



1
00:00:13,030 --> 00:00:02,869
affirmative the space station and i are

2
00:00:16,630 --> 00:00:14,789
canadian space and cpo this is mission

3
00:00:18,870 --> 00:00:16,640
control in houston please call the

4
00:00:21,109 --> 00:00:18,880
station for a voice check houston please

5
00:00:23,910 --> 00:00:21,119
call people for voice check

6
00:00:36,950 --> 00:00:23,920
hi chris it's julie

7
00:00:50,310 --> 00:00:38,630
we hear you loud and clear we have the

8
00:00:55,750 --> 00:00:53,430
good morning this is mr henry

9
00:00:58,470 --> 00:00:55,760
obviously you have taken advantage of

10
00:01:01,750 --> 00:00:58,480
your stay in the space station we're

11
00:01:05,350 --> 00:01:01,760
following you especially on twitter do

12
00:01:08,550 --> 00:01:05,360
you think really becoming to become

13
00:01:14,149 --> 00:01:08,560

the main astronaut uh the most followed

14

00:01:20,230 --> 00:01:18,149

this is an interesting idea i am just

15

00:01:22,630 --> 00:01:20,240

a member of the

16

00:01:25,270 --> 00:01:22,640

rest of the team here and we are very

17

00:01:27,990 --> 00:01:25,280

busy with the experiences with the with

18

00:01:30,230 --> 00:01:28,000

operating the station itself and also we

19

00:01:31,429 --> 00:01:30,240

have the technology

20

00:01:33,910 --> 00:01:31,439

that is

21

00:01:38,149 --> 00:01:33,920

better to communicate what we're doing

22

00:01:41,910 --> 00:01:38,159

here exploring space it's not just tv

23

00:01:44,230 --> 00:01:41,920

not just email but now we can use

24

00:01:47,109 --> 00:01:44,240

my income the other

25

00:01:49,590 --> 00:01:47,119

social media such as twitter so that

26
00:01:52,149 --> 00:01:49,600
immediately people can know what we're

27
00:01:53,749 --> 00:01:52,159
doing here on space and for the rest of

28
00:01:55,670 --> 00:01:53,759
the team here

29
00:01:57,429 --> 00:01:55,680
it's very for the rest of the crew it's

30
00:01:59,830 --> 00:01:57,439
very interesting it's very interesting

31
00:02:02,789 --> 00:01:59,840
for me and for canada and for the rest

32
00:02:05,830 --> 00:02:02,799
of the world actually since it's just us

33
00:02:14,790 --> 00:02:05,840
but with technology this is amazing

34
00:02:18,869 --> 00:02:16,630
hi chris peter ray from the canadian

35
00:02:20,550 --> 00:02:18,879
press everybody's been following you on

36
00:02:24,790 --> 00:02:20,560
twitter and i think this morning you

37
00:02:26,630 --> 00:02:24,800
were approaching 160 000 followers

38
00:02:28,390 --> 00:02:26,640

i noted you're about 10 times more than

39

00:02:30,949 --> 00:02:28,400

tom marshburn

40

00:02:32,550 --> 00:02:30,959

first of all let's talk about uh

41

00:02:35,030 --> 00:02:32,560

the twitter and secondly let's talk

42

00:02:37,910 --> 00:02:35,040

about all those photos first of all

43

00:02:40,309 --> 00:02:37,920

160 000 followers and that's only i

44

00:02:47,350 --> 00:02:40,319

think within 21 days you started at 20

45

00:02:52,790 --> 00:02:50,150

well with any new technology uh peter it

46

00:02:54,630 --> 00:02:52,800

uh it takes a while for people to to get

47

00:02:56,309 --> 00:02:54,640

used to it and to start using it to look

48

00:02:58,869 --> 00:02:56,319

at look at anything look at telephones a

49

00:03:00,710 --> 00:02:58,879

little over 100 years ago or or airbags

50

00:03:02,790 --> 00:03:00,720

in cars even though the technology

51
00:03:04,949 --> 00:03:02,800
exists more and more people become aware

52
00:03:07,589 --> 00:03:04,959
of how useful it can be and what we're

53
00:03:10,550 --> 00:03:07,599
doing on space station is fundamentally

54
00:03:12,630 --> 00:03:10,560
fascinating and i think the evidence it

55
00:03:13,350 --> 00:03:12,640
shows through a measure like twitter

56
00:03:15,509 --> 00:03:13,360
where

57
00:03:17,270 --> 00:03:15,519
the uh of course the exploration we're

58
00:03:20,070 --> 00:03:17,280
doing the experiments we're doing but

59
00:03:21,270 --> 00:03:20,080
the view that it gives us of the world

