



1
00:00:07,030 --> 00:00:03,030
station this is houston are you ready

2
00:00:12,270 --> 00:00:08,710
houston station we are ready for the

3
00:00:16,070 --> 00:00:14,310
cosmopolitan.com this is mission control

4
00:00:18,230 --> 00:00:16,080
houston please call station for a voice

5
00:00:20,029 --> 00:00:18,240
check

6
00:00:25,109 --> 00:00:20,039
station this is emma barker with

7
00:00:29,509 --> 00:00:26,950
hi i've got you loud and clear hello

8
00:00:31,589 --> 00:00:29,519
from the international space station

9
00:00:33,830 --> 00:00:31,599
hello

10
00:00:37,270 --> 00:00:33,840
um so we're good to go along with

11
00:00:38,869 --> 00:00:37,990
yes

12
00:00:41,030 --> 00:00:38,879
okay

13
00:00:43,510 --> 00:00:41,040

we're doing so we're doing the story

14

00:00:45,430 --> 00:00:43,520

because a lot of millennial women really

15

00:00:46,630 --> 00:00:45,440

want to break out of their daily grind

16

00:00:49,910 --> 00:00:46,640

right now

17

00:00:51,830 --> 00:00:49,920

you work as a biologist um but you made

18

00:00:53,430 --> 00:00:51,840

your career a little more exciting by

19

00:00:54,790 --> 00:00:53,440

doing it in space

20

00:00:57,110 --> 00:00:54,800

i know you've always wanted to go to

21

00:00:59,189 --> 00:00:57,120

space eventually but where were you and

22

00:01:05,270 --> 00:00:59,199

what was the one moment when you decided

23

00:01:09,350 --> 00:01:06,710

that's a great question i don't think

24

00:01:12,230 --> 00:01:09,360

you ever really decide that you want to

25

00:01:14,710 --> 00:01:12,240

be an astronaut there's so many people

26

00:01:16,550 --> 00:01:14,720

that want to do this job and there are

27

00:01:18,630 --> 00:01:16,560

so many factors that have to come into

28

00:01:20,870 --> 00:01:18,640

play so people ask me about how how did

29

00:01:23,990 --> 00:01:20,880

you decide you wanted to do this and i i

30

00:01:25,510 --> 00:01:24,000

basically was just incredibly lucky um

31

00:01:28,149 --> 00:01:25,520

so i think

32

00:01:29,749 --> 00:01:28,159

you know you put in your application

33

00:01:30,950 --> 00:01:29,759

you hope for the best

34

00:01:32,230 --> 00:01:30,960

and

35

00:01:34,630 --> 00:01:32,240

i think there's a lot of people that

36

00:01:37,830 --> 00:01:34,640

have dreams about going to space

37

00:01:40,069 --> 00:01:37,840

and i just happen to luck out and get to

38

00:01:42,950 --> 00:01:40,079

be selected but it's really nothing that

39

00:01:45,190 --> 00:01:42,960

i ever controlled or decided or made

40

00:01:46,069 --> 00:01:45,200

happen

41

00:01:49,270 --> 00:01:46,079

okay

42

00:01:51,670 --> 00:01:49,280

um so what does it feel like physically

43

00:01:54,469 --> 00:01:51,680

and mentally and emotionally to blast

44

00:01:59,109 --> 00:01:54,479

off into space like describe how what

45

00:02:04,069 --> 00:02:01,030

yeah we do a lot of training in the

46

00:02:06,230 --> 00:02:04,079

simulator so we spend hundreds of hours

47

00:02:09,430 --> 00:02:06,240

getting into the soyuz sim that's our

48

00:02:11,350 --> 00:02:09,440

spacecraft and the actual spacecraft

49

00:02:12,309 --> 00:02:11,360

looks a lot like the sim

50

00:02:16,550 --> 00:02:12,319

so

51
00:02:18,710 --> 00:02:16,560
launch pad it all looks familiar

52
00:02:21,750 --> 00:02:18,720
everything feels comfortable

53
00:02:24,309 --> 00:02:21,760
and then you think for a second oh wait

54
00:02:26,550 --> 00:02:24,319
i'm actually sitting on top of a rocket

55
00:02:27,830 --> 00:02:26,560
