



1
00:00:05,829 --> 00:00:02,070
station this is houston are you ready

2
00:00:09,030 --> 00:00:07,430
houston this is station we are ready for

3
00:00:10,629 --> 00:00:09,040
the event

4
00:00:12,549 --> 00:00:10,639
south by southwest this is mission

5
00:00:13,910 --> 00:00:12,559
control houston please call station for

6
00:00:15,430 --> 00:00:13,920
a voice check

7
00:00:18,710 --> 00:00:15,440
station this is south by southwest how

8
00:00:30,310 --> 00:00:21,269
and south by southwest we hear you loud

9
00:00:34,470 --> 00:00:32,389
hi um it's a real honor to get to talk

10
00:00:37,270 --> 00:00:34,480
with you um thank you for taking our

11
00:00:39,830 --> 00:00:37,280
questions my name is kyle jones i am an

12
00:00:41,830 --> 00:00:39,840
earthling from nashville tennessee

13
00:00:43,430 --> 00:00:41,840

um despite all your training and

14

00:00:45,910 --> 00:00:43,440

preparation what is something you did

15

00:00:49,670 --> 00:00:45,920

not expect from your experience in space

16

00:00:53,830 --> 00:00:51,510

yeah that's a that's a great question

17

00:00:56,389 --> 00:00:53,840

and i think for me

18

00:00:57,750 --> 00:00:56,399

you know this was my first flight and so

19

00:00:59,189 --> 00:00:57,760

the biggest difference or what you

20

00:01:00,630 --> 00:00:59,199

really can't train for is actually

21

00:01:02,869 --> 00:01:00,640

floating and what it's like to be in

22

00:01:05,350 --> 00:01:02,879

microgravity all the time

23

00:01:07,350 --> 00:01:05,360

see we can get just a few seconds during

24

00:01:09,590 --> 00:01:07,360

the training during the

25

00:01:12,070 --> 00:01:09,600

operations with her practicing for evas

26

00:01:13,990 --> 00:01:12,080

spacewalks we use the pool but it

27

00:01:16,310 --> 00:01:14,000

doesn't give you that true feeling of

28

00:01:17,990 --> 00:01:16,320

what it's like to be in microgravity and

29

00:01:21,510 --> 00:01:18,000

and so that takes some time to get used

30

00:01:21,520 --> 00:01:28,630

thank you

31

00:01:33,670 --> 00:01:31,749

hi i'm dan edwards from atlanta georgia

32

00:01:34,950 --> 00:01:33,680

and uh my six-year-old son has a

33

00:01:42,069 --> 00:01:34,960

question for you

34

00:01:47,030 --> 00:01:44,630

that's a very good question we we see a

35

00:01:48,149 --> 00:01:47,040

lot of uh activities of volcanic

36

00:01:50,710 --> 00:01:48,159

activities

37

00:01:52,710 --> 00:01:50,720

and when there's an eruption uh ground

38

00:01:54,710 --> 00:01:52,720

folks tell us to take pictures and we

39

00:01:57,270 --> 00:01:54,720

were able to capture a lot of volcanic

40

00:02:00,149 --> 00:01:57,280

activities it's really vivid and it's

41

00:02:02,550 --> 00:02:00,159

sometimes very amazing view to see the

42

00:02:06,389 --> 00:02:02,560

the air and water

43

00:02:08,869 --> 00:02:06,399

vapors coming out of the volcanoes

44

00:02:11,670 --> 00:02:08,879

thank you

45

00:02:14,550 --> 00:02:11,680

hi uh i'm tea parade i'm rod uh i have

46

00:02:16,630 --> 00:02:14,560

two questions for you uh one is what

47

00:02:18,790 --> 00:02:16,640

kind of mission are you working on right

48

00:02:25,110 --> 00:02:18,800

now and the other one is how do you keep

49

00:02:28,550 --> 00:02:26,790

okay keeping in touch with our family

50

00:02:31,110 --> 00:02:28,560

well that's an easy one we have lots of

51
00:02:32,869 --> 00:02:31,120
ways to communicate with our family we

52
00:02:34,710 --> 00:02:32,879
actually have a telephone on board where

53
00:02:35,750 --> 00:02:34,720
we could we can call our families at

54
00:02:37,750 --> 00:02:35,760
pretty much

55
00:02:39,910 --> 00:02:37,760
almost any time of the day and then

56
00:02:42,630 --> 00:02:39,920
about once a week we do a video

57
00:02:45,190 --> 00:02:42,640
conference with our family and of course

58
00:02:46,790 --> 00:02:45,200
we have email so we could stay in touch

