



# NASA's SpaceX Demo-2 Mission Mission Highlights

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SPACEX

1  
00:00:00,920 --> 00:00:12,150

[Music]

2  
00:00:15,910 --> 00:00:13,749

you're looking at the american-made

3  
00:00:17,990 --> 00:00:15,920

rocket and spacecraft that will return

4  
00:00:20,790 --> 00:00:18,000

american astronauts to the international

5  
00:00:22,630 --> 00:00:20,800

space station from american soil for the

6  
00:00:25,109 --> 00:00:22,640

first time since the retirement of the

7  
00:00:27,670 --> 00:00:25,119

space shuttle last flown nearly nine

8  
00:00:29,990 --> 00:00:27,680

years ago but if all goes well today we

9  
00:00:32,310 --> 00:00:30,000

will mark a new first in nasa's storied

10  
00:00:36,790 --> 00:00:32,320

history and usher in the commercial crew

11  
00:00:41,190 --> 00:00:38,869

and we are looking at a live picture now

12  
00:00:43,590 --> 00:00:41,200

of bob benkin and doug hurley walking

13  
00:00:45,350 --> 00:00:43,600

down that hallway in the astronaut crew

14

00:00:47,029 --> 00:00:45,360

quarters we just saw doug wave at the

15

00:00:50,229 --> 00:00:47,039

screen and they're just turning the

16

00:00:52,150 --> 00:00:50,239

corner getting inside that elevator

17

00:00:53,670 --> 00:00:52,160

and this you can't see it from here but

18

00:00:54,790 --> 00:00:53,680

there is a banner hanging there you can

19

00:00:56,549 --> 00:00:54,800

kind of see it in the back there's a

20

00:00:58,709 --> 00:00:56,559

banner hanging on the wall of the

21

00:01:00,389 --> 00:00:58,719

elevator with the signatures of all the

22

00:01:02,709 --> 00:01:00,399

people who worked on this mission so it

23

00:01:04,149 --> 00:01:02,719

was really important for them to hang

24

00:01:09,109 --> 00:01:04,159

that up in there so bob and doug could

25

00:01:12,390 --> 00:01:10,950

and there the doors are opening here

26

00:01:15,810 --> 00:01:12,400

they come

27

00:01:18,310 --> 00:01:15,820

and there they are nasa astronauts

28

00:01:21,830 --> 00:01:18,320

[Applause]

29

00:01:26,950 --> 00:01:23,990

nasa astronauts bob bankin and doug

30

00:01:29,109 --> 00:01:26,960

hurley doug on the left bob on the right

31

00:01:31,410 --> 00:01:29,119

waving to the crowd there to cheer them

32

00:01:31,420 --> 00:01:37,030

[Applause]

33

00:01:41,429 --> 00:01:38,950

and there are their families right in

34

00:01:43,670 --> 00:01:41,439

front of them the virtual hugs a very

35

00:01:48,230 --> 00:01:43,680

special moment

36

00:01:51,030 --> 00:01:49,590

are you gonna listen to mommy and make

37

00:01:56,630 --> 00:01:51,040

her life easy

38

00:01:56,640 --> 00:02:04,389

let's light this candle i agree

39

00:02:04,399 --> 00:02:13,110

bye guys

40

00:02:13,120 --> 00:02:32,869

[Music]

41

00:02:35,910 --> 00:02:34,229

and there it is that

42

00:02:38,229 --> 00:02:35,920

that shot really gives you a sense of

43

00:02:40,229 --> 00:02:38,239

the scale of the falcon 9 rocket those

44

00:02:41,750 --> 00:02:40,239

teslas look teeny teeny tiny

45

00:02:43,910 --> 00:02:41,760

making their way up there

46

00:02:46,869 --> 00:02:43,920

yeah really cool watching the tesla's

47

00:02:49,509 --> 00:02:46,879

pull up driving on the launch pad just a

48

00:02:51,270 --> 00:02:49,519

few feet away from the vehicle this is

49

00:02:53,990 --> 00:02:51,280

awesome and getting really excited over

50

00:02:57,990 --> 00:02:56,070

corn countdown one at two hours 57

51  
00:02:59,589 --> 00:02:58,000  
minutes the crew has arrived at the pad

52  
00:03:02,149 --> 00:02:59,599  
on schedule

53  
00:03:04,550 --> 00:03:02,159  
there they are taken taken in the site

54  
00:03:08,790 --> 00:03:04,560  
craning to see the top of the falcon 9

55  
00:03:13,509 --> 00:03:11,110  
chlorine compound 1 at t minus 2 hours

56  
00:03:15,190 --> 00:03:13,519  
and 46 minutes the crew has arrived at

57  
00:03:16,830 --> 00:03:15,200  
the white room and its ingress is in

58  
00:03:20,390 --> 00:03:16,840  
progress on

59  
00:03:22,229 --> 00:03:20,400  
schedule and as they climb into dragon

60  
00:03:24,949 --> 00:03:22,239  
they will buckle themselves in and

61  
00:03:26,949 --> 00:03:24,959  
attach their umbilicals to their suits

62  
00:03:29,270 --> 00:03:26,959  
as you can see the suit techs

63  
00:03:34,390 --> 00:03:29,280

are there to help them get buckled and

64

00:03:38,070 --> 00:03:36,390

and we can see the seats slowly start to

65

00:03:39,910 --> 00:03:38,080

rotate again they're in this down

66

00:03:41,830 --> 00:03:39,920

position just to make it easier to climb

67

00:03:43,509 --> 00:03:41,840

in and out of dragon they'll rotate to

68

00:03:45,910 --> 00:03:43,519

this launch position to put their backs

69

00:03:48,309 --> 00:03:45,920

a little bit more parallel to the ground

70

00:03:50,070 --> 00:03:48,319

it makes taking the g-force a little bit

71

00:03:52,070 --> 00:03:50,080

easier for the crew on the way uphill

72

00:03:53,750 --> 00:03:52,080

but most importantly positions those

73

00:03:55,589 --> 00:03:53,760

touch screens directly in front of them

74

00:03:57,350 --> 00:03:55,599

which is just their gateway into dragon

75

00:03:58,550 --> 00:03:57,360

dragon spacex seats are in the launch

76

00:04:02,390 --> 00:03:58,560

position

77

00:04:07,670 --> 00:04:05,110

dragon spacex go for launch

78

00:04:10,470 --> 00:04:07,680

spacex dragon we're go for launch let's

79

00:04:11,509 --> 00:04:10,480

light this candle

80

00:04:12,470 --> 00:04:11,519

ten

81

00:04:13,429 --> 00:04:12,480

nine

82

00:04:14,550 --> 00:04:13,439

eight

83

00:04:15,509 --> 00:04:14,560

seven

84

00:04:16,550 --> 00:04:15,519

six

85

00:04:17,509 --> 00:04:16,560

five

86

00:04:18,550 --> 00:04:17,519

four

87

00:04:19,349 --> 00:04:18,560

three

88

00:04:20,150 --> 00:04:19,359

two

89

00:04:22,069 --> 00:04:20,160

one

90

00:04:24,469 --> 00:04:22,079

zero ignition

91

00:04:29,240 --> 00:04:24,479

liftoff there's a falcon line and crew

92

00:04:34,150 --> 00:04:31,030

[Applause]

93

00:04:36,390 --> 00:04:34,160

america has launched

94

00:04:38,629 --> 00:04:36,400

and so rises the new era of american

95

00:04:41,510 --> 00:04:38,639

space flight and with it the ambitions

96

00:04:43,110 --> 00:04:41,520

of a new generation continuing the dream

97

00:04:51,110 --> 00:04:43,120

20 seconds into flight stage one

98

00:04:55,110 --> 00:04:53,430

t-plus 30 seconds into this historic

99

00:04:57,909 --> 00:04:55,120

mission

100

00:05:00,550 --> 00:04:57,919

flying crew on board dragon and falcon 9

101  
00:05:02,670 --> 00:05:00,560  
and look at them go

102  
00:05:05,189 --> 00:05:02,680  
falcon power telemetry nominal

103  
00:05:06,870 --> 00:05:05,199  
[Music]

