



EXIT

TO NOD

1
00:00:14,450 --> 00:00:02,110
station this is Houston are you ready

2
00:00:20,490 --> 00:00:18,120
we are ready for the event we are ready

3
00:00:22,050 --> 00:00:20,500
for the event where the event fox news

4
00:00:29,240 --> 00:00:22,060
radio this is Mission Control Houston

5
00:00:35,270 --> 00:00:31,859
station this is fox news radio and eben

6
00:00:42,150 --> 00:00:38,430
Fox News Radio Evan we hear you loud and

7
00:00:47,520 --> 00:00:44,520
thank you so much it is great to be back

8
00:00:49,830 --> 00:00:47,530
in speaking with you and it's been a

9
00:00:53,940 --> 00:00:49,840
while but we're so glad to see your

10
00:00:55,740 --> 00:00:53,950
faces again um the first question I have

11
00:00:57,210 --> 00:00:55,750
for you is probably the big news and

12
00:00:59,509 --> 00:00:57,220
although we've we've encountered another

13
00:01:02,640 --> 00:00:59,519

delay here we're getting very close to

14

00:01:05,369 --> 00:01:02,650

seeing this test launch of the SpaceX

15

00:01:07,109 --> 00:01:05,379

Dragon this has to be something very

16

00:01:09,480 --> 00:01:07,119

exciting for for the both of you up

17

00:01:11,820 --> 00:01:09,490

there and and as well as your crewmates

18

00:01:13,469 --> 00:01:11,830

what do you think a successful test

19

00:01:16,290 --> 00:01:13,479

flight means to to you and your

20

00:01:22,210 --> 00:01:19,380

well successful test flight means

21

00:01:26,010 --> 00:01:22,220

everything happens according to plan

22

00:01:28,540 --> 00:01:26,020

where the vehicle gets launched

23

00:01:32,890 --> 00:01:28,550

rendevouz with station all the

24

00:01:34,870 --> 00:01:32,900

commanding goes as as what we'd like

25

00:01:36,370 --> 00:01:34,880

from the demonstration point of view

26

00:01:38,620 --> 00:01:36,380

where it comes close to station then we

27

00:01:41,020 --> 00:01:38,630

send it away then it comes back and then

28

00:01:43,270 --> 00:01:41,030

we snag it with the robotic arm and

29

00:01:46,060 --> 00:01:43,280

birth it and get the supplies off and

30

00:01:48,850 --> 00:01:46,070

then it doesn't end there we load it up

31

00:01:51,310 --> 00:01:48,860

with payload to go back to earth and

32

00:01:55,240 --> 00:01:51,320

then we unbirth it and release it and

33

00:01:59,080 --> 00:01:55,250

then it makes its journey back to earth

34

00:02:02,620 --> 00:01:59,090

for splashdown in the ocean and recovery

35

00:02:05,950 --> 00:02:02,630

of payload and this will be if all of

36

00:02:08,230 --> 00:02:05,960

that happens according to plan it will

37

00:02:10,719 --> 00:02:08,240

be great to have significant payload

38

00:02:13,120 --> 00:02:10,729

down capability once again because

39

00:02:15,010 --> 00:02:13,130

everybody talks about getting payload up

40

00:02:17,500 --> 00:02:15,020

to station but one of the things that's

41

00:02:19,990 --> 00:02:17,510

sorely missing in the wake of the

42

00:02:22,000 --> 00:02:20,000

shuttle retirement is getting payload

43

00:02:23,650 --> 00:02:22,010

back down and we have all kinds of

44

00:02:25,930 --> 00:02:23,660

useful things that we want to get back

45

00:02:30,760 --> 00:02:25,940

down to earth but currently don't really

46

00:02:32,440 --> 00:02:30,770

have a way to get them down and dr.