59
00:02:47,589 --> 00:02:46,800
with our friends and our family quite a

60
00:02:49,430 --> 00:02:47,599
bit

61
00:02:50,470 --> 00:02:49,440
your other question is what is our

62
00:02:52,710 --> 00:02:50,480
mission

63
00:02:54,790 --> 00:02:52,720

uh well basically we're doing science

64

00:02:56,869 --> 00:02:54,800

and research up here we have

65

00:02:58,949 --> 00:02:56,879

probably about 200 experiments will go

66

00:03:00,070 --> 00:02:58,959

on while we're up here for the six month

67

00:03:02,470 --> 00:03:00,080

period

68

00:03:04,949 --> 00:03:02,480

and it ranges everything from biology to

69

00:03:07,270 --> 00:03:04,959

earth observation to looking for a dark

70

00:03:08,869 --> 00:03:07,280

matter in in in deep space so it's a

71

00:03:10,710 --> 00:03:08,879

wide range of experiments going on at

72

00:03:15,670 --> 00:03:10,720

any time

73

00:03:21,670 --> 00:03:18,390

hello this is peggy hazley from planet

74

00:03:23,750 --> 00:03:21,680

earth i just had to say that and uh i

75

00:03:26,710 --> 00:03:23,760

was wondering what sleep is like in

76
00:03:28,390 --> 00:03:26,720
outer space can you describe what it's

77
00:03:30,229 --> 00:03:28,400
like to sleep when you don't have day

78
00:03:33,430 --> 00:03:30,239
and night what's happening to your

79
00:03:35,910 --> 00:03:33,440
circadian rhythms to your dreams do you

80
00:03:40,149 --> 00:03:35,920
snore differently what's it like out

81
00:03:40,159 --> 00:03:43,589
well hi peggy from earth

82
00:03:47,910 --> 00:03:45,910
you know sleeping up here is actually is

83
00:03:49,030 --> 00:03:47,920
actually quite comfortable um of course

84
00:03:50,630 --> 00:03:49,040
as i was saying earlier in the

85
00:03:52,229 --> 00:03:50,640
microgravity environment there's no up

86
00:03:54,630 --> 00:03:52,239
or down so we don't have a bed that we

87
00:03:56,309 --> 00:03:54,640
lay on or a cot or anything like that we

88
00:03:59,589 --> 00:03:56,319

have our little cubicle that's about the

89

00:04:01,110 --> 00:03:59,599

size of a broom closet and in there we

90

00:04:02,229 --> 00:04:01,120

have a sleeping bag and we just attach

91

00:04:04,949 --> 00:04:02,239

it to the wall

92

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

and um as far as how do we know when

93

00:04:09,509 --> 00:04:06,640

it's time to go to bed and all that well

94

00:04:12,470 --> 00:04:09,519

we're on gmt time up here greenwich mean

95

00:04:15,670 --> 00:04:12,480

time and so we just uh go by the clock

96

00:04:17,030 --> 00:04:15,680

and so about uh 10 to 10 to 11 o'clock

97

00:04:18,870 --> 00:04:17,040

at night uh

98

00:04:20,629 --> 00:04:18,880

whoever someone will turn out all of the

99

00:04:22,390 --> 00:04:20,639

lights and that kind of is a good

100

00:04:25,350 --> 00:04:22,400

indication that it's time for us to to

101
00:04:27,909 --> 00:04:25,360
go to sleep um and it's actually quite

102
00:04:29,830 --> 00:04:27,919
dark and quite comfortable inside our

103
00:04:31,909 --> 00:04:29,840
quarters and then you just crawl in your

104
00:04:33,670 --> 00:04:31,919
sleeping bag and you uh i mean it's

105
00:04:35,110 --> 00:04:33,680
really up to you some people like to

106
00:04:36,870 --> 00:04:35,120
when they sleep they'll have their arms

107
00:04:39,030 --> 00:04:36,880
kind of hanging out and they'll float

108
00:04:41,030 --> 00:04:39,040
some people like to be more of cocooned

109
00:04:42,710 --> 00:04:41,040
inside and it's actually quite

110
00:04:45,350 --> 00:04:42,720
comfortable

111
00:04:50,710 --> 00:04:47,990
hi i'm nicola from london i'm also on

112
00:04:51,990 --> 00:04:50,720
gmt time and this is

113
00:04:54,469 --> 00:04:52,000

one of the most exciting things that's

114

00:05:02,469 --> 00:04:54,479

ever happened um my question is what

115

00:05:06,150 --> 00:05:03,990

yeah actually

116

00:05:08,710 --> 00:05:06,160