104  
00:05:08,710 --> 00:05:06,880  
m1d throttle down

105  
00:05:12,550 --> 00:05:08,720  
we're throttling down to get ready for

106  
00:05:17,909 --> 00:05:12,560  
the period of maximum dynamic pressure

107  
00:05:17,919 --> 00:05:24,230  
reports say all systems are go

108  
00:05:32,710 --> 00:05:26,790  
is supersonic

109  
00:05:32,720 --> 00:05:36,550  
m1d throttle up

110  
00:05:41,189 --> 00:05:38,790  
we're throttling back up to full power

111  
00:05:45,110 --> 00:05:41,199  
as we're through max q

112  
00:05:48,950 --> 00:05:47,029  
and we heard that one bravo call out

113  
00:05:50,550 --> 00:05:48,960

that's just the second abort zone that

114

00:05:53,029 --> 00:05:50,560

they're in they'll continue to be on

115

00:05:54,790 --> 00:05:53,039

this until the first stage has done its

116

00:05:55,990 --> 00:05:54,800

job and they switch over to the second

117

00:05:59,110 --> 00:05:56,000

at this point

118

00:06:00,870 --> 00:05:59,120

bob and doug pulling about 2.3 g's 2.3

119

00:06:04,230 --> 00:06:00,880

times the earth's gravity

120

00:06:06,070 --> 00:06:04,240

already moving it over to 1500 miles per

121

00:06:07,990 --> 00:06:06,080

hour

122

00:06:09,749 --> 00:06:08,000

we've heard the call out for mvac engine

123

00:06:11,670 --> 00:06:09,759

chill that's getting the mvac engine

124

00:06:13,830 --> 00:06:11,680

ready to light that'll come at about 2

125

00:06:15,670 --> 00:06:13,840

44 into flight

126  
00:06:16,550 --> 00:06:15,680  
right now everything continuing to look

127  
00:06:18,309 --> 00:06:16,560  
good

128  
00:06:20,870 --> 00:06:18,319  
next major event

129  
00:06:22,710 --> 00:06:20,880  
coming up is going to be the triple

130  
00:06:24,629 --> 00:06:22,720  
we'll have main engine cutoff of the

131  
00:06:26,309 --> 00:06:24,639  
nine first stage engines stage

132  
00:06:28,309 --> 00:06:26,319  
separation

133  
00:06:30,950 --> 00:06:28,319  
and then ignition of the second stage

134  
00:06:34,150 --> 00:06:30,960  
engine to continue to carry astronauts

135  
00:06:35,590 --> 00:06:34,160  
into orbit

136  
00:06:38,309 --> 00:06:35,600  
and what you're seeing on your screen is

137  
00:06:40,070 --> 00:06:38,319  
a live view of our drone ship

138  
00:06:42,710 --> 00:06:40,080

where our first stage will be coming

139

00:06:46,629 --> 00:06:45,110

looks like we lost that live view but

140

00:06:48,870 --> 00:06:46,639

we'll wait for confirmation of that

141

00:06:50,790 --> 00:06:48,880

landing shortly here

142

00:06:53,270 --> 00:06:50,800

falcon 9 first aid successfully landed

143

00:06:56,070 --> 00:06:53,280

and there you can see on your screen

144

00:06:59,029 --> 00:06:56,080

falcon 9 has landed

145

00:07:04,070 --> 00:06:59,039

this is the first falcon 9 to carry

146

00:07:08,390 --> 00:07:05,909

and as you can see on your right screen

147

00:07:13,670 --> 00:07:08,400

bob and doug are still

148

00:07:19,350 --> 00:07:17,270

dragon separation confirmed

149

00:07:21,589 --> 00:07:19,360

countdown one is unmerged separation

150

00:07:23,749 --> 00:07:21,599

confirmed

151

00:07:27,029 --> 00:07:23,759

and there's that call out

152

00:07:33,270 --> 00:07:27,039

dragon is now officially making its way

153

00:07:37,029 --> 00:07:35,510

dragon spacex with that separation call

154

00:07:42,150 --> 00:07:37,039

we have a few words for you from our

155

00:07:46,869 --> 00:07:45,270

standing by dragon chief engineer on

156

00:07:48,950 --> 00:07:46,879

dragon the ground

157

00:07:50,710 --> 00:07:48,960

bob doug on behalf of the entire launch

158

00:07:52,710 --> 00:07:50,720

team thanks for flying with falcon 9

159

00:07:58,070 --> 00:07:52,720

today we hope you enjoyed the ride and

160

00:08:03,589 --> 00:08:00,150

thanks bala congratulations to you and

161

00:08:07,430 --> 00:08:03,599

the f9 team for the first uh human

162

00:08:10,390 --> 00:08:07,440

ride for falcon 9. and it was incredible

163

00:08:13,990 --> 00:08:10,400

uh appreciate all the hard work and uh

164

00:08:16,230 --> 00:08:14,000

thanks for the great uh rides of space

165

00:08:17,909 --> 00:08:16,240

capital power

166

00:08:20,070 --> 00:08:17,919

proud of you guys and the rest of the

167

00:08:22,629 --> 00:08:20,080

team uh thank you so much for what

168

00:08:24,790 --> 00:08:22,639

you've done for us today putting america

169

00:08:27,510 --> 00:08:24,800

back into low earth orbit from the

170

00:08:32,790 --> 00:08:27,520

florida coast

171

00:08:39,029 --> 00:08:35,350

without further ado we would like to

172

00:08:42,230 --> 00:08:39,039

welcome you aboard capsule endeavor

173

00:08:44,790 --> 00:08:42,240

uh we chose endeavor for a few reasons

174

00:08:46,070 --> 00:08:44,800

one because of this incredible endeavor

175

00:08:48,230 --> 00:08:46,080

uh

176

00:08:50,470 --> 00:08:48,240

nasa spacex

177

00:08:51,829 --> 00:08:50,480

and the united states has been on uh

178

00:08:53,829 --> 00:08:51,839

since the end of the shuttle program

179

00:08:55,990 --> 00:08:53,839

back in

180

00:08:57,670 --> 00:08:56,000

the other reason we named it

181

00:08:58,949 --> 00:08:57,680

endeavor is a little more personal to

182

00:09:01,430 --> 00:08:58,959

bob and i

183

00:09:02,630 --> 00:09:01,440

we both had our first flights on shuttle

184

00:09:03,670 --> 00:09:02,640

endeavor

185

00:09:06,070 --> 00:09:03,680

and

186

00:09:07,190 --> 00:09:06,080

it just meant so much to us to carry on

187

00:09:09,430 --> 00:09:07,200

that name

188

00:09:12,389 --> 00:09:09,440

that's what we decided to go with so we

189

00:09:14,630 --> 00:09:12,399

hope you enjoy that name and once again

190

00:09:16,389 --> 00:09:14,640

welcome on board

191

00:09:18,310 --> 00:09:16,399

today we accomplished the first flight

192

00:09:20,230 --> 00:09:18,320

off the florida coast in uh quite some

193

00:09:22,389 --> 00:09:20,240

time and doug and i were really proud to

194

00:09:25,030 --> 00:09:22,399

have an opportunity to be a part of that

195

00:09:26,790 --> 00:09:25,040

we're doing it in a brand new spaceship

196

00:09:29,910 --> 00:09:26,800

a spaceship that's a lot different than

197

00:09:32,550 --> 00:09:29,920

its namesake endeavor the space shuttle

198

00:09:34,790 --> 00:09:32,560

and that it has a touch display screens

199

00:09:37,269 --> 00:09:34,800

that allow us to accomplish most of the

200

00:09:38,790 --> 00:09:37,279

interfacing requirements that we have

201  
00:09:40,310 --> 00:09:38,800  
but we've got the capability to

202  
00:09:42,150 --> 00:09:40,320  
interface with the vehicle and it's kind

203  
00:09:43,590 --> 00:09:42,160  
of interesting there's a command this

204  
00:09:46,070 --> 00:09:43,600  
little button over here is actually what

205  
00:09:48,230 --> 00:09:46,080  
the commands are for our displays

206  
00:09:51,430 --> 00:09:48,240  
one thing that does get lost is there is

207  
00:09:52,710 --> 00:09:51,440  
a extensive button panel down below as

208  
00:09:55,190 --> 00:09:52,720  
well so

209  
00:09:57,269 --> 00:09:55,200  
over on this side we can turn the

210  
00:10:00,470 --> 00:09:57,279  
displays on and off as well as send some

211  
00:10:02,389 --> 00:10:00,480  
commands for some contingency situations

212  
00:10:03,670 --> 00:10:02,399  
on the other side we have the ability to

213  
00:10:05,430 --> 00:10:03,680

deploy

214

00:10:07,030 --> 00:10:05,440

shoots and things like that on entry so

215

00:10:10,069 --> 00:10:07,040

we do have some buttons but the primary

216

00:10:12,310 --> 00:10:10,079

interface is these displays so nice new

217

00:10:14,150 --> 00:10:12,320

modern cockpit that we've got for our

218

00:10:16,310 --> 00:10:14,160

our uh compared to our namesake the

219

00:10:17,910 --> 00:10:16,320

space shuttle uh endeavor

220

00:10:19,430 --> 00:10:17,920

and i'm guessing it was the first time a

221

00:10:21,910 --> 00:10:19,440

space vehicle was flown with a touch

222

00:10:24,550 --> 00:10:21,920

screen before so

223

00:10:25,910 --> 00:10:24,560

we got that going for us

224

00:10:29,269 --> 00:10:25,920

we did

225

