



1
00:00:01,340 --> 00:00:06,230

[Music]

2
00:00:48,389 --> 00:00:11,220

well we're making history again let's go

3
00:00:48,399 --> 00:00:58,500

bottom dog

4
00:00:58,510 --> 00:01:07,590

[Music]

5
00:01:11,109 --> 00:01:09,830

good afternoon and welcome from kennedy

6
00:01:13,270 --> 00:01:11,119

space center

7
00:01:16,070 --> 00:01:13,280

i'm betting and clown with nasa's

8
00:01:18,870 --> 00:01:16,080

office of communications what a day we

9
00:01:20,950 --> 00:01:18,880

are here to discuss the nasa spacex demo

10
00:01:23,190 --> 00:01:20,960

2 mission and the return of u.s human

11
00:01:25,109 --> 00:01:23,200

space flight from american soil to the

12
00:01:27,270 --> 00:01:25,119

international space station with

13
00:01:29,830 --> 00:01:27,280

astronauts robert benkin and douglas

14

00:01:31,990 --> 00:01:29,840

hurley the crew dragon space flight

15

00:01:34,789 --> 00:01:32,000

spacecraft and the falcon 9

16

00:01:37,910 --> 00:01:34,799

rocket lifted today from launch complex

17

00:01:41,670 --> 00:01:37,920

39a and nasa's kennedy space center at 3

18

00:01:43,190 --> 00:01:41,680

22 pm bob and doug are now safely on

19

00:01:45,350 --> 00:01:43,200

their way to the international space

20

00:01:47,429 --> 00:01:45,360

station to talk more about this historic

21

00:01:49,830 --> 00:01:47,439

mission we have a great panel of of

22

00:01:52,789 --> 00:01:49,840

guests starting with nasa nasa

23

00:01:54,950 --> 00:01:52,799

administrator jim bridenstine elon musk

24

00:01:57,270 --> 00:01:54,960

the chief engineer of spacex kathy

25

00:01:59,830 --> 00:01:57,280

leaders manager of the nasa commercial

26
00:02:02,230 --> 00:01:59,840
crew program kirk shireman manager of

27
00:02:05,109 --> 00:02:02,240
the international space station and nasa

28
00:02:06,630 --> 00:02:05,119
chief astronaut pat forrester we'll

29
00:02:07,830 --> 00:02:06,640
start with opening comments and our

30
00:02:09,910 --> 00:02:07,840
presenters

31
00:02:12,150 --> 00:02:09,920
then we'll take your questions we'll

32
00:02:13,910 --> 00:02:12,160
first start with our nasa administrator

33
00:02:15,750 --> 00:02:13,920
jim bridenstine

34
00:02:18,070 --> 00:02:15,760
well thank you bettina

35
00:02:19,910 --> 00:02:18,080
what a great day for nasa what a great

36
00:02:21,510 --> 00:02:19,920
day for spacex

37
00:02:23,750 --> 00:02:21,520
what a great day for the united states

38
00:02:25,430 --> 00:02:23,760

of america it's been nine years since

39

00:02:28,229 --> 00:02:25,440

we've launched american astronauts on

40

00:02:31,190 --> 00:02:28,239

american rockets from american soil

41

00:02:32,790 --> 00:02:31,200

and now we we have done it again um

42

00:02:34,949 --> 00:02:32,800

i want to be clear

43

00:02:36,630 --> 00:02:34,959

the mission is not yet over uh this is a

44

00:02:38,550 --> 00:02:36,640

test flight

45

00:02:39,589 --> 00:02:38,560

and so we are at the beginning but so

46

00:02:41,030 --> 00:02:39,599

far

47

00:02:43,670 --> 00:02:41,040

everything has

48

00:02:46,229 --> 00:02:43,680

performed very very well and we are

49

00:02:49,350 --> 00:02:46,239

excited about the fact that bob and doug

50

00:02:50,790 --> 00:02:49,360

our american heroes are safely in orbit

51
00:02:52,390 --> 00:02:50,800
and on the way to the international

52
00:02:55,110 --> 00:02:52,400
space station so i just want to say

53
00:02:57,509 --> 00:02:55,120
congratulations to the nasa team

54
00:02:58,710 --> 00:02:57,519
uh congratulations to kathy leaders

55
00:03:01,270 --> 00:02:58,720
who's been

56
00:03:03,830 --> 00:03:01,280
on the nasa side leading our commercial

57
00:03:06,790 --> 00:03:03,840
crew program all along and you and your

58
00:03:09,270 --> 00:03:06,800
team have done an absolutely marvelous

59
00:03:11,430 --> 00:03:09,280
job and of course elon musk and your

60
00:03:13,830 --> 00:03:11,440
team at spacex

61
00:03:16,149 --> 00:03:13,840
this this launch represents the best of

62
00:03:18,149 --> 00:03:16,159
everything that america has to offer

63
00:03:19,190 --> 00:03:18,159

but it also represents continuity of

64

00:03:21,350 --> 00:03:19,200

purpose

65

00:03:23,190 --> 00:03:21,360

um i think to charlie bolden my

66

00:03:26,390 --> 00:03:23,200

predecessor is the nasa administrator

67

00:03:28,309 --> 00:03:26,400

who got this program off the ground when

68

00:03:29,830 --> 00:03:28,319

there wasn't a lot of political support

69

00:03:31,830 --> 00:03:29,840

and now there is a lot of political

70

00:03:34,149 --> 00:03:31,840

support but it's because we have had

71

00:03:35,910 --> 00:03:34,159

success after success

72

00:03:37,750 --> 00:03:35,920

and so this is uh this is an important

73

00:03:40,789 --> 00:03:37,760

milestone for the nation

74

00:03:41,750 --> 00:03:40,799

um and i am so honored and grateful to

75

00:03:44,149 --> 00:03:41,760

have

76

00:03:46,869 --> 00:03:44,159

really this brief moment in my life to

77

00:03:49,030 --> 00:03:46,879

to be at the head of this agency so

78

00:03:51,190 --> 00:03:49,040

what an amazing amazing group of people

79

00:03:55,750 --> 00:03:51,200

that made all of this happen thank you

80

00:04:00,229 --> 00:03:57,270

oh i'd like to

81

00:04:02,470 --> 00:04:00,239

just uh

82

00:04:03,350 --> 00:04:02,480

yeah uh acknowledge the incredible work

83

00:04:04,229 --> 00:04:03,360

of

84

00:04:06,949 --> 00:04:04,239

the

85

00:04:08,309 --> 00:04:06,959

people at spacex and nasa and everyone

86

00:04:10,309 --> 00:04:08,319

in in

87

00:04:13,509 --> 00:04:10,319

creating this technology and

88

00:04:16,870 --> 00:04:15,110

what has culminated in this incredible

89

00:04:18,150 --> 00:04:16,880

launch today of getting astronauts back

90

00:04:19,990 --> 00:04:18,160

to orbit

91

00:04:22,390 --> 00:04:20,000

after almost a decade

92

00:04:23,270 --> 00:04:22,400

um i think this is something that

93

00:04:25,189 --> 00:04:23,280

should

94

00:04:27,430 --> 00:04:25,199

really get people i mean right on the

95

00:04:29,590 --> 00:04:27,440

heart of anyone who is

96

00:04:31,510 --> 00:04:29,600

has any spirit of exploration and the

97

00:04:33,189 --> 00:04:31,520

united states is a distillation of the

98

00:04:34,070 --> 00:04:33,199

human spirit of exploration i think this

99

00:04:35,830 --> 00:04:34,080

is something that's particularly

100

00:04:37,670 --> 00:04:35,840

important um in the united states but

101
00:04:39,510 --> 00:04:37,680
appeals to everyone with the uh

102
00:04:41,590 --> 00:04:39,520
throughout the world who has within them

103
00:04:42,950 --> 00:04:41,600
the spirit of exploration

104
00:04:44,710 --> 00:04:42,960
so

105
00:04:47,030 --> 00:04:44,720
um

106
00:04:49,510 --> 00:04:47,040
i mean i'm really quite overcome

107
00:04:53,590 --> 00:04:49,520
with emotion on this day it's kind of

108
00:04:58,150 --> 00:04:55,270
i've been 18 years working towards this

109
00:04:59,990 --> 00:04:58,160
goal so

110
00:05:01,350 --> 00:05:00,000
it's hard to believe that it's happened

111
00:05:03,110 --> 00:05:01,360
when we haven't quite yet doctored the

112
00:05:04,390 --> 00:05:03,120
space station and of course we need to

113
00:05:06,390 --> 00:05:04,400

bring them back safely and we need to

114

00:05:09,590 --> 00:05:06,400

repeat this these missions

115

00:05:12,870 --> 00:05:09,600

and have this be a regular occurrence

116

00:05:14,150 --> 00:05:12,880

so it's a lot of work to do uh but uh

117

00:05:16,310 --> 00:05:14,160

it's uh

118

00:05:18,390 --> 00:05:16,320

it's just incredible i i think this is

119

00:05:21,590 --> 00:05:18,400

something that everyone you know it's

120

00:05:23,670 --> 00:05:21,600

this is a a craft made by humans

121

00:05:25,830 --> 00:05:23,680

you know for humans this is like

122

00:05:28,070 --> 00:05:25,840

something that i think humanity should

123

00:05:30,790 --> 00:05:28,080

be excited about and proud of occurring

124

00:05:36,150 --> 00:05:33,909

thank you elon well next kathy leaders

125

00:05:37,830 --> 00:05:36,160

well i would i wasn't really expecting

126

00:05:40,550 --> 00:05:37,840

this today i'm going to tell you we woke

127

00:05:42,870 --> 00:05:40,560

up this morning um i think jim actually

128

00:05:44,390 --> 00:05:42,880

called me this morning and said what

129

00:05:46,629 --> 00:05:44,400

what do you think what do you think are

130

00:05:47,749 --> 00:05:46,639

we going to fly today what do you think

131

00:05:50,550 --> 00:05:47,759

um yeah

132

00:05:52,390 --> 00:05:50,560

yeah well it was at the 605

133

00:05:53,670 --> 00:05:52,400

wake up phone call but

134

00:05:57,430 --> 00:05:53,680

but um

135

00:06:01,189 --> 00:05:59,029

but but

136

00:06:03,029 --> 00:06:01,199

i think i'm you know

137

00:06:04,790 --> 00:06:03,039

jim said it i mean i think i was really

138

00:06:07,670 --> 00:06:04,800

proud of the team the team sat there

139

00:06:10,070 --> 00:06:07,680

this morning we looked at the weather

140

00:06:11,430 --> 00:06:10,080

it didn't look great but we we looked at

141

00:06:12,309 --> 00:06:11,440

the different options that were out

142

00:06:14,629 --> 00:06:12,319

there

143

00:06:16,710 --> 00:06:14,639

and we realized how important it was for

144

00:06:18,469 --> 00:06:16,720

us to kind of step through this

145

00:06:21,670 --> 00:06:18,479

carefully in way

146

00:06:22,950 --> 00:06:21,680

that um readiness of the hardware and

147

00:06:24,070 --> 00:06:22,960

then

148

00:06:26,629 --> 00:06:24,080

you know

149

00:06:29,189 --> 00:06:26,639

not have launch fever but to very

150

00:06:30,469 --> 00:06:29,199

carefully assess the situation and be

151

00:06:32,710 --> 00:06:30,479

able to clear the gates and the

152

00:06:35,270 --> 00:06:32,720

milestones along the way and the nasa

153

00:06:35,990 --> 00:06:35,280

and spacex team did a fabulous job with

154

00:06:39,110 --> 00:06:36,000

that

155

00:06:40,950 --> 00:06:39,120

and uh i'm very grateful for the weather

156

00:06:43,189 --> 00:06:40,960

clearing one hour before we were getting

157

00:06:45,430 --> 00:06:43,199

ready to launch i mean all weather

158

00:06:47,029 --> 00:06:45,440

constraints were cleared on a day that

159

00:06:50,309 --> 00:06:47,039

we weren't really sure how it was going

160

00:06:52,870 --> 00:06:50,319

to work out for both our abort track and

161

00:06:55,670 --> 00:06:52,880

our launch area which we have very very

162

00:06:57,909 --> 00:06:55,680

tough weather constraints

163

00:06:59,589 --> 00:06:57,919

but like both jim and elon have said you

164

00:07:01,990 --> 00:06:59,599

know this is a test flight bob and doug

165

00:07:04,070 --> 00:07:02,000

are already up there accomplishing a lot

166

00:07:06,309 --> 00:07:04,080

of the goals of our test mission you

167

00:07:09,110 --> 00:07:06,319

know they got to do their far-field

168

00:07:10,870 --> 00:07:09,120

demos they got to feel you know what

169

00:07:12,950 --> 00:07:10,880

it's like to be able to use the touch

170

00:07:16,710 --> 00:07:12,960

screens when you're in zero you know in

171

00:07:18,070 --> 00:07:16,720

zero g they got to be able to um

172

00:07:21,029 --> 00:07:18,080

you know check out all the different

173

00:07:23,189 --> 00:07:21,039

parts of the system and and uh liberate

174

00:07:25,270 --> 00:07:23,199

their zero g indicator which i think you

175

00:07:28,309 --> 00:07:25,280

guys all have and probably have on order

176

00:07:30,309 --> 00:07:28,319

right now um and they have a lot more

177

00:07:31,589 --> 00:07:30,319

things they're going to get to try to

178

00:07:32,950 --> 00:07:31,599

sleep i'm not sure how they're going to

179

00:07:33,990 --> 00:07:32,960

do that but they're going to get to try

180

00:07:36,390 --> 00:07:34,000

to sleep

181

00:07:39,189 --> 00:07:36,400

and then tomorrow morning we'll be

182

00:07:40,909 --> 00:07:39,199

approaching space station and it'll be

183

00:07:43,510 --> 00:07:40,919

some of the most important

184

00:07:45,270 --> 00:07:43,520

demonstrations that they'll be able to

185

00:07:47,670 --> 00:07:45,280

work in on

186

00:07:49,510 --> 00:07:47,680

about how do we safely dock to the

187