so there's uh there's quite a few hours

56
00:02:29,350 --> 00:02:27,840
before you launch

57
00:02:31,589 --> 00:02:29,360
you have a little bit of time to think

58
00:02:33,030 --> 00:02:31,599
and and uh reevaluate your life

59
00:02:35,509 --> 00:02:33,040
priorities at that point it's a little

60
00:02:37,430 --> 00:02:35,519
bit too late to back out and you're just

61
00:02:38,790 --> 00:02:37,440
pretty much along for the ride

62
00:02:41,030 --> 00:02:38,800
it's amazing

63
00:02:44,550 --> 00:02:41,040

it's very incredible that we launch

64

00:02:47,670 --> 00:02:45,750

yeah

65

00:02:49,110 --> 00:02:47,680

so you've been up there for about three

66

00:02:51,190 --> 00:02:49,120

months

67

00:02:53,030 --> 00:02:51,200

what do you miss most about life on

68

00:02:58,550 --> 00:02:53,040

earth and what are you glad that you

69

00:03:03,509 --> 00:03:01,270

so i miss the smell and the sound of

70

00:03:06,949 --> 00:03:03,519

nature a lot just being able to go

71

00:03:08,949 --> 00:03:06,959

outside take a walk see trees we're in a

72

00:03:11,430 --> 00:03:08,959

controlled environment up here which is

73

00:03:13,509 --> 00:03:11,440

truly amazing the fact that we recycle

74

00:03:17,030 --> 00:03:13,519

all of our air and our water we're

75

00:03:19,350 --> 00:03:17,040

really proving a lot of technologies for

76
00:03:21,110 --> 00:03:19,360
how we can conserve resources up here

77
00:03:23,270 --> 00:03:21,120
but what you do miss is all of those

78
00:03:25,990 --> 00:03:23,280
natural resources on the planet the

79
00:03:27,750 --> 00:03:26,000
planet is beautiful and we get a chance

80
00:03:29,430 --> 00:03:27,760
to view it from a completely different

81
00:03:31,030 --> 00:03:29,440
perspective up here

82
00:03:33,750 --> 00:03:31,040
one thing that i'm pretty glad i'm

83
00:03:35,509 --> 00:03:33,760
missing uh it frankly it's the u.s

84
00:03:39,270 --> 00:03:35,519
election season it's uh it's a little

85
00:03:43,830 --> 00:03:41,509
that's great um

86
00:03:45,670 --> 00:03:43,840
what is something that you can do when

87
00:03:50,949 --> 00:03:45,680
you're waitlist that no one on earth

88
00:03:55,670 --> 00:03:54,470

well you probably know that we can float

89

00:03:57,830 --> 00:03:55,680

but i don't know if you know that we can

90

00:04:00,390 --> 00:03:57,840

walk on walls i was practicing this the

91

00:04:03,030 --> 00:04:00,400

other day so you can walk up the wall

92

00:04:04,550 --> 00:04:03,040

if you go incredibly slowly

93

00:04:07,190 --> 00:04:04,560

the thing that i've been the most

94

00:04:11,429 --> 00:04:07,200

interested in is how fluids behave in

95

00:04:13,509 --> 00:04:11,439

microgravity you get all of this

96

00:04:14,789 --> 00:04:13,519

when fluids are in free float you get

97

00:04:17,189 --> 00:04:14,799

all of these different dynamic

98

00:04:20,229 --> 00:04:17,199

properties and one of the things that

99

00:04:21,749 --> 00:04:20,239

you can do in weightlessness is actually

100

00:04:24,790 --> 00:04:21,759

take a look at how

101
00:04:26,629 --> 00:04:24,800
fluids are behaving and i think we're

102
00:04:28,870 --> 00:04:26,639
quite getting quite a bit of science out

103
00:04:33,350 --> 00:04:28,880
of some of these investigations that

104
00:04:37,110 --> 00:04:34,710
um

105
00:04:42,070 --> 00:04:37,120
what has been your scariest moment in

106
00:04:45,909 --> 00:04:44,390
i wouldn't say that we really have scary

107
00:04:49,110 --> 00:04:45,919
moments up here

108
00:04:50,629 --> 00:04:49,120
we train incredibly hard and we simulate

