some of the other uh

870

00:37:59,349 --> 00:37:57,599

events uh uh particularly with the uh um

871

00:38:00,870 --> 00:37:59,359

loss and acquisition of signal that

872

00:38:03,030 --> 00:38:00,880

seven minute blackout period that we

873

00:38:04,950 --> 00:38:03,040

were talking about but uh all in all

874

00:38:07,910 --> 00:38:04,960

we're still looking at that same time

875

00:38:12,950 --> 00:38:07,920

for uh splashing down uh in the gulf of

876

00:38:16,550 --> 00:38:14,790

so stay with us we're gonna continue to

877

00:38:19,589 --> 00:38:16,560

provide coverage through this very

878

00:38:21,270 --> 00:38:19,599

dynamic sequence we will even after

879

00:38:22,790 --> 00:38:21,280

splashdown we're going to remain on air

880

00:38:24,790 --> 00:38:22,800

we want to make sure that the crew is

881

00:38:27,109 --> 00:38:24,800

safe once they splash down off the gulf

882

00:38:28,950 --> 00:38:27,119

of mexico so once they splash down it

883

00:38:29,670 --> 00:38:28,960

takes less than an hour

884

00:38:34,470 --> 00:38:29,680

in

885

00:38:37,190 --> 00:38:34,480

the boat uh or to go out to the capsule

886

00:38:38,950 --> 00:38:37,200

rather and outfit it to get onto the

887

00:38:41,190 --> 00:38:38,960

dragon nest which is on the recovery

888

00:38:43,670 --> 00:38:41,200

ship and bring it in for the hatch

889

00:38:45,589 --> 00:38:43,680

opening side hatch and recovering the

890

00:38:48,150 --> 00:38:45,599

the crew inside we'll continue to

891

00:38:50,790 --> 00:38:48,160

provide coverage as each of the four

892

00:38:52,470 --> 00:38:50,800

astronauts egress or exit from the

893

00:38:55,270 --> 00:38:52,480

capsule itself

894

00:38:57,349 --> 00:38:55,280

we hopefully will get some views of them

895

00:38:59,589 --> 00:38:57,359

maybe pumping fists as long as they're

896

00:39:01,349 --> 00:38:59,599

feeling healthy of course

897

00:39:03,670 --> 00:39:01,359

we'll get some views of them on the

898

00:39:05,510 --> 00:39:03,680

recovery ship and after that we are

899

00:39:07,270 --> 00:39:05,520

looking forward to talking to some

900

00:39:10,150 --> 00:39:07,280

leadership from some of the respective

901  
00:39:12,230 --> 00:39:10,160  
agencies uh we're expecting to have uh

902  
00:39:14,630 --> 00:39:12,240  
some representatives from nasa the

903  
00:39:16,950 --> 00:39:14,640  
european space agency and the japanese

904  
00:39:19,270 --> 00:39:16,960  
uh the japan aerospace exploration

905  
00:39:21,510 --> 00:39:19,280  
agency call in to provide some final

906  
00:39:23,430 --> 00:39:21,520  
comments now that we have we can declare

907  
00:39:25,030 --> 00:39:23,440  
a mission success all coming up very

908  
00:39:27,109 --> 00:39:25,040  
soon but first we have to pay attention

909  
00:39:28,870 --> 00:39:27,119  
of course on the mission itself making

910  
00:39:31,430 --> 00:39:28,880  
sure that these crew members

911  
00:40:13,589 --> 00:39:31,440  
are about to return to homes

912  
00:40:13,599 --> 00:40:19,990  
dragon nose cone secure for entry

913  
00:40:20,000 --> 00:45:32,150

endeavor copies no secured

914

00:45:32,160 --> 00:45:41,020

endeavor spacex for entry brief

915

00:45:44,950 --> 00:45:43,109

[Applause]