i hope we don't smell very much

117

00:05:11,670 --> 00:05:08,720

in the space station but i can tell you

118

00:05:14,070 --> 00:05:11,680

when rick and mike went out to spacewalk

119

00:05:16,629 --> 00:05:14,080

when they came back i could smell the

120

00:05:19,590 --> 00:05:16,639

space of the vacuum it probably comes

121

00:05:21,350 --> 00:05:19,600

from some external surface of the space

122

00:05:24,870 --> 00:05:21,360

station and

123

00:05:27,510 --> 00:05:24,880

it's some mechanical smell and it's very

124

00:05:29,830 --> 00:05:27,520

unique as soon as we open the hatch when

125

00:05:32,230 --> 00:05:29,840

they came in after a spacewalk i smell

126

00:05:34,150 --> 00:05:32,240

that so that's a very unique smell but

127

00:05:36,150 --> 00:05:34,160

other than that i think inside of the

128

00:05:38,390 --> 00:05:36,160

space station we have really good air

129

00:05:40,629 --> 00:05:38,400

circulation ventilation so it doesn't

130

00:05:42,310 --> 00:05:40,639

smell very differently from from the

131

00:05:45,110 --> 00:05:42,320

ground

132

00:05:48,870 --> 00:05:46,950

hello my name is joe curry my question

133

00:05:50,629 --> 00:05:48,880

is what are some ways nasa can inspire

134

00:05:58,629 --> 00:05:50,639

students to be our future scientists and

135

00:06:02,870 --> 00:06:01,029

well we like to inspire folks on a daily

136

00:06:04,950 --> 00:06:02,880

basis up here that's one of the reasons

137

00:06:07,110 --> 00:06:04,960

why we we communicate with folks in

138

00:06:09,189 --> 00:06:07,120

these events right now is to try to

139

00:06:11,590 --> 00:06:09,199

inspire folks to motivate folks to show

140

00:06:13,189 --> 00:06:11,600

them uh what's possible you know when i

141

00:06:14,629 --> 00:06:13,199

was growing up i never knew that i could

142

00:06:16,230 --> 00:06:14,639

be an astronaut until i saw an

143

00:06:17,990 --> 00:06:16,240

advertisement in a magazine and i

144

00:06:20,230 --> 00:06:18,000

answered that ad of course it took me

145

00:06:23,430 --> 00:06:20,240

nine years of hard work and applications

146

00:06:25,909 --> 00:06:23,440

to eventually get selected but nasa is

147

00:06:28,070 --> 00:06:25,919

one of the main reasons for nasa is to

148

00:06:30,950 --> 00:06:28,080

promote math promote science to

149

00:06:33,270 --> 00:06:30,960

encourage students to study hard and to

150

00:06:34,790 --> 00:06:33,280

go into engineering and technologies and

151
00:06:36,870 --> 00:06:34,800
things like that so

152
00:06:38,870 --> 00:06:36,880
nasa does a lot of things

153
00:06:41,430 --> 00:06:38,880
to try to do that for students we have a

154
00:06:43,110 --> 00:06:41,440
lot of outreach programs for teachers in

155
00:06:45,990 --> 00:06:43,120
outreach student outreach programs for

156
00:06:48,469 --> 00:06:46,000
students on and and astronauts even go

157
00:06:50,390 --> 00:06:48,479
off and do pao events and visit schools

158
00:06:58,710 --> 00:06:50,400
on a regular basis so nasa's doing quite

159
00:07:01,909 --> 00:06:59,830
hello

160
00:07:06,469 --> 00:07:01,919
my name is miriam langston and i work in

161
00:07:09,510 --> 00:07:07,990
my question is

162
00:07:11,830 --> 00:07:09,520
if you could travel

163
00:07:17,189 --> 00:07:11,840

to anywhere in the universe where would

164

00:07:20,710 --> 00:07:18,870

well that's uh that's pretty easy it'd

165

00:07:22,390 --> 00:07:20,720

be earth

166

00:07:23,990 --> 00:07:22,400

you know being being away from earth

167

00:07:25,749 --> 00:07:24,000

this is an absolutely incredible

168

00:07:28,230 --> 00:07:25,759

experience and and it's something i'll

169

00:07:29,909 --> 00:07:28,240

never forget but i'm getting ready to

170

00:07:31,589 --> 00:07:29,919

come home on monday night and i'm

171

00:07:33,110 --> 00:07:31,599

looking forward to it

172

00:07:35,189 --> 00:07:33,120