60
00:03:23,190 --> 00:03:21,280
and the

61
00:03:25,509 --> 00:03:23,200
i think the way that it encapsulates

62
00:03:28,390 --> 00:03:25,519
encapsulates where we are in history as

63
00:03:29,830 --> 00:03:28,400

well of people permanently living earth

64

00:03:32,550 --> 00:03:29,840

with these new technologies

65

00:03:34,470 --> 00:03:32,560

communications we can directly

66

00:03:38,229 --> 00:03:34,480

give people the human side of that and

67

00:03:40,070 --> 00:03:38,239

the fact that uh now gosh over 150 000

68

00:03:41,830 --> 00:03:40,080

people are directly following what we're

69

00:03:44,149 --> 00:03:41,840

doing here every day i think it's just a

70

00:03:51,509 --> 00:03:44,159

direct measure of of how important and

71

00:03:55,350 --> 00:03:53,190

just one follow-up

72

00:03:57,190 --> 00:03:55,360

talking about those photos everybody is

73

00:03:57,990 --> 00:03:57,200

talking about the images you're sending

74

00:04:00,390 --> 00:03:58,000

back

75

00:04:02,309 --> 00:04:00,400

just talk a little bit about those uh in

76

00:04:04,070 --> 00:04:02,319

english and then in french and tell me

77

00:04:05,910 --> 00:04:04,080

is there any favorite or was there any

78

00:04:08,390 --> 00:04:05,920

among those photos that you've taken

79

00:04:14,550 --> 00:04:08,400

that really strikes you as uh as you

80

00:04:20,150 --> 00:04:16,949

since my first flight to the russian

81

00:04:22,629 --> 00:04:20,160

space station mir back 17 years ago i've

82

00:04:24,710 --> 00:04:22,639

always maintained that the favorite

83

00:04:26,629 --> 00:04:24,720

pastime of astronauts is is looking at

84

00:04:28,950 --> 00:04:26,639

the world out the window it is

85

00:04:31,030 --> 00:04:28,960

it is so fundamentally beautiful and

86

00:04:33,189 --> 00:04:31,040

mesmerizing and i've been doing my best

87

00:04:36,070 --> 00:04:33,199

with words to try and describe it ever

88

00:04:39,110 --> 00:04:36,080

since i first saw it from onboard space

89

00:04:42,390 --> 00:04:39,120

shuttle atlantis just after we launched

90

00:04:44,390 --> 00:04:42,400

and now uh i can directly as i see

91

00:04:46,230 --> 00:04:44,400

beautiful things send those pictures to

92

00:04:49,110 --> 00:04:46,240

the ground and you can see the reaction

93

00:04:51,030 --> 00:04:49,120

it has captured the eyes and therefore

94

00:04:51,909 --> 00:04:51,040

the minds and imaginations of so many

95

00:04:55,189 --> 00:04:51,919

people

96

00:04:56,950 --> 00:04:55,199

um it's such a wonderful place to better

97

00:04:58,469 --> 00:04:56,960

understand our planet

98

00:04:59,909 --> 00:04:58,479

and for me

99

00:05:01,430 --> 00:04:59,919

i love the beautiful pictures of the

100

00:05:04,230 --> 00:05:01,440

world but the one that was the most

101
00:05:06,629 --> 00:05:04,240
significant for me was looking at

102
00:05:08,790 --> 00:05:06,639
their noctilucent clouds these are

103
00:05:10,790 --> 00:05:08,800
clouds that you can barely see from the

104
00:05:13,270 --> 00:05:10,800
surface of the earth they're the highest

105
00:05:15,590 --> 00:05:13,280
clouds that exist tiny ice particles way

106
00:05:19,029 --> 00:05:15,600
up in the mesosphere and yet from orbit

107
00:05:21,270 --> 00:05:19,039
as the sun rises the light bounces off

108
00:05:22,950 --> 00:05:21,280
of those clouds directly into our eyes

109
00:05:25,430 --> 00:05:22,960
and we can see a part of the earth's

110
00:05:27,909 --> 00:05:25,440
atmosphere that's basically invisible to

111
00:05:29,510 --> 00:05:27,919
people on the surface to me that's both

112
00:05:31,749 --> 00:05:29,520
beautiful because of the colors and

113
00:05:33,350 --> 00:05:31,759

textures and ripples of it but it's also

114

00:05:36,390 --> 00:05:33,360

really significant it's a way to

115

00:05:38,230 --> 00:05:36,400

understand the changes in our atmosphere

116

00:05:40,230 --> 00:05:38,240

and way to understand exactly how our

117

00:05:42,950 --> 00:05:40,240

