



1
00:00:07,190 --> 00:00:03,830
stations this is houston are you ready

2
00:00:07,200 --> 00:00:11,350
we are ready for the event

3
00:00:18,310 --> 00:00:13,990
yp

4
00:00:20,870 --> 00:00:18,320
please call station for a voice check

5
00:00:22,550 --> 00:00:20,880
station this is tom at wypr can you hear

6
00:00:26,470 --> 00:00:22,560
me

7
00:00:28,070 --> 00:00:26,480
hey tom i hear you loud and clear

8
00:00:30,470 --> 00:00:28,080
great thanks

9
00:00:32,389 --> 00:00:30,480
on 881 it's maryland morning with sheila

10
00:00:34,150 --> 00:00:32,399
cast i'm tom hall since the end of may

11
00:00:35,350 --> 00:00:34,160
cockeysville native reid weissman has

12
00:00:37,910 --> 00:00:35,360
been living and working on the

13
00:00:39,990 --> 00:00:37,920

international space station about 200

14

00:00:41,670 --> 00:00:40,000

miles above the earth he'll be there for

15

00:00:43,430 --> 00:00:41,680

about four more months we talked to him

16

00:00:45,590 --> 00:00:43,440

right before he launched into space in

17

00:00:47,190 --> 00:00:45,600

the spring and on wednesday we caught up

18

00:00:48,950 --> 00:00:47,200

with commander weissman from the

19

00:00:52,709 --> 00:00:48,960

international space station it's good to

20

00:00:55,750 --> 00:00:54,229

oh i'm always good when i'm talking to

21

00:00:57,029 --> 00:00:55,760

people from maryland it's great great to

22

00:00:58,310 --> 00:00:57,039

be with you this morning

23

00:01:00,630 --> 00:00:58,320

great to have you here so now you're

24

00:01:03,590 --> 00:01:00,640

traveling up just under five miles per

25

00:01:05,109 --> 00:01:03,600

second about 17 000 miles an hour how

26

00:01:08,310 --> 00:01:05,119

long does it take you to orbit the

27

00:01:12,950 --> 00:01:10,550

so we lap the earth once every 90

28

00:01:15,590 --> 00:01:12,960

minutes so that gives us about 16

29

00:01:18,149 --> 00:01:15,600

sunrises and sunsets each day

30

00:01:20,630 --> 00:01:18,159

and how do you even keep track of uh

31

00:01:21,749 --> 00:01:20,640

daytime night time i mean how do you how

32

00:01:23,590 --> 00:01:21,759

do you work that out in terms of your

33

00:01:25,190 --> 00:01:23,600

sleep schedule and your work schedule

34

00:01:28,310 --> 00:01:25,200

your sleep schedule on your work

35

00:01:29,429 --> 00:01:28,320

schedule well sure when we're inside if

36

00:01:31,429 --> 00:01:29,439

you're not looking out the window you

37

00:01:33,670 --> 00:01:31,439

can definitely lose track of day and

38

00:01:36,310 --> 00:01:33,680

night but we work based on greenwich

39

00:01:38,710 --> 00:01:36,320

mean time and we work a regular day so i

40

00:01:40,950 --> 00:01:38,720

wake up around 6 30 in the morning start

41

00:01:42,789 --> 00:01:40,960

the day about 7 30 and then we wrap up

42

00:01:44,870 --> 00:01:42,799

around 7 30 at night and have a little

43

00:01:47,350 --> 00:01:44,880

bit of time for uh pre-sleep and then

44

00:01:49,270 --> 00:01:47,360

i'm off to bed around 10 p.m

45

00:01:50,870 --> 00:01:49,280

so you have taken some really beautiful

46

00:01:53,190 --> 00:01:50,880

photographs and sent some beautiful

47

00:01:54,389 --> 00:01:53,200

video on your twitter account your vine

48

00:01:56,789 --> 00:01:54,399

account

49

00:01:58,870 --> 00:01:56,799

and you've got about 200 000 followers

50

00:02:01,590 --> 00:01:58,880

here on earth you've been looking at the

51
00:02:03,590 --> 00:02:01,600
earth from this amazing perspective

52
00:02:06,630 --> 00:02:03,600
for the last couple of months

53
00:02:08,389 --> 00:02:06,640
has your view of life on earth

54
00:02:12,150 --> 00:02:08,399
evolved and changed it all since you've

55
00:02:16,229 --> 00:02:13,670
that's a great question and no one's

56
00:02:17,910 --> 00:02:16,239
really asked me that yet i would say

57
00:02:20,869 --> 00:02:17,920
it has in many ways first of all our

58
00:02:23,030 --> 00:02:20,879
planet is amazingly beautiful and way

59
00:02:25,750 --> 00:02:23,040
more complex and dynamic than i ever

60
00:02:27,990 --> 00:02:25,760
imagined um and the thing that i think

61
00:02:30,949 --> 00:02:28,000
really strikes me is the night passes

62
00:02:32,949 --> 00:02:30,959
and if you are over land almost entirely

63
00:02:35,110 --> 00:02:32,959

you see lights and you see humans you

64

00:02:36,869 --> 00:02:35,120

see civilization down there and really

65

00:02:38,309 --> 00:02:36,879

it just brings home to me that our plan

66

00:02:40,309 --> 00:02:38,319

is actually pretty small when you when

67

00:02:42,470 --> 00:02:40,319

