



1  
00:00:05,749 --> 00:00:02,230  
station this is houston are you ready

2  
00:00:12,950 --> 00:00:07,430  
houston station we're ready for the

3  
00:00:17,349 --> 00:00:15,270  
military times this is mission control

4  
00:00:18,790 --> 00:00:17,359  
houston please call station for a voice

5  
00:00:20,790 --> 00:00:18,800  
check

6  
00:00:24,630 --> 00:00:20,800  
station this is the military times how

7  
00:00:27,910 --> 00:00:26,470  
loud and clear military times hello

8  
00:00:29,269 --> 00:00:27,920  
great to be with you today and welcome

9  
00:00:30,390 --> 00:00:29,279  
aboard to the international space

10  
00:00:32,150 --> 00:00:30,400  
station

11  
00:00:34,229 --> 00:00:32,160  
hi commander cassidy this is tony

12  
00:00:36,069 --> 00:00:34,239  
lombardo the managing editor of navy

13  
00:00:39,430 --> 00:00:36,079

times thanks for agreeing to talk with

14

00:00:43,590 --> 00:00:41,430

my first question my pleasure tony it's

15

00:00:45,830 --> 00:00:43,600

great to great to be with you

16

00:00:47,590 --> 00:00:45,840

my first question to you is

17

00:00:50,549 --> 00:00:47,600

can you take just a minute and explain

18

00:00:52,229 --> 00:00:50,559

to me what a typical day in the life at

19

00:00:57,350 --> 00:00:52,239

the space station is like what kind of

20

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

yeah exactly so we wake up around six or

21

00:01:04,549 --> 00:01:02,480

so and we have a morning daily

22

00:01:09,590 --> 00:01:04,559

conference with with the ground teams

23

00:01:11,750 --> 00:01:09,600

around the world at roughly 7 15 7 30

24

00:01:13,030 --> 00:01:11,760

in that first hour is all the normal

25

00:01:15,749 --> 00:01:13,040

things you do

26

00:01:17,910 --> 00:01:15,759

uh at on earth you know wake up go to

27

00:01:20,630 --> 00:01:17,920

the bathroom clean yourself up eat some

28

00:01:22,230 --> 00:01:20,640

things and uh and prepare a little

29

00:01:24,950 --> 00:01:22,240

reading for what you're about to tackle

30

00:01:27,190 --> 00:01:24,960

for the day and then during the day the

31

00:01:29,270 --> 00:01:27,200

we close out the day at 7 30 p.m with

32

00:01:31,670 --> 00:01:29,280

another daily conference in in between

33

00:01:34,390 --> 00:01:31,680

that time we're doing uh science

34

00:01:35,990 --> 00:01:34,400

experiments our personal personal health

35

00:01:38,310 --> 00:01:36,000

and fitness with a couple hours of

36

00:01:41,109 --> 00:01:38,320

exercise eating lunch

37

00:01:42,870 --> 00:01:41,119

and maintenance on the space station and

38

00:01:45,830 --> 00:01:42,880

any other things that that come up

39

00:01:48,550 --> 00:01:45,840

unplanned uh that need attention

40

00:01:50,950 --> 00:01:48,560

and then we we wrap up the day uh what

41

00:01:53,190 --> 00:01:50,960

we call pre-sleep and that's the

42

00:01:54,950 --> 00:01:53,200

analogous to the time that you spend on

43

00:01:56,550 --> 00:01:54,960

earth after you finish work and you

44

00:01:58,789 --> 00:01:56,560

drive home you go to the grocery store

45

00:02:00,550 --> 00:01:58,799

you you go home and relax with your

46

00:02:02,950 --> 00:02:00,560

family watch some tv read a book and

47

00:02:04,310 --> 00:02:02,960

then go to bed and we have a couple of

48

00:02:06,550 --> 00:02:04,320

hours of that in the evening where we

49

00:02:08,790 --> 00:02:06,560

typically look out the window and talk

50

00:02:10,790 --> 00:02:08,800

with each other and things like this

51  
00:02:13,430 --> 00:02:10,800  
so that that's our day

52  
00:02:15,670 --> 00:02:13,440  
and we go to bed around 10 30 at night

53  
00:02:17,910 --> 00:02:15,680  
okay as a navy seal you're up there

54  
00:02:19,830 --> 00:02:17,920  
representing the defense department how

55  
00:02:26,390 --> 00:02:19,840  
would you say what you're doing is

56  
00:02:30,949 --> 00:02:29,270  
well you if if you look at the the

57  
00:02:33,509 --> 00:02:30,959  
the astronaut office we're about half

58  
00:02:35,589 --> 00:02:33,519  
military half civilian so any given time

59  
00:02:39,350 --> 00:02:35,599  
you'll have a military uniform wearing

60  
00:02:42,309 --> 00:02:39,360  
uh astronaut up here in fact not only

61  
00:02:44,790 --> 00:02:42,319  
from from the united states but my

62  
00:02:46,229 --> 00:02:44,800  
crewmate luca parmitano is an italian

63  
00:02:48,229 --> 00:02:46,239

air force

64

00:02:48,830 --> 00:02:48,239

officer and pilot so

65

00:02:51,190 --> 00:02:48,840

you

66

00:02:53,830 --> 00:02:51,200

know that what we're doing up here is

67

00:02:56,390 --> 00:02:53,840

not necessarily military in nature but i

68

00:02:59,670 --> 00:02:56,400

i think the what the military brings is

69

00:03:02,309 --> 00:02:59,680

pretty is pretty substantial to of being

70

00:03:03,990 --> 00:03:02,319

