



1  
00:00:03,669 --> 00:00:02,389  
station this is houston are you ready

2  
00:00:19,750 --> 00:00:03,679  
for the event

3  
00:00:23,109 --> 00:00:21,510  
georgia institute of technology this is

4  
00:00:25,990 --> 00:00:23,119  
mission control houston please call

5  
00:00:27,509 --> 00:00:26,000  
station for a voice check

6  
00:00:29,509 --> 00:00:27,519  
station this is jason vader from the

7  
00:00:33,990 --> 00:00:29,519  
georgia institute of technology how do

8  
00:00:37,350 --> 00:00:35,830  
hey jason read you loud and clear nice

9  
00:00:40,150 --> 00:00:37,360  
to talk to you again

10  
00:00:46,630 --> 00:00:40,160  
you as well shane i uh i'm digging this

11  
00:00:51,430 --> 00:00:48,950  
just for you

12  
00:00:52,470 --> 00:00:51,440  
well uh so happy anniversary we are

13  
00:00:53,990 --> 00:00:52,480

exactly

14

00:00:55,910 --> 00:00:54,000

two months from when you actually

15

00:01:00,470 --> 00:00:55,920

launched into space how's the mission

16

00:01:04,549 --> 00:01:02,470

the mission is going really well

17

00:01:06,550 --> 00:01:04,559

we're expedition 50 now as you may

18

00:01:08,390 --> 00:01:06,560

remember i was expedition 49 when i

19

00:01:10,230 --> 00:01:08,400

launched but that would only lasted

20

00:01:13,190 --> 00:01:10,240

about a week because my other crewmates

21

00:01:15,910 --> 00:01:13,200

departed here a week after we showed up

22

00:01:17,830 --> 00:01:15,920

but my expedition 50 crewmates uh peggy

23

00:01:19,030 --> 00:01:17,840

whitson and tomah pesquet and oleg

24

00:01:20,230 --> 00:01:19,040

novitskiy

25

00:01:22,710 --> 00:01:20,240

showed up

26

00:01:23,910 --> 00:01:22,720

about six weeks after we got here

27

00:01:25,749 --> 00:01:23,920

i didn't know i guess about a month

28

00:01:27,990 --> 00:01:25,759

after we got here and ever since then

29

00:01:30,149 --> 00:01:28,000

we've been expedition 50 and we'll be 50

30

00:01:32,149 --> 00:01:30,159

until the time i leave

31

00:01:34,069 --> 00:01:32,159

in the spring

32

00:01:36,069 --> 00:01:34,079

has it i mean it's been two months

33

00:01:38,789 --> 00:01:36,079

you're about halfway through it has it

34

00:01:43,749 --> 00:01:38,799

gone by fast do you can you believe that

35

00:01:47,109 --> 00:01:45,109

yeah i'm trying not to keep track of

36

00:01:48,950 --> 00:01:47,119

time but it does seem like it's flown by

37

00:01:50,870 --> 00:01:48,960

pretty quickly um it's already almost

38

00:01:53,749 --> 00:01:50,880

christmas which is hard to believe and

39

00:01:55,590 --> 00:01:53,759

2017 will be here in just a few weeks so

40

00:01:57,510 --> 00:01:55,600

that that's kind of crazy to think about

41

00:01:59,910 --> 00:01:57,520

we have a lot of stuff coming up that's

42

00:02:02,069 --> 00:01:59,920

going to i think really make the time go

43

00:02:04,709 --> 00:02:02,079

quickly we have two spacewalks in early

44

00:02:07,030 --> 00:02:04,719

january that we're planning right now so

45

00:02:09,749 --> 00:02:07,040

uh gearing up for that already so

46

00:02:12,070 --> 00:02:09,759

that'll make the time go quickly as well

47

00:02:14,150 --> 00:02:12,080

what's um i've seen you grow lettuce

48

00:02:16,390 --> 00:02:14,160

you're grabbing spacecrafts with robotic

49

00:02:17,990 --> 00:02:16,400

arms there's something that you've done

50

00:02:19,750 --> 00:02:18,000

or a few things that you've done that

51  
00:02:25,110 --> 00:02:19,760  
have really piqued your interest and

52  
00:02:29,350 --> 00:02:27,190  
well the last week was the first time

53  
00:02:31,509 --> 00:02:29,360  
i'd ever captured another vehicle with

54  
00:02:34,710 --> 00:02:31,519  
the robotic arm that was pretty special

55  
00:02:37,190 --> 00:02:34,720  
when the japanese htv six showed up