you know you see the views of earth up

173

00:07:37,189 --> 00:07:35,199

here and it is truly stunning and it's

174

00:07:39,909 --> 00:07:37,199

something that never gets old but at the

175

00:07:41,749 --> 00:07:39,919

same time i'm really looking forward to

176

00:07:43,510 --> 00:07:41,759

feeling the earth between my toes

177

00:07:45,270 --> 00:07:43,520

feeling a breeze

178

00:07:47,670 --> 00:07:45,280

maybe even standing out in a rainstorm

179

00:07:50,869 --> 00:07:47,680

so earth is is truly incredible and i

180

00:07:57,430 --> 00:07:52,390

thank you it was an honor to speak with

181

00:08:03,270 --> 00:08:00,790

i i'm beatrice from miami and i wanted

182

00:08:14,790 --> 00:08:03,280

to take an oscar selfie with you guys

183

00:08:14,800 --> 00:08:32,230

yes

184

00:08:55,670 --> 00:08:34,310

hi

185

00:08:57,990 --> 00:08:55,680

no hello hello

186

00:08:59,350 --> 00:08:58,000

keep talking no

187

00:09:01,990 --> 00:08:59,360

okay

188

00:09:05,590 --> 00:09:02,000

we still hear you loud and clear

189

00:09:07,350 --> 00:09:05,600

and we have not heard the last question

190

00:09:09,430 --> 00:09:07,360

could you repeat

191

00:09:11,750 --> 00:09:09,440

i got it

192

00:09:13,990 --> 00:09:11,760

right yes

193

00:09:16,630 --> 00:09:14,000

okay cool thank you

194

00:09:19,670 --> 00:09:16,640

she took a selfie with you

195

00:09:20,710 --> 00:09:19,680

just like at the oscars

196

00:09:24,150 --> 00:09:20,720

hi

197

00:09:26,470 --> 00:09:24,160

jersey you guys are awesome

198

00:09:29,269 --> 00:09:26,480

and my question is

199

00:09:31,030 --> 00:09:29,279

at earth we all are always stressed

200

00:09:39,030 --> 00:09:31,040

do you get stressed up in space how do

201
00:09:43,670 --> 00:09:41,670
yeah uh actually all of us onboard the

202
00:09:46,070 --> 00:09:43,680
space station go through the emergency

203
00:09:48,550 --> 00:09:46,080
medical training like a cpr and an

204
00:09:50,470 --> 00:09:48,560
injury treatment and in case of a

205
00:09:52,949 --> 00:09:50,480
medical emergency happens we follow a

206
00:09:55,590 --> 00:09:52,959
procedure to to treat and we also have a

207
00:09:57,910 --> 00:09:55,600
real-time support from the flight

208
00:09:59,670 --> 00:09:57,920
surgeons on the ground so we will be

209
00:10:01,350 --> 00:09:59,680
able to cope with that kind of emergency

210
00:10:06,470 --> 00:10:01,360
situation

211
00:10:11,590 --> 00:10:09,190
hello i'm ben from here in austin texas

212
00:10:14,069 --> 00:10:11,600
and i was curious if you guys

213
00:10:15,190 --> 00:10:14,079

had any protection from cosmic radiation

214

00:10:18,069 --> 00:10:15,200

up there

215

00:10:20,150 --> 00:10:18,079

if the magnetosphere protects you since

216

00:10:21,990 --> 00:10:20,160

you're above the ionosphere just just

217

00:10:23,350 --> 00:10:22,000

worried about that my wife is a flight

218

00:10:25,110 --> 00:10:23,360

attendant and i kind of worry about her

219

00:10:32,790 --> 00:10:25,120

when she's up in the plains but you guys

220

00:10:35,590 --> 00:10:33,990

well we don't have any special

221

00:10:37,509 --> 00:10:35,600

protection you know the obviously the

222

00:10:39,590 --> 00:10:37,519

structure protects us a little bit but

223

00:10:41,910 --> 00:10:39,600

no we are above the protection of the

224

00:10:44,470 --> 00:10:41,920

atmosphere so we do absorb uh quite a

225

00:10:46,470 --> 00:10:44,480

bit of radiation but we monitor that

226

00:10:47,910 --> 00:10:46,480

monitor that very closely we have

227

00:10:49,750 --> 00:10:47,920

radiation monitors throughout the

228

00:10:51,269 --> 00:10:49,760

vehicle we have radiation monitors that

229

00:10:54,710 --> 00:10:51,279

we have to carry on our person at all

230

00:10:57,750 --> 00:10:54,720

time and then that num those numbers are

231

00:10:59,670 --> 00:10:57,760

