



1  
00:00:04,309 --> 00:00:02,550  
good afternoon thanks for joining us

2  
00:00:06,389 --> 00:00:04,319  
here at nasa's johnson space center in

3  
00:00:10,629 --> 00:00:06,399  
houston we're excited to be here with

4  
00:00:12,070 --> 00:00:10,639  
the expedition 54 and expedition 55 crew

5  
00:00:13,430 --> 00:00:12,080  
um who will be launching to the

6  
00:00:16,230 --> 00:00:13,440  
international space station from the

7  
00:00:19,269 --> 00:00:16,240  
baikonur cosmodrome in kazakhstan on

8  
00:00:21,990 --> 00:00:19,279  
december 17th at 1 20 a.m central time

9  
00:00:25,269 --> 00:00:22,000  
which will be 1 20 p.m in baikonur

10  
00:00:26,550 --> 00:00:25,279  
with us today is first time space flier

11  
00:00:28,870 --> 00:00:26,560  
scott tingle

12  
00:00:30,550 --> 00:00:28,880  
and then next to him we have japanese

13  
00:00:32,709 --> 00:00:30,560

aerospace

14

00:00:34,709 --> 00:00:32,719

astronaut

15

00:00:36,470 --> 00:00:34,719

norshige kanai

16

00:00:39,430 --> 00:00:36,480

and then finally you have anton

17

00:00:41,350 --> 00:00:39,440

shkaplerov from the ross cosmos russian

18

00:00:43,430 --> 00:00:41,360

space agency

19

00:00:47,190 --> 00:00:43,440

it's scott and nemo's first flight and

20

00:00:49,190 --> 00:00:47,200

anton has is a veteran cosmonaut

21

00:00:50,869 --> 00:00:49,200

all right i want to recognize also some

22

00:00:52,389 --> 00:00:50,879

special guests we have here in the room

23

00:00:54,069 --> 00:00:52,399

we have several houston maker

24

00:00:56,389 --> 00:00:54,079

organizations

25

00:00:59,510 --> 00:00:56,399

including innovation spark which is a

26  
00:01:02,310 --> 00:00:59,520  
non-profit organization who is committed

27  
00:01:04,229 --> 00:01:02,320  
to the advancement of stem in the

28  
00:01:05,590 --> 00:01:04,239  
greater houston area

29  
00:01:07,030 --> 00:01:05,600  
you will have a chance to ask questions

30  
00:01:08,710 --> 00:01:07,040  
in a little bit after we introduce the

31  
00:01:10,550 --> 00:01:08,720  
crew

32  
00:01:13,270 --> 00:01:10,560  
first

33  
00:01:14,789 --> 00:01:13,280  
let's have scott nora shige and anton

34  
00:01:16,469 --> 00:01:14,799  
talk a little bit about their upcoming

35  
00:01:18,070 --> 00:01:16,479  
mission that they are currently training

36  
00:01:19,990 --> 00:01:18,080  
for and then we'll take questions for

37  
00:01:22,230 --> 00:01:20,000  
them with that let me turn to scott

38  
00:01:24,390 --> 00:01:22,240

tingle scott this is your first time

39

00:01:25,749 --> 00:01:24,400

leaving this planet so how excited are

40

00:01:26,789 --> 00:01:25,759

you feeling what are you looking forward

41

00:01:29,510 --> 00:01:26,799

to

42

00:01:31,190 --> 00:01:29,520

excited about being the first time

43

00:01:33,590 --> 00:01:31,200

almost everything i'm going to do on a

44

00:01:36,710 --> 00:01:33,600

day-to-day basis for the time frame that

45

00:01:39,350 --> 00:01:36,720

we from now until i come back will be

46

00:01:42,630 --> 00:01:39,360

the first time that i've ever done it

47

00:01:43,749 --> 00:01:42,640

and with that is just a pure excitement