a good crewmate an effective astronaut

71

00:03:05,270 --> 00:03:04,000

and understanding how to work in an

72

00:03:06,869 --> 00:03:05,280

operational environment because that's

73

00:03:09,589 --> 00:03:06,879

what we have here is an operational

74

00:03:11,589 --> 00:03:09,599

environment we're every day doing things

75

00:03:13,589 --> 00:03:11,599

that could uh impact the health of the

76

00:03:16,229 --> 00:03:13,599

station or in some cases our own

77

00:03:17,990 --> 00:03:16,239

personal health and and and to be able

78

00:03:19,990 --> 00:03:18,000

to understand all that and talk on the

79

00:03:21,670 --> 00:03:20,000

radio and work with the ground teams is

80

00:03:24,229 --> 00:03:21,680

very much what we're used to

81

00:03:26,949 --> 00:03:24,239

from our military training

82

00:03:28,789 --> 00:03:26,959

you mentioned your italian crewmate what

83

00:03:30,470 --> 00:03:28,799

other foreign countries

84

00:03:35,750 --> 00:03:30,480

are represented up there and what

85

00:03:40,070 --> 00:03:37,589

yeah that's a good question so so right

86

00:03:43,589 --> 00:03:40,080

now on board we have myself and karen

87

00:03:46,470 --> 00:03:43,599

nyberg are nasa u.s astronauts luca is

88

00:03:48,789 --> 00:03:46,480

in luca parmitano is an italian

89  
00:03:52,070 --> 00:03:48,799  
astronaut from the european space agency

90  
00:03:55,190 --> 00:03:52,080  
and we have three russian cosmonauts

91  
00:03:56,949 --> 00:03:55,200  
pavel fyodor and and sasha

92  
00:03:58,630 --> 00:03:56,959  
and all together

93  
00:04:00,149 --> 00:03:58,640  
what we what we're learning what we

94  
00:04:01,910 --> 00:04:00,159  
learned together is just interaction

95  
00:04:04,869 --> 00:04:01,920  
good interaction much like if you do a

96  
00:04:07,589 --> 00:04:04,879  
joint training exercise or go

97  
00:04:09,589 --> 00:04:07,599  
into a a

98  
00:04:12,390 --> 00:04:09,599  
joint combined

99  
00:04:14,789 --> 00:04:12,400  
task force or something overseas

100  
00:04:16,629 --> 00:04:14,799  
you realize that everybody speaks a

101  
00:04:18,550 --> 00:04:16,639  
little bit differently in their own

102  
00:04:19,990 --> 00:04:18,560  
language and maybe their acronyms are

103  
00:04:21,030 --> 00:04:20,000  
different but when you get down to the

104  
00:04:23,030 --> 00:04:21,040  
individual

105  
00:04:25,189 --> 00:04:23,040  
soldier sailor airman or in this case

106  
00:04:27,189 --> 00:04:25,199  
astronaut cosmonaut we're all cut from

107  
00:04:29,510 --> 00:04:27,199  
the same breed and we all have the same

108  
00:04:30,950 --> 00:04:29,520  
sense of humor and we're all just trying

109  
00:04:33,110 --> 00:04:30,960  
to get through our day without making

110  
00:04:34,950 --> 00:04:33,120  
mistakes and doing the best we can

111  
00:04:37,270 --> 00:04:34,960  
and uh and that's and that's the bottom

112  
00:04:38,629 --> 00:04:37,280  
line that's what i've learned is that uh

113  
00:04:40,550 --> 00:04:38,639

internationally

114

00:04:41,430 --> 00:04:40,560

uh we're all training for the same

115

00:04:43,749 --> 00:04:41,440

mission

116

00:04:45,510 --> 00:04:43,759

and we're basically the same guys we're

117

00:04:47,110 --> 00:04:45,520

in slightly different uniforms and with

118

00:04:48,710 --> 00:04:47,120

the different accents

119

00:04:51,270 --> 00:04:48,720

okay

120

00:04:52,790 --> 00:04:51,280

what career advice would you offer to a

121

00:04:56,790 --> 00:04:52,800

service member looking to get into the

122

00:05:03,270 --> 00:04:59,749

you know i'm often asked that and uh the

123

00:05:06,070 --> 00:05:03,280

best advice i ever got was to just keep

124

00:05:09,029 --> 00:05:06,080

keep on doing uh

125

00:05:10,870 --> 00:05:09,039

jobs and taking sets of orders that

126

00:05:13,430 --> 00:05:10,880

you're satisfied with in within your

127

00:05:15,430 --> 00:05:13,440

military career because when you do that

128

00:05:18,629 --> 00:05:15,440

you'll tend to do them well

129

00:05:20,550 --> 00:05:18,639

and you'll a you'll enjoy your military

130

00:05:22,950 --> 00:05:20,560

career and if and by the chance you get

131

00:05:24,950 --> 00:05:22,960

selected to come to to become an

132

00:05:28,150 --> 00:05:24,960

astronaut and work in the space program

133

00:05:29,110 --> 00:05:28,160

then that's all all great but you're

134

00:05:31,189 --> 00:05:29,120

that's

135

00:05:33,110 --> 00:05:31,199

based on a foundation of hard work and

136

00:05:34,469 --> 00:05:33,120

doing well in your military chosen

137

00:05:36,150 --> 00:05:34,479

career field and that was the case with

138

00:05:38,629 --> 00:05:36,160

me i i really enjoyed my time in the

139

00:05:40,390 --> 00:05:38,639

seal teams

140

00:05:41,670 --> 00:05:40,400

and i knew that it was a long shot to

141

00:05:43,510 --> 00:05:41,680

