



1  
00:00:35,350 --> 00:00:25,890  
[Music]

2  
00:00:52,370 --> 00:00:37,550  
so

3  
00:07:45,350 --> 00:01:11,950  
[Music]

4  
00:08:05,589 --> 00:07:47,960  
this is nasa tv

5  
00:08:09,589 --> 00:08:07,830  
good afternoon and welcome to the

6  
00:08:11,670 --> 00:08:09,599  
johnson space center my name is bettina

7  
00:08:13,670 --> 00:08:11,680  
and klon with nasa communications thank

8  
00:08:16,550 --> 00:08:13,680  
you for joining us for this post-docking

9  
00:08:18,710 --> 00:08:16,560  
news briefing of the nasa spacex demo 2

10  
00:08:20,869 --> 00:08:18,720  
mission just moments ago

11  
00:08:22,230 --> 00:08:20,879  
astronauts bob benkin and douglas hurley

12  
00:08:24,790 --> 00:08:22,240  
arrived at the international space

13  
00:08:26,390 --> 00:08:24,800

station aboard the crew dragon today

14

00:08:27,749 --> 00:08:26,400

we'll hear more from nasa leadership to

15

00:08:30,550 --> 00:08:27,759

tell us more about the mission in the

16

00:08:32,949 --> 00:08:30,560

last 24 hours with us today is nasa

17

00:08:35,670 --> 00:08:32,959

administrator jim bridenstine

18

00:08:37,589 --> 00:08:35,680

mark guyer jsc director the director of

19

00:08:39,990 --> 00:08:37,599

the johnson space center

20

00:08:42,469 --> 00:08:40,000

steve sitch the program director of the

21

00:08:44,870 --> 00:08:42,479

commercial crew program

22

00:08:46,870 --> 00:08:44,880

kenny todd from iss

23

00:08:48,550 --> 00:08:46,880

the international space center is an

24

00:08:51,350 --> 00:08:48,560

international space station program

25

00:08:54,310 --> 00:08:51,360

director and deputy program director and

26  
00:08:55,910 --> 00:08:54,320  
michelle lindgren nasa astronaut thank

27  
00:08:57,590 --> 00:08:55,920  
you so much all of you for joining us

28  
00:08:58,870 --> 00:08:57,600  
today we're going to start with open

29  
00:09:02,230 --> 00:08:58,880  
your remarks and then we'll go to

30  
00:09:05,590 --> 00:09:02,240  
questions from reporters so first up is

31  
00:09:07,790 --> 00:09:05,600  
our nasa administrator james bridenstine

32  
00:09:10,710 --> 00:09:07,800  
thank you bettina i just want to say

33  
00:09:12,790 --> 00:09:10,720  
congratulations to the nasa team and to

34  
00:09:14,790 --> 00:09:12,800  
the spacex team and really

35  
00:09:17,269 --> 00:09:14,800  
congratulations to the united states of

36  
00:09:20,230 --> 00:09:17,279  
america this has been

37  
00:09:22,070 --> 00:09:20,240  
an amazing two days we're still at the

38  
00:09:23,990 --> 00:09:22,080

beginning we have a mission in front of

39

00:09:26,550 --> 00:09:24,000

us and of course we need to make sure

40

00:09:28,630 --> 00:09:26,560

that we bring bob and doug home safely

41

00:09:30,870 --> 00:09:28,640

but um when we think about launching

42

00:09:33,269 --> 00:09:30,880

american astronauts for the first time

43

00:09:35,110 --> 00:09:33,279

on a brand new rocket this has been done

44

00:09:37,990 --> 00:09:35,120

four times in the history of the united

45

00:09:41,430 --> 00:09:38,000

states mercury gemini

46

00:09:43,990 --> 00:09:41,440

apollo space shuttle and now crew dragon

47

00:09:45,990 --> 00:09:44,000

so it's actually five times now

48

00:09:48,310 --> 00:09:46,000

and this has gone as well as we could

49

00:09:50,310 --> 00:09:48,320

have expected it to go

50

00:09:52,630 --> 00:09:50,320

so i just want to say a big big

51  
00:09:55,350 --> 00:09:52,640  
congratulations to nasa big

52  
00:09:57,590 --> 00:09:55,360  
congratulations to spacex

53  
00:09:59,670 --> 00:09:57,600  
and we're going to continue to work day

54  
00:10:01,509 --> 00:09:59,680  
in and day out until bob and doug are

55  
00:10:03,910 --> 00:10:01,519  
home safely so with that bettina i'll

56  
00:10:06,230 --> 00:10:03,920  
turn it back to you thank you next we'll

57  
00:10:08,710 --> 00:10:06,240  
hear from mark guyer the director of the

58  
00:10:10,710 --> 00:10:08,720  
johnson space center thanks mattina so

59  
00:10:11,990 --> 00:10:10,720  
it's great to be here today thank you

60  
00:10:13,590 --> 00:10:12,000  
for joining us

61  
00:10:15,350 --> 00:10:13,600  
uh it was a tremendous day in mission

62  
00:10:17,430 --> 00:10:15,360  
control as we watched the dragon

63  
00:10:19,990 --> 00:10:17,440

approach and then dock and

64

00:10:21,590 --> 00:10:20,000

hatch open and have bob and doug

65

00:10:23,269 --> 00:10:21,600

come forward into the space station you

66

00:10:25,430 --> 00:10:23,279

know we've been launching with our

67

00:10:27,190 --> 00:10:25,440

russian partners for so many years so it

68

00:10:29,430 --> 00:10:27,200

was nice to see astronauts actually

69

00:10:30,550 --> 00:10:29,440

enter from the u.s side of the space

70

00:10:32,790 --> 00:10:30,560

station

71

00:10:34,550 --> 00:10:32,800

great to see bob and doug on orbit

72

00:10:36,069 --> 00:10:34,560

uh for the johnson space center it's a

73

00:10:38,069 --> 00:10:36,079

big moment of course we do we have the

74

00:10:39,829 --> 00:10:38,079

astronauts we have mission control

75

00:10:41,590 --> 00:10:39,839

and we also think of ourselves as the

76

00:10:42,870 --> 00:10:41,600

spacecraft experts for human space

77

00:10:45,910 --> 00:10:42,880

flight so it's great to see this

78

00:10:47,670 --> 00:10:45,920

particular mission uh executed so well

79

00:10:49,829 --> 00:10:47,680

uh we look forward for the a great

80

00:10:51,750 --> 00:10:49,839

continuation of the mission thank you

81

00:10:53,750 --> 00:10:51,760

thank you next we'll hear from steve

82

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

stitch the deputy director of the

83

00:10:57,990 --> 00:10:55,519

commercial crew program

84

00:10:59,509 --> 00:10:58,000

uh good afternoon it's certainly a very

85

00:11:00,790 --> 00:10:59,519

exciting day to be here for commercial

86

00:11:03,030 --> 00:11:00,800

crew

87

00:11:04,230 --> 00:11:03,040

the launch yesterday was just phenomenal

88

00:11:06,310 --> 00:11:04,240

and today

89

00:11:07,350 --> 00:11:06,320

to dock to the space station

90

00:11:10,470 --> 00:11:07,360

many of us in the program have been

91

00:11:13,350 --> 00:11:10,480

working on this for many many many years

92

00:11:16,870 --> 00:11:13,360

i can't tell you how many people across

93

00:11:18,870 --> 00:11:16,880

nasa spacex and across the whole country

94

00:11:21,430 --> 00:11:18,880

putting in tireless hours

95

00:11:23,750 --> 00:11:21,440

uh missing time with their families

96

00:11:26,230 --> 00:11:23,760

hard work and dedication to make today

97

00:11:27,670 --> 00:11:26,240

happen but we're just thrilled

98

00:11:30,550 --> 00:11:27,680

docking happened just a little bit

99

00:11:33,190 --> 00:11:30,560

before 9 30 central time this morning we

100

00:11:34,870 --> 00:11:33,200

got the hatches opened at 1202. really

101  
00:11:37,670 --> 00:11:34,880  
what's been happening since launch over

102  
00:11:39,670 --> 00:11:37,680  
the last 24 hours has been a series of

103  
00:11:42,630 --> 00:11:39,680  
rendezvous burns to raise the orbit and

104  
00:11:45,110 --> 00:11:42,640  
then get into this approach phase today

105  
00:11:46,710 --> 00:11:45,120  
today went really well

106  
00:11:48,550 --> 00:11:46,720  
we're learning a lot about the vehicle

107  
00:11:50,069 --> 00:11:48,560  
you know how to manage it thermally

108  
00:11:52,710 --> 00:11:50,079  
watching the life support systems for

109  
00:11:54,069 --> 00:11:52,720  
the first time over these 24 hours

110  
00:11:55,910 --> 00:11:54,079  
certainly different than demo one where

111  
00:11:57,350 --> 00:11:55,920  
it was an uncrewed flight

112  
00:11:58,389 --> 00:11:57,360  
those life support systems are doing

113  
00:12:00,629 --> 00:11:58,399

well

114

00:12:03,190 --> 00:12:00,639

the crew got in the suits again today

115

00:12:04,069 --> 00:12:03,200

for the rendezvous timeline that went

116

00:12:05,910 --> 00:12:04,079

well

117

00:12:07,190 --> 00:12:05,920

so really dragon's performing extremely

118

00:12:09,110 --> 00:12:07,200

well

119

00:12:11,750 --> 00:12:09,120

just kind of the next

120

00:12:14,389 --> 00:12:11,760

few hours and into that tomorrow

121

00:12:15,670 --> 00:12:14,399

you know the crew now is joined as part

122

00:12:17,750 --> 00:12:15,680

of the space station crew there's a

123

00:12:20,069 --> 00:12:17,760

safety brief going on today they'll go

124

00:12:22,069 --> 00:12:20,079

to sleep here around 4 30 this afternoon

125

00:12:24,310 --> 00:12:22,079

and then they join this the station

126  
00:12:26,150 --> 00:12:24,320  
complement of crew to execute what we

127  
00:12:27,910 --> 00:12:26,160  
need on station so it's kind of this

128  
00:12:30,710 --> 00:12:27,920  
hybrid mission still we'll have some

129  
00:12:32,230 --> 00:12:30,720  
other objectives uh while we're docked

130  
00:12:33,910 --> 00:12:32,240  
to demonstrate other capabilities of

131  
00:12:35,350 --> 00:12:33,920  
dragon it serves as a lifeboat we'll

132  
00:12:36,310 --> 00:12:35,360  
practice some of that in the next couple

133  
00:12:38,069 --> 00:12:36,320  
days

134  
00:12:40,310 --> 00:12:38,079  
and we'll do some other tests just to

135  
00:12:41,430 --> 00:12:40,320  
verify all the dragon systems but again

136  
00:12:43,269 --> 00:12:41,440  
we're really excited we're going to

137  
00:12:45,829 --> 00:12:43,279  
continue to look at all the data you

138  
00:12:47,350 --> 00:12:45,839

know great mission so far but we've got

139

00:12:49,269 --> 00:12:47,360

to continue to be vigilant and look at

140

00:12:51,030 --> 00:12:49,279

all the data while we're docked

141

00:12:53,590 --> 00:12:51,040

i'll turn it back over to you tina thank

142

00:12:57,030 --> 00:12:53,600

you next we'll hear from kenny todd the

143

00:12:58,790 --> 00:12:57,040

iss deputy program manager

144

00:13:02,310 --> 00:12:58,800

well thank you bettina and it's great to

145

00:13:05,590 --> 00:13:02,320

be here uh what an incredible 24 hours

146

00:13:07,590 --> 00:13:05,600

for for human space flight

147

00:13:10,069 --> 00:13:07,600

you don't have to be just american if

148

00:13:12,790 --> 00:13:10,079

you're just a fan of human space flight

149

00:13:14,790 --> 00:13:12,800

and and exploring and going going beyond

150

00:13:15,829 --> 00:13:14,800

the levels of what we understand to to

151

00:13:17,350 --> 00:13:15,839

discover

152

00:13:19,269 --> 00:13:17,360

you can't help but be excited about

153

00:13:21,430 --> 00:13:19,279

what's happened the last 24 hours it was

154

00:13:23,030 --> 00:13:21,440

it was very very cool to be a part of

155

00:13:24,790 --> 00:13:23,040

from an international space station

156

00:13:26,629 --> 00:13:24,800

program standpoint we don't think it

157

00:13:29,509 --> 00:13:26,639

could have gone any better this morning

158

00:13:31,829 --> 00:13:29,519

the station certainly was a good stable