you when you come down to it 90 minutes

68

00:02:44,470 --> 00:02:42,480

to lap our planet and uh it really looks

69

00:02:46,550 --> 00:02:44,480

small from up here

70

00:02:48,309 --> 00:02:46,560

i wonder um and forgive it forgive me

71

00:02:52,470 --> 00:02:48,319

this is too personal a question but are

72

00:02:56,309 --> 00:02:54,550

no that's definitely a great question uh

73

00:02:58,149 --> 00:02:56,319

not lonely at all i'm flying up here

74

00:03:00,869 --> 00:02:58,159

with five of my best friends three

75

00:03:02,630 --> 00:03:00,879

russians a german and another american

76
00:03:05,910 --> 00:03:02,640
and we really have a good time we all

77
00:03:07,509 --> 00:03:05,920
get along we like sports we have similar

78
00:03:09,509 --> 00:03:07,519
tastes and what we want to do and we

79
00:03:11,830 --> 00:03:09,519
have a great time

80
00:03:13,750 --> 00:03:11,840
you are a decorated fighter fighter

81
00:03:17,270 --> 00:03:13,760
pilot you've been deployed i guess five

82
00:03:20,470 --> 00:03:18,949
well i think i lost count and i we

83
00:03:22,710 --> 00:03:20,480
should tack this one on as a deployment

84
00:03:24,710 --> 00:03:22,720
as well so we'll call it six yeah and i

85
00:03:27,589 --> 00:03:24,720
i just wonder i mean has how does this

86
00:03:29,750 --> 00:03:27,599
deployment compare with your other uh

87
00:03:31,509 --> 00:03:29,760
military deployments in terms of you

88
00:03:33,509 --> 00:03:31,519

know missing your family your wife you

89

00:03:36,149 --> 00:03:33,519

have two kids you know that that kind of

90

00:03:37,509 --> 00:03:36,159

stuff how does it how does it compare

91

00:03:40,070 --> 00:03:37,519

how does it compare

92

00:03:42,229 --> 00:03:40,080

well it may it may not seem too logical

93

00:03:44,070 --> 00:03:42,239

but my connectivity from up here thanks

94

00:03:46,470 --> 00:03:44,080

to the good folks at nasa on the ground

95

00:03:48,470 --> 00:03:46,480

is fantastic so i actually get to talk

96

00:03:50,390 --> 00:03:48,480

to my wife and kids once a week and

97

00:03:53,030 --> 00:03:50,400

that's really a great morale booster and

98

00:03:54,949 --> 00:03:53,040

then our email has been really good we

99

00:03:57,190 --> 00:03:54,959

have real time email now as long as we

100

00:03:58,710 --> 00:03:57,200

have a good satellite link so i get i

101
00:03:59,990 --> 00:03:58,720
get a couple emails a day my wife's been

102
00:04:01,990 --> 00:04:00,000
sending me pictures and little video

103
00:04:03,429 --> 00:04:02,000
clips of the kids so i stay in touch and

104
00:04:05,270 --> 00:04:03,439
it's really nice

105
00:04:07,110 --> 00:04:05,280
that's terrific on 88 one it's maryland

106
00:04:09,509 --> 00:04:07,120
morning i'm tom hall astronaut reed

107
00:04:11,670 --> 00:04:09,519
weissman joins me from the international

108
00:04:13,670 --> 00:04:11,680
space station so commander this is your

109
00:04:15,830 --> 00:04:13,680
first time in space you've been up there

110
00:04:17,430 --> 00:04:15,840
for a little more than two months

111
00:04:19,189 --> 00:04:17,440
can you remember what you thought it

112
00:04:23,189 --> 00:04:19,199
would be like and how that's compared to

113
00:04:27,110 --> 00:04:25,430

oh sure you know before you launch this

114

00:04:29,270 --> 00:04:27,120

has been a dream of mine essentially my

115

00:04:31,590 --> 00:04:29,280

whole life that i can remember and so

116

00:04:33,110 --> 00:04:31,600

you build it up a lot in your head a lot

117

00:04:33,990 --> 00:04:33,120

and you don't expect that there's any

118

00:04:36,230 --> 00:04:34,000

way it could live up to your

119

00:04:37,510 --> 00:04:36,240

expectations and then when the engine's

120

00:04:39,830 --> 00:04:37,520

cut off on your rocket and you're

121

00:04:41,510 --> 00:04:39,840

floating for the first time you realize

122

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

first the earth is way more beautiful

123

00:04:45,350 --> 00:04:43,120

than you ever expected when you look out

124

00:04:47,350 --> 00:04:45,360

the window but second that living and

125

00:04:49,990 --> 00:04:47,360

working up here at least initially is

126
00:04:52,230 --> 00:04:50,000
way harder than you ever dreamed so just

127
00:04:54,150 --> 00:04:52,240
turning off gravity my whole world was

128
00:04:55,590 --> 00:04:54,160
twisted upside down and it took me at

129
00:04:57,270 --> 00:04:55,600
least a few weeks before i was

130
00:04:58,390 --> 00:04:57,280
comfortable up here

131
00:05:00,230 --> 00:04:58,400
what's the biggest part of the

132
00:05:03,670 --> 00:05:00,240