56  
00:02:38,949 --> 00:02:37,200  
really just huge beautiful vehicle and

57  
00:02:41,110 --> 00:02:38,959  
uh was able to capture that with the

58  
00:02:42,630 --> 00:02:41,120  
canadian robotic arm that was a real

59  
00:02:44,150 --> 00:02:42,640  
thrill and being a part of that team

60  
00:02:46,150 --> 00:02:44,160  
it's not just me it was a whole team

61  
00:02:47,670 --> 00:02:46,160  
doing it on the ground as well as my

62  
00:02:49,030 --> 00:02:47,680  
crewmates here on board so that was

63  
00:02:50,309 --> 00:02:49,040

pretty cool

64

00:02:52,150 --> 00:02:50,319

another thing that's really peaking i

65

00:02:53,670 --> 00:02:52,160

think all of our interest is just

66

00:02:55,750 --> 00:02:53,680

looking out the window and taking

67

00:02:57,750 --> 00:02:55,760

pictures of our beautiful planet and

68

00:02:59,509 --> 00:02:57,760

different places around the world that

69

00:03:01,670 --> 00:02:59,519

we may not have seen before that are

70

00:03:03,270 --> 00:03:01,680

really strikingly beautiful um even

71

00:03:04,949 --> 00:03:03,280

though we hadn't had not thought about

72

00:03:06,630 --> 00:03:04,959

it before

73

00:03:09,190 --> 00:03:06,640

what what is that like when you're

74

00:03:11,509 --> 00:03:09,200

looking out is it is it hard to figure

75

00:03:14,229 --> 00:03:11,519

out where you are you just remember back

76

00:03:16,309 --> 00:03:14,239

to social studies class and go well that

77

00:03:20,390 --> 00:03:16,319

looks like italy so that must be rome

78

00:03:23,589 --> 00:03:21,830

yeah i'm pretty good on the bigger

79

00:03:26,070 --> 00:03:23,599

things the countries but the cities i'm

80

00:03:27,509 --> 00:03:26,080

not so good at and some of my crewmates

81

00:03:29,110 --> 00:03:27,519

are really good at that we help each

82

00:03:31,270 --> 00:03:29,120

other out we also have a great

83

00:03:33,670 --> 00:03:31,280

application on our computers that shows

84

00:03:35,589 --> 00:03:33,680

us exactly where we are and we can zoom

85

00:03:37,589 --> 00:03:35,599

in as much as we want to see cities and

86

00:03:39,670 --> 00:03:37,599

towns and everything so we have a lot of

87

00:03:41,270 --> 00:03:39,680

help but by doing that we're learning

88

00:03:42,869 --> 00:03:41,280



we're always learning in different parts

89

00:03:44,789 --> 00:03:42,879

of the world that we were not familiar

90

00:03:46,390 --> 00:03:44,799

with before so it's pretty fun

91

00:03:48,070 --> 00:03:46,400

that's cool is

92

00:03:50,550 --> 00:03:48,080

would you say that you're you're fully

93

00:03:52,070 --> 00:03:50,560

acclimated to to living in space or

94

00:03:54,149 --> 00:03:52,080

there's some things that

95

00:03:58,710 --> 00:03:54,159

you might not get used to before it's

96

00:04:02,309 --> 00:04:00,470

i would say i'm fully acclimated i don't

97

00:04:04,229 --> 00:04:02,319

think it took any of this crew very long

98

00:04:06,149 --> 00:04:04,239

to acclimate i mean we're talking just a

99

00:04:08,630 --> 00:04:06,159

few days maybe a week at the most for

100

00:04:09,350 --> 00:04:08,640

everybody to to be completely acclimated

101  
00:04:11,190 --> 00:04:09,360  
so

102  
00:04:12,470 --> 00:04:11,200  
uh we were very fortunate i mean

103  
00:04:14,309 --> 00:04:12,480  
everybody's just a little bit different

104  
00:04:16,469 --> 00:04:14,319  
you never know how it's going to go but

105  
00:04:17,670 --> 00:04:16,479  
in our case everybody adapted very

106  
00:04:19,110 --> 00:04:17,680  
quickly

107  
00:04:21,030 --> 00:04:19,120  
let's talk a little bit about that

108  
00:04:23,110 --> 00:04:21,040  
actually and i see people floating back

109  
00:04:25,430 --> 00:04:23,120  
and forth what's it like being up there

110  