00:07:51,990 --> 00:07:49,520

international space station

188

00:07:53,270 --> 00:07:52,000

so i am so grateful

189

00:07:55,909 --> 00:07:53,280

and proud

190

00:07:57,830 --> 00:07:55,919

of our nasa and spacex team

191

00:08:00,150 --> 00:07:57,840

they are still vigilant they're still on

192

00:08:02,629 --> 00:08:00,160

console we're going to stay i'm going to

193

00:08:03,589 --> 00:08:02,639

stay in the lcc until bob and doug get

194

00:08:06,230 --> 00:08:03,599

docked

195

00:08:08,390 --> 00:08:06,240

to the international space station

196

00:08:10,710 --> 00:08:08,400

because we're going to stay vigilant

197

00:08:13,350 --> 00:08:10,720

until we bring them safely home

198

00:08:16,230 --> 00:08:13,360

very very proud of this team cannot tell

199

00:08:19,350 --> 00:08:16,240

you how happy i am and amazed that we're

200

00:08:21,189 --> 00:08:19,360

here today thank you

201

00:08:23,430 --> 00:08:21,199

kirk sireman

202

00:08:24,869 --> 00:08:23,440

well what a great day a very very great

203

00:08:26,629 --> 00:08:24,879

day for human spaceflight big

204

00:08:28,950 --> 00:08:26,639

congratulations to elon musk and the

205

00:08:30,869 --> 00:08:28,960

spacex team and and of course a big

206

00:08:33,190 --> 00:08:30,879

congratulations to jim bridenstine and

207

00:08:35,190 --> 00:08:33,200

uh and uh his leadership together with

208

00:08:37,909 --> 00:08:35,200

cassie kathy leaders and uh and the

209

00:08:40,070 --> 00:08:37,919

commercial cargo t current recruit team

210

00:08:41,750 --> 00:08:40,080

just a fantastic day really really happy

211

00:08:43,509 --> 00:08:41,760

to be part of it

212

00:08:45,430 --> 00:08:43,519

a lot of the iss team couldn't be here

213

00:08:47,350 --> 00:08:45,440

in florida today but i can tell you they

214

00:08:48,949 --> 00:08:47,360

were watching it virtually i they

215

00:08:51,110 --> 00:08:48,959

actually had a long a virtual launch

216

00:08:54,310 --> 00:08:51,120

watching party um

217

00:08:56,230 --> 00:08:54,320

and and they were very excited to to see

218

00:08:58,070 --> 00:08:56,240

the launch as well

219

00:09:01,110 --> 00:08:58,080

and finally our international partners i

220

00:09:03,910 --> 00:09:01,120

had the chance to to get congratulations

221

00:09:05,190 --> 00:09:03,920

from from many of my counterparts across

222

00:09:06,790 --> 00:09:05,200

the international space station

223

00:09:09,269 --> 00:09:06,800

partnership

224

00:09:12,630 --> 00:09:09,279

they have been a big part of of uh of

225

00:09:15,590 --> 00:09:12,640

commercial crew and and the spacex uh uh

226
00:09:17,269 --> 00:09:15,600
efforts along the way uh today they were

227
00:09:18,710 --> 00:09:17,279
watching uh i can tell you they're all

228
00:09:21,110 --> 00:09:18,720
very excited about having their crew

229
00:09:22,710 --> 00:09:21,120
members fly the very very near future on

230
00:09:24,949 --> 00:09:22,720
on the dragon and come up to

231
00:09:27,110 --> 00:09:24,959
international space station

232
00:09:28,070 --> 00:09:27,120
today on board the iss the three crew

233
00:09:30,550 --> 00:09:28,080
members

234
00:09:33,030 --> 00:09:30,560
chris cassidy yvonne wagner and anatoly

235
00:09:34,630 --> 00:09:33,040
and ivanishin are getting ready to have

236
00:09:36,389 --> 00:09:34,640
their additional crewmates on board i

237
00:09:37,670 --> 00:09:36,399
know they're very very excited in fact

238
00:09:39,190 --> 00:09:37,680

i'd be surprised if they don't have

239

00:09:40,790 --> 00:09:39,200

something really special cooked up for

240

00:09:42,230 --> 00:09:40,800

them when they arrive so we'll look

241

00:09:44,230 --> 00:09:42,240

forward to that

242

00:09:45,509 --> 00:09:44,240

there's lots of work to be done on iss

243

00:09:48,070 --> 00:09:45,519

and i know uh

244

00:09:51,030 --> 00:09:48,080

bob and doug together with the the folks

245

00:09:52,470 --> 00:09:51,040

on orbit are really ready to get busy

246

00:09:55,030 --> 00:09:52,480

what you saw today hopefully what you

247

00:09:56,949 --> 00:09:55,040

saw today was was really smooth

248

00:09:58,310 --> 00:09:56,959

um and calm

249

00:09:59,910 --> 00:09:58,320

it's kind of like a duck maybe on the

250

00:10:01,110 --> 00:09:59,920

water it looks smooth and calm but

251
00:10:02,710 --> 00:10:01,120
there's a lot of there's a lot of

252
00:10:04,310 --> 00:10:02,720
paddling on going on underneath the

253
00:10:06,389 --> 00:10:04,320
surface

254
00:10:08,790 --> 00:10:06,399
and what you'll see tomorrow likely we

255
00:10:10,230 --> 00:10:08,800
certainly expect is very very smooth and

256
00:10:11,910 --> 00:10:10,240
and nominal

257
00:10:13,509 --> 00:10:11,920
i just want you to know though it's very

258
00:10:15,509 --> 00:10:13,519
very difficult tremendous amount of

259
00:10:18,710 --> 00:10:15,519
effort on the part of the designers the

260
00:10:20,550 --> 00:10:18,720
test engineers terms of the ops planners

261
00:10:22,630 --> 00:10:20,560
and the operators and even the crew to

262
00:10:25,269 --> 00:10:22,640
go make that happen so

263
00:10:26,790 --> 00:10:25,279

smooth and nominal is actually really

264

00:10:27,590 --> 00:10:26,800

really hard

265

00:10:29,509 --> 00:10:27,600

so

266

00:10:31,829 --> 00:10:29,519

anyway with that it's been a great day

267

00:10:33,030 --> 00:10:31,839

very very happy to to have bob and doug

268

00:10:35,509 --> 00:10:33,040

on their way to the international space

269

00:10:38,310 --> 00:10:35,519

station and looking forward to the rest

270

00:10:40,470 --> 00:10:38,320

of this test flight

271

00:10:43,350 --> 00:10:40,480

and pat

272

00:10:45,990 --> 00:10:43,360

i tell you i am very happy to be sitting

273

00:10:47,590 --> 00:10:46,000

here in a post launch press conference

274

00:10:49,590 --> 00:10:47,600

and that's not something you'll hear me

275

00:10:51,509 --> 00:10:49,600

say very often

276

00:10:55,110 --> 00:10:51,519

probably not as happy as bob and doug

277

00:10:57,509 --> 00:10:55,120

are right now but i'm pretty happy and

278

00:10:59,829 --> 00:10:57,519

no doubt i have a group of astronauts

279

00:11:02,230 --> 00:10:59,839

jumping up and down back in houston that

280

00:11:04,710 --> 00:11:02,240

are pretty happy too because

281

00:11:07,670 --> 00:11:04,720

we promised them some flight assignments

282

00:11:11,910 --> 00:11:07,680

and those are sure to come once we got

283

00:11:14,550 --> 00:11:11,920

bob and doug up and so i just wanted to

284

00:11:16,310 --> 00:11:14,560

to just say thanks to the team for being

285

00:11:18,550 --> 00:11:16,320

able to do that to make to give these

286

00:11:20,389 --> 00:11:18,560

opportunities to our other crew members

287

00:11:21,990 --> 00:11:20,399

uh i want you to know that i've been

288

00:11:23,670 --> 00:11:22,000

living with bob and doug in our

289

00:11:25,350 --> 00:11:23,680

astronaut crew quarters here over the

290

00:11:30,069 --> 00:11:25,360

last week plus

291

00:11:32,710 --> 00:11:30,079

and i have never seen a crew so calm and

292

00:11:34,949 --> 00:11:32,720

focused leading up to a launch as these

293

00:11:37,030 --> 00:11:34,959

two were now no doubt that has to do

294

00:11:39,430 --> 00:11:37,040

with their experience it has to do with

295

00:11:41,350 --> 00:11:39,440

the training but i really think it's a

296

00:11:43,430 --> 00:11:41,360

demonstration of the trust that they

297

00:11:45,030 --> 00:11:43,440

have both in the nasa team and the

298

00:11:51,750 --> 00:11:45,040

spacex team

299

00:11:56,389 --> 00:11:53,910

astronauts sometimes are referred to as

300

00:11:59,670 --> 00:11:56,399

heroes and no doubt bob and doug

301
00:12:01,590 --> 00:11:59,680
demonstrated that today but this is the

302
00:12:04,230 --> 00:12:01,600
first time i've ever been in the flight

303
00:12:06,550 --> 00:12:04,240
control room as the chief astronaut

304
00:12:08,470 --> 00:12:06,560
while we were trying to launch a crew

305
00:12:11,509 --> 00:12:08,480
and i'll tell you accepting risk on

306
00:12:14,150 --> 00:12:11,519
behalf of others is a big responsibility

307
00:12:16,470 --> 00:12:14,160
and i was amazed at what was going on in

308
00:12:18,310 --> 00:12:16,480
the loops as kirk said there was a lot

309
00:12:20,710 --> 00:12:18,320
of paddling underneath

310
00:12:23,750 --> 00:12:20,720
and i want everyone to know that we were

311
00:12:26,949 --> 00:12:23,760
surrounded by heroes on the ground that

312
00:12:28,949 --> 00:12:26,959
got us where we were today

313
00:12:31,030 --> 00:12:28,959

with that i think

314

00:12:32,710 --> 00:12:31,040

i'll say thanks again for getting our

315

00:12:34,310 --> 00:12:32,720

crew safely to orbit we'll look forward

316

00:12:35,590 --> 00:12:34,320

to seeing them talk to the international

317

00:12:37,750 --> 00:12:35,600

space station

318

00:12:39,190 --> 00:12:37,760

tomorrow

319

00:12:41,190 --> 00:12:39,200

thank you

320

00:12:44,470 --> 00:12:41,200

so today um we have media joining us

321

00:12:45,990 --> 00:12:44,480

remotely so they'll be on the phone and

322

00:12:48,069 --> 00:12:46,000

watching on nasa television like

323

00:12:49,670 --> 00:12:48,079

everybody else so to insure as many

324

00:12:51,350 --> 00:12:49,680

people as possible to ask our questions

325

00:12:54,230 --> 00:12:51,360

we're asking our reporters to ask one

326

00:12:56,150 --> 00:12:54,240

question to make sure that all of their

327

00:12:57,590 --> 00:12:56,160

colleagues has an opportunity to

328

00:12:59,829 --> 00:12:57,600

participate in this press conference

329

00:13:02,069 --> 00:12:59,839

please state your name affiliation and

330

00:13:03,910 --> 00:13:02,079

whom you're directing your question to

331

00:13:06,949 --> 00:13:03,920

our first question comes from miriam

332

00:13:08,550 --> 00:13:06,959

creamier creamer

333

00:13:12,629 --> 00:13:08,560

hi thank you so much miriam kramer with

334

00:13:15,269 --> 00:13:12,639

axios uh this question is for uh elon or

335

00:13:16,870 --> 00:13:15,279

for the administrator or both um i was

336

00:13:18,710 --> 00:13:16,880

just wondering so this launch has often

337

00:13:20,550 --> 00:13:18,720

been referred to as a moment of hope for

338

00:13:22,150 --> 00:13:20,560

the nation but it's also happening

339

00:13:23,829 --> 00:13:22,160

against the backdrop of protests and

340

00:13:25,590 --> 00:13:23,839

demonstrations around the country today

341

00:13:27,350 --> 00:13:25,600

i wonder what you want to say to those

342

00:13:32,870 --> 00:13:27,360

people out there protesting is this

343

00:13:38,550 --> 00:13:35,829

i'll be happy to field it um look this

344

00:13:40,870 --> 00:13:38,560

this launch is for all of america um and

345

00:13:42,470 --> 00:13:40,880

we have had moments in time

346

00:13:44,710 --> 00:13:42,480

in american history where we've had

347

00:13:46,949 --> 00:13:44,720

challenges as a nation

348

00:13:49,829 --> 00:13:46,959

we think back to the 1960s we think

349

00:13:52,550 --> 00:13:49,839

about the vietnam war and the protests

350

00:13:54,389 --> 00:13:52,560

we think about in the 1960s the civil

351

00:13:56,870 --> 00:13:54,399

rights abuses and the civil rights

352

00:13:58,870 --> 00:13:56,880

protests we think about the the height

353

00:14:01,750 --> 00:13:58,880

of the cold war and

354

00:14:04,470 --> 00:14:01,760

yet we had this moment in time

355

00:14:07,670 --> 00:14:04,480

july 20th 1969

356

00:14:09,750 --> 00:14:07,680

when all of america stopped

357

00:14:11,829 --> 00:14:09,760

literally just stopped

358

00:14:14,069 --> 00:14:11,839

because we had american astronauts

359

00:14:16,949 --> 00:14:14,079

walking on the surface of the moon and

360

00:14:18,550 --> 00:14:16,959

then we repeated that five more times

361

00:14:20,870 --> 00:14:18,560

the challenge is

362

00:14:21,829 --> 00:14:20,880

the the the apollo program eventually

363

00:14:25,350 --> 00:14:21,839

ended

364

00:14:27,509 --> 00:14:25,360

but i think what is great about nasa is

365

00:14:30,870 --> 00:14:27,519

that we bring people together

366

00:14:33,509 --> 00:14:30,880

um everybody loves exploration

367