109
00:04:52,469 --> 00:04:50,639
a lot of really

110
00:04:55,350 --> 00:04:52,479
i think what would seem to most people

111
00:04:57,350 --> 00:04:55,360
to be very scary situations

112
00:04:59,749 --> 00:04:57,360
for example launch

113
00:05:01,430 --> 00:04:59,759

doing a spacewalk depressurizing to

114

00:05:03,670 --> 00:05:01,440

absolute vacuum

115

00:05:05,590 --> 00:05:03,680

when we did some training with the navy

116

00:05:07,510 --> 00:05:05,600

they strap you into a helicopter

117

00:05:09,830 --> 00:05:07,520

simulator flip you upside down dunk you

118

00:05:11,270 --> 00:05:09,840

in a pool and you basically drown for a

119

00:05:13,749 --> 00:05:11,280

couple minutes until you can rescue

120

00:05:15,350 --> 00:05:13,759

yourself so you do a lot of these kinds

121

00:05:18,150 --> 00:05:15,360

of training events

122

00:05:20,629 --> 00:05:18,160

really to overcome your fear and to be

123

00:05:22,310 --> 00:05:20,639

able to operate in any kind of situation

124

00:05:24,870 --> 00:05:22,320

we have to be able to respond to an

125

00:05:27,749 --> 00:05:24,880

emergency up here so

126
00:05:29,430 --> 00:05:27,759
fear being scared that kind of response

127
00:05:31,430 --> 00:05:29,440
doesn't serve you particularly well in

128
00:05:33,189 --> 00:05:31,440
an operational environment

129
00:05:34,790 --> 00:05:33,199
and we basically just train it out of

130
00:05:35,590 --> 00:05:34,800
people

131
00:05:36,710 --> 00:05:35,600
wow

132
00:05:38,310 --> 00:05:36,720
okay

133
00:05:40,390 --> 00:05:38,320
um

134
00:05:42,310 --> 00:05:40,400
well i imagine it's still there are

135
00:05:45,029 --> 00:05:42,320
still stressful some stressful moments

136
00:05:47,990 --> 00:05:45,039
so what do you do to unwind when you're

137
00:05:53,350 --> 00:05:48,000
up there do you read books and how does

138
00:05:58,629 --> 00:05:56,309

yeah so uh up here we have

139

00:06:00,230 --> 00:05:58,639

the world's most amazing television set

140

00:06:02,230 --> 00:06:00,240

which is a window with the view of the

141

00:06:04,550 --> 00:06:02,240

planet so i have to say there's a lot of

142

00:06:07,350 --> 00:06:04,560

activities that i do at home

143

00:06:09,350 --> 00:06:07,360

that i really don't want to even do up

144

00:06:11,110 --> 00:06:09,360

here because

145

00:06:13,830 --> 00:06:11,120

that's time that we could be spending

146

00:06:15,909 --> 00:06:13,840

looking at the planet or taking photos

147

00:06:18,469 --> 00:06:15,919

or seeing what's happening in the world

148

00:06:20,309 --> 00:06:18,479

around us as we're all in free fall the

149

00:06:21,270 --> 00:06:20,319

entire station is in free fall so we

150

00:06:23,270 --> 00:06:21,280

talk about

151
00:06:25,350 --> 00:06:23,280
weightlessness and microgravity but

152
00:06:27,749 --> 00:06:25,360
really what it is is is we're constantly

153
00:06:30,390 --> 00:06:27,759
falling and all of these objects even

154
00:06:32,950 --> 00:06:30,400
this microphone here

155
00:06:35,430 --> 00:06:32,960
is falling with me and so you end up

156
00:06:36,710 --> 00:06:35,440
just doing experiments about what

157
00:06:41,110 --> 00:06:36,720
happens to

158
00:06:43,830 --> 00:06:41,120
fall so it's a lot of experiments and a

159
00:06:47,670 --> 00:06:43,840
lot of looking out the window

160
00:06:50,870 --> 00:06:47,680
that must be such a weird feeling

161
00:06:52,710 --> 00:06:50,880
have you i imagine um space might kind

162
00:06:54,870 --> 00:06:52,720
of like change your mindset a little bit