47

00:02:35,530 --> 00:02:32,450

pettit and also dr. Kuiper's you can

48

00:02:37,870 --> 00:02:35,540

answer this as well a good number of the

49

00:02:41,199 --> 00:02:37,880

programs aboard the space station relied

50

00:02:43,930 --> 00:02:41,209

so much on shuttle with this wrist would

51
00:02:46,240 --> 00:02:43,940
it would a good successful test flight

52
00:02:47,920 --> 00:02:46,250
and the eventual regular use of of the

53
00:02:50,620 --> 00:02:47,930
SpaceX craft as well as some of the

54
00:02:53,229 --> 00:02:50,630
other cots crafts would this restore

55
00:02:55,300 --> 00:02:53,239
some independence to NASA in terms of

56
00:02:57,009 --> 00:02:55,310
its ability to get not just people but

57
00:03:00,559 --> 00:02:57,019
but as you said you know the payloads

58
00:03:07,190 --> 00:03:04,160
okay certainly we restore some measure

59
00:03:08,869 --> 00:03:07,200
of Independence but and let me explain

60
00:03:10,420 --> 00:03:08,879
something that's really going to be

61
00:03:12,530 --> 00:03:10,430
important in terms of the down mass

62
00:03:16,250 --> 00:03:12,540
currently we have no way to get our

63
00:03:18,140 --> 00:03:16,260

frozen samples back and and crucial to

64

00:03:20,539 --> 00:03:18,150

the life science experiments that we are

65

00:03:22,640 --> 00:03:20,549

doing on Space Station particularly the

66

00:03:26,390 --> 00:03:22,650

human physiology experiments we have

67

00:03:29,659 --> 00:03:26,400

blood and urine and spit samples we we

68

00:03:31,849 --> 00:03:29,669

have all these Said's frozen in our our

69

00:03:35,059 --> 00:03:31,859

freezers we have three freezers on

70

00:03:37,729 --> 00:03:35,069

station actually five freezers for

71

00:03:40,220 --> 00:03:37,739

samples and and there they're down at

72

00:03:42,229 --> 00:03:40,230

minus 95 to minus ninety eight

73

00:03:44,089 --> 00:03:42,239

centigrade and these samples have to

74

00:03:45,649 --> 00:03:44,099

remain frozen all the way to the

75

00:03:48,649 --> 00:03:45,659

laboratory from where they're going to

76
00:03:50,089 --> 00:03:48,659
be analyzed and currently Dragon will be

77
00:03:54,110 --> 00:03:50,099
the only way that we can get these

78
00:03:58,759 --> 00:03:54,120
samples back to earth and that will will

79
00:04:04,550 --> 00:03:58,769
allow the science behind all our human

80
00:04:08,990 --> 00:04:04,560
physiology to continue no that's okay

81
00:04:12,500 --> 00:04:09,000
um you spoke much about the the payloads

82
00:04:15,110 --> 00:04:12,510
but also yourselves will be traveling in

83
00:04:17,599 --> 00:04:15,120
these types of crafts uh are there any

84
00:04:19,970 --> 00:04:17,609
safety concerns about flying either to

85
00:04:23,610 --> 00:04:19,980
this station or back home in a private

86
00:04:28,600 --> 00:04:26,920
well for the time being it it's a

87
00:04:32,350 --> 00:04:28,610
off vehicle though the windows are

88
00:04:35,619 --> 00:04:32,360

already there but I'm sure if things go

89

00:04:39,429 --> 00:04:35,629

well the future will will bring us also

90

00:04:42,249 --> 00:04:39,439

meant space flight with this kind of

91

00:04:43,629 --> 00:04:42,259

craft and safety is a very important

92

00:04:47,080 --> 00:04:43,639

secretary space flight we all know that

93

00:04:50,170 --> 00:04:47,090

and pretty sure that this will be the

94

00:04:54,279 --> 00:04:50,180

future of space flight as well besides

95

00:04:57,070 --> 00:04:54,289

all the things that the agencies do and

96

00:05:00,519 --> 00:04:57,080

I'd like to add that you look at the

97

00:05:03,040 --> 00:05:00,529

development of commercial aviation back

98

00:05:07,420 --> 00:05:03,050

in the 20s and there were quite a few

99

00:05:09,580 --> 00:05:07,430

nasty little accidents that resulted in

100

00:05:12,700 --> 00:05:09,590

short term setback but then it set the

101
00:05:14,920 --> 00:05:12,710
whole aviation industry to a standstill

102
00:05:18,369 --> 00:05:14,930
and and I hope that that doesn't

103
00:05:20,800 --> 00:05:18,379
necessarily play itself out for space in

104
00:05:24,820 --> 00:05:20,810
our near future but we shouldn't be

105
00:05:27,730 --> 00:05:24,830
surprised if we do see some catastrophes

106
00:05:30,640 --> 00:05:27,740
happen and what we need to do when those

107
00:05:34,029 --> 00:05:30,650
do happen is just regroup sharpen our

108
00:05:41,070 --> 00:05:34,039
pencils figure out what went wrong work

109
00:05:45,880 --> 00:05:43,540
I'd like to ask you both about the

110
00:05:48,310 --> 00:05:45,890
historical sense of private space

111
00:05:50,650 --> 00:05:48,320
transit you know if you think back to

112
00:05:54,010 --> 00:05:50,660
the explorers like Christopher Columbus

113
00:05:56,890 --> 00:05:54,020

who who sailed taxpayer-funded vehicles

114

00:05:58,540 --> 00:05:56,900

across the Atlantic eventually we had

115

00:06:01,300 --> 00:05:58,550

companies like the Dutch West Indies and

116

00:06:03,340 --> 00:06:01,310

and and other companies that did the

117

00:06:05,380 --> 00:06:03,350

work for the government it are we sort

118

00:06:07,630 --> 00:06:05,390

of seeing the same thing now with space

119

00:06:09,070 --> 00:06:07,640

are we seeing a public-private

120

00:06:11,800 --> 00:06:09,080

partnership and and and how does that

121

00:06:15,290 --> 00:06:11,810

make space more accessible for for

122

00:06:22,700 --> 00:06:18,060

Ill think the settlement of the u.s.

