



1
00:00:07,349 --> 00:00:02,629
station this is houston are you ready

2
00:00:11,549 --> 00:00:08,790
and the international space station is

3
00:00:13,589 --> 00:00:11,559
ready for the event

4
00:00:15,589 --> 00:00:13,599
collectspace.com this is mission control

5
00:00:17,029 --> 00:00:15,599
houston please call station for a voice

6
00:00:19,189 --> 00:00:17,039
check

7
00:00:22,630 --> 00:00:19,199
station this is collectspace.com how do

8
00:00:26,070 --> 00:00:24,470
i got you loud and clear how do you hear

9
00:00:27,349 --> 00:00:26,080
us

10
00:00:29,029 --> 00:00:27,359
loud and clear

11
00:00:31,189 --> 00:00:29,039
great to talk to you this morning sunny

12
00:00:33,110 --> 00:00:31,199
thanks for taking a few minutes of your

13
00:00:35,510 --> 00:00:33,120

time out to uh

14

00:00:38,229 --> 00:00:35,520

to answer some questions um

15

00:00:40,709 --> 00:00:38,239

and to jump directly into that

16

00:00:41,830 --> 00:00:40,719

you've been on board the iss for about

17

00:00:43,670 --> 00:00:41,840

three months

18

00:00:45,510 --> 00:00:43,680

if and if i did my math correct i think

19

00:00:48,389 --> 00:00:45,520

you you're within four days of your

20

00:00:50,630 --> 00:00:48,399

100th day aboard so congratulations

21

00:00:52,310 --> 00:00:50,640

uh by now does the station feel like

22

00:00:54,869 --> 00:00:52,320

home or are you staying at someone

23

00:00:56,950 --> 00:00:54,879

else's home or is it a really unusual

24

00:01:01,510 --> 00:00:56,960

hotel are you camping out at work inside

25

00:01:05,670 --> 00:01:02,790

it's definitely

26

00:01:07,750 --> 00:01:05,680

our home at this moment in time

27

00:01:09,990 --> 00:01:07,760

you might see my hair has grown a little

28

00:01:12,469 --> 00:01:10,000

bit longer i think i'm getting used to

29

00:01:14,469 --> 00:01:12,479

being up here and the long hair is is

30

00:01:16,149 --> 00:01:14,479

good with me so i think i think it's

31

00:01:18,390 --> 00:01:16,159

it's our home at this moment in time you

32

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

know we have our little things scattered

33

00:01:21,270 --> 00:01:20,080

here and there and we know where they

34

00:01:22,870 --> 00:01:21,280

are and um

35

00:01:24,710 --> 00:01:22,880

i think we have to clean up before the

36

00:01:26,469 --> 00:01:24,720

next crew comes here just like when you

37

00:01:27,670 --> 00:01:26,479

have visitors at your house you want to

38

00:01:32,230 --> 00:01:27,680

probably take this weekend or the

39

00:01:37,030 --> 00:01:34,469

the tv show the big bang theory recently

40

00:01:38,630 --> 00:01:37,040

had one of its characters fly to their

41

00:01:40,230 --> 00:01:38,640

version of the space station which to

42

00:01:41,590 --> 00:01:40,240

their credit look very much like where

43

00:01:43,670 --> 00:01:41,600

you're floating now

44

00:01:45,749 --> 00:01:43,680

uh one of the comedic story story lines

45

00:01:47,990 --> 00:01:45,759

was that the character desired gravity

46

00:01:49,990 --> 00:01:48,000

after being weightless for so long have

47

00:01:56,550 --> 00:01:50,000

you experienced that for example do you

48

00:01:59,190 --> 00:01:57,429

no

49

00:02:00,870 --> 00:01:59,200

actually i love being up here and i love

50

00:02:02,789 --> 00:02:00,880

floating around and i think you know the

51
00:02:05,830 --> 00:02:02,799
mindset really is you know it's not

52
00:02:07,749 --> 00:02:05,840
going to last forever ever so

53
00:02:09,990 --> 00:02:07,759
you know i think you take advantage of

54
00:02:11,910 --> 00:02:10,000
flying around as much as possible

55
00:02:13,510 --> 00:02:11,920
there are subconscious things that catch

56
00:02:14,949 --> 00:02:13,520
you off guard though you know and it

57
00:02:17,030 --> 00:02:14,959
took a little while to get used to

58
00:02:19,830 --> 00:02:17,040
falling asleep without laying down on a

59
00:02:22,229 --> 00:02:19,840
bed or having a pillow um still every

60