are added up over our lifetime and if we

232

00:11:03,509 --> 00:10:59,680

exceed a certain radiation limit then

233

00:11:09,190 --> 00:11:04,949

thank you

234

00:11:14,949 --> 00:11:11,509

hi gentlemen my name is christine and

235

00:11:16,230 --> 00:11:14,959

i'm from atlanta um so my question is

236

00:11:18,069 --> 00:11:16,240

this is something you just kind of

237

00:11:20,550 --> 00:11:18,079

addressed a little bit but things that

238

00:11:22,230 --> 00:11:20,560

you're missing about earth about you

239

00:11:24,069 --> 00:11:22,240

know just your normal kind of daily

240

00:11:26,470 --> 00:11:24,079

creature comforts if there's anything in

241

00:11:27,829 --> 00:11:26,480

particular that you're sort of surprised

242

00:11:29,269 --> 00:11:27,839

that you missed while you've been up

243

00:11:33,269 --> 00:11:29,279

there other than of course friends and

244

00:11:36,710 --> 00:11:34,630

yeah actually

245

00:11:38,470 --> 00:11:36,720

there are things that you do miss and

246

00:11:39,750 --> 00:11:38,480

i'd say one of them that i miss is a

247

00:11:44,150 --> 00:11:39,760

shower

248

00:11:47,030 --> 00:11:44,160

so when we clean up we just we use a wet

249

00:11:49,350 --> 00:11:47,040

cloth to uh to wash off and then a towel

250

00:11:50,790 --> 00:11:49,360

to dry off but uh i can't wait to have

251
00:11:53,190 --> 00:11:50,800
that shower and the other thing we get

252
00:11:54,389 --> 00:11:53,200
occasionally but not as often as as i'd

253
00:11:56,389 --> 00:11:54,399
like and that's the fresh fruit

254
00:11:58,310 --> 00:11:56,399
sometimes we're fresh produce

255
00:12:00,069 --> 00:11:58,320
when we have a resupply vehicle we'll

256
00:12:02,870 --> 00:12:00,079
usually get a little bit but it doesn't

257
00:12:05,350 --> 00:12:02,880
last very long

258
00:12:09,990 --> 00:12:05,360
thank you i get richard just and

259
00:12:14,470 --> 00:12:13,350
hi hello i'm jenny from denver and i'm

260
00:12:15,990 --> 00:12:14,480
in the running for one of the bigger

261
00:12:17,590 --> 00:12:16,000
space geeks in the room i went to space

262
00:12:19,509 --> 00:12:17,600
camp three times

263
00:12:22,230 --> 00:12:19,519

as a child so

264

00:12:24,389 --> 00:12:22,240

i might pass out

265

00:12:26,710 --> 00:12:24,399

right now

266

00:12:28,949 --> 00:12:26,720

um i just wondered if you guys have ever

267

00:12:37,430 --> 00:12:28,959

been really scared while you were on an

268

00:12:41,990 --> 00:12:38,870

it's okay to admit it have i ever been

269

00:12:43,990 --> 00:12:42,000

scared on a on a space walk uh

270

00:12:46,550 --> 00:12:44,000

i've done a few space walks and i can't

271

00:12:48,150 --> 00:12:46,560

say that i've ever been scared but uh

272

00:12:49,590 --> 00:12:48,160

there there is a bit of pressure when

273

00:12:51,269 --> 00:12:49,600

you're out there

274

00:12:53,430 --> 00:12:51,279

because of the you know you're working

275

00:12:56,069 --> 00:12:53,440

on multi-billion dollar hardware it's

276

00:12:57,430 --> 00:12:56,079

very easy to do something wrong or break

277

00:12:58,790 --> 00:12:57,440

something and you've got the whole world

278

00:13:00,790 --> 00:12:58,800

watching you it feels like so there's a

279

00:13:03,350 --> 00:13:00,800

lot of pressure on you to of course to

280

00:13:04,790 --> 00:13:03,360

perform and to do things correctly i've

281

00:13:07,509 --> 00:13:04,800

never been scared but we definitely

282

00:13:09,590 --> 00:13:07,519

worry while we're out there

283

00:13:15,750 --> 00:13:09,600

have you ever messed up or dropped

284

00:13:15,760 --> 00:13:19,110

do we have to admit that

285

00:13:24,389 --> 00:13:21,590

um yeah you know we we actually

286

00:13:26,150 --> 00:13:24,399

mistakes are making all the time um and

287

00:13:27,829 --> 00:13:26,160

and hopefully they're minor but that's

288