get selected there

142

00:05:45,510 --> 00:05:43,520

during my interview process i realized

143

00:05:48,150 --> 00:05:45,520

just how many really really good people

144

00:05:51,670 --> 00:05:48,160

there are out there and and i just was

145

00:05:54,150 --> 00:05:51,680

really lucky to get to get picked

146

00:05:55,270 --> 00:05:54,160

so if i had continued on in my in my

147

00:05:56,790 --> 00:05:55,280

seal team career that would have been

148

00:05:58,950 --> 00:05:56,800

fine too because i thoroughly enjoyed

149

00:06:01,110 --> 00:05:58,960

what i was doing there

150

00:06:03,189 --> 00:06:01,120

um what what's been your most fulfilling

151  
00:06:08,710 --> 00:06:03,199  
experience so far in space and what's

152  
00:06:08,720 --> 00:06:12,710  
well that's a good question i think

153  
00:06:17,510 --> 00:06:15,029  
the most fulfilling and most challenging

154  
00:06:19,430 --> 00:06:17,520  
could be the same thing i personally

155  
00:06:21,350 --> 00:06:19,440  
really enjoy the space walks that i've

156  
00:06:24,390 --> 00:06:21,360  
done and i feel very privileged that

157  
00:06:26,230 --> 00:06:24,400  
i've been able to be a part of of

158  
00:06:27,670 --> 00:06:26,240  
three since i've been up here on this

159  
00:06:28,629 --> 00:06:27,680  
particular mission

160  
00:06:30,710 --> 00:06:28,639  
and

161  
00:06:32,710 --> 00:06:30,720  
we had a really challenging

162  
00:06:34,390 --> 00:06:32,720  
episode on the last one where luca had a

163  
00:06:36,070 --> 00:06:34,400

problem a technical problem with his

164

00:06:38,550 --> 00:06:36,080

suit and

165

00:06:40,390 --> 00:06:38,560

and that was

166

00:06:42,870 --> 00:06:40,400

very challenging to deal with it in real

167

00:06:45,830 --> 00:06:42,880

time but also very rewarding and very

168

00:06:48,469 --> 00:06:45,840

fulfilling to see the whole team the

169

00:06:50,150 --> 00:06:48,479

ground team the onboard folks that were

170

00:06:53,189 --> 00:06:50,160

inside the space station and luca and

171

00:06:55,270 --> 00:06:53,199

myself outside all working together to

172

00:06:56,790 --> 00:06:55,280

bring to make quick decisions and bring

173

00:06:59,029 --> 00:06:56,800

him in

174

00:07:00,629 --> 00:06:59,039

as fast and safely as we could to get

175

00:07:02,629 --> 00:07:00,639

his helmet off he had water leaking

176  
00:07:04,070 --> 00:07:02,639  
inside his helmet

177  
00:07:06,230 --> 00:07:04,080  
so that was a really challenging

178  
00:07:08,390 --> 00:07:06,240  
situation and and

179  
00:07:09,830 --> 00:07:08,400  
in retrospect one of the more rewarding

180  
00:07:11,029 --> 00:07:09,840  
and feeling what fulfilling ones i've

181  
00:07:13,270 --> 00:07:11,039  
had

182  
00:07:15,749 --> 00:07:13,280  
um most of us here on earth will never

183  
00:07:21,589 --> 00:07:15,759  
get a chance to do a space walk can you

184  
00:07:27,110 --> 00:07:23,830  
well first and foremost if you

185  
00:07:28,870 --> 00:07:27,120  
took your toes and went to the top of a

186  
00:07:31,029 --> 00:07:28,880  
skyscraper and put your toes over the

187  
00:07:32,309 --> 00:07:31,039  
edge of the skyscraper and leaned over

188  
00:07:33,830 --> 00:07:32,319

your brain would tell you what are you

189

00:07:36,150 --> 00:07:33,840

doing you're crazy back off you're going

190

00:07:37,589 --> 00:07:36,160

to fall and that's kind of the sensation

191

00:07:39,350 --> 00:07:37,599

that you have when you're very on your

192

00:07:40,790 --> 00:07:39,360

first spacewalk when you open the hatch

193

00:07:42,550 --> 00:07:40,800

and you're looking right down at the

194

00:07:44,469 --> 00:07:42,560

earth even though we've been looking out

195

00:07:45,830 --> 00:07:44,479

the window here on the space station

196

00:07:48,150 --> 00:07:45,840

it's just somehow it's it's

197

00:07:49,830 --> 00:07:48,160

psychologically different when it's just

198

00:07:52,070 --> 00:07:49,840

your helmet and you look down once you

199

00:07:53,749 --> 00:07:52,080

get over that initial

200

00:07:55,189 --> 00:07:53,759

it only takes a minute or a couple of

201  
00:07:56,230 --> 00:07:55,199  
minutes to realize that you're not going

202  
00:07:57,110 --> 00:07:56,240  
to fall and everything's going to be

203  
00:07:59,749 --> 00:07:57,120  
okay

204  
00:08:00,710 --> 00:07:59,759  
and and then you start going to work

205  
00:08:03,670 --> 00:08:00,720  
and

206  
00:08:05,510 --> 00:08:03,680  
there's a very um refined timeline a

207  
00:08:07,270 --> 00:08:05,520  
script of of the pace of work that we

208  
00:08:09,270 --> 00:08:07,280  
need to do so in the back of your mind

209  
00:08:11,270 --> 00:08:09,280  
you're always thinking am i are we

210  
00:08:12,390 --> 00:08:11,280  
working on the timeline or we're ahead

211  
00:08:13,909 --> 00:08:12,400  
or behind

212  