916

00:45:46,790 --> 00:45:44,960

shane things are looking really good no

917

00:45:48,309 --> 00:45:46,800

delta is a timeline

918

00:45:50,230 --> 00:45:48,319

vehicle is nominal we're tracking no

919

00:45:52,390 --> 00:45:50,240

issues for entry

920

00:45:55,109 --> 00:45:52,400

entry targeting is also nominal note

921

00:45:56,950 --> 00:45:55,119

that you may see the landing site

922

00:45:58,710 --> 00:45:56,960

slightly off in the world view

923

00:46:00,470 --> 00:45:58,720

that is expected and nominal due to

924

00:46:02,710 --> 00:46:00,480

entry purge and entry guidance will

925

00:46:04,390 --> 00:46:02,720

clean that up so that's nominal

926

00:46:06,230 --> 00:46:04,400

there's no doubt as to whether the

927

00:46:07,829 --> 00:46:06,240

recovery fast boats have been launched

928

00:46:12,870 --> 00:46:07,839

and they're awaiting your arrival for

929

00:46:17,589 --> 00:46:14,950

great news all around thanks chris and

930

00:46:32,390 --> 00:46:17,599

we caught you all

931

00:46:37,270 --> 00:46:34,309

further affirmation that everything

932

00:46:39,829 --> 00:46:37,280

continues to look good uh we did have a

933

00:46:41,430 --> 00:46:39,839

successful de-orbit burn and so we're

934

00:46:44,550 --> 00:46:41,440

just really in a waiting period right

935

00:46:47,190 --> 00:46:44,560

now before we begin that entry uh coming

936

00:46:49,349 --> 00:46:47,200

up in approximately 10 minutes uh when

937

00:46:52,150 --> 00:46:49,359

the crew themselves will enter into the

938

00:46:53,670 --> 00:46:52,160

earth's atmosphere uh and uh the heat

939

00:46:56,309 --> 00:46:53,680

shield being pointed in the right

940

00:46:58,470 --> 00:46:56,319

direction uh and the vehicle itself will

941

00:47:00,309 --> 00:46:58,480

slow down uh over the course of about

942

00:47:02,390 --> 00:47:00,319

seven minutes uh until they get on the

943

00:47:04,390 --> 00:47:02,400

other side into the earth's atmosphere

944

00:47:06,630 --> 00:47:04,400

and we can talk to them again uh slowing

945

00:47:08,790 --> 00:47:06,640

down from 17 000 miles an hour to about

946

00:47:10,950 --> 00:47:08,800

350 miles an hour that briefing was

947

00:47:13,109 --> 00:47:10,960

spectacular andy it sounds like the

948

00:47:15,510 --> 00:47:13,119

weather is cooperating

949

00:47:17,430 --> 00:47:15,520

and all of the recovery teams are in

950

00:47:19,109 --> 00:47:17,440

place in fact the fast boats that we

951  
00:47:21,910 --> 00:47:19,119  
were talking about earlier have already

952  
00:47:24,150 --> 00:47:21,920  
deployed uh we are getting ready uh to

953  
00:47:26,710 --> 00:47:24,160  
bring these guys home yeah the really no

954  
00:47:28,870 --> 00:47:26,720  
changes in what

955  
00:47:30,710 --> 00:47:28,880  
we were expecting or what we heard prior

956  
00:47:32,309 --> 00:47:30,720  
to the deorbit sequence so

957  
00:47:34,150 --> 00:47:32,319  
in that sense everything was great

958  
00:47:36,309 --> 00:47:34,160  
leading up to the deorbit sequence and

959  
00:47:38,630 --> 00:47:36,319  
everything remains great right now for

960  
00:47:40,549 --> 00:47:38,640  
uh cruise flash down and recovery so

961  
00:47:43,990 --> 00:47:40,559  
again uh we've been hearing nothing but

962  
00:47:47,190 --> 00:47:44,000  
good news uh all broadcasts uh we are

963  
00:47:49,910 --> 00:47:47,200

about five minutes away from slewing of

964

00:47:52,390 --> 00:47:49,920

the dragon to orient it correctly uh and

965

00:47:53,990 --> 00:47:52,400

then a few minutes after that from

966

00:47:55,750 --> 00:47:54,000

um

967

00:47:58,230 --> 00:47:55,760

anticipated loss of signal again that

968

00:48:00,150 --> 00:47:58,240

communications blackout period due to

969

00:48:03,990 --> 00:48:00,160

the plasma buildup

970

00:48:07,430 --> 00:48:05,750

so a lot's gonna happen let's go through

971

00:48:09,589 --> 00:48:07,440

the sequence of events here while we

972

00:48:11,829 --> 00:48:09,599

have a little bit of time uh as we're

973

00:48:14,470 --> 00:48:11,839

waiting for that slew of course and then

974

00:48:17,190 --> 00:48:14,480

of course the the entry sequence itself

975

00:48:19,270 --> 00:48:17,200

um once the dragon slews or orients

976  
00:48:20,710 --> 00:48:19,280  
itself right in the precise position

977  
00:48:22,150 --> 00:48:20,720  
where the

978  
00:48:24,309 --> 00:48:22,160  
heat shield is pointed in the right

979  
00:48:26,390 --> 00:48:24,319  
direction uh andy as you mentioned we're

980  
00:48:28,390 --> 00:48:26,400  
going to enter into a period where we

981  
00:48:30,069 --> 00:48:28,400  
will lose the signal and that's just

982  
00:48:32,150 --> 00:48:30,079  
because of the plasma that's building up

983  
00:48:34,790 --> 00:48:32,160  
on the outside of the spacecraft

984  
00:48:36,549 --> 00:48:34,800  
communications can't get through so uh

985  
00:48:39,349 --> 00:48:36,559  
the plasma is building up because we are

986  
00:48:42,230 --> 00:48:39,359  
using the atmosphere itself to slow us

987  
00:48:45,109 --> 00:48:42,240  
down we're going about 17 000 uh miles

988  
00:48:47,430 --> 00:48:45,119

an hour now and we need to slow down um

989

00:48:50,230 --> 00:48:47,440

uh quite a bit uh eventually to get us

990

00:48:52,230 --> 00:48:50,240

to about 15 miles an hour so the bulk of

991

00:48:53,910 --> 00:48:52,240

that will happen uh during the entry

992

00:48:56,069 --> 00:48:53,920

into earth's atmosphere it'll it'll

993

00:48:56,750 --> 00:48:56,079

shave off from 17 000 miles an hour to

994

00:49:00,150 --> 00:48:56,760

about

995

00:49:01,829 --> 00:49:00,160

350 miles an hour uh from there there

996

00:49:04,470 --> 00:49:01,839

will be a sequence of parachute

997

00:49:06,549 --> 00:49:04,480

deployments first with the drogue shoots

998

00:49:09,270 --> 00:49:06,559

uh that'll perform the initial slowdown

999

00:49:12,069 --> 00:49:09,280

from 350 miles an hour to i think it was

1000

00:49:13,430 --> 00:49:12,079

you said about 120 miles an hour

1001  
00:49:15,270 --> 00:49:13,440  
and then from there it's only a matter

1002  
00:49:17,430 --> 00:49:15,280  
of seconds about 40 seconds after drove

1003  
00:49:20,230 --> 00:49:17,440  
shoot deploy that those will be

1004  
00:49:23,430 --> 00:49:20,240  
cut off and the four main parachutes

1005  
00:49:26,309 --> 00:49:23,440  
will deploy uh from the dragon itself

1006  
00:49:29,349 --> 00:49:26,319  
slowing it down to about 15 miles an

1007  
00:49:32,549 --> 00:49:29,359  
hour we are aiming right on time for a

1008  
00:49:35,990 --> 00:49:32,559  
glass like uh i've been we've heard lake

1009  
00:49:37,990 --> 00:49:36,000  
i've i've heard the word pool uh um uh

1010  
00:49:40,549 --> 00:49:38,000  
wave conditions uh out at pensacola

1011  
00:49:41,990 --> 00:49:40,559  
florida look absolutely pristine so so

1012  
00:49:44,390 --> 00:49:42,000  
things are looking pretty good for us so

1013  
00:49:46,309 --> 00:49:44,400

far so after splashdown we just heard

1014

00:49:48,390 --> 00:49:46,319

that the fastboats are on their way to

1015

00:49:51,750 --> 00:49:48,400

the recovery site um there are two of

1016

00:49:54,069 --> 00:49:51,760

them uh the first fastboat will

1017

00:49:56,230 --> 00:49:54,079

approach the dragon capsule that's in

1018

00:49:58,230 --> 00:49:56,240

the water and do a couple of things

1019

00:50:01,190 --> 00:49:58,240

really a lot of safety checks to make

1020

00:50:03,030 --> 00:50:01,200

sure there isn't any ordinances or

1021

00:50:04,870 --> 00:50:03,040

any type of

1022

00:50:06,549 --> 00:50:04,880

chemicals in the air they'll also do a

1023

00:50:08,150 --> 00:50:06,559

vehicle integrity check to make sure

1024

00:50:10,069 --> 00:50:08,160

things are looking great on the vehicle

1025

00:50:11,589 --> 00:50:10,079

and then give the go for

1026

00:50:13,990 --> 00:50:11,599

the rest of the recovery team to

1027

00:50:16,309 --> 00:50:14,000

approach the vehicle the other recovery

1028

00:50:20,309 --> 00:50:16,319

vessel um as long as that first fast

1029

00:50:21,109 --> 00:50:20,319

boat um is is able to do its job the

1030

00:50:23,190 --> 00:50:21,119

other

1031

00:50:25,270 --> 00:50:23,200

fast boat will go ahead and recover the

1032

00:50:27,910 --> 00:50:25,280

main shoot that's in the water

1033

00:50:30,549 --> 00:50:27,920

if the first fast boat for whatever

1034

00:50:32,790 --> 00:50:30,559

reason motor failure uh

1035

00:50:35,589 --> 00:50:32,800

who knows cannot do their job it serves

1036

00:50:37,430 --> 00:50:35,599

as a redundant uh vehicle

1037

00:50:39,910 --> 00:50:37,440

from there um a

1038

00:50:42,470 --> 00:50:39,920

a rigger who's typically

1039

00:50:44,470 --> 00:50:42,480

approaches the vehicle on a jet ski will

1040

00:50:46,309 --> 00:50:44,480

approach the vehicle and actually

1041

00:50:48,630 --> 00:50:46,319

physically climb up on top of the dragon

1042

00:50:50,630 --> 00:50:48,640

capsule they carry with them a lot of

1043

00:50:51,910 --> 00:50:50,640

hardware a lot of hoisting equipment

1044

00:50:54,150 --> 00:50:51,920

that they'll need to attach to the

1045

00:50:56,630 --> 00:50:54,160

capsule and this is really to prepare

1046

00:50:59,030 --> 00:50:56,640

the vehicle to be again lifted out of

1047

00:51:02,549 --> 00:50:59,040

the water there is a larger

1048

00:51:03,990 --> 00:51:02,559

recovery vessel that has a um a

1049

00:51:06,549 --> 00:51:04,000

sort of hoisting

1050

00:51:09,750 --> 00:51:06,559

a crane of sorts on the back of it and

1051  
00:51:12,230 --> 00:51:09,760  
there's a platform or nest um that the

1052  
00:51:14,790 --> 00:51:12,240  
recovery vessel will uh hoist the the

1053  
00:51:17,589 --> 00:51:14,800  
dragon capsule out of the water place it

1054  
00:51:19,829 --> 00:51:17,599  
on the nest secure it in place from

1055  
00:51:21,990 --> 00:51:19,839  
there a couple more checks will happen

1056  
00:51:24,710 --> 00:51:22,000  
and then we can finally get to see the

1057  
00:51:27,510 --> 00:51:24,720  
crew egress uh the dragon capsule that's

1058  
00:51:29,510 --> 00:51:27,520  
right the nest itself moves a little bit

1059  
00:51:41,510 --> 00:51:29,520  
further into spacex for crew entry

1060  
00:51:47,109 --> 00:51:43,430  
hey spacex our tablets are secured the

1061  
00:51:48,950 --> 00:51:47,119  
trains are tightened visors are down

1062  
00:51:50,549 --> 00:51:48,960  
copy all thank you approximately four

1063  
00:51:52,790 --> 00:51:50,559

minutes three zero seconds until

1064

00:51:59,030 --> 00:51:52,800

anticipated calm blackout we'll see you

1065

00:51:59,040 --> 00:52:05,510

coffee zero three three six

1066

00:52:09,750 --> 00:52:09,030

four minutes three zero seconds takes us

1067

00:52:11,430 --> 00:52:09,760

to

1068

00:52:17,670 --> 00:52:11,440

7 20

1069

00:52:19,510 --> 00:52:17,680

standard time 8 20 p.m eastern

1070

00:52:21,030 --> 00:52:19,520

so that's uh the calm blackout that we

1071

00:52:22,470 --> 00:52:21,040

were talking about it's a seven minute

1072

00:52:24,470 --> 00:52:22,480

period where

1073

00:52:26,309 --> 00:52:24,480

we're really in the atmosphere at that

1074

00:52:28,950 --> 00:52:26,319

point the heat shield is doing its job

1075

00:52:30,549 --> 00:52:28,960

of dissipating the 3 500 degrees of heat

1076

00:52:32,710 --> 00:52:30,559

that's surrounding the vehicle at that

1077

00:52:35,990 --> 00:52:32,720

time and slowing the vehicle down down

1078

00:52:38,790 --> 00:52:36,000

to uh 350 miles an hour so so everything

1079

00:52:40,630 --> 00:52:38,800

is happening right on cue 7 20 p.m is

1080

00:52:43,109 --> 00:52:40,640

when we're expecting that loss of signal

1081

00:52:44,870 --> 00:52:43,119

it is an estimate um so there might be a

1082

00:52:46,710 --> 00:52:44,880

variation of a couple of seconds couple

1083

00:52:48,950 --> 00:52:46,720

of minutes we'll stand by for that seven

1084

00:52:53,270 --> 00:52:48,960

minute period uh so we'll be looking at

1085

00:52:55,670 --> 00:52:53,280

uh approximately 7 20 uh to 7 27. and

1086

00:52:57,750 --> 00:52:55,680

again as we get closer to the end of the

1087

00:53:01,109 --> 00:52:57,760

blackout communications period we will

1088

00:53:02,950 --> 00:53:01,119

be we typically hear um the either

1089

00:53:05,109 --> 00:53:02,960

dragon or ground pinging each other to

1090

00:53:08,630 --> 00:53:05,119

make sure that they do have signal

1091

00:53:10,870 --> 00:53:08,640

acquisition so um again seven minutes um

1092

00:53:13,589 --> 00:53:10,880

and and we'll be with you uh the entire

1093

00:53:16,230 --> 00:53:13,599

way uh for signal acquisition uh shortly

1094

00:53:19,109 --> 00:53:16,240

after that the drove shoots will deploy

1095

00:53:21,750 --> 00:53:19,119

that that happens at about 18 000 feet

1096

00:53:24,790 --> 00:53:21,760

and then at 6 500 feet that's when the

1097

00:53:27,109 --> 00:53:24,800

main shoots deploy so we talked about um

1098

00:53:30,069 --> 00:53:27,119

deployment in terms of speed right but

1099

00:53:32,390 --> 00:53:30,079

um there are sensors on the dragon

1100

00:53:34,790 --> 00:53:32,400

vehicle that detects both velocity and

1101

00:53:37,190 --> 00:53:34,800

pressure and they know basically exactly

1102

00:53:40,309 --> 00:53:37,200

when to deploy um so again the dragon

1103

00:53:42,710 --> 00:53:40,319

vehicle super intelligent and uh uh

1104

00:53:44,790 --> 00:53:42,720

basically pilots itself um that's why

1105

00:53:46,390 --> 00:53:44,800

even through this blackout period the

1106

00:53:48,630 --> 00:53:46,400

dragon knows where it's at it knows

1107

00:53:51,030 --> 00:53:48,640

where it needs to go uh so the crew is

1108

00:53:52,870 --> 00:53:51,040

is in good hands

1109

00:53:55,910 --> 00:53:52,880

an automatic flight all the way it

1110

00:53:58,230 --> 00:53:55,920

really started about eight hours ago

1111

00:53:59,990 --> 00:53:58,240

when the uh dragon itself more than

1112

00:54:01,589 --> 00:54:00,000

eight hours ago at this point undocked

1113

00:54:02,950 --> 00:54:01,599

from the international space station the

1114

00:54:05,270 --> 00:54:02,960

zenith port

1115

00:54:06,790 --> 00:54:05,280

and backed up to about 220 meters an

1116

00:54:09,030 --> 00:54:06,800

automatic procedure

1117

00:54:10,790 --> 00:54:09,040

followed by an automatic fly around in

1118

00:54:12,870 --> 00:54:10,800

fact the crew were really hands off

1119

00:54:15,109 --> 00:54:12,880

throughout that whole period uh the

1120

00:54:16,870 --> 00:54:15,119

commander uh shane kimbrough and pilot

1121

00:54:19,109 --> 00:54:16,880

megan macarthur were in their seats

1122

00:54:21,190 --> 00:54:19,119

monitoring the entire procedure while

1123

00:54:22,390 --> 00:54:21,200

tamatha sk was at the forward window

1124

00:54:23,910 --> 00:54:22,400

that was pointed right at the

1125

00:54:25,910 --> 00:54:23,920

international space station taking

1126  
00:54:27,829 --> 00:54:25,920  
pictures for about an hour and a half as

1127  
00:54:29,109 --> 00:54:27,839  
it uh circled the international space

1128  
00:54:31,190 --> 00:54:29,119  
station we got

1129  
00:54:33,190 --> 00:54:31,200  
awesome pictures of the international

1130  
00:54:34,630 --> 00:54:33,200  
space station i'm anticipating i haven't

1131  
00:54:36,789 --> 00:54:34,640  
seen them yet but

1132  
00:54:38,390 --> 00:54:36,799  
i'm definitely looking forward to them

1133  
00:54:40,069 --> 00:54:38,400  
all of that was automatic

1134  
00:54:42,470 --> 00:54:40,079  
and then of course the departure burns

1135  
00:54:43,510 --> 00:54:42,480  
that got us to break away from the keep

1136  
00:54:45,589 --> 00:54:43,520  
out sphere

1137  
00:54:47,510 --> 00:54:45,599  
and the approach ellipsoid uh that

1138  
00:54:50,710 --> 00:54:47,520

surround the international space station

1139

00:54:53,030 --> 00:54:50,720

and get us into a

1140

00:54:54,870 --> 00:54:53,040

lower altitude about 10 kilometers below

1141

00:54:57,510 --> 00:54:54,880

the station which we were at for quite

1142

00:54:59,750 --> 00:54:57,520

some time uh followed by the departure

1143

00:55:02,069 --> 00:54:59,760

phase burn uh we had a good trunk

1144

00:55:04,069 --> 00:55:02,079

jettison claw or a claw separation trunk

1145

00:55:07,270 --> 00:55:04,079

jettison and then of course the super

1146

00:55:16,470 --> 00:55:07,280

important deorbit burn all right on time

1147

00:55:20,870 --> 00:55:18,309

so we are just

1148

00:55:23,270 --> 00:55:20,880

25 minutes away from splashdown

1149

00:55:24,630 --> 00:55:23,280

and so again we are entering going to be

1150

00:55:27,349 --> 00:55:24,640

entering that black of communication

1151

00:55:29,510 --> 00:55:27,359

spirit but uh once we're on the other

1152

00:55:31,589 --> 00:55:29,520

side so to speak of that things happen

1153

00:55:33,109 --> 00:55:31,599

to very very quickly drove shoots deploy

1154