48

00:01:45,109 --> 00:01:43,759

but i think the big thing i'm going to

49

00:01:46,870 --> 00:01:45,119

be looking forward to is that we've been

50

00:01:49,109 --> 00:01:46,880

training for a long time you know seven

51  
00:01:50,630 --> 00:01:49,119  
years just at jsc and then two years

52  
00:01:52,310 --> 00:01:50,640  
just for this mission uh there's

53  
00:01:53,990 --> 00:01:52,320  
literally been hundreds and maybe

54  
00:01:55,270 --> 00:01:54,000  
thousands of people that have had their

55  
00:01:57,510 --> 00:01:55,280  
had their hand

56  
00:01:59,429 --> 00:01:57,520  
in making us ready and getting the

57  
00:02:01,590 --> 00:01:59,439  
mission planned and making sure it goes

58  
00:02:02,870 --> 00:02:01,600  
goes through safe and expeditiously

59  
00:02:04,230 --> 00:02:02,880  
i'm really looking forward to working

60  
00:02:05,590 --> 00:02:04,240  
with all those folks on the loops and

61  
00:02:07,670 --> 00:02:05,600  
getting the science done that they need

62  
00:02:10,229 --> 00:02:07,680  
and getting the operations done safely

63  
00:02:11,990 --> 00:02:10,239

and and expeditiously awesome thank you

64

00:02:13,750 --> 00:02:12,000

guys have been training for a long time

65

00:02:16,309 --> 00:02:13,760

and now we're just a couple months away

66

00:02:17,910 --> 00:02:16,319

from the big launch so thanks excited

67

00:02:19,510 --> 00:02:17,920

all right nora shige what are you

68

00:02:21,430 --> 00:02:19,520

looking forward to for this upcoming

69

00:02:24,309 --> 00:02:21,440

mission also your first space flight yes

70

00:02:27,589 --> 00:02:24,319

this is my first space flight and i'm

71

00:02:30,790 --> 00:02:27,599

very excited who is flying with his two

72

00:02:34,869 --> 00:02:30,800

nice crew mates and scotland and i

73

00:02:36,949 --> 00:02:34,879

have been working together since 2009

74

00:02:38,150 --> 00:02:36,959

when we selected as an astronaut

75

00:02:39,190 --> 00:02:38,160

candidate

76

00:02:40,390 --> 00:02:39,200

and

77

00:02:43,270 --> 00:02:40,400

anton

78

00:02:46,390 --> 00:02:43,280

our commander is very experienced

79

00:02:48,869 --> 00:02:46,400

space flier so i'm pretty much

80

00:02:51,830 --> 00:02:48,879

confident with success of our

81

00:02:54,390 --> 00:02:51,840

space flight especially since my

82

00:02:55,990 --> 00:02:54,400

background is a medical

83

00:03:00,229 --> 00:02:56,000

doctor medical

84

00:03:02,390 --> 00:03:00,239

science so i'm looking for doing lots of

85

00:03:03,509 --> 00:03:02,400

scientific researches on onboard the

86

00:03:04,390 --> 00:03:03,519

station

87

00:03:06,229 --> 00:03:04,400

thank you

88

00:03:09,030 --> 00:03:06,239

all right so you guys are both our

89

00:03:10,949 --> 00:03:09,040

rookies here and um you both will be

90

00:03:13,350 --> 00:03:10,959

flight engineers on exhibition 54 and

91

00:03:15,110 --> 00:03:13,360

also expedition 55 and then anton our

92

00:03:17,270 --> 00:03:15,120

veteran cosmonaut you will be a flight

93

00:03:19,030 --> 00:03:17,280

engineer on 54 and also the commander of

94

00:03:20,470 --> 00:03:19,040

expedition 55.