00:13:30,150 --> 00:13:27,839

one of the things that that we train for

289

00:13:33,269 --> 00:13:30,160

as well is when you do make a mistake

290

00:13:35,750 --> 00:13:33,279

you you've got to uh go get past it

291

00:13:37,910 --> 00:13:35,760

fix whatever that maybe you did wrong

292

00:13:40,550 --> 00:13:37,920

and keep going because if it happens

293

00:13:41,829 --> 00:13:40,560

early on in the in a six hour eva you

294

00:13:43,430 --> 00:13:41,839

know you've got a lot of work to do and

295

00:13:44,949 --> 00:13:43,440

you can't sit there and worry about

296

00:13:47,189 --> 00:13:44,959

something that didn't go quite right

297

00:13:49,110 --> 00:13:47,199

earlier on

298

00:13:53,670 --> 00:13:49,120

wonderful thank you so much you guys

299

00:13:58,949 --> 00:13:56,470

hi my name is taylor eden i'm a total

300

00:14:00,629 --> 00:13:58,959

space nut since my fiance um

301

00:14:02,150 --> 00:14:00,639

did an internship at spacex so he's

302

00:14:04,470 --> 00:14:02,160

probably going to kill me after i tell

303

00:14:06,629 --> 00:14:04,480

my guy to talk to astronauts

304

00:14:08,550 --> 00:14:06,639

my question for you is do you get on

305

00:14:10,310 --> 00:14:08,560

social networks while you're in orbit

306

00:14:11,590 --> 00:14:10,320

and how do you communicate with you know

307

00:14:13,430 --> 00:14:11,600

your friends and family down here on

308

00:14:14,150 --> 00:14:13,440

earth are you sending snapchats or you

309

00:14:15,670 --> 00:14:14,160

know

310

00:14:22,230 --> 00:14:15,680

selfies on instagram or anything like

311

00:14:26,790 --> 00:14:24,470

yeah we uh actually uh tweet a lot and

312

00:14:27,990 --> 00:14:26,800

they uh you know facebook that we use

313

00:14:29,670 --> 00:14:28,000

and then uh

314

00:14:31,829 --> 00:14:29,680

actually we take a lot of pictures of

315

00:14:33,910 --> 00:14:31,839

the earth and what we do in the space

316

00:14:36,790 --> 00:14:33,920

station outside of the space station and

317

00:14:39,110 --> 00:14:36,800

tweet and then send a message and then

318

00:14:40,790 --> 00:14:39,120

actually a lot of people uh retweet and

319

00:14:43,350 --> 00:14:40,800

uh you know replied to our tweets and

320

00:14:46,710 --> 00:14:43,360

it's really uh i am really thankful to

321

00:14:48,150 --> 00:14:46,720

to see the reaction of the public and i

322

00:14:50,310 --> 00:14:48,160

hope we are

323

00:14:52,550 --> 00:14:50,320

extending this excitement of what we do

324

00:14:54,310 --> 00:14:52,560

in space through the social media

325

00:14:56,629 --> 00:14:54,320

and as far as the communication with the

326

00:14:59,269 --> 00:14:56,639

family as rick mentioned we have really

327

00:15:02,550 --> 00:14:59,279

great tools to communicate with a family

328

00:15:04,629 --> 00:15:02,560

telephone video conference and email so

329

00:15:07,829 --> 00:15:04,639

i think we are really keep in touch with

330

00:15:12,790 --> 00:15:07,839

the family on a daily basis

331

00:15:17,350 --> 00:15:15,670

hi my name is uh richard just i'm super

332

00:15:19,990 --> 00:15:17,360

excited to be here today to you guys

333

00:15:22,069 --> 00:15:20,000

just now um i was wondering how did it

334

00:15:24,949 --> 00:15:22,079

feel the first time you saw earth from

335

00:15:31,749 --> 00:15:24,959

space and has being in space change the

336

00:15:35,910 --> 00:15:33,910

yeah it's um you know that's a tough

337

00:15:38,230 --> 00:15:35,920

question to answer it's it's a bit

338

00:15:39,749 --> 00:15:38,240

overwhelming

339

00:15:41,350 --> 00:15:39,759

because you just you know you see

340

00:15:42,310 --> 00:15:41,360

pictures of it but when you when you see

341

00:15:44,629 --> 00:15:42,320

it

342

00:15:46,629 --> 00:15:44,639

live and and really um we talked about

343

00:15:48,310 --> 00:15:46,639

the spacewalks and that's and that's one