00:55:36,549 --> 00:55:33,119

main shoots the boy and we're in the

1155

00:55:38,549 --> 00:55:36,559

water just a few minutes later

1156

00:55:41,670 --> 00:55:38,559

and you mentioned gary

1157

00:55:45,030 --> 00:55:41,680

the wb 57 is up in the air it is

1158

00:55:47,349 --> 00:55:45,040

equipped with um

1159

00:55:49,030 --> 00:55:47,359

imaging technology that will be able to

1160

00:55:51,750 --> 00:55:49,040

get pretty much the first views of the

1161

00:55:54,069 --> 00:55:51,760

dragon capsule uh on its return back to

1162

00:55:55,349 --> 00:55:54,079

earth so we do expect to see

1163

00:55:56,870 --> 00:55:55,359

that great footage here in a couple

1164

00:55:59,030 --> 00:55:56,880  
minutes as well

1165

00:56:02,230 --> 00:55:59,040  
we're about 30 seconds from the

1166

00:56:04,470 --> 00:56:02,240  
anticipated loss of signal uh this is

1167

00:56:07,910 --> 00:56:04,480  
really the beginning of a seven minute

1168

00:56:09,829 --> 00:56:07,920  
period where the crew themselves

1169

00:56:11,349 --> 00:56:09,839  
will be okay we're and we're hearing

1170

00:56:12,549 --> 00:56:11,359  
from the dragon teams here in mission

1171

00:56:14,870 --> 00:56:12,559  
control hawthorne they're starting to

1172

00:56:16,630 --> 00:56:14,880  
see some drag so we are now making

1173

00:56:18,870 --> 00:56:16,640  
contact with the upper limits of the

1174

00:56:21,430 --> 00:56:18,880  
atmosphere right now that's going to be

1175

00:56:23,430 --> 00:56:21,440  
slowing the vehicle down quite a bit now

1176

00:56:37,190 --> 00:56:23,440

seconds away from the anticipated loss

1177

00:56:41,910 --> 00:56:39,510

so we're in the expected period now that

1178

00:56:45,030 --> 00:56:41,920

was uh the anticipated loss of signal so

1179

00:56:49,829 --> 00:56:45,040

so the clock starts uh approximately now

1180

00:56:51,589 --> 00:56:49,839

uh until about 7 27 p.m pacific 10 27

1181

00:56:53,430 --> 00:56:51,599

pm eastern

1182

00:56:55,030 --> 00:56:53,440

now in the blackout and entry period and

1183

00:56:56,950 --> 00:56:55,040

we did hear that

1184

00:56:58,309 --> 00:56:56,960

we did hear some initial confirmation

1185

00:57:00,230 --> 00:56:58,319

from the dragon teams here they're

1186

00:57:01,030 --> 00:57:00,240

starting to see some drag

1187

00:57:02,789 --> 00:57:01,040

so

1188

00:57:09,109 --> 00:57:02,799

we'll see the vehicles slow down here

1189

00:57:13,349 --> 00:57:11,030

during this reentry phase the team is

1190

00:57:15,510 --> 00:57:13,359

going to be experiencing

1191

00:57:17,190 --> 00:57:15,520

deceleration right now they're going

1192

00:57:19,670 --> 00:57:17,200

through that as well as when the

1193

00:57:22,309 --> 00:57:19,680

parachutes deploy the seats actually

1194

00:57:24,950 --> 00:57:22,319

will rotate themselves to about 26

1195

00:57:27,829 --> 00:57:24,960

degrees to make sure that the crew is

1196

00:57:30,309 --> 00:57:27,839

oriented properly for when um the shoots

1197

00:57:33,109 --> 00:57:30,319

deploy so uh the the during the downhill

1198

00:57:36,069 --> 00:57:33,119

phase uh very similar uh g-forces

1199

00:57:37,030 --> 00:57:36,079

experience about 3.5 uh to maybe

1200

00:57:38,829 --> 00:57:37,040

anywhere

1201  
00:57:42,069 --> 00:57:38,839  
to like 4.5

1202  
00:57:43,670 --> 00:57:42,079  
gs so

1203  
00:57:44,950 --> 00:57:43,680  
the crew is is definitely going to be

1204  
00:57:46,630 --> 00:57:44,960  
anticipating that and that's that's

1205  
00:57:56,470 --> 00:57:46,640  
definitely part of their training and

1206  
00:58:01,349 --> 00:57:59,109  
so we're standing by uh we did we are in

1207  
00:58:03,750 --> 00:58:01,359  
the blackout period right now

1208  
00:58:06,150 --> 00:58:03,760  
this blackout period expected to last an

1209  
00:58:08,549 --> 00:58:06,160  
additional six or so minutes

1210  
00:58:11,030 --> 00:58:08,559  
until we hear some of the first calls

1211  
00:58:14,630 --> 00:58:11,040  
from the crew inside dragon

1212  
00:58:17,670 --> 00:58:14,640  
now slowing down from 17 000 miles an

1213  
00:58:19,589 --> 00:58:17,680

hour to about 350 miles an hour when we

1214

00:58:39,910 --> 00:58:19,599

hear them on the other side of this

1215

00:58:44,069 --> 00:58:41,309

again we have a

1216

00:58:46,470 --> 00:58:44,079

wb-57 high altitude aircraft that has

1217

00:58:48,470 --> 00:58:46,480

deployed with an imaging system on board

1218

00:58:50,710 --> 00:58:48,480

to to get those initial views using

1219

00:58:53,030 --> 00:58:50,720

infrared cameras that are on board so

1220

00:58:54,630 --> 00:58:53,040

even though it is night time as long as

1221

00:58:55,910 --> 00:58:54,640

the vehicle is able to identify and

1222

00:58:57,990 --> 00:58:55,920

track the vehicle which with the

1223

00:58:59,510 --> 00:58:58,000

infrared camera will be easy just look

1224

00:59:00,710 --> 00:58:59,520

for the hot thing that just came from

1225

00:59:02,789 --> 00:59:00,720

the uh

1226  
00:59:04,549 --> 00:59:02,799  
from the atmosphere uh it'll be able to

1227  
00:59:06,230 --> 00:59:04,559  
get those initial views and uh

1228  
00:59:07,829 --> 00:59:06,240  
confirmation of the status of the

1229  
00:59:09,430 --> 00:59:07,839  
vehicle the very first confirmation

1230  
00:59:11,510 --> 00:59:09,440  
which is very critical to the teams

1231  
00:59:13,030 --> 00:59:11,520  
monitoring the operations and of course

1232  
00:59:14,950 --> 00:59:13,040  
the recovery teams that are out in the

1233  
00:59:17,109 --> 00:59:14,960  
gulf right now fast boats have been

1234  
00:59:20,069 --> 00:59:17,119  
deployed so we got confirmation of that

1235  
00:59:22,950 --> 00:59:20,079  
uh the helicopters have landed on the go

1236  
00:59:25,510 --> 00:59:22,960  
navigator uh recovery vessel and the

1237  
00:59:27,910 --> 00:59:25,520  
teams are on the vessel right now uh

1238  
00:59:29,349 --> 00:59:27,920

getting ready to uh welcome the crew on

1239

00:59:31,990 --> 00:59:29,359

board once the

1240

00:59:33,750 --> 00:59:32,000

fast boats get out to the capsule and

1241

00:59:35,510 --> 00:59:33,760

rig it with some of the equipment that's

1242

00:59:38,630 --> 00:59:35,520

necessary to hoist it on board using the

1243

00:59:40,470 --> 00:59:38,640

a-frame on the go navigator spacecraft

1244

00:59:42,549 --> 00:59:40,480

we're really in the critical period

1245

00:59:44,470 --> 00:59:42,559

right now just uh eagerly awaiting i

1246

00:59:46,950 --> 00:59:44,480

think all the teams are

1247

00:59:49,030 --> 00:59:46,960

the comms uh at the end uh when we have

1248

00:59:51,430 --> 00:59:49,040

an acquisition of signal from the crew

1249

00:59:54,069 --> 00:59:51,440

uh and some of the first views of the

1250

00:59:55,750 --> 00:59:54,079

spacecraft itself and uh confirmation of

1251  
00:59:57,109 --> 00:59:55,760  
the next sequence of automatic events

1252  
00:59:58,390 --> 00:59:57,119  
which are the deployment of the

1253  
00:59:59,910 --> 00:59:58,400  
parachutes

1254  
01:00:02,390 --> 00:59:59,920  
yeah the earth's atmosphere certainly

1255  
01:00:04,870 --> 01:00:02,400  
does make it easier for the wb-57 to

1256  
01:00:07,670 --> 01:00:04,880  
spot the hot thing it is uh

1257  
01:00:09,030 --> 01:00:07,680  
excess of 3000 degrees fahrenheit so it

1258  
01:00:10,710 --> 01:00:09,040  
should be able to spot it in the sky

1259  
01:00:13,109 --> 01:00:10,720  
there should be nothing else like it

1260  
01:00:15,589 --> 01:00:13,119  
right at this time uh we're again a

1261  
01:00:18,069 --> 01:00:15,599  
couple minutes away from um

1262  
01:00:20,710 --> 01:00:18,079  
starting to exit that uh phase where

1263  
01:00:24,710 --> 01:00:20,720

we're seeing a lot of plasma and so uh

1264

01:00:26,230 --> 01:00:24,720

we are expecting um pings uh from dragon

1265

01:00:36,789 --> 01:00:26,240

or ground uh to try to get the

1266

01:00:40,549 --> 01:00:39,270

so again i mentioned

1267

01:00:41,910 --> 01:00:40,559

things are going to be happening very

1268

01:00:44,630 --> 01:00:41,920

very quickly as soon as we get out of

1269

01:00:47,109 --> 01:00:44,640

here gary we are under 10 minutes

1270

01:00:49,829 --> 01:00:47,119

until splashdown i cannot wait uh this

1271

01:00:52,390 --> 01:00:49,839

is a very uh dynamic period so we are

1272

01:00:53,829 --> 01:00:52,400

listening very closely uh to all of the

1273

01:00:55,589 --> 01:00:53,839

different sequences of event because as

1274

01:00:57,750 --> 01:00:55,599

you're saying andy a lot is going to

1275

01:01:00,870 --> 01:00:57,760

happen we're more than halfway through

1276

01:01:03,109 --> 01:01:00,880

this expected blackout period uh an

1277

01:01:05,190 --> 01:01:03,119

expected seven minute period of course

1278

01:01:07,190 --> 01:01:05,200

there might be some variation but uh

1279

01:01:09,430 --> 01:01:07,200

we're expecting an acquisition of signal

1280

01:01:11,589 --> 01:01:09,440

and initial communications from the crew

1281

01:01:13,750 --> 01:01:11,599

uh before we see uh

1282

01:01:16,150 --> 01:01:13,760

the deployment of the drogue parachutes

1283

01:01:18,230 --> 01:01:16,160

and and uh and main parachutes there's

1284

01:01:20,069 --> 01:01:18,240

about uh maybe about two minutes

1285

01:01:21,990 --> 01:01:20,079

difference from when we should first

1286

01:01:24,470 --> 01:01:22,000

hear from the crew themselves at about 7

1287

01:01:27,589 --> 01:01:24,480

27 and about 7 29

1288

01:01:32,069 --> 01:01:27,599

pm pacific is when we should see the

1289

01:01:36,870 --> 01:01:34,390

and again i say both of them at 729

1290

01:01:39,349 --> 01:01:36,880

because that's how fast that sequence is

1291

01:01:41,109 --> 01:01:39,359

it's about eight second deployment from

1292

01:01:43,349 --> 01:01:41,119

uh of confirmation of the drogue shoots

1293

01:01:45,349 --> 01:01:43,359

themselves and 40 seconds later the

1294

01:02:03,190 --> 01:01:45,359

shoot the main shoots are out it's very

1295

01:02:03,200 --> 01:02:08,549

come here

1296

01:02:13,510 --> 01:02:11,349

so really any any minute now

1297

01:02:15,589 --> 01:02:13,520

we are expecting um anticipated

1298

01:02:17,270 --> 01:02:15,599

acquisition of signal

1299

01:02:18,950 --> 01:02:17,280

uh

1300

01:02:21,990 --> 01:02:18,960

to reconnect that communications line

1301  
01:02:25,670 --> 01:02:22,000  
between uh the spacecraft and the folks

1302  
01:02:30,309 --> 01:02:28,309  
from this moment in time about a minute

1303  
01:02:32,789 --> 01:02:30,319  
left in the anticipated period again

1304  
01:02:34,390 --> 01:02:32,799  
it's not it's not an exact science

1305  
01:02:35,910 --> 01:02:34,400  
there might be some variation we might

1306  
01:02:37,589 --> 01:02:35,920  
hear from them early we might hear from

1307  
01:02:38,870 --> 01:02:37,599  
them late it just depends on a couple of

1308  
01:02:40,470 --> 01:02:38,880  
different factors

1309  
01:02:42,710 --> 01:02:40,480  
but we're all eagerly at the edge of our

1310  
01:02:44,870 --> 01:02:42,720  
seats right now just uh standing by

1311  
01:02:48,230 --> 01:02:44,880  
waiting to hear from the crew

1312  
01:02:49,829 --> 01:02:48,240  
so far things looking good

1313  
01:03:00,829 --> 01:02:49,839

and we'll continue to track it as we

1314

01:03:06,789 --> 01:03:03,670

period getting wb views

1315

01:03:09,670 --> 01:03:06,799

the first views of crew dragon

1316

01:03:11,829 --> 01:03:09,680

look at that tail

1317

01:03:13,349 --> 01:03:11,839

that's the 3 500 degrees look for the

1318

01:03:14,710 --> 01:03:13,359

hot thing that is the hottest thing in

1319

01:03:16,789 --> 01:03:14,720

the sky right now

1320

01:03:18,390 --> 01:03:16,799

uh that is such a it's it's literally

1321

01:03:19,190 --> 01:03:18,400

lighting up the stepper spacex come

1322

01:03:31,109 --> 01:03:19,200

check

1323

01:03:34,309 --> 01:03:32,630

and dragon we've got you expect

1324

01:03:49,910 --> 01:03:34,319

automated parachute deployment and we

1325

01:03:54,630 --> 01:03:52,230

wonderful to hear from the crew on the

1326

01:03:56,950 --> 01:03:54,640

other side of the blackout period the wb

1327

01:03:59,750 --> 01:03:56,960

57 high altitude aircraft providing that

1328

01:04:01,910 --> 01:03:59,760

thermal imaging we saw the tail of the

1329

01:04:04,230 --> 01:04:01,920

entry of the vehicle itself absolutely

1330

01:04:09,270 --> 01:04:04,240

beautiful gps converge expect nominal

1331

01:04:09,280 --> 01:04:14,390

tapping gps

1332

01:04:18,549 --> 01:04:16,069

so again nominal altitude for drove

1333

01:04:19,589 --> 01:04:18,559

deployment that happens at about 18 000

1334

01:04:22,309 --> 01:04:19,599

feet

1335

01:04:23,750 --> 01:04:22,319

again good news after good news gary uh

1336

01:04:26,390 --> 01:04:23,760

things are looking great for crew to

1337

01:04:44,630 --> 01:04:26,400

return i am loving this flight that that

1338

01:04:54,870 --> 01:04:46,710

right as anticipated andy dragon brace

1339

01:04:59,270 --> 01:04:57,029

the thermal imaging system on board the

1340

01:05:01,910 --> 01:04:59,280

wb 57 is getting us great views of the

1341

01:05:04,470 --> 01:05:01,920

capsule but should give us equally good

1342

01:05:19,910 --> 01:05:04,480

views of the drogue deployment expected

1343

01:05:23,990 --> 01:05:22,309

the capsule is traveling about 350 miles

1344

01:05:25,589 --> 01:05:24,000

an hour

1345

01:05:45,190 --> 01:05:25,599

and the drogue chute's job is to slow it

1346

01:05:45,200 --> 01:05:50,870

drugs deployed confirmation

1347

01:05:55,670 --> 01:05:52,870

that'll slow us down from 350 miles an

1348

01:05:57,430 --> 01:05:55,680

hour to 120 miles an hour

1349

01:06:02,829 --> 01:05:57,440

dragon video on two healthy drugs

1350

01:06:02,839 --> 01:06:08,309

nominal shopping great news

1351  
01:06:12,390 --> 01:06:10,789  
so in about 30 seconds the main shoots

1352  
01:06:13,349 --> 01:06:12,400  
are going to come out there are four of

1353  
01:06:15,990 --> 01:06:13,359  
them

1354  
01:06:17,670 --> 01:06:16,000  
and they deploy at about 6 500 feet oh

1355  
01:06:20,309 --> 01:06:17,680  
gary look at this this is an excellent

1356  
01:06:23,349 --> 01:06:20,319  
view of the drogue parachutes

1357  
01:06:26,630 --> 01:06:23,359  
there is drug separation

1358  
01:06:43,090 --> 01:06:28,069  
we'll wait for confirmation of four

1359  
01:06:52,040 --> 01:06:43,960  
[Music]

1360  
01:06:58,829 --> 01:06:52,050  
[Applause]

1361  
01:07:03,910 --> 01:07:01,589  
1000 you really can't ask for anything

1362  
01:07:05,750 --> 01:07:03,920  
better we got confirmation of uh you

1363  
01:07:07,990 --> 01:07:05,760

heard on the loops there four healthy

1364

01:07:10,150 --> 01:07:08,000

mains descent rate is nominal that means

1365

01:07:22,630 --> 01:07:10,160

we are expecting splashdown three

1366

01:07:29,670 --> 01:07:25,190

visually you can see one of the mains uh

1367

01:07:35,029 --> 01:07:32,470

but the teams are uh are tracking that

1368

01:07:37,510 --> 01:07:35,039

as a nominal inflation rate uh and the

1369

01:07:40,390 --> 01:07:37,520

descent rate is as expected

1370

01:07:50,309 --> 01:07:40,400

we do have four healthy mains and we are

1371

01:08:12,470 --> 01:07:52,950

600 meters

1372

01:08:14,309 --> 01:08:12,480

those four healthy main parachutes

1373

01:08:16,390 --> 01:08:14,319

attached to the

1374

01:08:19,189 --> 01:08:16,400

dragon spacecraft endeavor as it

1375

01:08:23,590 --> 01:08:19,199

continues to descend

1376

01:08:51,030 --> 01:08:27,269

the rate is as expected 400 meters

1377

01:08:54,630 --> 01:08:53,189

200 embracing

1378

01:09:39,510 --> 01:08:54,640

standing by for confirmation of

1379

01:09:51,430 --> 01:09:41,559

is

1380

01:09:58,870 --> 01:09:53,110

endeavor on behalf of spacex welcome

1381

01:10:05,030 --> 01:10:01,030

hey chris it's great to be back to

1382

01:10:07,189 --> 01:10:05,040

planet earth and thanks to thanks

1383

01:10:09,510 --> 01:10:07,199

and jackson teams uh honored to

1384

01:10:10,790 --> 01:10:09,520

represent you and work with us

1385

01:10:17,270 --> 01:10:10,800

to our family

1386

01:10:24,950 --> 01:10:20,709

splashdown confirmed at 7 33 p.m pacific

1387

01:10:26,870 --> 01:10:24,960

10 33 p.m eastern standard time four

1388

01:10:29,590 --> 01:10:26,880

astronauts of crew 2 shane kimbrough

1389

01:10:33,590 --> 01:10:29,600

megan mcarthur aki hoshide and tomah

1390

01:10:35,350 --> 01:10:33,600

pesquet now safely returned to earth

1391

01:10:36,790 --> 01:10:35,360

confirmation that the main parachutes

1392

01:10:38,950 --> 01:10:36,800

have been cut and you can see from the

1393

01:10:40,950 --> 01:10:38,960

thermal imaging camera

1394

01:10:43,669 --> 01:10:40,960

that the fast boats are already on their

1395

01:10:45,700 --> 01:10:43,679

way to meet up with crew dragon endeavor

1396

01:10:47,750 --> 01:10:45,710

now splashing down

1397

01:10:49,830 --> 01:10:47,760

[Applause]