adjustment to being in in a weightless

133
00:05:07,430 --> 00:05:05,590
being weightless just waiting for your

134
00:05:09,590 --> 00:05:07,440
body to figure it out your brain needs

135
00:05:11,830 --> 00:05:09,600
time to understand that there isn't a

136
00:05:14,230 --> 00:05:11,840
floor a ceiling in two walls it's just

137
00:05:16,230 --> 00:05:14,240
it's just all surfaces and then your

138
00:05:18,790 --> 00:05:16,240

digestive system how do you eat how do

139

00:05:20,310 --> 00:05:18,800

you go to the bathroom and you just

140

00:05:21,749 --> 00:05:20,320

gotta wrap your body around all that and

141

00:05:23,270 --> 00:05:21,759

eventually it figures it out took me

142

00:05:25,830 --> 00:05:23,280

about two solid weeks and then

143

00:05:28,710 --> 00:05:25,840

everything started to run like clockwork

144

00:05:31,110 --> 00:05:28,720

um yours uh was the first team to dock

145

00:05:33,670 --> 00:05:31,120

uh as quickly as it did uh you were

146

00:05:35,430 --> 00:05:33,680

actually docked at the isf uh about six

147

00:05:37,830 --> 00:05:35,440

hours or so after you launched from

148

00:05:39,270 --> 00:05:37,840

kazakhstan um can you walk us through

149

00:05:40,230 --> 00:05:39,280

that maneuver that's the first time that

150

00:05:42,070 --> 00:05:40,240

that's happened

151

00:05:44,150 --> 00:05:42,080

my impression is that uh previous

152

00:05:47,909 --> 00:05:44,160

flights had taken as many as two days to

153

00:05:52,070 --> 00:05:50,469

well sure one small correction we we

154

00:05:54,469 --> 00:05:52,080

were i think maybe the third or fourth

155

00:05:55,430 --> 00:05:54,479

crew to do this but it is really new

156

00:05:56,710 --> 00:05:55,440

we've only been doing it for about the

157

00:05:59,270 --> 00:05:56,720

last year and a half

158

00:06:00,870 --> 00:05:59,280

and so launch happens basically in the

159

00:06:03,270 --> 00:06:00,880

middle of the night out of baikonur in

160

00:06:05,029 --> 00:06:03,280

kazakhstan and then it's six hours and

161

00:06:07,670 --> 00:06:05,039

it's just go go go until you get to the

162

00:06:09,749 --> 00:06:07,680

space station so by the time we got here

163

00:06:10,710 --> 00:06:09,759

i think all three of us were exhausted

164

00:06:12,150 --> 00:06:10,720

and

165

00:06:13,510 --> 00:06:12,160

it's funny to note the first thing that

166

00:06:14,950 --> 00:06:13,520

was said when we got onto the space

167

00:06:18,469 --> 00:06:14,960

station is where's the bathroom because

168

00:06:21,990 --> 00:06:20,150

and what kind of work what what is the

169

00:06:24,390 --> 00:06:22,000

specific work that you're charged with

170

00:06:26,870 --> 00:06:24,400

uh yourself on the space station uh

171

00:06:28,790 --> 00:06:26,880

yourself on the space station well i'm

172

00:06:30,790 --> 00:06:28,800

not sure if you can see on uh on the

173

00:06:32,309 --> 00:06:30,800

video downlink right now but

174

00:06:34,710 --> 00:06:32,319

uh basically i'm a run-of-the-mill

175

00:06:36,950 --> 00:06:34,720

flight engineer i'm standing in the u.s

176

00:06:39,510 --> 00:06:36,960

lab it's absolutely covered in science

177

00:06:42,469 --> 00:06:39,520

experiments i'm standing right next to

178

00:06:45,670 --> 00:06:42,479

robonaut a great robot we have up here

179

00:06:47,350 --> 00:06:45,680

so my main tasks are first keep keep my

180

00:06:49,029 --> 00:06:47,360

body in shape so i'm working out about

181

00:06:50,710 --> 00:06:49,039

two hours a day

182

00:06:52,870 --> 00:06:50,720

second main task is keep the space

183

00:06:55,189 --> 00:06:52,880

station running clean and uh and correct

184

00:06:57,189 --> 00:06:55,199

so maintenance is a huge priority for us

185

00:06:59,189 --> 00:06:57,199

and then third and really our highest

186

00:07:00,950 --> 00:06:59,199

priority as an organization is

187

00:07:02,469 --> 00:07:00,960

conducting the science up here and we've

188

00:07:04,070 --> 00:07:02,479

been hot and heavy on science for the

189

00:07:05,909 --> 00:07:04,080

last two months

190

00:07:07,670 --> 00:07:05,919

uh you were scheduled to do a space walk

191

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

in just a couple of weeks on the 21st of

192

00:07:12,309 --> 00:07:10,080

august that's been postponed why has it

193

00:07:17,029 --> 00:07:12,319

been postponed and do you have a sense

194

00:07:21,270 --> 00:07:19,589

well sadly it has been postponed and

195

00:07:22,710 --> 00:07:21,280

they figured out that there's an issue

196