atmosphere inner interacts with with the

118

00:05:44,469 --> 00:05:42,960

universe beyond so the the ability to

119

00:05:46,469 --> 00:05:44,479

take pictures up here

120

00:05:48,870 --> 00:05:46,479

it fulfills all sorts of different

121

00:05:50,150 --> 00:05:48,880

purposes and needs and we are so lucky

122

00:05:54,710 --> 00:05:50,160

to be able to be the ones holding the

123

00:06:01,990 --> 00:05:57,270

it's just incredible to take a chance to

124

00:06:05,430 --> 00:06:02,000

take pictures like that it's amazing

125

00:06:07,670 --> 00:06:05,440

and since my first flight on

126
00:06:10,629 --> 00:06:07,680
the mares space

127
00:06:12,870 --> 00:06:10,639
shuttle i have said that

128
00:06:14,629 --> 00:06:12,880
most favorite pastime for astronauts is

129
00:06:17,270 --> 00:06:14,639
to be able to look out the window and

130
00:06:20,710 --> 00:06:17,280
look at the earth from above it's

131
00:06:22,950 --> 00:06:20,720
truly fascinating and on this flight we

132
00:06:25,510 --> 00:06:22,960
have the immediate technology with

133
00:06:29,270 --> 00:06:25,520
twitter to be able to provide these

134
00:06:32,309 --> 00:06:29,280
images to earth and to the entire world

135
00:06:36,469 --> 00:06:32,319
and my favorite for me is the high

136
00:06:38,710 --> 00:06:36,479
clouds the noctilucent clouds

137
00:06:40,950 --> 00:06:38,720
which are almost impossible to see from

138
00:06:43,350 --> 00:06:40,960

earth but from the space station you can

139

00:06:45,670 --> 00:06:43,360

see them and they are so beautiful with

140

00:06:48,309 --> 00:06:45,680

the textures and colors and we see

141

00:06:50,950 --> 00:06:48,319

something very very interesting for the

142

00:06:53,270 --> 00:06:50,960

scientists because this is something

143

00:06:55,029 --> 00:06:53,280

rare and actually

144

00:06:58,550 --> 00:06:55,039

an indication of the change of the

145

00:07:02,230 --> 00:06:58,560

atmosphere so here we are in a specific

146

00:07:05,189 --> 00:07:02,240

very unique location to be able to be a

147

00:07:09,110 --> 00:07:05,199

witness to these changes and everything

148

00:07:13,110 --> 00:07:11,589

hello elizabeth howell from space.com um

149

00:07:15,270 --> 00:07:13,120

today's as you know is a special

150

00:07:17,350 --> 00:07:15,280

canadian day sort of on station and also

151
00:07:19,990 --> 00:07:17,360
in nasa and i just was wondering uh what

152
00:07:22,390 --> 00:07:20,000
sort of uh aspects of canadiana are you

153
00:07:28,469 --> 00:07:22,400
trying to bring to the world as you're

154
00:07:33,749 --> 00:07:31,189
hello elizabeth um

155
00:07:36,230 --> 00:07:33,759
today on board the space station

156
00:07:37,350 --> 00:07:36,240
uh we operated canadarm2

157
00:07:38,710 --> 00:07:37,360
and

158
00:07:41,110 --> 00:07:38,720
if you look at the direct link it's

159
00:07:42,870 --> 00:07:41,120
amazing we have uh the canadian space

160
00:07:45,510 --> 00:07:42,880
agency in santa barbara just outside

161
00:07:48,309 --> 00:07:45,520
montreal with controllers there who are

162
00:07:50,070 --> 00:07:48,319
monitoring the health of the canadarm

163
00:07:52,070 --> 00:07:50,080

they have people working down in houston

164

00:07:54,710 --> 00:07:52,080

that are watching it uh canadians and

165

00:07:56,869 --> 00:07:54,720

and people from other countries and then

166

00:07:59,029 --> 00:07:56,879

sitting in mission control today was

167

00:08:01,350 --> 00:07:59,039

astronaut jeremy hansen this morning and

168

00:08:03,189 --> 00:08:01,360

astronaut david sanjak this afternoon

169

00:08:05,670 --> 00:08:03,199

and they're talking directly to me a

170

00:08:07,189 --> 00:08:05,680

canadian on board this space station as

171

00:08:08,710 --> 00:08:07,199

i have my hands and i'm operating

172

00:08:11,110 --> 00:08:08,720

canadarm2

173

00:08:13,029 --> 00:08:11,120

and that canadarm built this space

174

00:08:15,909 --> 00:08:13,039

station we're not the biggest partner by

175

00:08:16,710 --> 00:08:15,919