1398

01:10:56,950 --> 01:10:49,840

off the coast of florida for the second

1399

01:11:07,990 --> 01:10:58,550

hey shane you're coming in broken but we

1400

01:11:12,950 --> 01:11:10,390

stable one is the configuration that we

1401  
01:11:21,270 --> 01:11:12,960  
were hoping for stable one means it's in

1402  
01:11:33,669 --> 01:11:24,310  
the teams have been uh ready and waiting

1403  
01:11:33,679 --> 01:11:39,990  
and dragon please repeat

1404  
01:11:43,830 --> 01:11:41,350  
yeah we're going to raise our visors if

1405  
01:11:43,840 --> 01:11:57,590  
hey go for visor raise

1406  
01:12:01,030 --> 01:11:59,030  
so it looks like the astronauts inside

1407  
01:12:03,270 --> 01:12:01,040  
are going to be lifting those visors the

1408  
01:12:05,189 --> 01:12:03,280  
recovery team has been uh waiting about

1409  
01:12:06,630 --> 01:12:05,199  
three nautical miles away so it is going

1410  
01:12:08,470 --> 01:12:06,640  
to take them a little bit of time to

1411  
01:12:11,990 --> 01:12:08,480  
make their way to shane megan aki and

1412  
01:12:14,070 --> 01:12:12,000  
toma inside of dragon a quick rundown of

1413  
01:12:16,550 --> 01:12:14,080

what is to come

1414

01:12:17,830 --> 01:12:16,560

so about a minute and a half after

1415

01:12:19,350 --> 01:12:17,840

splashdown

1416

01:12:22,149 --> 01:12:19,360

mission control here in hawthorne will

1417

01:12:23,910 --> 01:12:22,159

give the go for safe approach about two

1418

01:12:26,070 --> 01:12:23,920

minutes away uh two minutes from uh

1419

01:12:29,189 --> 01:12:26,080

splashdown the approachable begins its

1420

01:12:30,709 --> 01:12:29,199

inspection uh we are expecting that um

1421

01:12:33,350 --> 01:12:30,719

ordnance and hyperclock check to

1422

01:12:36,470 --> 01:12:33,360

complete around the I plus 12 minute

1423

01:12:47,590 --> 01:12:36,480

mark around the I plus 30 minute mark

1424

01:12:52,149 --> 01:12:50,870

endeavor has you loud and clear spacex

1425

01:12:53,350 --> 01:12:52,159

we have it loud and clear as well we

1426

01:13:02,630 --> 01:12:53,360

stopped the boat we have it much better

1427

01:13:07,750 --> 01:13:04,870

so some good comms shacks uh on screen

1428

01:13:09,910 --> 01:13:07,760

right now that is the dragon capsule in

1429

01:13:13,590 --> 01:13:09,920

the background uh

1430

01:13:16,229 --> 01:13:13,600

upright and stable in the gulf of

1431

01:13:18,630 --> 01:13:16,239

uh mexico and uh there's a boat that is

1432

01:13:21,830 --> 01:13:18,640

heading towards it so um

1433

01:13:24,390 --> 01:13:21,840

at about I plus 30 minutes uh the dragon

1434

01:13:27,590 --> 01:13:24,400

rigging will be is expected to complete

1435

01:13:29,189 --> 01:13:27,600

again rigging is where um a an employee

1436

01:13:31,189 --> 01:13:29,199

as part of the recovery team will

1437

01:13:34,070 --> 01:13:31,199

physically climb on top of dragon and

1438

01:13:36,310 --> 01:13:34,080

attach hardware necessary to hoist

1439

01:13:38,070 --> 01:13:36,320

dragon up and out of the water

1440

01:13:40,149 --> 01:13:38,080

recovery ships

1441

01:13:42,950 --> 01:13:40,159

also arrive at this time

1442

01:13:44,470 --> 01:13:42,960

at I plus 38 minutes that's when we're

1443

01:13:47,110 --> 01:13:44,480

expecting to lift dragon out of the

1444

01:13:49,350 --> 01:13:47,120

water uh I plus 40 minutes dragon will

1445

01:13:52,229 --> 01:13:49,360

be on deck of the recovery vessel and

1446

01:13:55,189 --> 01:13:52,239

then at I plus 48 minutes we are

1447

01:13:58,470 --> 01:13:55,199

expecting dragon hatch to open and the

1448

01:14:01,669 --> 01:13:58,480

crew to egress after about six months

1449

01:14:03,830 --> 01:14:01,679

in space that is the goal to do this in

1450

01:14:05,910 --> 01:14:03,840

under an hour and it seems like the the

1451

01:14:07,910 --> 01:14:05,920

crew is right where they're supposed to

1452

01:14:11,030 --> 01:14:07,920

be right on time we're getting thermal

1453

01:14:13,110 --> 01:14:11,040

images of uh the uh

1454

01:14:15,990 --> 01:14:13,120

fast boats out near the

1455

01:14:18,470 --> 01:14:16,000

crew dragon endeavor in the uh

1456

01:14:21,910 --> 01:14:18,480

wonderfully smooth waters of the gulf of

1457

01:14:23,510 --> 01:14:21,920

mexico as predicted which is fantastic

1458

01:14:25,669 --> 01:14:23,520

you can see there's two boats that are

1459

01:14:27,590 --> 01:14:25,679

out towards the recovery vessel once we

1460

01:14:29,350 --> 01:14:27,600

get a smoother lock on the vehicle

1461

01:14:31,990 --> 01:14:29,360

itself one of them collecting the

1462

01:14:33,189 --> 01:14:32,000

parachutes uh the other uh doing some of

1463

01:14:34,950 --> 01:14:33,199

the rigging that you were talking about

1464

01:14:37,430 --> 01:14:34,960

and which is uh super critical to the

1465

01:14:39,350 --> 01:14:37,440

next series of steps um dragon the

1466

01:14:41,189 --> 01:14:39,360

spacex is go for recovery personnel to

1467

01:14:45,350 --> 01:14:41,199

approach expect personal alongside

1468

01:14:45,360 --> 01:14:56,229

okay tap it out we're ready

1469

01:14:58,950 --> 01:14:57,990

so we should see one of the fast boats

1470

01:15:01,350 --> 01:14:58,960

go out

1471

01:15:02,630 --> 01:15:01,360

really right next to the capsule and uh

1472

01:15:05,669 --> 01:15:02,640

and you were describing this a little

1473

01:15:07,350 --> 01:15:05,679

bit earlier we'll see um some personnel

1474

01:15:09,510 --> 01:15:07,360

climb on board

1475

01:15:10,950 --> 01:15:09,520

that rigging equipment is hardware that

1476

01:15:13,110 --> 01:15:10,960

they have on board and they have to

1477

01:15:14,470 --> 01:15:13,120

attach certain things to certain areas

1478

01:15:17,350 --> 01:15:14,480

um because the

1479

01:15:20,149 --> 01:15:17,360

recovery vessel itself the go navigator

1480

01:15:21,669 --> 01:15:20,159

uh is also moving out too turn in spacex

1481

01:15:29,430 --> 01:15:21,679

request permission to come on board via

1482

01:15:33,510 --> 01:15:30,950

you're welcome on board on the display

1483

01:15:44,950 --> 01:15:33,520

cam spacex

1484

01:15:48,149 --> 01:15:46,390

so the teams here in mission control

1485

01:15:50,550 --> 01:15:48,159

hawthorne will get a peek inside the

1486

01:15:52,310 --> 01:15:50,560

vehicle itself

1487

01:15:55,430 --> 01:15:52,320

watching over their shoulder the the

1488

01:15:58,470 --> 01:15:55,440

crew themselves really uh are just in a

1489

01:16:00,790 --> 01:15:58,480

waiting position um their seats were

1490

01:16:03,030 --> 01:16:00,800

rotated uh four shoot deployment and

1491

01:16:04,709 --> 01:16:03,040

four splash down uh so they're in a

1492

01:16:06,149 --> 01:16:04,719

slightly more upright position although

1493

01:16:08,709 --> 01:16:06,159

they're not completely upright it just

1494

01:16:10,550 --> 01:16:08,719

helps to help them to brace uh you heard

1495

01:16:12,390 --> 01:16:10,560

that a couple of times over the dragon

1496

01:16:13,830 --> 01:16:12,400

the ground calls brace for those shoot

1497

01:16:14,790 --> 01:16:13,840

deployments and for the splashdown

1498

01:16:16,229 --> 01:16:14,800

itself

1499

01:16:18,310 --> 01:16:16,239

but really they're in just a waiting

1500

01:16:21,430 --> 01:16:18,320

posture at this point as the recovery

1501

01:16:23,910 --> 01:16:21,440

teams do their job it'll take the

1502

01:16:25,430 --> 01:16:23,920

go navigator recovery vessel which we're

1503

01:16:28,390 --> 01:16:25,440

getting some of the images from right

1504

01:16:30,149 --> 01:16:28,400

now um the thermal images uh it takes it

1505

01:16:32,229 --> 01:16:30,159

quite a bit to get out to the capsule

1506

01:16:33,990 --> 01:16:32,239

itself about 30 minutes but which is why

1507

01:16:35,350 --> 01:16:34,000

we have the fast boats that's both doing

1508

01:16:37,910 --> 01:16:35,360

a lot of the

1509

01:16:40,470 --> 01:16:37,920

work ahead of time to prepare it so that

1510

01:16:43,110 --> 01:16:40,480

really when the go navigator arrives

1511

01:16:46,070 --> 01:16:43,120

right next to the spacecraft it is ready

1512

01:16:48,550 --> 01:16:46,080

to hoist onto the recovery vessel and

1513

01:16:50,070 --> 01:16:48,560

onto the dragon nest

1514

01:16:52,790 --> 01:16:50,080

you can see that each of the boats are

1515

01:16:54,950 --> 01:16:52,800

outfitted with uh spotlights to make

1516

01:16:57,830 --> 01:16:54,960

sure that they can again do all their

1517

01:17:03,669 --> 01:16:57,840

functions uh properly as this is a

1518

01:17:08,550 --> 01:17:05,510

but it looks like they have plenty of

1519

01:17:14,550 --> 01:17:11,110

and this is the second time that this

1520

01:17:16,709 --> 01:17:14,560

particular capsule has landed right um

1521

01:17:18,630 --> 01:17:16,719

so this this capsule endeavor was used

1522

01:17:20,870 --> 01:17:18,640

as part of the demonstration two mission

1523

01:17:23,110 --> 01:17:20,880

last year uh flying bob and doug and it

1524

01:17:25,270 --> 01:17:23,120

has splashed down and been recovered

1525

01:17:27,510 --> 01:17:25,280

once before so uh this is not its first

1526

01:17:30,149 --> 01:17:27,520

rodeo

1527

01:17:32,950 --> 01:17:30,159

really a testament to uh the capability

1528

01:17:34,390 --> 01:17:32,960

of these american spacecraft that are

1529

01:17:35,990 --> 01:17:34,400

rotating crews to and from the

1530

01:17:38,630 --> 01:17:36,000

international space station as part of

1531

01:17:40,950 --> 01:17:38,640

these expeditions

1532

01:17:42,229 --> 01:17:40,960

it is truly an international team from

1533

01:17:43,350 --> 01:17:42,239

the camera views that you're seeing

1534

01:17:46,070 --> 01:17:43,360

right now

1535

01:17:49,430 --> 01:17:46,080

on board the go navigator is

1536

01:17:51,910 --> 01:17:49,440

teams representing nasa spacex european

1537

01:17:53,270 --> 01:17:51,920

space agency and the japanese

1538

01:17:57,189 --> 01:17:53,280

exploration

1539

01:17:59,030 --> 01:17:57,199

of them on board

1540

01:18:01,510 --> 01:17:59,040

truly an international

1541

01:18:35,189 --> 01:18:01,520

government and commercial joint effort

1542

01:18:39,189 --> 01:18:37,830

so this is

1543

01:18:42,229 --> 01:18:39,199

this is the

1544

01:18:44,229 --> 01:18:42,239

first fast boat um right now it is uh

1545

01:18:46,070 --> 01:18:44,239

it's essentially doing safety checks uh

1546

01:18:49,189 --> 01:18:46,080

making sure that ordinances and

1547

01:18:51,590 --> 01:18:49,199

hypergals are uh still not persisting in

1548

01:18:52,790 --> 01:18:51,600

the area immediately around the vehicle

1549

01:18:54,310 --> 01:18:52,800

they're also

1550

01:18:55,830 --> 01:18:54,320

doing um

1551

01:18:57,910 --> 01:18:55,840

essentially a

1552

01:18:59,110 --> 01:18:57,920

an inspection of the capsule itself to

1553

01:19:01,830 --> 01:18:59,120

make sure that

1554

01:19:02,870 --> 01:19:01,840

integrity wise it is good uh before we

1555

01:19:05,590 --> 01:19:02,880

start to

1556

01:19:11,750 --> 01:19:05,600

um again rig the equipments for hoisting

1557

01:19:15,510 --> 01:19:13,430

so again it's it's going to take some

1558

01:19:19,430 --> 01:19:15,520

time we're shooting for less than an

1559

01:19:22,550 --> 01:19:19,440

hour to bring the dragon endeavor onto

1560

01:19:25,270 --> 01:19:22,560

the recovery ship and to

1561

01:19:26,870 --> 01:19:25,280

open up the hatches and egress the crew

1562

01:19:29,669 --> 01:19:26,880

or take them out and bring them onto the

1563

01:19:31,830 --> 01:19:29,679

medical facilities i can only imagine

1564

01:19:34,070 --> 01:19:31,840

the views that were possible from right

1565

01:19:36,870 --> 01:19:34,080

there in the gulf of mexico

1566

01:19:39,910 --> 01:19:36,880

let's see we do have a call-in from leah

1567

01:19:42,790 --> 01:19:39,920

cheshire uh nasa communications who's on

1568

01:19:45,669 --> 01:19:42,800

the go navigator recovery ship and was

1569

01:19:48,870 --> 01:19:45,679

able to uh witness the re-entry and

1570

01:19:50,790 --> 01:19:48,880

splashdown of crew dragon endeavor leah

1571

01:19:52,950 --> 01:19:50,800

if you can hear me tell us about your

1572

01:19:54,950 --> 01:19:52,960

experience and uh witnessing dragon

1573

01:19:56,310 --> 01:19:54,960

endeavor splash down

1574

01:19:58,229 --> 01:19:56,320

bringing a crew home from the

1575

01:20:02,470 --> 01:19:58,239

international space station for the

1576

01:20:06,470 --> 01:20:04,229

[Music]

1577

01:20:08,550 --> 01:20:06,480

i can only

1578

01:20:11,030 --> 01:20:08,560

i can hardly explain how amazing that

1579

01:20:14,229 --> 01:20:11,040

experience has been right now as you

1580

01:20:19,430 --> 01:20:14,239

said i'm on go navigator right now i'm

1581

01:20:23,750 --> 01:20:21,750

spacecraft um we were standing on top of

1582

01:20:25,270 --> 01:20:23,760

the helipad where we just landed at

1583

01:20:28,229 --> 01:20:25,280

about 9 00 pm

1584

01:20:31,110 --> 01:20:28,239

central third nine pm eastern time and

1585

01:20:32,790 --> 01:20:31,120

we feel back to the helipad watching the

1586

01:20:35,750 --> 01:20:32,800

crew members streak through the

1587

01:20:37,910 --> 01:20:35,760

atmosphere it truly looked like a meteor

1588

01:20:40,229 --> 01:20:37,920

and actually at the exact same time we

1589

01:20:42,390 --> 01:20:40,239

fought in the crew members we did see a

1590

01:20:43,910 --> 01:20:42,400

meteorite in the sky so it was an

1591

01:20:46,390 --> 01:20:43,920

incredible moment

1592

01:20:48,310 --> 01:20:46,400

and i was sitting next to nasa astronaut

1593

01:20:50,550 --> 01:20:48,320

shannon walker who she herself just

1594

01:20:53,189 --> 01:20:50,560

completed this journey six or seven

1595

01:20:56,709 --> 01:20:53,199

months ago as a member of the crew one

1596

01:20:57,990 --> 01:20:56,719

uh spacecraft and submission and so it's

1597

01:20:59,590 --> 01:20:58,000

it's been an incredible night here

1598

01:21:02,149 --> 01:20:59,600

although now the theater we can't ask

1599

01:21:05,430 --> 01:21:02,159

for better conditions it's uh wonderful

1600

01:21:08,390 --> 01:21:05,440

temperatures the seat is very smooth and

1601  
01:21:10,709 --> 01:21:08,400  
glassy almost and so uh things are just

1602  
01:21:15,189 --> 01:21:10,719  
moving really smoothly here and teams

1603  
01:21:17,669 --> 01:21:15,199  
are are exiting everything at the stairs

1604  
01:21:19,990 --> 01:21:17,679  
leah tell me what's uh happening uh as

1605  
01:21:22,709 --> 01:21:20,000  
you are witnessing it uh you mentioned

1606  
01:21:24,790 --> 01:21:22,719  
landing uh uh not too long ago about an

1607  
01:21:27,350 --> 01:21:24,800  
hour and a half ago on the recovery ship

1608  
01:21:28,950 --> 01:21:27,360  
tell me what the teams have been doing

1609  
01:21:31,110 --> 01:21:28,960  
we witnessed the back end of that with

1610  
01:21:33,030 --> 01:21:31,120  
the recovery boats deployed uh what's

1611  
01:21:35,410 --> 01:21:33,040  
been happening in preparation from your

1612  
01:21:41,110 --> 01:21:35,420  
perspective to get ready for this moment

1613  
01:21:46,390 --> 01:21:43,350

well we saw the bath boat and the jet

1614

01:21:48,229 --> 01:21:46,400

ski pull up next to us pretty much as we

1615

01:21:49,750 --> 01:21:48,239

waited for the capsule to re-enter the

1616

01:21:52,390 --> 01:21:49,760

water and i actually have a very good

1617

01:21:53,990 --> 01:21:52,400

vision of the castle right now um and

1618

01:21:56,629 --> 01:21:54,000

since that time there's been several

1619

01:21:58,229 --> 01:21:56,639

people on the ship um just making sure

1620

01:21:59,750 --> 01:21:58,239

that all of the

1621

01:22:01,110 --> 01:21:59,760

hydraulics and everything are ready to

1622

01:22:04,950 --> 01:22:01,120

go to lift

1623

01:22:07,830 --> 01:22:04,960

crew dragon up is to have a nest that is

1624

01:22:09,510 --> 01:22:07,840

on backup strip and you'll see that as

1625

01:22:10,790 --> 01:22:09,520

it's pulled for the platform that they

1626

01:22:13,030 --> 01:22:10,800

will egress

1627

01:22:14,870 --> 01:22:13,040

they'll then move into medical checks so

1628

01:22:17,830 --> 01:22:14,880

you've got all the team members here on

1629

01:22:22,390 --> 01:22:19,750

tonight on the helicopters and uh

1630

01:22:25,270 --> 01:22:22,400

they're ready to jump in

1631

01:22:27,189 --> 01:22:25,280

go ahead for status update

1632

01:22:28,790 --> 01:22:27,199

proper call sweeps and unfired ordinance

1633

01:22:31,110 --> 01:22:28,800

checks are nominal

1634

01:22:33,110 --> 01:22:31,120

rigging is in progress approximately two

1635

01:22:39,510 --> 01:22:33,120

five minutes until capsule lift

1636

01:22:43,430 --> 01:22:41,590

copy two five minutes before lift and

1637

01:22:44,709 --> 01:22:43,440

standing by for pmc

1638

01:22:46,229 --> 01:22:44,719

all right we're hearing private medical

1639

01:22:47,510 --> 01:22:46,239

conference coming up

1640

01:22:54,149 --> 01:22:47,520

for a minute if you'd like uh just to

1641

01:22:58,550 --> 01:22:55,590

sounds good i will call you back in one

1642

01:23:02,070 --> 01:23:00,149

all right and we're hearing those uh the

1643

01:23:04,310 --> 01:23:02,080

the crew sounding healthy from from

1644

01:23:05,430 --> 01:23:04,320

inside crew dragon endeavor walking

1645

01:23:07,510 --> 01:23:05,440

through the final steps getting a

1646

01:23:09,350 --> 01:23:07,520

private medical conference leah one more

1647

01:23:11,430 --> 01:23:09,360

question before we let you go and

1648

01:23:12,790 --> 01:23:11,440

witness some of the next uh series of

1649

01:23:15,270 --> 01:23:12,800

events uh of course we're going to be

1650

01:23:16,229 --> 01:23:15,280

following all along the way but after

1651  
01:23:18,870 --> 01:23:16,239  
the crew

1652  
01:23:21,830 --> 01:23:18,880  
enters into the

1653  
01:23:24,550 --> 01:23:21,840  
go navigator vessel and does those

1654  
01:23:27,189 --> 01:23:24,560  
medical checks what are the next steps

1655  
01:23:34,470 --> 01:23:27,199  
to get the crew uh home uh either in

1656  
01:23:39,430 --> 01:23:37,510  
it is an incredibly excellent process uh

1657  
01:23:41,110 --> 01:23:39,440  
so the crew members after they've

1658  
01:23:42,950 --> 01:23:41,120  
completed those medical checks they will

1659  
01:23:45,750 --> 01:23:42,960  
board a helicopter right here on the

1660  
01:23:50,350 --> 01:23:45,760  
boat uh within just a couple of hours of

1661  
01:23:50,360 --> 01:24:01,110  
[Applause]

1662  
01:24:05,990 --> 01:24:02,629  
and their mission on the international

1663  
01:24:10,550 --> 01:24:06,000

space station uh everything is moving on

1664

01:24:14,790 --> 01:24:12,629

leah cheshire nasa communications thank

1665

01:24:16,550 --> 01:24:14,800

you for joining us and and telling us a

1666

01:24:18,470 --> 01:24:16,560

little bit about uh what's happening

1667

01:24:22,340 --> 01:24:18,480

there at the recovery site best of luck

1668

01:24:22,350 --> 01:24:26,870

[Music]