00:10:31,910 --> 00:10:29,279

it it turns out end up with one stowaway

226  
00:10:32,870 --> 00:10:31,920  
on board our vehicle when we launched

227  
00:10:34,949 --> 00:10:32,880  
today

228  
00:10:37,190 --> 00:10:34,959  
it was not

229  
00:10:40,069 --> 00:10:37,200  
just doug and i who accomplished the

230  
00:10:43,110 --> 00:10:40,079  
launch here we do have an apatosaurus

231  
00:10:45,430 --> 00:10:43,120  
aboard we both have two boys

232  
00:10:47,750 --> 00:10:45,440  
who are super interested in dying

233  
00:10:50,069 --> 00:10:47,760  
and we collected up all the dinosaurs

234  
00:10:52,630 --> 00:10:50,079  
between the two houses and

235  
00:10:54,790 --> 00:10:52,640  
trimmer the apatosaurus uh

236  
00:10:56,710 --> 00:10:54,800  
got the vote from the boys to make the

237  
00:10:59,110 --> 00:10:56,720  
trip into space today with us and so

238  
00:11:00,949 --> 00:10:59,120

that's uh was a super cool thing for us

239

00:11:03,269 --> 00:11:00,959

to get a chance to do for both of our

240

00:11:04,230 --> 00:11:03,279

sons who i i hope are super excited to

241

00:11:05,910 --> 00:11:04,240

see

242

00:11:08,230 --> 00:11:05,920

their toys floating around with us on

243

00:11:09,829 --> 00:11:08,240

board i'm sure they would rather be here

244

00:11:15,590 --> 00:11:09,839

given the opportunity but hopefully

245

00:11:21,990 --> 00:11:18,150

at this point dragon now approaching

246

00:11:26,310 --> 00:11:24,310

at this moment we're less than a mile

247

00:11:28,630 --> 00:11:26,320

away from station dragging just under

248

00:11:29,509 --> 00:11:28,640

1200 meters away continuing to close the

249

00:11:31,430 --> 00:11:29,519

gap

250

00:11:34,870 --> 00:11:31,440

pretty slow right right now moving in at

251  
00:11:36,790 --> 00:11:34,880  
only about 1.7 meters per second

252  
00:11:38,790 --> 00:11:36,800  
and here's a view from

253  
00:11:41,750 --> 00:11:38,800  
from dragon dragon's got a number of

254  
00:11:43,829 --> 00:11:41,760  
relative navigation sensors

255  
00:11:45,430 --> 00:11:43,839  
as well as a couple of cameras that can

256  
00:11:47,110 --> 00:11:45,440  
look forward that will hopefully get

257  
00:11:48,870 --> 00:11:47,120  
some some additional views for as we get

258  
00:11:52,310 --> 00:11:48,880  
closer to docking

259  
00:11:54,949 --> 00:11:52,320  
here's a great view from a camera behind

260  
00:11:57,110 --> 00:11:54,959  
bob and doug bob and the right hand seat

261  
00:11:59,990 --> 00:11:57,120  
in the pilot seat dug in the commander

262  
00:12:02,710 --> 00:12:00,000  
seat or the cdr seat

263  
00:12:10,069 --> 00:12:05,030

and that's 200 meters from this center

264

00:12:15,509 --> 00:12:12,710

we're inside 100 meters continuing to

265

00:12:17,750 --> 00:12:15,519

close i think you can see a meatball in

266

00:12:19,190 --> 00:12:17,760

american flag on that uh on the

267

00:12:21,269 --> 00:12:19,200

spacecraft

268

00:12:22,710 --> 00:12:21,279

that structure on the the fairing

269

00:12:24,629 --> 00:12:22,720

structure is actually what the super

270

00:12:26,550 --> 00:12:24,639

dracos are are housed in of course all

271

00:12:28,710 --> 00:12:26,560

of those are deactivated now

272

00:12:29,990 --> 00:12:28,720

only used for launch escape during the

273

00:12:32,310 --> 00:12:30,000

ascent portion

274

00:12:33,509 --> 00:12:32,320

nose cone right at the the top of the

275

00:12:35,430 --> 00:12:33,519

vehicle

276

00:12:37,110 --> 00:12:35,440

and you can see sort of the sealing

277

00:12:39,590 --> 00:12:37,120

surface

278

00:12:41,590 --> 00:12:39,600

those four circular slots right

279

00:12:44,710 --> 00:12:41,600

underneath the nose cone within that red

280

00:12:47,350 --> 00:12:44,720

ring are the the ford bulkhead dracos

281

00:12:50,150 --> 00:12:47,360

that's what we were using while

282

00:13:00,470 --> 00:12:50,160

we were conducting all those burns um

283

00:13:05,269 --> 00:13:02,949

they are puppy binders down

284

00:13:07,829 --> 00:13:05,279

they're sitting right there 20 meters

285

00:13:13,110 --> 00:13:07,839

from the docking port

286

00:13:13,120 --> 00:13:26,310

okay

287

00:13:31,590 --> 00:13:29,110

dragon closing in we're inside 20 meters

288

00:13:33,350 --> 00:13:31,600

and yeah that crew hands off point uh

289

00:13:36,230 --> 00:13:33,360  
should come up

290

00:13:38,310 --> 00:13:36,240  
in about three minutes or so

291

00:13:40,790 --> 00:13:38,320  
right before we get that final docking

292

00:13:42,629 --> 00:13:40,800  
it comes about 20 seconds prior or just

293

00:13:45,910 --> 00:13:42,639  
about two meters away from the station

294

00:13:48,310 --> 00:13:45,920  
still and that's just the crew not

295

00:13:49,509 --> 00:13:48,320  
issuing any abort commands at that point

296

00:13:51,910 --> 00:13:49,519  
it would be

297

00:13:59,509 --> 00:13:51,920  
too late and so any aborts would be

298

00:13:59,519 --> 00:14:05,269  
two meters

299

00:14:09,829 --> 00:14:07,350  
we are inside the hands off point the

300

00:14:25,990 --> 00:14:09,839  
chop the crew hands off point one meter

301  
00:14:26,000 --> 00:14:40,949  
soft capture complete

302  
00:14:46,069 --> 00:14:43,269  
and we just heard it soft capture we

303  
00:14:49,670 --> 00:14:46,079  
have docking that coming

304  
00:14:53,269 --> 00:14:49,680  
at 7 16 a.m pacific time with the

305  
00:14:55,430 --> 00:14:53,279  
station and dragon flying 262 statute

306  
00:15:00,470 --> 00:14:55,440  
miles right over the border between

307  
00:15:07,189 --> 00:15:03,030  
dragon spacex docking sequence is

308  
00:15:14,870 --> 00:15:12,550  
next dragon recopy dock incomplete

309  
00:15:17,110 --> 00:15:14,880  
to say that it's been a

310  
00:15:20,230 --> 00:15:17,120  
real honor to be just a small part of

311  
00:15:22,230 --> 00:15:20,240  
this uh 90-year endeavor since the last

312  
00:15:23,750 --> 00:15:22,240  
time the united states spaceship has

313  
00:15:25,509 --> 00:15:23,760

stopped with the international space

314

00:15:27,750 --> 00:15:25,519

station

315

00:15:30,949 --> 00:15:27,760

we have to congratulate the

316

00:15:32,310 --> 00:15:30,959

men and women of spacex at hawthorne

317

00:15:34,389 --> 00:15:32,320

mcgregor

318

00:15:36,550 --> 00:15:34,399

and at kennedy space center

319

00:15:39,110 --> 00:15:36,560

their incredible efforts over the last

320

00:15:41,110 --> 00:15:39,120

several years to make this possible

321

00:15:42,629 --> 00:15:41,120

to not go

322

00:15:44,310 --> 00:15:42,639

overstated

323

00:15:46,629 --> 00:15:44,320

i'd also like to thank

324

00:15:49,110 --> 00:15:46,639

kathy leaders and her team of the

325

00:15:51,110 --> 00:15:49,120

commercial crew program of nasa

326  
00:15:54,150 --> 00:15:51,120  
an outstanding job

327  
00:15:56,949 --> 00:15:54,160  
by everyone

328  
00:15:59,110 --> 00:15:56,959  
last i'd like to thank the

329  
00:16:01,829 --> 00:15:59,120  
the men and women of the national

330  
00:16:05,430 --> 00:16:01,839  
aeronautics and space agency

331  
00:16:08,949 --> 00:16:05,440  
this is an incredible time to be at nasa

332  
00:16:11,509 --> 00:16:08,959  
three new vehicles to be flown

333  
00:16:14,069 --> 00:16:11,519  
continuing mission in low-earth orbit

334  
00:16:20,740 --> 00:16:14,079  
and then to the moon and mars

335  
00:16:20,750 --> 00:16:25,350  
[Music]

336  
00:16:29,749 --> 00:16:27,509  
dragon arriving

337  
00:16:32,069 --> 00:16:29,759  
the crew of expedition 63 is honored to

338  
00:16:33,110 --> 00:16:32,079

welcome dragon in the commercial crew

339

00:16:34,870 --> 00:16:33,120

program

340

00:16:37,030 --> 00:16:34,880

to welcome aboard the international

341

00:16:38,870 --> 00:16:37,040

space station bob and doug glad to have

342

00:16:59,509 --> 00:16:38,880

you as part of the crew well done bravo

343

00:17:03,829 --> 00:17:01,910

we have bob bankin from spacex demo 2

344

00:17:11,829 --> 00:17:03,839

mission entering the international space

345

00:17:15,750 --> 00:17:12,940

followed by doug hurley

346

00:17:17,110 --> 00:17:15,760

[Applause]