00:14:36,790 --> 00:14:33,519

and it's not just political divides it's

368

00:14:38,470 --> 00:14:36,800

also international divides

369

00:14:40,870 --> 00:14:38,480

and it's unifying

370

00:14:43,670 --> 00:14:40,880

and i i would hope i think it happened

371

00:14:46,230 --> 00:14:43,680

today as a matter of fact

372

00:14:48,470 --> 00:14:46,240

all of america stopped i've seen some of

373

00:14:51,269 --> 00:14:48,480

the numbers the amount of viewership on

374

00:14:55,269 --> 00:14:51,279

what we accomplished today

375

00:14:57,910 --> 00:14:55,279

was was off the charts and so

376

00:15:00,949 --> 00:14:57,920

i am hoping that people can see this as

377

00:15:03,430 --> 00:15:00,959

something that is bright and hopeful and

378

00:15:05,990 --> 00:15:03,440

that people know that tomorrow is a new

379

00:15:10,629 --> 00:15:06,000

day and a better day and we're always

380

00:15:13,430 --> 00:15:11,670

thank you

381

00:15:16,870 --> 00:15:13,440

our next question comes from jackie

382

00:15:22,150 --> 00:15:19,350

thanks so much for doing this um i was

383

00:15:24,230 --> 00:15:22,160

curious this question is for elon if you

384

00:15:25,990 --> 00:15:24,240

had heard from president trump yet and

385

00:15:27,910 --> 00:15:26,000

what he might have told you and what you

386

00:15:30,470 --> 00:15:27,920

might have said to him about this thanks

387

00:15:33,430 --> 00:15:32,150

uh well i've not spoken

388

00:15:35,110 --> 00:15:33,440

um

389

00:15:36,870 --> 00:15:35,120
one-on-one with with him i just

390

00:15:39,990 --> 00:15:36,880
essentially heard the the press

391

00:15:43,269 --> 00:15:40,000
conference along with everybody else so

392

00:15:45,910 --> 00:15:43,279
we've not exchanged any direct comments

393

00:15:48,790 --> 00:15:45,920
we had a few moments in the firing room

394

00:15:50,949 --> 00:15:48,800
there after after the launch

395

00:15:52,790 --> 00:15:50,959
and i'll tell you that yeah

396

00:15:55,269 --> 00:15:52,800
the president is excited of course he

397

00:15:56,790 --> 00:15:55,279
congratulated elon and the spacex team

398

00:15:57,990 --> 00:15:56,800
and um

399

00:15:59,749 --> 00:15:58,000
i thought it was i thought it was a good

400

00:16:01,110 --> 00:15:59,759
moment uh yeah so it was a with a group

401
00:16:02,310 --> 00:16:01,120
of people but yeah oh sure yeah sure

402
00:16:05,110 --> 00:16:02,320
sure

403
00:16:07,110 --> 00:16:05,120
um but yes um he certainly congratulated

404
00:16:09,030 --> 00:16:07,120
the spacex team at nasa and everyone

405
00:16:11,509 --> 00:16:09,040
involved and um

406
00:16:14,310 --> 00:16:11,519
yeah i think this uh just to um

407
00:16:16,870 --> 00:16:14,320
uh echo the nasa administrator's

408
00:16:18,550 --> 00:16:16,880
comments i think this is uh this is a

409
00:16:19,430 --> 00:16:18,560
day that is that

410
00:16:21,910 --> 00:16:19,440
i think

411
00:16:24,470 --> 00:16:21,920
everyone can be proud of that

412
00:16:25,590 --> 00:16:24,480
it's it's a good day to be if this event

413
00:16:28,389 --> 00:16:25,600

is something that

414

00:16:29,910 --> 00:16:28,399

all of humanity can get excited about um

415

00:16:31,829 --> 00:16:29,920

it's just a fundamentally positive good

416

00:16:33,350 --> 00:16:31,839

thing

417

00:16:34,629 --> 00:16:33,360

and

418

00:16:38,870 --> 00:16:34,639

you know i think we need we need more

419

00:16:44,389 --> 00:16:41,030

our next question is from joey roulette

420

00:16:50,150 --> 00:16:47,110

doing this um one question two part

421

00:16:51,509 --> 00:16:50,160

question first is for jim bridenstine um

422

00:16:53,590 --> 00:16:51,519

have you heard from your russian

423

00:16:55,829 --> 00:16:53,600

counterparts i i know kirk shireman

424

00:16:57,749 --> 00:16:55,839

mentioned that um international partners

425

00:17:00,150 --> 00:16:57,759

reached out to nasa with the success and

426

00:17:01,990 --> 00:17:00,160

the others for elon musk um with

427

00:17:04,069 --> 00:17:02,000

spacex's you know success today have you

428

00:17:07,270 --> 00:17:04,079

heard from your boeing counterparts and

429

00:17:09,590 --> 00:17:07,280

what would you say to them thanks

430

00:17:12,470 --> 00:17:09,600

so uh dmitry rogozin is the head of

431

00:17:13,429 --> 00:17:12,480

roscosmos in russia and i haven't talked

432

00:17:15,429 --> 00:17:13,439

to him

433

00:17:17,669 --> 00:17:15,439

but i have seen his public comments and

434

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

of course he was

435

00:17:22,630 --> 00:17:20,799

congratulat congratulatory towards

436

00:17:24,470 --> 00:17:22,640

nasa and spacex

437

00:17:27,029 --> 00:17:24,480

um and and

438

00:17:28,789 --> 00:17:27,039

he made some comment about how it's uh

439

00:17:30,789 --> 00:17:28,799

it's it's like flying an iphone or

440

00:17:33,990 --> 00:17:30,799

something and i know i've made similar

441

00:17:35,830 --> 00:17:34,000

comments as well but um but he does uh

442

00:17:38,230 --> 00:17:35,840

he did express that this is an exciting

443

00:17:39,830 --> 00:17:38,240

day not just for us but also for them

444

00:17:42,070 --> 00:17:39,840

um they're they believe in the

445

00:17:43,830 --> 00:17:42,080

partnership um and so i think it's going

446

00:17:52,789 --> 00:17:43,840

to remain strong

447

00:17:52,799 --> 00:17:55,510

inside joke

448

00:17:55,520 --> 00:18:01,590

our next question comes from marsha dunn

449

00:18:06,150 --> 00:18:03,909

for you um your company president said

450

00:18:08,470 --> 00:18:06,160

right before liftoff that she was super

451

00:18:11,510 --> 00:18:08,480

nervous stomach and throat

452

00:18:13,350 --> 00:18:11,520

could you talk about how you were

453

00:18:15,590 --> 00:18:13,360

your emotions your feelings leading up

454

00:18:17,909 --> 00:18:15,600

to liftoff and especially seeing the

455

00:18:21,190 --> 00:18:17,919

make it to orbit safely thank you very

456

00:18:21,200 --> 00:18:26,630

was that for me or elon

457

00:18:26,640 --> 00:18:33,430

may goes

458

00:18:37,830 --> 00:18:34,789

if you're on the line can you repeat

459

00:18:43,430 --> 00:18:41,029

yes um elon gwen shot well said right

460

00:18:45,990 --> 00:18:43,440

before liftoff that she had her stomach

461

00:18:47,990 --> 00:18:46,000

and her throat she was super nervous

462

00:18:50,870 --> 00:18:48,000

i'd like to know how you were feeling in

463

00:18:53,669 --> 00:18:50,880

the minutes leading up to liftoff today

464

00:18:55,830 --> 00:18:53,679

uh your emotions your feelings of um

465

00:18:59,270 --> 00:18:55,840

having to stand there and watch all this

466

00:19:03,350 --> 00:19:01,510

well i mean just speaking straight from

467

00:19:04,630 --> 00:19:03,360

the heart the

468

00:19:06,070 --> 00:19:04,640

um

469

00:19:08,230 --> 00:19:06,080

on wednesday during the first first

470

00:19:10,390 --> 00:19:08,240

countdown i'd say that

471

00:19:11,590 --> 00:19:10,400

my adrenaline was railed at

472

00:19:12,710 --> 00:19:11,600

100

473

00:19:14,390 --> 00:19:12,720

um

474

00:19:16,789 --> 00:19:14,400

and when the launch was called off it

475

00:19:17,750 --> 00:19:16,799

went to zero percent it was like i just

476

00:19:18,950 --> 00:19:17,760

basically

477

00:19:21,830 --> 00:19:18,960

collapsed and slept though the longest

478

00:19:23,830 --> 00:19:21,840

time i'd slept in probably a year

479

00:19:25,190 --> 00:19:23,840

then oddly enough today i don't know it

480

00:19:27,990 --> 00:19:25,200

felt like the just the fates were

481

00:19:29,990 --> 00:19:28,000

aligned and i didn't feel didn't feel

482

00:19:31,750 --> 00:19:30,000

nervous didn't feel

483

00:19:32,789 --> 00:19:31,760

just it felt like it felt like it was

484

00:19:33,830 --> 00:19:32,799

going to work

485

00:19:35,029 --> 00:19:33,840

and i felt like the right thing was

486

00:19:36,070 --> 00:19:35,039

going to happen

487

00:19:45,990 --> 00:19:36,080

so

488

00:19:46,789 --> 00:19:46,000

real quick um i just got a note moments

489

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

ago

490

00:19:52,470 --> 00:19:48,720

doug hurley announced that the crew

491

00:19:54,070 --> 00:19:52,480

dragon is named endeavor and we are

492

00:19:56,310 --> 00:19:54,080

going to look forward to hearing a few

493

00:19:58,070 --> 00:19:56,320

words from them shortly

494

00:19:59,669 --> 00:19:58,080

thank you yeah that they have they've

495

00:20:02,390 --> 00:19:59,679

been flying it around actually

496

00:20:03,590 --> 00:20:02,400

it's cool that they they um

497

00:20:05,430 --> 00:20:03,600

they uh

498

00:20:07,990 --> 00:20:05,440

they took it off automatic and

499

00:20:09,750 --> 00:20:08,000

just manually flying the craft around

500

00:20:11,590 --> 00:20:09,760

it's got to be pretty fun you know just

501
00:20:13,669 --> 00:20:11,600
zipping around space and you know

502
00:20:15,909 --> 00:20:13,679
spacecraft

503
00:20:17,669 --> 00:20:15,919
everyone's childhood dream yeah

504
00:20:19,990 --> 00:20:17,679
next we'll go to emory kelly of florida

505
00:20:21,830 --> 00:20:20,000
today

506
00:20:23,669 --> 00:20:21,840
uh hey folks thanks

507
00:20:25,190 --> 00:20:23,679
thanks for doing this i appreciate it

508
00:20:26,710 --> 00:20:25,200
i'm just wondering with this being the

509
00:20:28,630 --> 00:20:26,720
first time

510
00:20:30,070 --> 00:20:28,640
um humans have had a chance to

511
00:20:32,230 --> 00:20:30,080
experience

512
00:20:34,070 --> 00:20:32,240
flying on a falcon 9

513
00:20:35,270 --> 00:20:34,080

and in a crew dragon after all these

514

00:20:38,230 --> 00:20:35,280

years of them

515

00:20:41,270 --> 00:20:38,240

flying have you gotten any input from uh

516

00:20:44,149 --> 00:20:41,280

bob and doug is it you know smooth ride

517

00:20:46,549 --> 00:20:44,159

what was it like thank you

518

00:20:49,190 --> 00:20:46,559

so i have not heard uh specifically as

519

00:20:50,630 --> 00:20:49,200

to how it flies

520

00:20:53,510 --> 00:20:50,640

i do know that we are going to hear from

521

00:20:55,270 --> 00:20:53,520

them soon um i don't know at what point

522

00:20:56,470 --> 00:20:55,280

that's going to take place bettina i

523

00:20:59,430 --> 00:20:56,480

don't know if you have that specific

524

00:21:04,149 --> 00:21:02,630

no i don't have a very it was a very

525

00:21:06,789 --> 00:21:04,159

i think in the webcast it looked quite

526
00:21:08,549 --> 00:21:06,799
smooth um in fact i was a friend of mine

527
00:21:10,549 --> 00:21:08,559
who's a filmmaker said

528
00:21:16,470 --> 00:21:10,559
you need to put some shake into the

529
00:21:22,230 --> 00:21:18,950
okay our next question will be from paul

530
00:21:27,750 --> 00:21:25,350
uh yes i'd like to ask elon um i realize

531
00:21:30,149 --> 00:21:27,760
mission isn't over but um it's a

532
00:21:32,870 --> 00:21:30,159
significant achievement at this point

533
00:21:36,149 --> 00:21:32,880
what's the impact of success for this

534
00:21:40,149 --> 00:21:36,159
program on spacex as a whole

535
00:21:40,159 --> 00:21:43,510
well i think this

536
00:21:48,470 --> 00:21:45,830
this is obviously

537
00:21:50,950 --> 00:21:48,480
a trans accomplishment for spacex in

538
00:21:52,789 --> 00:21:50,960

partnership with nasa and a number of

539

00:21:54,630 --> 00:21:52,799

critical suppliers in fact if i think

540

00:21:56,230 --> 00:21:54,640

about the total number of people

541

00:21:57,669 --> 00:21:56,240

involved in making this mission

542

00:22:00,149 --> 00:21:57,679

successful probably adds up to a hundred

543

00:22:01,750 --> 00:22:00,159

thousand so i'd just like to

544

00:22:03,510 --> 00:22:01,760

uh just to express a word of

545

00:22:04,870 --> 00:22:03,520

appreciation and congratulations again

546

00:22:08,310 --> 00:22:04,880

for to

547

00:22:09,990 --> 00:22:08,320

everyone involved making this successful

548

00:22:12,310 --> 00:22:10,000

and uh

549

00:22:14,870 --> 00:22:12,320

i actually and just a special special to

550

00:22:16,310 --> 00:22:14,880

the administrator and kathy and you know

551
00:22:19,430 --> 00:22:16,320
it's just a

552
00:22:21,510 --> 00:22:19,440
everyone involved it's just uh