1669

01:24:30,870 --> 01:24:28,390

all right that was leah cheshire on

1670

01:24:33,590 --> 01:24:30,880

board the uh go navigator recovery

1671

01:24:35,110 --> 01:24:33,600

vessel now heading back uh to inside the

1672

01:24:36,470 --> 01:24:35,120

crew dragon we're getting those views

1673

01:24:39,110 --> 01:24:36,480

right over the shoulder the crew

1674

01:24:41,669 --> 01:24:39,120

standing by helmet visors up uh really

1675

01:24:43,430 --> 01:24:41,679

just in a waiting posture as we're uh uh

1676

01:24:46,149 --> 01:24:43,440

waiting for the

1677

01:24:48,870 --> 01:24:46,159

fast boats and the teams out there to

1678

01:24:51,669 --> 01:24:48,880

rig the crew dragon endeavor with the

1679

01:24:53,830 --> 01:24:51,679

proper equipment to hoist it the capsule

1680

01:24:55,910 --> 01:24:53,840

itself up onto the go navigator

1681

01:24:58,310 --> 01:24:55,920

spacecraft where you just heard uh Leah

1682

01:25:01,350 --> 01:24:58,320

cheshire and the remaining recovery

1683

01:25:03,110 --> 01:25:01,360

teams uh are waiting uh for of course

1684

01:25:04,629 --> 01:25:03,120

the series of medical checks and and of

1685

01:25:07,430 --> 01:25:04,639

course the personnel representing each

1686

01:25:10,390 --> 01:25:07,440

of the space agencies nasa uh

1687

01:25:53,750 --> 01:25:10,400

european space agency jaxa as well as

1688

01:25:53,760 --> 01:26:24,709

you

1689

01:26:28,950 --> 01:26:26,629

so again as expected crew dragon

1690

01:26:32,950 --> 01:26:28,960

endeavor splashing down off the coast of

1691

01:26:36,709 --> 01:26:32,960

pensacola florida right on time 7 33 p.m

1692

01:26:37,910 --> 01:26:36,719

pacific time 10 33 p.m eastern standard

1693

01:26:39,669 --> 01:26:37,920

time

1694

01:26:41,110 --> 01:26:39,679

an incredible journey we got a fly

1695

01:26:44,229 --> 01:26:41,120

around of the international space

1696

01:26:45,990 --> 01:26:44,239

station documenting the exterior of the

1697

01:26:47,910 --> 01:26:46,000

orbiting complex with digital

1698

01:26:50,950 --> 01:26:47,920

photographs the first time we've done

1699

01:26:53,189 --> 01:26:50,960

that since 2018 with a soyuz survey

1700

01:26:55,030 --> 01:26:53,199

that was done a lot of elements of the

1701

01:26:56,709 --> 01:26:55,040

space station have been added since so

1702

01:26:58,870 --> 01:26:56,719

we'll be able to document that and check

1703

01:27:00,870 --> 01:26:58,880

on the status of areas that can't

1704

01:27:01,910 --> 01:27:00,880

normally be seen by some of the exterior

1705

01:27:04,790 --> 01:27:01,920

cameras

1706

01:27:07,430 --> 01:27:04,800

as well as the robotic arm you see we

1707

01:27:10,470 --> 01:27:07,440

are getting uh views from inside capsule

1708

01:27:12,550 --> 01:27:10,480

endeavor uh the crew really just poised

1709

01:27:14,229 --> 01:27:12,560

seated uh with their seats rotated

1710

01:27:16,470 --> 01:27:14,239

slightly upright you can see they still

1711

01:27:21,830 --> 01:27:16,480

have uh access to someone's hands for

1712

01:27:24,790 --> 01:27:23,350

go ahead

1713

01:27:26,470 --> 01:27:24,800

let's turn around and make its final

1714

01:27:28,790 --> 01:27:26,480

approach to you

1715

01:27:29,910 --> 01:27:28,800

just a couple hundred meters off

1716

01:27:39,669 --> 01:27:29,920

just checking in to see if ready for

1717

01:27:44,470 --> 01:27:42,790

we are ready for the tmc

1718

01:27:58,830 --> 01:27:44,480

all right and work next person you hear

1719

01:28:04,149 --> 01:28:02,229

no we just got updates that the recovery

1720

01:28:06,629 --> 01:28:04,159

vessel is uh just a couple hundred

1721

01:28:09,430 --> 01:28:06,639

meters away from the dragon capsule

1722

01:28:11,189 --> 01:28:09,440

um and they are gearing up for the pmc

1723

01:28:13,350 --> 01:28:11,199

which stands for private medical

1724

01:28:14,629 --> 01:28:13,360

conference the flight surgeon

1725

01:28:16,870 --> 01:28:14,639

will check in with each of the crew

1726

01:28:19,430 --> 01:28:16,880

members to make sure

1727

01:28:21,470 --> 01:28:19,440

they are doing well as they

1728

01:28:26,149 --> 01:28:21,480

have just returned back to earth after

1729

01:28:31,990 --> 01:28:28,229

right now this is a view of the back

1730

01:28:34,709 --> 01:28:32,000

side of the recovery vessel um that is

1731

01:28:36,870 --> 01:28:34,719

essentially a crane uh the bottom middle

1732

01:28:39,350 --> 01:28:36,880

section is the platform or nest where

1733

01:28:41,510 --> 01:28:39,360

the dragon will be hoisted up and placed

1734

01:28:43,910 --> 01:28:41,520

upon and that platform actually will

1735

01:28:46,070 --> 01:28:43,920

move um towards the center of the boat

1736

01:28:50,149 --> 01:28:46,080

uh into essentially a platform where the

1737

01:28:52,390 --> 01:28:50,159

astronauts can uh step off of and so um

1738

01:28:54,470 --> 01:28:52,400

again the the the boat is is backing up

1739

01:28:58,470 --> 01:28:54,480

towards the dragon cap so you can see it

1740

01:29:00,310 --> 01:28:58,480

in the background there and it'll

1741

01:29:02,629 --> 01:29:00,320

hook up all of its lines to the rigging

1742

01:29:05,350 --> 01:29:02,639

equipment that the rigger is currently

1743

01:29:06,790 --> 01:29:05,360

attaching on the spacecraft and will

1744

01:29:09,510 --> 01:29:06,800

hoist it up and get it on top of the

1745

01:29:11,430 --> 01:29:09,520

recovery vessel

1746

01:29:13,669 --> 01:29:11,440

we are not too far away from the dragon

1747

01:29:16,229 --> 01:29:13,679

spacecraft it's right off of the aft end

1748

01:29:18,070 --> 01:29:16,239

of the recovery vessel itself so right

1749

01:29:20,229 --> 01:29:18,080

as expected it was about uh it was

1750

01:29:25,430 --> 01:29:20,239

expected to be a 30 minute transition

1751

01:29:25,440 --> 01:29:29,189

yeah about a 30 minute transit and

1752

01:29:29,199 --> 01:29:39,270

they got there in 20.

1753

01:29:44,229 --> 01:29:42,149

i think a big part of of this is you

1754

01:29:46,310 --> 01:29:44,239

look at the seas right now and uh

1755

01:29:48,310 --> 01:29:46,320

there's effectively no movement gary uh

1756

01:29:51,030 --> 01:29:48,320

leah described it uh

1757

01:29:51,990 --> 01:29:51,040

witnessing it firsthand it is glass-like

1758

01:29:53,669 --> 01:29:52,000

steam

1759

01:29:55,750 --> 01:29:53,679

which makes really for the recovery

1760

01:29:57,430 --> 01:29:55,760

operations just that much

1761

01:30:00,550 --> 01:29:57,440

easier

1762

01:30:02,709 --> 01:30:00,560

really one of the very critical reasons

1763

01:30:05,350 --> 01:30:02,719

why we are in an indirect handover

1764

01:30:07,430 --> 01:30:05,360

posture again the crew 2 astronauts

1765

01:30:09,750 --> 01:30:07,440

landing in the gulf of mexico before

1766

01:30:12,149 --> 01:30:09,760

crew 3 launched it was really for for

1767

01:30:14,790 --> 01:30:12,159

this reason it was because the weather

1768

01:30:17,110 --> 01:30:14,800

at this moment in time was predicted uh

1769

01:30:19,350 --> 01:30:17,120

to be as smooth and uh

1770

01:30:27,669 --> 01:30:19,360

as fantastic as

1771

01:30:32,149 --> 01:30:30,310

so again the crew is

1772

01:30:34,790 --> 01:30:32,159

had a private medical conference that

1773

01:30:37,030 --> 01:30:34,800

was an initial assessment before

1774

01:30:38,870 --> 01:30:37,040

the docs on board have access to pull

1775

01:30:40,310 --> 01:30:38,880

them out of the spacecraft they have a

1776

01:30:42,149 --> 01:30:40,320

pretty good idea of what to expect

1777

01:30:45,430 --> 01:30:42,159

whenever they pull them out so they'll

1778

01:30:49,270 --> 01:30:47,270

precautions to take and what's needed

1779

01:30:51,669 --> 01:30:49,280

for each individual crew member that of

1780

01:30:55,430 --> 01:30:51,679

course privatized because of the medical

1781

01:30:57,350 --> 01:30:55,440

uh reasons um but uh that is why we have

1782

01:31:00,390 --> 01:30:57,360

medical personnel on board the recovery

1783

01:31:01,910 --> 01:31:00,400

spacecraft medical facilities on board

1784

01:31:04,149 --> 01:31:01,920

i'm sorry not the recovery spacecraft

1785

01:31:06,790 --> 01:31:04,159

the recovery vessel and metal medical

1786

01:31:09,270 --> 01:31:06,800

facilities there as well uh and of

1787

01:31:12,149 --> 01:31:09,280

course it'll be a time for the docs to

1788

01:31:14,470 --> 01:31:12,159

do those initial checks uh before they

1789

01:31:17,350 --> 01:31:14,480

uh what's anticipated will fly each of

1790

01:31:18,390 --> 01:31:17,360

the crew members out on a hilo uh back

1791

01:31:25,830 --> 01:31:18,400

to

1792

01:31:27,350 --> 01:31:25,840

at all until we have some crew members

1793

01:31:28,709 --> 01:31:27,360

back home

1794

01:31:31,430 --> 01:31:28,719

shane

1795

01:31:33,750 --> 01:31:31,440

kimbrough megan mcarthur aki hoshide all

1796

01:31:36,070 --> 01:31:33,760

uh planned to go on a nasa plane back to

1797

01:31:37,830 --> 01:31:36,080

houston they'll land in ellington field

1798

01:31:39,189 --> 01:31:37,840

uh not too far away from the johnson

1799

01:31:40,550 --> 01:31:39,199

space center there

1800

01:31:42,550 --> 01:31:40,560

will they'll get to meet up with their

1801

01:31:44,550 --> 01:31:42,560

family and friends of course uh

1802

01:31:47,030 --> 01:31:44,560

tomafesque will board a separate plane

1803

01:31:49,270 --> 01:31:47,040

and head over to europe for the

1804

01:32:21,910 --> 01:31:49,280

facilities over at the european space

1805

01:32:27,030 --> 01:32:24,229

so we're continuing to provide coverage

1806

01:32:28,870 --> 01:32:27,040

even though the crude dragon and the and

1807

01:32:31,510 --> 01:32:28,880

the crew inside have splashed down

1808

01:32:34,550 --> 01:32:31,520

safely in the gulf of mexico at uh right

1809

01:32:36,390 --> 01:32:34,560

on time 7 30 3 p.m pacific 10 33 p.m

1810

01:32:39,189 --> 01:32:36,400

eastern will continue to provide

1811

01:32:41,510 --> 01:32:39,199

coverage until they egress or exit from

1812

01:32:43,590 --> 01:32:41,520

the spacecraft itself and once all four

1813

01:32:45,510 --> 01:32:43,600

crew members are on board

1814

01:32:47,990 --> 01:32:45,520

we're expecting to get some calls from

1815

01:32:49,669 --> 01:32:48,000

representatives of each of the space

1816

01:32:52,550 --> 01:32:49,679

agencies of the astronauts that are on

1817

01:32:54,550 --> 01:32:52,560

board crew dragon endeavor now now

1818

01:32:56,709 --> 01:32:54,560

jackson and esa all calling in to

1819

01:32:58,310 --> 01:32:56,719

provide some remarks after a successful

1820

01:33:33,350 --> 01:32:58,320

mission and return of all four crew

1821

01:33:38,790 --> 01:33:35,510

and this here is a live view inside of

1822

01:33:40,790 --> 01:33:38,800

the dragon capsule the crew members are

1823

01:33:41,990 --> 01:33:40,800

inside and really gary as you mentioned

1824

01:33:44,229 --> 01:33:42,000

they are just

1825

01:33:45,270 --> 01:33:44,239

uh waiting for the recovery team to do

1826

01:33:46,229 --> 01:33:45,280

their job

1827

01:33:48,790 --> 01:33:46,239

uh

1828

01:33:53,500 --> 01:33:48,800

hoist the dragon out of the water before

1829

01:33:57,510 --> 01:33:55,430

[Applause]

1830

01:33:58,790 --> 01:33:57,520

from this view inside crew dragon

1831

01:34:00,550 --> 01:33:58,800

endeavor

1832

01:34:02,629 --> 01:34:00,560

over on the right side megan mcarthur

1833

01:34:05,110 --> 01:34:02,639

the pilot for the crew tube mission you

1834

01:34:06,950 --> 01:34:05,120

can see that little black antenna

1835

01:34:09,510 --> 01:34:06,960

sticking out from her seat she's on a

1836

01:34:10,629 --> 01:34:09,520

satellite phone right now talking with

1837

01:34:13,590 --> 01:34:10,639

the uh

1838

01:34:15,510 --> 01:34:13,600

teams over in mission control houston

1839

01:34:17,590 --> 01:34:15,520

getting confirmation that everyone's

1840

01:34:32,550 --> 01:34:17,600

saying hi to the crew checking in sounds

1841

01:34:36,790 --> 01:34:34,470

if you remember back in uh

1842

01:34:38,229 --> 01:34:36,800

the demo two mission it was a test

1843

01:34:40,470 --> 01:34:38,239

mission for

1844

01:34:41,590 --> 01:34:40,480

using crew dragon endeavor but really to

1845

01:34:44,070 --> 01:34:41,600

verify

1846

01:34:45,830 --> 01:34:44,080

that the spacex crew dragon was ready to

1847

01:34:47,109 --> 01:34:45,840

carry crews as part of regular crew

1848

01:34:48,870 --> 01:34:47,119

rotation missions to and from the

1849

01:34:51,189 --> 01:34:48,880

international space station

1850

01:34:52,149 --> 01:34:51,199

as part of that they used the satellite

1851  
01:34:54,550 --> 01:34:52,159  
phone

1852  
01:34:56,709 --> 01:34:54,560  
as one of the checks and measures to

1853  
01:34:58,950 --> 01:34:56,719  
ensure that the crew had the capability

1854  
01:35:00,870 --> 01:34:58,960  
to use the satellite phone

1855  
01:35:02,149 --> 01:35:00,880  
to call the various teams and report

1856  
01:35:03,750 --> 01:35:02,159  
statuses

1857  
01:35:05,430 --> 01:35:03,760  
it was

1858  
01:35:07,350 --> 01:35:05,440  
really a precaution and one of the test

1859  
01:35:09,910 --> 01:35:07,360  
objectives of

1860  
01:35:25,620 --> 01:35:09,920  
the mission itself

1861  
01:36:42,310 --> 01:36:05,380  
[Music]

1862  
01:36:52,229 --> 01:36:44,950  
and now the recovery vessel is that much

1863  
01:36:52,239 --> 01:36:57,270

spacex for status update

1864

01:37:01,430 --> 01:36:59,510

go ahead

1865

01:37:06,950 --> 01:37:01,440

breaking is complete or approximately

1866

01:37:06,960 --> 01:37:13,990

copy

1867

01:37:19,350 --> 01:37:17,030

so you can see the person that is on the

1868

01:37:21,030 --> 01:37:19,360

capsule stuff that is the rigor they we

1869

01:37:23,910 --> 01:37:21,040

just got confirmation that the rigging

1870

01:37:25,189 --> 01:37:23,920

has been completed uh now they are

1871

01:37:28,149 --> 01:37:25,199

essentially

1872

01:37:29,510 --> 01:37:28,159

um securing the the dragon capsule to

1873

01:37:32,950 --> 01:37:29,520

all the rigging hardware that was

1874

01:37:35,669 --> 01:37:32,960

attached to safely lift it up and out of

1875

01:37:37,350 --> 01:37:35,679

the water and onto the recovery vessel

1876  
01:37:41,590 --> 01:37:37,360  
we're seeing motion of the a-frame now

1877  
01:37:46,149 --> 01:37:43,510  
the rigor making the final attachments

1878  
01:37:48,229 --> 01:37:46,159  
necessary

1879  
01:37:51,510 --> 01:37:48,239  
memory serves me right from previous

1880  
01:37:54,229 --> 01:37:51,520  
recovery missions the rigor will uh

1881  
01:37:57,109 --> 01:37:54,239  
jump off the capsule into the water

1882  
01:38:00,709 --> 01:37:57,119  
and make his way back into the recovery

1883  
01:38:42,790 --> 01:38:00,719  
or into one of the fast boats

1884  
01:38:42,800 --> 01:38:48,390  
dragon spacex space for capsule lift

1885  
01:38:52,629 --> 01:38:50,070  
there he goes as expected jumped into

1886  
01:38:54,310 --> 01:38:52,639  
the water his job complete attaching the

1887  
01:38:56,709 --> 01:38:54,320  
uh

1888  
01:38:58,629 --> 01:38:56,719

all of the connection points to

1889

01:39:00,390 --> 01:38:58,639

crew dragon endeavor

1890

01:39:04,229 --> 01:39:00,400

making sure that it is stable as the

1891

01:39:06,390 --> 01:39:04,239

a-frame itself using hydraulic lifts

1892

01:39:07,350 --> 01:39:06,400

hoists crew dragon endeavor out of the

1893

01:39:09,430 --> 01:39:07,360

water

1894

01:39:11,510 --> 01:39:09,440

onto that circular frame there you see

1895

01:39:12,950 --> 01:39:11,520

at the base of uh

1896

01:39:21,990 --> 01:39:12,960

the ship

1897

01:39:22,000 --> 01:39:25,750

there we are

1898

01:39:29,590 --> 01:39:27,990

in a in in a slightly

1899

01:39:30,870 --> 01:39:29,600

ahead of schedule we were expecting

1900

01:39:33,590 --> 01:39:30,880

dragon

1901

01:39:35,830 --> 01:39:33,600

lift to begin at I plus 38 minutes it is

1902

01:39:37,669 --> 01:39:35,840

I plus 30 minutes now

1903

01:39:40,709 --> 01:39:37,679

uh so

1904

01:39:46,070 --> 01:39:40,719

things things continuing to go smoothly

1905

01:40:01,180 --> 01:39:47,430

seem to get better and more efficient

1906

01:40:01,190 --> 01:40:27,270

[Applause]