344

00:15:49,910 --> 00:15:48,320

of the most amazing things about a

345

00:15:51,509 --> 00:15:49,920

spacewalk as well you know when we look

346

00:15:52,870 --> 00:15:51,519

at the earth through the cupola you've

347

00:15:54,230 --> 00:15:52,880

got the windows that you're looking

348

00:15:55,590 --> 00:15:54,240

through and so there's frame and

349

00:15:57,269 --> 00:15:55,600

everything around it so your views can

350

00:15:59,590 --> 00:15:57,279

be somewhat limited but when you go

351

00:16:01,030 --> 00:15:59,600

outside on a on a space walk in and all

352

00:16:03,990 --> 00:16:01,040

you have is just the visor of your

353

00:16:05,509 --> 00:16:04,000

helmet which uh you know you can just

354

00:16:07,910 --> 00:16:05,519

just see the earth

355

00:16:09,749 --> 00:16:07,920

the incredible expanse of the earth

356

00:16:11,430 --> 00:16:09,759

it's amazing and does it change your

357

00:16:12,870 --> 00:16:11,440

perspective on it uh yeah i think

358

00:16:14,389 --> 00:16:12,880

there's a couple things that that you

359

00:16:15,990 --> 00:16:14,399

notice about it

360

00:16:18,470 --> 00:16:16,000

one i would say that you don't see any

361

00:16:19,910 --> 00:16:18,480

borders and and so i think that's uh

362

00:16:22,069 --> 00:16:19,920

that's a good thing and that you know

363

00:16:25,430 --> 00:16:22,079

we're all part of this uh one planet and

364

00:16:27,269 --> 00:16:25,440

uh and so uh you know i think it changes

365

00:16:29,269 --> 00:16:27,279

your your outlook on that

366

00:16:31,110 --> 00:16:29,279

and um

367

00:16:32,710 --> 00:16:31,120

and what else uh

368

00:16:35,269 --> 00:16:32,720

you know the other the other part is you

369

00:16:37,590 --> 00:16:35,279

just realize um how how precious our

370

00:16:39,670 --> 00:16:37,600

planet is and and how important it is to

371

00:16:43,350 --> 00:16:39,680

take care of it

372

00:16:47,269 --> 00:16:45,430

hi this is uh daniel fisher from london

373

00:16:48,790 --> 00:16:47,279

england this is a huge childhood dream

374

00:16:51,670 --> 00:16:48,800

come true so thank you

375

00:16:53,749 --> 00:16:51,680

my question is how much have life

376

00:16:56,389 --> 00:16:53,759

support systems changed on

377

00:17:04,549 --> 00:16:56,399

space station in the last few years

378

00:17:08,870 --> 00:17:06,230

yeah the biggest probably the biggest

379

00:17:10,309 --> 00:17:08,880

changes that we have incorporated into

380

00:17:13,029 --> 00:17:10,319

the space station is we're trying to

381

00:17:15,429 --> 00:17:13,039

recycle everything we're recycling the

382

00:17:17,669 --> 00:17:15,439

water so you know we drink the water

383

00:17:19,669 --> 00:17:17,679

that we urinate we sweat the

384

00:17:21,829 --> 00:17:19,679

condensation is collected that water is

385

00:17:23,510 --> 00:17:21,839

purified and then we drink it again but

386

00:17:25,669 --> 00:17:23,520

it's probably it's purified probably

387

00:17:28,710 --> 00:17:25,679

more pure than any water that i've ever

388

00:17:30,950 --> 00:17:28,720

drank before so the air is recycled of

389

00:17:33,990 --> 00:17:30,960

course continuously the co2 is scrubbed

390

00:17:35,430 --> 00:17:34,000

out and recycled so i think the kind of

391

00:17:36,710 --> 00:17:35,440

things that we're seeing on board space

392

00:17:38,070 --> 00:17:36,720

station we're trying to recycle

393

00:17:40,710 --> 00:17:38,080

everything because if we go off to the

394

00:17:43,110 --> 00:17:40,720

moon or if we go off to the mars to mars

395

00:17:44,950 --> 00:17:43,120

or an asteroid we can't carry all the

396

00:17:46,230 --> 00:17:44,960

water that a person needs to drink on a

397

00:17:48,150 --> 00:17:46,240

daily basis we need to be able to

398

00:17:50,230 --> 00:17:48,160

recycle we can't carry all the air it's

399