159

00:13:33,910 --> 00:13:31,839

platform and and the commercial crew

160

00:13:36,230 --> 00:13:33,920

program and the and the spacex team

161

00:13:38,230 --> 00:13:36,240

delivered us an absolutely uh beautiful

162

00:13:40,870 --> 00:13:38,240

spacecraft and we're happy to have it on

163

00:13:42,629 --> 00:13:40,880

board on board the space station

164

00:13:45,269 --> 00:13:42,639

and equally as

165

00:13:46,310 --> 00:13:45,279

as glad to have bob and doug on board

166

00:13:48,230 --> 00:13:46,320

right now

167

00:13:50,069 --> 00:13:48,240

chris cassidy was a little lonely up

168

00:13:52,949 --> 00:13:50,079

there being the only person on the usos

169

00:13:55,670 --> 00:13:52,959

so having two two friends up there um we

170

00:13:57,269 --> 00:13:55,680

will do our best to uh to keep the three

171

00:13:59,430 --> 00:13:57,279

of them busy um

172

00:14:01,430 --> 00:13:59,440

and in concert with working with steve

173

00:14:04,150 --> 00:14:01,440

and a commercial crew program and spacex

174

00:14:06,629 --> 00:14:04,160

team to to learn as much as we can about

175

00:14:09,269 --> 00:14:06,639

about about the dragon

176  
00:14:10,790 --> 00:14:09,279  
and and as as others have stated this is

177  
00:14:12,629 --> 00:14:10,800  
a test flight

178  
00:14:14,870 --> 00:14:12,639  
what's really important for the

179  
00:14:16,550 --> 00:14:14,880  
international space station program is

180  
00:14:18,550 --> 00:14:16,560  
really the next mission of the dragon

181  
00:14:20,710 --> 00:14:18,560  
which is the crew one mission which is

182  
00:14:22,230 --> 00:14:20,720  
set up to be a long duration flight so

183  
00:14:24,310 --> 00:14:22,240  
what we want to do is learn as much as

184  
00:14:25,670 --> 00:14:24,320  
we can as quick as we can about this

185  
00:14:28,470 --> 00:14:25,680  
vehicle keep

186  
00:14:31,110 --> 00:14:28,480  
bob and doug busy uh doing work on that

187  
00:14:33,590 --> 00:14:31,120  
dragon and and on the space station and

188  
00:14:35,350 --> 00:14:33,600

and when the time's right um get them

189

00:14:37,670 --> 00:14:35,360

back home safely and then and then start

190

00:14:40,150 --> 00:14:37,680

looking towards getting getting the uh

191

00:14:41,829 --> 00:14:40,160

the crew one mission mission on board so

192

00:14:43,269 --> 00:14:41,839

anyway uh we're looking forward to the

193

00:14:44,790 --> 00:14:43,279

next few weeks a couple of months

194

00:14:47,030 --> 00:14:44,800

whatever it turns out to be but uh

195

00:14:48,310 --> 00:14:47,040

certainly it's off to a great start

196

00:14:50,389 --> 00:14:48,320

thank you madinah

197

00:14:54,389 --> 00:14:50,399

thank you kenny and next we'll hear from

198

00:14:58,310 --> 00:14:56,470

thank you bettina you know what a

199

00:15:00,710 --> 00:14:58,320

incredible privilege to be a part of

200

00:15:02,310 --> 00:15:00,720

this uh this phenomenal team this nasa

201  
00:15:05,189 --> 00:15:02,320  
spacex partnership

202  
00:15:07,670 --> 00:15:05,199  
and uh to be a part of

203  
00:15:08,870 --> 00:15:07,680  
um this historic past 24 hours to see

204  
00:15:10,230 --> 00:15:08,880  
that launch

205  
00:15:12,550 --> 00:15:10,240  
to see the vehicle dock with the

206  
00:15:14,310 --> 00:15:12,560  
international space station incredibly

207  
00:15:17,110 --> 00:15:14,320  
happy for bob and doug

208  
00:15:18,550 --> 00:15:17,120  
for nasa for spacex and for america

209  
00:15:19,829 --> 00:15:18,560  
you know for the past year and a half

210  
00:15:21,670 --> 00:15:19,839  
i've had the opportunity to train as the

211  
00:15:24,150 --> 00:15:21,680  
backup for this mission to work with bob

212  
00:15:26,389 --> 00:15:24,160  
and doug with spacex and with nasa

213  
00:15:28,150 --> 00:15:26,399

and it was just so cool to get to see

214

00:15:31,509 --> 00:15:28,160

all of those all that training those

215

00:15:34,629 --> 00:15:31,519

procedures um the simulations all kind

216

00:15:37,189 --> 00:15:34,639

of culminate in it happening real time

217

00:15:38,230 --> 00:15:37,199

and uh so incredibly excited uh

218

00:15:40,629 --> 00:15:38,240

to see

219

00:15:42,870 --> 00:15:40,639

bob and doug get to work now um as we as

220

00:15:43,829 --> 00:15:42,880

they do the the space station's mission

221

00:15:46,069 --> 00:15:43,839

um

222

00:15:47,990 --> 00:15:46,079

and then and then return safely home you

223

00:15:49,590 --> 00:15:48,000

know the the i know that my colleagues

224

00:15:51,509 --> 00:15:49,600

and friends in the astronaut office are

225

00:15:54,790 --> 00:15:51,519

incredibly excited too

226

00:15:59,509 --> 00:15:57,030

the opportunity to launch from u.s soil

227

00:16:01,030 --> 00:15:59,519

in the future and we're excited about

228

00:16:03,990 --> 00:16:01,040

that mission and excited to have the

229

00:16:07,990 --> 00:16:04,000

opportunity to find the future on this

230

00:16:09,030 --> 00:16:08,000

and our other partner spacecraft

231

00:16:10,790 --> 00:16:09,040

you michelle

232

00:16:12,550 --> 00:16:10,800

um well if you would like to ask a

233

00:16:14,389 --> 00:16:12,560

question you would please press star one

234

00:16:15,990 --> 00:16:14,399

and you'll be part of the queue we'll

235

00:16:18,230 --> 00:16:16,000

try to get to as many questions as

236

00:16:21,430 --> 00:16:18,240

possible um as usual we're going to ask

237

00:16:23,030 --> 00:16:21,440

for a one question per reporter to give

238

00:16:25,509 --> 00:16:23,040

all the media as many opportunities as

239

00:16:27,189 --> 00:16:25,519

possible to ask our questions and please

240

00:16:29,430 --> 00:16:27,199

direct your question to the person that

241

00:16:31,030 --> 00:16:29,440

you wanted to get answered so we'll

242

00:16:34,870 --> 00:16:31,040

start with our first question from

243

00:16:39,990 --> 00:16:37,269

hi everyone congrats on a successful

244

00:16:41,990 --> 00:16:40,000

docking uh jim this question is for you

245

00:16:43,749 --> 00:16:42,000

um as bob and doug slept last night the

246

00:16:46,310 --> 00:16:43,759

situation on the ground in the united

247

00:16:47,590 --> 00:16:46,320

states escalated and you said before

248

00:16:50,470 --> 00:16:47,600

that this mission is meant to bring

249

00:16:52,310 --> 00:16:50,480

people together and unite america

250

00:16:55,269 --> 00:16:52,320

unfortunately it's clear that a space

251  
00:16:58,230 --> 00:16:55,279  
mission even one as historic as this one

252  
00:17:00,629 --> 00:16:58,240  
is can't do that not in 1969 and not in

253  
00:17:03,030 --> 00:17:00,639  
2020 so i'm wondering do you think that

254  
00:17:04,549 --> 00:17:03,040  
the message here should change in any

255  
00:17:06,309 --> 00:17:04,559  
way how can we

256  
00:17:08,150 --> 00:17:06,319  
celebrate american space exploration

257  
00:17:11,270 --> 00:17:08,160  
while also recognizing what americans

258  
00:17:15,750 --> 00:17:13,029  
yeah so

259  
00:17:18,390 --> 00:17:15,760  
i think i'll uh i'll i'll just speak

260  
00:17:19,990 --> 00:17:18,400  
from the heart i think you know our

261  
00:17:22,150 --> 00:17:20,000  
country is going through some real

262  
00:17:23,510 --> 00:17:22,160  
challenges right now

263  
00:17:25,270 --> 00:17:23,520

and that's true

264

00:17:27,909 --> 00:17:25,280

when you look at the unrest and when you

265

00:17:29,750 --> 00:17:27,919

look at the coronavirus pandemic times

266

00:17:31,190 --> 00:17:29,760

are really tough

267

00:17:33,909 --> 00:17:31,200

but we've been through tough times

268

00:17:35,909 --> 00:17:33,919

before and even in those tough times

269

00:17:38,190 --> 00:17:35,919

the united states of america has an

270

00:17:41,430 --> 00:17:38,200

amazing ability to accomplish

271

00:17:43,350 --> 00:17:41,440

astonishingly impressive achievements

272

00:17:45,669 --> 00:17:43,360

and that's what this was

273

00:17:47,350 --> 00:17:45,679

and i will say that i think

274

00:17:49,350 --> 00:17:47,360

you know there was a moment of time

275

00:17:50,630 --> 00:17:49,360

yesterday when these two astronauts

276

00:17:52,789 --> 00:17:50,640

launched when

277

00:17:54,870 --> 00:17:52,799

everybody paused and and we thought

278

00:17:56,870 --> 00:17:54,880

about what the future could be and how

279

00:17:58,789 --> 00:17:56,880

much brighter it could be than it is

280

00:18:02,070 --> 00:17:58,799

right now at this moment

281

00:18:04,150 --> 00:18:02,080

um and and and nasa has a history of

282

00:18:05,270 --> 00:18:04,160

doing these astonishing things in tough

283

00:18:07,590 --> 00:18:05,280

times

284

00:18:09,590 --> 00:18:07,600

it requires leadership um

285

00:18:11,830 --> 00:18:09,600

and we've been able to achieve it

286

00:18:14,950 --> 00:18:11,840

even in the coronavirus pandemic we we

287

00:18:16,870 --> 00:18:14,960

made sure that we protected this mission

288

00:18:19,270 --> 00:18:16,880

this was the highest priority for the

289

00:18:21,750 --> 00:18:19,280

united states of america lot or for at

290

00:18:23,669 --> 00:18:21,760

least for nasa

291

00:18:25,350 --> 00:18:23,679

we were launching american astronauts on

292

00:18:27,669 --> 00:18:25,360

american rockets

293

00:18:29,830 --> 00:18:27,679

from american soil and our objective was

294

00:18:32,310 --> 00:18:29,840

to get that done and so we we moved very

295

00:18:34,310 --> 00:18:32,320

quickly uh when the coronavirus pandemic

296

00:18:36,070 --> 00:18:34,320

first broke out we moved very quickly to

297

00:18:37,909 --> 00:18:36,080

move to stage three and then to stage

298

00:18:40,070 --> 00:18:37,919

four make sure everybody was working

299

00:18:42,549 --> 00:18:40,080

from home but we protected this mission

300

00:18:44,390 --> 00:18:42,559

we protected the mars perseverance

301  
00:18:46,230 --> 00:18:44,400  
mission we named it perseverance

302  
00:18:48,310 --> 00:18:46,240  
intentionally because we need to

303  
00:18:49,990 --> 00:18:48,320  
persevere right now

304  
00:18:51,990 --> 00:18:50,000  
the mars perseverance mission is going

305  
00:18:55,510 --> 00:18:52,000  
to launch in july

306  
00:18:57,029 --> 00:18:55,520  
but yes these are very unifying things

307  
00:18:59,110 --> 00:18:57,039  
when we talk about human space

308  
00:19:01,110 --> 00:18:59,120  
exploration it has strong bipartisan

309  
00:19:03,350 --> 00:19:01,120  
support when we talk about space

310  
00:19:05,350 --> 00:19:03,360  
exploration in general and the science

311  
00:19:06,789 --> 00:19:05,360  
and discovery that comes from it which

312  
00:19:09,110 --> 00:19:06,799  
is what we're going to get from the mars

313  
00:19:11,350 --> 00:19:09,120

perseverance mission these are these are

314

00:19:14,870 --> 00:19:11,360

unifying kind of things republicans and

315

00:19:16,789 --> 00:19:14,880

democrats um and even internationally

316

