



1
00:00:07,909 --> 00:00:04,390
station mrs houston are you ready for

2
00:00:13,509 --> 00:00:11,270
absolutely we are ready

3
00:00:15,350 --> 00:00:13,519
wbal radio this is mission control

4
00:00:21,990 --> 00:00:15,360
houston please call station for a voice

5
00:00:25,509 --> 00:00:23,349
read you loud and clear how do you hear

6
00:00:35,830 --> 00:00:25,519
us

7
00:00:40,630 --> 00:00:37,590
hello there from baltimore maryland this

8
00:00:45,670 --> 00:00:40,640
is phil jacobski from wbal radio how are

9
00:00:50,630 --> 00:00:47,990
well they're going great we have been

10
00:00:52,389 --> 00:00:50,640
here for a month now we uh launched just

11
00:00:54,869 --> 00:00:52,399
over four weeks ago me samantha and

12
00:00:56,869 --> 00:00:54,879
anton we joined our crewmates butch

13
00:00:58,470 --> 00:00:56,879

elena and sasha and we're having a great

14

00:00:59,750 --> 00:00:58,480

time getting a lot of work done up here

15

00:01:01,029 --> 00:00:59,760

on the station

16

00:01:04,869 --> 00:01:01,039

what are some of the things that you are

17

00:01:08,710 --> 00:01:06,950

well it seems like every day we do about

18

00:01:10,469 --> 00:01:08,720

10 different things there's a lot of

19

00:01:11,830 --> 00:01:10,479

science that we do

20

00:01:14,390 --> 00:01:11,840

a lot of different types of science

21

00:01:16,710 --> 00:01:14,400

material science biology

22

00:01:18,390 --> 00:01:16,720

uh combustion science the station's

23

00:01:20,070 --> 00:01:18,400

involved in some pretty cool astronomy

24

00:01:22,550 --> 00:01:20,080

experiments there's a lot of maintenance

25

00:01:23,910 --> 00:01:22,560

that goes on um that we have to work on

26
00:01:25,510 --> 00:01:23,920
different equipment butch and i worked

27
00:01:27,350 --> 00:01:25,520
on a thing called sidro which is a

28
00:01:28,870 --> 00:01:27,360
carbon dioxide removal a couple weeks

29
00:01:30,469 --> 00:01:28,880
ago

30
00:01:31,990 --> 00:01:30,479
we're getting ready for some space walks

31
00:01:33,510 --> 00:01:32,000
getting the spacesuits ready for some

32
00:01:35,109 --> 00:01:33,520
spacewalks that are coming up in about

33
00:01:37,429 --> 00:01:35,119
another month or two

34
00:01:38,870 --> 00:01:37,439
and uh of course trying to stay in shape

35
00:01:40,630 --> 00:01:38,880
there's a lot of exercise that goes on

36
00:01:41,830 --> 00:01:40,640
too so it's it's a pretty full day every

37
00:01:43,510 --> 00:01:41,840
day

38
00:01:46,389 --> 00:01:43,520

we understand that nasa for the first

39

00:01:48,550 --> 00:01:46,399

time emailed you a wrench as part of a

40

00:01:50,069 --> 00:01:48,560

3d printer can you explain what that was

41

00:01:53,830 --> 00:01:50,079

like and what are you going to use that

42

00:01:57,910 --> 00:01:55,670

yeah it's a pretty exciting when you

43

00:01:59,910 --> 00:01:57,920

think about the possibilities of being

44

00:02:01,510 --> 00:01:59,920

able to email like you said a file that

45

00:02:03,670 --> 00:02:01,520

will go into a printer and we'll print

46

00:02:05,270 --> 00:02:03,680

out a tool that we can use to fix and

47

00:02:06,709 --> 00:02:05,280

implement or maybe you know in space

48

00:02:08,869 --> 00:02:06,719

things get away from you there's you

49

00:02:10,710 --> 00:02:08,879

know it floats and things disappear so

50

00:02:13,270 --> 00:02:10,720

to replace a tool that you lost so that

51
00:02:15,990 --> 00:02:13,280
was a small wrench it's a prototype we'd

52
00:02:17,670 --> 00:02:16,000
love to use it would love to but of

53
00:02:19,670 --> 00:02:17,680
course we have to pack it up and send it

54
00:02:20,869 --> 00:02:19,680
back to earth so they can analyze it and

55
00:02:23,510 --> 00:02:20,879
check it out so they're not going to let

56
00:02:25,190 --> 00:02:23,520
us use it regrettably

57
00:02:27,350 --> 00:02:25,200
can you tell us something about and this

58
00:02:28,949 --> 00:02:27,360
is for either one of you what a surprise

59
00:02:30,949 --> 00:02:28,959
you about the experience of being in

60
00:02:35,509 --> 00:02:30,959
space were you totally prepared for

61
00:02:39,030 --> 00:02:37,190
that's a great question um for both

62
00:02:41,110 --> 00:02:39,040
butch and i this is our second flight on

63
00:02:43,750 --> 00:02:41,120

our first flight we flew on the space

64

00:02:46,390 --> 00:02:43,760

shuttle as pilots and now here we are on

