



1
00:00:09,049 --> 00:00:03,290
station this is Houston are you ready

2
00:00:14,419 --> 00:00:09,059
for the event Houston this is station

3
00:00:16,250 --> 00:00:14,429
where we are ready space com this is

4
00:00:19,609 --> 00:00:16,260
Mission Control Houston please call

5
00:00:25,189 --> 00:00:19,619
station from a voice check station this

6
00:00:26,660 --> 00:00:25,199
is space com how do you hear me hello

7
00:00:29,779 --> 00:00:26,670
Denise Mike Fossum with you loud and

8
00:00:31,790 --> 00:00:29,789
clear hi commander so nice to speak to

9
00:00:33,860 --> 00:00:31,800
you this morning I've got a fun one to

10
00:00:35,270 --> 00:00:33,870
start us off is there anything special

11
00:00:41,270 --> 00:00:35,280
planned for Halloween on the space

12
00:00:43,369 --> 00:00:41,280
station you know we haven't looked

13
00:00:45,470 --> 00:00:43,379

forward to Halloween we have a there is

14

00:00:47,810 --> 00:00:45,480

a bag of some of the personal items up

15

00:00:49,790 --> 00:00:47,820

here that the crews have brought up in

16

00:00:51,560 --> 00:00:49,800

the past right on the top are the

17

00:00:52,970 --> 00:00:51,570

Christmas kind of items I'm going to

18

00:00:54,500 --> 00:00:52,980

look underneath that and see if we have

19

00:00:58,490 --> 00:00:54,510

some masks or something we can have a

20

00:01:00,260 --> 00:00:58,500

little fun with that day commander

21

00:01:02,660 --> 00:01:00,270

you've been living in space for a couple

22

00:01:05,240 --> 00:01:02,670

months now with the population of Earth

23

00:01:07,160 --> 00:01:05,250

set to surpass 7 billion people I'm

24

00:01:10,070 --> 00:01:07,170

curious as to how evident humans are

25

00:01:11,929 --> 00:01:10,080

from space is it at all evident how much

26
00:01:18,859 --> 00:01:11,939
the population has grown either and how

27
00:01:20,179 --> 00:01:18,869
many lights you see I'm not sure you

28
00:01:21,800 --> 00:01:20,189
know quite how to measure that there's

29
00:01:24,380 --> 00:01:21,810
places on the earth where it's very

30
00:01:25,940 --> 00:01:24,390
evident there are not many people going

31
00:01:27,590 --> 00:01:25,950
across parts of the rain forests in

32
00:01:30,289 --> 00:01:27,600
Africa and South America you could see

33
00:01:32,929 --> 00:01:30,299
the unbroken dark green forest canopy

34
00:01:34,640 --> 00:01:32,939
that goes on seemingly without end and

35
00:01:37,340 --> 00:01:34,650
then of course you do reach the end and

36
00:01:41,359 --> 00:01:37,350
you see that that where where people are

37
00:01:43,130 --> 00:01:41,369
moving in and and you know in changing

38
00:01:44,780 --> 00:01:43,140

the earth changing the face of it it's

39

00:01:47,749 --> 00:01:44,790

really the most evident though at night

40

00:01:49,639 --> 00:01:47,759

when the lights come up and you can see

41

00:01:52,190 --> 00:01:49,649

where the industrialized world lives

42

00:01:54,499 --> 00:01:52,200

it's quite stunning to it to spend time

43

00:01:55,880 --> 00:01:54,509

with to light adjust in the cupola or

44

00:01:58,219 --> 00:01:55,890

one of the other windows in the space

45

00:02:00,469 --> 00:01:58,229

station and go across parts of the world

46

00:02:02,120 --> 00:02:00,479

that are heavily populated and you see

47

00:02:05,030 --> 00:02:02,130

the cities you can see the highways

48

00:02:08,240 --> 00:02:05,040

across remote areas in certain countries

49

00:02:10,520 --> 00:02:08,250

and then the small bits of communities

50

00:02:12,650 --> 00:02:10,530

that sprout up off of those highways or

51
00:02:14,690 --> 00:02:12,660
rail railways perhaps

52
00:02:16,460 --> 00:02:14,700
so it's it's really fascinating I think

53
00:02:19,340 --> 00:02:16,470
to look at this the earth at night

54
00:02:21,350 --> 00:02:19,350
because it gives you that idea of the

55
00:02:24,980 --> 00:02:21,360
footprint of the presence a little more

56
00:02:26,630 --> 00:02:24,990
clearly it's fascinating and we also

57
00:02:28,160 --> 00:02:26,640
asked our readers what they were most