95

00:03:21,830 --> 00:03:20,480

you've been to the space station before

96

00:03:26,710 --> 00:03:21,840

but what are you looking forward to for

97

00:03:26,720 --> 00:03:59,429

of course

98

00:04:04,070 --> 00:04:02,309

um i have prior spaceflight experience i

99

00:04:06,309 --> 00:04:04,080

have no fear

100

00:04:09,350 --> 00:04:06,319

going up in space again i have full

101  
00:04:11,509 --> 00:04:09,360  
confidence in our soyuz vehicle i was on

102  
00:04:13,589 --> 00:04:11,519  
board of the iss practically two years

103  
00:04:15,750 --> 00:04:13,599  
ago and spent 200 days living and

104  
00:04:18,150 --> 00:04:15,760  
working on board of the iss

105  
00:04:20,469 --> 00:04:18,160  
i have great crew i have full confidence

106  
00:04:22,550 --> 00:04:20,479  
in my wonderful flight engineers they

107  
00:04:25,030 --> 00:04:22,560  
know hardware and all the technology

108  
00:04:26,710 --> 00:04:25,040  
very well and i believe that we're going

109  
00:04:31,110 --> 00:04:26,720  
to follow the procedures that they

110  
00:04:33,430 --> 00:04:31,120  
trained us to work with on the ground

111  
00:04:34,710 --> 00:04:33,440  
thank you all right now we'll start with

112  
00:04:37,030 --> 00:04:34,720  
questions

113  
00:04:38,870 --> 00:04:37,040

we have media here and guests here at

114

00:04:41,030 --> 00:04:38,880

johnson space center some reporters on

115

00:04:44,629 --> 00:04:41,040

the phone you can also ask a question on

116

00:04:47,830 --> 00:04:44,639

social media using the hashtag asknasa

117

00:04:49,270 --> 00:04:47,840

and we also will have

118

00:04:51,270 --> 00:04:49,280

as i said people here in the room and

119

00:04:53,270 --> 00:04:51,280

we'll take questions all right so if

120

00:04:55,430 --> 00:04:53,280

you're on the phone bridge please press

121

00:04:57,510 --> 00:04:55,440

star one if you have a question and then

122

00:04:59,430 --> 00:04:57,520

press star 2 to withdraw your question

123

00:05:00,950 --> 00:04:59,440

if it's already been answered

124

00:05:02,629 --> 00:05:00,960

all right you will be allowed one

125

00:05:04,390 --> 00:05:02,639

question and a follow-up please state

126  
00:05:05,670 --> 00:05:04,400  
your name and affiliation before asking

127  
00:05:07,749 --> 00:05:05,680  
your question

128  
00:05:11,590 --> 00:05:07,759  
so we'll start with

129  
00:05:12,950 --> 00:05:11,600  
media and guests in the room here robert

130  
00:05:16,950 --> 00:05:12,960  
and please wait for the mic and we'll

131  
00:05:21,830 --> 00:05:20,469  
hi robert pearlman with collectspace.com

132  
00:05:23,510 --> 00:05:21,840  
for scott

133  
00:05:25,749 --> 00:05:23,520  
i think it may have slipped past your

134  
00:05:28,950 --> 00:05:25,759  
expedition but can you talk a little bit

135  
00:05:31,270 --> 00:05:28,960  
about um potentially the first crew

136  
00:05:34,790 --> 00:05:31,280  
dragon unmanned test arriving how much

137  
00:05:38,230 --> 00:05:34,800  
preparation you've done for it as a crew

138  
00:05:40,469 --> 00:05:38,240

and what that preparation consisted of

139

00:05:41,909 --> 00:05:40,479

uh well we we didn't really prepare uh

140

00:05:44,070 --> 00:05:41,919

too much for it we

141

00:05:45,990 --> 00:05:44,080

you know it's on the schedule to to

142

00:05:47,990 --> 00:05:46,000

happen and if it started looking like it

143

00:05:50,150 --> 00:05:48,000

was a realistic target then we we would

144

00:05:51,430 --> 00:05:50,160

be training uh quite a bit more uh the

145

00:05:53,990 --> 00:05:51,440

procedures that we would use would

146

00:05:56,790 --> 00:05:54,000

pretty much be standard procedures uh

147

00:05:58,790 --> 00:05:56,800

for any visiting vehicle uh or any

148

00:05:59,830 --> 00:05:58,800

transport vehicle to uh to arrive on

149

00:06:01,189 --> 00:05:59,840

station

150

00:06:03,430 --> 00:06:01,199

so the amount of training that we would

151

00:06:05,510 --> 00:06:03,440

do on station real time just prior to

152

00:06:07,029 --> 00:06:05,520

the arrival would probably ramp up and

153

00:06:09,189 --> 00:06:07,039

would probably take uh take a couple of

154

00:06:10,870 --> 00:06:09,199

weeks of training on on getting more

155

00:06:12,070 --> 00:06:10,880

familiar with the systems more familiar

156

00:06:14,950 --> 00:06:12,080