00:07:24,870 --> 00:07:22,720

with our batteries in our in our

197

00:07:26,469 --> 00:07:24,880

spacesuits and so i think it's awesome

198

00:07:28,550 --> 00:07:26,479

that mission control down in houston

199

00:07:30,070 --> 00:07:28,560

decided to push these off of course i'm

200

00:07:31,430 --> 00:07:30,080

a little sad about that but when i go

201
00:07:34,070 --> 00:07:31,440
out the door i wanted to be in a good

202
00:07:37,270 --> 00:07:34,080
clean configuration and so we're hoping

203
00:07:39,110 --> 00:07:37,280
right now maybe uh early to mid october

204
00:07:40,710 --> 00:07:39,120
we may be able to reschedule these but

205
00:07:42,150 --> 00:07:40,720
in reality when the suits are ready

206
00:07:43,830 --> 00:07:42,160
we'll do the spacewalks and if it's not

207
00:07:45,430 --> 00:07:43,840
our crew then it'll be the next or maybe

208
00:07:47,189 --> 00:07:45,440
the crew after that and in the meantime

209
00:07:49,589 --> 00:07:47,199
the station's in a great configuration

210
00:07:51,189 --> 00:07:49,599
and everything's running smooth

211
00:07:53,350 --> 00:07:51,199
and you are actually training for that

212
00:07:56,469 --> 00:07:53,360
spacewalk as you're up in space on the

213
00:08:01,189 --> 00:07:56,479

iss you sent a tweet about a laptop

214

00:08:04,629 --> 00:08:03,029

well unfortunately now the training is

215

00:08:06,550 --> 00:08:04,639

pretty much stopped so we kind of

216

00:08:08,869 --> 00:08:06,560

cleaned up what we were doing but the

217

00:08:10,550 --> 00:08:08,879

training up here is really fascinating

218

00:08:12,070 --> 00:08:10,560

we have a laptop that we can wear on our

219

00:08:14,230 --> 00:08:12,080

head like you were mentioning and it

220

00:08:16,070 --> 00:08:14,240

gives us a 3d view of the space station

221

00:08:18,070 --> 00:08:16,080

it uses a little

222

00:08:19,749 --> 00:08:18,080

webcam actually very simple technology

223

00:08:20,710 --> 00:08:19,759

but very effective so wherever i was

224

00:08:22,550 --> 00:08:20,720

looking

225

00:08:23,990 --> 00:08:22,560

i was actually seeing an image outside

226

00:08:25,830 --> 00:08:24,000

the space station and i was able to

227

00:08:27,189 --> 00:08:25,840

maneuver to the different work sites

228

00:08:28,950 --> 00:08:27,199

look around

229

00:08:30,710 --> 00:08:28,960

see what would be a danger what would be

230

00:08:32,949 --> 00:08:30,720

easy what would be hard

231

00:08:34,709 --> 00:08:32,959

so for me it was really fantastic

232

00:08:36,469 --> 00:08:34,719

training and i was working with a

233

00:08:38,469 --> 00:08:36,479

gentleman our commander steve swanson

234

00:08:40,389 --> 00:08:38,479

who's done many space walks so to have a

235

00:08:42,310 --> 00:08:40,399

veteran like him at my side helping me

236

00:08:43,909 --> 00:08:42,320

out was just fantastic

237

00:08:45,910 --> 00:08:43,919

and when you eventually get outside the

238

00:08:47,670 --> 00:08:45,920

space space

239

00:08:51,430 --> 00:08:47,680

craft for your spacewalk what will you

240

00:08:54,710 --> 00:08:52,550

well the first thing we're going to do

241

00:08:56,630 --> 00:08:54,720

is change out a sequential shunting unit

242

00:08:58,870 --> 00:08:56,640

which is part of our solar array system

243

00:09:01,030 --> 00:08:58,880

which provides energy for everything

244

00:09:03,430 --> 00:09:01,040

that that we have inside

245

00:09:05,590 --> 00:09:03,440

it's all based on solar power of course

246

00:09:07,670 --> 00:09:05,600

so that one of our components on one of

247

00:09:09,350 --> 00:09:07,680

our eight arrays failed a few months ago

248

00:09:11,350 --> 00:09:09,360

and that's our primary task is to fix

249

00:09:13,350 --> 00:09:11,360

that and then after that we're going to

250

00:09:14,870 --> 00:09:13,360

do some basic reconfiguration work

251
00:09:17,110 --> 00:09:14,880
basically reassembling the furniture

252
00:09:19,430 --> 00:09:17,120
outside uh so that we can have crude

253
00:09:20,630 --> 00:09:19,440
vehicles launching from u.s soil in 2017

254
00:09:22,630 --> 00:09:20,640
and come dock with the international

255
00:09:24,150 --> 00:09:22,640
space station

256
00:09:25,509 --> 00:09:24,160
well it really sounds terrific and

257
00:09:26,550 --> 00:09:25,519
commander weissman i really appreciate

258
00:09:28,710 --> 00:09:26,560
your time and we look forward to

259
00:09:31,110 --> 00:09:28,720
catching up with you again uh during

260
00:09:33,670 --> 00:09:31,120
your uh incredible historic journey on

261
00:09:35,509 --> 00:09:33,680
the iss thanks so much