00:08:15,830 --> 00:08:13,919  
what do we have

213  
00:08:18,150 --> 00:08:15,840

ahead of us what challenges could be

214

00:08:20,469 --> 00:08:18,160

there and so for me it was a lot like

215

00:08:23,830 --> 00:08:20,479

and some of the missions that i've done

216

00:08:25,510 --> 00:08:23,840

in my military career where

217

00:08:26,869 --> 00:08:25,520

if things are going well you're always

218

00:08:28,469 --> 00:08:26,879

in your back your mind thinking all

219

00:08:30,790 --> 00:08:28,479

right what is around the corner that's

220

00:08:32,550 --> 00:08:30,800

going to prevent us from from finishing

221

00:08:35,909 --> 00:08:32,560

what little gotcha do have we not

222

00:08:38,949 --> 00:08:35,919

thought about and and how can we

223

00:08:40,790 --> 00:08:38,959

posture ourselves to deal with that

224

00:08:43,029 --> 00:08:40,800

quickly and still get all of our jobs

225

00:08:46,150 --> 00:08:43,039

done and and that's that's kind of the

226  
00:08:47,590 --> 00:08:46,160  
mindset that i have during spacewalks um

227  
00:08:50,710 --> 00:08:47,600  
and then every now and then i have to

228  
00:08:53,590 --> 00:08:50,720  
stop and relax and just look and see and

229  
00:08:56,230 --> 00:08:53,600  
take in the the breathtaking beauty of

230  
00:08:58,070 --> 00:08:56,240  
where i am out with one hand on the very

231  
00:09:00,550 --> 00:08:58,080  
far edge of the port side of the space

232  
00:09:03,269 --> 00:09:00,560  
station for example looking all the way

233  
00:09:05,590 --> 00:09:03,279  
down uh across the space station and

234  
00:09:09,190 --> 00:09:05,600  
down to the earth and trying to capture

235  
00:09:11,829 --> 00:09:09,200  
that my mental picture in my mind's eye

236  
00:09:13,750 --> 00:09:11,839  
to capture forever and ever

237  
00:09:15,509 --> 00:09:13,760  
okay commander well thank you very much

238  
00:09:19,829 --> 00:09:15,519

for your time i appreciate it and this

239

00:09:24,070 --> 00:09:21,750

thank you thank you very much and thanks

240

00:09:25,829 --> 00:09:24,080

for the reporting on the navy times i

241

00:09:30,710 --> 00:09:25,839

enjoy that magazine a lot

242

00:09:35,030 --> 00:09:33,030

station this is houston acr that

243

00:09:37,110 --> 00:09:35,040

concludes the military times portion of

244

00:09:41,030 --> 00:09:37,120

the event please stand by for a voice

245

00:09:43,750 --> 00:09:41,040

check from wbur fm

246

00:09:47,350 --> 00:09:43,760

and station this is wbur fm how do you

247

00:09:51,030 --> 00:09:49,670

hello there in boston great to to be

248

00:09:53,030 --> 00:09:51,040

with you and welcome aboard the

249

00:09:54,949 --> 00:09:53,040

international space station hey

250

00:09:56,550 --> 00:09:54,959

commander cassidy it's anthony brooks in

251

00:09:58,550 --> 00:09:56,560

boston thanks so much for joining us

252

00:10:00,070 --> 00:09:58,560

today we're very grateful uh to have you

253

00:10:02,389 --> 00:10:00,080

and i got to say this is the first time

254

00:10:04,069 --> 00:10:02,399

uh my voice has been in outer space as

255

00:10:08,550 --> 00:10:04,079

far as i know so i'm very excited about

256

00:10:14,069 --> 00:10:10,870

well anthony it sounds just like it does

257

00:10:18,150 --> 00:10:15,829

let me ask you this commander cassidy

258

00:10:20,790 --> 00:10:18,160

when you return home next month you will

259

00:10:22,470 --> 00:10:20,800

have been in space for six months which

260

00:10:25,350 --> 00:10:22,480

is i think hard for a lot of people on

261

00:10:27,590 --> 00:10:25,360

earth to imagine what that feels like

262

00:10:34,150 --> 00:10:27,600

what's the biggest challenge about being

263

00:10:37,110 --> 00:10:34,949

well

264

00:10:40,069 --> 00:10:37,120

it's um there's several ways to answer

265

00:10:42,470 --> 00:10:40,079

that question one is uh on the personal

266

00:10:43,990 --> 00:10:42,480

level you know we miss our our family

267

00:10:47,350 --> 00:10:44,000

and friends and our loved ones on the

268

00:10:49,350 --> 00:10:47,360

ground and uh and and that's a big part

269

00:10:51,590 --> 00:10:49,360

of it we're all all of us that are up

270

00:10:53,350 --> 00:10:51,600

here when it's time to return that's one

271

00:10:55,670 --> 00:10:53,360

of the first things we think about is

272

00:10:57,190 --> 00:10:55,680

our our family friends and loved ones

273

00:10:58,630 --> 00:10:57,200

um

274

00:11:01,030 --> 00:10:58,640

second to that

275

00:11:03,190 --> 00:11:01,040

would be some of the pleasant things

276

00:11:05,750 --> 00:11:03,200

that that each of us have on earth for

277

00:11:07,190 --> 00:11:05,760

me um it's been the summertime right now

278

00:11:10,790 --> 00:11:07,200

so i realized that i

279

00:11:12,790 --> 00:11:10,800

missed the the smell of fresh cut grass

280