00:19:19,350 --> 00:19:16,799

we get support for for these kind of

317

00:19:21,110 --> 00:19:19,360

activities so um i do think that this

318

00:19:23,669 --> 00:19:21,120

was a moment in time for people to

319

00:19:25,909 --> 00:19:23,679

reflect on what is great about

320

00:19:27,830 --> 00:19:25,919

exploration what is great about the

321

00:19:31,669 --> 00:19:27,840

united states of america and what we can

322

00:19:38,870 --> 00:19:34,070

thank you jim our next question comes

323

00:19:43,350 --> 00:19:40,950

hi thank you for taking my question uh

324

00:19:44,390 --> 00:19:43,360

my question is probably for uh steve

325

00:19:46,789 --> 00:19:44,400

stitch

326

00:19:48,710 --> 00:19:46,799

um looking forward looking ahead over

327

00:19:51,750 --> 00:19:48,720

the next few weeks i know he'll be

328

00:19:54,070 --> 00:19:51,760

looking at some data on the solar

329

00:19:55,830 --> 00:19:54,080

to determine how long this mission

330

00:19:57,270 --> 00:19:55,840

can remain in orbit do you do you have

331

00:19:59,909 --> 00:19:57,280

any idea how long that will take when

332

00:20:01,990 --> 00:19:59,919

that assessment might occur uh do you

333

00:20:04,549 --> 00:20:02,000

have some sort of idea whether it's days

334

00:20:06,630 --> 00:20:04,559

or weeks as we monitor the solar ray

335

00:20:08,630 --> 00:20:06,640

performance and if i could also uh

336

00:20:10,710 --> 00:20:08,640

quickly uh one of the differences

337

00:20:13,029 --> 00:20:10,720

between this spacecraft on demo2 and the

338

00:20:15,110 --> 00:20:13,039

crew dragon that'll fly through one i

339

00:20:16,870 --> 00:20:15,120

know there's some some some differences

340

00:20:18,710 --> 00:20:16,880

so can you sort of describe a few of

341

00:20:20,870 --> 00:20:18,720

those thank you

342

00:20:22,310 --> 00:20:20,880

yeah sure stephen uh to address your

343

00:20:23,750 --> 00:20:22,320

first question how how long is the

344

00:20:26,549 --> 00:20:23,760

mission going to be

345

00:20:28,149 --> 00:20:26,559

uh we've certified the systems on this

346

00:20:30,789 --> 00:20:28,159

dragon vehicle

347

00:20:32,710 --> 00:20:30,799

to to be able to last about 120 days so

348

00:20:34,870 --> 00:20:32,720

that's the capability and that is driven

349

00:20:36,950 --> 00:20:34,880

by the solar rays they slowly degrade

350

00:20:38,870 --> 00:20:36,960

over time we'll start watching those

351  
00:20:40,630 --> 00:20:38,880  
we'll power up the spacecraft about once

352  
00:20:42,230 --> 00:20:40,640  
a week and we'll get some data on those

353  
00:20:44,470 --> 00:20:42,240  
solar rays so it'll probably take a few

354  
00:20:47,990 --> 00:20:44,480  
weeks to get trending on that to see

355  
00:20:49,750 --> 00:20:48,000  
hey is that 120 days about right

356  
00:20:52,149 --> 00:20:49,760  
today the dragon is extremely healthy

357  
00:20:53,430 --> 00:20:52,159  
there's really no major problem so it

358  
00:20:55,190 --> 00:20:53,440  
should be able to stay for a longer

359  
00:20:57,029 --> 00:20:55,200  
period of time but not only are we

360  
00:20:59,029 --> 00:20:57,039  
looking at this particular vehicle we're

361  
00:21:01,110 --> 00:20:59,039  
also looking ahead to crew one as kenny

362  
00:21:02,470 --> 00:21:01,120  
said that's an important mission for us

363  
00:21:04,390 --> 00:21:02,480

it has four crew

364

00:21:05,270 --> 00:21:04,400

it really is what commercial crew is

365

00:21:07,190 --> 00:21:05,280

about

366

00:21:09,590 --> 00:21:07,200

uh having a vehicle ready to do these

367

00:21:11,270 --> 00:21:09,600

increment missions so that we'll look at

368

00:21:13,669 --> 00:21:11,280

that readiness of that vehicle right now

369

00:21:15,990 --> 00:21:13,679

it's targeting toward being launch ready

370

00:21:17,590 --> 00:21:16,000

at the end of august time frame and so

371

00:21:20,070 --> 00:21:17,600

we'll just kind of continue to look at

372

00:21:22,070 --> 00:21:20,080

this vehicle is it performing well we'll

373

00:21:23,909 --> 00:21:22,080

look at the readiness of that vehicle

374

00:21:26,149 --> 00:21:23,919

and then you know in a month or so we'll

375

00:21:28,070 --> 00:21:26,159

be able to make a decision as to as to

376

00:21:30,710 --> 00:21:28,080

how long to

377

00:21:32,549 --> 00:21:30,720

just keep this vehicle in orbit uh the

378

00:21:35,350 --> 00:21:32,559

second question was what's different

379

00:21:37,190 --> 00:21:35,360

between uh this version of dragon and

380

00:21:38,630 --> 00:21:37,200

the crew one vehicle uh which is the

381

00:21:40,310 --> 00:21:38,640

next dragon

382

00:21:44,070 --> 00:21:40,320

they're very similar in terms of their

383

00:21:45,909 --> 00:21:44,080

systems uh the life support the gnc

384

00:21:47,590 --> 00:21:45,919

the crew one vehicle can land in a

385

00:21:49,590 --> 00:21:47,600

little bit higher wind state

386

00:21:51,510 --> 00:21:49,600

the spacex has changed

387

00:21:53,430 --> 00:21:51,520

some of the outer composite panels to

388

00:21:56,149 --> 00:21:53,440

make that a little stronger it can land

389

00:21:59,190 --> 00:21:56,159

in higher winds it also has the

390

00:22:00,710 --> 00:21:59,200

capability to dock not only to the ford

391

00:22:02,789 --> 00:22:00,720

port of the space station but it can go

392

00:22:04,549 --> 00:22:02,799

to the zenith port as well so it has

393

00:22:06,070 --> 00:22:04,559

that capability

394

00:22:08,549 --> 00:22:06,080

and it has a couple of other features

395

00:22:10,549 --> 00:22:08,559

but largely it's the same vehicle

396

00:22:12,149 --> 00:22:10,559

and it's set up for four crew and then

397

00:22:13,990 --> 00:22:12,159

can dock at either port and then a

398

00:22:16,230 --> 00:22:14,000

little bit better capability relative to

399

00:22:20,149 --> 00:22:16,240

uh to landing and higher winds i would

400

00:22:23,830 --> 00:22:21,350

thank you

401  
00:22:30,870 --> 00:22:23,840  
um our next question comes from stephen

402  
00:22:35,909 --> 00:22:33,590  
uh did you mean keith kelly oh sorry the

403  
00:22:38,070 --> 00:22:35,919  
operator put stephen cowan keith happy

404  
00:22:40,630 --> 00:22:38,080  
you can join us your question please

405  
00:22:42,230 --> 00:22:40,640  
that was my evil twin mr breidenstein

406  
00:22:43,990 --> 00:22:42,240  
i've been watching a lot of tv lately

407  
00:22:45,830 --> 00:22:44,000  
with a lot of split screens

408  
00:22:48,710 --> 00:22:45,840  
nasa on one side riots and the other and

409  
00:22:50,710 --> 00:22:48,720  
it reminds me of 1968 when i was a kid

410  
00:22:52,630 --> 00:22:50,720  
watching the apollo missions

411  
00:22:54,950 --> 00:22:52,640  
you say that the demo 2 coverage topped

412  
00:22:57,430 --> 00:22:54,960  
everything yet these heat charts that

413  
00:22:59,510 --> 00:22:57,440

you were showing on tv yesterday seem to

414

00:23:00,870 --> 00:22:59,520

suggest that the only interest that we

415

00:23:02,149 --> 00:23:00,880

you're seeing is from the states where

416

00:23:04,149 --> 00:23:02,159

the dragon was built and flown in

417

00:23:06,149 --> 00:23:04,159

california texas and florida

418

00:23:08,230 --> 00:23:06,159

can you provide some more detailed stats

419

00:23:09,909 --> 00:23:08,240

to back up your claims but moreover and

420

00:23:11,669 --> 00:23:09,919

i know this has been asked many times

421

00:23:13,510 --> 00:23:11,679

how do you convince the millions of

422

00:23:15,270 --> 00:23:13,520

angry and upset people who were not

423

00:23:17,830 --> 00:23:15,280

watching tv they're out in the streets

424

00:23:19,990 --> 00:23:17,840

with their phones and wearing gas masks

425

00:23:21,830 --> 00:23:20,000

that two guys in a spaceship is more

426

00:23:23,990 --> 00:23:21,840

important than the problems that in

427

00:23:26,470 --> 00:23:24,000

quotes we have here back on earth which

428

00:23:27,990 --> 00:23:26,480

was the line that we used back in 1968

429

00:23:30,149 --> 00:23:28,000

there doesn't seem to be a connection

430

00:23:32,630 --> 00:23:30,159

between what nasa is doing and this

431

00:23:35,669 --> 00:23:32,640

subset of the population who is looking

432

00:23:37,430 --> 00:23:36,470

yeah

433

00:23:38,789 --> 00:23:37,440

um

434

00:23:41,350 --> 00:23:38,799

look uh

435

00:23:43,590 --> 00:23:41,360

i think what nasa does is um is

436

00:23:46,390 --> 00:23:43,600

astonishing it's impressive

437

00:23:50,630 --> 00:23:46,400

um and it does bring people together

438

00:23:51,830 --> 00:23:50,640

um if if the expectation was that things

439

00:23:53,990 --> 00:23:51,840

on the ground were going to change

440

00:23:55,590 --> 00:23:54,000

because we launched a rocket i i think

441

00:23:56,630 --> 00:23:55,600

maybe the expectation might have been a

442

00:24:00,789 --> 00:23:56,640

little high

443

00:24:02,230 --> 00:24:00,799

um but but i will tell you that

444

00:24:04,070 --> 00:24:02,240

you know

445

00:24:05,990 --> 00:24:04,080

what bettina do you have the numbers on

446

00:24:07,750 --> 00:24:06,000

how many how many people watched on nasa

447

00:24:09,750 --> 00:24:07,760

tv so we're still collecting the data

448

00:24:12,789 --> 00:24:09,760

but some of um our metrics are saying is

449

00:24:15,350 --> 00:24:12,799

peak viewership for the may 30th joint

450

00:24:17,750 --> 00:24:15,360

nasa spacex launch broadcast across all

451  
00:24:19,669 --> 00:24:17,760  
of our platforms was at least 10.3

452  
00:24:21,990 --> 00:24:19,679  
million concurrent viewers the most

453  
00:24:25,430 --> 00:24:22,000  
watched events we've ever tracked yeah

454  
00:24:28,149 --> 00:24:25,440  
so i i think i think it is impressive um

455  
00:24:29,669 --> 00:24:28,159  
and i think um i think a lot of people

456  
00:24:30,630 --> 00:24:29,679  
saw it i think the whole world saw it

457  
00:24:33,990 --> 00:24:30,640  
and

458  
00:24:36,070 --> 00:24:34,000  
want to make sure that uh we can

459  
00:24:38,630 --> 00:24:36,080  
continue to congratulate the spacex team

460  
00:24:41,590 --> 00:24:38,640  
and the nasa team for doing amazing work

461  
00:24:42,950 --> 00:24:41,600  
um even in the midst of tough times

462  
00:24:45,269 --> 00:24:42,960  
and i will say those numbers are only

463  
00:24:47,990 --> 00:24:45,279

for the nasa spacex that doesn't count

464

00:24:49,990 --> 00:24:48,000

broadcast and other agencies and news

465

00:24:51,990 --> 00:24:50,000

outlets that we're talking and promoting

466

00:24:53,909 --> 00:24:52,000

are this incredible achievement for

467

00:24:56,549 --> 00:24:53,919

humanity

468

00:25:04,789 --> 00:24:56,559

so we'll go to our next question

469

00:25:10,470 --> 00:25:07,590

talk with elon musk send stalking and if

470

00:25:11,270 --> 00:25:10,480

so if you've heard from him and

471

00:25:12,789 --> 00:25:11,280

how he's

472

00:25:14,470 --> 00:25:12,799

[Music]