65

00:02:47,509 --> 00:02:46,400

a six month long long duration mission

66

00:02:49,110 --> 00:02:47,519

in space

67

00:02:51,670 --> 00:02:49,120

and i think the thing for me that i've

68

00:02:54,229 --> 00:02:51,680

noticed over the last week or two is how

69

00:02:56,550 --> 00:02:54,239

i'm getting even more adapted and more

70

00:02:58,470 --> 00:02:56,560

able to fly and float and do things in

71

00:03:00,070 --> 00:02:58,480

space on the shuttle flight it was only

72

00:03:02,070 --> 00:03:00,080

two weeks long and there was a steep

73

00:03:04,149 --> 00:03:02,080

learning curve and that had not peaked

74

00:03:06,070 --> 00:03:04,159

out and i'm still learning the basics of

75

00:03:07,589 --> 00:03:06,080

how to fly and and i can already tell

76

00:03:09,670 --> 00:03:07,599

that i'm getting better than i did on

77

00:03:11,509 --> 00:03:09,680

that short duration flight

78

00:03:13,830 --> 00:03:11,519

terry we're your hometown station you're

79

00:03:15,910 --> 00:03:13,840

from uh maryland talk to us about who

80

00:03:17,350 --> 00:03:15,920

you want to say hello to especially for

81

00:03:21,509 --> 00:03:17,360

christmas and what's it going to be like

82

00:03:25,430 --> 00:03:23,110

that's a great question my family's all

83

00:03:27,270 --> 00:03:25,440

back there my mom and a stepdad are

84

00:03:29,430 --> 00:03:27,280

actually down in texas for christmas

85

00:03:32,949 --> 00:03:29,440

without with my family there but i have

86

00:03:35,430 --> 00:03:32,959

to say hi to my aunts and uncles and um

87

00:03:38,070 --> 00:03:35,440

and helen and aunt pat my cousin kristen

88

00:03:40,869 --> 00:03:38,080

she just had a new uh a new baby little

89

00:03:42,309 --> 00:03:40,879

cameron and uh landon and

90

00:03:44,149 --> 00:03:42,319

man i got all kinds of relatives back

91

00:03:45,430 --> 00:03:44,159

there but i do miss maryland i've been

92

00:03:46,869 --> 00:03:45,440

trying to get some good pictures of it

93

00:03:48,070 --> 00:03:46,879

but it's been cloudy every time we fly

94

00:03:49,670 --> 00:03:48,080

over during the daytime but one of these

95

00:03:50,869 --> 00:03:49,680

days i want to get a good shot

96

00:03:52,390 --> 00:03:50,879

and uh

97

00:03:54,309 --> 00:03:52,400

and rooting for the ravens man they had

98

00:03:55,670 --> 00:03:54,319

a rough uh rough game this last weekend

99

00:03:56,869 --> 00:03:55,680

i think

100

00:04:01,830 --> 00:03:56,879

were you able to watch the game

101
00:04:05,830 --> 00:04:03,990
we can watch bits and pieces of it um

102
00:04:07,670 --> 00:04:05,840
whenever we're in the right satellite

103
00:04:10,070 --> 00:04:07,680
coverage they can uplink us the game

104
00:04:11,830 --> 00:04:10,080
live uh so we can see bits and pieces

105
00:04:13,589 --> 00:04:11,840
and on saturday night i was able to

106
00:04:15,670 --> 00:04:13,599
watch the air force academy uh

107
00:04:17,670 --> 00:04:15,680
commander-in-chief trophy winners i was

108
00:04:19,909 --> 00:04:17,680
able to watch them play the uh win their

109
00:04:21,509 --> 00:04:19,919
bowl game so but again only only little

110
00:04:23,350 --> 00:04:21,519
bits and pieces but it's pretty amazing

111
00:04:25,189 --> 00:04:23,360
the um the support that they give us

112
00:04:26,870 --> 00:04:25,199
being able to watch live sporting events

113
00:04:28,469 --> 00:04:26,880

or news or whatever

114

00:04:29,909 --> 00:04:28,479

what are you missing about marilyn and

115

00:04:32,710 --> 00:04:29,919

how are you going to spend christmas in

116

00:04:36,710 --> 00:04:35,909

that's easy sweet sweet corn and crabs

117

00:04:38,150 --> 00:04:36,720

um

118

00:04:39,510 --> 00:04:38,160

and christmas is going to be good i

119

00:04:41,110 --> 00:04:39,520

think butch and i are going to we'll do

120

00:04:44,469 --> 00:04:41,120

a little christmas eve service up here

121

00:04:46,629 --> 00:04:44,479

and and uh butch got uh stockings for us

122

00:04:47,909 --> 00:04:46,639

all and uh i've got some presents and so

123

00:04:49,189 --> 00:04:47,919

i think we're gonna have a little gift

124

00:04:50,469 --> 00:04:49,199

exchange and

125

00:04:52,790 --> 00:04:50,479

and eat some

126

00:04:54,550 --> 00:04:52,800

um irradiated turkey and dehydrated

127

00:04:56,150 --> 00:04:54,560

mashed potatoes and cornbread dressing

128