any means in the space station project

176

00:08:18,950 --> 00:08:16,720

but

177

00:08:21,350 --> 00:08:18,960

we are a trusted and respected and

178

00:08:23,909 --> 00:08:21,360

capable partner and what canada has done

179

00:08:26,150 --> 00:08:23,919

is world class and to be able to link it

180

00:08:28,469 --> 00:08:26,160

right through from the the mission

181

00:08:31,029 --> 00:08:28,479

control back room at the canadian space

182

00:08:33,350 --> 00:08:31,039

agency in santa bare right through to my

183

00:08:34,709 --> 00:08:33,360

hands on the controls and canada arm

184

00:08:37,029 --> 00:08:34,719

moving around up here on the space

185

00:08:39,110 --> 00:08:37,039

station to me it's a real demonstration

186

00:08:40,870 --> 00:08:39,120

of international partnership but also a

187

00:08:42,870 --> 00:08:40,880

real demonstration of canada's

188

00:08:47,670 --> 00:08:42,880

capabilities and some of the places we

189

00:08:50,550 --> 00:08:49,190

just a quick follow-up do you have any

190

00:08:51,910 --> 00:08:50,560

parts of canadian culture that you're

191

00:08:57,350 --> 00:08:51,920

also trying to portray as well as the

192

00:09:01,269 --> 00:08:59,030

i think everybody's proud of where

193

00:09:02,870 --> 00:09:01,279

they're from on board

194

00:09:05,990 --> 00:09:02,880

we have

195

00:09:08,710 --> 00:09:06,000

people from belo russia from russia

196

00:09:11,030 --> 00:09:08,720

historically from the ukraine

197

00:09:14,070 --> 00:09:11,040

tom and kevin from the united states and

198

00:09:16,470 --> 00:09:14,080

myself from canada when we get together

199

00:09:18,310 --> 00:09:16,480

we talk about family we talk about where

200

00:09:20,550 --> 00:09:18,320

we're from we talk about

201
00:09:22,230 --> 00:09:20,560
things that we grew up with when we got

202
00:09:24,470 --> 00:09:22,240
together for christmas and it was both

203
00:09:26,389 --> 00:09:24,480
the uh the 25th of december christmas

204
00:09:27,910 --> 00:09:26,399
and the russian orthodox christmas we

205
00:09:29,670 --> 00:09:27,920
talked about each of us about what our

206
00:09:31,590 --> 00:09:29,680
traditions were and for new year's as

207
00:09:33,190 --> 00:09:31,600
well how we celebrated it with our

208
00:09:33,990 --> 00:09:33,200
families and our friends

209
00:09:46,070 --> 00:09:34,000
and

210
00:09:48,150 --> 00:09:46,080
cover a lot of the world's

211
00:09:49,990 --> 00:09:48,160
dirt a lot of the world's territory and

212
00:09:51,829 --> 00:09:50,000
so there's lots of opportunity while

213
00:09:54,310 --> 00:09:51,839

you're looking out the window together

214

00:09:56,550 --> 00:09:54,320

to to share the experience and i've had

215

00:09:57,990 --> 00:09:56,560

several moments quietly floating in the

216

00:10:00,710 --> 00:09:58,000

cupola with one of the other crew

217

00:10:01,990 --> 00:10:00,720

members as the two of us in sort of a

218

00:10:04,630 --> 00:10:02,000

hushed

219

00:10:07,350 --> 00:10:04,640

off-filled conversation talk about what

220

00:10:09,509 --> 00:10:07,360

we're seeing what it means to us

221

00:10:11,350 --> 00:10:09,519

what we feel sort of as

222

00:10:13,590 --> 00:10:11,360

as representatives of everyone that that

223

00:10:15,350 --> 00:10:13,600

we came from on earth and we share that

224

00:10:17,350 --> 00:10:15,360

experience internationally up here the

225

00:10:23,990 --> 00:10:17,360

space station is a wonderful crucible

226

00:10:27,750 --> 00:10:26,230

uh hi it's alan woods from the toronto

227

00:10:29,670 --> 00:10:27,760

star newspaper

228

00:10:32,389 --> 00:10:29,680

you're talking about the the impression

229

00:10:34,550 --> 00:10:32,399

that some of these images uh leave with

230

00:10:37,110 --> 00:10:34,560

you one of the the images that i was

231

00:10:38,069 --> 00:10:37,120

struck by was uh your picture of uh

232

00:10:41,590 --> 00:10:38,079

syria

233

00:10:43,670 --> 00:10:41,600

peaceful from up here but you know the