00:11:14,949 --> 00:11:12,800

and you know just being outside in the

281

00:11:17,990 --> 00:11:14,959

in the summertime and and going to the

282

00:11:20,389 --> 00:11:18,000

beach and that sort of thing so so those

283

00:11:22,310 --> 00:11:20,399

uh types of things that you can just do

284

00:11:23,990 --> 00:11:22,320

on earth are are a few of the examples

285

00:11:25,509 --> 00:11:24,000

that i'm looking really looking forward

286

00:11:27,910 --> 00:11:25,519

to when i get back

287

00:11:30,230 --> 00:11:27,920

um commander cassidy quick question you

288

00:11:32,069 --> 00:11:30,240

know we're following where you are right

289

00:11:34,389 --> 00:11:32,079

now online and i think when i started

290

00:11:36,870 --> 00:11:34,399

talking to you you were somewhere over

291

00:11:38,470 --> 00:11:36,880

senegal i'm wondering if you can just

292

00:11:39,990 --> 00:11:38,480

give me a sense of your view what are

293

00:11:44,550 --> 00:11:40,000

you seeing what do you see when you look

294

00:11:49,750 --> 00:11:47,430

well right this second i i i don't

295

00:11:52,870 --> 00:11:49,760

exactly know but for instance it the

296

00:11:54,550 --> 00:11:52,880

best way for me to describe it is if uh

297

00:11:57,430 --> 00:11:54,560

it's it you don't see the whole entire

298

00:11:59,670 --> 00:11:57,440

earth we're we're about 200 200 250

299

00:12:01,670 --> 00:11:59,680

miles above the surface of the earth so

300

00:12:03,750 --> 00:12:01,680

if you sat in your car

301

00:12:06,389 --> 00:12:03,760

your driver's seat or car and you sort

302

00:12:11,750 --> 00:12:09,350

a long horizon across the windshield

303

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

that would be what we see the horizon of

304

00:12:16,629 --> 00:12:14,399

the earth and uh

305

00:12:18,550 --> 00:12:16,639

for instance we can see all of florida

306

00:12:20,790 --> 00:12:18,560

when we're over it you see the whole

307

00:12:22,949 --> 00:12:20,800

state of florida and up the partially up

308

00:12:25,269 --> 00:12:22,959

the east coast when we come across the

309

00:12:27,990 --> 00:12:25,279

mediterranean uh as we go through the

310

00:12:30,949 --> 00:12:28,000

straits of gibraltar you can see

311

00:12:32,870 --> 00:12:30,959

uh italy and in the uh and its boot

312

00:12:34,230 --> 00:12:32,880

there and that's we we watch that a lot

313

00:12:36,470 --> 00:12:34,240

with luca here

314

00:12:38,710 --> 00:12:36,480

so so that kind of gives you an

315

00:12:40,949 --> 00:12:38,720

appreciation of the the the amount of

316

00:12:41,910 --> 00:12:40,959

territory the amount of of land that we

317

00:12:45,190 --> 00:12:41,920

can see

318

00:12:47,829 --> 00:12:45,200

mediterranean for instance and when you

319

00:12:49,590 --> 00:12:47,839

come across the persian gulf you can you

320

00:12:51,990 --> 00:12:49,600

can see

321

00:12:53,430 --> 00:12:52,000

all the sand that's all around that

322

00:12:55,590 --> 00:12:53,440

whole region and then and then the

323

00:12:57,910 --> 00:12:55,600

really beautiful lush green Nile river

324

00:12:59,590 --> 00:12:57,920

delta right in the middle of all that so

325

00:13:01,750 --> 00:12:59,600

so there's some really breathtaking

326

00:13:04,389 --> 00:13:01,760

views to be seen on our planet

327

00:13:05,990 --> 00:13:04,399

well speaking of of breathtaking views

328

00:13:07,670 --> 00:13:06,000

commander i wonder if you could just

329

00:13:09,910 --> 00:13:07,680

tell me a little bit about what it's

330

00:13:12,069 --> 00:13:09,920

like to walk in space that this is

331

00:13:14,150 --> 00:13:12,079

something that uh you know as a kid

332

00:13:16,550 --> 00:13:14,160

growing up and trying to imagine what

333

00:13:18,790 --> 00:13:16,560

it's like to be in outer space that that

334

00:13:20,710 --> 00:13:18,800

that sort of inspires the imagination

335

00:13:27,110 --> 00:13:20,720

what's it like to step outside of a

336

00:13:30,389 --> 00:13:28,949

well at first it's really intimidating

337

00:13:32,150 --> 00:13:30,399

you know that there's a lot of people

338

00:13:33,829 --> 00:13:32,160

that put a lot of hard work into

339

00:13:35,430 --> 00:13:33,839

building whatever piece of equipment

340

00:13:37,670 --> 00:13:35,440

whatever piece of hardware you're about

341

00:13:39,910 --> 00:13:37,680

to install or repair

342

00:13:42,710 --> 00:13:39,920

and there's a sensation of not wanting

343

00:13:45,189 --> 00:13:42,720

to do anything to to mess up the chances

344

00:13:47,269 --> 00:13:45,199

of that being installed successfully

345

00:13:49,509 --> 00:13:47,279

aside from that you mentioned walking in

346

00:13:51,590 --> 00:13:49,519

space but i should add that it's there's

347

00:13:53,430 --> 00:13:51,600

really not much walking involved in fact

348

00:13:55,189 --> 00:13:53,440