with the processes and some of the

157

00:06:16,629 --> 00:06:14,960

limitations uh on that but we've had a

158

00:06:18,230 --> 00:06:16,639

little bit of overview on dragon you

159

00:06:20,629 --> 00:06:18,240

know i used to work commercial crew you

160

00:06:22,550 --> 00:06:20,639

know several years ago so we all have as

161

00:06:24,550 --> 00:06:22,560

a crew we have a general knowledge of of

162

00:06:27,350 --> 00:06:24,560

the systems and and and how it should

163

00:06:28,390 --> 00:06:27,360

work uh for that but but other than that

164

00:06:31,110 --> 00:06:28,400

um

165

00:06:33,830 --> 00:06:31,120

we we don't see it coming into our our

166

00:06:35,749 --> 00:06:33,840

our schedule uh while we're there

167

00:06:37,830 --> 00:06:35,759

but but if it does start looking like it

168

00:06:40,550 --> 00:06:37,840

will then then we'll ramp up and start

169

00:06:43,270 --> 00:06:40,560

training more intensely

170

00:06:45,110 --> 00:06:43,280

great question and for those of you who

171

00:06:46,870 --> 00:06:45,120

don't know we are looking forward to

172

00:06:49,350 --> 00:06:46,880

commercial crew flights where our

173

00:06:51,430 --> 00:06:49,360

contract partners boeing and spacex are

174

00:06:53,350 --> 00:06:51,440

building vehicles to launch

175

00:06:55,350 --> 00:06:53,360

astronauts from america to the space

176

00:06:57,270 --> 00:06:55,360

station so we're very excited for that

177

00:06:59,189 --> 00:06:57,280

all right another question

178

00:07:00,710 --> 00:06:59,199

yes my name is jared williams with

179

00:07:03,270 --> 00:07:00,720

creator space local maker space in

180

00:07:05,749 --> 00:07:03,280

league city and i was uh going to ask do

181

00:07:07,350 --> 00:07:05,759

you have your own makerspace are you

182

00:07:09,110 --> 00:07:07,360

part of the one here at nasa cause i

183

00:07:10,790 --> 00:07:09,120

know you guys do have one

184

00:07:14,469 --> 00:07:10,800

and if not do you have an affiliation

185

00:07:18,629 --> 00:07:16,710

i do not and i just actually learned

186

00:07:21,110 --> 00:07:18,639

about the maker organization as i was

187

00:07:22,629 --> 00:07:21,120

preparing for uh for this interview uh i

188

00:07:25,029 --> 00:07:22,639

got on the web a little bit last night

189

00:07:27,350 --> 00:07:25,039

and started looking at all all you do

190

00:07:29,350 --> 00:07:27,360

and it's uh it's amazing and and i would

191

00:07:30,790 --> 00:07:29,360

like to get more more involved in it

192

00:07:32,309 --> 00:07:30,800

when i get back from my mission or maybe

193

00:07:34,710 --> 00:07:32,319

during the mission if we can send up

194

00:07:37,110 --> 00:07:34,720

some uh some documents for that

195

00:07:39,670 --> 00:07:37,120

uh for that so thank you for uh for

196

00:07:41,670 --> 00:07:39,680

coming out and uh and showing us all

197

00:07:43,110 --> 00:07:41,680

what you do and i see the bus out there

198

00:07:46,469 --> 00:07:43,120

and i gotta go take a look at that that

199

00:07:49,189 --> 00:07:47,830

awesome all right we have another

200

00:07:50,710 --> 00:07:49,199

question over here

201  
00:07:53,029 --> 00:07:50,720  
hey my name is dave renee i'm with the

202  
00:07:56,629 --> 00:07:53,039  
innovation spark and so we're promoting

203  
00:07:58,550 --> 00:07:56,639  
no kids interest in steam education so

204  
00:08:00,150 --> 00:07:58,560  
seeing how long how long it took you to

205  
00:08:02,309 --> 00:08:00,160  
prepare for this mission what advice

206  
00:08:03,830 --> 00:08:02,319  
would you have for the young

207  
00:08:05,029 --> 00:08:03,840  
kids coming up

208  
00:08:07,430 --> 00:08:05,039  
and what would they need to do to

209  
00:08:09,830 --> 00:08:07,440  
prepare to maybe participate

210  
00:08:11,430 --> 00:08:09,840  
in a national mission in the future

211  
00:08:15,430 --> 00:08:11,440  
i think the the biggest thing that they

212  
00:08:17,510 --> 00:08:15,440  
can do is to get a good education

213  
00:08:19,589 --> 00:08:17,520

uh really focus hard on on making that

214

00:08:22,309 --> 00:08:19,599

happen if they like you know building

215

00:08:24,629 --> 00:08:22,319

systems fixing systems wondering how

216

00:08:26,390 --> 00:08:24,639

systems work that's uh that's a benefit

217

00:08:28,230 --> 00:08:26,400