00:02:24,309 --> 00:02:22,239
now and then you know you take a bag of

61
00:02:25,910 --> 00:02:24,319
nuts and go like this you know like hold

62
00:02:27,670 --> 00:02:25,920
it up in the air to fall in your mouth

63
00:02:29,270 --> 00:02:27,680

and that's not gonna work so

64

00:02:31,190 --> 00:02:29,280

some of those little subconscious things

65

00:02:32,949 --> 00:02:31,200

catch you off guard but um you know

66

00:02:35,509 --> 00:02:32,959

being in microgravity and flying around

67

00:02:37,750 --> 00:02:35,519

in space is priceless and uh i mean i

68

00:02:41,190 --> 00:02:37,760

think uh we're cherishing every moment

69

00:02:44,470 --> 00:02:42,869

you'll be on space station until next

70

00:02:46,150 --> 00:02:44,480

month and that'll be just over four

71

00:02:49,110 --> 00:02:46,160

months and you previously spent six

72

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

months aboard on a prior expedition

73

00:02:53,670 --> 00:02:51,200

nasa and its international partners have

74

00:02:55,750 --> 00:02:53,680

now approved uh for a future crew to

75

00:02:57,750 --> 00:02:55,760

spend a year up there from your

76
00:02:59,750 --> 00:02:57,760
perspective what are the challenges you

77
00:03:05,190 --> 00:02:59,760
think that crew will face would you feel

78
00:03:08,710 --> 00:03:06,790
you know i i would love to spend a year

79
00:03:11,190 --> 00:03:08,720
on the space station it is a great place

80
00:03:13,750 --> 00:03:11,200
to live and work and you know since this

81
00:03:15,030 --> 00:03:13,760
uh subject has come up and i've heard a

82
00:03:17,030 --> 00:03:15,040
little bit about it and heard some of

83
00:03:18,949 --> 00:03:17,040
the science objectives and things like

84
00:03:20,390 --> 00:03:18,959
that that are associated with it

85
00:03:22,229 --> 00:03:20,400
you know the international space station

86
00:03:24,390 --> 00:03:22,239
is a great place to live for a year

87
00:03:26,470 --> 00:03:24,400
there's lots to do here there's science

88
00:03:27,830 --> 00:03:26,480

experiments you know there's working on

89

00:03:30,149 --> 00:03:27,840

the house you know every now and then

90

00:03:32,550 --> 00:03:30,159

something breaks uh there's crews and

91

00:03:35,830 --> 00:03:32,560

it's dynamic you know changing crews and

92

00:03:37,830 --> 00:03:35,840

so it would be really a good place to do

93

00:03:39,110 --> 00:03:37,840

that and if we're looking for the

94

00:03:41,270 --> 00:03:39,120

biological

95

00:03:43,110 --> 00:03:41,280

human side of it what happens uh to the

96

00:03:44,470 --> 00:03:43,120

human body over that long of a time you

97

00:03:46,630 --> 00:03:44,480

know this is the perfect place to do

98

00:03:49,030 --> 00:03:46,640

that and we have all the monitoring here

99

00:03:51,350 --> 00:03:49,040

to figure out um you know every step of

100

00:03:53,110 --> 00:03:51,360

the way what happens so yeah i would

101
00:03:54,630 --> 00:03:53,120
love to do it i know there's other folks

102
00:03:55,910 --> 00:03:54,640
in the office who would love to do it

103
00:03:57,190 --> 00:03:55,920
there's folks all over the world who

104
00:03:58,470 --> 00:03:57,200
would love to do it

105
00:04:00,710 --> 00:03:58,480
staying in space and looking at the

106
00:04:02,789 --> 00:04:00,720
planet for a year this close would be

107
00:04:04,470 --> 00:04:02,799
perfect

108
00:04:06,869 --> 00:04:04,480
well on the subject of spending years in

109
00:04:08,550 --> 00:04:06,879
space november 2nd will mark 12 years of

110
00:04:10,710 --> 00:04:08,560
continuous human presence on the

111
00:04:12,789 --> 00:04:10,720
international space station

112
00:04:14,550 --> 00:04:12,799
what in your opinion have we gained from

113
00:04:16,390 --> 00:04:14,560

the cumulative experience

114

00:04:20,870 --> 00:04:16,400

as it plot as it applies to the future

115

00:04:25,350 --> 00:04:22,790

wow that's a great question you know i

116

00:04:27,350 --> 00:04:25,360

was lucky enough to be at the launch of