473

00:25:16,230 --> 00:25:14,480

dealing with all the good news today

474

00:25:18,230 --> 00:25:16,240

thank you marcia can you repeat your

475

00:25:19,909 --> 00:25:18,240

question we think we missed the first

476  
00:25:21,830 --> 00:25:19,919  
half of it and if anyone has other

477  
00:25:23,190 --> 00:25:21,840  
questions please press the star one to

478  
00:25:25,269 --> 00:25:23,200  
be added to the cube but marcia if you

479  
00:25:27,830 --> 00:25:25,279  
could please repeat your question

480  
00:25:30,230 --> 00:25:27,840  
yes for mr brindenstein i'm wondering if

481  
00:25:32,710 --> 00:25:30,240  
you've had a chance to touch base with

482  
00:25:35,029 --> 00:25:32,720  
elon musk since the docking

483  
00:25:37,430 --> 00:25:35,039  
and if so

484  
00:25:38,549 --> 00:25:37,440  
what he's saying about it thank you

485  
00:25:40,870 --> 00:25:38,559  
i have not

486  
00:25:42,950 --> 00:25:40,880  
since the docking occurred a few hours

487  
00:25:45,669 --> 00:25:42,960  
ago i have not had the opportunity to

488  
00:25:49,110 --> 00:25:45,679

488 speak with elon musk but that will be

489

00:25:50,870 --> 00:25:49,120

coming up i would assume in a few hours

490

00:25:52,789 --> 00:25:50,880

and i can just say from the whole spacex

491

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

team uh i've talked to a lot of their

492

00:25:56,710 --> 00:25:54,480

leadership they're just ecstatic their

493

00:25:58,870 --> 00:25:56,720

mission directors are extremely happy

494

00:26:00,630 --> 00:25:58,880

they're engineers the lead of the dragon

495

00:26:02,310 --> 00:26:00,640

production you know his vehicle did it

496

00:26:04,070 --> 00:26:02,320

out outstanding

497

00:26:05,909 --> 00:26:04,080

in these first 24 hours of the mission

498

00:26:07,110 --> 00:26:05,919

so you know when you talk to the spacex

499

00:26:08,470 --> 00:26:07,120

employees they're

500

00:26:10,870 --> 00:26:08,480

very proud of what they've done they've

501  
00:26:15,350 --> 00:26:10,880  
worked very hard and they're excited to

502  
00:26:19,430 --> 00:26:17,190  
so if there's any other questions right

503  
00:26:21,029 --> 00:26:19,440  
now we've gone through most of our

504  
00:26:22,549 --> 00:26:21,039  
questions i guess we've done so many

505  
00:26:24,070 --> 00:26:22,559  
great media events throughout the last

506  
00:26:26,470 --> 00:26:24,080  
few days i know we've tried to give as

507  
00:26:29,029 --> 00:26:26,480  
many access to reporters if anyone has a

508  
00:26:30,390 --> 00:26:29,039  
question you could please press star one

509  
00:26:33,990 --> 00:26:30,400  
to be added

510  
00:26:38,310 --> 00:26:36,149  
in the meantime

511  
00:26:39,990 --> 00:26:38,320  
we'll say i know the administrator we've

512  
00:26:41,350 --> 00:26:40,000  
gotten a lot of um

513  
00:26:42,630 --> 00:26:41,360

we've got a lot of questions like what's

514

00:26:45,590 --> 00:26:42,640

happening with the astronauts we heard

515

00:26:47,430 --> 00:26:45,600

them just recently thankfully through

516

00:26:49,430 --> 00:26:47,440

through the down link that when we spot

517

00:26:51,669 --> 00:26:49,440

you spoke to them on mission control any

518

00:26:53,669 --> 00:26:51,679

thoughts on that or or guy or anyone

519

00:26:55,110 --> 00:26:53,679

that's joining us on the panel of what

520

00:26:56,470 --> 00:26:55,120

the astronauts are doing now what's

521

00:26:57,669 --> 00:26:56,480

going on in the next few weeks and

522

00:27:00,230 --> 00:26:57,679

what's going to happen now that they're

523

00:27:01,990 --> 00:27:00,240

part of the iss team

524

00:27:04,310 --> 00:27:02,000

mark yeah maybe i could speak to that it

525

00:27:05,909 --> 00:27:04,320

was great to see them all together i

526  
00:27:06,950 --> 00:27:05,919  
know chris was looking forward to having

527  
00:27:08,710 --> 00:27:06,960  
help

528  
00:27:10,070 --> 00:27:08,720  
so yeah there's a there's a great video

529  
00:27:13,430 --> 00:27:10,080  
of them together

530  
00:27:15,269 --> 00:27:13,440  
um i think the key part now is as steve

531  
00:27:16,950 --> 00:27:15,279  
said the vehicle is there

532  
00:27:18,630 --> 00:27:16,960  
the crew's on board

533  
00:27:21,669 --> 00:27:18,640  
that was the main thing let's make sure

534  
00:27:23,990 --> 00:27:21,679  
dragon and and the mission is going well

535  
00:27:26,789 --> 00:27:24,000  
um and and kenny can speak to this there

536  
00:27:29,190 --> 00:27:26,799  
is a there are some options for bob and

537  
00:27:30,549 --> 00:27:29,200  
doug some actions for them to help chris

538  
00:27:31,990 --> 00:27:30,559

while they're there

539

00:27:34,630 --> 00:27:32,000

uh and that will be part of the

540

00:27:36,549 --> 00:27:34,640

assessment as well as making sure

541

00:27:38,149 --> 00:27:36,559

though that we have a landing plan since

542

00:27:41,029 --> 00:27:38,159

this is the first flight

543

00:27:43,590 --> 00:27:41,039

uh that we have a safe and uh

544

00:27:45,269 --> 00:27:43,600

fairly straightforward landing plan for

545

00:27:46,789 --> 00:27:45,279

bob and doug and that'll be that's what

546

00:27:48,870 --> 00:27:46,799

the team will be fleshing out in the

547

00:27:51,190 --> 00:27:48,880

next few weeks

548

00:27:53,350 --> 00:27:51,200

and i can i can talk a little bit about

549

00:27:54,789 --> 00:27:53,360

a few of the major objectives for us

550

00:27:56,549 --> 00:27:54,799

still remaining other than

551  
00:27:58,789 --> 00:27:56,559  
characterizing the vehicle

552  
00:28:00,149 --> 00:27:58,799  
uh we do we have a test i believe that's

553  
00:28:02,070 --> 00:28:00,159  
going to be planned for sometime next

554  
00:28:04,149 --> 00:28:02,080  
week where we're going to get

555  
00:28:05,669 --> 00:28:04,159  
four crew members in dragon just to see

556  
00:28:07,029 --> 00:28:05,679  
how that works from a habitability

557  
00:28:08,470 --> 00:28:07,039  
perspective

558  
00:28:09,909 --> 00:28:08,480  
while we're on orbit

559  
00:28:11,590 --> 00:28:09,919  
operating in zero g is a little

560  
00:28:15,029 --> 00:28:11,600  
different than on the ground

561  
00:28:16,789 --> 00:28:15,039  
so we'll do that we've got a test plan

562  
00:28:19,590 --> 00:28:16,799  
there's a there's a mode of dragon where

563  
00:28:20,710 --> 00:28:19,600

you can um actually go into it if

564

00:28:21,990 --> 00:28:20,720  
station were to have a problem

565

00:28:24,389 --> 00:28:22,000  
temporarily

566

00:28:27,269 --> 00:28:24,399  
you can transition into dragon and stay

567

00:28:29,430 --> 00:28:27,279  
there for a period of time for 24 hours

568

00:28:30,870 --> 00:28:29,440  
uh as what we call a safe haven we're

569

00:28:31,990 --> 00:28:30,880  
going to test that out here in the next

570

00:28:33,430 --> 00:28:32,000  
week

571

00:28:35,190 --> 00:28:33,440  
we'll do some tests of some of the other

572

00:28:37,190 --> 00:28:35,200  
emergency systems on dragon and other

573

00:28:39,110 --> 00:28:37,200  
cruise systems

574

00:28:41,029 --> 00:28:39,120  
so we have a few of those things planned

575

00:28:42,789 --> 00:28:41,039  
over the next week to get some of our

576

00:28:44,710 --> 00:28:42,799

test objectives done again for us it's

577

00:28:45,990 --> 00:28:44,720

still a test flight and then i think

578

00:28:47,269 --> 00:28:46,000

i'll hand it over to kenny and he can

579

00:28:49,350 --> 00:28:47,279

talk about some of the activities

580

00:28:50,389 --> 00:28:49,360

stations planning over the next few

581

00:28:52,230 --> 00:28:50,399

weeks

582

00:28:54,549 --> 00:28:52,240

thanks steve um

583

00:28:57,269 --> 00:28:54,559

yes we're we are now starting to

584

00:29:00,389 --> 00:28:57,279

integrate the plan between what what we

585

00:29:02,310 --> 00:29:00,399

need to do uh for the for the dragon uh

586

00:29:03,830 --> 00:29:02,320

crew vehicle what kind of things we need

587

00:29:05,510 --> 00:29:03,840

to learn the test objectives that are

588

00:29:06,950 --> 00:29:05,520

specific to the to the commercial crew

589

00:29:08,070 --> 00:29:06,960

program and the spacex team that will

590

00:29:10,310 --> 00:29:08,080

help them

591

00:29:12,549 --> 00:29:10,320

again get a little step closer to to

592

00:29:13,909 --> 00:29:12,559

being able to support the crew 1

593

00:29:15,510 --> 00:29:13,919

mission needs

594

00:29:17,430 --> 00:29:15,520

but in addition to that

595

00:29:18,230 --> 00:29:17,440

we have a couple of spacewalkers on who

596

00:29:21,510 --> 00:29:18,240

have

597

00:29:24,470 --> 00:29:21,520

an incredible amount of of experience

598

00:29:27,190 --> 00:29:24,480

being outside station and so

599

00:29:29,029 --> 00:29:27,200

we are blessed at this point with with a

600

00:29:31,510 --> 00:29:29,039

whole new set of lithium ion batteries

601  
00:29:33,830 --> 00:29:31,520  
that just arrived on the htv vehicle

602  