347

00:17:18,789 --> 00:17:17,120

demo two crew now aboard the

348

00:17:21,829 --> 00:17:18,799

international space station they entered

349

00:17:24,069 --> 00:17:21,839

at 12 22 pm central time the station at

350

00:17:25,590 --> 00:17:24,079

the time was 262 statute miles over

351

00:17:26,949 --> 00:17:25,600

tuchmanistan

352

00:17:29,909 --> 00:17:26,959

crew all gathered in front of the

353

00:17:31,430 --> 00:17:29,919

cameras at the node 2 forward end of the

354

00:17:33,750 --> 00:17:31,440

international space station just behind

355

00:17:37,190 --> 00:17:33,760

them is the hatchway to the crew dragon

356

00:17:42,070 --> 00:17:39,350

station this is the nasa administrator

357

00:17:47,110 --> 00:17:44,470

we hear you loud and clear sir welcome

358

00:17:49,669 --> 00:17:47,120

to the space station

359

00:17:51,990 --> 00:17:49,679

thank you chris it's good to see you and

360

00:17:54,070 --> 00:17:52,000

welcome to bob and doug

361

00:17:57,110 --> 00:17:54,080

i i will tell you the whole world saw

362

00:17:59,270 --> 00:17:57,120

this mission and we are so so proud of

363

00:18:02,789 --> 00:17:59,280

everything you have done for our country

364

00:18:05,110 --> 00:18:02,799

and in fact to inspire the world

365

00:18:07,110 --> 00:18:05,120

we sure appreciate that sir it's uh

366

00:18:08,870 --> 00:18:07,120

obviously been our honor to be just a

367

00:18:11,430 --> 00:18:08,880

small part of this we have to give

368

00:18:13,510 --> 00:18:11,440

credit to spacex the commercial crew

369

00:18:15,909 --> 00:18:13,520

program and of course nasa

370

00:18:19,270 --> 00:18:15,919

it's great to get the united states back

371

00:18:21,190 --> 00:18:19,280

in the crude launch business and

372

00:18:23,669 --> 00:18:21,200

we're just really glad to be on board

373

00:18:25,590 --> 00:18:23,679

this magnificent complex

374

00:18:28,630 --> 00:18:25,600

first i just want to say thank you again

375

00:18:31,669 --> 00:18:28,640

to bob and doug and your families

376

00:18:33,990 --> 00:18:31,679

from all of us here at spacex all of our

377

00:18:35,750 --> 00:18:34,000

locations all of our partners all of our

378

00:18:38,870 --> 00:18:35,760

vendors everyone

379

00:18:40,950 --> 00:18:38,880

for uh trusting us to bring you up there

380

00:18:42,870 --> 00:18:40,960

hey thanks benji

381

00:18:44,549 --> 00:18:42,880

it's same back at you you know

382

00:18:47,590 --> 00:18:44,559

congratulations to the folks out of

383

00:18:50,150 --> 00:18:47,600

hawthorne mcgregor and at kennedy

384

00:18:52,150 --> 00:18:50,160

just uh an incredible journey we've had

385

00:18:54,950 --> 00:18:52,160

the last couple days a great day in

386

00:18:57,830 --> 00:18:54,960

space today our first uh first day of

387

00:19:00,230 --> 00:18:57,840

work and on space station but uh

388

00:19:01,590 --> 00:19:00,240

what a great ride on dragon and falcon 9

389

00:19:03,270 --> 00:19:01,600

to get us here

390

00:19:06,310 --> 00:19:03,280

everything worked uh

391

00:19:07,830 --> 00:19:06,320

exactly the way we plan it to work and

392

00:19:10,710 --> 00:19:07,840

that's a credit to the teams there in

393

00:19:12,630 --> 00:19:10,720

hawthorne and mcgregor and and kennedy

394

00:19:15,750 --> 00:19:12,640

just uh

395

00:19:18,070 --> 00:19:15,760

it's a pretty awe inspiring uh trip so

396

00:19:19,830 --> 00:19:18,080

far and and very humbling

397

00:19:22,150 --> 00:19:19,840

and just we're

398

00:19:24,470 --> 00:19:22,160

we're just so proud to represent uh

399

00:19:26,710 --> 00:19:24,480

spacex and nasa in

400

00:19:27,990 --> 00:19:26,720

this this new

401  
00:19:30,070 --> 00:19:28,000  
next

402  
00:19:32,470 --> 00:19:30,080  
launch capability

403  
00:19:34,310 --> 00:19:32,480  
you guys have a picture of the earth

404  
00:19:36,549 --> 00:19:34,320  
and you have a flag which also

405  
00:19:37,510 --> 00:19:36,559  
represents the friendly competition

406  
00:19:39,669 --> 00:19:37,520  
maybe

407  
00:19:42,630 --> 00:19:39,679  
that uh that brings us unity why don't

408  
00:19:45,830 --> 00:19:42,640  
you tell us about that there

409  
00:19:49,590 --> 00:19:45,840  
yeah so this is the uh flag that we left

410  
00:19:52,230 --> 00:19:49,600  
uh here almost nine years ago on sts-135

411  
00:19:55,750 --> 00:19:52,240  
it had actually flown an sts-1 and then

412  
00:19:58,150 --> 00:19:55,760  
it flew again with us on sts-135

413  
00:20:01,029 --> 00:19:58,160

and at some point after the end of the

414

00:20:03,830 --> 00:20:02,390

we decided

415

00:20:05,909 --> 00:20:03,840

we had we would have a little friendly

416

00:20:08,310 --> 00:20:05,919

competition to see who came up and got

417

00:20:11,669 --> 00:20:08,320

this flag and uh

418

00:20:14,230 --> 00:20:11,679

congratulations spacex you got the flag

419

00:20:17,110 --> 00:20:14,240

so bob and i chris will not let us

420

00:20:19,510 --> 00:20:17,120

forget it uh that's the biggest thing

421

00:20:20,310 --> 00:20:19,520

is this will be on his to-do list when

422

00:20:23,350 --> 00:20:20,320

uh

423

00:20:26,310 --> 00:20:23,360

we get the nod to return dragon back to

424

00:20:29,990 --> 00:20:26,320

earth and and uh hopefully this will

425

00:20:31,190 --> 00:20:30,000

find a a great place of honor somewhere

426  
00:20:33,750 --> 00:20:31,200  
in

427  
00:20:51,029 --> 00:20:33,760  
hawthorne

428  
00:20:55,029 --> 00:20:52,950  
everyone at nasdaq is thrilled that

429  
00:20:57,510 --> 00:20:55,039  
you're able to join us here today

430  
00:21:00,050 --> 00:20:57,520  
virtually as we get set to ring today's

431  
00:21:12,690 --> 00:21:00,060  
opening bell

432  
00:21:12,700 --> 00:21:16,070  
[Music]

433  
00:21:20,230 --> 00:21:16,950  
all right

434  
00:21:21,270 --> 00:21:20,240  
bob mini workstation brt

435  
00:21:23,029 --> 00:21:21,280  
has

436  
00:21:23,990 --> 00:21:23,039  
a red small small

437  
00:21:26,950 --> 00:21:24,000  
yes

438  
00:21:30,870 --> 00:21:26,960

three short wire ties one long wire tie

439

00:21:34,549 --> 00:21:30,880

one long one two three shorts

440

00:21:37,510 --> 00:21:34,559

i swing our breath small small

441

00:21:39,909 --> 00:21:37,520

red small small to pgt number seven

442

00:21:42,470 --> 00:21:39,919

number seven cal not motor thirty point

443

00:21:42,480 --> 00:21:59,909

seven sixteen 12.

444

00:22:07,909 --> 00:22:01,830

hey bob your helmet is locked just check

445

00:22:13,790 --> 00:22:10,470

the thermal cover is open

446

00:22:39,909 --> 00:22:13,800

i'm dressing we copy

447

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

the two spacewalkers will be making

448

00:22:45,590 --> 00:22:43,679

their way to the far starboard truss of

449

00:22:47,830 --> 00:22:45,600

the international space station to

450

00:22:50,390 --> 00:22:47,840

replace aging nickel hydrogen batteries

451  
00:22:53,029 --> 00:22:50,400  
on the first of two power channels for

452  
00:22:55,029 --> 00:22:53,039  
the s6 truss with new lithium-ion

453  
00:22:57,160 --> 00:22:55,039  
batteries and their associated adapter

454  
00:23:10,430 --> 00:22:57,170  
plates

455  
00:23:10,440 --> 00:23:34,950  
[Music]

456  
00:24:17,750 --> 00:23:37,630  
man

457  
00:24:19,380 --> 00:24:17,760  
[Music]

458  
00:24:32,070 --> 00:24:19,390  
foreign

459  
00:25:32,070 --> 00:24:33,570  
m

460  
00:25:33,880 --> 00:25:32,080  
[Music]

461  
00:25:44,549 --> 00:25:33,890  
so

462  
00:25:48,390 --> 00:25:46,470  
a view back inside where you can see

463  
00:25:53,590 --> 00:25:48,400

that thermal cover of the hatch is

464

00:25:57,430 --> 00:25:55,269

still waiting on the opportunity to

465

00:25:59,710 --> 00:25:57,440

close the hatch however

466

00:26:08,440 --> 00:25:59,720

the space walk does not end until

467

00:26:08,450 --> 00:26:26,720

[Music]

468

00:26:26,730 --> 00:26:37,490

[Applause]

469

00:26:37,500 --> 00:26:46,710

[Music]

470

00:26:46,720 --> 00:26:57,530

hold bob for a second

471

00:26:57,540 --> 00:27:02,149

[Music]

472

00:27:02,159 --> 00:27:06,070

okay

473

00:27:06,080 --> 00:27:20,549

on

474

00:27:25,590 --> 00:27:22,789

first of all i'm super excited that this

475

00:27:27,830 --> 00:27:25,600

is the uh first payload you you're

476  
00:27:29,750 --> 00:27:27,840  
working with on space station so make it

477  
00:27:32,870 --> 00:27:29,760  
super special for me

478  
00:27:35,110 --> 00:27:32,880  
and you can start we have the video

479  
00:27:39,590 --> 00:27:35,120  
we'll be watching

480  
00:27:44,070 --> 00:27:41,510  
when you install the

481  
00:27:46,870 --> 00:27:44,080  
sample cartridge we'd like you to first

482  
00:27:49,430 --> 00:27:46,880  
hand snug bolt bravo

483  
00:27:50,950 --> 00:27:49,440  
and then do bolt alpha and let us know

484  
00:27:53,110 --> 00:27:50,960  
if there's any difference between those

485  
00:28:20,220 --> 00:27:53,120  
two bolts

486  
00:28:52,549 --> 00:28:28,110  
[Music]

487  
00:28:52,559 --> 00:28:56,920  
so

488  
00:29:32,789 --> 00:29:26,790

[Music]

489

00:29:46,720 --> 00:29:34,400

so

490

00:30:24,389 --> 00:29:58,490

[Music]

491

00:30:26,549 --> 00:30:24,399

we'd like you to do is like with two

492

00:30:28,950 --> 00:30:26,559

hands you're gonna grab the drink bag

493

00:30:31,269 --> 00:30:28,960

and try to squeeze it uniformly so that

494

00:30:33,480 --> 00:30:31,279

you actually drain it in about 15

495

00:30:41,190 --> 00:30:33,490

seconds

496

00:30:57,750 --> 00:30:44,440

keep it going keep it going cool

497

00:30:58,630 --> 00:30:57,760

[Music]

498

00:31:21,060 --> 00:30:58,640

nice

499

00:31:21,070 --> 00:31:35,269

[Music]

500

00:31:38,389 --> 00:31:37,029

an endeavor he's been on two while we

501  
00:31:40,549 --> 00:31:38,399  
wait for the fan

502  
00:31:42,630 --> 00:31:40,559  
uh on this day in space history nine

503  
00:31:45,390 --> 00:31:42,640  
years ago today

504  
00:31:56,389 --> 00:31:45,400  
mr doug hurley launched on sts-135

505  
00:31:59,990 --> 00:31:58,070  
well welcome aboard to the international

506  
00:32:01,269 --> 00:32:00,000  
space station and the crew of expedition

507  
00:32:03,909 --> 00:32:01,279  
63.