117

00:04:29,670 --> 00:04:27,360

the first expedition crew

118

00:04:31,590 --> 00:04:29,680

to the international space station and

119

00:04:34,070 --> 00:04:31,600

so i can tell you just from personal

120

00:04:36,790 --> 00:04:34,080

relationships with people and

121

00:04:39,270 --> 00:04:36,800

partners from all the different agencies

122

00:04:41,270 --> 00:04:39,280

we've come a long way we've uh you know

123

00:04:43,189 --> 00:04:41,280

of course we've trusted each other

124

00:04:44,790 --> 00:04:43,199

before and building the space station

125

00:04:46,150 --> 00:04:44,800

and throughout the whole process while

126
00:04:47,830 --> 00:04:46,160
it's being built

127
00:04:50,710 --> 00:04:47,840
that's that has just been you know

128
00:04:52,710 --> 00:04:50,720
capitalized on for the last decade

129
00:04:54,390 --> 00:04:52,720
um as crew members we've got to know

130
00:04:56,790 --> 00:04:54,400
each other really well

131
00:04:59,590 --> 00:04:56,800
as as international partners for sharing

132
00:05:01,110 --> 00:04:59,600
information and engineering ideas

133
00:05:03,510 --> 00:05:01,120
learning from each other how other

134
00:05:07,510 --> 00:05:03,520
people tackle a problem

135
00:05:09,830 --> 00:05:07,520
i think that has just been you know

136
00:05:11,670 --> 00:05:09,840
accelerated throughout this program i

137
00:05:13,430 --> 00:05:11,680
think it's a role model program for many

138
00:05:14,390 --> 00:05:13,440

many other international programs on the

139

00:05:16,710 --> 00:05:14,400

ground

140

00:05:18,150 --> 00:05:16,720

and with that you know one of my own

141

00:05:19,590 --> 00:05:18,160

personal feelings is you know when you

142

00:05:22,790 --> 00:05:19,600

leave the planet

143

00:05:24,629 --> 00:05:22,800

being you don't necessarily leave it as

144

00:05:25,510 --> 00:05:24,639

a guy from this country or that country

145

00:05:27,430 --> 00:05:25,520

and so

146

00:05:30,469 --> 00:05:27,440

hopefully uh you know when we're going

147

00:05:35,990 --> 00:05:30,479

to other planets a little bit away from

148

00:05:40,469 --> 00:05:38,230

with regards to your times

149

00:05:42,230 --> 00:05:40,479

on board already uh you recently had a

150

00:05:44,070 --> 00:05:42,240

spacex dragon capsule and it's now

151

00:05:46,070 --> 00:05:44,080

famous ice cream delivery

152

00:05:48,070 --> 00:05:46,080

and you and your crew would do a

153

00:05:50,150 --> 00:05:48,080

halloween day delivery by a russian

154

00:05:52,150 --> 00:05:50,160

progress spacecraft given that were

155

00:05:53,830 --> 00:05:52,160

there any other surprise treats or

156

00:05:55,990 --> 00:05:53,840

tricks you found while unpacking the

157

00:05:57,749 --> 00:05:56,000

dragon or treats you're hoping to find

158

00:06:02,469 --> 00:05:57,759

on the progress when it arrives october

159

00:06:05,590 --> 00:06:04,309

well that's interesting halloween is

160

00:06:07,270 --> 00:06:05,600

happens to be one of my favorite

161

00:06:07,990 --> 00:06:07,280

holidays just because it's a lot of fun

162

00:06:13,909 --> 00:06:08,000

and

163

00:06:15,670 --> 00:06:13,919

it's exciting so we're hoping

164

00:06:18,309 --> 00:06:15,680

that we open the door and there'll be a

165

00:06:19,270 --> 00:06:18,319

little bit of treats in the progress

166

00:06:20,790 --> 00:06:19,280

but

167

00:06:22,790 --> 00:06:20,800

sort of as a little bit of a surprise

168

00:06:24,950 --> 00:06:22,800

for me i got a little bit of a costume

169

00:06:26,950 --> 00:06:24,960

from my folks for my birthday because my

170

00:06:29,430 --> 00:06:26,960

birthday happens to fall on uh

171

00:06:31,270 --> 00:06:29,440

uh national talk like a pirate day so i

172

00:06:32,950 --> 00:06:31,280

think we'll uh we'll all sit we're all

173

00:06:35,909 --> 00:06:32,960

set for costumes up here for halloween

174

00:06:38,390 --> 00:06:35,919

and hopefully we'll get some candy

175

00:06:40,070 --> 00:06:38,400