00:17:51,830 --> 00:17:50,240

just too much weight too much mass too

400

00:17:54,070 --> 00:17:51,840

much volume so we have to learn to

401
00:17:56,549 --> 00:17:54,080
recycle and of course these technologies

402
00:17:58,310 --> 00:17:56,559
apply to earth we could recycle water

403
00:18:00,630 --> 00:17:58,320
the technologies we develop up here can

404
00:18:02,070 --> 00:18:00,640
be used to recycle water back on planet

405
00:18:10,870 --> 00:18:02,080
earth because eventually we're going to

406
00:18:14,150 --> 00:18:12,390
my name is haley fick and i'm from

407
00:18:16,150 --> 00:18:14,160
houston texas i'm actually an intern at

408
00:18:17,510 --> 00:18:16,160
johnson space center and this is a

409
00:18:19,590 --> 00:18:17,520
popular question a lot of people are

410
00:18:21,669 --> 00:18:19,600
wondering about what did you think about

411
00:18:23,190 --> 00:18:21,679
the movie gravity were there situations

412
00:18:29,190 --> 00:18:23,200
that were realistic or was it all

413
00:18:34,070 --> 00:18:31,590

actually uh just before uh rick and i

414

00:18:36,870 --> 00:18:34,080

launched uh huppo was already there but

415

00:18:39,909 --> 00:18:36,880

uh we watched the movie in russia

416

00:18:42,549 --> 00:18:39,919

and uh it was pretty exciting uh movie

417

00:18:45,830 --> 00:18:42,559

and uh up on the space station our life

418

00:18:47,029 --> 00:18:45,840

here is uh is not as exciting as you see

419

00:18:49,190 --> 00:18:47,039

on the movie

420

00:18:51,590 --> 00:18:49,200

but spacewalks they conducted was really

421

00:18:53,430 --> 00:18:51,600

exciting and it's really fascinating to

422

00:18:56,230 --> 00:18:53,440

see them work outside of the space

423

00:18:57,990 --> 00:18:56,240

station so on the wrong run you know the

424

00:18:59,270 --> 00:18:58,000

excitement that we have is pretty you

425

00:19:01,909 --> 00:18:59,280

know

426

00:19:04,070 --> 00:19:01,919

similar to what you see in the movie but

427

00:19:06,950 --> 00:19:04,080

we're having a very safe and efficient

428

00:19:09,430 --> 00:19:06,960

operation every day here

429

00:19:11,430 --> 00:19:09,440

thank you

430

00:19:12,470 --> 00:19:11,440

hello my name's ollie calling from

431

00:19:13,270 --> 00:19:12,480

london

432

00:19:14,310 --> 00:19:13,280

um

433

00:19:16,789 --> 00:19:14,320

when do you think we're going to become

434

00:19:23,029 --> 00:19:16,799

a truly space-faring species given that

435

00:19:28,150 --> 00:19:25,830

yeah that's that's a great question um i

436

00:19:29,590 --> 00:19:28,160

i think it is in our future when that is

437

00:19:32,390 --> 00:19:29,600

i'm not quite sure

438

00:19:33,669 --> 00:19:32,400

um but uh i i definitely think that

439

00:19:35,909 --> 00:19:33,679

we're gonna you know we'll we'll take

440

00:19:38,710 --> 00:19:35,919

baby steps uh maybe it's going back to

441

00:19:39,750 --> 00:19:38,720

the moon on to mars the asteroid

442

00:19:41,590 --> 00:19:39,760

but

443

00:19:43,110 --> 00:19:41,600

you know the what's what's interesting

444

00:19:44,870 --> 00:19:43,120

though is here with the space station

445

00:19:45,590 --> 00:19:44,880

we've had a permanent presence in space

446

00:19:48,630 --> 00:19:45,600

for

447

00:19:50,070 --> 00:19:48,640

what the last 13 years 14 years so

448

00:19:51,430 --> 00:19:50,080

that's pretty exciting and that's and

449

00:19:53,110 --> 00:19:51,440

that's definitely a step in the right

450

00:19:53,990 --> 00:19:53,120

direction for that

451
00:19:56,710 --> 00:19:54,000
that

452
00:20:00,150 --> 00:19:56,720
you know a space-faring species

453
00:20:04,950 --> 00:20:03,190
station this is houston acr on behalf of

454
00:20:07,029 --> 00:20:04,960
south by southwest

455
00:20:12,390 --> 00:20:07,039
thank you very much this concludes our

456
00:20:16,149 --> 00:20:14,549
thank you south by southwest station we