508  
00:32:05,750 --> 00:32:03,919  
it's an exciting day for us all as uh we

509  
00:32:08,710 --> 00:32:05,760  
bid farewell to our two friends and

510  
00:32:09,430 --> 00:32:08,720  
colleagues bob and doug as they complete

511  
00:32:13,350 --> 00:32:09,440  
the

512  
00:32:15,190 --> 00:32:13,360  
of this amazing test test mission before

513  
00:32:17,590 --> 00:32:15,200

i hand the mic over

514

00:32:20,630 --> 00:32:17,600

to bob and doug i do want to

515

00:32:22,070 --> 00:32:20,640

make mention of this very special flag

516

00:32:23,509 --> 00:32:22,080

it has deep

517

00:32:27,669 --> 00:32:23,519

deep

518

00:32:30,630 --> 00:32:27,679

as this flag will return

519

00:32:33,430 --> 00:32:30,640

to earth with the the crew crew dragon

520

00:32:36,389 --> 00:32:33,440

guys and uh spend a little bit of time

521

00:32:38,470 --> 00:32:36,399

on earth and very soon make a trip

522

00:32:41,029 --> 00:32:38,480

to the moon

523

00:32:43,990 --> 00:32:41,039

in short order so

524

00:32:47,830 --> 00:32:44,000

doug the flag's all yours it's been a

525

00:32:50,310 --> 00:32:47,840

pleasure and here you go thanks chris

526

00:32:52,549 --> 00:32:50,320

thanks for this uh yeah this flag has

527

00:32:54,950 --> 00:32:52,559

spent some time up here uh on the order

528

00:32:58,630 --> 00:32:54,960

of nine years since we dropped it off on

529

00:33:01,350 --> 00:32:58,640

sts-135 after it flew on sts-1 so very

530

00:33:02,870 --> 00:33:01,360

proud to return this flag home

531

00:33:05,430 --> 00:33:02,880

and

532

00:33:07,750 --> 00:33:05,440

see what's next for it on its journey to

533

00:33:11,190 --> 00:33:07,760

the moon

534

00:33:13,590 --> 00:33:11,200

it's hard to put into words

535

00:33:16,789 --> 00:33:13,600

just what it was like to be a part of

536

00:33:18,149 --> 00:33:16,799

this expedition expedition 63 it'll be

537

00:33:20,950 --> 00:33:18,159

kind of a memory that will last a

538

00:33:23,029 --> 00:33:20,960

lifetime for me just all the incredible

539

00:33:25,830 --> 00:33:23,039

teamwork and accomplishments with the

540

00:33:27,509 --> 00:33:25,840

highlights obviously being the the four

541

00:33:28,870 --> 00:33:27,519

space walks that we

542

00:33:31,269 --> 00:33:28,880

work together

543

00:33:33,430 --> 00:33:31,279

literally as a crew of five to to have

544

00:33:34,950 --> 00:33:33,440

success and to complete that part of the

545

00:33:36,549 --> 00:33:34,960

upgrade for the international space

546

00:33:38,549 --> 00:33:36,559

station which leaves it in a great

547

00:33:40,789 --> 00:33:38,559

posture for the future

548

00:33:42,470 --> 00:33:40,799

as i look back on the the mission that

549

00:33:44,310 --> 00:33:42,480

we've had here on the international

550

00:33:46,549 --> 00:33:44,320

space station i'm proud to have been a

551

00:33:48,389 --> 00:33:46,559

part of much of the science

552

00:33:50,789 --> 00:33:48,399

activities that happened over the last

553

00:33:52,630 --> 00:33:50,799

two months as doug and chris mentioned

554

00:33:54,789 --> 00:33:52,640

the the space walks and robotics

555

00:33:57,509 --> 00:33:54,799

activity uh chris and i were able to

556

00:33:59,830 --> 00:33:57,519

join the uh 10 spacewalk club which is a

557

00:34:01,909 --> 00:33:59,840

pretty neat thing that you know just a

558

00:34:04,149 --> 00:34:01,919

few short months ago i didn't think i

559

00:34:06,950 --> 00:34:04,159

would do another spacewalk and to now

560

00:34:09,589 --> 00:34:06,960

have the chance to have done four more

561

00:34:12,550 --> 00:34:09,599

with commander cassidy was just a icing

562

00:34:14,790 --> 00:34:12,560

on the cake for a wonderful mission

563

00:34:17,589 --> 00:34:14,800

and as i look forward to

564

00:34:18,710 --> 00:34:17,599

heading back home for the splashdown

565

00:34:21,349 --> 00:34:18,720

i do

566

00:34:23,030 --> 00:34:21,359

think that from a family perspective

567

00:34:25,510 --> 00:34:23,040

my son and

568

00:34:27,430 --> 00:34:25,520

doug's son are really excited not only

569

00:34:29,990 --> 00:34:27,440

to get their fathers back but to get our

570

00:34:32,230 --> 00:34:30,000

apatosaurus our zero g indicator that

571

00:34:34,310 --> 00:34:32,240

they nominated to go with us on this

572

00:34:36,550 --> 00:34:34,320

historic mission to the international

573

00:34:38,950 --> 00:34:36,560

space station and bringing that launch

574

00:34:39,909 --> 00:34:38,960

and return capability back to the u.s

575

00:34:41,990 --> 00:34:39,919

and so

576  
00:34:44,790 --> 00:34:42,000  
for jack and theo uh tremor the

577  
00:34:46,950 --> 00:34:44,800  
apatosaurus is uh headed home soon and

578  
00:34:49,109 --> 00:34:46,960  
uh he'll be with uh your dads you'll

579  
00:35:09,430 --> 00:34:49,119  
have to pick which one of us is your

580  
00:35:14,710 --> 00:35:12,069  
dragon spacex on the big loop

581  
00:35:17,030 --> 00:35:14,720  
the final reconfigurations for undock

582  
00:35:20,710 --> 00:35:17,040  
are complete and nominal

583  
00:35:25,030 --> 00:35:20,720  
the ground is go for undocking at the

584  
00:35:26,310 --> 00:35:25,040  
undocking sequence start time of 2330

585  
00:35:28,310 --> 00:35:26,320  
gmt

586  
00:35:29,910 --> 00:35:28,320  
please confirm your visors are down and

587  
00:35:34,710 --> 00:35:29,920  
that you are ready for undock and

588  
00:35:41,750 --> 00:35:37,910

dragon copies gopro.com our advisors are

589

00:35:41,760 --> 00:35:50,310

we copy all

590

00:35:50,320 --> 00:35:57,190

dragon spacex all hooks open and

591

00:35:57,200 --> 00:35:57,290

oh it's nominal

592

00:35:57,300 --> 00:36:02,069

[Music]