00:04:57,670 --> 00:04:56,160

and so it should be it should be it

129

00:04:59,430 --> 00:04:57,680

should be a good christmas day and

130

00:05:00,390 --> 00:04:59,440

actually we'll get to celebrate it

131

00:05:03,029 --> 00:05:00,400

you know

132

00:05:04,230 --> 00:05:03,039

in 16 times because we get 16 sunrises

133

00:05:07,029 --> 00:05:04,240

every day here so we'll have christmas

134

00:05:08,230 --> 00:05:07,039

morning 16 times on the 25th

135

00:05:10,070 --> 00:05:08,240

and then we get celebrated again on

136

00:05:12,070 --> 00:05:10,080

january 7th because that's the that's

137

00:05:14,070 --> 00:05:12,080

the russian the russian christmas is on

138

00:05:15,350 --> 00:05:14,080

january 7th so half of our crew is

139

00:05:17,749 --> 00:05:15,360

russian so we'll have it again a few

140

00:05:19,830 --> 00:05:17,759

weeks later

141

00:05:21,830 --> 00:05:19,840

you talked earlier about the experiments

142

00:05:23,670 --> 00:05:21,840

you have been conducting up there and

143

00:05:26,629 --> 00:05:23,680

this is for either one of you anything

144

00:05:28,550 --> 00:05:26,639

surprise you as of now and

145

00:05:30,070 --> 00:05:28,560

uh what are you most looking forward to

146

00:05:33,430 --> 00:05:30,080

obviously the space walk will be pretty

147

00:05:38,790 --> 00:05:35,749

yeah the space walk space walks plural

148

00:05:39,990 --> 00:05:38,800

are definitely a big on our horizon

149

00:05:41,990 --> 00:05:40,000

here's something

150

00:05:43,749 --> 00:05:42,000

surprising and we all know physics and

151

00:05:45,990 --> 00:05:43,759

we learn the basics of physics and

152

00:05:47,830 --> 00:05:46,000

inertia and that kind of thing but um

153

00:05:49,990 --> 00:05:47,840

when when you rotate things in space you

154

00:05:52,790 --> 00:05:50,000

can see how they behave and

155

00:05:53,909 --> 00:05:52,800

you if you spin uh an ipad for example

156

00:05:55,590 --> 00:05:53,919

today butch and i were doing this you

157

00:05:57,270 --> 00:05:55,600

spin an ipad in certain directions it

158

00:05:58,629 --> 00:05:57,280

spins fine but if you spin it in one

159

00:06:00,710 --> 00:05:58,639

certain axis

160

00:06:02,230 --> 00:06:00,720

if it flips a couple times and then it

161

00:06:03,909 --> 00:06:02,240

rotates itself and it flips in different

162

00:06:06,469 --> 00:06:03,919

direction a couple times it rotates back

163

00:06:08,390 --> 00:06:06,479

and it's uh it's cool to see mr newton's

164

00:06:10,390 --> 00:06:08,400

laws in action up here in space

165

00:06:12,550 --> 00:06:10,400

something you just can't do on earth uh

166

00:06:14,309 --> 00:06:12,560

we can see it and for real so that's it

167

00:06:15,909 --> 00:06:14,319

wasn't an official nasa experiment but

168

00:06:21,749 --> 00:06:15,919

it was a neat a neat demonstration of

169

00:06:28,230 --> 00:06:23,510

other than the spacewalks anything else

170

00:06:31,029 --> 00:06:29,749

i am looking forward to spending more

171

00:06:32,550 --> 00:06:31,039

time looking out the window i've been

172

00:06:34,469 --> 00:06:32,560

here for a month already and i feel like

173

00:06:36,070 --> 00:06:34,479

i just haven't spent any time

174

00:06:37,350 --> 00:06:36,080

i love taking pictures of the earth and

175

00:06:39,189 --> 00:06:37,360

of stars

176

00:06:41,189 --> 00:06:39,199

and there's just lots and lots and lots

177

00:06:43,350 --> 00:06:41,199

more pictures i want to take

178

00:06:44,550 --> 00:06:43,360

and i try and tweet out when i can at

179

00:06:46,870 --> 00:06:44,560

the

180

00:06:49,589 --> 00:06:46,880

astro terry and butch has an astro butch

181

00:06:51,430 --> 00:06:49,599

hashtag and so

182

00:06:53,749 --> 00:06:51,440

photography and just looking out the

183

00:06:55,670 --> 00:06:53,759

window is is probably by far the best

184

00:06:57,189 --> 00:06:55,680

thing to do up here

185

00:07:02,150 --> 00:06:57,199

and for those of us who don't know does

186

00:07:07,589 --> 00:07:04,469

it does actually we have just

187

00:07:09,110 --> 00:07:07,599

tens and tens and tens of uh big like

188

00:07:11,430 --> 00:07:09,120

professional cameras the kind you see at

189

00:07:13,589 --> 00:07:11,440

the football games we've got camcorders

190

00:07:14,950 --> 00:07:13,599

all over the station and and uh they do

191