58
00:02:29,990 --> 00:02:28,170
curious about living and working from

59
00:02:32,540 --> 00:02:30,000
space so I'm going to ask a few of their

60
00:02:34,730 --> 00:02:32,550
questions now one of our readers Vicki

61
00:02:36,290 --> 00:02:34,740
Barker would like to know what's the one

62
00:02:42,170 --> 00:02:36,300
thing besides friends and family that

63
00:02:44,660 --> 00:02:42,180

you miss most about home a good question

64

00:02:46,490 --> 00:02:44,670

from Vicki Barker I think for me it's

65

00:02:48,650 --> 00:02:46,500

fresh fruit and vegetables would be near

66

00:02:50,780 --> 00:02:48,660

the top of my list because if eventually

67

00:02:54,800 --> 00:02:50,790

get a little tired of eating food out of

68

00:02:57,260 --> 00:02:54,810

a pouch rehydrated or or stabilized I

69

00:02:59,150 --> 00:02:57,270

think a really good pizza is high on my

70

00:03:02,360 --> 00:02:59,160

list of things to so it's it's creature

71

00:03:04,610 --> 00:03:02,370

comforts things that that I want to eat

72

00:03:09,680 --> 00:03:04,620

another thing that I miss are just the

73

00:03:13,670 --> 00:03:09,690

sounds and smells of nature of growing

74

00:03:15,650 --> 00:03:13,680

things of the damp moist earth that is

75

00:03:19,070 --> 00:03:15,660

from from which springs forth life I

76

00:03:21,260 --> 00:03:19,080

really missed that great and Rob would

77

00:03:22,580 --> 00:03:21,270

like to know would you command a mission

78

00:03:24,590 --> 00:03:22,590

to Mars right now if it were possible

79

00:03:26,690 --> 00:03:24,600

and if you were given the choice and if

80

00:03:34,310 --> 00:03:26,700

so what top three personal items would

81

00:03:36,680 --> 00:03:34,320

you bring to leave there Wow the first

82

00:03:38,960 --> 00:03:36,690

one I can answer hands down absolutely

83

00:03:41,390 --> 00:03:38,970

when I was a child dreaming about going

84

00:03:43,010 --> 00:03:41,400

into space i started a notebook on Mars

85

00:03:46,370 --> 00:03:43,020

because I was pretty sure I was going to

86

00:03:47,780 --> 00:03:46,380

see human footprints on Mars and that I

87

00:03:50,000 --> 00:03:47,790

might have the chance to put those

88

00:03:52,340 --> 00:03:50,010

footprints on there myself or add mine

89

00:03:54,530 --> 00:03:52,350

to others I don't think it's likely i'm

90

00:03:57,260 --> 00:03:54,540

going to be going to Mars now but I do

91

00:03:59,330 --> 00:03:57,270

still think that I will see that in my

92

00:04:03,380 --> 00:03:59,340

lifetime in our lifetimes and look

93

00:04:06,140 --> 00:04:03,390

forward to it a lot I'd have to not sure

94

00:04:09,290 --> 00:04:06,150

what I would leave what I would take to

95

00:04:12,740 --> 00:04:09,300

leave on Mars as just part of

96

00:04:17,449 --> 00:04:12,750

representing humankind I'll have to pass

97

00:04:19,070 --> 00:04:17,459

on that one Tim Greene asks despite

98

00:04:20,930 --> 00:04:19,080

having gone through countless hours of

99

00:04:22,640 --> 00:04:20,940

training what is surprised you the most

100

00:04:27,770 --> 00:04:22,650

on the International Space Station that

101
00:04:32,490 --> 00:04:29,749
you know that's a really interesting

102
00:04:35,670 --> 00:04:32,500
interesting question not very much

103
00:04:37,379 --> 00:04:35,680
because our training is extensive but as

104
00:04:39,270 --> 00:04:37,389
with all training for this kind of

105
00:04:42,270 --> 00:04:39,280
business most of your training focuses

106
00:04:43,800 --> 00:04:42,280
on the emergency scenarios and and when

107
00:04:45,719 --> 00:04:43,810
you really have to get into the details

108
00:04:49,050 --> 00:04:45,729
of knowing the systems knowing how to

109
00:04:51,779 --> 00:04:49,060
how to respond and it's critical that

110
00:04:54,510 --> 00:04:51,789
you know all of those things for an

111
00:04:56,339 --> 00:04:54,520
emergency situation but thankfully we

112
00:04:58,800 --> 00:04:56,349
have very little opportunity to exercise

113
00:05:00,930 --> 00:04:58,810