looking forward to seeing that um

176

00:06:41,590 --> 00:06:40,080

i understand you're preparing now for a

177

00:06:43,670 --> 00:06:41,600

space walk your second during this

178

00:06:45,430 --> 00:06:43,680

expedition but this one to repair an

179

00:06:47,670 --> 00:06:45,440

ammonia leak was not something you

180

00:06:49,270 --> 00:06:47,680

anticipated before launching

181

00:06:51,189 --> 00:06:49,280

knowing the normal procedures that go

182

00:06:52,790 --> 00:06:51,199

through preparing for a spacewalk when

183

00:06:54,230 --> 00:06:52,800

training on the ground is it

184

00:06:55,830 --> 00:06:54,240

substantially more difficult than

185

00:06:58,070 --> 00:06:55,840

undertaking to get ready for while in

186

00:07:02,710 --> 00:06:58,080

space and how challenging is this repair

187

00:07:06,309 --> 00:07:05,110

you know again a good question um you

188

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

know the

189

00:07:09,510 --> 00:07:08,000

it takes a lot of time to prepare for

190

00:07:10,870 --> 00:07:09,520

these things but luckily there's a team

191

00:07:13,749 --> 00:07:10,880

of people on the ground that are doing

192

00:07:17,029 --> 00:07:13,759

most of the leg work to get it done

193

00:07:19,270 --> 00:07:17,039

um you know going into the nba other uh

194

00:07:20,710 --> 00:07:19,280

astronauts are in the neutral buoyancy

195

00:07:21,510 --> 00:07:20,720

lab going through the procedures that

196

00:07:24,309 --> 00:07:21,520

the

197

00:07:26,230 --> 00:07:24,319

eva folks have developed and thought

198

00:07:28,230 --> 00:07:26,240

about for a long time about how they

199

00:07:29,749 --> 00:07:28,240

might handle something like this

200

00:07:31,990 --> 00:07:29,759

we have the luxury of actually looking

201
00:07:33,749 --> 00:07:32,000
out the window the cupola window and

202
00:07:35,830 --> 00:07:33,759
seeing where our work site is and seeing

203
00:07:38,629 --> 00:07:35,840
how we might get there as we call it

204
00:07:40,790 --> 00:07:38,639
translate there and and then

205
00:07:42,629 --> 00:07:40,800
with our group of folks on the ground we

206
00:07:44,869 --> 00:07:42,639
review all of the procedures and

207
00:07:46,629 --> 00:07:44,879
understand what we'll have to do

208
00:07:49,270 --> 00:07:46,639
we also have equipment up here that we

209
00:07:50,629 --> 00:07:49,280
can sort of practice on inside some of

210
00:07:51,589 --> 00:07:50,639
the connectors

211
00:07:53,350 --> 00:07:51,599
and so we have a really good

212
00:07:54,710 --> 00:07:53,360
understanding about what the eva is

213
00:07:55,909 --> 00:07:54,720

supposed to be like but

214

00:07:57,830 --> 00:07:55,919

you know i always say it's not over

215

00:07:58,950 --> 00:07:57,840

until it's over and it seems like

216

00:08:00,790 --> 00:07:58,960

there's more things up here that

217

00:08:02,710 --> 00:08:00,800

surprise you than not so our

218

00:08:04,309 --> 00:08:02,720

skills-based training i think is the big

219

00:08:06,469 --> 00:08:04,319

the biggest benefit that has got us

220

00:08:08,469 --> 00:08:06,479

ready for any type of surprise that we

221

00:08:10,230 --> 00:08:08,479

might have to handle and tackle out

222

00:08:11,749 --> 00:08:10,240

there along with the of course the

223

00:08:13,029 --> 00:08:11,759

talented group of folks on the ground

224

00:08:16,390 --> 00:08:13,039

who are thinking of every little

225

00:08:19,270 --> 00:08:17,749

you're right now commanding a crew of

226

00:08:21,270 --> 00:08:19,280

three but you'll soon be joined by

227

00:08:23,029 --> 00:08:21,280

another three crew members how eager are

228

00:08:24,950 --> 00:08:23,039

you for their arrival and are there

229

00:08:26,790 --> 00:08:24,960

benefits for having just three people

230

00:08:32,149 --> 00:08:26,800

aboard the station and having that whole

231

00:08:35,029 --> 00:08:33,829

well it's sort of quiet up here which is

232

00:08:36,790 --> 00:08:35,039