593

00:36:12,950 --> 00:36:05,030

dragon departing

594

00:36:19,430 --> 00:36:14,630

okay separation

595

00:36:23,349 --> 00:36:21,510

thrusters looking good counting down to

596

00:36:49,190 --> 00:36:23,359

a nominal departure burn zero coming up

597

00:36:49,200 --> 00:37:00,150

dragon spacex depart burn zero complete

598

00:37:02,710 --> 00:37:01,270

and with that bob and doug have

599

00:37:04,390 --> 00:37:02,720

concluded their stay aboard the

600

00:37:06,710 --> 00:37:04,400

international space station they're on

601  
00:37:09,030 --> 00:37:06,720  
their way back to planet earth confirms

602  
00:37:11,190 --> 00:37:09,040  
a physical separation at 4 35 p.m

603  
00:37:14,150 --> 00:37:11,200  
pacific as the station and dragon were

604  
00:37:19,030 --> 00:37:14,160  
flying 267 statute miles over

605  
00:37:25,190 --> 00:37:20,829  
endeavor on the big

606  
00:37:28,710 --> 00:37:27,190  
chris we just uh can't thank you enough

607  
00:37:31,750 --> 00:37:28,720  
it's been an honor and a privilege to be

608  
00:37:33,030 --> 00:37:31,760  
part of expedition 63 with you anatoly

609  
00:37:34,790 --> 00:37:33,040  
and yvonne

610  
00:37:37,910 --> 00:37:34,800  
it's been a great two months and we

611  
00:37:39,349 --> 00:37:37,920  
appreciate all you've done as a crew to

612  
00:37:42,310 --> 00:37:39,359  
help us

613  
00:37:45,349 --> 00:37:42,320

prove out dragon on its maiden flight

614

00:37:47,190 --> 00:37:45,359

i'd also like to thank zeb and his team

615

00:37:49,030 --> 00:37:47,200

in mission control and houston for the

616

00:37:51,349 --> 00:37:49,040

incredible amount of work they did to

617

00:37:52,550 --> 00:37:51,359

make the doctor ops successful

618

00:37:55,270 --> 00:37:52,560

for dragon

619

00:37:56,790 --> 00:37:55,280

and also the teams of staffex that

620

00:37:58,470 --> 00:37:56,800

keep us going towards the end of our

621

00:38:00,710 --> 00:37:58,480

mission that we look forward to

622

00:38:03,589 --> 00:38:00,720

splashdown tomorrow

623

00:38:06,550 --> 00:38:03,599

i also like to wish you a great success

624

00:38:08,710 --> 00:38:06,560

on the rest of your expedition nfc

625

00:38:11,349 --> 00:38:08,720

flight home in the fall

626

00:38:13,670 --> 00:38:11,359

take care friend

627

00:38:16,310 --> 00:38:13,680

endeavors thank you chris

628

00:38:20,230 --> 00:38:16,320

thank you anatoly thank you yvonne

629

00:38:23,190 --> 00:38:20,240

thank you houston and thank you spacex

630

00:38:23,990 --> 00:38:23,200

endeavor station uh bob and doug

631

00:38:32,550 --> 00:38:24,000

i

632

00:38:34,630 --> 00:38:32,560

safe travels and have a successful

633

00:38:37,990 --> 00:38:34,640

landing endeavor is a great ship

634

00:38:38,000 --> 00:38:43,270

is all thanks chris

635

00:38:47,990 --> 00:38:45,750

good morning dragon endeavor i'm happy

636

00:38:49,910 --> 00:38:48,000

you went into space but i'm even happier

637

00:38:52,950 --> 00:38:49,920

that you're coming back home

638

00:38:56,710 --> 00:38:52,960

rise and time daddy we love you

639

00:38:58,550 --> 00:38:56,720

we can't wait to see you wake up wake up

640

00:39:01,030 --> 00:38:58,560

rise and shine dad

641

00:39:03,030 --> 00:39:01,040

me luke leo and mom can't wait to see

642

00:39:05,430 --> 00:39:03,040

you daddy love you

643

00:39:06,630 --> 00:39:05,440

wake up wake up wake up

644

00:39:11,430 --> 00:39:06,640

wake up

645

00:39:14,870 --> 00:39:11,440

don't worry you can sleep in tomorrow

646

00:39:20,310 --> 00:39:14,880

hurry home so we can go get my dog

647

00:39:25,510 --> 00:39:22,710

good morning jay good morning to spacex

648

00:39:27,990 --> 00:39:25,520

and uh thank you especially to jack and

649

00:39:29,270 --> 00:39:28,000

to theo for that uh wonderful message

650

00:39:31,670 --> 00:39:29,280

this morning

651

00:39:33,829 --> 00:39:31,680

hopefully the pressure's all on uh

652

00:39:36,069 --> 00:39:33,839

whoever's making the the weather call

653

00:39:39,589 --> 00:39:36,079

because uh those boys seem excited to

654

00:39:42,470 --> 00:39:41,750

yeah we concur it was great hearing them

655

00:39:44,310 --> 00:39:42,480

and

656

00:39:46,630 --> 00:39:44,320

happy to hear you

657

00:39:48,790 --> 00:39:46,640

and lucky for you weather is looking

658

00:39:50,550 --> 00:39:48,800

great at pensacola

659

00:39:55,510 --> 00:39:50,560

dragon is also healthy and proceeding

660

00:40:00,230 --> 00:39:57,589

we've got some live views inside the

661

00:40:02,870 --> 00:40:00,240

dragon endeavor capsule bob and doug

662

00:40:05,349 --> 00:40:02,880

they're in their seats as they are

663

00:40:07,349 --> 00:40:05,359

making final preparations and doing

664

00:40:09,430 --> 00:40:07,359

final reviews as we

665

00:40:10,550 --> 00:40:09,440

get ready to initiate the deorbit

666

00:40:12,230 --> 00:40:10,560

sequence

667

00:40:14,390 --> 00:40:12,240

closest to the camera there is nasa

668

00:40:16,470 --> 00:40:14,400

astronaut doug hurley and further away

669

00:40:18,230 --> 00:40:16,480

from the camera is nasa astronaut bob

670

00:40:19,430 --> 00:40:18,240

benkin

671

00:40:20,230 --> 00:40:19,440

these are

672

00:40:21,510 --> 00:40:20,240

two

673

00:40:23,349 --> 00:40:21,520

incredibly

674

00:40:25,510 --> 00:40:23,359

wonderful humans

675

00:40:27,829 --> 00:40:25,520

we affectionately call them our space

676

00:40:30,150 --> 00:40:27,839

dads here at spacex

677

00:40:32,630 --> 00:40:30,160

it's been such an honor to be able to

678

00:40:34,950 --> 00:40:32,640

fly them of course doug hurley was

679

00:40:38,309 --> 00:40:34,960

actually the pilot of the final space

680

00:40:41,270 --> 00:40:38,319

shuttle mission sts-135

681

00:40:42,870 --> 00:40:41,280

back in 2011 and

682

00:40:45,589 --> 00:40:42,880

honestly when i heard that he was

683

00:40:46,470 --> 00:40:45,599

assigned to this mission

684

00:41:22,630 --> 00:40:46,480

i

685

00:41:22,640 --> 00:41:28,150

never happened

686

00:41:32,950 --> 00:41:29,990

there on your screen we have a shot of

687

00:41:34,710 --> 00:41:32,960

the capsule as it is preparing to deploy

688

00:41:35,910 --> 00:41:34,720

those initial parachutes the drug

689

00:41:39,349 --> 00:41:35,920

parachutes

690

00:41:40,870 --> 00:41:39,359

vehicle down

691

00:41:43,030 --> 00:41:40,880

even further

692

00:41:45,589 --> 00:41:43,040

and help stabilize in preparation for

693

00:41:47,430 --> 00:41:45,599

main shoot deployment

694

00:41:51,109 --> 00:41:47,440

right about now the capsule is going

695

00:41:53,349 --> 00:41:51,119

about 400 miles per hour

696

00:41:57,030 --> 00:41:53,359

decelerating quickly

697

00:41:59,750 --> 00:41:57,040

and standing by for drug deploys

698

00:42:01,109 --> 00:41:59,760

visual two drugs out

699

00:42:02,470 --> 00:42:01,119

there on your screen we have visual

700

00:42:04,470 --> 00:42:02,480

confirmation of those two drug

701  
00:42:06,790 --> 00:42:04,480  
deployments

702  
00:42:08,790 --> 00:42:06,800  
all right so two of two the droves now

703  
00:42:11,829 --> 00:42:08,800  
out they're going to do their slowing

704  
00:42:14,230 --> 00:42:11,839  
and stabilizing of the dragon spacecraft

705  
00:42:16,150 --> 00:42:14,240  
they should be detaching in just a few

706  
00:42:19,190 --> 00:42:16,160  
moments and then we'll see four

707  
00:42:22,710 --> 00:42:19,200  
parachutes the main parachutes deployed

708  
00:42:22,720 --> 00:42:29,349  
trove decent rate nominal

709  
00:42:32,950 --> 00:42:31,190  
so the expected descent rate the

710  
00:42:36,069 --> 00:42:32,960  
expected velocity under the droves

711  
00:42:38,150 --> 00:42:36,079  
nominal we're right at around 150 miles

712  
00:42:42,230 --> 00:42:38,160  
an hour and already dropping

713  
00:42:44,150 --> 00:42:42,240

you can see the droves now detach

714

00:42:48,069 --> 00:42:44,160

and there we have confirmation of

715

00:42:51,910 --> 00:42:48,079

deployment of the four main parachutes

716

00:42:52,870 --> 00:42:51,920

we are visual on four shoots out we are

717

00:43:09,829 --> 00:42:52,880

visual

718

00:43:14,630 --> 00:43:11,670

so at this point the main parachutes

719

00:43:16,790 --> 00:43:14,640

have deployed they are inflating as you

720

00:43:21,349 --> 00:43:16,800

can see there on your screen continuing

721

00:43:23,510 --> 00:43:21,359

to slow dragon down significantly

722

00:43:26,390 --> 00:43:23,520

we are anticipating splashdown in just

723

00:43:28,230 --> 00:43:26,400

under two minutes and 30 seconds

724

00:43:30,870 --> 00:43:28,240

we've already slowed the vehicle down to

725

00:43:45,109 --> 00:43:30,880

about 16 miles an hour it's already less

726  
00:43:54,950 --> 00:43:48,069  
main shoot descent rate nominal passing

727  
00:43:59,190 --> 00:43:56,710  
so at this point dragon has saved all

728  
00:44:02,069 --> 00:43:59,200  
propulsion systems on 600 meters

729  
00:44:08,390 --> 00:44:04,950  
and we're 600 meters above the gulf of

730  
00:44:14,150 --> 00:44:10,870  
should be approximately a minute 30 from

731  
00:44:17,829 --> 00:44:16,069  
mission control team here in hawthorne

732  
00:44:20,390 --> 00:44:17,839  
has reported the precise landing

733  
00:44:22,710 --> 00:44:20,400  
coordinates to the recovery team

734  
00:44:42,390 --> 00:44:22,720  
they are standing by

735  
00:44:52,150 --> 00:44:45,589  
we just passed about 300 meters

736  
00:44:56,870 --> 00:44:54,150  
200 meters

737  
00:45:02,710 --> 00:44:56,880  
we have brace for splashdown

738  
00:45:10,790 --> 00:45:04,309

so there we heard bob and doug reporting

739

00:45:15,670 --> 00:45:13,109

we should be able to see

740

00:45:17,750 --> 00:45:15,680

the gulf of mexico here in the shot just

741

00:45:20,309 --> 00:45:17,760

momentarily

742

00:45:28,309 --> 00:45:20,319

as we're now just about 20 meters off

743

00:45:32,550 --> 00:45:30,230

splash down

744

00:45:38,309 --> 00:45:32,560

as you can see on your screen we have

745

00:45:43,589 --> 00:45:40,870

spacex copies and concurs we see

746

00:45:46,710 --> 00:45:43,599

splashdown and mains cut

747

00:45:48,630 --> 00:45:46,720

dragon endeavor has returned home nasa

748

00:45:50,870 --> 00:45:48,640

astronauts and endeavor on behalf of the

749

00:45:52,470 --> 00:45:50,880

spacex and nasa teams welcome back to

750

00:46:00,069 --> 00:45:52,480

planet earth and thanks for flying

751  
00:46:05,349 --> 00:46:02,630  
truly our honor and privilege to fly in

752  
00:46:06,550 --> 00:46:05,359  
flights of the crew dragon and endeavor

753  
00:46:12,309 --> 00:46:06,560  
congrats

754  
00:46:17,430 --> 00:46:14,390  
uh all good and we're

755  
00:46:21,430 --> 00:46:17,440  
into section of four decimal

756  
00:46:26,069 --> 00:46:23,270  
thanks for those words doug and we uh

757  
00:46:29,589 --> 00:46:26,079  
copy that you are into uh four decimal

758  
00:46:31,990 --> 00:46:29,599  
eight zero zero so great news all around

759  
00:46:34,710 --> 00:46:32,000  
there our space dads are back on earth

760  
00:46:35,670 --> 00:46:34,720  
after a 19 hour return journey from

761  
00:46:37,990 --> 00:46:35,680  
space

762  
00:46:40,309 --> 00:46:38,000  
dragon endeavor has played splashdown in

763  
00:46:42,630 --> 00:46:40,319

the gulf of mexico just off the coast of

764

00:46:44,950 --> 00:46:42,640

pensacola florida and on your screen

765

00:46:46,950 --> 00:46:44,960

there you can see our two fast boats and

766

00:46:50,390 --> 00:46:46,960

they are indeed fast

767

00:46:52,870 --> 00:46:50,400

racing out to greet dragon endeavor as

768

00:46:54,550 --> 00:46:52,880

it sits there the first

769

00:46:56,630 --> 00:46:54,560

on there we can see a view inside the

770

00:46:58,150 --> 00:46:56,640

capsule bob and doug looking good

771

00:47:00,790 --> 00:46:58,160

although the communication was a little

772

00:47:03,430 --> 00:47:00,800

choppy we did hear the endeavor in three