00:04:27,830 --> 00:04:25,440  
with a crew of six and so many different

111  
00:04:30,070 --> 00:04:27,840  
nationalities and language what are

112  
00:04:31,670 --> 00:04:30,080  
those interactions like and how often do

113  
00:04:36,390 --> 00:04:31,680

you get to just sit and chat i know

114

00:04:39,189 --> 00:04:38,230

yeah it's a great question and uh our

115

00:04:41,510 --> 00:04:39,199

crew

116

00:04:43,430 --> 00:04:41,520

we were kind of split in i would say two

117

00:04:45,430 --> 00:04:43,440

or in several different groups actually

118

00:04:48,150 --> 00:04:45,440

depending on which soyuz you came up on

119

00:04:51,030 --> 00:04:48,160

so my crew my soyuz crew is two

120

00:04:53,990 --> 00:04:51,040

cosmonauts and myself and the other crew

121

00:04:56,790 --> 00:04:54,000

is a cosmonaut an american astronaut and

122

00:04:58,550 --> 00:04:56,800

a french astronaut so very diverse

123

00:05:01,749 --> 00:04:58,560

and then we're kind of also broken up

124

00:05:03,670 --> 00:05:01,759

into here on board into the cosmonauts

125

00:05:05,350 --> 00:05:03,680

and the astronauts so

126

00:05:07,110 --> 00:05:05,360

typically the astronauts will eat all

127

00:05:08,469 --> 00:05:07,120

our meals together the russians

128

00:05:10,629 --> 00:05:08,479

cosmonauts will eat all their meals

129

00:05:12,310 --> 00:05:10,639

together we do come together usually on

130

00:05:14,070 --> 00:05:12,320

friday nights and saturday nights to

131

00:05:15,909 --> 00:05:14,080

talk about the week and

132

00:05:17,830 --> 00:05:15,919

kind of just relax and enjoy meals

133

00:05:19,749 --> 00:05:17,840

together on the weekends so that's how

134

00:05:22,070 --> 00:05:19,759

our crew interacts of course we see each

135

00:05:24,550 --> 00:05:22,080

other every day and we make sure

136

00:05:26,310 --> 00:05:24,560

everything's going well on each side of

137

00:05:27,830 --> 00:05:26,320

the space station but

138

00:05:29,830 --> 00:05:27,840

during the during the work day we're

139

00:05:31,670 --> 00:05:29,840

pretty much divided and that was we stay

140

00:05:33,909 --> 00:05:31,680

on our side doing all of our tasks and

141

00:05:36,150 --> 00:05:33,919

the cosmonauts will stay on their side

142

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

doing their task

143

00:05:39,990 --> 00:05:37,840

let's let's talk about the the space

144

00:05:41,590 --> 00:05:40,000

walks that that you referenced earlier

145

00:05:43,270 --> 00:05:41,600

uh i think you have two it's coming up

146

00:05:45,350 --> 00:05:43,280

in january

147

00:05:50,710 --> 00:05:45,360

a little bit about what you're doing and

148

00:05:54,950 --> 00:05:52,390

yeah so our task is going to be to

149

00:05:56,230 --> 00:05:54,960

replace batteries um that are on the

150

00:05:58,230 --> 00:05:56,240

outside of the space station that

151  
00:05:59,430 --> 00:05:58,240  
obviously provide power to this entire

152  
00:06:01,430 --> 00:05:59,440  
complex

153  
00:06:03,430 --> 00:06:01,440  
um there are 12

154  
00:06:04,790 --> 00:06:03,440  
batteries on the starboard or the right

155  
00:06:09,029 --> 00:06:04,800  
side of the space station that we're

156  
00:06:12,309 --> 00:06:10,629  
on one the first space walk will take

157  
00:06:14,070 --> 00:06:12,319  
care of six of them the second spacewalk

158  
00:06:15,670 --> 00:06:14,080  
will take care of the other six

159  
00:06:17,189 --> 00:06:15,680  
and it's not a one for one replacement

160  
00:06:20,150 --> 00:06:17,199  
these new batteries that came up on the

161  
00:06:22,710 --> 00:06:20,160  
japanese htv-6 are much more efficient

162  
00:06:24,550 --> 00:06:22,720  
so one battery and then one adapter

163  
00:06:27,270 --> 00:06:24,560