234

00:10:44,630 --> 00:10:43,680

reality on the ground is much different

235

00:10:47,269 --> 00:10:44,640

how does

236

00:10:48,630 --> 00:10:47,279

what you're seeing change your

237

00:10:55,110 --> 00:10:48,640

impression of the world when you come

238

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

the uh

239

00:11:01,750 --> 00:10:58,800

the perspective that that

240

00:11:03,430 --> 00:11:01,760

that we are subject to that we are

241

00:11:05,110 --> 00:11:03,440

privileged enough to see directly with

242

00:11:07,030 --> 00:11:05,120

our eyes

243

00:11:08,150 --> 00:11:07,040

is one that i think

244

00:11:10,470 --> 00:11:08,160

um

245

00:11:13,190 --> 00:11:10,480

would benefit everyone to go around the

246

00:11:15,350 --> 00:11:13,200

world in just slightly over 90 minutes

247

00:11:16,790 --> 00:11:15,360

to see the whole world in 90 minutes and

248

00:11:18,870 --> 00:11:16,800

then by the time you've come around the

249

00:11:20,630 --> 00:11:18,880

world with the world turning underneath

250

00:11:22,069 --> 00:11:20,640

you by the time you've come around the

251
00:11:24,069 --> 00:11:22,079
world

252
00:11:25,829 --> 00:11:24,079
it's turned and you come over a new part

253
00:11:29,110 --> 00:11:25,839
so the world just

254
00:11:32,150 --> 00:11:29,120
unrolls itself for you and you see it

255
00:11:34,150 --> 00:11:32,160
absolutely discreetly as one place

256
00:11:36,150 --> 00:11:34,160
and so when we do look down in a place

257
00:11:37,910 --> 00:11:36,160
that is currently in great turmoil or

258
00:11:39,990 --> 00:11:37,920
strife

259
00:11:42,550 --> 00:11:40,000
it's hard to reconcile the inherent

260
00:11:43,590 --> 00:11:42,560
patience and beauty of the world with

261
00:11:55,110 --> 00:11:43,600
the

262
00:11:57,190 --> 00:11:55,120
perspective more clearly and that's part

263
00:11:59,030 --> 00:11:57,200

of the reason that we work so hard to

264

00:12:01,350 --> 00:11:59,040

communicate what we're doing up here as

265

00:12:04,470 --> 00:12:01,360

an international team is to try and just

266

00:12:06,629 --> 00:12:04,480

give people a little glimpse of

267

00:12:08,389 --> 00:12:06,639

that global perspective that

268

00:12:10,389 --> 00:12:08,399

understanding of the fact that we're all

269

00:12:12,550 --> 00:12:10,399

in this together and that this is a

270

00:12:14,870 --> 00:12:12,560

spaceship but so is the world

271

00:12:17,110 --> 00:12:14,880

and yes there are important territorial

272

00:12:19,269 --> 00:12:17,120

issues they're important personal issues

273

00:12:20,949 --> 00:12:19,279

but at the same time

274

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

with increased communication with

275

00:12:25,430 --> 00:12:23,040

increased understanding

276

00:12:29,110 --> 00:12:25,440

comes a more global

277

00:12:30,870 --> 00:12:29,120

uh perspective and it's one that uh

278

00:12:32,710 --> 00:12:30,880

we feel incredibly honored to see

279

00:12:35,509 --> 00:12:32,720

directly and one that we do our best to

280

00:12:37,590 --> 00:12:35,519

try and pass on to everybody and 160 000

281

00:12:39,350 --> 00:12:37,600

people are looking through my eyes every

282

00:12:46,790 --> 00:12:39,360

day and hopefully some of them

283

00:12:49,509 --> 00:12:48,389

hello

284

00:12:50,710 --> 00:12:49,519

good morning

285

00:12:52,949 --> 00:12:50,720

pascal

286

00:12:56,310 --> 00:12:52,959

with the television radio canada you

287

00:12:58,629 --> 00:12:56,320

have manipulated canada this morning and

288

00:13:00,629 --> 00:12:58,639

we wanted to see with

289

00:13:02,470 --> 00:13:00,639

the research you've done

290

00:13:06,949 --> 00:13:02,480

what have you done in the international

291

00:13:07,990 --> 00:13:06,959

space station as far as research goes we

292

00:13:11,269 --> 00:13:08,000

yes the

293

00:13:13,910 --> 00:13:11,279

international space station is a lab not

294

00:13:15,829 --> 00:13:13,920

only one lab this one lab here