262
00:09:37,430 --> 00:09:35,519
thanks so much hey thank you and i look

263
00:09:39,190 --> 00:09:37,440

forward to our next meeting

264

00:09:41,110 --> 00:09:39,200

reid weissman he's a cockeysville native

265

00:09:42,870 --> 00:09:41,120

and an astronaut who joined us from the

266

00:09:44,310 --> 00:09:42,880

international space station we've got a

267

00:09:47,190 --> 00:09:44,320

link to commander weissman's twitter

268

00:09:48,790 --> 00:09:47,200

feed on our website wypr.org

269

00:09:50,630 --> 00:09:48,800

maryland morning i'm tom hall don't

270

00:09:52,630 --> 00:09:50,640

space out on us lots more ahead on

271

00:09:55,350 --> 00:09:52,640

maryland morning with sheila cast stay

272

00:10:00,310 --> 00:09:57,670

station this is houston acr that

273

00:10:02,310 --> 00:10:00,320

concludes the wypr portion of the event

274

00:10:08,470 --> 00:10:02,320

please stand by for a voice check from

275

00:10:14,150 --> 00:10:10,310

station this is maryland public

276

00:10:14,160 --> 00:10:19,509

i've got you loud and clear how about me

277

00:10:23,509 --> 00:10:21,509

read loud and clear this is jeff salkin

278

00:10:25,829 --> 00:10:23,519

in owings mills thank you very much for

279

00:10:29,110 --> 00:10:25,839

the time uh we'll take most of the 10

280

00:10:31,750 --> 00:10:29,120

minutes we try to have fun and and

281

00:10:34,069 --> 00:10:31,760

feel free to go off on tangents here and

282

00:10:38,389 --> 00:10:34,079

i'll begin by saying commander thank you

283

00:10:41,590 --> 00:10:40,230

jeff it's great to speak to you and

284

00:10:42,949 --> 00:10:41,600

owings mills that's right down the

285

00:10:44,389 --> 00:10:42,959

street from where i grew up so it's

286

00:10:45,910 --> 00:10:44,399

great to know that's where you are right

287

00:10:49,829 --> 00:10:45,920

now it's a pleasure to be talking to

288

00:10:57,269 --> 00:10:51,750

i have to ask do do you wear that

289

00:11:02,389 --> 00:10:59,350

you know lately it's been pretty good to

290

00:11:04,069 --> 00:11:02,399

be an orioles fan so i keep it handy for

291

00:11:08,630 --> 00:11:04,079

events like this and on the weekends i

292

00:11:13,269 --> 00:11:10,710

i guess in space nobody can hear you

293

00:11:15,509 --> 00:11:13,279

cheer that's the that's the problem i

294

00:11:17,829 --> 00:11:15,519

know they keep you you're so busy uh on

295

00:11:19,750 --> 00:11:17,839

duty at the space station tell us a

296

00:11:22,790 --> 00:11:19,760

little bit about what what your normal

297

00:11:25,990 --> 00:11:22,800

day is like and whether you have time to

298

00:11:29,509 --> 00:11:26,000

just look out the window and and enjoy

299

00:11:33,990 --> 00:11:31,750

certainly great question so our normal

300

00:11:36,310 --> 00:11:34,000

day is just like any earth day we work

301
00:11:38,310 --> 00:11:36,320
off of greenwich mean time in london and

302
00:11:40,389 --> 00:11:38,320
i'm generally waking up around 6 30 in

303
00:11:42,310 --> 00:11:40,399
the morning eat a breakfast we don't

304
00:11:44,069 --> 00:11:42,320
really shower but you wipe yourself down

305
00:11:46,630 --> 00:11:44,079
with a towel and then you jump right

306
00:11:48,870 --> 00:11:46,640
into your work day around 7 30. i work

307
00:11:51,350 --> 00:11:48,880
about a 12-hour day and we wrap up

308
00:11:52,870 --> 00:11:51,360
around 7 30 at night have a little bit

309
00:11:55,750 --> 00:11:52,880
of time before i head off to bed and

310
00:11:58,550 --> 00:11:55,760
around 10 30 i'm usually lights out in

311
00:12:00,550 --> 00:11:58,560
my crew quarters which is behind me

312
00:12:02,230 --> 00:12:00,560
how do you steal peaks out the window

313
00:12:03,829 --> 00:12:02,240

well if you had a view like this you

314

00:12:06,389 --> 00:12:03,839

would take every opportunity to run down

315

00:12:08,069 --> 00:12:06,399

there and look outside so if a procedure

316

00:12:09,750 --> 00:12:08,079

ends a little early or a science gets

317

00:12:11,110 --> 00:12:09,760

done and there's a little break i'm down

318

00:12:16,230 --> 00:12:11,120

at the window looking out so are my

319

00:12:21,269 --> 00:12:19,350

zero gravity or microgravity is is

320

00:12:22,629 --> 00:12:21,279

probably old hat for you now but is

321

00:12:24,550 --> 00:12:22,639

there anything you can you can

322

00:12:28,949 --> 00:12:24,560

demonstrate for us that you would not be

323

00:12:32,310 --> 00:12:30,790

i'm not a very good athlete and

324

00:12:33,110 --> 00:12:32,320

unfortunately i got robonaut in the way

325

00:12:35,190 --> 00:12:33,120