123

00:06:26,520 --> 00:06:22,710

West is a good example of government

124

00:06:28,860 --> 00:06:26,530

driven but supported by commercial

125

00:06:31,110 --> 00:06:28,870

enterprises and you see that with wagon

126

00:06:32,700 --> 00:06:31,120

trade supporting forts where the fort's

127

00:06:34,470 --> 00:06:32,710

defined the government to find the

128

00:06:36,390 --> 00:06:34,480

mission that the fort's did but the

129

00:06:39,000 --> 00:06:36,400

wagon trains provided all the goods and

130

00:06:40,290 --> 00:06:39,010

services and then you see see that with

131

00:06:41,490 --> 00:06:40,300

the building of the railroads the

132

00:06:43,110 --> 00:06:41,500

government didn't build the railroads

133

00:06:45,420 --> 00:06:43,120

commercial American free enterprise

134

00:06:48,960 --> 00:06:45,430

built the railroads at the encouragement

135

00:06:50,880 --> 00:06:48,970

of the government and the benefits to

136

00:06:52,650 --> 00:06:50,890

these were immense in terms of the

137

00:06:57,710 --> 00:06:52,660

settlement of the western part of the

138

00:07:02,970 --> 00:06:57,720

United States and and I see this same

139

00:07:06,450 --> 00:07:02,980

type of structure going on in space

140

00:07:10,380 --> 00:07:06,460

where where governments will define the

141

00:07:14,160 --> 00:07:10,390

role at least for the near future and a

142

00:07:19,550 --> 00:07:14,170

free enterprise will help supply the

143

00:07:23,760 --> 00:07:22,320

they it's been a while since we've we've

144

00:07:25,050 --> 00:07:23,770

had a big space storage we don't follow

145

00:07:26,940 --> 00:07:25,060

the shuttle launches anymore obviously

146

00:07:28,620 --> 00:07:26,950

because there are no more but how's the

147

00:07:29,760 --> 00:07:28,630

station holding up these days and tell

148

00:07:31,650 --> 00:07:29,770

us some of the things you've been doing

149

00:07:34,140 --> 00:07:31,660

we know dr. Pettitte you've been working

150

00:07:38,010 --> 00:07:34,150

with Robonaut recently so Phyllis in on

151
00:07:43,630 --> 00:07:42,100
well well from a payload science point

152
00:07:45,580 --> 00:07:43,640
of view I've been working on some

153
00:07:48,490 --> 00:07:45,590
combustion experiments which are really

154
00:07:50,080 --> 00:07:48,500
fascinating fire is one of the

155
00:07:52,720 --> 00:07:50,090
fundamental aspects that our whole

156
00:07:56,650 --> 00:07:52,730
civilization is built on in fact the the

157
00:07:58,780 --> 00:07:56,660
human beings first using fire was one

158
00:08:01,630 --> 00:07:58,790
step that took us from where we were to

159
00:08:04,750 --> 00:08:01,640
where we are now and and it's not

160
00:08:06,400 --> 00:08:04,760
surprising that we are still scratching

161
00:08:09,940 --> 00:08:06,410
our heads and wondering how fireworks

162
00:08:12,520 --> 00:08:09,950
and we are studying how fireworks in a

163
00:08:14,590 --> 00:08:12,530

weightless environment where fire is

164

00:08:15,880 --> 00:08:14,600

hard pressed to even burn in a

165

00:08:18,100 --> 00:08:15,890

weightless environment because you don't

166

00:08:20,800 --> 00:08:18,110

have buoyancy driven convection and so

167

00:08:25,510 --> 00:08:20,810

we have a series of experiments up here

168

00:08:29,200 --> 00:08:25,520

where we are burning both gasp gasp

169

00:08:31,540 --> 00:08:29,210

fuels and solid fuels and looking at the

170

00:08:33,940 --> 00:08:31,550

parameters behind where they will burn

171

00:08:36,580 --> 00:08:33,950

and where they won't burn and looking at

172

00:08:39,460 --> 00:08:36,590

some of the chemistry in the physics

173

00:08:42,850 --> 00:08:39,470

inside of the flame so that's one of the

174

00:08:45,190 --> 00:08:42,860

exciting science projects that I'm

175

00:08:48,370 --> 00:08:45,200

working on from an engineering point of

176
00:08:51,310 --> 00:08:48,380
view we've been working on getting ready

177
00:08:56,440 --> 00:08:51,320
for Dragon and this happens to be the

178
00:08:58,780 --> 00:08:56,450
control box for Dragon where where as

179
00:09:00,520 --> 00:08:58,790
dragon is approaching Space Station we

180
00:09:03,130 --> 00:09:00,530
will be able to push any number of these

181
00:09:07,180 --> 00:09:03,140
little buttons here to send commands to

182
00:09:10,530 --> 00:09:07,190
the vehicle depending on on what we want

183
00:09:13,060 --> 00:09:10,540
to send it away or whether we want to

184
00:09:15,840 --> 00:09:13,070
put it into a mode where we can snag it

185
00:09:18,430 --> 00:09:15,850
with the arm and and working on this is

186
00:09:20,140 --> 00:09:18,440
engineering research this this is as

187
00:09:23,800 --> 00:09:20,150
good as it gets from the point of view

188
00:09:26,710 --> 00:09:23,810

of designing your spacecraft making the

189

00:09:28,720 --> 00:09:26,720

systems work and and advancing the

190

00:09:33,220 --> 00:09:28,730

technology needed to continue the

191

00:09:34,870 --> 00:09:33,230

exploration of space dr. pettit dr.