553
00:22:23,590 --> 00:22:21,520
wow

554
00:22:25,110 --> 00:22:23,600
anyway

555
00:22:27,029 --> 00:22:25,120
um

556
00:22:27,990 --> 00:22:27,039
it it is a little hard to process like i

557
00:22:30,710 --> 00:22:28,000
think at this point i am somewhat

558
00:22:33,110 --> 00:22:30,720
overcome by a motion to try to come up

559
00:22:34,789 --> 00:22:33,120
with uh cohesive

560
00:22:37,190 --> 00:22:34,799
you know sentences that make any sense

561
00:22:38,830 --> 00:22:37,200
is quite difficult

562
00:22:43,029 --> 00:22:38,840
i but i think

563
00:22:43,830 --> 00:22:43,039

the this is hopefully the first step on

564

00:23:18,149 --> 00:22:43,840

a

565

00:23:20,870 --> 00:23:18,159

beyond orbit

566

00:23:22,230 --> 00:23:20,880

a routine matter where

567

00:23:24,789 --> 00:23:22,240

thousands and perhaps ultimately

568

00:23:25,830 --> 00:23:24,799

millions of people can travel to other

569

00:23:27,990 --> 00:23:25,840

planets

570

00:23:29,990 --> 00:23:28,000

that's that's what we really need to

571

00:23:31,590 --> 00:23:30,000

achieve over time

572

00:23:32,870 --> 00:23:31,600

and that that's

573

00:23:34,070 --> 00:23:32,880

that's obviously a very difficult goal

574

00:23:35,029 --> 00:23:34,080

but that's

575

00:23:37,430 --> 00:23:35,039

um

576
00:23:38,870 --> 00:23:37,440
is that seeming increasingly real with

577
00:23:42,149 --> 00:23:38,880
what happened today

578
00:23:45,110 --> 00:23:42,159
that um getting people to orbit

579
00:23:47,510 --> 00:23:45,120
finally after 18 years

580
00:23:49,029 --> 00:23:47,520
if we if we are able to increase out the

581
00:23:52,070 --> 00:23:49,039
rate of innovation

582
00:23:54,870 --> 00:23:52,080
then life can become multi-planetary

583
00:23:57,669 --> 00:23:54,880
this is the goal we should strive for

584
00:23:59,750 --> 00:23:57,679
i think from from a nasa perspective

585
00:24:02,070 --> 00:23:59,760
i think what this did for

586
00:24:04,630 --> 00:24:02,080
starship and a lot of others

587
00:24:07,110 --> 00:24:04,640
is kind of established that this is a

588
00:24:09,190 --> 00:24:07,120

successful business model and if we look

589

00:24:10,710 --> 00:24:09,200

at how we did commercial resupply of the

590

00:24:12,630 --> 00:24:10,720

international space station and now

591

00:24:14,310 --> 00:24:12,640

commercial crew of the international

592

00:24:16,149 --> 00:24:14,320

space station and of course the

593

00:24:18,310 --> 00:24:16,159

commercial lunar payload services

594

00:24:19,669 --> 00:24:18,320

program to deliver payloads to the

595

00:24:23,190 --> 00:24:19,679

surface of the moon and now for the

596

00:24:25,430 --> 00:24:23,200

first time since 1972 we have funded a

597

00:24:27,350 --> 00:24:25,440

human landing system and of course we're

598

00:24:29,909 --> 00:24:27,360

very proud that spacex is going to be a

599

00:24:31,750 --> 00:24:29,919

partner in that development program as

600

00:24:33,190 --> 00:24:31,760

well so

601
00:24:35,750 --> 00:24:33,200
so not only do we have it funded we

602
00:24:37,590 --> 00:24:35,760
actually have contractors

603
00:24:40,549 --> 00:24:37,600
under contract developing that human

604
00:24:43,590 --> 00:24:40,559
landing system so i think as far as how

605
00:24:46,470 --> 00:24:43,600
how this relates to the artemis program

606
00:24:49,029 --> 00:24:46,480
and and the moon to mars program i think

607
00:24:50,789 --> 00:24:49,039
um i think the business model has has

608
00:24:53,029 --> 00:24:50,799
proven itself very successful we're

609
00:24:54,470 --> 00:24:53,039
bringing down costs we're increasing

610
00:24:57,029 --> 00:24:54,480
access that's going to continue to

611
00:24:59,510 --> 00:24:57,039
happen as we on ramp more partners and

612
00:25:01,909 --> 00:24:59,520
of course as as spacex and others to go

613
00:25:03,110 --> 00:25:01,919

get more customers nasa doesn't want to

614

00:25:05,269 --> 00:25:03,120

be the owner and operator of the

615

00:25:07,590 --> 00:25:05,279

hardware we also don't want to be the

616

00:25:09,430 --> 00:25:07,600

only customer we want

617

00:25:11,190 --> 00:25:09,440

we want spacex and others to go get

618

00:25:12,830 --> 00:25:11,200

customers that are not us

619

00:25:15,590 --> 00:25:12,840

and when all that

620

00:25:18,230 --> 00:25:15,600

materializes i think what elon's talking

621

00:25:19,830 --> 00:25:18,240

about here this vision for humanity

622

00:25:21,269 --> 00:25:19,840

being able to live

623

00:25:23,669 --> 00:25:21,279

on the surface of the moon for long

624

00:25:25,830 --> 00:25:23,679

periods of time and eventually on mars

625

00:25:27,990 --> 00:25:25,840

for long periods of time that's

626

00:25:32,070 --> 00:25:28,000

that's the eventuality of the business

627

00:25:34,710 --> 00:25:33,190

thank you

628

00:25:37,909 --> 00:25:34,720

our next question is from chris

629

00:25:40,470 --> 00:25:37,919

davenport of the washington post

630

00:25:43,110 --> 00:25:40,480

oh uh thanks guys for taking my call i

631

00:25:44,950 --> 00:25:43,120

really appreciate it um and thanks elon

632

00:25:45,990 --> 00:25:44,960

for the trampoline quote that was

633

00:25:48,149 --> 00:25:46,000

classic

634

00:25:50,310 --> 00:25:48,159

um elon if i could ask you you put the

635

00:25:53,029 --> 00:25:50,320

window in the cargo dragon as a symbol

636

00:25:54,710 --> 00:25:53,039

of your ambition of flying people

637

00:25:57,750 --> 00:25:54,720

um i wonder if you can talk a little bit

638

00:25:59,750 --> 00:25:57,760

about how over these very long years you

639

00:26:00,710 --> 00:25:59,760

kept your team focused on human space

640

00:26:02,230 --> 00:26:00,720

flight

641

00:26:03,669 --> 00:26:02,240

as the ultimate goal even though

642

00:26:06,230 --> 00:26:03,679

obviously they've been working on so

643

00:26:13,590 --> 00:26:06,240

many other things along the way thanks

644

00:26:16,070 --> 00:26:14,390

yeah

645

00:26:18,950 --> 00:26:16,080

human space flight was was always the

646

00:26:20,310 --> 00:26:18,960

goal the the fundamental goal of spacex

647

00:26:22,950 --> 00:26:20,320

well i'd like to

648

00:26:26,950 --> 00:26:24,630

create the technologies or help create

649

00:26:29,669 --> 00:26:26,960

the technologies necessary to

650

00:26:31,350 --> 00:26:29,679

make life sustainably multi-planetary i

651
00:26:33,110 --> 00:26:31,360
can't emphasize i cannot emphasize this

652
00:26:35,470 --> 00:26:33,120
enough this is the thing that we need to

653
00:26:37,269 --> 00:26:35,480
do we must make life sustainably

654
00:26:39,669 --> 00:26:37,279
multi-multi-planetary it's not one

655
00:26:40,549 --> 00:26:39,679
planet to the exclusion of another but

656
00:26:43,269 --> 00:26:40,559
to

657
00:26:45,590 --> 00:26:43,279
extend life beyond earth we are life's

658
00:26:47,510 --> 00:26:45,600
agent in this regard um

659
00:26:49,510 --> 00:26:47,520
all the creatures that and the plants

660
00:26:52,149 --> 00:26:49,520
and everyone that exist here on earth we

661
00:26:53,909 --> 00:26:52,159
can bring them to other planets and it's

662
00:26:55,269 --> 00:26:53,919
very important that we do so as soon as

663
00:26:59,990 --> 00:26:55,279

possible i think

664

00:27:05,590 --> 00:27:03,909

i i call upon i call upon the public to

665

00:27:07,269 --> 00:27:05,600

support this goal

666

00:27:09,430 --> 00:27:07,279

and to think about this goal and think

667

00:27:13,190 --> 00:27:09,440

about how important it is

668

00:27:13,200 --> 00:27:16,149

we've got to get it done

669

00:27:22,389 --> 00:27:19,029

the launching satellites is is nice of

670

00:27:24,310 --> 00:27:22,399

course and it

671

00:27:26,389 --> 00:27:24,320

keeps the co you know we've got to bring

672

00:27:29,350 --> 00:27:26,399

in more money than we spend this is

673

00:27:30,470 --> 00:27:29,360

important but it's ultimately

674

00:27:34,950 --> 00:27:30,480

all about

675

00:27:40,870 --> 00:27:37,029

we'll go to our next question it's eric

676

00:27:44,389 --> 00:27:42,549

good afternoon that was a hell of a

677

00:27:46,950 --> 00:27:44,399

thing to watch

678

00:27:48,549 --> 00:27:46,960

question for jim today it's been a

679

00:27:49,830 --> 00:27:48,559

little more than eight months since you

680

00:27:53,110 --> 00:27:49,840

tweeted about

681

00:27:54,630 --> 00:27:53,120

uh spacex and it was time to deliver

682

00:27:57,110 --> 00:27:54,640

just wondering if you would say that

683

00:27:58,389 --> 00:27:57,120

they have delivered or not and uh and

684

00:28:00,389 --> 00:27:58,399

maybe do you have a message for other

685

00:28:03,590 --> 00:28:00,399

contractors for nasa

686

00:28:05,909 --> 00:28:03,600

yeah no i i leave it to you to bring

687

00:28:07,190 --> 00:28:05,919

this up uh we're celebrating here a

688

00:28:08,950 --> 00:28:07,200

little bit i want to be careful we're

689

00:28:10,630 --> 00:28:08,960

not celebrating too much until bob and

690

00:28:14,310 --> 00:28:10,640

doug get home safely

691

00:28:15,990 --> 00:28:14,320

um but um but no that's that's right um

692

00:28:17,669 --> 00:28:16,000

you know there was a there was a time

693

00:28:18,870 --> 00:28:17,679

eight months ago as you mentioned where

694

00:28:20,070 --> 00:28:18,880

we were having challenges with

695

00:28:22,549 --> 00:28:20,080

parachutes

696

00:28:25,750 --> 00:28:22,559

um you know we had um

697

00:28:28,070 --> 00:28:25,760

a a a crew dragon that had a static fire

698

00:28:31,750 --> 00:28:28,080

test that ultimately resulted in its

699

00:28:33,190 --> 00:28:31,760

catastrophic loss and you know if if you

700

00:28:35,110 --> 00:28:33,200

would have told me then that we would be

701
00:28:36,950 --> 00:28:35,120
right here today i don't know that i

702
00:28:39,510 --> 00:28:36,960
would have believed it um

703
00:28:41,350 --> 00:28:39,520
and and yes i sent a tweet

704
00:28:43,190 --> 00:28:41,360
and asked elon to deliver and i'll tell

705
00:28:44,870 --> 00:28:43,200
you and i'll tell you the same thing i

706
00:28:46,789 --> 00:28:44,880
told the president i told the vice

707
00:28:49,190 --> 00:28:46,799
president and of course i've said it in

708
00:28:50,710 --> 00:28:49,200
a number of interviews

709
00:28:53,269 --> 00:28:50,720
since that day

710
00:28:54,870 --> 00:28:53,279
elon musk and spacex have delivered on

711
00:28:58,230 --> 00:28:54,880
everything nasa has asked them to

712
00:29:01,269 --> 00:28:58,240
deliver on and and and at a speed that

713
00:29:02,630 --> 00:29:01,279

we never would have guessed uh my my

714

00:29:04,310 --> 00:29:02,640

engineering team

715

00:29:06,070 --> 00:29:04,320

was saying that this is not going to be

716

00:29:08,630 --> 00:29:06,080

able to be achieved in this amount of

717

00:29:10,230 --> 00:29:08,640

time um the amount of parachute tests

718

00:29:12,310 --> 00:29:10,240

that we had to get done and how long it

719

00:29:13,830 --> 00:29:12,320

takes to get those parachute tests done

720

00:29:14,950 --> 00:29:13,840

look we got we got all the parachute

721

00:29:16,070 --> 00:29:14,960

tests done

722

00:29:18,149 --> 00:29:16,080

um

723

00:29:20,789 --> 00:29:18,159

and and we are just uh overwhelmingly

724

00:29:23,430 --> 00:29:20,799

grateful not just for spacex and and

725

00:29:25,510 --> 00:29:23,440

elon musk but also airborne

726

00:29:27,669 --> 00:29:25,520

and the nasa team

727

00:29:29,190 --> 00:29:27,679

that really went to work

728

00:29:30,230 --> 00:29:29,200

on getting all these tests done and of

729

00:29:32,549 --> 00:29:30,240

course

730

00:29:33,990 --> 00:29:32,559

all of the you know getting changing out

731

00:29:34,789 --> 00:29:34,000

the titanium

732

00:29:36,389 --> 00:29:34,799

um

733

00:29:38,549 --> 00:29:36,399

all that took time and then doing all

734

00:29:41,350 --> 00:29:38,559

the tests after that

735

00:29:43,190 --> 00:29:41,360

my goodness uh spacex really delivered

736

00:29:43,909 --> 00:29:43,200

something that is magnificent and that

737

00:29:45,110 --> 00:29:43,919

is

738

00:29:46,789 --> 00:29:45,120

speed

739

00:29:47,909 --> 00:29:46,799

without question

740

00:29:49,909 --> 00:29:47,919