but

326

00:12:37,990 --> 00:12:35,200

basically any old maneuver up here is

327

00:12:40,230 --> 00:12:38,000

pretty simple when you take gravity out

328

00:12:41,829 --> 00:12:40,240

of the equation and i've really enjoyed

329

00:12:45,030 --> 00:12:41,839

becoming an expert at tumbling

330

00:12:49,509 --> 00:12:45,040

cartwheels flips handstands all that

331

00:12:53,670 --> 00:12:51,509

we'll try that when you get back back

332

00:12:55,990 --> 00:12:53,680

down to earth how many people are aboard

333

00:12:59,350 --> 00:12:56,000

the the space station and i mentioned

334

00:13:03,670 --> 00:12:59,360

that you uh you took off in late may how

335

00:13:08,870 --> 00:13:06,310

so we have a six-month uh duration space

336

00:13:10,230 --> 00:13:08,880

flight here for the three of us me a

337

00:13:12,310 --> 00:13:10,240

russian and a german who launched

338

00:13:14,230 --> 00:13:12,320

together in may and we joined three

339

00:13:16,230 --> 00:13:14,240

other gentlemen who are already up here

340

00:13:17,910 --> 00:13:16,240

on the space station two russians and

341

00:13:19,910 --> 00:13:17,920

one american so right now our crew

342

00:13:21,590 --> 00:13:19,920

complement is six and we're getting

343

00:13:23,030 --> 00:13:21,600

ready in about five weeks to send three

344

00:13:27,590 --> 00:13:23,040

of those folks home and we'll get three

345

00:13:33,829 --> 00:13:30,629

are you noticing any um

346

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

physical impact of having been in near

347

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

weightlessness for

348

00:13:40,310 --> 00:13:37,680

that long a period of time and and does

349

00:13:41,910 --> 00:13:40,320

it um inform your thinking about the

350

00:13:46,629 --> 00:13:41,920

sort of preparation that's going to be

351

00:13:51,030 --> 00:13:48,949

oh no doubt absolutely no doubt about it

352

00:13:53,110 --> 00:13:51,040

uh one thing that i can say is nasa has

353

00:13:55,030 --> 00:13:53,120

done a fantastic job building up our

354

00:13:57,269 --> 00:13:55,040

counter measures and our workout regimen

355

00:13:59,030 --> 00:13:57,279

so i'm on the treadmill quite a bit

356

00:14:00,230 --> 00:13:59,040

we've got bungee cords that hold us down

357

00:14:02,310 --> 00:14:00,240

and provide

358

00:14:04,949 --> 00:14:02,320

i weigh about 170 pounds and they

359

00:14:06,389 --> 00:14:04,959

provide about 130 pounds of force for me

360

00:14:08,790 --> 00:14:06,399

and then we also have a resistance

361

00:14:10,790 --> 00:14:08,800

device that allows us to do squats uh

362

00:14:12,389 --> 00:14:10,800

bench press things like that and between

363

00:14:14,389 --> 00:14:12,399

these two systems the treadmill and

364

00:14:16,550 --> 00:14:14,399

resistance i'm able to keep my muscle

365

00:14:17,990 --> 00:14:16,560

mass and my bone density up pretty well

366

00:14:20,069 --> 00:14:18,000

one thing that is interesting like you

367

00:14:21,269 --> 00:14:20,079

see i look like i'm standing right here

368

00:14:24,230 --> 00:14:21,279

and that's just because my feet are

369

00:14:27,030 --> 00:14:24,240

locked into little locks on the floor

370

00:14:28,550 --> 00:14:27,040

but the fronts of my legs the muscles

371

00:14:30,069 --> 00:14:28,560

have changed pretty dramatically being

372

00:14:31,750 --> 00:14:30,079

up here just because i'm using my feet

373

00:14:33,670 --> 00:14:31,760

in different ways

374

00:14:35,509 --> 00:14:33,680

and so i think with the counter measures

375

00:14:36,949 --> 00:14:35,519

we have when we do a trip to mars it's

376

00:14:39,430 --> 00:14:36,959

going to require a lot of physical

377

00:14:40,949 --> 00:14:39,440

activity by the astronauts but no doubt

378

00:14:42,470 --> 00:14:40,959

when we get there i think you'll be in

379

00:14:43,990 --> 00:14:42,480

good enough shape to at least after a

380

00:14:49,910 --> 00:14:44,000

day or two of adjustment to martian

381

00:14:55,030 --> 00:14:52,790

you've been uh very busy on social media

382

00:14:58,949 --> 00:14:55,040

people can follow you on twitter at

383

00:15:00,710 --> 00:14:58,959

astro underscore read reid

384

00:15:02,710 --> 00:15:00,720

and i've looked at many of the pictures

385

00:15:05,269 --> 00:15:02,720

that you've posted could you talk a

386

00:15:08,710 --> 00:15:05,279

little about the the mechanics of doing

387

00:15:09,910 --> 00:15:08,720

that also if any particular

388

00:15:11,829 --> 00:15:09,920

images

389

00:15:16,470 --> 00:15:11,839