that will carry their their interest

218

00:08:29,670 --> 00:08:28,240

through all of the education that that

219

00:08:30,390 --> 00:08:29,680

they should have

220

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

but

221

00:08:34,550 --> 00:08:32,880

they should concentrate on education and

222

00:08:37,350 --> 00:08:34,560

if they find a point of something that

223

00:08:39,670 --> 00:08:37,360

they love whether it's in technology or

224

00:08:41,509 --> 00:08:39,680

art or music or whatever it doesn't

225

00:08:43,750 --> 00:08:41,519

matter we have room for all of them in

226

00:08:44,790 --> 00:08:43,760

this in in the human space flight

227

00:08:46,470 --> 00:08:44,800

community

228

00:08:48,150 --> 00:08:46,480

it takes all types we're probably one of

229

00:08:49,590 --> 00:08:48,160

the most diverse groups

230

00:08:51,350 --> 00:08:49,600

that you'd ever find in any any

231

00:08:54,150 --> 00:08:51,360

corporation

232

00:08:55,509 --> 00:08:54,160

out there the mission is incredible and

233

00:08:57,350 --> 00:08:55,519

and if you have a love for space it

234

00:08:59,190 --> 00:08:57,360

doesn't matter what you do

235

00:09:02,150 --> 00:08:59,200

do it well do whatever it is you you

236

00:09:04,790 --> 00:09:02,160

like well and then and then bring it to

237

00:09:07,110 --> 00:09:04,800

the space community because we want it

238

00:09:09,030 --> 00:09:07,120

thanks do nemo or anton do you want to

239

00:09:11,430 --> 00:09:09,040

add anything about education or

240

00:09:13,990 --> 00:09:11,440

inspiring the next generation

241

00:09:16,790 --> 00:09:14,000

actually when i was a kid

242

00:09:19,269 --> 00:09:16,800

i was never thinking about

243

00:09:21,110 --> 00:09:19,279

you know becoming an astronaut but for

244

00:09:23,110 --> 00:09:21,120

some reason you know

245

00:09:23,829 --> 00:09:23,120

i i am here

246

00:09:24,710 --> 00:09:23,839

so

247

00:09:27,030 --> 00:09:24,720

i think

248

00:09:31,430 --> 00:09:29,430

that's very interesting but uh

249

00:09:32,550 --> 00:09:31,440

i'm thinking about my teachers my

250

00:09:35,350 --> 00:09:32,560

parents

251

00:09:38,389 --> 00:09:35,360

they directed me to the right

252

00:09:39,829 --> 00:09:38,399

direction whenever i think about i'm

253

00:09:41,910 --> 00:09:39,839

you know studying

254

00:09:44,150 --> 00:09:41,920

something else they you know just

255

00:10:04,470 --> 00:09:44,160

directed me to the right direction then

256

00:10:09,590 --> 00:10:07,110

i should say that my

257

00:10:11,829 --> 00:10:09,600

dream to become a cosmonaut and go into

258

00:10:15,110 --> 00:10:11,839

space has been my childhood dream and i

259

00:10:16,389 --> 00:10:15,120

was advancing the dream step by step and

260

00:10:18,710 --> 00:10:16,399

the

261

00:10:20,550 --> 00:10:18,720

makerspace representative mentioned i

262

00:10:22,630 --> 00:10:20,560

was working hard to

263

00:10:42,790 --> 00:10:22,640

advance my education to achieve their

264

00:10:47,350 --> 00:10:44,790

and for our kids all over the world i

265

00:10:49,670 --> 00:10:47,360

should say that using my example it is

266

00:10:52,310 --> 00:10:49,680

not that difficult to become a cosmonaut

267

00:10:54,630 --> 00:10:52,320

or an astronaut you need to study hard

268

00:10:57,590 --> 00:10:54,640

you need to listen to

269

00:11:00,389 --> 00:10:57,600

adults follow directions no drinking

270

00:11:02,389 --> 00:11:00,399

no smoking no drugs lots of sports and

271

00:11:04,230 --> 00:11:02,399

you can pursue your dream

272

00:11:06,310 --> 00:11:04,240

great thank you all right we have

273

00:11:10,230 --> 00:11:06,320

another question over here

274

00:11:12,470 --> 00:11:10,240

i'm ethan saudia with pcs4me and um my

275

00:11:14,710 --> 00:11:12,480

question is well i've noticed that your

276

00:11:16,470 --> 00:11:14,720

twitter handle is astro maker and i'm

277

00:11:18,550 --> 00:11:16,480

wondering what kind of things you like

278

00:11:21,750 --> 00:11:18,560

making and if you will be involved with

279

00:11:25,110 --> 00:11:21,760

the raspberry pi astro pi program aboard

280

00:11:26,010 --> 00:11:25,120

the international space station

281

00:11:27,590 --> 00:11:26,020

am i part of that

282

00:11:29,750 --> 00:11:27,600

[Laughter]