i don't think anybody would have

741

00:29:52,830 --> 00:29:49,919

believed the speed with which spacex

742

00:29:55,669 --> 00:29:52,840

delivered and they did in fact

743

00:29:58,389 --> 00:29:55,679

deliver kathy won't add anything to that

744

00:30:00,470 --> 00:29:58,399

oh no i mean i think jim said it really

745

00:30:02,549 --> 00:30:00,480

well i mean we went through

746

00:30:05,269 --> 00:30:02,559

it wasn't like we didn't have issues we

747

00:30:07,190 --> 00:30:05,279

had things we had to go solve right

748

00:30:09,269 --> 00:30:07,200

and we've learned a ton

749

00:30:11,590 --> 00:30:09,279

and that team

750

00:30:14,230 --> 00:30:11,600

the spacex team and the nasa team

751
00:30:15,350 --> 00:30:14,240
together working hand in glove you know

752
00:30:19,590 --> 00:30:15,360
together

753
00:30:21,029 --> 00:30:19,600
we tackled them and we solved them and

754
00:30:23,590 --> 00:30:21,039
figured out how we're going to go fly

755
00:30:28,950 --> 00:30:26,549
but without the spacex folks making it

756
00:30:31,190 --> 00:30:28,960
happen like jim said so quickly we

757
00:30:32,630 --> 00:30:31,200
wouldn't be here today

758
00:30:36,549 --> 00:30:32,640
thank you

759
00:30:38,149 --> 00:30:36,559
next is lauren grush with the verge

760
00:30:40,470 --> 00:30:38,159
hi thank you so much for taking my

761
00:30:42,870 --> 00:30:40,480
question i guess this is for anyone who

762
00:30:45,029 --> 00:30:42,880
can answer it i'm wondering if there was

763
00:30:46,870 --> 00:30:45,039

anything unexpected during the launch

764

00:30:49,350 --> 00:30:46,880

today i think i heard something on the

765

00:30:51,750 --> 00:30:49,360

live stream about some component being

766

00:30:53,669 --> 00:30:51,760

lower in temperature than expected just

767

00:30:56,470 --> 00:30:53,679

wondering if everything

768

00:31:01,350 --> 00:30:56,480

went as planned or if you had any any uh

769

00:31:04,070 --> 00:31:02,389

jeremy

770

00:31:05,509 --> 00:31:04,080

so the only you know really the count

771

00:31:07,990 --> 00:31:05,519

was i would say

772

00:31:10,230 --> 00:31:08,000

spectacularly quiet i mean i mean

773

00:31:12,470 --> 00:31:10,240

everybody said you know and then

774

00:31:14,549 --> 00:31:12,480

um probably within

775

00:31:16,870 --> 00:31:14,559

uh as we were loading the prop the only

776

00:31:19,190 --> 00:31:16,880

thing we we saw was we saw

777

00:31:22,630 --> 00:31:19,200

uh it was it was actually something we'd

778

00:31:24,630 --> 00:31:22,640

seen as we were unloading on wednesday

779

00:31:26,549 --> 00:31:24,640

we had a sensor

780

00:31:32,070 --> 00:31:26,559

that was

781

00:31:34,630 --> 00:31:32,080

in a way that we had to go understand

782

00:31:36,630 --> 00:31:34,640

why was it reading in that particular

783

00:31:39,190 --> 00:31:36,640

manner and we also had to understand

784

00:31:43,029 --> 00:31:39,200

what can happen if it fails and it was

785

00:31:45,110 --> 00:31:43,039

in an area where actually we

786

00:31:47,269 --> 00:31:45,120

it's downstream of our fill and drain

787

00:31:49,350 --> 00:31:47,279

valve and so

788

00:31:51,590 --> 00:31:49,360

it was you know kind of jim talked

789

00:31:53,190 --> 00:31:51,600

before about where do the teams how do

790

00:31:54,549 --> 00:31:53,200

they work together and one of the things

791

00:31:56,789 --> 00:31:54,559

that we've learned on this mission is

792

00:31:59,430 --> 00:31:56,799

how to go take a piece of data like a

793

00:32:01,750 --> 00:31:59,440

sensor data and go understand

794

00:32:04,230 --> 00:32:01,760

what is that data telling us and then be

795

00:32:06,389 --> 00:32:04,240

able to clear it which is really why we

796

00:32:07,909 --> 00:32:06,399

were able to fly

797

00:32:09,110 --> 00:32:07,919

through our understanding of what the

798

00:32:11,430 --> 00:32:09,120

issue was

799

00:32:13,190 --> 00:32:11,440

and then turn that around in a very

800

00:32:14,389 --> 00:32:13,200

short period of time and what that takes

801
00:32:15,830 --> 00:32:14,399
is two

802
00:32:17,750 --> 00:32:15,840
groups of folks that have been working

803
00:32:19,430 --> 00:32:17,760
with each other for a while and

804
00:32:21,590 --> 00:32:19,440
understand what the vehicle is trying to

805
00:32:23,509 --> 00:32:21,600
tell them but um

806
00:32:24,789 --> 00:32:23,519
you know i thought oh my goodness we're

807
00:32:26,149 --> 00:32:24,799
gonna have this issue after going

808
00:32:28,470 --> 00:32:26,159
through all the weather stuff now we're

809
00:32:31,110 --> 00:32:28,480
gonna have this issue

810
00:32:33,430 --> 00:32:31,120
and and i was very impressed with how

811
00:32:35,269 --> 00:32:33,440
the joint teams together looked at the

812
00:32:37,590 --> 00:32:35,279
sensor understood it understood the

813
00:32:41,590 --> 00:32:37,600

phenomena and then cleared it and

814

00:32:45,350 --> 00:32:43,830

next we'll go to irene klotz of aviation

815

00:32:46,549 --> 00:32:45,360

week

816

00:32:48,870 --> 00:32:46,559

thanks

817

00:32:50,630 --> 00:32:48,880

congratulations everybody that was super

818

00:32:52,870 --> 00:32:50,640

impressive to see

819

00:32:54,470 --> 00:32:52,880

um my question that i think is for kathy

820

00:32:55,509 --> 00:32:54,480

and maybe for elon

821

00:32:57,830 --> 00:32:55,519

um

822

00:32:59,590 --> 00:32:57,840

what what has to happen from this point

823

00:33:03,269 --> 00:32:59,600

on for you all to

824

00:33:06,230 --> 00:33:03,279

feel confident that a august 30th or

825

00:33:09,430 --> 00:33:06,240

early september launch of the first post

826

00:33:11,990 --> 00:33:09,440

certification mission can happen

827

00:33:16,230 --> 00:33:13,990

well you know i i'm very proud of the

828

00:33:18,389 --> 00:33:16,240

spacex team for another reason you know

829

00:33:20,549 --> 00:33:18,399

we had really wanted

830

00:33:22,630 --> 00:33:20,559

our crew on vehicle to get into prop

831

00:33:23,669 --> 00:33:22,640

checkouts

832

00:33:26,230 --> 00:33:23,679

which is

833

00:33:28,070 --> 00:33:26,240

really where the spacecraft's assembled

834

00:33:30,549 --> 00:33:28,080

and we're kind of in one of the final

835

00:33:33,350 --> 00:33:30,559

acceptance testing modes and last night

836

00:33:35,590 --> 00:33:33,360

i got an email it said crew one vehicle

837

00:33:38,389 --> 00:33:35,600

is in prop checkouts they're going

838

00:33:40,230 --> 00:33:38,399

through so and making sure that the

839

00:33:42,630 --> 00:33:40,240

propulsion systems

840

00:33:44,789 --> 00:33:42,640

um leak tight and operating in a

841

00:33:46,230 --> 00:33:44,799

critical manner so i tell you that's the

842

00:33:48,870 --> 00:33:46,240

first thing the vehicle has got to be

843

00:33:52,470 --> 00:33:48,880

ready um the other things that we've got

844

00:33:53,750 --> 00:33:52,480

to do is make sure one we can

845

00:33:55,269 --> 00:33:53,760

we dock

846

00:33:57,029 --> 00:33:55,279

our demo two vehicle because like we

847

00:33:59,190 --> 00:33:57,039

said this is a test flight and make sure

848

00:34:01,509 --> 00:33:59,200

that we're taking all that learning that

849

00:34:03,590 --> 00:34:01,519

we're gonna have from the docking and

850

00:34:05,269 --> 00:34:03,600

rolling it into our readiness for crew

851
00:34:07,190 --> 00:34:05,279
one

852
00:34:08,069 --> 00:34:07,200
and then and then we also have to make

853
00:34:10,149 --> 00:34:08,079
sure

854
00:34:11,510 --> 00:34:10,159
that we are understanding that we get

855
00:34:12,550 --> 00:34:11,520
through

856
00:34:14,950 --> 00:34:12,560
landing

857
00:34:17,190 --> 00:34:14,960
and make sure that we're taking that

858
00:34:19,030 --> 00:34:17,200
understanding and any issues that we

859
00:34:22,629 --> 00:34:19,040
have with the landing and then rolling

860
00:34:24,790 --> 00:34:22,639
that into crew one so

861
00:34:26,950 --> 00:34:24,800
our team's getting the vehicle ready and

862
00:34:28,869 --> 00:34:26,960
we're also

863
00:34:30,629 --> 00:34:28,879

watching this demonstration mission and

864

00:34:32,310 --> 00:34:30,639

making sure that our learning out of

865

00:34:33,990 --> 00:34:32,320

this test flight

866

00:34:36,950 --> 00:34:34,000

is then rolled into how we're going to

867

00:34:38,470 --> 00:34:36,960

be flying crew one so

868

00:34:41,109 --> 00:34:38,480

keep watching along the way it's going

869

00:34:44,149 --> 00:34:41,119

to be like a we're like a i'd say like a

870

00:34:46,230 --> 00:34:44,159

cereal net your your cereal and we'll be

871

00:34:47,430 --> 00:34:46,240

following along as we learn along the

872

00:34:48,950 --> 00:34:47,440

way but

873

00:34:53,190 --> 00:34:48,960

these test flights are very important

874

00:34:53,200 --> 00:34:58,069

next question comes from jeff faust

875

00:35:02,630 --> 00:35:01,030

hi this is jeff faust with space news um

876

00:35:04,870 --> 00:35:02,640

are there anything any issues you're

877

00:35:06,550 --> 00:35:04,880

particularly watching on the crew dragon

878

00:35:08,790 --> 00:35:06,560

as it approaches the space station

879

00:35:10,950 --> 00:35:08,800

anything that um you'll be particularly

880

00:35:17,589 --> 00:35:10,960

keeping your fingers across the over the

881

00:35:20,790 --> 00:35:19,030

so um

882

00:35:22,150 --> 00:35:20,800

you know the big thing

883

00:35:24,390 --> 00:35:22,160

the nice thing about us having the

884

00:35:25,910 --> 00:35:24,400

uncrewed mission was we were able to

885

00:35:28,310 --> 00:35:25,920

check out a lot of the systems on the

886

00:35:29,910 --> 00:35:28,320

uncrewed mission um

887

00:35:32,790 --> 00:35:29,920

that had to do with docking and i think

888

00:35:35,990 --> 00:35:32,800

everybody saw last spring how successful

889

00:35:37,670 --> 00:35:36,000

our crew our demo one mission was with

890

00:35:39,589 --> 00:35:37,680

through the docking phase

891

00:35:40,470 --> 00:35:39,599

um

892

00:35:41,910 --> 00:35:40,480

but

893

00:35:43,910 --> 00:35:41,920

you always learn something with

894

00:35:46,390 --> 00:35:43,920

spaceflight and now having the crew on

895

00:35:48,870 --> 00:35:46,400

board and and understanding how the

896

00:35:49,990 --> 00:35:48,880

spacecraft and the crew operate as a

897

00:35:55,430 --> 00:35:50,000

system

898

00:35:57,270 --> 00:35:55,440

obviously um works with us approaching

899

00:35:58,790 --> 00:35:57,280

station will be another big thing that

900

00:36:00,630 --> 00:35:58,800

we're learning right

901
00:36:02,950 --> 00:36:00,640
um

902
00:36:05,030 --> 00:36:02,960
and then obviously

903
00:36:08,470 --> 00:36:05,040
you know people forget and kirk alluded

904
00:36:10,630 --> 00:36:08,480
to it us understanding how to be

905
00:36:12,790 --> 00:36:10,640
docked with station and operate within

906
00:36:14,390 --> 00:36:12,800
station is a big part of our learning

907
00:36:16,470 --> 00:36:14,400
for this crew we're going to be this is

908
00:36:19,030 --> 00:36:16,480
also our first long duration mission

909
00:36:21,430 --> 00:36:19,040
where we're going to be doing integrated

910
00:36:25,349 --> 00:36:21,440
operations with the space station

911
00:36:26,710 --> 00:36:25,359
for a long period of time which is

912
00:36:29,990 --> 00:36:26,720
which is also going to be a huge

913
00:36:32,470 --> 00:36:30,000

learning opportunity for us so um these

914

00:36:35,430 --> 00:36:32,480

test flights are very very important for

915

00:36:38,230 --> 00:36:35,440

us to not only learn how the vehicle

916

00:36:40,710 --> 00:36:38,240

works but learn how we're operating it

917

00:36:43,030 --> 00:36:40,720

and we've learned a lot about how to

918

00:36:45,750 --> 00:36:43,040

try to fly with weather and how to

919

00:36:47,910 --> 00:36:45,760

operate with these systems um it's going

920

00:36:49,910 --> 00:36:47,920

to be really important for us now to go

921

00:36:52,390 --> 00:36:49,920

learn how to obviously do the docking

922

00:36:55,349 --> 00:36:52,400

piece but then learn how to be part of

923

00:36:57,190 --> 00:36:55,359

this integrated um

924

00:36:59,270 --> 00:36:57,200

you know enterprise that's the

925

00:37:01,270 --> 00:36:59,280