00:07:16,230 --> 00:07:14,960

work they're all digital of course and

192

00:07:17,430 --> 00:07:16,240

so we can downlink the pictures

193

00:07:19,029 --> 00:07:17,440

instantly and

194

00:07:21,189 --> 00:07:19,039

um

195

00:07:22,629 --> 00:07:21,199

yeah that is your that's a good question

196

00:07:23,990 --> 00:07:22,639

some things don't work but cameras do

197

00:07:26,230 --> 00:07:24,000

work that's good

198

00:07:29,110 --> 00:07:26,240

and this is my question before we have

199

00:07:31,830 --> 00:07:29,120

to go but what is the food like up there

200

00:07:33,749 --> 00:07:31,840

you mentioned irradiated beef and and uh

201
00:07:36,950 --> 00:07:33,759
freeze-dried mashed potatoes is the

202
00:07:40,469 --> 00:07:38,390
actually to be honest perfectly honest

203
00:07:42,230 --> 00:07:40,479
the food is really good i was

204
00:07:43,670 --> 00:07:42,240
i sent an email to our food folks

205
00:07:45,670 --> 00:07:43,680
yesterday telling them how good it is

206
00:07:47,029 --> 00:07:45,680
and it's it's way better than anything i

207
00:07:49,029 --> 00:07:47,039
would be cooking for myself if i were a

208
00:07:50,629 --> 00:07:49,039
bachelor that's for sure but it's a good

209
00:07:53,189 --> 00:07:50,639
variety they got different kinds of

210
00:07:54,469 --> 00:07:53,199
meats and vegetables and desserts and

211
00:07:57,189 --> 00:07:54,479
beverages and

212
00:08:01,589 --> 00:07:57,199
it's uh it's it's actually

213
00:08:04,150 --> 00:08:02,710

but you're looking forward to some

214

00:08:07,110 --> 00:08:04,160

maryland crabs and some corn when you

215

00:08:12,150 --> 00:08:09,029

well yes it's not maryland crabs or corn

216

00:08:13,270 --> 00:08:12,160

that's for sure but it's not bad

217

00:08:15,589 --> 00:08:13,280

all right

218

00:08:17,029 --> 00:08:15,599

watermelon i have time i have time for

219

00:08:18,710 --> 00:08:17,039

one more question i believe they're

220

00:08:20,150 --> 00:08:18,720

telling me you talked about looking out

221

00:08:21,749 --> 00:08:20,160

the window that that view is something

222

00:08:24,550 --> 00:08:21,759

you just can't seem to absorb enough

223

00:08:27,909 --> 00:08:26,629

it's not and i wish i could

224

00:08:29,350 --> 00:08:27,919

i just wish everybody could see it

225

00:08:30,950 --> 00:08:29,360

because i you know i had seen pictures

226

00:08:32,070 --> 00:08:30,960

from space my whole life since i was a

227

00:08:34,230 --> 00:08:32,080

kid i've been looking at books and

228

00:08:36,389 --> 00:08:34,240

pictures and it just doesn't do it

229

00:08:38,149 --> 00:08:36,399

justice um the one thing i've noticed is

230

00:08:40,389 --> 00:08:38,159

i see colors that i'd never seen before

231

00:08:42,149 --> 00:08:40,399

shades of blue especially

232

00:08:43,670 --> 00:08:42,159

the oxygen in our atmosphere and in the

233

00:08:45,750 --> 00:08:43,680

water

234

00:08:47,190 --> 00:08:45,760

really makes things blue on earth and

235

00:08:48,470 --> 00:08:47,200

that's a really small part if you look

236

00:08:50,550 --> 00:08:48,480

in the other direction it's nothing but

237

00:08:52,550 --> 00:08:50,560

black in all directions and so it's

238

00:08:54,230 --> 00:08:52,560

pretty cool to see it's like being up in

239

00:08:55,670 --> 00:08:54,240

the heavens looking down on creation

240

00:08:58,070 --> 00:08:55,680

it's an amazing thing and you just can't

241

00:08:59,670 --> 00:08:58,080

describe it with words

242

00:09:03,190 --> 00:08:59,680

are you hoping for one more trip to

243

00:09:06,389 --> 00:09:04,550

oh yeah

244

00:09:07,670 --> 00:09:06,399

uh for sure yeah you know i'd love to go

245

00:09:08,949 --> 00:09:07,680

to the moon is what i would really love

246

00:09:11,110 --> 00:09:08,959

to do but we'll see how that works out

247

00:09:12,630 --> 00:09:11,120

we just had our launch of the orion

248

00:09:14,150 --> 00:09:12,640

capsule which is

249

00:09:15,430 --> 00:09:14,160

uh one piece of the puzzle that we're

250

00:09:16,790 --> 00:09:15,440

going to need to go out into the solar

251

00:09:18,230 --> 00:09:16,800

system so that was that was pretty

252

00:09:20,310 --> 00:09:18,240

exciting a couple weeks ago we actually

253

00:09:21,750 --> 00:09:20,320

watched that live from our from our

254

00:09:23,990 --> 00:09:21,760

dining room area that was that was kind