stand out anything you've seen out the

390

00:15:19,829 --> 00:15:18,150

remind me about the second half of this

391

00:15:21,350 --> 00:15:19,839

question in a minute so i don't want to

392

00:15:23,350 --> 00:15:21,360

have to tell you all my secrets but i

393

00:15:25,189 --> 00:15:23,360

will let you in on a little one it is

394

00:15:26,949 --> 00:15:25,199

very tough to get on the internet itself

395

00:15:28,949 --> 00:15:26,959

up here i can do it but it really is

396

00:15:30,949 --> 00:15:28,959

difficult so what i generally do our

397

00:15:32,470 --> 00:15:30,959

email connectivity is fantastic and i've

398

00:15:34,790 --> 00:15:32,480

got a gentleman on the ground who works

399

00:15:37,110 --> 00:15:34,800

at nasa uh my right hand man the

400

00:15:39,509 --> 00:15:37,120

magician behind the twitter magic so i

401
00:15:41,509 --> 00:15:39,519
send him the images with the the tweet

402
00:15:42,949 --> 00:15:41,519
captions and he just fires them off on

403
00:15:44,790 --> 00:15:42,959
twitter and that that really has worked

404
00:15:46,310 --> 00:15:44,800
i'm actually the first u.s astronaut

405
00:15:48,550 --> 00:15:46,320
that's had this ability and i think

406
00:15:50,710 --> 00:15:48,560
that's really given us a great great

407
00:15:52,790 --> 00:15:50,720
chance to connect on social media so i

408
00:15:54,629 --> 00:15:52,800
owe nasa huge thanks for that

409
00:15:55,910 --> 00:15:54,639
and then what really

410
00:15:57,910 --> 00:15:55,920
every time you look out the window

411
00:15:59,990 --> 00:15:57,920
there's some amazing sight that you

412
00:16:01,590 --> 00:16:00,000
didn't expect to see whether uh this

413
00:16:04,470 --> 00:16:01,600

morning i we were flying over the east

414

00:16:07,829 --> 00:16:04,480

coast of the u.s and i looked back from

415

00:16:10,710 --> 00:16:07,839

our cupola viewing area and they're on

416

00:16:12,550 --> 00:16:10,720

the east coast was richmond through dc

417

00:16:15,269 --> 00:16:12,560

the i-95 corridor running up through

418

00:16:17,110 --> 00:16:15,279

baltimore philly up into manhattan

419

00:16:19,189 --> 00:16:17,120

and that was amazing but then what

420

00:16:20,629 --> 00:16:19,199

really blew me away is i just shifted my

421

00:16:22,790 --> 00:16:20,639

glance a little bit upward and there's

422

00:16:24,550 --> 00:16:22,800

chicago detroit and toronto on the

423

00:16:27,110 --> 00:16:24,560

horizon and then above that you could

424

00:16:29,829 --> 00:16:27,120

see the aurora the northern lights uh

425

00:16:31,590 --> 00:16:29,839

with the sunrise just barely peeking in

426
00:16:33,030 --> 00:16:31,600
and i'd say

427
00:16:34,470 --> 00:16:33,040
for at least the last little bit i mean

428
00:16:40,550 --> 00:16:34,480
that just blew me away to see my

429
00:16:46,069 --> 00:16:43,749
you're a 1993 graduate of delaney high

430
00:16:48,949 --> 00:16:46,079
school in baltimore county could you

431
00:16:53,910 --> 00:16:48,959
talk a little about your your path from

432
00:16:58,949 --> 00:16:56,150
sure i i wasn't necessarily a straight a

433
00:17:01,110 --> 00:16:58,959
student i did well at delaney uh i left

434
00:17:03,030 --> 00:17:01,120
there though with a great set of tools i

435
00:17:05,750 --> 00:17:03,040
knew i wanted to be an engineer i really

436
00:17:07,590 --> 00:17:05,760
wanted to be a pilot so i went up to new

437
00:17:08,870 --> 00:17:07,600
york went to rensselaer polytechnic up

438
00:17:10,710 --> 00:17:08,880

there and i pursued a degree in

439

00:17:13,029 --> 00:17:10,720

engineering and that went very well and

440

00:17:15,189 --> 00:17:13,039

then when i left rpi i joined the navy

441

00:17:16,710 --> 00:17:15,199

and became a navy pilot

442

00:17:19,350 --> 00:17:16,720

that career blossomed i ended up

443

00:17:21,110 --> 00:17:19,360

becoming a test pilot in the navy and

444

00:17:23,029 --> 00:17:21,120

all of those little wickets lined up

445

00:17:27,029 --> 00:17:23,039

perfectly to fit what nasa was looking

446

00:17:28,630 --> 00:17:27,039

for and in 2009 i shifted my focus moved

447

00:17:29,909 --> 00:17:28,640

down to houston and

448

00:17:31,590 --> 00:17:29,919

five years later i'm on the space

449

00:17:33,270 --> 00:17:31,600

station so it's pretty much the dream

450

00:17:37,830 --> 00:17:33,280

career i'd always envisioned i i don't

451
00:17:42,870 --> 00:17:40,390
tell us about the space station itself i

452
00:17:45,590 --> 00:17:42,880
guess it's it's mostly fully uh built

453
00:17:48,070 --> 00:17:45,600
out now and we have some pictures of the