192

00:09:36,160 --> 00:09:34,880

Kuiper our time is running short with

193

00:09:38,110 --> 00:09:36,170

you guys so you have another interview

194

00:09:39,310 --> 00:09:38,120

coming up next but thank you so much for

195

00:09:41,440 --> 00:09:39,320

your time it's good to see your faces

196

00:09:45,319 --> 00:09:41,450

again and enjoy your stay up there we'll

197

00:09:49,939 --> 00:09:48,199

it's always a good it's always good to

198

00:09:57,619 --> 00:09:49,949

talk with you Evan you guys take care

199

00:10:02,369 --> 00:10:00,329

station this is Houston ACR that

200

00:10:04,350 --> 00:10:02,379

concludes the Fox News Radio portion of

201

00:10:07,980 --> 00:10:04,360

the event please stand by for a voice

202

00:10:09,540 --> 00:10:07,990

check from CBS news station this is bill

203

00:10:13,949 --> 00:10:09,550

Harwood CBS News down to Kennedy Space

204

00:10:16,769 --> 00:10:13,959

Center how do you read me dude he

205

00:10:18,990 --> 00:10:16,779

allowed it clears thank you very much

206

00:10:21,480 --> 00:10:19,000

Andre and Don thanks for taking time out

207

00:10:23,389 --> 00:10:21,490

to chat you guys obviously have a busy

208

00:10:25,619 --> 00:10:23,399

couple of weeks coming up you got SpaceX

209

00:10:27,780 --> 00:10:25,629

hopefully arriving soon you got the next

210

00:10:29,369 --> 00:10:27,790

Soyuz and all of that wondered how it's

211

00:10:34,309 --> 00:10:29,379

been going with just three guys on board

212

00:10:39,649 --> 00:10:37,349

well actually it's a very nice earth

213

00:10:42,719 --> 00:10:39,659

Reaper people on board it's a it's quiet

214

00:10:45,469 --> 00:10:42,729

seems like yeah of course there's a lot

215

00:10:48,779 --> 00:10:45,479

of lesser traffic in the station and

216

00:10:50,819 --> 00:10:48,789

actually it's it's a nice quiet time so

217

00:10:52,909 --> 00:10:50,829

but we missed the other ones ever

218

00:10:55,319 --> 00:10:52,919

looking forward to the new crew for sure

219

00:10:56,969 --> 00:10:55,329

yeah I can imagine there and I don't

220

00:11:01,739 --> 00:10:56,979

have to wait in line at the gym anymore

221

00:11:03,539 --> 00:11:01,749

I hear that you know as you were just

222

00:11:04,679 --> 00:11:03,549

talking to the previous interview you

223

00:11:06,479 --> 00:11:04,689

know we're all waiting for word for

224

00:11:08,699 --> 00:11:06,489

SpaceX on when they might be launching

225

00:11:10,409 --> 00:11:08,709

what have you guys been doing training

226
00:11:15,300 --> 00:11:10,419
wise to make sure you're ready to birth

227
00:11:22,090 --> 00:11:17,619
we've been doing quite a bit of training

228
00:11:24,819 --> 00:11:22,100
I particularly oriented towards the crew

229
00:11:28,629 --> 00:11:24,829
role which is flying the robotic arm and

230
00:11:31,420 --> 00:11:28,639
capturing the SpaceX vehicle when it

231
00:11:34,650 --> 00:11:31,430
gets in a holding pattern near space

232
00:11:37,960 --> 00:11:34,660
station and then the arm will maneuver

233
00:11:41,139 --> 00:11:37,970
the dragon vehicle to one of our docking

234
00:11:42,999 --> 00:11:41,149
ports and and then we'll well fasten it

235
00:11:44,860 --> 00:11:43,009
to station and then we can go about

236
00:11:47,139 --> 00:11:44,870
outfitting the vestibule and opening the

237
00:11:49,840 --> 00:11:47,149
hatch and that whole process is going to

238
00:11:53,379 --> 00:11:49,850

be a long day for us it's going to be 10

239

00:11:56,439 --> 00:11:53,389

hours plus two to get all of that done

240

00:11:58,119 --> 00:11:56,449

and it may be and if we have a few

241