295

00:13:18,790 --> 00:13:15,839

is the american lab there's another

296

00:13:20,550 --> 00:13:18,800

european another japanese lab a russian

297

00:13:22,150 --> 00:13:20,560

lab as well

298

00:13:26,069 --> 00:13:22,160

and canada

299

00:13:28,870 --> 00:13:26,079

ii is our famous manipulator that has

300

00:13:32,470 --> 00:13:28,880

helped to build this so

301
00:13:33,350 --> 00:13:32,480
it's international a very international

302
00:13:35,670 --> 00:13:33,360
place

303
00:13:38,949 --> 00:13:35,680
definitely there's a lot of different

304
00:13:39,990 --> 00:13:38,959
experiments that are being conducted one

305
00:13:41,110 --> 00:13:40,000
with the

306
00:13:44,790 --> 00:13:41,120
physics

307
00:13:47,110 --> 00:13:44,800
physical fluids uh japanese we're doing

308
00:13:48,389 --> 00:13:47,120
that and this is a very difficult

309
00:13:50,230 --> 00:13:48,399
impossible

310
00:13:51,269 --> 00:13:50,240
experiment to be

311
00:13:53,910 --> 00:13:51,279
done

312
00:13:57,350 --> 00:13:53,920
in on earth and there has to be no

313
00:13:58,069 --> 00:13:57,360

gravity at all and we can only do this

314

00:14:01,670 --> 00:13:58,079

is

315

00:14:03,110 --> 00:14:01,680

to con they were trying to build like a

316

00:14:04,790 --> 00:14:03,120

water

317

00:14:08,949 --> 00:14:04,800

bridge to see

318

00:14:11,750 --> 00:14:08,959

to understand better the key fundamental

319

00:14:15,829 --> 00:14:11,760

aspects of it and also for

320

00:14:18,310 --> 00:14:15,839

colloid we also did for hydraulics

321

00:14:20,389 --> 00:14:18,320

it's an experiment that it's impossible

322

00:14:21,910 --> 00:14:20,399

to do on earth and after the press

323

00:14:23,350 --> 00:14:21,920

conference i'm going to do something

324

00:14:25,750 --> 00:14:23,360

here actually

325

00:14:27,829 --> 00:14:25,760

with a very high temperature to see

326

00:14:28,790 --> 00:14:27,839

how metal

327

00:14:34,230 --> 00:14:28,800

mix

328

00:14:36,629 --> 00:14:34,240

gravity also we do medical experiments

329

00:14:39,189 --> 00:14:36,639

the canadian experiments have to do with

330

00:14:41,030 --> 00:14:39,199

respect to regulating

331

00:14:43,110 --> 00:14:41,040

the pressure

332

00:14:45,269 --> 00:14:43,120

in the body how our

333

00:14:47,110 --> 00:14:45,279

balance works

334

00:14:49,430 --> 00:14:47,120

all of these

335

00:14:51,910 --> 00:14:49,440

many many hundreds of experiments are

336

00:14:53,910 --> 00:14:51,920

constantly underway and

337

00:14:56,389 --> 00:14:53,920

it's uh

338

00:15:00,470 --> 00:14:56,399

very very busy there's a lot of things

339

00:15:06,790 --> 00:15:03,350

and one last question maybe

340

00:15:09,030 --> 00:15:06,800

and i know that you are an amateur music

341

00:15:11,509 --> 00:15:09,040

lover so when you look at earth what is

342

00:15:12,710 --> 00:15:11,519

the song that comes up for you

343

00:15:15,670 --> 00:15:12,720

we just

344

00:15:19,269 --> 00:15:15,680

yes i am an astronaut but also i am a

345

00:15:21,750 --> 00:15:19,279

musician for i've been a musician for

346

00:15:23,189 --> 00:15:21,760

several years and we do have some

347

00:15:24,230 --> 00:15:23,199

guitars here

348

00:15:27,590 --> 00:15:24,240

in the

349

00:15:30,550 --> 00:15:27,600

international space station and after

350

00:15:32,949 --> 00:15:30,560

work in the evening i do that i do grab

351

00:15:34,150 --> 00:15:32,959

my guitar and it was perfect during

352

00:15:36,949 --> 00:15:34,160

christmas

353

00:15:39,829 --> 00:15:36,959

to get together and sing and with my

354

00:15:42,710 --> 00:15:39,839

brother we wrote a

355

00:15:45,030 --> 00:15:42,720

for christmas and uh i think

356

00:15:46,949 --> 00:15:45,040

a lot of people have already maybe heard

357

00:15:47,670 --> 00:15:46,959

it and we were able

358

00:15:49,749 --> 00:15:47,680

to

359

00:15:57,350 --> 00:15:49,759

record it and on youtube i believe

360

00:16:01,990 --> 00:15:59,749