773

00:47:06,630 --> 00:47:03,440

decimal one we show ourselves in stable

774

00:47:12,230 --> 00:47:09,430

and spacex copies for vehicle assessment

775

00:47:14,550 --> 00:47:12,240

step three decimal one stable one good

776

00:47:19,349 --> 00:47:17,270

i was still getting a view from the wb

777

00:47:21,510 --> 00:47:19,359

uh the airplane flying overhead it gave

778

00:47:23,510 --> 00:47:21,520

us those those great views of really our

779

00:47:25,430 --> 00:47:23,520

first views of bob and doug re-entering

780

00:47:26,870 --> 00:47:25,440

the earth's atmosphere

781

00:47:29,109 --> 00:47:26,880

from up above you can see the four

782

00:47:32,069 --> 00:47:29,119

parachutes in the water

783

00:47:34,790 --> 00:47:32,079

we heard those were cut automatically as

784

00:47:36,630 --> 00:47:34,800

expected by dragon

785

00:47:37,829 --> 00:47:36,640

so for now the crew just standing by

786

00:47:42,150 --> 00:47:37,839

again they're going to stay in their

787

00:47:46,069 --> 00:47:43,589

dragon will be hoisted using the

788

00:47:48,870 --> 00:47:46,079

hydraulic lift out of the water and into

789

00:47:50,470 --> 00:47:48,880

that nest that nest will then be pulled

790

00:47:52,549 --> 00:47:50,480

towards the camera from this view

791

00:47:56,549 --> 00:47:52,559

towards those individuals on that upper

792

00:48:03,510 --> 00:47:58,630

try again spacex brace for capsule lift

793

00:48:09,030 --> 00:48:06,870

we're ready thank you

794

00:48:11,670 --> 00:48:09,040

all right so the crew was just told in

795

00:48:12,870 --> 00:48:11,680

about 30 in the next 30 seconds they

796

00:48:15,030 --> 00:48:12,880

have the lines to fix so they're going

797

00:48:16,470 --> 00:48:15,040

to start lifting the capsule up out of

798

00:48:17,670 --> 00:48:16,480

the water

799

00:48:19,910 --> 00:48:17,680

and at this point the communication

800

00:48:21,750 --> 00:48:19,920

we're getting with dragon is actually

801  
00:48:23,109 --> 00:48:21,760  
being routed through the boat itself at

802  
00:48:27,910 --> 00:48:23,119  
this point

803  
00:48:34,870 --> 00:48:31,430  
dragon is out of the water yeah so now a

804  
00:48:36,950 --> 00:48:34,880  
frame is going to start swinging it back

805  
00:48:45,589 --> 00:48:36,960  
and it's bound right for that nest at

806  
00:48:49,510 --> 00:48:47,589  
there we can see dragon endeavor being

807  
00:48:53,270 --> 00:48:49,520  
carefully set down into the recovery

808  
00:48:55,190 --> 00:48:53,280  
nest on top of go navigator

809  
00:48:57,430 --> 00:48:55,200  
dragon spacex welcome aboard the

810  
00:48:59,270 --> 00:48:57,440  
recovery vessel recovery personnel are

811  
00:49:04,630 --> 00:48:59,280  
completing final checks and preparing to

812  
00:49:04,640 --> 00:49:08,549  
be happy thank you

813  
00:49:13,990 --> 00:49:11,670

and we see the hatch is now open hatch

814

00:49:15,030 --> 00:49:14,000

being opened at 12 59

815

00:49:18,470 --> 00:49:15,040

pm

816

00:49:18,480 --> 00:49:25,589

match is open

817

00:49:30,069 --> 00:49:28,390

so right now they're going to put a

818

00:49:31,910 --> 00:49:30,079

piece of equipment in there that

819

00:49:32,950 --> 00:49:31,920

basically smooths out the edges and make

820

00:49:35,990 --> 00:49:32,960

sure

821

00:49:37,910 --> 00:49:36,000

that it is a comfortable exit from

822

00:49:40,069 --> 00:49:37,920

the dragon capsule just a little piece

823

00:49:42,470 --> 00:49:40,079

of structure there to ensure that

824

00:49:45,109 --> 00:49:42,480

the hatch will remain open and that any

825

00:49:49,349 --> 00:49:45,119

sharp edges around that side hatch

826

00:49:54,230 --> 00:49:51,990

and solo from the plt i just wanted to

827

00:49:57,030 --> 00:49:54,240

thank you guys for bringing us home safe

828

00:49:58,470 --> 00:49:57,040

before we uh i disembarked from chip

829

00:50:00,630 --> 00:49:58,480

endeavor i'm sure doug will have some

830

00:50:02,309 --> 00:50:00,640

good words for you guys as well but uh

831

00:50:04,470 --> 00:50:02,319

thank you for doing the most difficult

832

00:50:06,870 --> 00:50:04,480

parts and the most important important

833

00:50:08,549 --> 00:50:06,880

parts of uh human space flight getting

834

00:50:09,990 --> 00:50:08,559

us into orbit and bringing us home

835

00:50:11,349 --> 00:50:10,000

safely

836

00:50:15,589 --> 00:50:11,359

thank you again for the good ship

837

00:50:18,950 --> 00:50:17,190

thank you bob for those awesome words

838

00:50:20,150 --> 00:50:18,960

it's absolutely been an honor and a

839

00:50:35,349 --> 00:50:20,160

pleasure to work with you from the

840

00:50:40,309 --> 00:50:37,750

i just would like to sort of reiterate

841

00:50:42,630 --> 00:50:40,319

what bob said and add

842

00:50:44,549 --> 00:50:42,640

my thanks to

843

00:50:45,910 --> 00:50:44,559

everybody over the last several years

844

00:50:48,870 --> 00:50:45,920

that's either worked in hawthorne

845

00:50:51,910 --> 00:50:48,880

mcgregor or down at kennedy space center

846

00:50:54,390 --> 00:50:51,920

anybody who's touched endeavor

847

00:50:56,790 --> 00:50:54,400

you should take a moment to just cherish

848

00:50:58,390 --> 00:50:56,800

this day especially given all the things

849

00:51:00,870 --> 00:50:58,400

that have happened this year

850

00:51:03,589 --> 00:51:00,880

uh we certainly can't thank you enough

851

00:51:06,150 --> 00:51:03,599

our families can't thank you enough

852

00:51:08,710 --> 00:51:06,160

just proud to be a small part of this

853

00:51:10,069 --> 00:51:08,720

whole effort to get the

854

00:51:13,589 --> 00:51:10,079

company

855

00:51:16,230 --> 00:51:13,599

people to and from the space station

856

00:51:17,270 --> 00:51:16,240

they can celebrate with each other

857

00:51:19,190 --> 00:51:17,280

and

858

00:51:22,150 --> 00:51:19,200

we'll talk to you soon hopefully in

859

00:51:23,670 --> 00:51:22,160

person

860

00:51:25,270 --> 00:51:23,680

thanks so much doug and you're welcome

861

00:51:27,190 --> 00:51:25,280

and and thank you so much for those kind

862

00:51:29,030 --> 00:51:27,200

words and we all wish you a safe journey

863

00:51:30,390 --> 00:51:29,040

home and a happy reunion with your

864

00:51:41,430 --> 00:51:30,400

family soon and we look forward to

865

00:51:45,510 --> 00:51:43,910

yeah so bob bank and uh the pilot the

866

00:51:47,589 --> 00:51:45,520

joint operations commander for this

867

00:51:48,710 --> 00:51:47,599

mission out of the capsule now

868

00:51:51,589 --> 00:51:48,720

so he's

869

00:51:53,510 --> 00:51:51,599

making his way over to the medical area

870

00:51:55,430 --> 00:51:53,520

and now they're gonna work to get doug

871

00:51:59,190 --> 00:51:55,440

hurley out next

872

00:52:03,589 --> 00:51:59,200

i think i saw a smile on bob's face

873

00:52:07,190 --> 00:52:05,349

as they've been giving us some regular

874

00:52:09,430 --> 00:52:07,200

status updates from inside the capsule

875

00:52:11,510 --> 00:52:09,440

they've been feeling really good

876

00:52:14,950 --> 00:52:11,520

and so now we're just standing by for

877

00:52:17,190 --> 00:52:14,960

our spacecraft commander doug hurley

878

00:52:21,829 --> 00:52:17,200

to make his way out into the fresh air

879

00:52:21,839 --> 00:52:27,030

and it looks like we've got him out

880

00:52:30,549 --> 00:52:29,390

we've got some applause here

881

00:52:32,150 --> 00:52:30,559

[Applause]

882

00:52:35,030 --> 00:52:32,160

and as you can see in mission control a

883

00:52:38,069 --> 00:52:35,040

standing ovation for a job well done all

884

00:52:41,190 --> 00:52:38,079

around yeah our our crew members

885

00:52:42,870 --> 00:52:41,200

bob and doug are now safely back home on

886

00:52:44,230 --> 00:52:42,880

earth and

887

00:52:45,670 --> 00:52:44,240

they're going to get checked out now by

888

00:52:47,589 --> 00:52:45,680

the nasa medical team they're going

889

00:52:49,349 --> 00:52:47,599

straight into the medical quarters on

890

00:52:51,430 --> 00:52:49,359

board the ship that'll be their first

891

00:52:53,109 --> 00:52:51,440

stop on planet earth and then they're

892

00:52:55,270 --> 00:52:53,119

going to be making their way up into a

893

00:52:57,589 --> 00:52:55,280

helicopter and then heading back to dry

894

00:52:59,750 --> 00:52:57,599

land so once they're complete the team's

895

00:53:01,750 --> 00:52:59,760

going to prepare dragon itself

896

00:53:10,309 --> 00:53:01,760

and they're going to begin taking it

897

00:53:14,309 --> 00:53:12,390

i think the the biggest thing that we

898

00:53:16,710 --> 00:53:14,319

would both like to talk about is just to

899

00:53:20,790 --> 00:53:16,720

thank uh you could see steve and kathy

900

00:53:22,790 --> 00:53:20,800

here and elon you know this has been a

901  
00:53:25,670 --> 00:53:22,800  
quite an odyssey the last

902  
00:53:26,470 --> 00:53:25,680  
five six seven eight years five years

903  
00:53:28,390 --> 00:53:26,480  
since

904  
00:53:29,510 --> 00:53:28,400  
bob and i started working on this

905  
00:53:32,470 --> 00:53:29,520  
program

906  
00:53:35,829 --> 00:53:32,480  
and to be where we are now the first

907  
00:53:38,470 --> 00:53:35,839  
crude flight of dragon is just

908  
00:53:40,470 --> 00:53:38,480  
unbelievable

909  
00:53:42,470 --> 00:53:40,480  
we said it before just a tremendous

910  
00:53:45,670 --> 00:53:42,480  
privilege to be part of this program to

911  
00:53:48,150 --> 00:53:45,680  
be part of nasa and to

912  
00:53:50,390 --> 00:53:48,160  
spend two months on the international

913  
00:53:53,910 --> 00:53:50,400

space station with the

914

00:53:59,349 --> 00:53:56,549

officers crewmates astronauts chris

915

00:54:00,630 --> 00:53:59,359

cassidy just was a a real pleasure for

916

00:54:02,390 --> 00:54:00,640

both of us

917

00:54:04,390 --> 00:54:02,400

and i'm sure bob will talk about the

918

00:54:06,790 --> 00:54:04,400

spacewalks but that just to see those

919

00:54:08,150 --> 00:54:06,800

two work uh out on the international

920

00:54:09,270 --> 00:54:08,160

space station

921

00:54:11,190 --> 00:54:09,280

you're not going to see anything like

922

00:54:13,750 --> 00:54:11,200

that again it just was uh it was just

923

00:54:15,990 --> 00:54:13,760

amazing to be part of that and then

924

00:54:18,390 --> 00:54:16,000

you know the flight of uh dragon on

925

00:54:21,270 --> 00:54:18,400

falcon and then the re-entry today it's

926  
00:54:23,109 --> 00:54:21,280  
uh it's a lot the process

927  
00:54:24,790 --> 00:54:23,119  
as i said five hours ago we were in a

928  
00:54:27,109 --> 00:54:24,800  
spaceship bobbing around

929  
00:54:29,510 --> 00:54:27,119  
making prank satellite phone calls to

930  
00:54:31,670 --> 00:54:29,520  
whoever we could get a hold of

931  
00:54:33,670 --> 00:54:31,680  
which was kind of fun by the way

932  
00:54:35,589 --> 00:54:33,680  
you can send him the bill for the sat

933  
00:54:38,470 --> 00:54:35,599  
phone

934  
00:54:40,309 --> 00:54:38,480  
but anyway we we really appreciate uh

935  
00:54:42,549 --> 00:54:40,319  
all of you uh

936  
00:54:43,750 --> 00:54:42,559  
coming to say hi and welcoming us back

937  
00:54:46,150 --> 00:54:43,760  
it's uh

938  
00:54:48,230 --> 00:54:46,160

it's a little bit overwhelming to to to

939

00:54:49,990 --> 00:54:48,240

see everybody here considering the

940

00:54:51,510 --> 00:54:50,000

things that have gone on the last few

941

00:54:53,030 --> 00:54:51,520

months since we've been

942

00:54:55,109 --> 00:54:53,040

off planet but

943

00:54:57,190 --> 00:54:55,119

thank you again for

944

00:54:59,270 --> 00:54:57,200

coming to say hi and

945

00:55:01,750 --> 00:54:59,280

and uh hopefully we'll be able to share

946

00:55:04,069 --> 00:55:01,760

a lot of this mission with you uh

947

00:55:07,920 --> 00:55:04,079

in a few months hopefully if not sooner

948

00:55:07,930 --> 00:55:13,990

[Music]