283

00:11:32,310 --> 00:11:29,760

i have to ask the boss here i believe

284

00:11:33,750 --> 00:11:32,320

it's a european space agency experiment

285

00:11:36,310 --> 00:11:33,760

i don't know if you guys have more info

286

00:11:37,829 --> 00:11:36,320

on it but you may you never know yeah

287

00:11:39,990 --> 00:11:37,839

yeah we'll see when we get there i

288

00:11:42,790 --> 00:11:40,000

haven't been been briefed on it or uh

289

00:11:45,670 --> 00:11:42,800

i've been part of it uh yet um so my my

290

00:11:47,750 --> 00:11:45,680

call sign is uh astromaker on on twitter

291

00:11:49,990 --> 00:11:47,760

uh and that just that comes from uh when

292

00:11:53,509 --> 00:11:50,000

i was a pilot in the navy

293

00:11:56,470 --> 00:11:53,519

that um uh my co my colleagues called me

294

00:11:59,350 --> 00:11:56,480

maker and um it did not have to do

295

00:12:01,750 --> 00:11:59,360

because i made things it had other other

296

00:12:04,949 --> 00:12:01,760

reasons and then um

297

00:12:07,910 --> 00:12:04,959

which i won't talk about today

298

00:12:10,230 --> 00:12:07,920

but uh but it's uh it's

299

00:12:11,829 --> 00:12:10,240

more than a great coincidence i do like

300

00:12:14,870 --> 00:12:11,839

making things i do like fixing things i

301

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

got a lot of tools at home and i have a

302

00:12:18,790 --> 00:12:17,120

small garage but it gets everything done

303

00:12:21,269 --> 00:12:18,800

and when the dishwasher breaks i pull it

304

00:12:24,230 --> 00:12:21,279

out and i'll put a pump in it or take it

305

00:12:25,990 --> 00:12:24,240

apart the the clothes washer breaks i'll

306

00:12:27,670 --> 00:12:26,000

take it out put a new motor in it and if

307

00:12:29,750 --> 00:12:27,680

the car breaks i'll pull that out take

308

00:12:32,310 --> 00:12:29,760

the motor out put another one in it and

309

00:12:34,150 --> 00:12:32,320

whatever whatever it needs to happen and

310

00:12:35,910 --> 00:12:34,160

uh and occasionally i'll i'll get some

311

00:12:38,470 --> 00:12:35,920

tools out and you know make some nice

312

00:12:40,629 --> 00:12:38,480

little ornament things or or some

313

00:12:42,310 --> 00:12:40,639

plaques for my friends that that i've

314

00:12:43,990 --> 00:12:42,320

done in the past so

315

00:12:46,150 --> 00:12:44,000

if it's a system i like getting into it

316

00:12:47,430 --> 00:12:46,160

and seeing how it works and i try to fix

317

00:12:49,110 --> 00:12:47,440

it

318

00:12:50,470 --> 00:12:49,120

not just because i'm cheap although i am

319

00:12:51,910 --> 00:12:50,480

cheap but

320

00:12:53,350 --> 00:12:51,920

but because it's cool you know going in

321

00:12:54,710 --> 00:12:53,360

and seeing how all the wires work and

322

00:12:56,870 --> 00:12:54,720

how all the all the mechanical

323

00:12:58,470 --> 00:12:56,880

interfaces work and uh and just getting

324

00:12:59,910 --> 00:12:58,480

it working and it's a challenge for me

325

00:13:02,150 --> 00:12:59,920

being a little bit older and working all

326

00:13:03,509 --> 00:13:02,160

the electronics into these systems and

327

00:13:05,509 --> 00:13:03,519

and doing the troubleshooting so i'm

328

00:13:07,910 --> 00:13:05,519

starting to gear up my toolbox when it

329

00:13:09,350 --> 00:13:07,920

you know for electronic troubleshooting

330

00:13:11,030 --> 00:13:09,360

as well i'm trying to get my kids

331

00:13:12,310 --> 00:13:11,040

interested in it as well if you guys

332

00:13:13,670 --> 00:13:12,320

have any ideas how to do that i'd

333

00:13:15,110 --> 00:13:13,680

appreciate it

334

00:13:16,790 --> 00:13:15,120

but that's pretty much it

335

00:13:18,310 --> 00:13:16,800

and that will of course be a big job for

336

00:13:20,150 --> 00:13:18,320

you and the whole crew on the space

337

00:13:21,430 --> 00:13:20,160

station because there's a lot of

338

00:13:23,030 --> 00:13:21,440

maintenance involved on the space

339

00:13:24,870 --> 00:13:23,040

station and i'm sure you'll have plenty

340

00:13:26,949 --> 00:13:24,880

of things to fix up there the job won't

341

00:13:28,790 --> 00:13:26,959

stop once you get a space

342

00:13:31,110 --> 00:13:28,800

all right next question

343

00:13:32,790 --> 00:13:31,120

hello uh h yasami with kyoto news the

344

00:13:35,430 --> 00:13:32,800

japanese wire

345

00:13:38,230 --> 00:13:35,440

for three of you uh please describe the

346

00:13:40,629 --> 00:13:38,240

impression that you have for each for

347

00:13:43,750 --> 00:13:40,639

each other as a fellow clue

348

00:13:46,710 --> 00:13:45,670

i love these guys like my like my

349

00:13:48,629 --> 00:13:46,720

brothers

350

00:13:49,829 --> 00:13:48,639

now we've trained hard for uh for a year

351

00:13:52,150 --> 00:13:49,839

and a half now

352

00:13:55,110 --> 00:13:52,160

and uh you know it's very it can be very

353

00:13:57,990 --> 00:13:55,120

challenging it's very intense um and and

354

00:14:00,230 --> 00:13:58,000

we work very hard very long hours and uh

355

00:14:02,550 --> 00:14:00,240

so we take care of each other

356

00:14:04,310 --> 00:14:02,560

there's uh i have a hundred and hundred

357

00:14:07,509 --> 00:14:04,320

percent trust for uh for both these

358

00:14:08,949 --> 00:14:07,519

folks um i couldn't be more luckier than