the canadian folk songs are the ones

361

00:16:04,150 --> 00:16:02,000

that i love the most and

362

00:16:07,990 --> 00:16:04,160

i'm not only

363

00:16:09,350 --> 00:16:08,000

a singer but i also i compose songs and

364

00:16:12,389 --> 00:16:09,360

i'm trying

365

00:16:14,150 --> 00:16:12,399

to write some songs on life

366

00:16:15,350 --> 00:16:14,160

on earth and also

367

00:16:17,910 --> 00:16:15,360

life

368

00:16:20,150 --> 00:16:17,920

without gravity and in a few months

369

00:16:23,670 --> 00:16:20,160

maybe i will know

370

00:16:26,949 --> 00:16:23,680

or have enough to record

371

00:16:30,150 --> 00:16:26,959

a whole album but for me this is uh

372

00:16:34,790 --> 00:16:30,160

interesting as a human being it's uh

373

00:16:40,150 --> 00:16:37,030

it's i'm very lucky that we have a

374

00:16:45,350 --> 00:16:42,870

hi this is uh joanne brackes from cbc

375

00:16:47,189 --> 00:16:45,360

television here in montreal uh i've

376

00:16:49,509 --> 00:16:47,199

thought long and hard about what to ask

377

00:16:50,389 --> 00:16:49,519

you because there's so much to ask uh

378

00:16:53,350 --> 00:16:50,399

hello

379

00:16:55,030 --> 00:16:53,360

um what uh i guess what still surprises

380

00:16:56,389 --> 00:16:55,040

you after all this time i mean of course

381

00:16:58,230 --> 00:16:56,399

there's the robotics there's everything

382

00:17:00,230 --> 00:16:58,240

that's going on up there but i mean

383

00:17:01,829 --> 00:17:00,240

you're floating and you're playing

384

00:17:03,670 --> 00:17:01,839

around and you're i mean what is still

385

00:17:09,429 --> 00:17:03,680

surprising to you about being up there

386

00:17:13,110 --> 00:17:11,110

well you know um

387

00:17:15,909 --> 00:17:13,120

this is my third space flight but

388

00:17:17,909 --> 00:17:15,919

yesterday i equaled my entire

389

00:17:20,150 --> 00:17:17,919

time that i had previously in space

390

00:17:22,470 --> 00:17:20,160

after 20 years of being an astronaut i'd

391

00:17:24,710 --> 00:17:22,480

only been in space for 20 days

392

00:17:26,150 --> 00:17:24,720

but now with the soyuz flight back on

393

00:17:27,270 --> 00:17:26,160

the 19th

394

00:17:29,909 --> 00:17:27,280

and um

395

00:17:33,270 --> 00:17:29,919

with the time on station i'm now up

396

00:17:36,150 --> 00:17:33,280

over twice that so i've uh

397

00:17:38,390 --> 00:17:36,160

i even though my experience is growing

398

00:17:40,150 --> 00:17:38,400

there are still lots of surprises

399

00:17:41,669 --> 00:17:40,160

something i noticed this morning

400

00:17:43,669 --> 00:17:41,679

on earth when i get up first thing in

401

00:17:45,909 --> 00:17:43,679

the morning i find sometimes i'm a

402

00:17:47,669 --> 00:17:45,919

little bit clumsy as my body's waking up

403

00:17:49,750 --> 00:17:47,679

i discovered you can be clumsy in

404

00:17:51,750 --> 00:17:49,760

weightlessness and when i come out of my

405

00:17:53,990 --> 00:17:51,760

sleeping birth and come floating right

406

00:17:56,470 --> 00:17:54,000

down here to go into what is basically

407

00:17:57,590 --> 00:17:56,480

our galley in our bathroom i bump into

408

00:17:59,430 --> 00:17:57,600

things

409

00:18:01,510 --> 00:17:59,440

even though i'm floating weightless you

410

00:18:03,430 --> 00:18:01,520

can still uh you can still have the

411

00:18:05,669 --> 00:18:03,440

morning clumsies up here and that

412

00:18:07,510 --> 00:18:05,679

surprised me

413

00:18:09,190 --> 00:18:07,520

the other thing that surprises me is the

414

00:18:11,430 --> 00:18:09,200
difference between

415

00:18:13,430 --> 00:18:11,440
uh visiting space which is what happened

416

00:18:15,350 --> 00:18:13,440
the last two times and living in space

417

00:18:18,070 --> 00:18:15,360
which is what's happening now

418

00:18:19,990 --> 00:18:18,080
the the incredible privilege

419

00:18:21,750 --> 00:18:20,000
of truly

420

00:18:24,549 --> 00:18:21,760
living this experience of not having to

421