949

00:55:17,270 --> 00:55:15,270

well first of all thank you for

950

00:55:18,950 --> 00:55:17,280

everybody who came out today i know with

951  
00:55:20,789 --> 00:55:18,960  
all the challenges

952  
00:55:22,870 --> 00:55:20,799  
everybody's wearing a mask uh with a

953  
00:55:24,789 --> 00:55:22,880  
situation that we're in it's a not

954  
00:55:26,549 --> 00:55:24,799  
trivial to get this many people here to

955  
00:55:27,910 --> 00:55:26,559  
try to be close and celebrate what we've

956  
00:55:29,990 --> 00:55:27,920  
accomplished

957  
00:55:32,789 --> 00:55:30,000  
i think for both doug and i the thing

958  
00:55:34,950 --> 00:55:32,799  
that we're most excited about having

959  
00:55:36,069 --> 00:55:34,960  
accomplished with this mission is you

960  
00:55:38,150 --> 00:55:36,079  
know it's written right on that sign

961  
00:55:40,230 --> 00:55:38,160  
where it says launch america and then of

962  
00:55:41,510 --> 00:55:40,240  
course land america today

963  
00:55:42,549 --> 00:55:41,520

uh as we

964

00:55:44,710 --> 00:55:42,559

went through

965

00:55:46,390 --> 00:55:44,720

our years as astronauts here at the

966

00:55:48,950 --> 00:55:46,400

johnson space center

967

00:55:51,670 --> 00:55:48,960

we got to live through a big chunk of

968

00:55:53,829 --> 00:55:51,680

the shuttle era and uh a big chunk of

969

00:55:56,069 --> 00:55:53,839

the assembly of the space station

970

00:55:58,710 --> 00:55:56,079

uh when the space shuttles retired when

971

00:55:59,829 --> 00:55:58,720

doug took his uh final flight uh to wrap

972

00:56:02,549 --> 00:55:59,839

that up

973

00:56:04,549 --> 00:56:02,559

i think it was a sad day for us

974

00:56:07,510 --> 00:56:04,559

because there's something special about

975

00:56:09,589 --> 00:56:07,520

having that capability to launch and and

976  
00:56:11,510 --> 00:56:09,599  
bring your own astronauts home

977  
00:56:13,270 --> 00:56:11,520  
and uh we went through a lot of years

978  
00:56:15,349 --> 00:56:13,280  
without that capability

979  
00:56:16,870 --> 00:56:15,359  
and i think we're both super super proud

980  
00:56:18,950 --> 00:56:16,880  
to have been just a small part of the

981  
00:56:20,870 --> 00:56:18,960  
team that accomplished

982  
00:56:22,309 --> 00:56:20,880  
bringing those space flights back to the

983  
00:56:24,630 --> 00:56:22,319  
florida coast and bringing that

984  
00:56:27,030 --> 00:56:24,640  
capability back to america

985  
00:56:28,789 --> 00:56:27,040  
as doug mentioned we had the luxury of

986  
00:56:30,710 --> 00:56:28,799  
having a just a

987  
00:56:33,510 --> 00:56:30,720  
super crew on board the international

988  
00:56:35,990 --> 00:56:33,520

space station with chris cassidy

989

00:56:38,470 --> 00:56:36,000

with anatoly and yvonne

990

00:56:41,030 --> 00:56:38,480

they just took a wonderful care of us

991

00:56:42,870 --> 00:56:41,040

i can't think of anything that we could

992

00:56:44,470 --> 00:56:42,880

have had more

993

00:56:46,789 --> 00:56:44,480

in place and ready for us when we

994

00:56:48,710 --> 00:56:46,799

arrived then what chris set up for us

995

00:56:50,789 --> 00:56:48,720

and so we're we're extremely thankful

996

00:56:52,789 --> 00:56:50,799

for him and his work to make things look

997

00:56:54,630 --> 00:56:52,799

easy for us you know we didn't have the

998

00:56:55,510 --> 00:56:54,640

full training template that was out

999

00:56:58,230 --> 00:56:55,520

there

1000

00:56:59,910 --> 00:56:58,240

we had an abbreviated flow and and got

1001  
00:57:02,630 --> 00:56:59,920  
to take advantage of

1002  
00:57:04,069 --> 00:57:02,640  
uh an opportunity if you will to try to

1003  
00:57:06,470 --> 00:57:04,079  
take care of space station as we

1004  
00:57:09,030 --> 00:57:06,480  
accomplish this test mission and so

1005  
00:57:10,870 --> 00:57:09,040  
uh i think we're both really proud of

1006  
00:57:13,030 --> 00:57:10,880  
that and happy that it didn't become a

1007  
00:57:14,950 --> 00:57:13,040  
distraction we were able to accomplish

1008  
00:57:15,990 --> 00:57:14,960  
the test mission objectives and work

1009  
00:57:18,630 --> 00:57:16,000  
through those

1010  
00:57:21,349 --> 00:57:18,640  
kind of get dragon certified

1011  
00:57:23,109 --> 00:57:21,359  
and in some sense to be ready for our

1012  
00:57:23,910 --> 00:57:23,119  
return home when the time came to do

1013  
00:57:25,910 --> 00:57:23,920

that

1014

00:57:28,230 --> 00:57:25,920

and so it all just worked out

1015

00:57:31,030 --> 00:57:28,240

wonderfully and so

1016

00:57:33,270 --> 00:57:31,040

uh today when we got the wake-up calls

1017

00:57:34,630 --> 00:57:33,280

from our boys uh

1018

00:57:36,230 --> 00:57:34,640

telling us a little bit about what they

1019

00:57:38,390 --> 00:57:36,240

were looking forward to

1020

00:57:41,750 --> 00:57:38,400

which was us coming home and in theo's

1021

00:57:43,750 --> 00:57:41,760

case getting a new dog

1022

00:57:46,630 --> 00:57:43,760

it was it was a wonderful morning and we

1023

00:57:48,789 --> 00:57:46,640

very much appreciated it and so again i

1024

00:57:50,470 --> 00:57:48,799

think this kind of comes full circle

1025

00:57:51,990 --> 00:57:50,480

took years to get here

1026

00:57:54,549 --> 00:57:52,000

we brought the capability back to

1027

00:57:56,870 --> 00:57:54,559

america and we came home safely to our

1028

00:57:59,510 --> 00:57:56,880

families and it took a lot of people a

1029

00:58:01,510 --> 00:57:59,520

lot of time to make that happen and so

1030

00:58:03,670 --> 00:58:01,520

to kathy thank you for that of course

1031

00:58:06,870 --> 00:58:03,680

you had steve as your right hand man for

1032

00:58:08,950 --> 00:58:06,880

the most recent history at least and we

1033

00:58:10,710 --> 00:58:08,960

definitely really appreciate

1034

00:58:12,710 --> 00:58:10,720

the the hard work that that you all had

1035

00:58:15,430 --> 00:58:12,720

to go through to ensure that the

1036

00:58:18,069 --> 00:58:15,440

contractors in this case uh the spacex

1037

00:58:20,630 --> 00:58:18,079

team really could understand nasa

1038

00:58:23,510 --> 00:58:20,640

and what we needed to be able to have in

1039

00:58:25,430 --> 00:58:23,520

place to have human space flight be safe

1040

00:58:26,789 --> 00:58:25,440

in the way that we wanted to to

1041

00:58:28,870 --> 00:58:26,799

operate it

1042

00:58:30,549 --> 00:58:28,880

and i think for the spacex team

1043

00:58:33,109 --> 00:58:30,559

we couldn't have asked for a more

1044

00:58:35,589 --> 00:58:33,119

wonderful team to work with i think

1045

00:58:38,150 --> 00:58:35,599

you know we definitely are our old dogs

1046

00:58:39,190 --> 00:58:38,160

and uh like some of our old tricks

1047

00:58:45,510 --> 00:58:39,200

because

1048

00:58:47,510 --> 00:58:45,520

know an easy solution and we try to

1049

00:58:50,069 --> 00:58:47,520

share that with folks and that's really

1050

00:58:51,190 --> 00:58:50,079

as we go forward to

1051  
00:58:53,349 --> 00:58:51,200  
further

1052  
00:58:55,190 --> 00:58:53,359  
activities

1053  
00:58:58,069 --> 00:58:55,200  
whether it's in low earth orbit to the

1054  
00:59:00,710 --> 00:58:58,079  
moon or beyond we need to figure out the

1055  
00:59:03,109 --> 00:59:00,720  
best way to share what nasa knows

1056  
00:59:05,109 --> 00:59:03,119  
with the contractor team and help them

1057  
00:59:07,589 --> 00:59:05,119  
be as successful as possible and and i

1058  
00:59:09,349 --> 00:59:07,599  
think maybe we weren't there five or six

1059  
00:59:11,030 --> 00:59:09,359  
years ago of course but by the time we

1060  
00:59:14,069 --> 00:59:11,040  
launched and certainly by the time we

1061  
00:59:16,150 --> 00:59:14,079  
returned i think there was a very tight

1062  
00:59:17,030 --> 00:59:16,160  
knit relationship between the spacex

1063  
00:59:22,150 --> 00:59:17,040

team

1064

00:59:23,829 --> 00:59:22,160

to accomplish what we accomplished so

1065

00:59:25,990 --> 00:59:23,839

with that i just want to thank you all

1066

00:59:26,950 --> 00:59:26,000

for coming out today and celebrating

1067

00:59:28,630 --> 00:59:26,960

this uh

1068

00:59:30,069 --> 00:59:28,640

this victory

1069

00:59:33,109 --> 00:59:30,079

with doug and i

1070

00:59:34,390 --> 00:59:33,119

and recognize our small part of what was

1071

00:59:36,090 --> 00:59:34,400

accomplished

1072

00:59:42,080 --> 00:59:36,100

thank you all