those up here and so there's more Oh

114

00:05:03,029 --> 00:05:00,940
on-the-job training for a lot of the

115

00:05:04,890 --> 00:05:03,039
payloads work we do and the simple

116

00:05:07,170 --> 00:05:04,900
things like going through and cleaning

117

00:05:08,730 --> 00:05:07,180
all of the filters you know and things

118

00:05:10,950 --> 00:05:08,740
like that and so for me that was a

119

00:05:14,399 --> 00:05:10,960
little bit of a surprise I found a

120

00:05:16,200 --> 00:05:14,409
filter just last week that I had not

121

00:05:18,870 --> 00:05:16,210
cleaned in a while I didn't know it was

122

00:05:20,339 --> 00:05:18,880
there and that we were measuring airflow

123

00:05:22,800 --> 00:05:20,349
doing some air flow measurements and it

124

00:05:24,600 --> 00:05:22,810
was a little low and Mission Control

125

00:05:26,520 --> 00:05:24,610
asked me to check this filter I zazu

126

00:05:27,839 --> 00:05:26,530

that's going to be a problem opened up

127

00:05:30,469 --> 00:05:27,849

the panel and there was a you know big

128

00:05:32,790 --> 00:05:30,479

furball back there and so that's just

129

00:05:34,920 --> 00:05:32,800

some of the realities of living and

130

00:05:36,839 --> 00:05:34,930

working in space and and taking over a

131

00:05:39,270 --> 00:05:36,849

complex it's this big longer and wider

132

00:05:41,550 --> 00:05:39,280

than a football field and a lot of a lot

133

00:05:44,180 --> 00:05:41,560

of details hidden behind little panels

134

00:05:47,159 --> 00:05:44,190

that you didn't even know we're there

135

00:05:49,140 --> 00:05:47,169

Vince asks what do you feel is needed to

136

00:05:51,450 --> 00:05:49,150

recapture the imagination and passion to

137

00:05:53,399 --> 00:05:51,460

people to explore the stars with budget

138

00:05:54,899 --> 00:05:53,409

cuts in the weak economy what can we do

139

00:05:56,550 --> 00:05:54,909

to inspire and drive our young people

140

00:06:01,860 --> 00:05:56,560

and our governments to make exploration

141

00:06:03,180 --> 00:06:01,870

an important priority events continue to

142

00:06:04,740 --> 00:06:03,190

tell the story and that's what I'm

143

00:06:06,180 --> 00:06:04,750

trying to do up here along with the

144

00:06:07,709 --> 00:06:06,190

other work that we're doing is just to

145

00:06:10,379 --> 00:06:07,719

share the story of what we're doing the

146

00:06:12,059 --> 00:06:10,389

successes the failures the things that

147

00:06:14,399 --> 00:06:12,069

are that are hard to things that are fun

148

00:06:16,290 --> 00:06:14,409

because it's an amazing adventure it

149

00:06:18,059 --> 00:06:16,300

really is and I think it's worth doing I

150

00:06:20,010 --> 00:06:18,069

think it really speaks to the pioneering

151

00:06:22,740 --> 00:06:20,020

spirit that's part of being an American

152

00:06:25,260 --> 00:06:22,750

and that that wants to explore wants to

153

00:06:27,659 --> 00:06:25,270

find ways to reach out to new places and

154

00:06:29,490 --> 00:06:27,669

figure out how not just to visit them

155

00:06:32,969 --> 00:06:29,500

but how to tame them and how to make a

156

00:06:35,639 --> 00:06:32,979

Mars and and to to live there not just

157

00:06:37,800 --> 00:06:35,649

visit which has been a great part of my

158

00:06:38,850 --> 00:06:37,810

experience having visited space twice on

159

00:06:40,589 --> 00:06:38,860

short missions

160

00:06:43,200 --> 00:06:40,599

and now living here for months it's a

161

00:06:44,820 --> 00:06:43,210

very very different experience and I

162

00:06:46,409 --> 00:06:44,830

think we just need to continue to tell

163

00:06:48,990 --> 00:06:46,419

that story and to capture the

164

00:06:50,999 --> 00:06:49,000

imagination because as you capture the

165

00:06:54,119 --> 00:06:51,009

public's imagination and the imagination

166

00:06:56,580 --> 00:06:54,129

of not just young kids but even the

167

00:06:58,290 --> 00:06:56,590

college-age kids and and other people

168

00:06:59,610 --> 00:06:58,300