163
00:06:56,950 --> 00:06:54,880

have you had any really great ideas well

164

00:06:59,909 --> 00:06:56,960

up there that you plan to execute when

165

00:07:05,830 --> 00:06:59,919

you get home or has space like impacted

166

00:07:11,110 --> 00:07:08,710

yeah i'm uh i'm a scientist so i'm not

167

00:07:14,150 --> 00:07:11,120

necessarily sure i can lay claim to a

168

00:07:17,189 --> 00:07:14,160

whole lot of creativity but

169

00:07:18,309 --> 00:07:17,199

it has impacted my ability to think

170

00:07:20,150 --> 00:07:18,319

about

171

00:07:22,550 --> 00:07:20,160

uh ways that we might do future

172

00:07:25,350 --> 00:07:22,560

experiments up here actually seeing all

173

00:07:28,230 --> 00:07:25,360

of these changes uh has been spurring a

174

00:07:31,909 --> 00:07:28,240

lot of ideas for me about the kinds of

175

00:07:33,670 --> 00:07:31,919

research that we might do going forward

176

00:07:35,990 --> 00:07:33,680

and i do have to say it changes your

177

00:07:37,749 --> 00:07:36,000

perspective a lot to be able to look out

178

00:07:39,270 --> 00:07:37,759

the window and see the planet

179

00:07:41,110 --> 00:07:39,280

one of the thoughts that i had when i

180

00:07:43,909 --> 00:07:41,120

first got up here was

181

00:07:46,469 --> 00:07:43,919

we we really actually live on a planet i

182

00:07:48,150 --> 00:07:46,479

mean this is something that you know

183

00:07:51,990 --> 00:07:48,160

obviously you're you're not going to

184

00:07:54,869 --> 00:07:52,000

dispute that fact but to see the planet

185

00:07:56,710 --> 00:07:54,879

you just keep thinking we we really do

186

00:07:58,710 --> 00:07:56,720

live on a planet and we are in a solar

187

00:08:00,950 --> 00:07:58,720

system and we are flying through space

188

00:08:02,309 --> 00:08:00,960

right now

189

00:08:03,430 --> 00:08:02,319

so amazing

190

00:08:06,390 --> 00:08:03,440

um

191

00:08:09,270 --> 00:08:06,400

does being in space feel like an escape

192

00:08:14,469 --> 00:08:09,280

from your kind of like daily life or the

193

00:08:18,070 --> 00:08:16,390

i wouldn't say it's an escape

194

00:08:21,270 --> 00:08:18,080

it's it's really what we're trained to

195

00:08:23,270 --> 00:08:21,280

do so we train for years before we fly

196

00:08:25,749 --> 00:08:23,280

we practice all of the kinds of

197

00:08:28,390 --> 00:08:25,759

activities and experiments we do

198

00:08:30,390 --> 00:08:28,400

up here so we train for hundreds of

199

00:08:32,870 --> 00:08:30,400

thousands of hours on the ground so

200

00:08:34,230 --> 00:08:32,880

really it actually feels quite normal it

201
00:08:35,670 --> 00:08:34,240
feels like

202
00:08:37,350 --> 00:08:35,680
everything that i've been doing for the

203
00:08:40,709 --> 00:08:37,360
last seven years

204
00:08:42,949 --> 00:08:40,719
it just is all truly in low earth orbit

205
00:08:45,990 --> 00:08:42,959
this time instead of a simulator in one

206
00:08:46,870 --> 00:08:46,000
of our buildings at nasa

207
00:08:50,389 --> 00:08:46,880
cool

208
00:08:51,110 --> 00:08:50,399
um so one quick experiment for us

209
00:08:53,430 --> 00:08:51,120
an

210
00:08:55,030 --> 00:08:53,440
astronaut that we interviewed before so

211
00:08:56,870 --> 00:08:55,040
that it's really hard to wash your hair

212
00:08:58,949 --> 00:08:56,880
in space and so she uses a lot of dry

213
00:09:01,829 --> 00:08:58,959

shampoo and i was wondering if you could

214

00:09:06,150 --> 00:09:01,839

show us how it works to use dry shampoo

215

00:09:09,910 --> 00:09:08,389