international space station and kirk

926
00:37:03,190 --> 00:37:01,280
keep i could add there it's a very

927
00:37:04,150 --> 00:37:03,200
complicated you know

928
00:37:05,750 --> 00:37:04,160
system

929
00:37:09,510 --> 00:37:05,760
first of all i promise good weather

930
00:37:11,109 --> 00:37:09,520
tomorrow kathy i promise no rain showers

931
00:37:13,190 --> 00:37:11,119
we did have a solar flare but i don't

932
00:37:15,270 --> 00:37:13,200
think that'll impact our operations but

933
00:37:16,710 --> 00:37:15,280
there's a series of tests along the way

934
00:37:19,190 --> 00:37:16,720
just like on demo one there's some

935
00:37:20,550 --> 00:37:19,200
additional tests of course

936
00:37:23,030 --> 00:37:20,560
doug's going to take over and fly

937
00:37:24,950 --> 00:37:23,040
manually and the crew the the crew

938
00:37:26,950 --> 00:37:24,960

onboard the dragon bob and doug

939

00:37:29,109 --> 00:37:26,960

monitoring how the vehicle comes in and

940

00:37:31,430 --> 00:37:29,119

chris cassidy on board the iss will also

941

00:37:32,790 --> 00:37:31,440

be monitoring it so it really is how

942

00:37:34,390 --> 00:37:32,800

does the vehicle perform how does the

943

00:37:35,990 --> 00:37:34,400

integrated crew both the crew on the

944

00:37:37,190 --> 00:37:36,000

dragon and the corona international

945

00:37:39,190 --> 00:37:37,200

space station

946

00:37:41,270 --> 00:37:39,200

handle all that and then of course

947

00:37:43,510 --> 00:37:41,280

equalizing the pressures making sure the

948

00:37:45,030 --> 00:37:43,520

the the there's no leaks when it's mated

949

00:37:46,950 --> 00:37:45,040

to the iss

950

00:37:49,349 --> 00:37:46,960

and then finally just training the crew

951
00:37:51,510 --> 00:37:49,359
to come across the hatch and how how the

952
00:37:53,750 --> 00:37:51,520
iss works and be part of that bigger

953
00:37:55,750 --> 00:37:53,760
integrated team so i think there's a

954
00:37:57,670 --> 00:37:55,760
tremendous amount of things to learn

955
00:37:59,190 --> 00:37:57,680
along the way and

956
00:38:00,550 --> 00:37:59,200
we have very very experienced crew on

957
00:38:03,109 --> 00:38:00,560
board the iss and a very very

958
00:38:05,030 --> 00:38:03,119
experienced crew on on dragon and i

959
00:38:06,390 --> 00:38:05,040
think it'll go really well but uh but

960
00:38:09,670 --> 00:38:06,400
i'm sure we'll learn a few things along

961
00:38:13,829 --> 00:38:11,349
thank you our next question is going to

962
00:38:15,910 --> 00:38:13,839
come from jackie goddard of times of

963
00:38:18,150 --> 00:38:15,920

london

964

00:38:21,270 --> 00:38:18,160

hello thank you and congratulations my

965

00:38:23,589 --> 00:38:21,280

question is for elon um you said last

966

00:38:25,270 --> 00:38:23,599

week that you had told bob and doug's

967

00:38:26,790 --> 00:38:25,280

two little boys that you would do

968

00:38:27,990 --> 00:38:26,800

everything you can to bring them home

969

00:38:29,750 --> 00:38:28,000

safely

970

00:38:31,829 --> 00:38:29,760

even with a safe launch out the way that

971

00:38:34,150 --> 00:38:31,839

must still weigh on you throughout the

972

00:38:35,510 --> 00:38:34,160

mission though and i wondered if you can

973

00:38:37,270 --> 00:38:35,520

share

974

00:38:39,109 --> 00:38:37,280

some personal insight into what it's

975

00:38:41,670 --> 00:38:39,119

like to have that responsibility not

976
00:38:48,390 --> 00:38:41,680
just with your spacex hat on but as a

977
00:38:52,630 --> 00:38:50,870
well it it really hit home

978
00:38:55,030 --> 00:38:52,640
you know when you meet

979
00:38:56,470 --> 00:38:55,040
somebody's kids and

980
00:38:58,470 --> 00:38:56,480
and the

981
00:39:01,030 --> 00:38:58,480
the vehicle that

982
00:39:02,550 --> 00:39:01,040
they're responsible for

983
00:39:04,870 --> 00:39:02,560
you know

984
00:39:07,670 --> 00:39:04,880
that their life's at stake it's it's

985
00:39:12,069 --> 00:39:07,680
it really hits home

986
00:39:15,750 --> 00:39:13,349
so

987
00:39:16,870 --> 00:39:15,760
you know uh there's still

988
00:39:18,870 --> 00:39:16,880

so we still got a dock with space

989

00:39:20,630 --> 00:39:18,880

station we still got a um

990

00:39:23,910 --> 00:39:20,640

still got a return i think there's an

991

00:39:25,589 --> 00:39:23,920

argument that the return is

992

00:39:27,589 --> 00:39:25,599

more dangerous in some ways than the

993

00:39:29,829 --> 00:39:27,599

ascent so we don't want to declare

994

00:39:31,270 --> 00:39:29,839

victory yet um we need to bring them

995

00:39:33,190 --> 00:39:31,280

home safely

996

00:39:34,470 --> 00:39:33,200

make sure that we we're doing everything

997

00:39:36,870 --> 00:39:34,480

we can to

998

00:39:37,990 --> 00:39:36,880

minimize that risk of re-entry and and

999

00:39:39,030 --> 00:39:38,000

return

1000

00:39:40,950 --> 00:39:39,040

the

1001

00:39:43,589 --> 00:39:40,960

we were able to do that with

1002

00:39:45,109 --> 00:39:43,599

the demo one vehicle so if we were able

1003

00:39:47,349 --> 00:39:45,119

to retire a lot of risk with the

1004

00:39:50,950 --> 00:39:47,359

re-entry there that that's a big deal

1005

00:39:50,960 --> 00:39:56,630

yeah that's uh

1006

00:40:00,470 --> 00:39:57,510

anyway

1007

00:40:01,829 --> 00:40:00,480

i'm gonna get it choked up here so

1008

00:40:06,309 --> 00:40:01,839

it

1009

00:40:08,150 --> 00:40:06,319

yeah i'm getting choked up sorry i'm not

1010

00:40:10,150 --> 00:40:08,160

sure i can answer the question any more

1011

00:40:11,750 --> 00:40:10,160

than that except

1012

00:40:15,109 --> 00:40:11,760

yeah we're going to do everything we can

1013

00:40:16,630 --> 00:40:15,119

to make sure it gets home safely

1014

00:40:19,109 --> 00:40:16,640

our next question comes from marina

1015

00:40:23,349 --> 00:40:20,710

hi everyone marina corn with the

1016

00:40:25,910 --> 00:40:23,359

atlantic congratulations on the launch

1017

00:40:28,390 --> 00:40:25,920

uh this is for elon or jim do bob and

1018

00:40:30,470 --> 00:40:28,400

doug want to talk manually to the iss

1019

00:40:32,390 --> 00:40:30,480

instead of letting dragon do it are they

1020

00:40:34,230 --> 00:40:32,400

allowed to do that or can they only take

1021

00:40:37,109 --> 00:40:34,240

over if there is a problem or some kind

1022

00:40:41,030 --> 00:40:39,109

uh the the plan is for automatic

1023

00:40:44,550 --> 00:40:41,040

rendezvous and docking that's that's the

1024

00:40:47,190 --> 00:40:44,560

plan um of course uh if they needed to

1025

00:40:50,230 --> 00:40:47,200

to do something manually they they could

1026
00:40:52,870 --> 00:40:50,240
um but but uh but we're planning to uh

1027
00:40:55,109 --> 00:40:52,880
to test automatic rendezvous and docking

1028
00:40:58,150 --> 00:40:55,119
i just want to reiterate something that

1029
00:40:59,670 --> 00:40:58,160
that elon talked about

1030
00:41:02,550 --> 00:40:59,680
there is no doubt

1031
00:41:03,750 --> 00:41:02,560
that bob and doug are on elon's mind all

1032
00:41:06,309 --> 00:41:03,760
the time

1033
00:41:08,150 --> 00:41:06,319
but that is not just on his mind he has

1034
00:41:11,349 --> 00:41:08,160
made that throughout the culture at

1035
00:41:13,270 --> 00:41:11,359
spacex and we did we did an assessment

1036
00:41:14,390 --> 00:41:13,280
of the culture at spacex and it came

1037
00:41:16,790 --> 00:41:14,400
back

1038
00:41:19,990 --> 00:41:16,800

extremely strong and

1039

00:41:22,390 --> 00:41:20,000

um it is it is on the my bob and doug

1040

00:41:23,670 --> 00:41:22,400

are on the minds of everybody all the

1041

00:41:25,510 --> 00:41:23,680

way down

1042

00:41:28,230 --> 00:41:25,520

to the line worker and all the way to

1043

00:41:30,950 --> 00:41:28,240

the top everybody at spacex knows

1044

00:41:32,950 --> 00:41:30,960

what what is at stake here and i will

1045

00:41:35,990 --> 00:41:32,960

tell you i was very impressed with what

1046

00:41:37,589 --> 00:41:36,000

i saw in that in that safety assessment

1047

00:41:39,910 --> 00:41:37,599

that we conducted

1048

00:41:41,829 --> 00:41:39,920

um and i think all of our nasa team was

1049

00:41:43,750 --> 00:41:41,839

was impressed with it as well

1050

00:41:45,750 --> 00:41:43,760

um it's not just elon it's his whole

1051
00:41:49,030 --> 00:41:45,760
team and he's he's made that go all the

1052
00:41:50,550 --> 00:41:49,040
way down to the to to every person that

1053
00:41:52,630 --> 00:41:50,560
works at spacex

1054
00:41:55,349 --> 00:41:52,640
they're called the dads which may have

1055
00:41:56,950 --> 00:41:55,359
something to do with their age but i

1056
00:41:59,589 --> 00:41:56,960
won't i can say that because they're on

1057
00:42:01,670 --> 00:41:59,599
orbit so they're

1058
00:42:03,510 --> 00:42:01,680
and it'll be a few months before maybe

1059
00:42:08,390 --> 00:42:03,520
they come back and kick me now but but

1060
00:42:08,400 --> 00:42:11,829
we should have a dad joke or something

1061
00:42:17,109 --> 00:42:14,950
i would like to add that to that because

1062
00:42:20,069 --> 00:42:17,119
it plays back to an earlier question

1063
00:42:22,150 --> 00:42:20,079

about how did spacex stay focused on

1064

00:42:24,069 --> 00:42:22,160

human space flight

1065

00:42:26,470 --> 00:42:24,079

coming out of cargo and i think part of

1066

00:42:29,030 --> 00:42:26,480

that is that relationship that was built

1067

00:42:31,190 --> 00:42:29,040

i i know recently over this past year i

1068

00:42:33,430 --> 00:42:31,200

think it was 32 straight weeks that bob

1069

00:42:35,109 --> 00:42:33,440

and doug were out there at hawthorne

1070

00:42:36,710 --> 00:42:35,119

with the spacex team and they have

1071

00:42:39,190 --> 00:42:36,720

really built

1072

00:42:41,750 --> 00:42:39,200

a very close relationship you can see it

1073

00:42:43,030 --> 00:42:41,760

in the eyes and and the smiles when they

1074

00:42:46,309 --> 00:42:43,040

see each other

1075

00:42:48,950 --> 00:42:46,319

and that goes a long way i think in this

1076

00:42:50,550 --> 00:42:48,960

and so

1077

00:42:52,870 --> 00:42:50,560

i think what's really really cool is

1078

00:42:56,470 --> 00:42:52,880

that the part number for their seats and

1079

00:42:58,950 --> 00:42:56,480

their suits has their names in it

1080

00:43:02,390 --> 00:42:58,960

so you know i think elon you guys have

1081

00:43:04,710 --> 00:43:02,400

done a great job to personalize

1082

00:43:06,950 --> 00:43:04,720

that you're they're flying our cruise

1083

00:43:08,550 --> 00:43:06,960

that culture is not easy to achieve and

1084

00:43:10,630 --> 00:43:08,560

it's not easy to get it throughout the

1085

00:43:12,870 --> 00:43:10,640

whole organization and the safety

1086

00:43:14,950 --> 00:43:12,880

assessment that we did um indicated that

1087

00:43:16,870 --> 00:43:14,960

that was the case well i just want to

1088

00:43:18,790 --> 00:43:16,880

say that i think we would not have

1089

00:43:20,150 --> 00:43:18,800

achieved this level of safety without

1090

00:43:23,349 --> 00:43:20,160

the tremendous support from nasa and

1091

00:43:25,109 --> 00:43:23,359

your team this this this

1092

00:43:26,309 --> 00:43:25,119

nasa made us way better than we would

1093

00:43:27,510 --> 00:43:26,319

otherwise have been and obviously

1094

00:43:29,589 --> 00:43:27,520

couldn't even have got started without

1095

00:43:31,109 --> 00:43:29,599

nasa so thank you very much for your

1096

00:43:33,349 --> 00:43:31,119

support

1097

00:43:35,829 --> 00:43:33,359

let's um let's celebrate safety when we

1098

00:43:40,390 --> 00:43:35,839

get them home yeah totally yes let's do

1099

00:43:42,710 --> 00:43:40,400

that yeah but it's good

1100

00:43:44,870 --> 00:43:42,720

our next question is from ivan crone

1101
00:43:46,790 --> 00:43:44,880
from afp

1102
00:43:49,190 --> 00:43:46,800
uh thank you very much uh question for

1103
00:43:51,589 --> 00:43:49,200
elon musk could you expand on starship

1104
00:43:55,510 --> 00:43:51,599
development and about when you expect

1105
00:43:56,950 --> 00:43:55,520
you you will go around the moon

1106
00:44:00,300 --> 00:43:56,960
well i tend to be a little optimistic

1107
00:44:05,349 --> 00:44:03,990
[Laughter]