00:29:35,830 --> 00:29:33,840  
and uh so that's going to take somewhere

603  
00:29:38,950 --> 00:29:35,840  
on the order of four to five evas to

604  
00:29:41,909 --> 00:29:38,960  
install those and so uh at this point um

605  
00:29:43,990 --> 00:29:41,919  
we are looking at all options that could

606  
00:29:45,990 --> 00:29:44,000  
allow us to do those evas while we have

607  
00:29:48,070 --> 00:29:46,000  
bob and doug on board

608  
00:29:49,669 --> 00:29:48,080  
and get those those lithium ion

609  
00:29:50,870 --> 00:29:49,679  
batteries installed in their permanent

610  
00:29:52,789 --> 00:29:50,880  
home

611  
00:29:54,789 --> 00:29:52,799  
certainly they're fine where they're at

612  
00:29:58,070 --> 00:29:54,799  
but i do worry

613  
00:29:59,510 --> 00:29:58,080

this is a fairly expensive hardware

614

00:30:02,389 --> 00:29:59,520

the the batteries that are currently

615

00:30:04,149 --> 00:30:02,399

installed on station on s6 are the last

616

00:30:06,310 --> 00:30:04,159

set of batteries that we need to replace

617

00:30:07,909 --> 00:30:06,320

with these new lithium-ion batteries

618

00:30:10,149 --> 00:30:07,919

those batteries are in good shape at

619

00:30:12,070 --> 00:30:10,159

this point but the fact of the matter is

620

00:30:14,070 --> 00:30:12,080

we have the new batteries up there uh

621

00:30:15,510 --> 00:30:14,080

when the htv goes away we're basically

622

00:30:17,430 --> 00:30:15,520

going to have to temp stow these new

623

00:30:19,190 --> 00:30:17,440

batteries and it would be in our best

624

00:30:22,070 --> 00:30:19,200

interest to go ahead and have those

625

00:30:24,950 --> 00:30:22,080

batteries installed and uh and and have

626

00:30:28,149 --> 00:30:24,960

that work behind us and and not have uh

627

00:30:29,830 --> 00:30:28,159

these uh these assets um basically in

628

00:30:31,350 --> 00:30:29,840

this temporary holding pattern if you

629

00:30:33,510 --> 00:30:31,360

will so that's something we're going to

630

00:30:35,590 --> 00:30:33,520

be looking at as we start to put the

631

00:30:36,950 --> 00:30:35,600

requirements together

632

00:30:38,789 --> 00:30:36,960

for what we need to do with the

633

00:30:42,230 --> 00:30:38,799

commercial crew program as well as what

634

00:30:43,590 --> 00:30:42,240

we need to do uh with the with these uh

635

00:30:45,750 --> 00:30:43,600

with these batteries and some of the

636

00:30:46,710 --> 00:30:45,760

other things on station but in addition

637

00:30:49,190 --> 00:30:46,720

to that

638

00:30:50,710 --> 00:30:49,200

anytime we have more than a single crew

639

00:30:52,549 --> 00:30:50,720

member on board we're in a much better

640

00:30:54,070 --> 00:30:52,559

position when it comes to to dealing

641

00:30:56,789 --> 00:30:54,080

with any kind of

642

00:30:58,710 --> 00:30:56,799

issues failures that that might come up

643

00:31:00,549 --> 00:30:58,720

so again that's part of the balance the

644

00:31:02,630 --> 00:31:00,559

risk balance that we have to strike in

645

00:31:04,470 --> 00:31:02,640

terms of trying to trying to look at

646

00:31:06,950 --> 00:31:04,480

what we want to try to accomplish

647

00:31:09,509 --> 00:31:06,960

on this mission versus versus trying to

648

00:31:12,230 --> 00:31:09,519

uh trying to to get these guys safely

649

00:31:14,070 --> 00:31:12,240

home uh sooner rather than later and uh

650

00:31:16,310 --> 00:31:14,080

and again start working towards the crew

651  
00:31:18,470 --> 00:31:16,320  
one mission

652  
00:31:20,470 --> 00:31:18,480  
and i would just add from a uh a crew

653  
00:31:22,310 --> 00:31:20,480  
perspective that i know that bob and

654  
00:31:24,389 --> 00:31:22,320  
doug are just excited to be

655  
00:31:26,630 --> 00:31:24,399  
on uh lower in low earth orbit

656  
00:31:27,590 --> 00:31:26,640  
successfully docked to the space station

657  
00:31:29,269 --> 00:31:27,600  
um

658  
00:31:31,269 --> 00:31:29,279  
and uh and i think at this point they

659  
00:31:32,630 --> 00:31:31,279  
can breathe a sigh of relief you know

660  
00:31:34,470 --> 00:31:32,640  
launch of course is an incredibly

661  
00:31:35,430 --> 00:31:34,480  
dynamic phase of flight

662  
00:31:37,029 --> 00:31:35,440  
um

663  
00:31:38,710 --> 00:31:37,039

meeting all of the manual flying

664

00:31:41,190 --> 00:31:38,720

objectives having the opportunity to fly

665

00:31:42,630 --> 00:31:41,200

a spaceship in uh in low earth orbit

666

00:31:44,310 --> 00:31:42,640

both away from the station and then

667

00:31:46,870 --> 00:31:44,320

closer to the station to demonstrate

668

00:31:48,470 --> 00:31:46,880

that capability and then to have a

669

00:31:50,870 --> 00:31:48,480

successful docking and to come through

670

00:31:53,350 --> 00:31:50,880

that hatch that at this point they can

671

00:31:55,110 --> 00:31:53,360

they can relax a little bit and enjoy

672

00:31:56,870 --> 00:31:55,120

being on the international space station

673

00:32:00,310 --> 00:31:56,880

having that opportunity to look out the

674

00:32:02,310 --> 00:32:00,320

window to see the earth below

675

00:32:04,549 --> 00:32:02,320

to float to have a maybe have a meal

676  
00:32:06,389 --> 00:32:04,559  
with the crew that's on board that they

677  
00:32:07,750 --> 00:32:06,399  
just joined

678  
00:32:10,070 --> 00:32:07,760  
i know they're doing a safety brief

679  
00:32:11,110 --> 00:32:10,080  
right now and and i recall doing that

680  
00:32:13,269 --> 00:32:11,120  
getting

681  
00:32:15,830 --> 00:32:13,279  
meeting up with scott kelly and the rest

682  
00:32:17,830 --> 00:32:15,840  
of uh the ex the crew members that were

683  
00:32:19,430 --> 00:32:17,840  
on board during my expedition

684  
00:32:20,710 --> 00:32:19,440  
and going through all the emergency

685  
00:32:23,190 --> 00:32:20,720  
equipment

686  
00:32:25,029 --> 00:32:23,200  
uh kind of being shown hey this is where

687  
00:32:27,350 --> 00:32:25,039  
the toilet is this is where you're

688  
00:32:29,350 --> 00:32:27,360

staying uh this is where the food is

689

00:32:31,029 --> 00:32:29,360

kind of crossing off all those important

690

00:32:32,630 --> 00:32:31,039

uh important items

691

00:32:34,310 --> 00:32:32,640

and then uh

692

00:32:37,029 --> 00:32:34,320

and having that opportunity to just get

693

00:32:38,870 --> 00:32:37,039

again get used to floating um in space

694

00:32:41,269 --> 00:32:38,880

being in that weightless environment bob

695

00:32:43,190 --> 00:32:41,279

and doug of course are are veteran space

696

00:32:45,909 --> 00:32:43,200

fliers so that uh that re-adaptation

697

00:32:48,149 --> 00:32:45,919

process will will happen very quickly um

698

00:32:50,710 --> 00:32:48,159

but uh i know that they're enjoying

699

00:32:52,710 --> 00:32:50,720

being in low earth orbit uh

700

00:32:55,029 --> 00:32:52,720

and looking forward to the work ahead

701  
00:32:56,630 --> 00:32:55,039  
but uh at this point kind of reflecting

702  
00:33:00,070 --> 00:32:56,640  
on this incredible experience the

703  
00:33:03,509 --> 00:33:00,080  
incredible past 24 hours and the team at

704  
00:33:09,430 --> 00:33:03,519  
nasa at spacex their family and friends

705  
00:33:14,230 --> 00:33:11,909  
thank you so much um i know mr you were

706  
00:33:17,830 --> 00:33:14,240  
talking earlier about um what's next

707  
00:33:20,470 --> 00:33:17,840  
with the program anything to add on that

708  
00:33:22,710 --> 00:33:20,480  
uh obviously you know we've had a big

709  
00:33:24,470 --> 00:33:22,720  
agenda to commercialize low earth orbit

710  
00:33:26,230 --> 00:33:24,480  
that's underway

711  
00:33:28,310 --> 00:33:26,240  
certainly we are launching american

712  
00:33:30,630 --> 00:33:28,320  
astronauts commercially

713  
00:33:32,310 --> 00:33:30,640

we we need spacex to go get customers

714

00:33:34,710 --> 00:33:32,320

that are not nasa

715

00:33:36,470 --> 00:33:34,720

we've already seen evidence of that

716

00:33:38,230 --> 00:33:36,480

which is a very positive thing for the

717

00:33:39,990 --> 00:33:38,240

agency because it's going to drive down

718

00:33:41,430 --> 00:33:40,000

our costs in the long run

719

00:33:42,870 --> 00:33:41,440

we need to get another commercial

720

00:33:45,029 --> 00:33:42,880

partner on board

721

00:33:47,669 --> 00:33:45,039

boeing is working towards that you know

722

00:33:48,870 --> 00:33:47,679

that objective with nasa

723

00:33:51,509 --> 00:33:48,880

and i think that we're going to have

724

00:33:53,190 --> 00:33:51,519

success there within the next year

725

00:33:55,669 --> 00:33:53,200

we think about

726  
00:33:57,509 --> 00:33:55,679  
really why why are we doing these these

727  
00:33:59,029 --> 00:33:57,519  
uh commercial public-private

728  
00:34:01,029 --> 00:33:59,039  
partnerships well we're doing it because

729  
00:34:03,110 --> 00:34:01,039  
we're changing the business model

730  
00:34:04,950 --> 00:34:03,120  