00:11:59,710 --> 00:11:58,129

hitches in the way we may have to put

242

00:12:02,980 --> 00:11:59,720

things on hold and pick it up the next

243

00:12:07,240 --> 00:12:02,990

day so we've been practicing all phases

244

00:12:09,699 --> 00:12:07,250

of that that that part of working on

245

00:12:11,350 --> 00:12:09,709

dragon well you know you raised one

246

00:12:12,850 --> 00:12:11,360

point if they launch I'll may the temp

247

00:12:14,920 --> 00:12:12,860

which I guess is the only option now

248

00:12:16,540 --> 00:12:14,930

before Soyuz it's not clear to me they'd

249

00:12:19,030 --> 00:12:16,550

have a second opportunity if there was a

250

00:12:20,199 --> 00:12:19,040

problem during the rendezvous it is that

251
00:12:22,210 --> 00:12:20,209
your understanding if they launched on

252
00:12:23,769 --> 00:12:22,220
the 10th it's a once that one and done

253
00:12:25,900 --> 00:12:23,779
or would you have a second day that you

254
00:12:32,139 --> 00:12:25,910
could maybe loiter and still have a

255
00:12:34,389 --> 00:12:32,149
chance to dock it you know that I don't

256
00:12:36,999 --> 00:12:34,399
know what the orbital dynamics are on

257
00:12:39,220 --> 00:12:37,009
that I do know that that there is a

258
00:12:41,290 --> 00:12:39,230
capability to send retreat commands and

259
00:12:44,499 --> 00:12:41,300
abort commands and then regroup and come

260
00:12:46,840 --> 00:12:44,509
back either in a few hours or a day or

261
00:12:50,170 --> 00:12:46,850
so and i know we have that capability

262
00:12:51,970 --> 00:12:50,180
and i'm not sure how all of this comes

263
00:12:54,910 --> 00:12:51,980

together with the May tenth to launch

264

00:12:57,040 --> 00:12:54,920

date tell me a little mentioned aborts

265

00:12:59,139 --> 00:12:57,050

tell me a little bit about what

266

00:13:01,660 --> 00:12:59,149

capability you guys have during the

267

00:13:03,460 --> 00:13:01,670

final stages of that rendezvous to to

268

00:13:05,199 --> 00:13:03,470

make it go away if things aren't going

269

00:13:06,579 --> 00:13:05,209

well I mean I assume that's that's a

270

00:13:07,869 --> 00:13:06,589

command you guys sender is that

271

00:13:09,670 --> 00:13:07,879

something Mission Control deals just

272

00:13:12,460 --> 00:13:09,680

kind of walk me through some of the

273

00:13:13,660 --> 00:13:12,470

abort capability you have all the way

274

00:13:16,930 --> 00:13:13,670

until you get to that 30-foot

275

00:14:41,260 --> 00:13:19,850

you

276

00:14:42,940 --> 00:14:41,270

so we get the a push push the continuing

277

00:14:47,290 --> 00:14:42,950

on with what I would say we could push

278

00:14:49,630 --> 00:14:47,300

the the free drift command weird when we

279

00:14:51,700 --> 00:14:49,640

don't want any thrusters firing on the

280

00:14:53,860 --> 00:14:51,710

vehicle and we do that right before we

281

00:14:56,590 --> 00:14:53,870

grab it with the arm and then we have a

282

00:14:58,750 --> 00:14:56,600

department mad and this is for a plan

283

00:15:01,630 --> 00:14:58,760

the departure that we we send the

284

00:15:04,810 --> 00:15:01,640

vehicle away when it's ready to reenter

285

00:15:07,990 --> 00:15:04,820

with a payload and slice down and then

286

00:15:10,120 --> 00:15:08,000

oh we got a couple more but we got

287

00:15:12,310 --> 00:15:10,130

unbuttons with red shepherds we hope you

288

00:15:14,590 --> 00:15:12,320

don't have to push any of these what is

289

00:15:17,290 --> 00:15:14,600

the abort command or command and that

290

00:15:19,329 --> 00:15:17,300

sends it away for about a day and it

291

00:15:22,150 --> 00:15:19,339