early in their working careers that want

169

00:07:01,830 --> 00:06:59,620

to make a difference in some way they're

170

00:07:02,999 --> 00:07:01,840

not all going to fly in space they're

171

00:07:04,890 --> 00:07:03,009

not all going to get involved in the

172

00:07:07,080 --> 00:07:04,900

space program but through technology we

173

00:07:08,550 --> 00:07:07,090

can influence our world and a lot of the

174

00:07:10,589 --> 00:07:08,560

problems of our world have come about

175

00:07:12,540 --> 00:07:10,599

because of advances in technology we

176

00:07:14,429 --> 00:07:12,550

like the lights on so we build power

177

00:07:16,200 --> 00:07:14,439

plants and there's a downside to that

178

00:07:18,420 --> 00:07:16,210

but technology is going to be our

179

00:07:19,890 --> 00:07:18,430

solution for the future to to help clean

180

00:07:21,869 --> 00:07:19,900

those up and find ways to use our

181

00:07:27,029 --> 00:07:21,879

resources more responsibly leave a

182

00:07:28,950 --> 00:07:27,039

smaller human footprint Tim Nunez asks

183

00:07:30,689 --> 00:07:28,960

well I'm sure that NASA thoroughly

184

00:07:32,429 --> 00:07:30,699

screened for claustrophobia do you ever

185

00:07:34,230 --> 00:07:32,439

feel strained or otherwise impacted

186

00:07:40,950 --> 00:07:34,240

after months of consigned living and if

187

00:07:43,019 --> 00:07:40,960

so how do you alleviate this yes we are

188

00:07:44,760 --> 00:07:43,029

see it we part of the screening is for

189

00:07:46,079 --> 00:07:44,770

claustrophobia and for good reason

190

00:07:49,379 --> 00:07:46,089

because it you would not be a happy

191

00:07:51,089 --> 00:07:49,389

camper shoved into the particularly into

192

00:07:53,670 --> 00:07:51,099

the spacecraft for getting up here once

193

00:07:55,619 --> 00:07:53,680

you get to the space station it there's

194

00:07:57,959 --> 00:07:55,629

there's room up here and it's big enough

195

00:08:00,990 --> 00:07:57,969

that we have some room to work alone

196

00:08:02,670 --> 00:08:01,000

sometimes and you can we're all working

197

00:08:05,129 --> 00:08:02,680

actually in different corners of the

198

00:08:08,309 --> 00:08:05,139

space station frequently I daily we're

199

00:08:09,869 --> 00:08:08,319

working separate from each other and so

200

00:08:12,659 --> 00:08:09,879

there's there's there's room to get away

201
00:08:14,369 --> 00:08:12,669
and if you really have to you know want

202
00:08:17,070 --> 00:08:14,379
to just get away and think about home

203
00:08:20,159 --> 00:08:17,080
you can go to the cupola and watch home

204
00:08:22,860 --> 00:08:20,169
go by underneath you or make a phone

205
00:08:25,800 --> 00:08:22,870
call literally to home to talk to our

206
00:08:28,709 --> 00:08:25,810
families and so I am surprised really at

207
00:08:31,320 --> 00:08:28,719
at how I don't think about being cooped

208
00:08:33,269 --> 00:08:31,330
up here at all it I it's hard for me to

209
00:08:35,250 --> 00:08:33,279
comprehend having been here already for

210
00:08:37,290 --> 00:08:35,260
four and a half months and it would just

211
00:08:40,350 --> 00:08:37,300
it just doesn't seem like it at all it's

212
00:08:43,079 --> 00:08:40,360
it's a it's a great place and it doesn't

213
00:08:46,889 --> 00:08:43,089

feel small to me I we get along fine and

214

00:08:48,750 --> 00:08:46,899

that's a really good thing Milton Rivera

215

00:08:50,819 --> 00:08:48,760

asks when I see pictures of Earth from

216

00:08:52,170 --> 00:08:50,829

space i see a miracle what do you assign

217

00:08:57,660 --> 00:08:52,180

to see and are you still in

218

00:09:00,540 --> 00:08:57,670

of the view out of the windows well

219

00:09:02,430 --> 00:09:00,550

that's a really good question and I have

220

00:09:04,980 --> 00:09:02,440

to say that on my first shuttle flight

221

00:09:07,230 --> 00:09:04,990

one of my jobs as soon as the engines

222

00:09:08,880 --> 00:09:07,240

cut off was just unstrap and grab

223

00:09:11,550 --> 00:09:08,890