um you know if the government is

731  
00:34:06,950 --> 00:34:04,960  
providing all of the demand for human

732  
00:34:08,869 --> 00:34:06,960  
space flight and then the government is

733  
00:34:11,829 --> 00:34:08,879  
providing all of the supply for human

734  
00:34:14,069 --> 00:34:11,839  
space flights we will always be limited

735  
00:34:15,510 --> 00:34:14,079  
uh by budgets and many times those

736  
00:34:17,510 --> 00:34:15,520  
budgets

737  
00:34:19,109 --> 00:34:17,520  
are whimsical based on

738  
00:34:21,750 --> 00:34:19,119

you know the the desires of the

739

00:34:24,710 --> 00:34:21,760

politicians that happened to be um you

740

00:34:26,710 --> 00:34:24,720

know in in in those roles at the time

741

00:34:27,909 --> 00:34:26,720

so if we want to have a sustainable

742

00:34:30,310 --> 00:34:27,919

long-term

743

00:34:32,149 --> 00:34:30,320

exploration campaign that includes not

744

00:34:33,829 --> 00:34:32,159

just government money but also private

745

00:34:35,829 --> 00:34:33,839

money we have to build these

746

00:34:38,069 --> 00:34:35,839

partnerships and we're doing it it's

747

00:34:41,109 --> 00:34:38,079

proving to be successful costs are

748

00:34:42,629 --> 00:34:41,119

coming down access is going up

749

00:34:44,069 --> 00:34:42,639

and we don't want to just stay in low

750

00:34:45,349 --> 00:34:44,079

earth orbit we want to go to the moon

751  
00:34:47,829 --> 00:34:45,359  
and on to mars

752  
00:34:50,230 --> 00:34:47,839  
that's going to require more investment

753  
00:34:52,710 --> 00:34:50,240  
and of course as we as we commercialize

754  
00:34:54,550 --> 00:34:52,720  
low earth orbit more more resources will

755  
00:34:57,109 --> 00:34:54,560  
be available for the moon program we

756  
00:34:58,950 --> 00:34:57,119  
call it artemis and eventually mars and

757  
00:35:00,790 --> 00:34:58,960  
so that's really that's really the

758  
00:35:03,030 --> 00:35:00,800  
future that we're looking towards we

759  
00:35:05,310 --> 00:35:03,040  
need to be focused on how we use the

760  
00:35:07,510 --> 00:35:05,320  
international space station for a

761  
00:35:10,470 --> 00:35:07,520  
commercialization effort

762  
00:35:12,470 --> 00:35:10,480  
so that private capital will flow in

763  
00:35:14,710 --> 00:35:12,480

again with public-private partnerships

764

00:35:17,190 --> 00:35:14,720

to the point where not just experiments

765

00:35:20,150 --> 00:35:17,200

are privately funded but also space

766

00:35:21,910 --> 00:35:20,160

stations themselves are privately funded

767

00:35:23,750 --> 00:35:21,920

and of course the johnson space center

768

00:35:26,150 --> 00:35:23,760

here where we are right now is going to

769

00:35:28,230 --> 00:35:26,160

be a leader in that effort

770

00:35:29,910 --> 00:35:28,240

and of course when we go to the moon we

771

00:35:31,670 --> 00:35:29,920

want to be able to stay

772

00:35:33,430 --> 00:35:31,680

and in order to achieve that we need

773

00:35:34,390 --> 00:35:33,440

commercial partners on the surface of

774

00:35:36,630 --> 00:35:34,400

the moon

775

00:35:39,190 --> 00:35:36,640

um and to that end the the president

776

00:35:40,950 --> 00:35:39,200

recently signed an executive order um

777

00:35:42,790 --> 00:35:40,960

saying that you know the resources that

778

00:35:44,710 --> 00:35:42,800

are extracted from the moon are

779

00:35:47,670 --> 00:35:44,720

available to the people who extract

780

00:35:50,069 --> 00:35:47,680

those resources and that follows

781

00:35:52,230 --> 00:35:50,079

many many years of law and precedent as

782

00:35:54,150 --> 00:35:52,240

it relates to international waters

783

00:35:56,550 --> 00:35:54,160

resources extracted from international

784

00:35:58,870 --> 00:35:56,560

waters belong to the individuals who

785

00:36:00,630 --> 00:35:58,880

extract those resources

786

00:36:02,630 --> 00:36:00,640

and that should apply

787

00:36:05,349 --> 00:36:02,640

to the moon and other celestial bodies

788

00:36:08,310 --> 00:36:05,359

as well to be clear the united states of

789

00:36:10,150 --> 00:36:08,320

america will always always always follow

790

00:36:12,150 --> 00:36:10,160

the outer space treaty

791

00:36:14,069 --> 00:36:12,160

and the moon and other celestial bodies

792

00:36:16,150 --> 00:36:14,079

cannot be appropriated for national

793

00:36:18,470 --> 00:36:16,160

sovereignty just like the ocean cannot

794

00:36:20,310 --> 00:36:18,480

be appropriated for national sovereignty

795

00:36:22,630 --> 00:36:20,320

although some nations don't follow that

796

00:36:24,150 --> 00:36:22,640

that is the international law

797

00:36:26,390 --> 00:36:24,160

and so

798

00:36:27,670 --> 00:36:26,400

we want to apply american values as we

799

00:36:30,390 --> 00:36:27,680

go forward

800

00:36:32,069 --> 00:36:30,400

to do that the artemis program we have

801  
00:36:35,670 --> 00:36:32,079  
established what we call the artemis

802  
00:36:38,190 --> 00:36:35,680  
accords which establishes how we expect

803  
00:36:41,349 --> 00:36:38,200  
nations to behave in space for the

804  
00:36:44,230 --> 00:36:41,359  
sustainability of exploration standards

805  
00:36:46,390 --> 00:36:44,240  
of behavior that make sure that not just

806  
00:36:48,390 --> 00:36:46,400  
this generation but many generations

807  
00:36:50,390 --> 00:36:48,400  
that come after us will be able to

808  
00:36:51,349 --> 00:36:50,400  
continue exploring space and going

809  
00:36:55,589 --> 00:36:51,359  
further

810  
00:36:58,550 --> 00:36:55,599  
before so today it's about low earth

811  
00:37:00,470 --> 00:36:58,560  
orbit tomorrow it's about the moon and

812  
00:37:01,990 --> 00:37:00,480  
of course we want to stay at the moon

813  
00:37:03,750 --> 00:37:02,000

for long periods of time we want to

814

00:37:05,510 --> 00:37:03,760

learn how to live and work on the moon

815

00:37:06,829 --> 00:37:05,520

we want to go with commercial partners

816

00:37:09,670 --> 00:37:06,839

international

817

00:37:12,470 --> 00:37:09,680

partners and and use the resources of

818

00:37:14,630 --> 00:37:12,480

the moon to live and work for long

819

00:37:17,430 --> 00:37:14,640

periods of time and then apply that

820

00:37:19,589 --> 00:37:17,440

architecture apply that learning

821

00:37:21,589 --> 00:37:19,599

at mars as well so

822

00:37:23,829 --> 00:37:21,599

the vision is big

823

00:37:26,150 --> 00:37:23,839

nasa's budget today is as high as it's

824

00:37:27,990 --> 00:37:26,160

ever been in nominal dollars

825

00:37:29,270 --> 00:37:28,000

maybe not in real dollars if we go back

826  
00:37:31,990 --> 00:37:29,280  
to apollo

827  
00:37:34,630 --> 00:37:32,000  
but maybe we can get there soon too

828  
00:37:37,589 --> 00:37:34,640  
the budget request for 2021 is

829  
00:37:39,589 --> 00:37:37,599  
is 25.2 billion dollars

830  
00:37:40,870 --> 00:37:39,599  
which is a three billion dollar increase

831  
00:37:42,390 --> 00:37:40,880  
in one year

832  
00:37:44,069 --> 00:37:42,400  
and so our budgets are going up they're

833  
00:37:45,829 --> 00:37:44,079  
going up rapidly

834  
00:37:47,990 --> 00:37:45,839  
my job is to make sure that we have the

835  
00:37:50,150 --> 00:37:48,000  
bipartisan a political support to

836  
00:37:51,910 --> 00:37:50,160  
achieve these objectives

837  
00:37:54,069 --> 00:37:51,920  
and so far we have been able we have

838  
00:37:56,150 --> 00:37:54,079

been able to do that

839

00:37:58,230 --> 00:37:56,160

but going to the moon and on to mars is

840

00:37:59,190 --> 00:37:58,240

going to be a tough a tough challenge

841

00:38:00,790 --> 00:37:59,200

and

842

00:38:02,390 --> 00:38:00,800

we don't want to go alone we want to go

843

00:38:04,150 --> 00:38:02,400

with international partners and we want

844

00:38:05,829 --> 00:38:04,160

to go with commercial partners and

845

00:38:08,069 --> 00:38:05,839

that's really what the artemis program

846

00:38:09,910 --> 00:38:08,079

is laying the foundation for and really

847

00:38:11,190 --> 00:38:09,920

it's in fact what the commercial program

848

00:38:13,589 --> 00:38:11,200

has already

849

00:38:15,430 --> 00:38:13,599

begun laying the foundation for so

850

00:38:16,390 --> 00:38:15,440

the agenda is big

851  
00:38:18,870 --> 00:38:16,400  
and

852  
00:38:21,670 --> 00:38:18,880  
our ambitions are big but certainly this

853  
00:38:24,150 --> 00:38:21,680  
nation um can lead and we want to lead

854  
00:38:26,630 --> 00:38:24,160  
in space we want to build a coalition um

855  
00:38:29,190 --> 00:38:26,640  
that can work together to achieve these

856  
00:38:30,710 --> 00:38:29,200  
um these stunning achievements uh we've

857  
00:38:33,109 --> 00:38:30,720  
started that with the international

858  
00:38:34,950 --> 00:38:33,119  
space station but there's a lot of room

859  
00:38:36,550 --> 00:38:34,960  
for more we've got 15 countries that

860  