plate which is a new piece of equipment

164

00:06:28,950 --> 00:06:27,280

will take the place of two of the of the

165

00:06:30,309 --> 00:06:28,960

old batteries or the current batteries

166

00:06:32,629 --> 00:06:30,319

so

167

00:06:34,309 --> 00:06:32,639

it's a combination of robotic operations

168

00:06:35,590 --> 00:06:34,319

and spacewalk operations that are going

169

00:06:36,790 --> 00:06:35,600

to make this happen so it's pretty

170

00:06:37,909 --> 00:06:36,800

complex

171

00:06:40,070 --> 00:06:37,919

and it's going to be starting here

172

00:06:41,670 --> 00:06:40,080

pretty soon with the robotics operations

173

00:06:43,590 --> 00:06:41,680

and then we go out the door for the

174

00:06:46,629 --> 00:06:43,600

first time on january 6th and then

175

00:06:48,469 --> 00:06:46,639

january 13th for the second spacewalk

176  
00:06:51,830 --> 00:06:48,479  
i'm curious about that i mean

177  
00:06:53,270 --> 00:06:51,840  
every experiment you do is important but

178  
00:06:55,589 --> 00:06:53,280  
is like this

179  
00:06:57,990 --> 00:06:55,599  
the space walk thing kind of like this

180  
00:06:59,589 --> 00:06:58,000  
thing you constantly look forward to or

181  
00:07:02,390 --> 00:06:59,599  
is it like

182  
00:07:03,909 --> 00:07:02,400  
it's time to go outside it just happens

183  
00:07:05,430 --> 00:07:03,919  
to be in a different you know part of

184  
00:07:09,189 --> 00:07:05,440  
the space station outside the space

185  
00:07:12,950 --> 00:07:11,189  
well spacewalks are pretty rare and

186  
00:07:14,870 --> 00:07:12,960  
we're very fortunate to have a planned

187  
00:07:17,029 --> 00:07:14,880  
spacewalk it doesn't happen on every

188  
00:07:18,950 --> 00:07:17,039



mission and really maybe only once a

189

00:07:21,270 --> 00:07:18,960

year currently are we doing planned

190

00:07:22,550 --> 00:07:21,280

spacewalks so our crew is very fortunate

191

00:07:23,510 --> 00:07:22,560

that that's going to happen while we're

192

00:07:25,110 --> 00:07:23,520

here

193

00:07:26,629 --> 00:07:25,120

the planned spacewalk also means that

194

00:07:28,830 --> 00:07:26,639

we've had a chance to train on these

195

00:07:31,830 --> 00:07:28,840

tasks in the neutral buoyancy lab in

196

00:07:33,830 --> 00:07:31,840

houston before so we're familiar with

197

00:07:35,670 --> 00:07:33,840

the equipment and the hardware and the

198

00:07:36,950 --> 00:07:35,680

location of where we're going

199

00:07:39,110 --> 00:07:36,960

so it obviously makes it a little bit

200

00:07:40,710 --> 00:07:39,120

easier but it is one of those i think

201  
00:07:42,550 --> 00:07:40,720  
pinnacle things in your mission when you

202  
00:07:43,909 --> 00:07:42,560  
look back on it

203  
00:07:46,070 --> 00:07:43,919  
things that i've gotten to do already

204  
00:07:47,749 --> 00:07:46,080  
grabbing the the vehicle the other day

205  
00:07:49,670 --> 00:07:47,759  
and spacewalking will certainly be the

206  
00:07:50,469 --> 00:07:49,680  
operational highlights now we're all

207  
00:07:51,749 --> 00:07:50,479  
doing

208  
00:07:53,670 --> 00:07:51,759  
incredible experiments like you

209  
00:07:56,790 --> 00:07:53,680  
mentioned as well and those are really

210  
00:07:59,029 --> 00:07:56,800  
the focus of the space station right now

211  
00:08:01,110 --> 00:07:59,039  
but operationally you know going outside

212  
00:08:02,790 --> 00:08:01,120  
is very special and again it doesn't

213  
00:08:04,550 --> 00:08:02,800

happen all the time and we're just very

214

00:08:06,150 --> 00:08:04,560

fortunate

215

00:08:08,150 --> 00:08:06,160

how about christmas what's the plan i

216

00:08:09,350 --> 00:08:08,160

saw your thanksgiving meal uh now the

217

00:08:10,869 --> 00:08:09,360

holiday is coming up how do you

218