1907

01:40:27,280 --> 01:40:45,990

oh

1908

01:40:46,000 --> 01:41:10,310

there

1909

01:41:14,870 --> 01:41:12,149

dragon welcome aboard the recovery

1910

01:41:16,550 --> 01:41:14,880

vessel personnel completing final checks

1911

01:41:21,990 --> 01:41:16,560

stand by for translation to the egress

1912

01:41:22,000 --> 01:41:27,750

ready for that

1913

01:41:32,390 --> 01:41:29,270

all right with that we have confirmation

1914

01:41:35,109 --> 01:41:32,400

that uh crew dragon endeavor is on the

1915

01:41:37,430 --> 01:41:35,119

dragon nest it has been hoisted from the

1916

01:41:38,310 --> 01:41:37,440

gulf of mexico and put onto the recovery

1917

01:41:40,950 --> 01:41:38,320

ship

1918

01:41:43,109 --> 01:41:40,960

where you saw the dragon be gently

1919

01:41:45,510 --> 01:41:43,119

placed is called the dragon nest that

1920

01:41:48,870 --> 01:41:45,520

whole section of the ship will be uh

1921

01:41:49,830 --> 01:41:48,880

translated or moved in uh further into

1922

01:41:52,470 --> 01:41:49,840

the ship

1923

01:41:54,229 --> 01:41:52,480

uh to allow access to the side hatch

1924

01:41:56,950 --> 01:41:54,239

that'll be the next uh very important

1925

01:41:59,590 --> 01:41:56,960

critical series of steps

1926

01:42:01,750 --> 01:41:59,600

there's personnel there that will

1927

01:42:04,550 --> 01:42:01,760

work on the hatch to eventually open it

1928

01:42:05,750 --> 01:42:04,560

it'll be open for the first time in 199

1929

01:42:07,189 --> 01:42:05,760

days

1930

01:42:10,149 --> 01:42:07,199

and we'll get the first

1931

01:42:12,550 --> 01:42:10,159

glimpses of the crew inside

1932

01:42:14,709 --> 01:42:12,560

we should be able to witness the

1933

01:42:16,550 --> 01:42:14,719

egress operations as well each of the

1934

01:42:19,669 --> 01:42:16,560

crew members getting out as long as the

1935

01:42:19,679 --> 01:42:44,450

so we can welcome each of them inside

1936

01:42:44,460 --> 01:42:49,120

[Applause]

1937

01:43:27,350 --> 01:42:50,790

[Music]

1938

01:43:54,390 --> 01:43:50,790

so

1939

01:43:57,430 --> 01:43:54,400

joining us the dragon capsule has been

1940

01:44:00,229 --> 01:43:57,440

lifted up and out of the water and is on

1941

01:44:02,629 --> 01:44:00,239

the recovery vessel uh we just saw a few

1942

01:44:05,270 --> 01:44:02,639

shots of the crew on board the ship uh

1943

01:44:07,109 --> 01:44:05,280

what they're doing is uh securing the

1944

01:44:08,870 --> 01:44:07,119

dragon onto the ship to make sure it

1945

01:44:11,109 --> 01:44:08,880

doesn't move as again it's being

1946

01:44:13,990 --> 01:44:11,119

translated or or moved towards the

1947

01:44:17,030 --> 01:44:14,000

egress platform uh where the side hatch

1948

01:44:20,390 --> 01:44:17,040

will be opened and the crew inside uh

1949

01:44:22,149 --> 01:44:20,400

can uh egress the vehicle

1950

01:44:24,709 --> 01:44:22,159

the shot you see on screen right now is

1951

01:44:29,430 --> 01:44:24,719

a view inside it's a live shot of the of

1952

01:44:33,350 --> 01:44:32,229

on the left hand side that is a

1953

01:44:35,910 --> 01:44:33,360

commander

1954

01:44:38,790 --> 01:44:35,920

shane kimbrough and to the right of him

1955

01:44:41,510 --> 01:44:38,800

is pilot megan macarthur uh what you

1956

01:44:43,750 --> 01:44:41,520

don't see on screen is to the right of

1957

01:44:45,189 --> 01:44:43,760

megan macarthur is mission specialist

1958

01:44:48,070 --> 01:44:45,199

tomorrow pasquee

1959

01:44:50,229 --> 01:44:48,080

uh and uh to the left of shane kimbrough

1960

01:44:53,910 --> 01:44:50,239

is mission specialist aki

1961

01:44:56,790 --> 01:44:54,950

they've had

1962

01:44:58,310 --> 01:44:56,800

about an eight hour journey from

1963

01:44:59,990 --> 01:44:58,320

undocking from the international space

1964

01:45:02,070 --> 01:45:00,000

station and now they're on their journey

1965

01:45:05,270 --> 01:45:02,080

to stand by for translation to egress

1966

01:45:05,280 --> 01:45:30,709

copy we're ready

1967

01:45:30,719 --> 01:45:50,629

there's that translation

1968

01:45:50,639 --> 01:46:00,070

uh

1969

01:46:00,080 --> 01:47:02,070

here

1970

01:47:05,990 --> 01:47:04,149

still getting views from inside crew

1971

01:47:09,350 --> 01:47:06,000

dragon endeavor this is spectacular

1972

01:47:11,350 --> 01:47:09,360

we're less than 40 minutes after the

1973

01:47:14,149 --> 01:47:11,360

dragon itself splashed down in the gulf

1974

01:47:16,550 --> 01:47:14,159

of mexico for the second time

1975

01:47:19,350 --> 01:47:16,560

now just again less than 40 minutes

1976

01:47:21,189 --> 01:47:19,360

later the crew has been hoisted onto the

1977

01:47:23,590 --> 01:47:21,199

recovery ship

1978

01:47:26,310 --> 01:47:23,600

and the dragon nest itself has been

1979

01:47:29,590 --> 01:47:26,320

translated over to the egress platform

1980

01:47:32,310 --> 01:47:29,600

uh the next series of steps will be uh

1981

01:47:34,229 --> 01:47:32,320

personnel on the recovery vessel that

1982

01:47:36,709 --> 01:47:34,239

are specialized in opening up that side

1983

01:47:39,189 --> 01:47:36,719

hatch uh we'll do so we have medical

1984

01:47:40,550 --> 01:47:39,199

doctors on board that will

1985

01:47:41,830 --> 01:47:40,560

take care of them after that they'll

1986

01:47:44,709 --> 01:47:41,840

provide initial

1987

01:47:46,229 --> 01:47:44,719

medical care and assessment uh egressing

1988

01:47:48,310 --> 01:47:46,239

the crew from

1989

01:47:50,070 --> 01:47:48,320

outside the dragon and putting them into

1990

01:47:52,310 --> 01:47:50,080

medical facilities that are on board to

1991

01:47:54,629 --> 01:47:52,320

conduct a series of initial checks uh

1992

01:47:57,189 --> 01:47:54,639

before they are flown by helicopter back

1993

01:47:58,870 --> 01:47:57,199

to shore the recovery vessel takes uh

1994

01:48:01,430 --> 01:47:58,880

quite a bit of time to get back to shore

1995

01:48:04,229 --> 01:48:01,440

so they'll be flown uh so they can get

1996

01:48:06,390 --> 01:48:04,239

right on an aircraft and fly home within

1997

01:48:08,070 --> 01:48:06,400

a very short period of time

1998

01:48:10,229 --> 01:48:08,080

again we're going to provide continuous

1999

01:48:12,390 --> 01:48:10,239

coverage until all crew members have

2000

01:48:16,070 --> 01:48:12,400

egressed the vehicle we also have

2001

01:48:17,669 --> 01:48:16,080

representatives of nasa jaxa and esa

2002

01:48:19,430 --> 01:48:17,679

that are scheduled to be on the line to

2003

01:48:21,750 --> 01:48:19,440

provide a comments of a successful

2004

01:48:23,510 --> 01:48:21,760

mission after the crew successfully

2005

01:48:33,350 --> 01:48:23,520

splashed down egressed and are safe on

2006

01:48:37,510 --> 01:48:35,510

dragon stand by for side hatch opening

2007

01:48:38,790 --> 01:48:37,520

and egress next call will be from the

2008

01:48:40,629 --> 01:48:38,800

recovery team

2009

01:48:44,709 --> 01:48:40,639

critique congratulations

2010

01:49:02,070 --> 01:48:46,470

hey thanks again christy and your team

2011

01:49:02,080 --> 01:49:06,310

side hatch is open

2012

01:49:06,320 --> 01:49:33,430

you see the waves coming out

2013

01:49:45,990 --> 01:49:35,830

even from inside dragon now we're seeing

2014

01:49:51,350 --> 01:49:48,390

the first humans that these crew members

2015

01:50:00,950 --> 01:49:51,360

have seen on planet earth

2016

01:50:04,470 --> 01:50:02,470

so i believe the recovery team is

2017

01:50:05,830 --> 01:50:04,480

checking in with the crews to make sure

2018

01:50:08,470 --> 01:50:05,840

uh they're all

2019

01:50:10,790 --> 01:50:08,480

uh doing fine there are we actually have

2020

01:50:12,149 --> 01:50:10,800

to remove the foot rest underneath the

2021

01:50:13,830 --> 01:50:12,159

seats um

2022

01:50:16,950 --> 01:50:13,840

prior to the crew getting out it just

2023

01:50:21,700 --> 01:50:18,629

for them to egress the vehicle with that

2024

01:50:29,350 --> 01:50:21,710

out of the way

2025

01:50:32,550 --> 01:50:31,189

we're on a great timeline right now just

2026

01:50:34,709 --> 01:50:32,560

40 minutes

2027

01:50:36,870 --> 01:50:34,719

uh after splashing down in the gulf of

2028

01:50:38,709 --> 01:50:36,880

mexico the side hatch is open

2029

01:50:41,430 --> 01:50:38,719

and there are

2030

01:50:58,550 --> 01:50:41,440

teams inside crew dragon endeavor

2031

01:50:58,560 --> 01:51:17,589

so

2032

01:51:23,270 --> 01:51:20,629

oh this is five views inside endeavor

2033

01:51:25,750 --> 01:51:23,280

wonderful getting all four crew members

2034

01:51:28,310 --> 01:51:25,760

thumbs up they are feeling good live

2035

01:51:41,270 --> 01:51:28,320

streamed from on the recovery boat

2036

01:52:01,910 --> 01:51:57,990

so

2037

01:52:04,070 --> 01:52:01,920

footrests are coming out of the vehicle

2038

01:52:06,229 --> 01:52:04,080

and once all those are removed we are

2039

01:52:41,990 --> 01:52:06,239

expecting the crew to egress one at a

2040

01:52:42,000 --> 01:53:31,350

is

2041

01:53:31,360 --> 01:53:59,510

yes

2042

01:53:59,520 --> 01:55:03,589

so

2043

01:55:58,470 --> 01:55:55,030

you

2044

01:56:01,189 --> 01:55:58,480

hand side of the screen that is the view

2045

01:56:03,189 --> 01:56:01,199

from inside of the dragon capsule

2046

01:56:05,109 --> 01:56:03,199

it has been

2047

01:56:06,470 --> 01:56:05,119

recovered out of the water and it's

2048

01:56:09,109 --> 01:56:06,480

currently on

2049

01:56:10,950 --> 01:56:09,119

the recovery vessel the side hatch is

2050

01:56:13,669 --> 01:56:10,960

open as you can see on the right hand

2051  
01:56:16,310 --> 01:56:13,679  
side of the screen the recovery team

2052  
01:56:18,070 --> 01:56:16,320  
are continuing to

2053  
01:56:19,430 --> 01:56:18,080  
do some more checkouts and procedures

2054  
01:56:22,709 --> 01:56:19,440  
before

2055  
01:57:53,670 --> 01:56:22,719  
we start to see the crew 2 astronauts

2056  
01:57:53,680 --> 01:58:42,390  
[Applause]

2057  
01:58:42,400 --> 01:58:55,030  
so

2058  
01:59:00,229 --> 01:58:57,030  
still standing by for

2059  
01:59:03,510 --> 01:59:00,239  
uh the egress of the four astronauts of

2060  
01:59:06,149 --> 01:59:03,520  
crew 2. outside of crew dragon endeavour

2061  
01:59:11,270 --> 01:59:08,310  
stationed over to the left there is a

2062  
01:59:13,830 --> 01:59:11,280  
stretcher part of the nominal procedure

2063  
01:59:15,350 --> 01:59:13,840

once they are egressed from the vehicle

2064

01:59:17,589 --> 01:59:15,360

they'll be put into

2065

01:59:20,550 --> 01:59:17,599

the stretcher and taken over to medical

2066

01:59:23,430 --> 01:59:20,560

facilities this is a standard precaution

2067

02:00:48,790 --> 01:59:23,440

that's been exercised for each of the

2068

02:00:52,709 --> 02:00:50,790

the first crew member being egressed

2069

02:00:55,350 --> 02:00:52,719

from crew dragon endeavor

2070

02:01:11,910 --> 02:00:55,360

gotta witness applause

2071

02:01:21,030 --> 02:01:13,830

it's hard to tell which crew member that

2072

02:01:25,109 --> 02:01:22,470

and we got confirmation that was megan

2073

02:01:26,709 --> 02:01:25,119

macarthur uh that was the pilot of the

2074

02:02:17,700 --> 02:01:26,719

crew tube mission the first crew member

2075

02:02:17,710 --> 02:03:20,310

[Music]

2076

02:03:26,149 --> 02:03:23,030

next out is uh commander

2077

02:03:30,390 --> 02:03:28,550

outside of crew dragon endeavor being

2078

02:03:32,070 --> 02:03:30,400

translated over to the stretcher of her

2079

02:03:34,390 --> 02:03:32,080

nominal procedure

2080

02:03:36,589 --> 02:03:34,400

waves smiles on his face

2081

02:06:44,229 --> 02:03:36,599

a fantastic journey

2082

02:07:02,390 --> 02:06:46,390

and here comes the third member to

2083

02:07:07,589 --> 02:07:04,310

some fist bumps

2084

02:07:10,950 --> 02:07:07,599

and smiles from aki

2085

02:07:15,430 --> 02:07:10,960

again after 199 days in space return to

2086

02:07:20,310 --> 02:07:17,669

all crew members flashing the peace sign

2087

02:07:22,390 --> 02:07:20,320

for crew 2. i love it

2088

02:07:25,109 --> 02:07:22,400

and that leaves one more member inside

2089

02:07:45,350 --> 02:07:25,119

of dragon that is toma pesque

2090

02:08:22,470 --> 02:07:58,069

so

2091

02:08:22,480 --> 02:08:45,270

and here comes tomah

2092

02:08:51,170 --> 02:08:47,189

that's the easter dock on board checking

2093

02:08:53,270 --> 02:08:51,180

in with uh this k

2094

02:08:55,910 --> 02:08:53,280

[Music]