454
00:17:50,870 --> 00:17:48,080
the exterior from from your camera we

455
00:17:52,310 --> 00:17:50,880
just see this one compartment so give us

456
00:17:54,549 --> 00:17:52,320
a sense of

457
00:17:58,950 --> 00:17:54,559
just how much how much space

458
00:18:02,070 --> 00:18:00,549
well the dimensions i think everyone

459
00:18:04,230 --> 00:18:02,080
says they're about as big as a football

460
00:18:07,110 --> 00:18:04,240
field that's our outer dimensions with

461
00:18:09,510 --> 00:18:07,120
our solar arrays inside i'd say if you

462
00:18:11,990 --> 00:18:09,520
cleaned out about a 747 that's the room

463
00:18:14,390 --> 00:18:12,000

we have obviously you can see here

464

00:18:17,029 --> 00:18:14,400

it's not as big around as a 747 but it's

465

00:18:18,870 --> 00:18:17,039

it's long and uh behind me there's two

466

00:18:21,669 --> 00:18:18,880

modules that shoot off either side a

467

00:18:23,190 --> 00:18:21,679

japanese module and a european module

468

00:18:26,070 --> 00:18:23,200

and then behind the camera we have some

469

00:18:27,430 --> 00:18:26,080

more us modules and then uh farther

470

00:18:29,430 --> 00:18:27,440

behind the camera we have the the

471

00:18:31,750 --> 00:18:29,440

russian half of the space station which

472

00:18:33,510 --> 00:18:31,760

is almost as big as what you see here so

473

00:18:35,590 --> 00:18:33,520

really it's it's actually a gigantic

474

00:18:37,029 --> 00:18:35,600

volume and where i'm standing right now

475

00:18:39,029 --> 00:18:37,039

just so you know this is the u.s

476

00:18:40,470 --> 00:18:39,039

laboratory so this is really the heart

477

00:18:42,710 --> 00:18:40,480

of the space station and this is where

478

00:18:44,549 --> 00:18:42,720

the science uh goes on i'm standing

479

00:18:46,630 --> 00:18:44,559

right here with robonaut we're working

480

00:18:48,310 --> 00:18:46,640

on some upgrades on him i've got a

481

00:18:49,590 --> 00:18:48,320

german experiment running over here in a

482

00:18:51,510 --> 00:18:49,600

glove box

483

00:18:53,590 --> 00:18:51,520

we've got a furnace here we've got a

484

00:18:56,150 --> 00:18:53,600

really high power microscope here so

485

00:18:57,909 --> 00:18:56,160

right now even though there's no people

486

00:18:59,430 --> 00:18:57,919

this is just absolutely booming with

487

00:19:04,070 --> 00:18:59,440

science even as we're talking here on

488

00:19:08,710 --> 00:19:06,390

reed is there anything i i failed to ask

489

00:19:10,950 --> 00:19:08,720

you or or anything that you would like

490

00:19:13,750 --> 00:19:10,960

your family here in maryland or

491

00:19:17,510 --> 00:19:13,760

your fellow graduates of delaney high to

492

00:19:22,710 --> 00:19:20,150

i just life is great yeah and and i

493

00:19:24,230 --> 00:19:22,720

really wish i really just wish everyone

494

00:19:26,710 --> 00:19:24,240

could come up here even if it was just

495

00:19:28,870 --> 00:19:26,720

for a few hours just come up to this

496

00:19:31,430 --> 00:19:28,880

this viewing platform and look down at

497

00:19:33,590 --> 00:19:31,440

our earth look back on maryland and just

498

00:19:35,510 --> 00:19:33,600

see how really how tiny the chesapeake

499

00:19:37,350 --> 00:19:35,520

bay is the first time i saw it i didn't

500

00:19:38,950 --> 00:19:37,360

even recognize it until i looked at our

501
00:19:41,190 --> 00:19:38,960
map and i realized wow that is the

502
00:19:43,350 --> 00:19:41,200
chesapeake and this morning i'm looking

503
00:19:45,029 --> 00:19:43,360
from the tip of florida key west all the

504
00:19:47,590 --> 00:19:45,039
way up through maine

505
00:19:49,669 --> 00:19:47,600
in one glance and it really just is so

506
00:19:51,029 --> 00:19:49,679
gorgeous i really wish everybody had a

507
00:19:52,710 --> 00:19:51,039
chance and

508
00:19:54,150 --> 00:19:52,720
everybody deserves that chance so i hope

509
00:19:58,390 --> 00:19:54,160
i hope someday everybody can come up and

510
00:20:01,909 --> 00:20:00,150
commander wiseman thank you very much

511
00:20:04,830 --> 00:20:01,919
we'll take you up on that and we'll do

512
00:20:07,510 --> 00:20:04,840
the next interview in

513
00:20:08,950 --> 00:20:07,520

person hey absolutely that's a deal come

514

00:20:14,630 --> 00:20:08,960

on up let's do it i would love to have

515

00:20:14,640 --> 00:20:17,590

this is marilyn

516

00:20:23,510 --> 00:20:20,470

station this is houston acr thank you

517

00:20:26,310 --> 00:20:23,520

that concludes our event

518

00:20:28,390 --> 00:20:26,320

thank you wypr and maryland public