359

00:14:11,430 --> 00:14:08,959

going up with uh

360

00:14:13,670 --> 00:14:11,440

with anton and nemo

361

00:14:15,829 --> 00:14:13,680

your family

362

00:14:18,790 --> 00:14:15,839

uh as scott mentioned

363

00:14:19,750 --> 00:14:18,800

we are like a family or brothers

364

00:14:30,629 --> 00:14:19,760

and

365

00:14:32,870 --> 00:14:30,639

very very experienced as i mentioned

366

00:14:35,269 --> 00:14:32,880

before and he flew

367

00:14:38,470 --> 00:14:35,279

with of course russian cosmonauts and

368

00:14:41,590 --> 00:14:38,480

american astronauts and the european

369

00:14:45,030 --> 00:14:41,600

italian astronaut japanese you stayed

370

00:14:47,590 --> 00:14:45,040

with other japanese astronauts in the

371

00:14:48,870 --> 00:14:47,600

previous mission so very international

372

00:14:51,030 --> 00:14:48,880

very uh

373

00:14:53,350 --> 00:14:51,040

experienced like a

374

00:14:54,470 --> 00:14:53,360

big brother leading us to the right

375

00:15:02,949 --> 00:14:54,480

direction

376

00:15:06,150 --> 00:15:04,470

thank you very much for your kind words

377

00:15:26,150 --> 00:15:06,160

i would like to confirm that yes we're

378

00:15:30,310 --> 00:15:28,069

and during the one and a half years of

379

00:15:32,470 --> 00:15:30,320

training our training consists of a lot

380

00:15:34,230 --> 00:15:32,480

of trips to different agencies for

381

00:15:36,470 --> 00:15:34,240

example roscosmos that means going to

382

00:15:38,069 --> 00:15:36,480

moscow houston here

383

00:15:57,829 --> 00:15:38,079

germany cologne

384

00:16:01,829 --> 00:15:59,829

and we not only work together as a

385

00:16:04,389 --> 00:16:01,839

three-person crew we also

386

00:16:05,509 --> 00:16:04,399

spend time together with our families

387

00:16:07,749 --> 00:16:05,519

with

388

00:16:09,430 --> 00:16:07,759

three of our families and

389

00:16:11,749 --> 00:16:09,440

we are hoping that by the time we get to

390

00:16:12,710 --> 00:16:11,759

space we're not going to experience any

391

00:16:15,030 --> 00:16:12,720

uh

392

00:16:17,030 --> 00:16:15,040

interrelationship or any interpersonal

393

00:16:18,550 --> 00:16:17,040

problems

394

00:16:19,829 --> 00:16:18,560

yeah the space station is truly

395

00:16:21,509 --> 00:16:19,839

international we have a great

396

00:16:23,350 --> 00:16:21,519

representation of that here with our

397

00:16:25,590 --> 00:16:23,360

american japanese and russian

398

00:16:27,350 --> 00:16:25,600

representatives and you guys it's

399

00:16:29,910 --> 00:16:27,360

amazing to see how well you all work

400

00:16:32,470 --> 00:16:29,920

together different languages but you're

401  
00:16:33,509 --> 00:16:32,480  
all doing the job up there so very cool

402  
00:16:34,829 --> 00:16:33,519  
thank you

403  
00:16:37,189 --> 00:16:34,839  
all right next

404  
00:16:40,230 --> 00:16:37,199  
question my name is makoto mitsui from

405  
00:16:41,430 --> 00:16:40,240  
the yomir shimbun japanese newspaper uh

406  
00:16:44,470 --> 00:16:41,440  
this question

407  
00:16:47,990 --> 00:16:44,480  
goes to mr shkaplerov and

408  
00:16:51,350 --> 00:16:48,000  
mr tingle so this question is related to

409  
00:16:55,350 --> 00:16:51,360  
the previous one i would like to uh

410  
00:16:59,110 --> 00:16:55,360  
impression of mr kanai in detail so what

411  
00:17:02,550 --> 00:16:59,120  
is the uh mr khanna's excellent point as

412  
00:17:04,710 --> 00:17:02,560  
an astronaut and what is his role uh as

413  
00:17:07,029 --> 00:17:04,720

a team in terms of

414

00:17:11,350 --> 00:17:07,039

keeping good relation

415

00:17:13,350 --> 00:17:12,470

nemo

416

00:17:14,309 --> 00:17:13,360

is

417

00:17:16,630 --> 00:17:14,319

first

418

00:17:17,590 --> 00:17:16,640

a great friend

419

00:17:20,230 --> 00:17:17,600

he's

420

00:17:21,990 --> 00:17:20,240

very trusty very reliable

421

00:17:23,350 --> 00:17:22,000

and i can count on him

422

00:17:27,350 --> 00:17:23,360

to

423

00:17:30,070 --> 00:17:27,360

don't know i need it he knows i need it

424

00:17:32,630 --> 00:17:30,080

and he he helps

425

00:17:35,590 --> 00:17:32,640

another great

426

00:17:36,789 --> 00:17:35,600

tribute to nemo is that he is incredibly

427

00:17:38,950 --> 00:17:36,799

smart

428

00:17:40,310 --> 00:17:38,960

when we're doing simulators together

429

00:17:41,590 --> 00:17:40,320

anton and i will be looking at the

430

00:17:43,909 --> 00:17:41,600

procedures

431

00:17:46,070 --> 00:17:43,919

and there's a choice to make left or

432

00:17:47,510 --> 00:17:46,080

right and we'll talk about it we'll talk

433

00:17:49,430 --> 00:17:47,520

about it and then we'll look at nemo and

434

00:17:58,310 --> 00:17:49,440

nemo goes right

435

00:17:58,320 --> 00:18:06,950

um

436

00:18:13,510 --> 00:18:10,070

i believe that nemo is a young

437

00:18:25,909 --> 00:18:13,520

person and um he has a great future in

438

00:18:25,919 --> 00:18:29,190

party

439

00:18:32,470 --> 00:18:30,070

and

440

00:18:35,669 --> 00:18:32,480

the first time we met

441

00:18:37,430 --> 00:18:35,679

he spoke neither russian or english and

442

00:18:40,630 --> 00:18:37,440

several months later i saw him sitting

443

00:18:56,420 --> 00:18:40,640

at a desk and listening to instructors

444

00:18:56,430 --> 00:19:00,070

[Music]