cameras and jump up to the window to

224

00:09:13,880 --> 00:09:11,560

look out and get pictures of the

225

00:09:18,570 --> 00:09:13,890

external fuel tank as it fell away and

226
00:09:21,120 --> 00:09:18,580
for me after dreaming from childhood and

227
00:09:22,590 --> 00:09:21,130
working through my you know education

228
00:09:26,190 --> 00:09:22,600
and professional career for this

229
00:09:27,930 --> 00:09:26,200
opportunity finally be it struck me

230
00:09:30,000 --> 00:09:27,940
looking out the window that I'm not

231
00:09:32,699 --> 00:09:30,010
looking at a video I'm not looking at a

232
00:09:35,250 --> 00:09:32,709
picture i'm looking through a lot of

233
00:09:37,280 --> 00:09:35,260
layers of glass with my own eyes out the

234
00:09:39,570 --> 00:09:37,290
window at the North Atlantic with a

235
00:09:41,760 --> 00:09:39,580
dabbling of white clouds over the top

236
00:09:43,949 --> 00:09:41,770
and this curbed horizon with this

237
00:09:45,990 --> 00:09:43,959
impossibly thin layer of atmosphere and

238
00:09:48,870 --> 00:09:46,000

then a black sky up above and what

239

00:09:51,150 --> 00:09:48,880

struck me immediately was I'm looking at

240

00:09:52,920 --> 00:09:51,160

the Earth from God's point of view

241

00:09:56,130 --> 00:09:52,930

looking down at the earth like this and

242

00:09:59,130 --> 00:09:56,140

that does strike me the same way you

243

00:10:00,960 --> 00:09:59,140

know as a technical person I couldn't

244

00:10:03,510 --> 00:10:00,970

claim to be a scientist but as a

245

00:10:06,900 --> 00:10:03,520

technical person I do also appreciate

246

00:10:09,329 --> 00:10:06,910

the the processes of nature the the

247

00:10:11,790 --> 00:10:09,339

geology I love going across the parts of

248

00:10:13,829 --> 00:10:11,800

the planet where the rocks really stand

249

00:10:16,800 --> 00:10:13,839

out to see the geology to see the fault

250

00:10:19,620 --> 00:10:16,810

lines the mountains the oceans it's a

251

00:10:21,390 --> 00:10:19,630

fascinating thing to watch well I think

252

00:10:23,160 --> 00:10:21,400

we're at the end of our time commander

253

00:10:24,300 --> 00:10:23,170

fossum thank you so much good luck with

254

00:10:29,430 --> 00:10:24,310

the remainder of your mission and have a

255

00:10:34,199 --> 00:10:29,440

safe trip home thanks Denise I really

256

00:10:36,930 --> 00:10:34,209

enjoyed talking to you station this is

257

00:10:38,730 --> 00:10:36,940

Houston ACR that concludes the space com

258

00:10:44,010 --> 00:10:38,740

portion of the event please stand by for

259

00:10:48,980 --> 00:10:44,020

a voice check from ABC radio station

260

00:10:54,720 --> 00:10:51,660

hey Vic Mike Fossum on the space station

261

00:10:58,560 --> 00:10:54,730

loud and clear good morning Mike good to

262

00:10:59,970 --> 00:10:58,570

see you tell me a little bit about

263

00:11:02,250 --> 00:10:59,980

scooted by Harry good to talk to you

264

00:11:03,600 --> 00:11:02,260

life is different now that the Space

265

00:11:08,430 --> 00:11:03,610

Shuttle is no longer bringing you

266

00:11:13,000 --> 00:11:11,079

well it is different the pace of things

267

00:11:14,230 --> 00:11:13,010

changed when I arrived of course I've

268

00:11:18,220 --> 00:11:14,240

been here twice as part of that

269

00:11:20,680 --> 00:11:18,230

whirlwind shuttle crew experience and

270

00:11:22,600 --> 00:11:20,690

when I arrived we were a few weeks away

271

00:11:24,370 --> 00:11:22,610

from the arrival of Atlantis for the

272

00:11:26,260 --> 00:11:24,380

final shuttle mission and so we jumped

273

00:11:28,000 --> 00:11:26,270

immediately into preparations for that

274

00:11:31,090 --> 00:11:28,010

and it's a different ball game when

275

00:11:32,230 --> 00:11:31,100

there's an absolute date that you're

276

00:11:34,170 --> 00:11:32,240

working toward and you have a lot of

277

00:11:36,280 --> 00:11:34,180

work to do and it was pretty frantic

278

00:11:38,829 --> 00:11:36,290

frantic maybe not the right word but it

279