255

00:09:25,990 --> 00:09:24,000

of neat to see that from space

256

00:09:28,389 --> 00:09:26,000

all right air force colonel terry verts

257

00:09:31,590 --> 00:09:28,399

who of course is from columbia

258

00:09:33,990 --> 00:09:31,600

in our area and crew member commander

259

00:09:36,790 --> 00:09:34,000

butch wilmore thanks for joining us here

260

00:09:40,070 --> 00:09:36,800

on wbal from the international space

261

00:09:43,430 --> 00:09:40,080

station 205 miles above the earth thanks

262

00:09:47,110 --> 00:09:45,110

thanks merry christmas to everybody down

263

00:09:51,590 --> 00:09:47,120

there in maryland and go orioles and go

264

00:09:56,790 --> 00:09:53,750

station this is houston acr that

265

00:09:59,190 --> 00:09:56,800

concludes the wbal radio portion of the

266

00:10:06,949 --> 00:09:59,200

event please stand by for a voice check

267

00:10:11,590 --> 00:10:07,990

okay

268

00:10:15,350 --> 00:10:11,600

check in all right station this is cbs

269

00:10:19,110 --> 00:10:16,550

we hear you loud and clear how do you

270

00:10:20,949 --> 00:10:19,120

hear us

271

00:10:25,590 --> 00:10:20,959

we hear you great and you guys look

272

00:10:25,600 --> 00:10:29,269

yeah understood

273

00:10:34,630 --> 00:10:31,030

keep the wall clear all right we're

274

00:10:40,550 --> 00:10:35,829

here we go

275

00:10:45,350 --> 00:10:43,110

three two

276

00:10:47,509 --> 00:10:45,360

we recently showed you new satellite

277

00:10:49,750 --> 00:10:47,519

images from nasa showing how bright the

278

00:10:51,670 --> 00:10:49,760

holiday lights are in cities across the

279

00:10:53,269 --> 00:10:51,680

country it is a familiar site for two

280

00:10:55,269 --> 00:10:53,279

astronauts who will spend christmas

281

00:10:56,710 --> 00:10:55,279

aboard the international space station

282

00:10:58,790 --> 00:10:56,720

the mission commander captain barry

283

00:11:01,269 --> 00:10:58,800

wilmore and flight engineer colonel

284

00:11:02,710 --> 00:11:01,279

terry verts joining us now from orbit

285

00:11:06,069 --> 00:11:02,720

well thanks for floating with us this

286

00:11:09,509 --> 00:11:08,230

well our pleasure we're doing great uh

287

00:11:10,710 --> 00:11:09,519

having a great time doing a lot of

288

00:11:12,069 --> 00:11:10,720

things up here getting ready for the

289

00:11:13,350 --> 00:11:12,079

holidays spending it together of course

290

00:11:14,949 --> 00:11:13,360

we'll be separating from our families

291

00:11:16,470 --> 00:11:14,959

but we've got each other and we've got

292

00:11:18,310 --> 00:11:16,480

some plans for some gift exchanges and

293

00:11:21,030 --> 00:11:18,320

such and just celebrate it much like we

294

00:11:24,949 --> 00:11:23,430

now i see some elf shoes on your feet

295

00:11:26,949 --> 00:11:24,959

and i think i see what looks like a

296

00:11:31,990 --> 00:11:26,959

christmas tree what else are you guys

297

00:11:35,750 --> 00:11:33,990

well we've got some stockings butch got

298

00:11:37,670 --> 00:11:35,760

us each each crew member is stocking

299

00:11:39,509 --> 00:11:37,680

it's down in the u.s lab

300

00:11:41,590 --> 00:11:39,519

uh we have some santa hats and some

301

00:11:43,269 --> 00:11:41,600

other gear that we've got stored away

302

00:11:45,350 --> 00:11:43,279

right over there in the other module so

303

00:11:47,670 --> 00:11:45,360

uh we've got you know many we got some

304

00:11:49,030 --> 00:11:47,680

turkey and mashed potatoes in the in the

305

00:11:53,030 --> 00:11:49,040

kitchen so we got

306

00:11:56,790 --> 00:11:55,030

yeah i like that sort of upside down

307

00:11:59,509 --> 00:11:56,800

christmas tree look that's a new thing i

308

00:12:01,190 --> 00:11:59,519

gotta try that at home um you guys you

309

00:12:05,670 --> 00:12:01,200

guys both have kids how do you stay in

310

00:12:09,269 --> 00:12:07,430

you know nasa is great they they afford

311

00:12:11,350 --> 00:12:09,279

us the opportunity to do video links

312

00:12:13,269 --> 00:12:11,360

once a week so we get to stay in touch

313

00:12:15,350 --> 00:12:13,279

that way and it's fantastic to see them

314

00:12:17,110 --> 00:12:15,360

and and you know my my daughters are

315

00:12:18,790 --> 00:12:17,120

seven and ten so actually see them

316

00:12:20,949 --> 00:12:18,800

changes and lose teeth and whatnot from

317