yeah so um

216

00:09:11,750 --> 00:09:09,920

not sure where you got that information

217

00:09:14,870 --> 00:09:11,760

we don't uh we really don't have dry

218

00:09:16,230 --> 00:09:14,880

shampoo up here uh that's particulate

219

00:09:17,829 --> 00:09:16,240

that would float

220

00:09:19,350 --> 00:09:17,839

you wouldn't be able to really control

221

00:09:21,350 --> 00:09:19,360

it so

222

00:09:22,949 --> 00:09:21,360

we can wash our hair

223

00:09:25,030 --> 00:09:22,959

we do that a little bit less we like to

224

00:09:27,750 --> 00:09:25,040

conserve water up here

225

00:09:29,269 --> 00:09:27,760

but you can just take a normal drink bag

226

00:09:31,829 --> 00:09:29,279

this is what we

227

00:09:33,509 --> 00:09:31,839

and

228

00:09:35,509 --> 00:09:33,519

just use this put a little bit of water

229

00:09:38,150 --> 00:09:35,519

in your hair

230

00:09:40,070 --> 00:09:38,160

we use a small amount of shampoo and

231

00:09:41,350 --> 00:09:40,080

it's not that different than you would

232

00:09:43,990 --> 00:09:41,360

think

233

00:09:44,790 --> 00:09:44,000

in terms of what we what we do on earth

234

00:09:49,430 --> 00:09:44,800

so

235

00:09:51,990 --> 00:09:49,440

fascinating and completely different

236

00:09:54,710 --> 00:09:52,000

sometimes it is uh just as normal as you

237

00:09:57,670 --> 00:09:54,720

would expect on the planet

238

00:09:59,190 --> 00:09:57,680

all right one quick last question um a

239

00:10:01,190 --> 00:09:59,200

lot of people have this sort of

240

00:10:03,509 --> 00:10:01,200

melancholy feeling after they achieve a

241

00:10:05,750 --> 00:10:03,519

huge goal like going to space

242

00:10:07,269 --> 00:10:05,760

um like now what so

243

00:10:11,190 --> 00:10:07,279

how are you feeling about your return to

244

00:10:16,710 --> 00:10:14,069

i'm enjoying every moment in space uh

245

00:10:18,949 --> 00:10:16,720

it's really an amazing laboratory that

246

00:10:21,350 --> 00:10:18,959

we have up here i am looking forward to

247

00:10:23,350 --> 00:10:21,360

going back to earth and

248

00:10:25,350 --> 00:10:23,360

when we come back to the planet we don't

249

00:10:26,550 --> 00:10:25,360

just quit uh what we've been doing we

250

00:10:28,630 --> 00:10:26,560

take all of this knowledge and

251

00:10:31,590 --> 00:10:28,640

experience and we actually turn that

252

00:10:33,590 --> 00:10:31,600

back into nasa and work on future

253

00:10:35,590 --> 00:10:33,600

expeditions and future space flights so

254

00:10:37,590 --> 00:10:35,600

i'm really just looking forward to

255

00:10:39,829 --> 00:10:37,600

working with the ground teams getting

256

00:10:42,870 --> 00:10:39,839

back into mission control and

257

00:10:44,790 --> 00:10:42,880

redesigning the next set of hardware and

258

00:10:46,230 --> 00:10:44,800

experiments for future astronauts that

259

00:10:48,949 --> 00:10:46,240

are going to fly on board the space

260

00:10:48,959 --> 00:10:51,670

great

261

00:10:51,680 --> 00:10:56,389

all right i think that's all i have

262

00:11:00,150 --> 00:10:58,150

all right excellent it was great talking

263

00:11:03,190 --> 00:11:00,160

to you today i hope you enjoyed a little

264

00:11:04,470 --> 00:11:03,200

glimpse into space station life and

265

00:11:08,470 --> 00:11:04,480

we'd like to say

266

00:11:11,670 --> 00:11:08,480

hello from the crew of expedition 49

267

00:11:19,990 --> 00:11:14,790

station this is houston acr thank you

268

00:11:24,150 --> 00:11:22,389

thank you cosmopolitan.com station