00:11:40,720 --> 00:11:38,839

was really busy working up to that you

280

00:11:42,100 --> 00:11:40,730

know it since that that part of that you

281

00:11:43,960 --> 00:11:42,110

know and going through the mission and

282

00:11:46,180 --> 00:11:43,970

it was just a wonderful experience it

283

00:11:47,710 --> 00:11:46,190

was a very emotional experience too but

284

00:11:49,540 --> 00:11:47,720

now we're in a different phase of

285

00:11:51,790 --> 00:11:49,550

operations and this is why we built the

286

00:11:54,220 --> 00:11:51,800

space station so we could continue and

287

00:11:56,620 --> 00:11:54,230

really concentrate not on preparations

288

00:11:59,470 --> 00:11:56,630

for a shuttle docking and more assembly

289

00:12:03,190 --> 00:11:59,480

but concentrate on the science

290

00:12:05,620 --> 00:12:03,200

objectives and we've had a lot of really

291

00:12:07,510 --> 00:12:05,630

good experiences and even fun activating

292

00:12:10,180 --> 00:12:07,520

the new facilities and changing out the

293

00:12:12,579 --> 00:12:10,190

different samples and and getting a lot

294

00:12:14,800 --> 00:12:12,589

of different science projects up and

295

00:12:16,449 --> 00:12:14,810

running and it's been great and so the

296

00:12:19,300 --> 00:12:16,459

focus has changed instead of that

297

00:12:20,949 --> 00:12:19,310

frantic assembly operations shuttle

298

00:12:24,280 --> 00:12:20,959

docked ops it's it's more to the

299

00:12:26,530 --> 00:12:24,290

utilization it's a great thing have you

300

00:12:28,120 --> 00:12:26,540

already got a long list of things that

301

00:12:29,680 --> 00:12:28,130

you would like the shuttle to bring up

302

00:12:38,380 --> 00:12:29,690

to you except the shuttles not there

303

00:12:41,199 --> 00:12:38,390

anymore surprisingly not uh the it they

304

00:12:43,090 --> 00:12:41,209

brought so much this time we have you

305

00:12:45,850 --> 00:12:43,100

know food and supplies to last for many

306

00:12:47,890 --> 00:12:45,860

months some things up to a year so we're

307

00:12:49,840 --> 00:12:47,900

in in really good shape there there's a

308

00:12:51,460 --> 00:12:49,850

you know a small list of things it's

309

00:12:53,320 --> 00:12:51,470

like okay next time we get a chance in

310

00:12:55,930 --> 00:12:53,330

fact the progress flight are the proper

311

00:12:57,670 --> 00:12:55,940

we have a progress fight in a few weeks

312

00:12:59,079 --> 00:12:57,680

the end of the month and you know

313

00:13:01,210 --> 00:12:59,089

they're bringing stuff up and there was

314

00:13:02,860 --> 00:13:01,220

a there was move in Houston dislike okay

315

00:13:04,780 --> 00:13:02,870

what are our top priority items to get

316

00:13:06,220 --> 00:13:04,790

up there and you know there's a few

317

00:13:08,890 --> 00:13:06,230

things coming up with it there's a few

318

00:13:11,740 --> 00:13:08,900

things coming up with the next crew on

319

00:13:14,230 --> 00:13:11,750

the Soyuz so we have cargo capability

320

00:13:16,630 --> 00:13:14,240

you know in place you know we've had a

321

00:13:18,130 --> 00:13:16,640

little I mean we've had of course with

322

00:13:20,230 --> 00:13:18,140

the progress accident

323

00:13:21,610 --> 00:13:20,240

then that cargo shipped down we've lost

324

00:13:23,620 --> 00:13:21,620

some things there but there was nothing

325

00:13:27,490 --> 00:13:23,630

particularly critical in that and we're

326

00:13:30,160 --> 00:13:27,500

supply we're well supplied at this point

327

00:13:33,160 --> 00:13:30,170

in your flight Mike what do you miss

328

00:13:36,130 --> 00:13:33,170

most is it it's fall how about apples

329

00:13:41,410 --> 00:13:36,140

and leaves on the ground you have a

330

00:13:44,470 --> 00:13:41,420

grandchild that kind of thing you bet

331

00:13:47,110 --> 00:13:44,480

well I yeah you i miss my granddaughter

332

00:13:49,870 --> 00:13:47,120

that's for sure she was very young when

333

00:13:51,460 --> 00:13:49,880

I left and she has changed so much while