00:12:23,030 --> 00:12:20,959

here so it's very unique and it's a very

318

00:12:26,790 --> 00:12:23,040

very uh good thing that nasa does so

319

00:12:30,550 --> 00:12:28,629

i can't imagine the story she gets to

320

00:12:32,310 --> 00:12:30,560

tell at school in terms of where her dad

321

00:12:34,150 --> 00:12:32,320

is for the holidays but we want to ask

322

00:12:38,870 --> 00:12:34,160

you about the actual mission itself why

323

00:12:43,110 --> 00:12:40,629

well uh we're on a six-month mission

324

00:12:44,949 --> 00:12:43,120

here in in earth orbit and the primary

325

00:12:47,430 --> 00:12:44,959

job is to get research done the space

326

00:12:49,030 --> 00:12:47,440

station is a national laboratory and

327

00:12:50,870 --> 00:12:49,040

there's lots of different science from

328

00:12:53,509 --> 00:12:50,880

all the different disciplines biology

329

00:12:55,509 --> 00:12:53,519

physics material science combustion

330

00:12:56,389 --> 00:12:55,519

science as even astronomy

331

00:12:57,990 --> 00:12:56,399

and so

332

00:12:59,269 --> 00:12:58,000

on a daily basis we're doing different

333

00:13:01,829 --> 00:12:59,279

kind of experiments we're setting them

334

00:13:03,990 --> 00:13:01,839

up taking them down making sure that the

335

00:13:05,750 --> 00:13:04,000

that they're maintained and along those

336

00:13:07,590 --> 00:13:05,760

lines we also have to maintain a station

337

00:13:10,230 --> 00:13:07,600

it's a million pound vehicle

338

00:13:12,069 --> 00:13:10,240

very very very complicated lots of uh

339

00:13:14,069 --> 00:13:12,079

equipment to keep running and so a big

340

00:13:15,829 --> 00:13:14,079

part of our job is to keep it running

341

00:13:17,590 --> 00:13:15,839

which occasionally requires spacewalks

342

00:13:19,350 --> 00:13:17,600

and butch and i have three scheduled

343

00:13:21,990 --> 00:13:19,360

spacewalks in february

344

00:13:24,389 --> 00:13:22,000

uh again to keep the station maintained

345

00:13:26,389 --> 00:13:24,399

properly and also to get it ready for uh

346

00:13:28,389 --> 00:13:26,399

future american capsules that will be

347

00:13:30,150 --> 00:13:28,399

bringing crews here in the coming years

348

00:13:31,750 --> 00:13:30,160

so it's a busy job

349

00:13:33,509 --> 00:13:31,760

and on top of all that we need to keep

350

00:13:35,269 --> 00:13:33,519

ourselves in shape to counteract the

351

00:13:36,790 --> 00:13:35,279

effects of weightlessness so

352

00:13:39,829 --> 00:13:36,800

it's definitely a full-time job and it's

353

00:13:44,310 --> 00:13:41,590

which you guys made some news last week

354

00:13:47,509 --> 00:13:44,320

when you you printed a 3d wrench from a

355

00:13:49,910 --> 00:13:47,519

design emailed to you from earth

356

00:13:54,310 --> 00:13:49,920

what kind of impact are things like that

357

00:13:57,910 --> 00:13:56,069

well it could actually re

358

00:13:59,590 --> 00:13:57,920

change everything i mean you may have a

359

00:14:01,350 --> 00:13:59,600

part that fails that you don't have on

360

00:14:03,670 --> 00:14:01,360

board and the

361

00:14:05,750 --> 00:14:03,680

opportunity to print small parts and

362

00:14:07,910 --> 00:14:05,760

install them and even and even print out

363

00:14:10,230 --> 00:14:07,920

the special tools that you could use to

364

00:14:12,389 --> 00:14:10,240

install those parts so the you know the

365

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

the possibilities are truly endless with

366

00:14:16,310 --> 00:14:14,639

what we can do as this technology goes

367

00:14:18,629 --> 00:14:16,320

forward we're just doing baby steps now

368

00:14:20,470 --> 00:14:18,639

it's just the start and you know printed

369

00:14:22,470 --> 00:14:20,480

out a wrench last week as you mentioned

370

00:14:24,470 --> 00:14:22,480

and uh it's it's like i said just

371

00:14:27,990 --> 00:14:24,480

getting going so it's it's the the

372

00:14:31,269 --> 00:14:29,189

terry i want to ask you about these

373

00:14:33,509 --> 00:14:31,279

amazing images we've seen on twitter

374

00:14:36,230 --> 00:14:33,519

images of sort of the earth from clearly

375

00:14:38,550 --> 00:14:36,240

an amazing viewpoint when you take each

376

00:14:42,150 --> 00:14:38,560

of these are you still as amazed as the

377

00:14:46,230 --> 00:14:43,750

it's it's amazing i wish i could