00:38:38,069 --> 00:38:36,560  
operate the iss

861  
00:38:39,829 --> 00:38:38,079  
and there's a lot more countries that

862  
00:38:42,710 --> 00:38:39,839  
want to join us and certainly we want

863  
00:38:44,790 --> 00:38:42,720

them to to be a part of it as well so

864

00:38:46,950 --> 00:38:44,800

the future is very bright

865

00:38:48,230 --> 00:38:46,960

great we have a next question from mike

866

00:38:49,990 --> 00:38:48,240

wallace and if you want to ask a

867

00:38:53,510 --> 00:38:50,000

question you give us star one mike

868

00:38:57,750 --> 00:38:55,430

hi there mikewellspace.com thank you

869

00:38:59,270 --> 00:38:57,760

guys um and yeah this is a very exciting

870

00:39:01,750 --> 00:38:59,280

day i just want to say

871

00:39:03,670 --> 00:39:01,760

uh congratulations to everybody um i was

872

00:39:04,950 --> 00:39:03,680

just wondering kenny this is probably

873

00:39:08,150 --> 00:39:04,960

for

874

00:39:09,510 --> 00:39:08,160

but kenny um

875

00:39:11,589 --> 00:39:09,520

like have you heard anything from the

876

00:39:13,109 --> 00:39:11,599

international partners kind of based on

877

00:39:14,950 --> 00:39:13,119

on this milestone

878

00:39:17,190 --> 00:39:14,960

and what are their thoughts about having

879

00:39:19,910 --> 00:39:17,200

another private spaceship coming

880

00:39:22,230 --> 00:39:19,920

up to to the space station how it could

881

00:39:24,150 --> 00:39:22,240

could yeah that kind of theoretically be

882

00:39:26,069 --> 00:39:24,160

used by the international partners on

883

00:39:26,950 --> 00:39:26,079

the space station thank you

884

00:39:29,030 --> 00:39:26,960

uh

885

00:39:31,030 --> 00:39:29,040

you bet mike and that's a great question

886

00:39:33,829 --> 00:39:31,040

uh i've heard from all of our

887

00:39:37,270 --> 00:39:33,839

international partner uh contacts this

888

00:39:39,349 --> 00:39:37,280

morning um as you know most

889

00:39:40,950 --> 00:39:39,359

most of the partners are represented

890

00:39:43,589 --> 00:39:40,960

here in houston

891

00:39:45,349 --> 00:39:43,599

they have liaisons here uh which again

892

00:39:47,510 --> 00:39:45,359

helps to facilitate our communication

893

00:39:49,910 --> 00:39:47,520

back and forth on a day-to-day basis but

894

00:39:51,670 --> 00:39:49,920

they've been part of this entire effort

895

00:39:54,069 --> 00:39:51,680

that that led to

896

00:39:56,630 --> 00:39:54,079

to uh to the mission that we've all

897

00:39:59,190 --> 00:39:56,640

experienced over the last 24 hours and

898

00:40:01,670 --> 00:39:59,200

to a partner they have not been nothing

899

00:40:04,470 --> 00:40:01,680

but supportive and and

900

00:40:06,550 --> 00:40:04,480

after the docking today again i heard

901  
00:40:09,030 --> 00:40:06,560  
from every one of those partners all of

902  
00:40:10,950 --> 00:40:09,040  
them basically cheering us on and

903  
00:40:13,990 --> 00:40:10,960  
and talking about the the historic

904  
00:40:15,589 --> 00:40:14,000  
nature of uh not just yesterday but the

905  
00:40:18,150 --> 00:40:15,599  
entire time period that led up to the

906  
00:40:19,589 --> 00:40:18,160  
docking today so i think they all

907  
00:40:21,990 --> 00:40:19,599  
felt like they were part of something

908  
00:40:23,510 --> 00:40:22,000  
there was something something big and

909  
00:40:26,390 --> 00:40:23,520  
something grand and something that

910  
00:40:28,630 --> 00:40:26,400  
really really was a next step

911  
00:40:30,309 --> 00:40:28,640  
which uh as the administrator said you

912  
00:40:33,270 --> 00:40:30,319  
know we're trying to do the next steps

913  
00:40:35,829 --> 00:40:33,280

with with uh with partners and

914

00:40:37,910 --> 00:40:35,839

be they commercial or international and

915

00:40:39,349 --> 00:40:37,920

uh and and the set of partners that we

916

00:40:41,349 --> 00:40:39,359

work with on the international space

917

00:40:43,750 --> 00:40:41,359

station applaud these kind of efforts

918

00:40:46,230 --> 00:40:43,760

like what we're doing and and are are

919

00:40:48,470 --> 00:40:46,240

very supportive and and we're certainly

920

00:40:50,390 --> 00:40:48,480

working with them as part of our our our

921

00:40:51,270 --> 00:40:50,400

coalition of partners to

922

00:40:55,910 --> 00:40:51,280

to

923

00:40:57,510 --> 00:40:55,920

fly on these vehicles as well uh so so

924

00:40:59,030 --> 00:40:57,520

yes again we're just going to move

925

00:41:00,150 --> 00:40:59,040

forward from here and the partnerships

926  
00:41:01,670 --> 00:41:00,160  
going with us and they're going to be

927  
00:41:03,589 --> 00:41:01,680  
part of this effort to

928  
00:41:06,470 --> 00:41:03,599  
uh to continue flying these commercial

929  
00:41:08,950 --> 00:41:06,480  
vehicles to to station

930  
00:41:12,069 --> 00:41:08,960  
thank you i have a question that came in

931  
00:41:14,230 --> 00:41:12,079  
from joey roulette his question is is

932  
00:41:16,309 --> 00:41:14,240  
nasa still negotiations to fly a russian

933  
00:41:18,630 --> 00:41:16,319  
cosmonaut on crew

934  
00:41:22,630 --> 00:41:18,640  
dragon and when do you expect to lock

935  
00:41:27,270 --> 00:41:25,510  
well the answer the answer is yes uh we

936  
00:41:28,790 --> 00:41:27,280  
uh those are discussions that we're

937  
00:41:31,349 --> 00:41:28,800  
continuing to have with within the

938  
00:41:34,550 --> 00:41:31,359

international partnership um as you know

939

00:41:36,630 --> 00:41:34,560

up to this this uh this point we have

940

00:41:39,190 --> 00:41:36,640

been purchasing uh seats from our

941

00:41:41,750 --> 00:41:39,200

russian colleagues uh flying on on their

942

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

russian soyuz vehicles uh but certainly

943

00:41:46,390 --> 00:41:44,000

we are we are working in a direction to

944

00:41:48,550 --> 00:41:46,400

uh to come up with a a

945

00:41:50,790 --> 00:41:48,560

a different arrangement if you will that

946

00:41:53,109 --> 00:41:50,800

will allow us to to fly on each other's

947

00:41:55,910 --> 00:41:53,119

vehicles and therefore ensure that at

948

00:41:57,349 --> 00:41:55,920

any given time that we have

949

00:42:19,190 --> 00:41:57,359

a

950

00:42:21,910 --> 00:42:19,200

successes

951  
00:42:23,910 --> 00:42:21,920  
with these missions with steve kathy and

952  
00:42:26,230 --> 00:42:23,920  
the commercial crew program so so

953  
00:42:27,990 --> 00:42:26,240  
absolutely those are active discussions

954  
00:42:30,710 --> 00:42:28,000  
and again

955  
00:42:32,950 --> 00:42:30,720  
we'll we'll continue to to to head in

956  
00:42:34,950 --> 00:42:32,960  
that direction

957  
00:42:39,109 --> 00:42:34,960  
great our next question

958  
00:42:39,119 --> 00:42:41,829  
marina

959  
00:42:47,910 --> 00:42:45,349  
uh peanut be okay yes that's great um

960  
00:42:49,750 --> 00:42:47,920  
question about doug after he entered the

961  
00:42:51,109 --> 00:42:49,760  
space station we saw him dabbing at his

962  
00:42:52,069 --> 00:42:51,119  
forehead and then someone got him a

963  
00:42:53,510 --> 00:42:52,079

tissue

964

00:42:55,670 --> 00:42:53,520

poor guy looked like he hit his head on

965

00:42:59,109 --> 00:42:55,680

the way out um is that what happened did

966

00:43:02,069 --> 00:42:59,119

he start bleeding and is he okay

967

00:43:04,150 --> 00:43:02,079

yeah i i can take that one i mean yeah

968

00:43:05,109 --> 00:43:04,160

doug doug did uh as he was coming

969

00:43:07,910 --> 00:43:05,119

through

970

00:43:09,510 --> 00:43:07,920

he bumped his head um

971

00:43:10,870 --> 00:43:09,520

chell could probably talk to this it

972

00:43:13,670 --> 00:43:10,880

happened sometimes while you're on

973

00:43:15,670 --> 00:43:13,680

station he's fine he looked great in the

974

00:43:17,349 --> 00:43:15,680

press conference

975

00:43:20,710 --> 00:43:17,359

it just is one of those things i think

976

00:43:22,710 --> 00:43:20,720

joe talked about adapting right as you

977

00:43:25,270 --> 00:43:22,720

get your space legs underneath you he

978

00:43:27,349 --> 00:43:25,280

was in a relatively small vehicle for

979

00:43:29,990 --> 00:43:27,359

the first 19 hours or so then he went

980

00:43:31,510 --> 00:43:30,000

into a big big vehicle and uh

981

00:43:34,069 --> 00:43:31,520

and he bumped his head a little bit but

982

00:43:35,910 --> 00:43:34,079

but he's doing fine

983

00:43:37,910 --> 00:43:35,920

and i haven't had a chance to chat with

984

00:43:38,870 --> 00:43:37,920

doug yet of course uh but i can tell you

985

00:43:40,470 --> 00:43:38,880

that

986

00:43:41,990 --> 00:43:40,480

for those of us especially first time

987

00:43:44,390 --> 00:43:42,000

flyers it takes

988

00:43:45,829 --> 00:43:44,400

i think a good four to six weeks to to

989

00:43:47,589 --> 00:43:45,839

really adapt to that weightless

990

00:43:48,710 --> 00:43:47,599

environment and uh

991