334

00:13:54,010 --> 00:13:51,470

I've been up here I'm fortunate to have

335

00:13:56,680 --> 00:13:54,020

seen some little video clips of her and

336

00:14:00,100 --> 00:13:56,690

and get the chance to talk mostly at her

337

00:14:03,370 --> 00:14:00,110

but here on the phone and it's a that's

338

00:14:05,410 --> 00:14:03,380

a you know probably the single person

339

00:14:07,000 --> 00:14:05,420

that I I you know just I can't

340

00:14:09,190 --> 00:14:07,010

communicate with her yet and so all I

341

00:14:10,930 --> 00:14:09,200

can do is look at pictures and I can't

342

00:14:13,690 --> 00:14:10,940

talk to her on the phone so I miss her

343

00:14:15,490 --> 00:14:13,700

and I definitely miss apples the fall is

344

00:14:17,950 --> 00:14:15,500

the time for those fresh crisp apples

345

00:14:21,880 --> 00:14:17,960

and I'm looking forward to some of those

346

00:14:23,260 --> 00:14:21,890

coming up on the progress oh that's the

347

00:14:25,150 --> 00:14:23,270

first I've heard about a progress

348

00:14:31,210 --> 00:14:25,160

bringing up that kind of thing I'll

349

00:14:34,150 --> 00:14:31,220

pizza maybe no I don't think pizza will

350

00:14:36,040 --> 00:14:34,160

make the trip but you bet the Russian

351
00:14:38,920 --> 00:14:36,050
vehicles come up with an assortment of

352
00:14:42,520 --> 00:14:38,930
fruit and vegetables so we'll have

353
00:14:45,340 --> 00:14:42,530
apples oranges they'll be actually uh

354
00:14:48,490 --> 00:14:45,350
there's always onions and perhaps even

355
00:14:50,920 --> 00:14:48,500
garlic and so those are it's it's great

356
00:14:53,920 --> 00:14:50,930
to taste the earth and I another thing

357
00:14:57,580 --> 00:14:53,930
that I miss really is just the sights

358
00:14:59,520 --> 00:14:57,590
the smells and sounds of nature it's a

359
00:15:01,840 --> 00:14:59,530
it's a little sterile inside a

360
00:15:03,550 --> 00:15:01,850
laboratory living environment like this

361
00:15:06,250 --> 00:15:03,560
and I missed the sound of the birds in

362
00:15:10,570 --> 00:15:06,260
the backyard and the smells of this

363
00:15:12,010 --> 00:15:10,580

things that are growing what your

364

00:15:17,369 --> 00:15:12,020

granddaughter being told that you're

365

00:15:23,259 --> 00:15:20,529

she's she's too young to understand what

366

00:15:25,239 --> 00:15:23,269

she's being told but on the at the top

367

00:15:29,319 --> 00:15:25,249

of my short list of things to do before

368

00:15:32,049 --> 00:15:29,329

I leave is to make a tour video of a

369

00:15:33,579 --> 00:15:32,059

tour for my granddaughter and so in a

370

00:15:35,049 --> 00:15:33,589

couple of years when she's old enough to

371

00:15:36,909 --> 00:15:35,059

start to understand these things she's

372

00:15:38,829 --> 00:15:36,919

going to have to endure another one of

373

00:15:43,179 --> 00:15:38,839

those talks with grandpa Mike as we sit

374

00:15:45,099 --> 00:15:43,189

down to watch my movie serious subject

375

00:15:47,649 --> 00:15:45,109

there's a scientific report that says

376

00:15:50,319 --> 00:15:47,659

almost half of people have been on the

377

00:15:52,719 --> 00:15:50,329

ISS event I problems when they return

378

00:15:59,799 --> 00:15:52,729

serious eye problems how worried are you

379

00:16:01,449 --> 00:15:59,809

about that that is of course something

380

00:16:03,879 --> 00:16:01,459

that gets everybody's attention when you

381

00:16:07,119 --> 00:16:03,889

when you hear about this and learn about

382

00:16:09,129 --> 00:16:07,129

it we're screened a lot to to try to

383

00:16:10,839 --> 00:16:09,139

keep but you know in a number of

384

00:16:12,999 --> 00:16:10,849

different ways looking at our interact

385

00:16:14,679 --> 00:16:13,009

or pressures the same kind of exams that

386

00:16:17,829 --> 00:16:14,689

are done in a doctor's office at home

387

00:16:20,649 --> 00:16:17,839

and we measure those up here we take

388

00:16:23,469 --> 00:16:20,659

actually ultrasounds of our eyes or

389