00:18:26,630 --> 00:18:24,559
rush everything of not making everything

422

00:18:28,870 --> 00:18:26,640
one time but actually being able to have

423

00:18:31,110 --> 00:18:28,880
a measured thoughtful existence to

424

00:18:33,909 --> 00:18:31,120
really absorb what it's like

425

00:18:36,470 --> 00:18:33,919
uh that that's different this time and

426

00:18:38,630 --> 00:18:36,480

the richness of that the impact on me

427

00:18:39,430 --> 00:18:38,640

personally and hopefully and my ability

428

00:18:43,990 --> 00:18:39,440

to

429

00:18:46,549 --> 00:18:44,000

for the rest of my life is much much

430

00:18:51,190 --> 00:18:46,559

deeper and i i really count myself lucky

431

00:18:55,510 --> 00:18:53,430

i'm just and uh my bosses would kill me

432

00:18:57,270 --> 00:18:55,520

if i didn't ask you this i'm gonna try

433

00:18:59,830 --> 00:18:57,280

to get you to say something about the

434

00:19:02,470 --> 00:18:59,840

habs and the leaves just

435

00:19:05,990 --> 00:19:02,480

playing if you get maybe little gohabs

436

00:19:10,630 --> 00:19:08,549

i had to try

437

00:19:12,710 --> 00:19:10,640

dad

438

00:19:14,150 --> 00:19:12,720

i'm i'm really pleased that the nhl is

439

00:19:16,789 --> 00:19:14,160

starting to play again

440

00:19:18,549 --> 00:19:16,799

uh i love uh hockey i love watching

441

00:19:20,549 --> 00:19:18,559

hockey i think it's a great tradition

442

00:19:22,549 --> 00:19:20,559

and it's a great sport and i'm really

443

00:19:24,630 --> 00:19:22,559

looking forward to watching uh

444

00:19:25,590 --> 00:19:24,640

they piped the games up to me here

445

00:19:27,029 --> 00:19:25,600

um

446

00:19:28,870 --> 00:19:27,039

and i can watch them while i'm working

447

00:19:31,029 --> 00:19:28,880

out this is a piece of workout equipment

448

00:19:33,029 --> 00:19:31,039

right next to me and uh it's a great

449

00:19:33,750 --> 00:19:33,039

thing to be able to put on and watch and

450

00:19:35,510 --> 00:19:33,760

uh

451
00:19:37,190 --> 00:19:35,520
the the first team i fell in love with

452
00:19:39,110 --> 00:19:37,200
and and therefore that i'm loyal to my

453
00:19:40,470 --> 00:19:39,120
whole life is is the leafs and and i'm

454
00:19:42,950 --> 00:19:40,480
looking forward to watching the season

455
00:19:45,510 --> 00:19:42,960
begin and watching them play but

456
00:19:48,150 --> 00:19:45,520
in reality what i really like

457
00:19:50,310 --> 00:19:48,160
is people that are taking themselves to

458
00:19:52,310 --> 00:19:50,320
the limits of their capability to do

459
00:19:54,310 --> 00:19:52,320
something that is just barely possible

460
00:19:56,630 --> 00:19:54,320
and that happens in sport that's what i

461
00:19:59,190 --> 00:19:56,640
really respect about the olympics and

462
00:20:01,510 --> 00:19:59,200
nhl quality quality hockey but it's what

463
00:20:04,470 --> 00:20:01,520

i respect about this place too it is a

464

00:20:06,070 --> 00:20:04,480

huge team on the ground working taking

465

00:20:08,310 --> 00:20:06,080

the things that we can do right to the

466

00:20:10,870 --> 00:20:08,320

very limit of human capability and

467

00:20:12,470 --> 00:20:10,880

seeing what you can find out there and

468

00:20:15,510 --> 00:20:12,480

and i really respect that it's what i've

469

00:20:17,990 --> 00:20:15,520

shaped my whole life around and uh

470

00:20:19,750 --> 00:20:18,000

and the leafs are still unbeaten so i

471

00:20:23,350 --> 00:20:19,760

hope their their season continues so

472

00:20:27,270 --> 00:20:25,590

thank you

473

00:20:29,350 --> 00:20:27,280

that's all the time we have chris thank

474

00:20:36,789 --> 00:20:29,360

you very much for your time and see you

475

00:20:40,310 --> 00:20:39,350

it was a pleasure and now i'm going back

476

00:20:42,230 --> 00:20:40,320

to work

477

00:20:46,310 --> 00:20:42,240

absolute best wishes from the crew of

478

00:20:52,470 --> 00:20:48,789

station this is houston acr thank you

479

00:20:55,590 --> 00:20:53,830

and thank you