378

00:14:47,750 --> 00:14:46,240

describe it with words um

379

00:14:49,590 --> 00:14:47,760

i've seen pictures from space ever since

380

00:14:51,030 --> 00:14:49,600

i was a kid i had space books and stuff

381

00:14:52,310 --> 00:14:51,040

and the first time i looked out of the

382

00:14:54,389 --> 00:14:52,320

window on the space shuttle a couple

383

00:14:56,550 --> 00:14:54,399

years ago i just couldn't believe it i

384

00:14:58,389 --> 00:14:56,560

literally took my breath away saw colors

385

00:15:00,230 --> 00:14:58,399

that i'd never seen before and every

386

00:15:01,829 --> 00:15:00,240

time you take pictures it's a it's a

387

00:15:03,430 --> 00:15:01,839

brand new experience

388

00:15:05,509 --> 00:15:03,440

it's it's kind of funny usually it's a

389

00:15:07,750 --> 00:15:05,519

flail you go in the cupola which is the

390

00:15:09,189 --> 00:15:07,760

seven windowed dome module that we have

391

00:15:10,949 --> 00:15:09,199

that has

392

00:15:12,710 --> 00:15:10,959

an unbelievable view of the earth and

393

00:15:14,550 --> 00:15:12,720

stars and you go in there and you're

394

00:15:16,710 --> 00:15:14,560

like oh wow there's like yesterday we

395

00:15:18,870 --> 00:15:16,720

were flying over asia there was beijing

396

00:15:20,550 --> 00:15:18,880

and korea and japan and you have to it's

397

00:15:22,150 --> 00:15:20,560

a flail you grab the camera and try and

398

00:15:23,110 --> 00:15:22,160

set it up real quick for night or day or

399

00:15:25,189 --> 00:15:23,120

whatever you're doing and take some

400

00:15:26,710 --> 00:15:25,199

pictures because we're going over 17 000

401
00:15:29,590 --> 00:15:26,720
miles an hour so

402
00:15:32,710 --> 00:15:29,600
beijing korea and japan last about you

403
00:15:34,470 --> 00:15:32,720
know two minutes and then you're gone so

404
00:15:35,590 --> 00:15:34,480
taking the pictures is great but it's

405
00:15:39,990 --> 00:15:35,600
every time you do it you're just

406
00:15:43,350 --> 00:15:41,670
they're really stunning images guys is

407
00:15:45,269 --> 00:15:43,360
there anything particular you miss about

408
00:15:49,350 --> 00:15:45,279
home at this point in time or being back

409
00:15:53,430 --> 00:15:51,110
to be quite honest obviously you miss

410
00:15:55,110 --> 00:15:53,440
the your family being with them that's

411
00:15:56,629 --> 00:15:55,120
the that's one thing of course we all

412
00:15:58,230 --> 00:15:56,639
would miss but

413
00:16:00,790 --> 00:15:58,240

it's such a different environment up

414

00:16:02,310 --> 00:16:00,800

here new experiences every single day

415

00:16:03,749 --> 00:16:02,320

and to be honest with you there's no

416

00:16:05,749 --> 00:16:03,759

longing for anything i don't long for a

417

00:16:06,949 --> 00:16:05,759

hamburger or anything like that because

418

00:16:09,430 --> 00:16:06,959

the food appears not bad it's a

419

00:16:11,749 --> 00:16:09,440

different variety so the newness of it

420

00:16:16,150 --> 00:16:11,759

all is what makes it truly truly special

421

00:16:19,749 --> 00:16:18,550

we want to ask you one quick we ask you

422

00:16:21,350 --> 00:16:19,759

one question just because we had a

423

00:16:22,629 --> 00:16:21,360

little bit of an issue with it with it

424

00:16:24,710 --> 00:16:22,639

coming over

425

00:16:29,430 --> 00:16:24,720

what exactly are you guys up there doing

426

00:16:32,870 --> 00:16:30,790

so the mission that we're doing right

427

00:16:34,150 --> 00:16:32,880

now on our six-month expedition to the

428

00:16:36,550 --> 00:16:34,160

space station

429

00:16:37,430 --> 00:16:36,560

is science our job here is to do science

430

00:16:39,910 --> 00:16:37,440

and there's lots of different

431

00:16:42,870 --> 00:16:39,920

disciplines that we're uh investigating

432

00:16:45,110 --> 00:16:42,880

biology chemistry physics material

433

00:16:47,590 --> 00:16:45,120

science combustion science even

434

00:16:49,509 --> 00:16:47,600

astronomy and so on a daily basis we're

435

00:16:50,710 --> 00:16:49,519

doing various experiments were either

436

00:16:53,350 --> 00:16:50,720

setting them up

437

00:16:55,829 --> 00:16:53,360

changing out samples downlinking imagery

438

00:16:57,110 --> 00:16:55,839

maintaining the the machines in the this

439

00:16:58,629 --> 00:16:57,120

laboratory that we have this national

440