gets the chance to regroup try it again

292

00:15:24,700 --> 00:15:22,160

and then the kamon that we really don't

293

00:15:28,450 --> 00:15:24,710

want to stay in the inert spent the FRG

294

00:15:31,450 --> 00:15:28,460

f set command this basically separates

295

00:15:33,130 --> 00:15:31,460

the grapple pin from the vehicle if it's

296

00:15:35,260 --> 00:15:33,140

stuck on the end of the arm and

297

00:15:37,840 --> 00:15:35,270

depending on what phase we happen to be

298

00:15:39,910 --> 00:15:37,850

we we might lose the contents of the

299

00:15:42,730 --> 00:15:39,920

vehicle if that were to happen but at

300

00:15:45,910 --> 00:15:42,740

least it would save station from having

301
00:15:47,350 --> 00:15:45,920
a dragon permanently attached to it so

302
00:15:50,019 --> 00:15:47,360
so these are the commands that we have

303
00:15:52,150 --> 00:15:50,029
available as crew and done I apologize

304
00:15:53,949 --> 00:15:52,160
that k you flip we all off the top of

305
00:15:55,300 --> 00:15:53,959
that answer I'm assuming from what

306
00:15:57,790 --> 00:15:55,310
you're saying is that all the way in you

307
00:15:59,170 --> 00:15:57,800
guys have the ability to slow the thing

308
00:16:01,000 --> 00:15:59,180
down stop the things send it away

309
00:16:05,230 --> 00:16:01,010
whatever is required depending on what

310
00:16:13,750 --> 00:16:09,850
that's a good a good synopsis of what I

311
00:16:15,010 --> 00:16:13,760
just spent five minutes explaining you

312
00:16:17,110 --> 00:16:15,020
know there doesn't seem to be a huge

313
00:16:18,360 --> 00:16:17,120

hurry for SpaceX orbital to get to

314

00:16:20,829 --> 00:16:18,370
station I mean you guys are fairly

315

00:16:22,269 --> 00:16:20,839
loaded with supplies and consumables

316

00:16:23,740 --> 00:16:22,279
right now what's your understanding of

317

00:16:25,389 --> 00:16:23,750
when they really do need to start

318

00:16:26,860 --> 00:16:25,399
getting there I guess I guess what's

319

00:16:28,180 --> 00:16:26,870
what's prompting the question is it

320

00:16:30,280 --> 00:16:28,190
seems like there's a bit of a rush to

321

00:16:31,900 --> 00:16:30,290
get this off and I don't know that I

322

00:16:33,639 --> 00:16:31,910
understand why there would be any need

323

00:16:37,120 --> 00:16:33,649
for a rush it just doesn't seem to be an

324

00:16:42,160 --> 00:16:39,670
it's a more important the most important

325

00:16:43,990 --> 00:16:42,170
thing about this first attempt is is to

326

00:16:46,150 --> 00:16:44,000

make sure you get your hardware your

327

00:16:48,550 --> 00:16:46,160

software your operations found correctly

328

00:16:51,270 --> 00:16:48,560

and they could send an empty vehicle up

329

00:16:55,060 --> 00:16:51,280

here from a supply point of view and

330

00:16:58,060 --> 00:16:55,070

it's the and the important aspect is is

331

00:17:00,540 --> 00:16:58,070

to show that we can actually do this and

332

00:17:04,540 --> 00:17:00,550

the supply to just frosting on the cake

333

00:17:07,660 --> 00:17:04,550

however we are on a frontier up here and

334

00:17:09,970 --> 00:17:07,670

we're always on the verge of supply

335

00:17:11,920 --> 00:17:09,980

limited and and you can't just run down

336

00:17:14,050 --> 00:17:11,930

to the local grocery store it just as an

337

00:17:17,050 --> 00:17:14,060

example we're almost out of disinfectant

338

00:17:18,490 --> 00:17:17,060

wipes and without that we can't clean

339

00:17:21,819 --> 00:17:18,500

our hands after we go to the bathroom

340

00:17:24,610 --> 00:17:21,829

and and so we're we're always running

341