00:16:26,259 --> 00:16:23,479

optic nerves as well as a scans of the

390

00:16:28,719 --> 00:16:26,269

retina these are these are just

391

00:16:30,309 --> 00:16:28,729

diagnostic tools that are used at the

392

00:16:32,589 --> 00:16:30,319

doctor's office back home and we're

393

00:16:34,329 --> 00:16:32,599

using them with remote guidance up here

394

00:16:36,069 --> 00:16:34,339

to help track these kind of things

395

00:16:38,019 --> 00:16:36,079

there's something going on there with

396

00:16:40,179 --> 00:16:38,029

the eyes that we don't understand and

397

00:16:43,119 --> 00:16:40,189

that's a potentially significant thing

398

00:16:45,249 --> 00:16:43,129

we're fortunate that we're not

399

00:16:47,709 --> 00:16:45,259

experiencing anything that that appears

400

00:16:49,659 --> 00:16:47,719

to be you know of that nature which just

401

00:16:52,179 --> 00:16:49,669

adds a little more confusion to it don't

402

00:16:55,029 --> 00:16:52,189

know why some people are affected and

403

00:16:57,069 --> 00:16:55,039

some are you know less affected but it's

404

00:16:59,639 --> 00:16:57,079

something we need to understand and kind

405

00:17:01,959 --> 00:16:59,649

of get to the get to the bottom of if we

406

00:17:03,069 --> 00:17:01,969

you know want to continue them one of

407

00:17:04,809 --> 00:17:03,079

the things we're trying to do is learn

408

00:17:07,449 --> 00:17:04,819

how to live and work in space for long

409

00:17:09,220 --> 00:17:07,459

periods of time when we go to Mars it's

410

00:17:10,659 --> 00:17:09,230

going to be a long trip we're going to

411

00:17:13,210 --> 00:17:10,669

be you know off of the earth for a

412

00:17:15,220 --> 00:17:13,220

couple of years probably going there

413

00:17:17,319 --> 00:17:15,230

getting some work done coming back and

414

00:17:18,939 --> 00:17:17,329

we need to understand things like this

415

00:17:21,340 --> 00:17:18,949

and this came as a kind of a surprise

416

00:17:23,109 --> 00:17:21,350

but it's part of why we do this long

417

00:17:26,590 --> 00:17:23,119

duration research with us human guinea

418

00:17:28,919 --> 00:17:26,600

pigs do you have a kind of hunch about

419

00:17:35,970 --> 00:17:28,929

that do you think it's radiation

420

00:17:38,340 --> 00:17:35,980

I do not the the kind of hunches that I

421

00:17:42,119 --> 00:17:38,350

that I had don't seem to have played out

422

00:17:44,609 --> 00:17:42,129

and I I couldn't explain why there's you

423

00:17:47,190 --> 00:17:44,619

know again why it affects some people

424

00:17:52,889 --> 00:17:47,200

and does not affect does not appear to

425

00:17:54,659 --> 00:17:52,899

affect others the same way no idea okay

426

00:17:55,830 --> 00:17:54,669

last question time's running out what

427

00:18:03,269 --> 00:17:55,840

are you going to be dressed as for

428

00:18:04,980 --> 00:18:03,279

halloween although I might do something

429

00:18:09,119 --> 00:18:04,990

outrageous and dressed like an astronaut

430

00:18:14,940 --> 00:18:09,129

I always wanted to be one there must be

431

00:18:17,430 --> 00:18:14,950

a mask up there there is there is

432

00:18:19,710 --> 00:18:17,440

there's a bag of things like that and I

433

00:18:22,230 --> 00:18:19,720

know where the bag is located but i have

434

00:18:24,930 --> 00:18:22,240

not had a chance to dig into it and pick

435

00:18:26,190 --> 00:18:24,940

mine out so i i'm sorry about that well

436

00:18:30,659 --> 00:18:26,200

I have to do an interview again next

437

00:18:35,570 --> 00:18:30,669

week and I'll I'll pull it out okay safe

438

00:18:40,560 --> 00:18:38,940

thanks a bunch i really appreciate the

439

00:18:42,269 --> 00:18:40,570

interview the time to talk to you and

440

00:18:45,269 --> 00:18:42,279

this is mike fossum on the International

441

00:18:48,029 --> 00:18:45,279

Space Station sign it out station this

442

00:18:53,159 --> 00:18:48,039

is Houston ACR thank you that concludes

443

00:18:55,470 --> 00:18:53,169

the event thank you space com and ABC