00:17:00,790 --> 00:16:58,639

laboratory of the international space

441

00:17:02,230 --> 00:17:00,800

station and along with that the second

442

00:17:04,150 --> 00:17:02,240

half of that mission is maintaining the

443

00:17:06,230 --> 00:17:04,160

station it's a million pound vehicle

444

00:17:07,590 --> 00:17:06,240

very complicated lots of different

445

00:17:09,350 --> 00:17:07,600

modules international we're in a

446

00:17:11,110 --> 00:17:09,360

japanese module right now the european

447

00:17:13,189 --> 00:17:11,120

modules there of course there's a big

448

00:17:15,029 --> 00:17:13,199

american segment and the russian segment

449

00:17:17,270 --> 00:17:15,039

is a very big part of this

450

00:17:20,949 --> 00:17:17,280

space station so maintaining this on a

451

00:17:22,870 --> 00:17:20,959

daily basis is a big job that we have

452

00:17:24,230 --> 00:17:22,880

getting ready for some space walks is

453

00:17:27,029 --> 00:17:24,240

very important butch and i are going to

454

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

go out and prepare the station for

455

00:17:31,029 --> 00:17:28,640

future american

456

00:17:32,470 --> 00:17:31,039

human vehicles crude vehicles that are

457

00:17:34,150 --> 00:17:32,480

in february we're doing these space

458

00:17:36,230 --> 00:17:34,160

walks and these vehicles will be uh

459

00:17:37,830 --> 00:17:36,240

flying in the next few years we hope and

460

00:17:39,350 --> 00:17:37,840

so every day there's a different

461

00:17:40,789 --> 00:17:39,360

challenge on top of all that we have to

462

00:17:42,470 --> 00:17:40,799

keep ourselves in shape with a lot of

463

00:17:44,230 --> 00:17:42,480

exercise to counteract the effects of

464

00:17:48,230 --> 00:17:44,240

weightlessness so it's definitely a

465

00:17:51,909 --> 00:17:50,390

well keep those stunning images coming

466

00:17:53,909 --> 00:17:51,919

guys they're really beautiful safe

467

00:17:55,669 --> 00:17:53,919

travels up there merry christmas captain

468

00:17:59,430 --> 00:17:55,679

wilmore colonel bertz thanks so much for

469

00:18:08,230 --> 00:18:01,190

merry christmas everybody in america and

470

00:18:11,430 --> 00:18:10,070

gary have you just mastered things still

471

00:18:13,430 --> 00:18:11,440

or are you tethered to something right

472

00:18:22,310 --> 00:18:13,440

now and and he's just free floating no

473

00:18:25,669 --> 00:18:23,830

you can't do this on earth that must

474

00:18:27,190 --> 00:18:25,679

never get old

475

00:18:28,870 --> 00:18:27,200

no you sure can

476

00:18:30,310 --> 00:18:28,880

no it doesn't you mentioned our tree was

477

00:18:31,830 --> 00:18:30,320

on the ceiling but our tree is only on

478

00:18:33,830 --> 00:18:31,840

the ceiling half the time the other half

479

00:18:37,190 --> 00:18:33,840

the time it's actually on the floor like

480

00:18:42,150 --> 00:18:39,110

i like it better upside down it's a new

481

00:18:45,669 --> 00:18:43,909

yeah this makes doing maintenance very

482

00:18:47,510 --> 00:18:45,679

easy butch and i were just down in our

483

00:18:49,669 --> 00:18:47,520

logistics module trying to find a thing

484

00:18:51,110 --> 00:18:49,679

and it's this big giant wall full of

485

00:18:52,710 --> 00:18:51,120

probably a thousand pounds of stuff and

486

00:18:54,710 --> 00:18:52,720

we were just floating in and out of all

487

00:18:58,549 --> 00:18:54,720

the different bags and it's it's very

488

00:19:04,870 --> 00:19:00,470

do you get seasick is it a f do you

489

00:19:08,390 --> 00:19:07,029

uh actually no terry was you know we had

490

00:19:10,390 --> 00:19:08,400

the centrifuge where we had to get some

491

00:19:11,990 --> 00:19:10,400

water out of a bag and terry was

492

00:19:13,510 --> 00:19:12,000

spinning me so i could get the water to

493

00:19:15,510 --> 00:19:13,520

the end of the bag and there's no

494

00:19:20,230 --> 00:19:15,520

nauseous no nothing no not at all the

495

00:19:20,240 --> 00:19:23,270

wow

496

00:19:23,280 --> 00:19:26,470

thank you guys

497

00:19:31,669 --> 00:19:28,710

yeah you bet thank you all synchronized

498

00:19:31,679 --> 00:19:35,590

merry christmas

499

00:19:39,669 --> 00:19:37,270

station this is houston acr that

500

00:19:42,150 --> 00:19:39,679

concludes the event thank you

501

00:19:43,909 --> 00:19:42,160

thank you wbal radio and cbs this