2095

02:08:58,550 --> 02:08:55,920

there you go

2096

02:09:02,470 --> 02:08:58,560

everybody flash on the crew 2 i love it

2097

02:09:02,480 --> 02:09:06,550

high fives

2098

02:09:10,950 --> 02:09:09,510

so that is all four members of the crew

2099

02:09:11,910 --> 02:09:10,960

2 team

2100

02:09:15,270 --> 02:09:11,920

uh

2101  
02:09:17,109 --> 02:09:15,280  
on a boat i was going to say on land for

2102  
02:09:19,350 --> 02:09:17,119  
a second but they're on a boat

2103  
02:09:21,109 --> 02:09:19,360  
and they will um head to all their

2104  
02:09:23,030 --> 02:09:21,119  
respective

2105  
02:09:26,149 --> 02:09:23,040  
places they need to go but uh what a

2106  
02:09:28,709 --> 02:09:26,159  
great uh recovery we we talked about how

2107  
02:09:30,870 --> 02:09:28,719  
things were going to speed up um and get

2108  
02:09:32,629 --> 02:09:30,880  
more exciting and that recovery was one

2109  
02:09:34,470 --> 02:09:32,639  
of the fastest i've ever seen it was

2110  
02:09:36,310 --> 02:09:34,480  
spectacular i mean uh you couldn't have

2111  
02:09:37,990 --> 02:09:36,320  
asked for a better mission uh we

2112  
02:09:41,510 --> 02:09:38,000  
accomplished everything and everything

2113  
02:09:43,830 --> 02:09:41,520

on time undocking right at 1105 uh am

2114

02:09:46,149 --> 02:09:43,840

earlier today we did a fly around of the

2115

02:09:48,629 --> 02:09:46,159

international space station went super

2116

02:09:50,950 --> 02:09:48,639

smoothly got some fantastic views even

2117

02:09:52,950 --> 02:09:50,960

on our coverage all along the way

2118

02:09:54,870 --> 02:09:52,960

all of the burns performed as expected

2119

02:09:56,470 --> 02:09:54,880

we did have an out of plane burn as well

2120

02:09:58,069 --> 02:09:56,480

that was introduced just to make sure we

2121

02:10:01,030 --> 02:09:58,079

were on the right course but it set us

2122

02:10:02,950 --> 02:10:01,040

up right for that deorbit burn on time

2123

02:10:04,790 --> 02:10:02,960

and uh lo and behold as soon as we got

2124

02:10:07,750 --> 02:10:04,800

out of that blackout period uh even a

2125

02:10:10,229 --> 02:10:07,760

little bit before from the wb-57 that

2126

02:10:12,069 --> 02:10:10,239

those views of the streak uh that was

2127

02:10:14,870 --> 02:10:12,079

the plasma building up on the outside of

2128

02:10:17,350 --> 02:10:14,880

the spacecraft we saw that we saw all

2129

02:10:19,189 --> 02:10:17,360

the all great shoots drogue shoots main

2130

02:10:20,310 --> 02:10:19,199

shoots all deployed with the infrared

2131

02:10:23,589 --> 02:10:20,320

cameras

2132

02:10:25,669 --> 02:10:23,599

and lands on a glassy gulf of mexico the

2133

02:10:27,350 --> 02:10:25,679

waves were perfect

2134

02:10:29,510 --> 02:10:27,360

incredible wind speeds in the recovery

2135

02:10:33,589 --> 02:10:29,520

operations went super smooth all in all

2136

02:10:36,550 --> 02:10:35,109

so we'll stand by uh we're going to

2137

02:10:38,069 --> 02:10:36,560

continue our coverage here for just a

2138

02:10:40,790 --> 02:10:38,079

little bit well all of all of the crew

2139

02:10:42,470 --> 02:10:40,800

members have uh egressed and are on the

2140

02:10:45,189 --> 02:10:42,480

recovery uh boats but we're going to

2141

02:10:46,550 --> 02:10:45,199

stand by we're hoping to hear from some

2142

02:10:49,189 --> 02:10:46,560

representatives from each of the

2143

02:10:50,390 --> 02:10:49,199

respective space agencies nasa esa and

2144

02:10:52,229 --> 02:10:50,400

jaxa

2145

02:11:01,830 --> 02:10:52,239

and we'll just stand by and

2146

02:11:08,629 --> 02:11:04,629

yeah so it was great to see

2147

02:11:11,510 --> 02:11:08,639

all four members again despite uh 199

2148

02:11:13,589 --> 02:11:11,520

days in space and coming back to earth

2149

02:11:17,270 --> 02:11:13,599

uh they came out of the capsule with

2150

02:11:19,270 --> 02:11:17,280

smiles thumbs up uh fist bumps and so

2151  
02:11:21,189 --> 02:11:19,280  
they are definitely in good spirits and

2152  
02:11:23,350 --> 02:11:21,199  
that is always great to see

2153  
02:11:25,669 --> 02:11:23,360  
so a little bit about what's to come um

2154  
02:11:27,430 --> 02:11:25,679  
so again we'll continue our coverage and

2155  
02:11:29,669 --> 02:11:27,440  
uh hope to hear some remarks from some

2156  
02:11:31,830 --> 02:11:29,679  
of the uh from the representatives of

2157  
02:11:33,830 --> 02:11:31,840  
each of the space agencies uh but right

2158  
02:11:35,910 --> 02:11:33,840  
now each of the four crew members are on

2159  
02:11:37,830 --> 02:11:35,920  
the go navigator recovery vessel they're

2160  
02:11:39,589 --> 02:11:37,840  
going into some of the medical

2161  
02:11:41,189 --> 02:11:39,599  
facilities that are on board and they'll

2162  
02:11:43,109 --> 02:11:41,199  
have doctors on board that are able to

2163  
02:11:45,109 --> 02:11:43,119

check them out and do an initial medical

2164

02:11:47,750 --> 02:11:45,119

assessment making sure that they're good

2165

02:11:49,830 --> 02:11:47,760

to go they're not going to remain on go

2166

02:11:51,510 --> 02:11:49,840

navigator for the entire trip back they

2167

02:11:52,470 --> 02:11:51,520

actually have helicopters that are

2168

02:11:54,790 --> 02:11:52,480

staged

2169

02:11:57,350 --> 02:11:54,800

ready to take them off there's a helipad

2170

02:11:59,510 --> 02:11:57,360

on the recovery vessel itself so that

2171

02:12:01,350 --> 02:11:59,520

helicopter will take them back over to

2172

02:12:03,750 --> 02:12:01,360

shore where they have planes that are

2173

02:12:06,709 --> 02:12:03,760

staged uh at shore ready to take them

2174

02:12:08,950 --> 02:12:06,719

back to respective locations for shane

2175

02:12:11,510 --> 02:12:08,960

megan and aki they'll head back to uh

2176

02:12:13,030 --> 02:12:11,520

houston uh and they'll do some

2177

02:12:14,149 --> 02:12:13,040

additional medical assessments some

2178

02:12:16,069 --> 02:12:14,159

additional tests they'll get to see

2179

02:12:17,750 --> 02:12:16,079

their family they're going to go home uh

2180

02:12:20,229 --> 02:12:17,760

in just a couple of short days they'll

2181

02:12:22,069 --> 02:12:20,239

be working out they'll be in the uh um

2182

02:12:24,550 --> 02:12:22,079

they'll be in the gym uh getting

2183

02:12:26,790 --> 02:12:24,560

reconditioned back to four 1g for life

2184

02:12:28,709 --> 02:12:26,800

on earth tomopascay will head over to

2185

02:12:30,470 --> 02:12:28,719

europa to do the same thing over at the

2186

02:12:33,109 --> 02:12:30,480

facilities over at the european space

2187

02:12:34,709 --> 02:12:33,119

agency and that will be a wrap for the

2188

02:12:36,629 --> 02:12:34,719

crew 2 mission

2189

02:12:38,390 --> 02:12:36,639

yeah so they still have a little ways to

2190

02:12:40,950 --> 02:12:38,400

go um

2191

02:12:43,510 --> 02:12:40,960

after egressing the the dragon capsule

2192

02:12:45,750 --> 02:12:43,520

but it looks like everything again going

2193

02:12:48,149 --> 02:12:45,760

smoothly um especially as part of this

2194

02:12:49,830 --> 02:12:48,159

broadcast again you had mentioned gary

2195

02:12:50,790 --> 02:12:49,840

everything that was on the to-do list

2196

02:12:53,350 --> 02:12:50,800

today

2197

02:12:55,669 --> 02:12:53,360

has been done and has been done on time

2198

02:12:57,589 --> 02:12:55,679

and and very smoothly

2199

02:13:00,790 --> 02:12:57,599

wonderful so uh we do have some

2200

02:13:02,950 --> 02:13:00,800

representatives from agencies online

2201

02:13:05,669 --> 02:13:02,960

right now calling in uh to make some

2202

02:13:08,149 --> 02:13:05,679

comments on behalf of the agency first

2203

02:13:09,990 --> 02:13:08,159

we do have kathy leaders who is the

2204

02:13:13,030 --> 02:13:10,000

associate administrator for space

2205

02:13:14,149 --> 02:13:13,040

operations uh here at nasa kathy if you

2206

02:13:16,950 --> 02:13:14,159

can hear me

2207

02:13:19,109 --> 02:13:16,960

your initial thoughts now that uh

2208

02:13:22,870 --> 02:13:19,119

crew 2 has safely returned to earth

2209

02:13:28,629 --> 02:13:22,880

after 199 days and what it means to nasa

2210

02:13:32,629 --> 02:13:30,629

well i'm always amazed i can hold my

2211

02:13:35,350 --> 02:13:32,639

breath for those last 10 minutes of

2212

02:13:36,229 --> 02:13:35,360

re-entry you know i mean that is

2213

02:13:38,790 --> 02:13:36,239

um

2214

02:13:40,790 --> 02:13:38,800

high drama right there and like you

2215

02:13:42,550 --> 02:13:40,800

mentioned several times

2216

02:13:45,669 --> 02:13:42,560

seeing those shoots come out is just an

2217

02:13:47,030 --> 02:13:45,679

amazing thing it is so nice to see than

2218

02:13:49,669 --> 02:13:47,040

that our

2219

02:13:51,910 --> 02:13:49,679

spacex crew 2 astronauts are

2220

02:13:54,310 --> 02:13:51,920

has safely splashed down in the gulf of

2221

02:13:56,310 --> 02:13:54,320

mexico off the coast of florida

2222

02:13:58,790 --> 02:13:56,320

aboard the crew dragon endeavor

2223

02:14:01,750 --> 02:13:58,800

spacecraft and we've now completed the

2224

02:14:03,350 --> 02:14:01,760

agency's second long duration commercial

2225

02:14:04,310 --> 02:14:03,360

commission to the international space

2226

02:14:07,189 --> 02:14:04,320  
station

2227

02:14:09,510 --> 02:14:07,199  
and what's it's been such a busy but

2228

02:14:11,189 --> 02:14:09,520  
exciting time aboard the station

2229

02:14:13,669 --> 02:14:11,199  
and which is really our home in

2230

02:14:16,470 --> 02:14:13,679  
microgravity you know i'm so proud of

2231

02:14:19,990 --> 02:14:16,480  
the nasa and the spacex team for another

2232

02:14:22,229 --> 02:14:20,000  
successful return they continue to show

2233

02:14:24,830 --> 02:14:22,239  
that amazing amount of dedication to

2234

02:14:27,750 --> 02:14:24,840  
each phase of the mission and and just

2235

02:14:29,430 --> 02:14:27,760  
safely and methodically moving forward

2236

02:14:30,709 --> 02:14:29,440  
and conducting the mission it's just

2237

02:14:32,310 --> 02:14:30,719  
amazing

2238

02:14:34,629 --> 02:14:32,320

you know we originally were planning to

2239

02:14:37,189 --> 02:14:34,639

launch our crew 3 mission for short

2240

02:14:39,350 --> 02:14:37,199

overlap on station with crew 2

2241

02:14:40,470 --> 02:14:39,360

but you know we ended up bringing crew 2

2242

02:14:42,790 --> 02:14:40,480

home first

2243

02:14:43,910 --> 02:14:42,800

the team really carefully balanced each

2244

02:14:46,790 --> 02:14:43,920

decision

2245

02:14:48,870 --> 02:14:46,800

and as we looked at which was a safer

2246

02:14:51,430 --> 02:14:48,880

opportunity we decided to bring the crew

2247

02:14:53,669 --> 02:14:51,440

home first given the weather conditions

2248

02:14:54,629 --> 02:14:53,679

and as you can see tonight they were

2249

02:14:56,870 --> 02:14:54,639

great

2250

02:14:59,669 --> 02:14:56,880

um like people said it was like a lake

2251

02:15:00,950 --> 02:14:59,679

out there a very calm lake so

2252

02:15:02,629 --> 02:15:00,960

this was

2253

02:15:04,709 --> 02:15:02,639

the best decision we could have made and

2254

02:15:07,430 --> 02:15:04,719

it was just great to see the crew

2255

02:15:08,950 --> 02:15:07,440

exiting that spacecraft this evening

2256

02:15:10,709 --> 02:15:08,960

you know as you folks have talked about

2257

02:15:14,390 --> 02:15:10,719

the mission set a record for the longest

2258

02:15:15,910 --> 02:15:14,400

space flight by a u.s crude spacecraft

2259

02:15:19,189 --> 02:15:15,920

the crew members were actually in their

2260

02:15:21,990 --> 02:15:19,199

200th flight day um even though

2261

02:15:24,390 --> 02:15:22,000

they and they did complete 199

2262

02:15:28,229 --> 02:15:24,400

full days in orbit which surpassed the

2263

02:15:30,470 --> 02:15:28,239

168 days set by spacex's um

2264

02:15:33,910 --> 02:15:30,480

crew 1 mission earlier this year not

2265

02:15:35,750 --> 02:15:33,920

that any of those crew members count

2266

02:15:38,149 --> 02:15:35,760

the crew 2 mission you know launched

2267

02:15:41,030 --> 02:15:38,159

april 23rd on a falcon 9 rocket from

2268

02:15:41,830 --> 02:15:41,040

nasa's kennedy space center and

2269

02:15:44,390 --> 02:15:41,840

uh

2270

02:15:46,069 --> 02:15:44,400

and then docked to the harmony modules

2271

02:15:49,669 --> 02:15:46,079

forward port of the space station on

2272

02:15:51,830 --> 02:15:49,679

april 24th nearly 24 hours after liftoff

2273

02:15:53,109 --> 02:15:51,840

you know the the crew

2274

02:15:55,830 --> 02:15:53,119

2 mission

2275

02:15:58,069 --> 02:15:55,840

has traveled over 84 million miles

2276

02:16:00,950 --> 02:15:58,079

during the mission while their stay on

2277

02:16:03,030 --> 02:16:00,960

orbit and completed over 3 000 orbits

2278

02:16:06,069 --> 02:16:03,040

around the earth and during their time

2279

02:16:08,550 --> 02:16:06,079

on orbit they have contributed to a host

2280

02:16:11,350 --> 02:16:08,560

of science and maintenance activities

2281

02:16:13,430 --> 02:16:11,360

scientific investigations technology

2282

02:16:16,069 --> 02:16:13,440

demonstrations and multiple public

2283

02:16:18,629 --> 02:16:16,079

engagement efforts while aborting the

2284

02:16:20,470 --> 02:16:18,639

onboard the iss vehicle

2285

02:16:22,629 --> 02:16:20,480

they've studied how gaseous flames

2286

02:16:25,109 --> 02:16:22,639

behave in microgravity and one of my

2287

02:16:27,910 --> 02:16:25,119

favorites as an ex-new mexico person

2288

02:16:30,830 --> 02:16:27,920

grew hatch green chiles in the station's

2289

02:16:33,990 --> 02:16:30,840

plant habitat facility and eight space

2290

02:16:35,990 --> 02:16:34,000

tacos they installed briefline robotic

2291

02:16:38,309 --> 02:16:36,000

assistance and even donned virtual

2292

02:16:40,389 --> 02:16:38,319

reality goggles to test new methods of

2293

02:16:43,589 --> 02:16:40,399

exercising in space

2294

02:16:45,349 --> 02:16:43,599

among many other scientific activities

2295

02:16:47,589 --> 02:16:45,359

and the astronauts took hundreds of

2296

02:16:50,230 --> 02:16:47,599

pictures of earth as part of the crew

2297

02:16:51,750 --> 02:16:50,240

earth observation investigation which

2298

02:16:54,309 --> 02:16:51,760

was one of the longest running

2299

02:16:57,030 --> 02:16:54,319

investigations aboard the space station

2300

02:16:59,830 --> 02:16:57,040

which contributes to tracking of natural

2301

02:17:01,990 --> 02:16:59,840

disasters and changes to our home planet

2302

02:17:04,870 --> 02:17:02,000

and most importantly they did that fly

2303

02:17:09,110 --> 02:17:04,880

around on the way home to have us check

2304

02:17:11,349 --> 02:17:09,120

out the state of the iss one more time

2305

02:17:14,469 --> 02:17:11,359

they conducted four spacewalks to

2306

02:17:17,589 --> 02:17:14,479

install deploy and otherwise prepare for

2307

02:17:20,469 --> 02:17:17,599

installation of our new iss rollout

2308

02:17:23,110 --> 02:17:20,479

solar rays and they also saw the arrival

2309

02:17:25,509 --> 02:17:23,120

of seven spacecraft of the space station

2310

02:17:28,870 --> 02:17:25,519

and seven spacecraft departing during

2311

02:17:30,389 --> 02:17:28,880

their six-month stay station is the hub