1108
00:44:09,430 --> 00:44:05,359
so

1109
00:44:11,190 --> 00:44:09,440
that extends to schedules too

1110
00:44:13,270 --> 00:44:11,200
um

1111
00:44:14,790 --> 00:44:13,280
i don't know

1112
00:44:16,069 --> 00:44:14,800
i mean i it

1113
00:44:18,069 --> 00:44:16,079

i guess

1114

00:44:20,790 --> 00:44:18,079

i i would i would wish that we could do

1115

00:44:23,190 --> 00:44:20,800

it in two years

1116

00:44:23,910 --> 00:44:23,200

i don't know that might mean four

1117

00:44:25,670 --> 00:44:23,920

but

1118

00:44:26,950 --> 00:44:25,680

i think i don't know

1119

00:44:29,510 --> 00:44:26,960

i think it's not out of the question

1120

00:44:31,109 --> 00:44:29,520

that it could be two years um

1121

00:44:36,950 --> 00:44:31,119

i i would be surprised if it took more

1122

00:44:43,510 --> 00:44:39,349

our next question is from dave mosher of

1123

00:44:48,069 --> 00:44:44,950

thank you for taking my question and

1124

00:44:49,430 --> 00:44:48,079

congratulations on an amazing launch um

1125

00:44:51,349 --> 00:44:49,440

this is for elon you've been working

1126
00:44:53,349 --> 00:44:51,359
toward this moment for 18 years and have

1127
00:44:55,349 --> 00:44:53,359
certainly encountered some uh resistance

1128
00:44:57,190 --> 00:44:55,359
along the way i think even in nasa at

1129
00:44:59,349 --> 00:44:57,200
one point um what would you say to those

1130
00:45:01,829 --> 00:44:59,359
who doubted spacex could do this do you

1131
00:45:03,670 --> 00:45:01,839
have a message for them and then uh your

1132
00:45:05,589 --> 00:45:03,680
last conversation with bob and doug can

1133
00:45:07,910 --> 00:45:05,599
you can you tell us what you um what you

1134
00:45:09,190 --> 00:45:07,920
talked about what you said thank you

1135
00:45:10,150 --> 00:45:09,200
my apologies i didn't hear the first

1136
00:45:21,910 --> 00:45:10,160
question

1137
00:45:24,550 --> 00:45:21,920
yes i'm sorry you couldn't hear the

1138
00:45:26,630 --> 00:45:24,560

question yeah can you repeat it please

1139

00:45:28,390 --> 00:45:26,640

yeah sorry about that um so this is for

1140

00:45:29,589 --> 00:45:28,400

elon i said you've been working toward

1141

00:45:30,710 --> 00:45:29,599

this moment for 18 years and you've

1142

00:45:32,870 --> 00:45:30,720

certainly encountered a lot of

1143

00:45:35,109 --> 00:45:32,880

resistance along the way uh even i i

1144

00:45:36,470 --> 00:45:35,119

think from nasa at the very beginning um

1145

00:45:37,910 --> 00:45:36,480

what would you say to those who doubted

1146

00:45:40,150 --> 00:45:37,920

spacex could do this do you have a

1147

00:45:41,750 --> 00:45:40,160

message for them and then uh what was

1148

00:45:43,109 --> 00:45:41,760

your last conversation with bob and doug

1149

00:45:46,069 --> 00:45:43,119

like what did you what did you talk

1150

00:45:49,510 --> 00:45:46,079

about where was it um thank you so much

1151

00:45:53,190 --> 00:45:49,520

it's do i have a message for those who

1152

00:45:56,270 --> 00:45:53,200

oh doubted okay i was like okay um

1153

00:46:00,870 --> 00:45:56,280

maybe i just blank out the word

1154

00:46:03,030 --> 00:46:01,910

okay

1155

00:46:05,990 --> 00:46:03,040

um

1156

00:46:07,750 --> 00:46:06,000

so uh no i mean i totally frank i

1157

00:46:10,069 --> 00:46:07,760

doubted us too so

1158

00:46:12,230 --> 00:46:10,079

i i thought we you know had maybe

1159

00:46:14,390 --> 00:46:12,240

when starting spacex maybe had a 10

1160

00:46:16,790 --> 00:46:14,400

chance of reaching orbit so

1161

00:46:17,750 --> 00:46:16,800

so you know to those who who doubted us

1162

00:46:20,470 --> 00:46:17,760

i was like well i think you're probably

1163

00:46:22,150 --> 00:46:20,480

right you know um i mean there were

1164

00:46:23,990 --> 00:46:22,160

times uh

1165

00:46:26,390 --> 00:46:24,000

that i was told like

1166

00:46:28,950 --> 00:46:26,400

uh because i was taking the money from

1167

00:46:31,829 --> 00:46:28,960

from paypal and enrolling into

1168

00:46:33,670 --> 00:46:31,839

to create spacex and tesla and and i

1169

00:46:34,870 --> 00:46:33,680

ended up spending it all it wasn't the

1170

00:46:36,150 --> 00:46:34,880

intention but

1171

00:46:37,510 --> 00:46:36,160

um

1172

00:46:38,870 --> 00:46:37,520

and and and

1173

00:46:42,790 --> 00:46:38,880

almost both companies went bankrupt

1174

00:46:45,510 --> 00:46:44,309

you know it took us took us four

1175

00:46:48,870 --> 00:46:45,520

attempts just to get to orbit with

1176

00:46:53,430 --> 00:46:50,630

and uh

1177

00:46:55,270 --> 00:46:53,440

so but a lot of times i was you know i

1178

00:46:56,790 --> 00:46:55,280

people tell me this joke like how do you

1179

00:46:58,550 --> 00:46:56,800

make a small fortune in the rocket

1180

00:47:00,309 --> 00:46:58,560

industry you start with a large one is

1181

00:47:01,829 --> 00:47:00,319

the punch line

1182

00:47:04,870 --> 00:47:01,839

and i was like okay i already heard that

1183

00:47:05,750 --> 00:47:04,880

joke 12 000 times you know

1184

00:47:08,230 --> 00:47:05,760

so

1185

00:47:10,550 --> 00:47:08,240

anyway

1186

00:47:11,910 --> 00:47:10,560

and it was it almost came true

1187

00:47:14,150 --> 00:47:11,920

um

1188

00:47:16,309 --> 00:47:14,160

you know we just barely made it there

1189

00:47:17,750 --> 00:47:16,319

that fourth launch of falcon one that's

1190

00:47:20,549 --> 00:47:17,760

all the money we had for that fourth

1191

00:47:22,630 --> 00:47:20,559

launch and then uh and that wasn't even

1192

00:47:24,470 --> 00:47:22,640

enough to save the company we also then

1193

00:47:26,950 --> 00:47:24,480

had to win the national cargo resupply

1194

00:47:28,950 --> 00:47:26,960

contract um so that that came a little

1195

00:47:31,109 --> 00:47:28,960

after you know a little bit later or

1196

00:47:32,950 --> 00:47:31,119

towards the end of 2008

1197

00:47:34,950 --> 00:47:32,960

those are the two key things that that

1198

00:47:37,190 --> 00:47:34,960

saved spacex otherwise we would have we

1199

00:47:39,670 --> 00:47:37,200

would have you know

1200

00:47:40,710 --> 00:47:39,680

not made it so

1201

00:47:43,030 --> 00:47:40,720

um

1202

00:47:45,589 --> 00:47:43,040

so hey i think those those doubters were

1203

00:47:47,750 --> 00:47:45,599

their probability assessment was correct

1204

00:47:49,430 --> 00:47:47,760

but fortunately

1205

00:47:51,670 --> 00:47:49,440

veda smiled upon us and brought us to

1206

00:47:53,190 --> 00:47:51,680

this day

1207

00:47:54,950 --> 00:47:53,200

and pat anything else you could add

1208

00:47:57,109 --> 00:47:54,960

about bob and doug right before they

1209

00:47:59,030 --> 00:47:57,119

launched

1210

00:48:01,510 --> 00:47:59,040

well i mentioned earlier that uh that

1211

00:48:04,470 --> 00:48:01,520

they were calm and focused uh

1212

00:48:06,870 --> 00:48:04,480

i think that

1213

00:48:09,270 --> 00:48:06,880

this was for both of them a chance to to

1214

00:48:11,589 --> 00:48:09,280

get back to space they felt like it was

1215

00:48:14,549 --> 00:48:11,599

a privilege to represent nasa and the

1216

00:48:17,270 --> 00:48:14,559

astronaut corps in in this endeavor and

1217

00:48:18,950 --> 00:48:17,280

they uh i guarantee uh

1218

00:48:21,349 --> 00:48:18,960

uh are gonna enjoy their time on the

1219

00:48:23,030 --> 00:48:21,359

international space station

1220

00:48:24,549 --> 00:48:23,040

chris joked with them when they didn't

1221

00:48:27,030 --> 00:48:24,559

get up the first time i think the

1222

00:48:29,190 --> 00:48:27,040

administrator heard this that they were

1223

00:48:31,829 --> 00:48:29,200

trying to get out of the weekend

1224

00:48:32,870 --> 00:48:31,839

cleaning that we do on the iss but

1225

00:48:36,150 --> 00:48:32,880

they'll be

1226

00:48:37,510 --> 00:48:36,160

glad to get there glad to come back

1227

00:48:40,790 --> 00:48:37,520

we're going to take our last question

1228

00:48:44,150 --> 00:48:42,069

hi this is hanukkah lightering with

1229

00:48:45,750 --> 00:48:44,160

space.com thank you so much for taking

1230

00:48:47,270 --> 00:48:45,760

my question and congratulations on an

1231

00:48:48,630 --> 00:48:47,280

amazing launch today

1232

00:48:50,870 --> 00:48:48,640

i'm just wondering if you could talk

1233

00:48:52,870 --> 00:48:50,880

about uh what else bob and doug will be

1234

00:48:54,630 --> 00:48:52,880

doing now that they've completed their

1235

00:48:56,710 --> 00:48:54,640

manual flight test i i've heard that

1236

00:48:59,349 --> 00:48:56,720

they're going to be taking a nap at some

1237

00:49:03,510 --> 00:48:59,359

point but what else is on the to-do list

1238

00:49:06,230 --> 00:49:03,520

for bob and doug between now and docking

1239

00:49:08,309 --> 00:49:06,240

well you know they um they they did

1240

00:49:10,390 --> 00:49:08,319

their far-field demo so like elon

1241

00:49:12,710 --> 00:49:10,400

already mentioned they got to

1242

00:49:15,030 --> 00:49:12,720

manually fly the vehicle

1243

00:49:16,950 --> 00:49:15,040

they'll be doing another demonstration a

1244

00:49:20,230 --> 00:49:16,960

little bit closer to the space station

1245

00:49:21,829 --> 00:49:20,240

you know people forget that

1246

00:49:23,510 --> 00:49:21,839

you know the reason

1247

00:49:25,430 --> 00:49:23,520

we picked or the

1248

00:49:27,270 --> 00:49:25,440

fod picked the

1249

00:49:30,309 --> 00:49:27,280

bob and duck to fly this is because of

1250

00:49:32,470 --> 00:49:30,319

their experience as test pilots and and

1251
00:49:35,190 --> 00:49:32,480
actually had developed this the concept

1252
00:49:37,030 --> 00:49:35,200
of the cadre to have an experienced set

1253
00:49:39,349 --> 00:49:37,040
of pilot of

1254
00:49:42,230 --> 00:49:39,359
crew members working with the companies

1255
00:49:44,150 --> 00:49:42,240
to make sure that that they were able to

1256
00:49:46,069 --> 00:49:44,160
help them as they're working through

1257
00:49:48,150 --> 00:49:46,079
their designs and developing their

1258
00:49:50,870 --> 00:49:48,160
systems

1259
00:49:52,630 --> 00:49:50,880
so this is kind of cool because this is

1260
00:49:53,829 --> 00:49:52,640
bob and doug get to

1261
00:49:55,829 --> 00:49:53,839
actually

1262
00:49:59,190 --> 00:49:55,839
fly the work that they've been helping

1263
00:50:02,150 --> 00:49:59,200

work and develop and say figure out how

1264

00:50:03,030 --> 00:50:02,160

is it really working on orbit and

1265

00:50:04,470 --> 00:50:03,040

so

1266

00:50:07,030 --> 00:50:04,480

the other thing they get to do is just

1267

00:50:09,670 --> 00:50:07,040

to be able to be

1268

00:50:12,230 --> 00:50:09,680

you know the ecosystems working they're

1269

00:50:14,630 --> 00:50:12,240

getting to see that are things cooling

1270

00:50:17,109 --> 00:50:14,640

is the how's the seat feels how's the

1271

00:50:19,030 --> 00:50:17,119

suits feel can you get in and out of the

1272

00:50:20,950 --> 00:50:19,040

suits you know when you're on orbit how

1273

00:50:22,710 --> 00:50:20,960