00:08:15,189 --> 00:08:10,879

celebrate christmas or do you even know

219

00:08:19,029 --> 00:08:17,270

so we're going to have um you know

220

00:08:20,629 --> 00:08:19,039

traditional i think probably very

221

00:08:23,189 --> 00:08:20,639

similar to the thanksgiving meal you may

222

00:08:24,950 --> 00:08:23,199

have seen and we'll also have some since

223

00:08:26,710 --> 00:08:24,960

we have our french astronaut on board

224

00:08:29,270 --> 00:08:26,720

he's going to provide a great

225

00:08:31,110 --> 00:08:29,280

european meal for us

226

00:08:33,670 --> 00:08:31,120

and the russians the russian christmas

227

00:08:35,750 --> 00:08:33,680

is on january 7th so we'll enjoy

228

00:08:37,350 --> 00:08:35,760

russian cuisine on that day with them so

229

00:08:38,709 --> 00:08:37,360

it's going to be a great international

230

00:08:40,230 --> 00:08:38,719

christmas season

231

00:08:42,630 --> 00:08:40,240

we're going to get to celebrate it on

232

00:08:44,790 --> 00:08:42,640

december 25th and january 7th so it'll

233

00:08:46,150 --> 00:08:44,800

be a definitely a unique opportunity for

234

00:08:48,630 --> 00:08:46,160

all of us

235

00:08:50,230 --> 00:08:48,640

cool i only got about a minute um so

236

00:08:52,150 --> 00:08:50,240

we'll rush through these ones where are

237

00:08:56,150 --> 00:08:52,160

you exactly in the space station what's

238

00:08:59,990 --> 00:08:58,150

so right now i'm in the u.s laboratory

239

00:09:01,509 --> 00:09:00,000

so this is where we do a lot of our work

240

00:09:03,590 --> 00:09:01,519

a lot of our experiments are set up in

241

00:09:05,670 --> 00:09:03,600

here it's kind of our command post as

242

00:09:07,430 --> 00:09:05,680

well behind me back by the uh the

243

00:09:09,269 --> 00:09:07,440

ramblin wreck flag is kind of the

244

00:09:11,030 --> 00:09:09,279

command post of the u.s side of the

245

00:09:12,790 --> 00:09:11,040

space station

246

00:09:14,710 --> 00:09:12,800

and then this kind of is a center point

247

00:09:17,509 --> 00:09:14,720

for all the other modules that kind of

248

00:09:19,110 --> 00:09:17,519

either go behind me or in front of me

249

00:09:20,710 --> 00:09:19,120

all right and then my final one is are

250

00:09:23,030 --> 00:09:20,720

you worried that perhaps your football

251

00:09:25,750 --> 00:09:23,040

teams play better when you're not on

252

00:09:27,350 --> 00:09:25,760

earth considering we beat georgia and

253

00:09:31,269 --> 00:09:27,360

army finally beat navy for the first

254

00:09:34,630 --> 00:09:32,949

yeah i was really happy to see that i

255

00:09:37,030 --> 00:09:34,640

told coach johnson a few years ago when

256

00:09:38,230 --> 00:09:37,040

i was talking at a thing that i was

257

00:09:39,829 --> 00:09:38,240

wanting of

258

00:09:41,829 --> 00:09:39,839

when i was in space for techbeat in

259

00:09:43,269 --> 00:09:41,839

georgia so now i'm 2-0 so i told him he

260

00:09:45,910 --> 00:09:43,279

has to tell nasa to send me to space

261

00:09:48,790 --> 00:09:47,509

thank you so much shane we're at the end

262

00:09:51,030 --> 00:09:48,800

of our time

263

00:09:53,509 --> 00:09:51,040

a safe mission safe continuing mission a

264

00:09:55,190 --> 00:09:53,519

safe trip home and a merry christmas to

265

00:09:58,710 --> 00:09:55,200

you the crew and also your family back

266

00:10:02,790 --> 00:10:00,550

thanks jason merry christmas everybody

267

00:10:05,509 --> 00:10:02,800

go jackets

268

00:10:11,110 --> 00:10:05,519

stayson this is houston acr that

269

00:10:14,630 --> 00:10:12,710

thank you to all participants and guests

270

00:10:15,990 --> 00:10:14,640

from the georgia institute of technology

271

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station please stand by while we