2312

02:17:32,790 --> 02:17:30,399

up there our

2313

02:17:35,750 --> 02:17:32,800

international hub

2314

02:17:38,790 --> 02:17:35,760

so this splashdown of crew 2 comes just

2315

02:17:40,070 --> 02:17:38,800

before the launch of nasa's spacex crew

2316

02:17:44,150 --> 02:17:40,080

3 mission

2317

02:17:46,549 --> 02:17:44,160

i the the return looked spotless i know

2318

02:17:48,070 --> 02:17:46,559

folks will be wondering about the that

2319

02:17:50,629 --> 02:17:48,080

one

2320

02:17:53,509 --> 02:17:50,639

lagging main parachute and the team will

2321

02:17:54,870 --> 02:17:53,519

be going off and and looking at

2322

02:17:56,709 --> 02:17:54,880

um

2323

02:17:59,830 --> 02:17:56,719

you know how the loading was on the

2324

02:18:02,150 --> 02:17:59,840

chutes and understanding that behavior

2325

02:18:04,629 --> 02:18:02,160

it is behavior we've seen multiple times

2326

02:18:07,030 --> 02:18:04,639

in other tests and usually happens when

2327

02:18:09,349 --> 02:18:07,040

the lines kind of bunch up together

2328

02:18:11,830 --> 02:18:09,359

until the arrow forces kind of open up

2329

02:18:13,349 --> 02:18:11,840

and and spread the shoots and

2330

02:18:15,349 --> 02:18:13,359

the the thing that makes me feel a

2331

02:18:18,230 --> 02:18:15,359

little bit more confident is that the

2332

02:18:20,629 --> 02:18:18,240

loading and the deceleration of the

2333

02:18:22,469 --> 02:18:20,639

spacecraft all looked nominal for us

2334

02:18:23,270 --> 02:18:22,479

which is good news

2335

02:18:25,270 --> 02:18:23,280

but

2336

02:18:25,990 --> 02:18:25,280

we're making this an exciting week for

2337

02:18:27,910 --> 02:18:26,000

us

2338

02:18:29,830 --> 02:18:27,920

and you know one of the key things we'll

2339

02:18:32,309 --> 02:18:29,840

be doing on our launch readiness review

2340

02:18:34,549 --> 02:18:32,319

for the crew 3 mission coming up we'll

2341

02:18:37,190 --> 02:18:34,559

be working through that that launch

2342

02:18:38,709 --> 02:18:37,200

readiness review is tomorrow at starting

2343

02:18:39,669 --> 02:18:38,719

at 7 00 pm

2344

02:18:40,790 --> 02:18:39,679

and

2345

02:18:43,190 --> 02:18:40,800

my uh

2346

02:18:44,629 --> 02:18:43,200

ocon colleagues would be kicking me

2347

02:18:47,110 --> 02:18:44,639

under the desk right now if i didn't

2348

02:18:49,110 --> 02:18:47,120

tell everybody we'll be doing a post

2349

02:18:52,709 --> 02:18:49,120

launch readiness review press conference

2350

02:18:55,349 --> 02:18:52,719

tomorrow evening at 9 30 pm eastern time

2351  
02:18:57,990 --> 02:18:55,359  
so once again thank you for watching i

2352  
02:18:59,910 --> 02:18:58,000  
can't tell you how excited i am to see

2353  
02:19:01,830 --> 02:18:59,920  
all four of the crew members back on

2354  
02:19:04,549 --> 02:19:01,840  
earth and i'm looking forward to

2355  
02:19:06,870 --> 02:19:04,559  
launching another set of four this week

2356  
02:19:10,549 --> 02:19:06,880  
thank you

2357  
02:19:13,669 --> 02:19:10,559  
associate administrator for space

2358  
02:19:16,309 --> 02:19:13,679  
operations here at nasa we also have on

2359  
02:19:18,309 --> 02:19:16,319  
the line hiroshi sasaki vice president

2360  
02:19:21,669 --> 02:19:18,319  
and director general for the human space

2361  
02:19:23,669 --> 02:19:21,679  
flight technology directorate at jaxa

2362  
02:19:25,830 --> 02:19:23,679  
mr sasaki your thoughts on the

2363  
02:19:27,100 --> 02:19:25,840

successful return and the completion of

2364

02:19:32,150 --> 02:19:27,110

the crew 2 mission

2365

02:19:37,669 --> 02:19:34,389

thank you for the introduction

2366

02:19:40,469 --> 02:19:37,679

uh first of all from vr jaxa i'd like to

2367

02:19:42,709 --> 02:19:40,479

express my heartfelt thanks to the nasa

2368

02:19:45,509 --> 02:19:42,719

leadership spacex

2369

02:19:48,549 --> 02:19:45,519

our international partners isa cselos

2370

02:19:50,790 --> 02:19:48,559

cosmos and all the colleagues who have

2371

02:19:53,349 --> 02:19:50,800

devoted to the successful mission

2372

02:19:55,510 --> 02:19:53,359

while overcoming the tough time under

2373

02:19:57,990 --> 02:19:55,520

copied 19.

2374

02:20:01,590 --> 02:19:58,000

i'm really relieved that all the crew

2375

02:20:04,469 --> 02:20:01,600

members came back home safely to

2376

02:20:07,270 --> 02:20:04,479

and i do believe they have brought

2377

02:20:11,110 --> 02:20:07,280

tremendous courage and hopes for all of

2378

02:20:13,910 --> 02:20:11,120

us through this successful mission

2379

02:20:18,070 --> 02:20:13,920

akh hoshide served as the commander

2380

02:20:20,389 --> 02:20:18,080

and led the expansion 65 and 36 missions

2381

02:20:22,870 --> 02:20:20,399

over five months

2382

02:20:25,030 --> 02:20:22,880

during his own orbit stay succeeding

2383

02:20:28,230 --> 02:20:25,040

astronaut soi technology

2384

02:20:31,429 --> 02:20:28,240

aki has completed his eba with isa

2385

02:20:33,590 --> 02:20:31,439

astronomer tamapesky and contributed to

2386

02:20:35,510 --> 02:20:33,600

the upgrade of the iss

2387

02:20:36,309 --> 02:20:35,520

including the installs

2388

02:20:38,469 --> 02:20:36,319

of

2389

02:20:41,270 --> 02:20:38,479

mlm

2390

02:20:43,830 --> 02:20:41,280

arc and the entire team faced various

2391

02:20:46,550 --> 02:20:43,840

challenges during their stay and they

2392

02:20:50,070 --> 02:20:46,560

have overcome with great communication

2393

02:20:52,070 --> 02:20:50,080

among the crew members and with ground

2394

02:20:55,590 --> 02:20:52,080

team it proves

2395

02:21:00,230 --> 02:20:55,600

us again with the importance of

2396

02:21:03,429 --> 02:21:00,240

teamwork and international corporations

2397

02:21:06,070 --> 02:21:03,439

i'm also pleased that we jaxa along with

2398

02:21:09,429 --> 02:21:06,080

aki have conducted worse activities to

2399

02:21:12,070 --> 02:21:09,439

promote space exploration basic research

2400

02:21:13,349 --> 02:21:12,080

as well as commercialization of laura

2401  
02:21:14,550 --> 02:21:13,359  
soviet

2402  
02:21:17,349 --> 02:21:14,560  
every time

2403  
02:21:20,309 --> 02:21:17,359  
we see a successful mission like this we

2404  
02:21:23,110 --> 02:21:20,319  
are getting one step closer to achieve

2405  
02:21:26,070 --> 02:21:23,120  
our common goals towards space

2406  
02:21:28,950 --> 02:21:26,080  
exploration using the gateway and on the

2407  
02:21:30,790 --> 02:21:28,960  
lunar surface and also bringing further

2408  
02:21:35,030 --> 02:21:30,800  
benefits to rs

2409  
02:21:36,630 --> 02:21:35,040  
through the utilization by the is space

2410  
02:21:39,990 --> 02:21:36,640  
next fall

2411  
02:21:42,150 --> 02:21:40,000  
jaxa astronaut koichi bakata will be on

2412  
02:21:45,190 --> 02:21:42,160  
board the crew 5

2413  
02:21:47,990 --> 02:21:45,200

followed by satoshi furukawa's long stay

2414

02:21:49,990 --> 02:21:48,000

mission in the coming years

2415

02:21:53,190 --> 02:21:50,000

i hope that

2416

02:21:56,389 --> 02:21:53,200

the arches experience will be succeeded

2417

02:21:58,710 --> 02:21:56,399

to contribute to our endpoints towards

2418

02:22:00,950 --> 02:21:58,720

space exploration and human space

2419

02:22:02,230 --> 02:22:00,960

freight

2420

02:22:05,270 --> 02:22:02,240

once again

2421

02:22:07,030 --> 02:22:05,280

congratulations up to all of you the

2422

02:22:10,070 --> 02:22:07,040

savory time

2423

02:22:11,670 --> 02:22:10,080

and wishing the successful launch of

2424

02:22:14,389 --> 02:22:11,680

kudu 3

2425

02:22:20,309 --> 02:22:16,469

thank you so much

2426

02:22:22,710 --> 02:22:20,319

president and director general for the

2427

02:22:24,870 --> 02:22:22,720

human space flight technology directed

2428

02:22:27,110 --> 02:22:24,880

directorate at jaxa

2429

02:22:28,550 --> 02:22:27,120

so that will do it for us that is the

2430

02:22:30,150 --> 02:22:28,560

comments that we have from the

2431

02:22:31,510 --> 02:22:30,160

respective agencies thank you so much

2432

02:22:34,389 --> 02:22:31,520

for calling in and providing those

2433

02:22:36,469 --> 02:22:34,399

comments well now that shane megan aki

2434

02:22:37,990 --> 02:22:36,479

and tamar are safely back on planet

2435

02:22:39,990 --> 02:22:38,000

earth and getting checked out by nasa

2436

02:22:42,550 --> 02:22:40,000

medical teams and of course teams from

2437

02:22:44,550 --> 02:22:42,560

the respective international agencies we

2438

02:22:47,030 --> 02:22:44,560

are going to wrap up our live coverage

2439

02:22:50,550 --> 02:22:47,040

of their historic return this all kicked

2440

02:22:53,990 --> 02:22:50,560

off on april 23 2020 uh one from

2441

02:22:56,150 --> 02:22:54,000

historic launch pad 39a at kennedy space

2442

02:22:58,309 --> 02:22:56,160

center in florida after a successful

2443

02:23:01,190 --> 02:22:58,319

liftoff in separation from falcon 9

2444

02:23:03,110 --> 02:23:01,200

shane megan aki and tomah made a 24-hour

2445

02:23:04,950 --> 02:23:03,120

flight on board dragon to the

2446

02:23:07,429 --> 02:23:04,960

international space station since

2447

02:23:09,270 --> 02:23:07,439

arriving at the space station they spent

2448

02:23:12,870 --> 02:23:09,280

nearly six months as members of

2449

02:23:15,429 --> 02:23:12,880

expedition 65 and 66 executing science

2450

02:23:17,990 --> 02:23:15,439

experiments space walks and repairs

2451  
02:23:19,670 --> 02:23:18,000  
while aboard the orbiting laboratory and

2452  
02:23:22,630 --> 02:23:19,680  
then their journey home began earlier

2453  
02:23:24,950 --> 02:23:22,640  
today on the eighth when uh they closed

2454  
02:23:28,150 --> 02:23:24,960  
the hatch to dragon and undock hours

2455  
02:23:30,550 --> 02:23:28,160  
later at 11 05 a.m pacific time after

2456  
02:23:32,550 --> 02:23:30,560  
four successful departure burns and a

2457  
02:23:35,030 --> 02:23:32,560  
phasing burn to line up their orbit

2458  
02:23:37,110 --> 02:23:35,040  
shane megan aki and tomah rested for a

2459  
02:23:40,469 --> 02:23:37,120  
few hours before waking up to prepare

2460  
02:23:42,710 --> 02:23:40,479  
for re-entry this uh this evening uh we

2461  
02:23:45,349 --> 02:23:42,720  
um excuse me they didn't rest uh they

2462  
02:23:47,429 --> 02:23:45,359  
they went straight to uh they had a meal

2463  
02:23:49,349 --> 02:23:47,439

they had a meal basically and don their

2464

02:23:51,750 --> 02:23:49,359

spacesuits uh we then jettisoned the

2465

02:23:53,990 --> 02:23:51,760

trunks the dragon's trunk and performed

2466

02:23:57,349 --> 02:23:54,000

our final on-orbit maneuver the d-over

2467

02:23:59,910 --> 02:23:57,359

burn at 6 39 p.m pacific time sent

2468

02:24:01,349 --> 02:23:59,920

dragon on the path home the spacecraft

2469

02:24:03,429 --> 02:24:01,359

re-entered the earth's atmosphere and

2470

02:24:05,830 --> 02:24:03,439

slowed its descent with successful

2471

02:24:08,309 --> 02:24:05,840

deployments of two drogue parachutes and

2472

02:24:09,910 --> 02:24:08,319

four mains with the final splashdown

2473

02:24:13,190 --> 02:24:09,920

occurring off the coast of pensacola

2474

02:24:15,190 --> 02:24:13,200

florida at 7 33 pm pacific time

2475

02:24:17,590 --> 02:24:15,200

now following successful splashdown we

2476

02:24:19,750 --> 02:24:17,600

saw spacex recovery experts move in and

2477

02:24:22,790 --> 02:24:19,760

prepare dragon endeavor for its liftoff

2478

02:24:24,870 --> 02:24:22,800

uh for its lift onto the recovery vessel

2479

02:24:27,270 --> 02:24:24,880

in just a little less than an hour

2480

02:24:29,590 --> 02:24:27,280

following splashdown we saw shane megan

2481

02:24:31,670 --> 02:24:29,600

aki and toma make their way out of the

2482

02:24:34,230 --> 02:24:31,680

dragon and into the recovery ship's

2483

02:24:36,070 --> 02:24:34,240

medic facilities safe and sound so

2484

02:24:38,150 --> 02:24:36,080

they're on the recovery vessel right now

2485

02:24:40,070 --> 02:24:38,160

next they'll catch a helicopter flight

2486

02:24:41,990 --> 02:24:40,080

back to shore while they're transferred

2487

02:24:43,990 --> 02:24:42,000

to aircraft that will take them home

2488

02:24:46,550 --> 02:24:44,000

shane megan and aki will take a nasa

2489

02:24:48,790 --> 02:24:46,560

plane for a short flight back to houston

2490

02:24:50,870 --> 02:24:48,800

and tomah will fly back to europe

2491

02:24:53,110 --> 02:24:50,880

they'll be reunited with their families

2492

02:24:55,670 --> 02:24:53,120

and then bring this historic flight to

2493

02:24:57,110 --> 02:24:55,680

an end it has been an honor and a

2494

02:24:59,429 --> 02:24:57,120

privilege to share their journey with

2495

02:25:01,910 --> 02:24:59,439

you all as we continue this new era in

2496

02:25:03,830 --> 02:25:01,920

human space flight but we have more

2497

02:25:07,349 --> 02:25:03,840

coming up soon

2498

02:25:09,270 --> 02:25:07,359

that is right uh spacex and nasa are

2499

02:25:11,670 --> 02:25:09,280

already looking forward to the next

2500

02:25:13,990 --> 02:25:11,680

mission when crew 3 launches currently

2501  
02:25:16,230 --> 02:25:14,000  
targeted just a few days from now on

2502  
02:25:17,750 --> 02:25:16,240  
november 10th uh we'll have an indirect

2503  
02:25:19,750 --> 02:25:17,760  
handover with three people on board the

2504  
02:25:22,469 --> 02:25:19,760  
station for a short period of time as we

2505  
02:25:24,870 --> 02:25:22,479  
continue this regular cadence of flying

2506  
02:25:27,190 --> 02:25:24,880  
astronauts on american rockets from the

2507  
02:25:30,070 --> 02:25:27,200  
kennedy space center again it has been

2508  
02:25:32,469 --> 02:25:30,080  
encouraging an incredible honor gary

2509  
02:25:34,469 --> 02:25:32,479  
and joy to share this mission with

2510  
02:25:36,550 --> 02:25:34,479  
public and all the teams from spacex and

2511  
02:25:38,550 --> 02:25:36,560  
nasa continue to work hard to keep

2512  
02:25:41,030 --> 02:25:38,560  
america leading the world in human space

2513  
02:25:43,510 --> 02:25:41,040

flight uh continue to follow spacex and

2514

02:25:45,670 --> 02:25:43,520

nasa online and on social media for

2515

02:25:46,870 --> 02:25:45,680

updates for the very latest on crew and

2516

02:25:48,630 --> 02:25:46,880

cargo fights

2517

02:25:49,590 --> 02:25:48,640

to and from the international space

2518

02:25:51,830 --> 02:25:49,600

station

2519

02:25:54,630 --> 02:25:51,840

and we'll continue to share the progress

2520

02:25:57,429 --> 02:25:54,640

of shane megan aki and tomorrow as they

2521

02:25:59,510 --> 02:25:57,439

travel back home on social media so

2522

02:26:01,510 --> 02:25:59,520

we'll say thanks once more

2523

02:26:03,830 --> 02:26:01,520

for tuning in and cheering on shane

2524

02:26:06,469 --> 02:26:03,840

megan aki and tomas as they return home

2525

02:26:08,150 --> 02:26:06,479

and we'll see you again very soon when

2526

02:26:09,830 --> 02:26:08,160

we'll once again be sending astronauts

2527

02:26:12,550 --> 02:26:09,840

to the international space station from

2528

02:26:20,710 --> 02:26:12,560

american soil on nasa spacex crew 3

2529

02:26:20,720 --> 02:26:35,040

[Music]

2530

02:26:35,050 --> 02:26:39,670

[Applause]

2531

02:26:39,680 --> 02:26:53,060

so