00:17:28,600 --> 00:17:24,620

low on things like that we're getting

342

00:17:32,560 --> 00:17:28,610

low on garbage bag liners and so we're

343

00:17:34,300 --> 00:17:32,570

looking at at other things we can use to

344

00:17:36,520 --> 00:17:34,310

put our garbage in until we get more

345

00:17:37,930 --> 00:17:36,530

garbage bag liners so so what we're

346

00:17:40,270 --> 00:17:37,940

always there's always something that

347

00:17:43,300 --> 00:17:40,280

we're short on up here and at its and

348

00:17:46,600 --> 00:17:43,310

the more more wagons bringing supplies

349

00:17:48,760 --> 00:17:46,610

to station the better the supplies are

350

00:17:50,760 --> 00:17:48,770

here and the better we can continue our

351

00:17:53,970 --> 00:17:50,770

work and get the business done of

352

00:17:56,470 --> 00:17:53,980

working and living in space and doing

353

00:17:58,840 --> 00:17:56,480

the research the scientific and

354

00:18:00,280 --> 00:17:58,850

engineering research yeah if you're

355

00:18:01,780 --> 00:18:00,290

under a question well I may have this

356

00:18:03,610 --> 00:18:01,790

backwards my understanding is done you

357

00:18:05,740 --> 00:18:03,620

operate the arm for for the initial

358

00:18:07,510 --> 00:18:05,750

capture and andre's on the CBM I guess

359

00:18:09,610 --> 00:18:07,520

and then it's backwards for deploy is

360

00:18:10,540 --> 00:18:09,620

that correct and if it is maybe Andre

361

00:18:12,760 --> 00:18:10,550

could tell us a little bit about

362

00:18:17,110 --> 00:18:12,770

releasing dragon when its mission is

363

00:18:23,440 --> 00:18:21,460

yeah actually we look at ourselves as

364

00:18:25,240 --> 00:18:23,450

being a team and we're sharing the

365

00:18:27,940 --> 00:18:25,250

flying duties and it really doesn't

366

00:18:29,410 --> 00:18:27,950

matter who's flying the arm at what part

367

00:18:32,370 --> 00:18:29,420

in time the important thing is that we

368

00:18:34,810 --> 00:18:32,380

work as a team both on station and with

369

00:18:37,210 --> 00:18:34,820

the scores of people on the ground that

370

00:18:39,490 --> 00:18:37,220

are also making this happen and it isn't

371

00:18:40,750 --> 00:18:39,500

just us it isn't just a person that

372

00:18:42,580 --> 00:18:40,760

happens to be touching the hand

373

00:18:45,790 --> 00:18:42,590

controllers at that moment in time it's

374

00:18:49,260 --> 00:18:45,800

it's the whole team that transcends

375

00:18:51,310 --> 00:18:49,270

orbit all the way down to earth I

376

00:18:52,780 --> 00:18:51,320

understand that but I was just trying to

377

00:18:54,340 --> 00:18:52,790

give under a chance to tell me a little

378

00:18:56,140 --> 00:18:54,350

bit about dragon I was just wondering

379

00:18:59,340 --> 00:18:56,150

about the deploy sequence and how that

380

00:19:05,700 --> 00:19:02,909

the deploy sequin it's actually kind of

381

00:19:08,730 --> 00:19:05,710

mundane we we unbolt it from the side of

382

00:19:13,169 --> 00:19:08,740

station we we pull it away about a meter

383

00:19:15,270 --> 00:19:13,179

and a half and then we type in an auto

384

00:19:18,029 --> 00:19:15,280

sequence on the arm and it'll move it

385

00:19:21,539 --> 00:19:18,039

away to a good position for releasing

386

00:19:26,000 --> 00:19:21,549

dragon and then we open up the stairs

387

00:19:29,100 --> 00:19:26,010

and carefully pull the arm back about

388

00:19:30,930 --> 00:19:29,110

back a few meters and then we we punch

389

00:19:33,360 --> 00:19:30,940

one of the buttons that I showed you on

390

00:19:36,659 --> 00:19:33,370

that command panel the retreat but the