our legs just sort of drag along and

349

00:13:57,269 --> 00:13:55,199

don't do much of anything

350

00:14:00,470 --> 00:13:57,279

uh it's all done with your hands so it's

351

00:14:02,949 --> 00:14:00,480

hand over hand uh across a

352

00:14:04,710 --> 00:14:02,959

path of handrails and we always have a

353

00:14:07,189 --> 00:14:04,720

safety tether connected back to the

354

00:14:09,430 --> 00:14:07,199

airlock hatch which it's kind of like a

355

00:14:11,269 --> 00:14:09,440

dog leash with a little slow pull so if

356

00:14:13,910 --> 00:14:11,279

you if you fell off nobody ever has and

357

00:14:16,389 --> 00:14:13,920

we don't want to test it but if you did

358

00:14:18,069 --> 00:14:16,399

it would pull you slowly back to where

359

00:14:20,310 --> 00:14:18,079

the airlock hatch is

360

00:14:23,110 --> 00:14:20,320

we always keep our hands on and when we

361

00:14:25,110 --> 00:14:23,120

get to a work work area we clip in so we

362

00:14:27,430 --> 00:14:25,120

can be nice and safe and secure in that

363

00:14:28,870 --> 00:14:27,440

local area in that region right around

364

00:14:30,710 --> 00:14:28,880

we're about to work

365

00:14:32,550 --> 00:14:30,720

but while you're working on the on the

366

00:14:34,389 --> 00:14:32,560

piece of equipment always in the corner

367

00:14:37,189 --> 00:14:34,399

of your eye you can see the earth below

368

00:14:39,670 --> 00:14:37,199

you flying by or when it's nighttime for

369

00:14:41,750 --> 00:14:39,680

instance you see nothing but what your

370

00:14:43,670 --> 00:14:41,760

headlights illuminate like maybe a three

371

00:14:44,470 --> 00:14:43,680

foot diameter circle right in front of

372

00:14:45,350 --> 00:14:44,480

you

373

00:14:47,030 --> 00:14:45,360

so

374

00:14:49,590 --> 00:14:47,040

as we go around the earth every 90

375

00:14:51,590 --> 00:14:49,600

minutes 45 minutes of in the day you see

376

00:14:53,430 --> 00:14:51,600

the earth below you dangling beneath

377

00:14:55,829 --> 00:14:53,440

your feet and at night you see

378

00:14:57,990 --> 00:14:55,839

absolutely nothing total pitch darkness

379

00:14:59,350 --> 00:14:58,000

so it's it's it's really an interesting

380

00:15:02,230 --> 00:14:59,360

place to work

381

00:15:04,150 --> 00:15:02,240

um well what's it like the first time

382

00:15:06,150 --> 00:15:04,160

you step out into space i've got to

383

00:15:09,030 --> 00:15:06,160

imagine that it's like stepping off of a

384

00:15:10,550 --> 00:15:09,040

mountain top or off of a of a skyscraper

385

00:15:11,430 --> 00:15:10,560

is there a part of you that has to sort

386

00:15:18,710 --> 00:15:11,440

of

387

00:15:22,230 --> 00:15:20,550

yes you know that's exactly right i was

388

00:15:25,030 --> 00:15:22,240

just telling the folks before i was

389

00:15:26,389 --> 00:15:25,040

talking to you that it's my my

390

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

experience was if

391

00:15:29,829 --> 00:15:28,160

as if i had just walked up to the edge

392

00:15:31,350 --> 00:15:29,839

of the skyscraper and tilted my head

393

00:15:33,350 --> 00:15:31,360

over the side and my brain was telling

394

00:15:35,990 --> 00:15:33,360

me no no what are you doing you're too

395

00:15:38,230 --> 00:15:36,000

close in fact this is a kind of a funny

396

00:15:39,670 --> 00:15:38,240

story on my very first spacewalk on my

397

00:15:42,150 --> 00:15:39,680

shuttle mission there happened to be a

398

00:15:44,069 --> 00:15:42,160

piece of uh a drink straw that had

399

00:15:46,629 --> 00:15:44,079

floated into our airlock and when we

400

00:15:48,470 --> 00:15:46,639

when i opened the hatch this piece of

401  
00:15:51,269 --> 00:15:48,480  
trash the drink straw

402  
00:15:52,470 --> 00:15:51,279  
flew right past my head and i saw it go

403  
00:15:54,550 --> 00:15:52,480  
out the corner of my eye and then i

404  
00:15:56,550 --> 00:15:54,560  
watched it kind of spiral its way down

405  
00:15:58,230 --> 00:15:56,560  
to the earth and i remember thinking i

406  
00:16:00,949 --> 00:15:58,240  
don't want to be that drink straw so

407  
00:16:03,030 --> 00:16:00,959  
hold on tight

408  
00:16:04,629 --> 00:16:03,040  
commander you mentioned your italian

409  
00:16:08,150 --> 00:16:04,639  
colleague there in the space station

410  
00:16:11,030 --> 00:16:08,160  
luca parmitano and i know you had of

411  
00:16:14,710 --> 00:16:11,040  
a few really tense moments uh during a

412  
00:16:17,350 --> 00:16:14,720  
spacewalk with luca parmitano when his

413  
00:16:19,110 --> 00:16:17,360

helmet began filling with water which

414

00:16:21,590 --> 00:16:19,120

was potentially a very dangerous

415

00:16:23,670 --> 00:16:21,600

situation tell us briefly what happened

416

00:16:27,430 --> 00:16:23,680

and and what you had to do to take care

417

00:16:33,590 --> 00:16:30,550