00:43:50,710 --> 00:43:48,720

um

992

00:43:52,829 --> 00:43:50,720

and as the veteran crew on board when

993

00:43:56,230 --> 00:43:52,839

you have new folks coming

994

00:43:57,910 --> 00:43:56,240

aboard and i know for myself that as i

995

00:44:00,230 --> 00:43:57,920

translated through the

996

00:44:03,349 --> 00:44:00,240

the uh

997

00:44:05,670 --> 00:44:03,359

those long modules for the first time i

998

00:44:07,589 --> 00:44:05,680

would leave uh cameras and equipment uh

999

00:44:08,390 --> 00:44:07,599

be knocking those off of the wall and so

1000

00:44:11,349 --> 00:44:08,400

it

1001  
00:44:14,069 --> 00:44:11,359  
get your space legs i know bob and doug

1002  
00:44:16,069 --> 00:44:14,079  
will transition very quickly um but it

1003  
00:44:17,510 --> 00:44:16,079  
was it was awesome to see them coming

1004  
00:44:18,790 --> 00:44:17,520  
through that forward hatch we haven't

1005  
00:44:20,710 --> 00:44:18,800  
seen that

1006  
00:44:23,109 --> 00:44:20,720  
for many years and we're looking forward

1007  
00:44:27,750 --> 00:44:23,119  
to many more crews coming through that

1008  
00:44:32,390 --> 00:44:29,670  
thank you we'll do our last question

1009  
00:44:36,390 --> 00:44:32,400  
from marsha dunn

1010  
00:44:38,150 --> 00:44:36,400  
yes hi either frisbee for kenny um when

1011  
00:44:40,870 --> 00:44:38,160  
when do you anticipate deciding whether

1012  
00:44:42,790 --> 00:44:40,880  
to proceed with the space walks and how

1013  
00:44:44,390 --> 00:44:42,800

quickly could you start kicking them off

1014

00:44:46,790 --> 00:44:44,400

would this be june do you think or would

1015

00:44:48,870 --> 00:44:46,800

you wait till july thanks a lot

1016

00:44:51,270 --> 00:44:48,880

hi marcia

1017

00:44:53,270 --> 00:44:51,280

we are we're still uh having those

1018

00:44:55,190 --> 00:44:53,280

discussions if we if we head down this

1019

00:44:57,349 --> 00:44:55,200

path it's uh it's most likely going to

1020

00:44:59,510 --> 00:44:57,359

be towards the end of june we've

1021

00:45:00,710 --> 00:44:59,520

considered doing some upfront work ahead

1022

00:45:03,030 --> 00:45:00,720

of this mission

1023

00:45:06,150 --> 00:45:03,040

to start laying the groundwork for that

1024

00:45:08,309 --> 00:45:06,160

but but decided uh against that just to

1025

00:45:10,710 --> 00:45:08,319

make sure that that we got the crew on

1026

00:45:12,470 --> 00:45:10,720

orbit and and uh and that way we weren't

1027

00:45:13,750 --> 00:45:12,480

in this constant sort of replan in case

1028

00:45:15,670 --> 00:45:13,760

we were having technical issues or

1029

00:45:17,750 --> 00:45:15,680

weather issues and so forth so so we

1030

00:45:19,750 --> 00:45:17,760

made the decision that we would wait

1031

00:45:22,150 --> 00:45:19,760

till the crew got on board and and then

1032

00:45:24,710 --> 00:45:22,160

start to start to lay some of these

1033

00:45:27,750 --> 00:45:24,720

these up front items in the plan so

1034

00:45:29,589 --> 00:45:27,760

we've got about another week and a half

1035

00:45:31,589 --> 00:45:29,599

and then you'll start to see some build

1036

00:45:32,950 --> 00:45:31,599

up and again you won't see it but it

1037

00:45:35,030 --> 00:45:32,960

there will be things that will start to

1038

00:45:37,510 --> 00:45:35,040

happen in the direction of preparing for

1039

00:45:39,030 --> 00:45:37,520

some evas that'll kick off around the

1040

00:45:40,870 --> 00:45:39,040

end of june

1041

00:45:43,109 --> 00:45:40,880

i would tell you at this point i would

1042

00:45:45,030 --> 00:45:43,119

call that very preliminary planning

1043

00:45:47,589 --> 00:45:45,040

just because again we need to work with

1044

00:45:49,750 --> 00:45:47,599

steve and uh and the rest of the agency

1045

00:45:51,829 --> 00:45:49,760

leadership and make sure that that we're

1046

00:45:54,630 --> 00:45:51,839

uh we're well calibrated on how we want

1047

00:45:57,190 --> 00:45:54,640

to how we want to approach uh approach

1048

00:45:58,230 --> 00:45:57,200

the next few weeks with this dragon on

1049

00:46:01,190 --> 00:45:58,240

board and making sure that we're

1050

00:46:02,870 --> 00:46:01,200

learning everything that we can and and

1051  
00:46:04,950 --> 00:46:02,880  
that we we we've got all the right

1052  
00:46:06,950 --> 00:46:04,960  
priorities in place but in order for us

1053  
00:46:08,390 --> 00:46:06,960  
to do some evas we probably got about a

1054  
00:46:10,630 --> 00:46:08,400  
week and a half and then we'll need to

1055  
00:46:12,309 --> 00:46:10,640  
start start that ramp up in order to get

1056  
00:46:15,270 --> 00:46:12,319  
out the hatch by about about the end of

1057  
00:46:16,950 --> 00:46:15,280  
june and if we do

1058  
00:46:18,860 --> 00:46:16,960  
head in that direction we'll probably go

1059  
00:46:19,990 --> 00:46:18,870  
on six day centers

1060  
00:46:22,390 --> 00:46:20,000  
[Music]

1061  
00:46:23,990 --> 00:46:22,400  
with the exception of the middle of july

1062  
00:46:25,190 --> 00:46:24,000  
time frame where we've got a high beta

1063  
00:46:26,870 --> 00:46:25,200

period

1064

00:46:29,430 --> 00:46:26,880

where where the

1065

00:46:31,109 --> 00:46:29,440

the sun angle on the station really it's

1066

00:46:32,950 --> 00:46:31,119

just because of the power issues that we

1067

00:46:34,630 --> 00:46:32,960

have in those time frames

1068

00:46:37,109 --> 00:46:34,640

we probably would steer clear trying to

1069

00:46:38,550 --> 00:46:37,119

do a an eva in that time frame but but

1070

00:46:40,069 --> 00:46:38,560

anyway that's that's the general

1071

00:46:41,910 --> 00:46:40,079

thinking i would call it more at the 10

1072

00:46:44,309 --> 00:46:41,920

000 foot level at this point as opposed

1073

00:46:46,630 --> 00:46:44,319

to the 200 foot level but but hopefully

1074

00:46:47,910 --> 00:46:46,640

that helps

1075

00:46:49,190 --> 00:46:47,920

thank you so much we're going to close

1076

00:46:50,309 --> 00:46:49,200

it out with closing remarks for our

1077

00:46:52,069 --> 00:46:50,319

administrator

1078

00:46:52,870 --> 00:46:52,079

well thank you bettina i just want to

1079

00:46:55,270 --> 00:46:52,880

again

1080

00:46:57,829 --> 00:46:55,280

uh congratulate the nasa team and

1081

00:47:00,150 --> 00:46:57,839

congratulate the spacex team

1082

00:47:02,470 --> 00:47:00,160

this has been a long time in the making

1083

00:47:03,670 --> 00:47:02,480

and i think it's been really astonishing

1084

00:47:05,750 --> 00:47:03,680

to see

1085

00:47:06,870 --> 00:47:05,760

how it came together

1086

00:47:08,790 --> 00:47:06,880

nasa said

1087

00:47:10,390 --> 00:47:08,800

that you know that nasa set what the

1088

00:47:12,550 --> 00:47:10,400

requirements were and those requirements

1089

00:47:15,030 --> 00:47:12,560

were based on payload and based on

1090

00:47:16,550 --> 00:47:15,040

safety and then our commercial partners

1091

00:47:18,950 --> 00:47:16,560

innovated and

1092

00:47:21,190 --> 00:47:18,960

we got very unique solutions one from

1093

00:47:23,589 --> 00:47:21,200

spacex and one from boeing

1094

00:47:25,910 --> 00:47:23,599

and and as of right now

1095

00:47:28,069 --> 00:47:25,920

the spacex solution is attached to the

1096

00:47:29,910 --> 00:47:28,079

international space station and

1097

00:47:31,910 --> 00:47:29,920

we will be working day in and day out to

1098

00:47:34,069 --> 00:47:31,920

make sure that it come it comes home

1099

00:47:35,829 --> 00:47:34,079

safely with our astronauts

1100

00:47:37,430 --> 00:47:35,839

and we will continue working with boeing

1101  
00:47:38,470 --> 00:47:37,440  
to make sure that they are successful as

1102  
00:47:40,870 --> 00:47:38,480  
well

1103  
00:47:43,109 --> 00:47:40,880  
because they have had significant

1104  
00:47:44,390 --> 00:47:43,119  
milestones that are impressive

1105  
00:47:45,910 --> 00:47:44,400  
and we need to get them across the

1106  
00:47:47,910 --> 00:47:45,920  
finish line so

1107  
00:47:50,390 --> 00:47:47,920  
i just want to say congratulations to

1108  
00:47:52,870 --> 00:47:50,400  
the commercial crew program

1109  
00:47:55,990 --> 00:47:52,880  
steve stitch you and your team and kathy

1110  
00:47:58,309 --> 00:47:56,000  
leaders um have done just um amazing

1111  
00:48:00,390 --> 00:47:58,319  
work and we are so grateful to you and

1112  
00:48:03,430 --> 00:48:00,400  
we're grateful to the to the spacex team

1113  
00:48:06,069 --> 00:48:03,440

as well um and and here we go we're back

1114

00:48:08,309 --> 00:48:06,079

we're launching america so thank you for

1115

00:48:10,470 --> 00:48:08,319

everybody who paid attention to this

1116

00:48:13,430 --> 00:48:10,480

really i think monumental achievement

1117

00:48:14,470 --> 00:48:13,440

and um and we've got more to come thank

1118

00:48:17,190 --> 00:48:14,480

you

1119

00:48:24,430 --> 00:48:17,200

concludes our press conference have a