easy are those kind of functions going

1274

00:50:25,190 --> 00:50:22,720

to be

1275

00:50:27,829 --> 00:50:25,200

i'm not going to talk about the

1276

00:50:30,950 --> 00:50:27,839

the wastes functions but that's kind of

1277

00:50:32,390 --> 00:50:30,960

part of it and and then obviously

1278

00:50:35,589 --> 00:50:32,400

how

1279

00:50:38,069 --> 00:50:35,599

approach feels with i know that that um

1280

00:50:39,829 --> 00:50:38,079

jim was able to use a simulator but now

1281

00:50:41,349 --> 00:50:39,839

they've got this big simulator with

1282

00:50:42,950 --> 00:50:41,359

that's the international space station

1283

00:50:43,990 --> 00:50:42,960

that they're going to get to be able to

1284

00:50:44,870 --> 00:50:44,000

actually

1285

00:50:47,270 --> 00:50:44,880

you know

1286

00:50:49,270 --> 00:50:47,280

come up to and be able to dock and see

1287

00:50:50,309 --> 00:50:49,280

how that really works and how it matches

1288

00:50:51,349 --> 00:50:50,319

because

1289

00:50:53,829 --> 00:50:51,359

one of the things that's really

1290

00:50:54,870 --> 00:50:53,839

important we all know it and anybody

1291

00:50:59,190 --> 00:50:54,880

i've

1292

00:51:01,270 --> 00:50:59,200

you know is how does a real thing really

1293

00:51:04,470 --> 00:51:01,280

approximate what you've been practicing

1294

00:51:06,309 --> 00:51:04,480

on for you know the last few years and

1295

00:51:07,990 --> 00:51:06,319

so they now are going to be able to come

1296

00:51:09,750 --> 00:51:08,000

back and for these next crews that are

1297

00:51:12,390 --> 00:51:09,760

going up they'll be able to share with

1298

00:51:15,030 --> 00:51:12,400

them hey this is really how it felt this

1299

00:51:17,030 --> 00:51:15,040

is how these systems worked and be able

1300

00:51:19,670 --> 00:51:17,040

to um

1301
00:51:21,430 --> 00:51:19,680
share that experience with the crew one

1302
00:51:24,309 --> 00:51:21,440
crew that right now is doing their

1303
00:51:27,510 --> 00:51:26,470
they're doing a very very very important

1304
00:51:30,150 --> 00:51:27,520
function

1305
00:51:32,549 --> 00:51:30,160
for our upcoming crews that will really

1306
00:51:34,950 --> 00:51:32,559
be the long duration crew members and

1307
00:51:36,950 --> 00:51:34,960
will be flying to the space station

1308
00:51:38,300 --> 00:51:36,960
and i can promise you that the hardest

1309
00:51:39,670 --> 00:51:38,310
thing they'll do tomorrow

1310
00:51:41,510 --> 00:51:39,680
[Music]

1311
00:51:43,589 --> 00:51:41,520
is when they're done flying their manual

1312
00:51:46,069 --> 00:51:43,599
near field flying is to hand it back

1313
00:51:48,309 --> 00:51:46,079

over to the computers and not dock it

1314

00:51:50,390 --> 00:51:48,319

themselves because they are test pilots

1315

00:51:52,390 --> 00:51:50,400

and to answer an earlier question that

1316

00:51:54,150 --> 00:51:52,400

is exactly what they would enjoy doing

1317

00:51:55,510 --> 00:51:54,160

so to give it back will be a little bit

1318

00:51:57,430 --> 00:51:55,520

hard for them

1319

00:51:59,750 --> 00:51:57,440

i i did notice you know doug was really

1320

00:52:02,950 --> 00:51:59,760

good at teaching jim how to fly it

1321

00:52:05,109 --> 00:52:02,960

so yes he helped you dock right

1322

00:52:09,750 --> 00:52:05,119

well i might have

1323

00:52:13,190 --> 00:52:11,109

well that was our last question some

1324

00:52:14,390 --> 00:52:13,200

closing remarks from the administrator

1325

00:52:16,390 --> 00:52:14,400

sure

1326

00:52:18,230 --> 00:52:16,400

so again this is a great day for the

1327

00:52:21,349 --> 00:52:18,240

united states of america it does

1328

00:52:23,349 --> 00:52:21,359

represent um many years of work uh i

1329

00:52:25,430 --> 00:52:23,359

want to say you know a question came up

1330

00:52:26,950 --> 00:52:25,440

earlier about you know

1331

00:52:28,470 --> 00:52:26,960

doubters and

1332

00:52:30,710 --> 00:52:28,480

people that didn't believe that this

1333

00:52:33,349 --> 00:52:30,720

could have ever happened

1334

00:52:36,950 --> 00:52:33,359

there was a day when charlie bolden my

1335

00:52:38,630 --> 00:52:36,960

predecessor at nasa as the administrator

1336

00:52:41,030 --> 00:52:38,640

was trying to get this program off the

1337

00:52:42,870 --> 00:52:41,040

ground in a significant way and he had

1338

00:52:44,950 --> 00:52:42,880

members of congress on both sides of the

1339

00:52:47,109 --> 00:52:44,960

aisle that were in opposition to it

1340

00:52:48,710 --> 00:52:47,119

and wouldn't adequately fund it and

1341

00:52:50,710 --> 00:52:48,720

ultimately

1342

00:52:51,670 --> 00:52:50,720

gave him a hard time about it

1343

00:52:52,630 --> 00:52:51,680

and

1344

00:52:57,990 --> 00:52:52,640

general

1345

00:53:00,150 --> 00:52:58,000

persevered and he pushed through and

1346

00:53:02,069 --> 00:53:00,160

that was the beginning of what we all

1347

00:53:04,150 --> 00:53:02,079

get to experience today

1348

00:53:06,470 --> 00:53:04,160

um and so i i want to i want to

1349

00:53:08,309 --> 00:53:06,480

emphasize that i also want to emphasize

1350

00:53:11,030 --> 00:53:08,319

you know pat was talking about how the

1351
00:53:13,270 --> 00:53:11,040
the bob and doug were joking with each

1352
00:53:14,710 --> 00:53:13,280
other earlier today when when i had the

1353
00:53:17,030 --> 00:53:14,720
opportunity to be with them and they

1354
00:53:19,910 --> 00:53:17,040
were joking you know doug

1355
00:53:21,990 --> 00:53:19,920
doug hurley's last space shuttle mission

1356
00:53:24,230 --> 00:53:22,000
got scrubbed five times before they

1357
00:53:26,150 --> 00:53:24,240
finally launched on the sixth time and

1358
00:53:28,309 --> 00:53:26,160
of course bob benkin is saying that doug

1359
00:53:29,430 --> 00:53:28,319
hurley is the jinx here and therefore

1360
00:53:31,910 --> 00:53:29,440
you know they're not going to launch

1361
00:53:33,829 --> 00:53:31,920
today either and and to see them

1362
00:53:36,870 --> 00:53:33,839
loose like that pat you mentioned that

1363
00:53:38,630 --> 00:53:36,880

they were loose and joking and and in

1364

00:53:41,030 --> 00:53:38,640

fact seemingly

1365

00:53:42,309 --> 00:53:41,040

having fun on the day of launch even

1366

00:53:44,549 --> 00:53:42,319

though what they're doing is very

1367

00:53:45,910 --> 00:53:44,559

serious and

1368

00:53:48,790 --> 00:53:45,920

nerves of steel

1369

00:53:50,710 --> 00:53:48,800

just i mean these are cheese are just

1370

00:53:51,829 --> 00:53:50,720

american heroes yeah

1371

00:53:53,750 --> 00:53:51,839

um

1372

00:53:56,230 --> 00:53:53,760

so i just want to make sure that we're

1373

00:53:58,630 --> 00:53:56,240

keeping them in mind and of course elon

1374

00:54:00,069 --> 00:53:58,640

spacex and your team

1375

00:54:01,750 --> 00:54:00,079

you know going back to what we talked

1376

00:54:02,630 --> 00:54:01,760

about just a few minutes ago the fact

1377

00:54:05,190 --> 00:54:02,640

that

1378

00:54:07,270 --> 00:54:05,200

at spacex you don't call them bob and

1379

00:54:08,950 --> 00:54:07,280

doug you call them the dads

1380

00:54:11,030 --> 00:54:08,960

because that's what they are they are in

1381

00:54:13,349 --> 00:54:11,040

fact dads and keeping their safety at

1382

00:54:15,349 --> 00:54:13,359

the foremost of your minds

1383

00:54:17,910 --> 00:54:15,359

so really this is really uh

1384

00:54:20,230 --> 00:54:17,920

a great day for all of america it's a

1385

00:54:22,470 --> 00:54:20,240

great day for our country it's been a

1386

00:54:25,349 --> 00:54:22,480

long time it's been nine years since

1387

00:54:26,710 --> 00:54:25,359

we've had the opportunity um and of

1388

00:54:29,510 --> 00:54:26,720

course uh

1389

00:54:32,230 --> 00:54:29,520

um we're we we are here now and there's

1390

00:54:34,309 --> 00:54:32,240

there's you know as elon said earlier

1391

00:54:36,069 --> 00:54:34,319

there's a ten thousand people behind

1392

00:54:37,349 --> 00:54:36,079

this that uh that have made it happen

1393

00:54:39,109 --> 00:54:37,359

you might have said

1394

00:54:40,870 --> 00:54:39,119

actually when you add up suppliers and

1395

00:54:42,549 --> 00:54:40,880

you know and everyone it's i think it's

1396

00:54:45,109 --> 00:54:42,559

probably closer to a hundred thousand

1397

00:54:47,270 --> 00:54:45,119

children that's right so

1398

00:54:49,510 --> 00:54:47,280

um this really is a it's a great day for

1399

00:54:51,190 --> 00:54:49,520

the united states of america it's a

1400

00:54:53,349 --> 00:54:51,200

great day for our international partners

1401

00:54:54,950 --> 00:54:53,359

remember crew one is going to be an

1402

00:54:56,470 --> 00:54:54,960

international mission

1403

00:54:58,710 --> 00:54:56,480

on the first on the first crew we're

1404

00:55:00,150 --> 00:54:58,720

going to have a japanese astronaut with

1405

00:55:02,069 --> 00:55:00,160

us so

1406

00:55:04,069 --> 00:55:02,079

so we're very excited about this i want

1407

00:55:05,990 --> 00:55:04,079

to say congratulations to everybody

1408

00:55:08,150 --> 00:55:06,000

we're not celebrating yet we will

1409

00:55:09,430 --> 00:55:08,160

celebrate when they're home safely but

1410

00:55:12,230 --> 00:55:09,440

certainly um

1411

00:55:13,750 --> 00:55:12,240

we can we can breathe size of relief uh

1412

00:55:15,750 --> 00:55:13,760

every step along the way and that's what

1413

00:55:19,270 --> 00:55:15,760

we're doing today so congratulations to

1414

00:55:21,270 --> 00:55:19,280

spacex and elon musk congratulations to

1415

00:55:23,349 --> 00:55:21,280

kathy leaders and your nasa team that

1416

00:55:25,670 --> 00:55:23,359

got us to this position and we look

1417

00:55:27,270 --> 00:55:25,680

forward to so many things ahead

1418

00:55:28,789 --> 00:55:27,280

great

1419

00:55:30,630 --> 00:55:28,799

so that's going to wrap it up for us

1420

00:55:32,390 --> 00:55:30,640

here at the kennedy space center you can

1421

00:55:34,150 --> 00:55:32,400

continue watching our live coverage

1422

00:55:36,789 --> 00:55:34,160

until the astronauts reach the

1423

00:55:38,789 --> 00:55:36,799

international space station and docking

1424

00:55:41,349 --> 00:55:38,799

and hatch opening and the arrival of bob

1425

00:55:44,630 --> 00:55:41,359

and doug at the iss docking is scheduled

1426

00:55:46,470 --> 00:55:44,640

for 10 29 eastern time and right after

1427

00:55:48,150 --> 00:55:46,480

this broadcast we'll turn it over to jsc

1428

00:55:50,710 --> 00:55:48,160

we're going to hear from bob and doug

1429

00:55:53,430 --> 00:55:50,720

during a downlink from the crew dragon

1430

00:55:55,430 --> 00:55:53,440

from as they orbit the earth so we'll

1431

00:55:57,349 --> 00:55:55,440

have more information please go to

1432

00:56:00,390 --> 00:55:57,359

nasa.gov for more specific information

1433

00:56:02,710 --> 00:56:00,400

on commercial crew you go to nasa.gov

1434

00:56:05,829 --> 00:56:02,720

commercial crew and