so at about 45 minutes or an hour into

418

00:16:35,030 --> 00:16:33,600

our our spacewalk luca noticed or he

419

00:16:37,509 --> 00:16:35,040

started to feel

420

00:16:39,829 --> 00:16:37,519

water on the back of his head

421

00:16:42,150 --> 00:16:39,839

and we were trying at first to figure

422

00:16:44,310 --> 00:16:42,160

out what the source was we have a drink

423

00:16:47,509 --> 00:16:44,320

bag of water that we wear inside the

424

00:16:49,590 --> 00:16:47,519

suit right on our belly on our belly

425

00:16:52,150 --> 00:16:49,600

and and we thought it might have been

426

00:16:54,069 --> 00:16:52,160

that the bag maybe have exploded open or

427

00:16:54,949 --> 00:16:54,079

something but we he realized it wasn't

428

00:16:57,110 --> 00:16:54,959

this

429

00:16:59,269 --> 00:16:57,120

and the water had a funny taste to it

430

00:17:01,430 --> 00:16:59,279

which indicated that it was sort of a

431

00:17:03,590 --> 00:17:01,440

technical water that

432

00:17:06,309 --> 00:17:03,600

uh coming from the backpack which is

433

00:17:07,990 --> 00:17:06,319

used to cool ourselves our long

434

00:17:08,789 --> 00:17:08,000

underwear has these

435

00:17:16,390 --> 00:17:08,799

cool

436

00:17:18,870 --> 00:17:16,400

as it interacts with a thing called a

437

00:17:20,470 --> 00:17:18,880

sublimator to keep the water cold and it

438

00:17:21,990 --> 00:17:20,480

keeps our body cold and then carries the

439

00:17:24,630 --> 00:17:22,000

heat back and rejects it to space

440

00:17:26,390 --> 00:17:24,640

otherwise we'd get really hot anyways so

441

00:17:29,190 --> 00:17:26,400

in that cooling water system there was

442

00:17:31,110 --> 00:17:29,200

somehow a leak coming into his suit and

443

00:17:32,630 --> 00:17:31,120

it when the leak was putting the water

444

00:17:34,150 --> 00:17:32,640

right on the back of his head and as

445

00:17:36,870 --> 00:17:34,160

that water bubble got bigger and bigger

446

00:17:39,830 --> 00:17:36,880

and bigger at one point it got into his

447

00:17:41,669 --> 00:17:39,840

communications cap and then the surface

448

00:17:42,310 --> 00:17:41,679

tension the water just kind of pulled it

449

00:17:43,270 --> 00:17:42,320

all

450

00:17:44,630 --> 00:17:43,280

around

451  
00:17:46,870 --> 00:17:44,640  
his whole head

452  
00:17:48,789 --> 00:17:46,880  
and though that same surface tension

453  
00:17:50,470 --> 00:17:48,799  
kept the water bubble on his head

454  
00:17:51,430 --> 00:17:50,480  
instead of that water floating around

455  
00:17:53,750 --> 00:17:51,440  
inside

456  
00:17:56,310 --> 00:17:53,760  
the comm cap well as the water grew it

457  
00:17:58,230 --> 00:17:56,320  
started to go over his eyes and his ears

458  
00:18:00,310 --> 00:17:58,240  
and eventually got close to his nose and

459  
00:18:01,430 --> 00:18:00,320  
then on to his nose once we got into the

460  
00:18:03,830 --> 00:18:01,440  
airlock

461  
00:18:06,230 --> 00:18:03,840  
and so when i when he first noticed it

462  
00:18:08,310 --> 00:18:06,240  
and i came up to him and looked i could

463  
00:18:10,230 --> 00:18:08,320

see that the water was growing and

464

00:18:12,150 --> 00:18:10,240

together with the ground team we decided

465

00:18:14,150 --> 00:18:12,160

it was time to end that spacewalk and

466

00:18:15,669 --> 00:18:14,160

send him back well as luck would have it

467

00:18:17,669 --> 00:18:15,679

or unluck would have it it became

468

00:18:20,070 --> 00:18:17,679

nighttime at that point and luca had to

469

00:18:22,230 --> 00:18:20,080

go back to the airlock at night with

470

00:18:25,510 --> 00:18:22,240

very little low visibility because of

471

00:18:27,110 --> 00:18:25,520

the water sloshing around and hardly any

472

00:18:28,630 --> 00:18:27,120

communications because the water was

473

00:18:31,110 --> 00:18:28,640

getting onto his communication

474

00:18:33,190 --> 00:18:31,120

microphones so anyways that was the most

475

00:18:35,270 --> 00:18:33,200

tense moment right right when he went

476  
00:18:37,510 --> 00:18:35,280  
back until we met up together again at

477  
00:18:39,390 --> 00:18:37,520  
the airlock and uh

478  
00:18:42,390 --> 00:18:39,400  
and closed the hatch and started the

479  
00:18:44,470 --> 00:18:42,400  
repressurization to get his helmet off

480  
00:18:46,150 --> 00:18:44,480  
and i would uh we were we were

481  
00:18:47,590 --> 00:18:46,160  
communicating to each other with hand

482  
00:18:48,950 --> 00:18:47,600  
signals because he couldn't talk very

483  
00:18:52,310 --> 00:18:48,960  
well

484  
00:18:54,150 --> 00:18:52,320  
and uh and i was watching his

485  
00:18:56,390 --> 00:18:54,160  
his face in his mouth to make sure that

486  
00:18:59,110 --> 00:18:56,400  
he had good access to air but once we

487  
00:19:01,029 --> 00:18:59,120  