sort of nice

233

00:08:38,310 --> 00:08:36,800

with just three we know we're really

234

00:08:40,949 --> 00:08:38,320

seriously we're really looking forward

235

00:08:43,750 --> 00:08:40,959

to the next group group coming up here

236

00:08:45,829 --> 00:08:43,760

it always adds a little more dynamic

237

00:08:47,750 --> 00:08:45,839

atmosphere when people are flying around

238

00:08:49,829 --> 00:08:47,760

you know right now only two of us are

239

00:08:52,550 --> 00:08:49,839

living up in node two soon it will be

240

00:08:55,509 --> 00:08:52,560

four so that means a lot of traffic back

241

00:08:57,509 --> 00:08:55,519

and forth but that makes it fun um being

242

00:08:59,269 --> 00:08:57,519

being a crew of three was really nice

243

00:09:00,870 --> 00:08:59,279

also of course it sort of calmed

244

00:09:04,150 --> 00:09:00,880

everything down made things a little bit

245

00:09:06,949 --> 00:09:04,160

more relaxing um uh even though we still

246

00:09:09,110 --> 00:09:06,959

had some dynamic ops but we're ready for

247

00:09:10,790 --> 00:09:09,120

our our guests and the new residents of

248

00:09:12,710 --> 00:09:10,800

the international space station kevin

249

00:09:14,630 --> 00:09:12,720

oleg and evgeny it's going to be great

250

00:09:15,990 --> 00:09:14,640

to have them up here and like i said

251
00:09:18,389 --> 00:09:16,000
we're cleaning house making sure it's

252
00:09:20,550 --> 00:09:18,399
all ready for them

253
00:09:22,230 --> 00:09:20,560
and as my time here runs out let me ask

254
00:09:24,870 --> 00:09:22,240
you know launching with kevin ford and

255
00:09:27,190 --> 00:09:24,880
his crew are also 32 fish for jack says

256
00:09:28,790 --> 00:09:27,200
aquatic habitat um reading your blog you

257
00:09:31,030 --> 00:09:28,800
seem to like checking in on the spiders

258
00:09:32,790 --> 00:09:31,040
that are now earthbound on spacex's

259
00:09:34,949 --> 00:09:32,800
dragon are you anticipating the fish

260
00:09:39,910 --> 00:09:34,959
will take the place of your

261
00:09:43,350 --> 00:09:41,590
well as a matter of fact we were just

262
00:09:46,389 --> 00:09:43,360
looking at the we called the aqm the

263
00:09:48,389 --> 00:09:46,399

aquarium over in the japanese module

264

00:09:50,790 --> 00:09:48,399

yesterday azaki was setting it all up

265

00:09:52,470 --> 00:09:50,800

getting it all ready so and i was asking

266

00:09:55,990 --> 00:09:52,480

him all sorts of questions about it so

267

00:09:58,470 --> 00:09:56,000

i'm i have a soft spot in my heart for

268

00:10:00,710 --> 00:09:58,480

uh animals and so i'll be really excited

269

00:10:02,790 --> 00:10:00,720

to see them and see how you know they

270

00:10:04,470 --> 00:10:02,800

change and they grow or how they develop

271

00:10:06,389 --> 00:10:04,480

and and what we can learn from them

272

00:10:08,310 --> 00:10:06,399

because uh you know part of them coming

273

00:10:09,750 --> 00:10:08,320

up here is is of course not just for our

274

00:10:11,670 --> 00:10:09,760

entertainment but they are a science

275

00:10:13,509 --> 00:10:11,680

experiment it will be very interesting

276

00:10:15,030 --> 00:10:13,519

to see their skeletal growth patterns

277

00:10:17,030 --> 00:10:15,040

and what happens with their muscles up

278

00:10:18,790 --> 00:10:17,040

here and could and you know enlighten us

279

00:10:21,269 --> 00:10:18,800

to some of the things that are going on

280

00:10:22,790 --> 00:10:21,279

with our own selves so yeah i'm psyched

281

00:10:25,590 --> 00:10:22,800

that they'll be here and you betcha

282

00:10:27,269 --> 00:10:25,600

you'll you'll hear about them in my blog

283

00:10:29,030 --> 00:10:27,279

well thank you for uh taking the time

284

00:10:33,509 --> 00:10:29,040

today been great talking to you and

285

00:10:33,519 --> 00:10:41,269

thank you is always fun

286

00:10:48,550 --> 00:10:43,829

station this is houston acr that

287

00:10:52,630 --> 00:10:50,550

thank you collect space station please