391

00:19:40,470 --> 00:19:36,669

depart button and and a dragon goes away

392

00:19:43,680 --> 00:19:40,480

so so it it should be a pretty

393

00:19:46,200 --> 00:19:43,690

straightforward a procedure for I said

394

00:19:47,909 --> 00:19:46,210

to drag it back home you don't want to

395

00:19:49,169 --> 00:19:47,919

think this joisting that dragon really

396

00:19:50,610 --> 00:19:49,179

brings to the table and you mentioned

397

00:19:52,020 --> 00:19:50,620

this in an earlier interview is the

398

00:19:55,169 --> 00:19:52,030

ability to bring things back to earth

399

00:19:57,539 --> 00:19:55,179

how important is that given the NASA has

400

00:19:58,740 --> 00:19:57,549

lost you know that great down capability

401
00:20:03,850 --> 00:19:58,750
the shuttle had how important is that

402
00:20:08,169 --> 00:20:05,620
it's actually very important that you

403
00:20:10,539 --> 00:20:08,179
went it already if you would need it for

404
00:20:12,280 --> 00:20:10,549
supplies well it's actually more needed

405
00:20:14,440 --> 00:20:12,290
to bring things back because that's

406
00:20:17,020 --> 00:20:14,450
capacity we don't have that capability

407
00:20:19,440 --> 00:20:17,030
we don't have anymore so that's one of

408
00:20:21,850 --> 00:20:19,450
the most important things in life you

409
00:20:24,610 --> 00:20:21,860
because well we had a lot of samples

410
00:20:28,000 --> 00:20:24,620
hear that a lot returned at the moment

411
00:20:31,390 --> 00:20:28,010
so uses a greater spacecraft it's not a

412
00:20:35,200 --> 00:20:31,400
cargo space bound to bring back and now

413
00:20:37,680 --> 00:20:35,210

we have this via this possibility and we

414

00:20:41,169 --> 00:20:37,690

have a lot of samples biological and

415

00:20:43,539 --> 00:20:41,179

physiological samples in our freezers

416

00:20:46,560 --> 00:20:43,549

here and yeah we're looking forward to

417

00:20:48,610 --> 00:20:46,570

bring that back through to the planet

418

00:20:51,100 --> 00:20:48,620

yeah thanks very much i'm told

419

00:20:53,950 --> 00:20:51,110

repetitive theories of most of our

420

00:20:56,260 --> 00:20:53,960

scientific labor are actual physical

421

00:20:57,820 --> 00:20:56,270

samples that need to be returned to

422

00:21:00,100 --> 00:20:57,830

earth and some of the science

423

00:21:02,950 --> 00:21:00,110

experiments just generate data in the

424

00:21:06,490 --> 00:21:02,960

form that can be sent back to earth as

425

00:21:08,440 --> 00:21:06,500

radio waves but but most of the stuff

426

00:21:11,890 --> 00:21:08,450

that we do ends up with a tangible

427

00:21:13,870 --> 00:21:11,900

sample and and we need you see samples

428

00:21:16,000 --> 00:21:13,880

back to earth and and it's like the

429

00:21:17,680 --> 00:21:16,010

farmer bringing your cross the market

430

00:21:19,990 --> 00:21:17,690

you can look at a picture of the crop

431

00:21:23,980 --> 00:21:20,000

but you really don't get satisfied till

432

00:21:27,730 --> 00:21:23,990

till you see see the vegetable wagon

433

00:21:28,930 --> 00:21:27,740

pulling in into the market guys thanks a

434

00:21:30,490 --> 00:21:28,940

lot they tell me we're at a time I

435

00:21:31,840 --> 00:21:30,500

appreciate it good luck with everything

436

00:21:36,499 --> 00:21:31,850

that's coming up and hope to see you on

437

00:21:42,850 --> 00:21:39,870

with you and you all take care

438

00:21:45,919 --> 00:21:42,860

station this is Houston ACR thank you

439

00:21:48,950 --> 00:21:45,929

that concludes the event

440

00:21:50,989 --> 00:21:48,960

Thank You Fox News Radio and CBS News