got the hatch open the russian crew and

488  
00:19:02,150 --> 00:19:01,039

karen were right there to get his helmet

489

00:19:04,390 --> 00:19:02,160  
off and and

490

00:19:06,870 --> 00:19:04,400  
and execute a nice

491

00:19:08,710 --> 00:19:06,880  
suit removal quickly

492

00:19:10,549 --> 00:19:08,720  
well commander i'm glad that worked out

493

00:19:12,230 --> 00:19:10,559  
for luca parmitano let me ask you one

494

00:19:13,990 --> 00:19:12,240  
last quick question you mentioned the

495

00:19:15,909 --> 00:19:14,000  
russian crew the first time you went

496

00:19:17,830 --> 00:19:15,919  
into space you traveled aboard a u.s

497

00:19:19,830 --> 00:19:17,840  
space shuttle this last time you

498

00:19:21,669 --> 00:19:19,840  
rocketed into space on a russian rocket

499

00:19:23,430 --> 00:19:21,679  
you'll be returning home with the

500

00:19:25,190 --> 00:19:23,440  
russians how does that compare with uh

501

00:19:29,750 --> 00:19:25,200

with the us shuttle what's that

502

00:19:34,390 --> 00:19:32,230

well first and foremost um all the books

503

00:19:35,590 --> 00:19:34,400

are in russian and there's a guy talking

504

00:19:37,750 --> 00:19:35,600

to you on the other side of the radio

505

00:19:39,510 --> 00:19:37,760

who's speaking in russian unlike in the

506

00:19:41,190 --> 00:19:39,520

shuttle where all the books are in my

507

00:19:42,950 --> 00:19:41,200

native language and the guys on the

508

00:19:45,350 --> 00:19:42,960

radio are all speaking english so that

509

00:19:46,390 --> 00:19:45,360

was one hurdle to get over but aside

510

00:19:48,310 --> 00:19:46,400

from that

511

00:19:50,310 --> 00:19:48,320

it's really more about the size of the

512

00:19:53,590 --> 00:19:50,320

vehicles i wouldn't equate the space

513

00:19:55,590 --> 00:19:53,600

shuttle to be like a big pickup truck

514

00:19:56,789 --> 00:19:55,600

king cab pickup truck lots of cargo in

515

00:19:59,590 --> 00:19:56,799

the back

516

00:20:01,669 --> 00:19:59,600

kind of a nice cushy or ride and you

517

00:20:05,190 --> 00:20:01,679

have a couple rows of seats in the front

518

00:20:07,430 --> 00:20:05,200

whereas the the soyuz is a small little

519

00:20:09,830 --> 00:20:07,440

race car you know where you just get the

520

00:20:11,510 --> 00:20:09,840

people and a soft bag of

521

00:20:14,149 --> 00:20:11,520

toiletries or something that can go

522

00:20:15,669 --> 00:20:14,159

along on your trip and uh and then

523

00:20:17,750 --> 00:20:15,679

because of that when you're driving a

524

00:20:21,270 --> 00:20:17,760

sports car for instance you feel all the

525

00:20:25,190 --> 00:20:21,280

turns and and i remember on on this most

526

00:20:27,909 --> 00:20:25,200

recent launch as as right off the pad as

527

00:20:30,149 --> 00:20:27,919

the uh the vehicles tried to vector in

528

00:20:32,470 --> 00:20:30,159

on its on its heading i could feel those

529

00:20:34,630 --> 00:20:32,480

small little course changes

530

00:20:36,630 --> 00:20:34,640

as the vehicle honed in on the right way

531

00:20:38,390 --> 00:20:36,640

to go whereas in the shuttle it's such a

532

00:20:40,149 --> 00:20:38,400

more massive vehicle

533

00:20:42,710 --> 00:20:40,159

i didn't i don't remember feeling those

534

00:20:44,230 --> 00:20:42,720

quick uh quick nuances in the in the

535

00:20:45,990 --> 00:20:44,240

heading changes so

536

00:20:47,590 --> 00:20:46,000

quite different because of the mass of

537

00:20:49,190 --> 00:20:47,600

the vehicle and then coming home will be

538

00:20:51,350 --> 00:20:49,200

a lot different because we'll land under

539

00:20:53,110 --> 00:20:51,360

parachute in the soyuz and on the space

540

00:20:55,510 --> 00:20:53,120

shuttle it was much like an aircraft

541

00:20:57,590 --> 00:20:55,520

landing with wings on the runway so a

542

00:20:58,870 --> 00:20:57,600

couple key differences neither one is

543

00:21:01,350 --> 00:20:58,880

more right or wrong they're just

544

00:21:03,190 --> 00:21:01,360

different and i'm really thankful to

545

00:21:05,270 --> 00:21:03,200

have both experiences

546

00:21:07,669 --> 00:21:05,280

well navy commander chris cassidy he's

547

00:21:10,070 --> 00:21:07,679

from york maine he's the flight engineer

548

00:21:11,750 --> 00:21:10,080

aboard the international space station

549

00:21:14,070 --> 00:21:11,760

commander cassidy thanks so much for

550

00:21:15,830 --> 00:21:14,080

joining us stay safe and safe travels

551

00:21:17,110 --> 00:21:15,840

and maybe we'll talk to you when you get

552

00:21:21,110 --> 00:21:17,120

back to earth on

553

00:21:23,750 --> 00:21:22,870

okay my pleasure great talking to you

554

00:21:29,110 --> 00:21:23,760

again

555

00:21:36,549 --> 00:21:31,750

station this is houston acr thank you

556

00:21:41,350 --> 00:21:39,510

thank you military times and wbur fm