445

00:19:03,909 --> 00:19:01,990

it emphasizes what kind of a

446

00:19:06,150 --> 00:19:03,919

hard-working person he is and if he's

447

00:19:07,909 --> 00:19:06,160

studying something you can be sure that

448

00:19:08,789 --> 00:19:07,919

he's going to study everything to the

449

00:19:11,350 --> 00:19:08,799

very

450

00:19:16,230 --> 00:19:11,360

last bolt and he studies the entire

451  
00:19:16,240 --> 00:19:25,990  
the doctor

452  
00:19:29,750 --> 00:19:28,310  
and we're flying to space with the maker

453  
00:19:32,230 --> 00:19:29,760  
and we're going to have a medical doctor

454  
00:19:34,950 --> 00:19:32,240  
on board so within six months we can be

455  
00:19:37,110 --> 00:19:34,960  
confident that if something

456  
00:19:39,110 --> 00:19:37,120  
doesn't feel right and we need medical

457  
00:19:40,630 --> 00:19:39,120  
help the nemo will cure us and we will

458  
00:19:43,029 --> 00:19:40,640  
come back to earth

459  
00:19:44,710 --> 00:19:43,039  
fit and healthy

460  
00:19:46,390 --> 00:19:44,720  
it's definitely nice to have a doctor on

461  
00:19:48,310 --> 00:19:46,400  
board that's great

462  
00:19:49,190 --> 00:19:48,320  
thank you all right we have a follow-up

463  
00:19:51,430 --> 00:19:49,200

question

464

00:19:52,470 --> 00:19:51,440

i guess my follow-up was uh are you guys

465

00:19:54,150 --> 00:19:52,480

going to be able to make it to the

466

00:19:57,029 --> 00:19:54,160

houston maker faire

467

00:19:59,029 --> 00:19:57,039

coming up next week the 21st and 22nd

468

00:20:00,630 --> 00:19:59,039

and also uh it's an open invitation for

469

00:20:02,950 --> 00:20:00,640

both my makerspace and the other maker

470

00:20:04,470 --> 00:20:02,960

spaces for any astronauts or other nasa

471

00:20:07,190 --> 00:20:04,480

people to you know come and experience

472

00:20:08,549 --> 00:20:07,200

what a makerspace is

473

00:20:11,190 --> 00:20:08,559

okay i'm gonna try to get up there on

474

00:20:13,990 --> 00:20:11,200

the 22nd uh uh i'm in cincinnati until

475

00:20:15,909 --> 00:20:14,000

the 21st so uh if i can get up there

476

00:20:17,350 --> 00:20:15,919

it'll be on i think sunday the 22nd

477

00:20:19,190 --> 00:20:17,360

right

478

00:20:20,470 --> 00:20:19,200

excellent yeah we'll give it a try

479

00:20:22,549 --> 00:20:20,480

okay

480

00:20:25,510 --> 00:20:22,559

all right we have another question in

481

00:20:29,270 --> 00:20:27,830

yes my name my name is greg radliff and

482

00:20:30,549 --> 00:20:29,280

i'd like to ask

483

00:20:31,990 --> 00:20:30,559

i know that y'all spent the last year

484

00:20:33,110 --> 00:20:32,000

and a half working together but did you

485

00:20:34,549 --> 00:20:33,120

also

486

00:20:35,669 --> 00:20:34,559

have time to work with the crew that's

487

00:20:37,350 --> 00:20:35,679

already up there that you'll be

488

00:20:41,029 --> 00:20:37,360

partnering with for at least three

489

00:20:44,310 --> 00:20:42,789

absolutely uh you know we had a lot of

490

00:20:45,590 --> 00:20:44,320

training with the crew that's currently

491

00:20:46,789 --> 00:20:45,600

up there and we've had a lot of training

492

00:20:48,630 --> 00:20:46,799

with the crew that's going to come up

493

00:20:49,990 --> 00:20:48,640

after us as well

494

00:20:50,950 --> 00:20:50,000

they're all great friends they're all

495

00:20:54,230 --> 00:20:50,960

great

496

00:20:56,870 --> 00:20:54,240

and we've had you know several emergency

497

00:20:59,430 --> 00:20:56,880

simulators we've

498

00:21:00,789 --> 00:20:59,440

shared beverages at shep's bar and star

499

00:21:02,549 --> 00:21:00,799

city

500

00:21:04,710 --> 00:21:02,559

and we've had had a lot of family

501  
00:21:07,430 --> 00:21:04,720  
dinners together so it's uh it's just a

502  
00:21:09,029 --> 00:21:07,440  
big extended family for us

503  
00:21:11,029 --> 00:21:09,039  
so about every three months we have a

504  
00:21:11,830 --> 00:21:11,039  
new crew launch to the space station and

505  
00:21:13,510 --> 00:21:11,840  
um

506  
00:21:15,190 --> 00:21:13,520  
and they launch in their soyuz three at

507  
00:21:17,270 --> 00:21:15,200  
a time and there are usually about six

508  
00:21:19,029 --> 00:21:17,280  
people on the space station at a time

509  
00:21:21,350 --> 00:21:19,039  
all right i think we have a question on

510  
00:21:23,909 --> 00:21:21,360  
the phone bridge just a reminder if you

511  
00:21:25,750 --> 00:21:23,919  
have a question you can press star one

512  
00:21:26,870 --> 00:21:25,760  
and you can press star two to withdraw

513  
00:21:28,710 --> 00:21:26,880

your question

514

00:21:33,510 --> 00:21:28,720

we have jill talk with the randolph

515

00:21:37,750 --> 00:21:35,669

yes maker as you know this is your

516

00:21:40,390 --> 00:21:37,760

hometown newspaper but i have a question

517

00:21:43,110 --> 00:21:40,400

for you nemo and anton could you all

518

00:21:45,190 --> 00:21:43,120

talk about the importance of your

519

00:21:46,789 --> 00:21:45,200

individual hometown communities during

520

00:21:48,390 --> 00:21:46,799

your mission if

521

00:21:52,390 --> 00:21:48,400

the entire mission but especially on

522

00:21:57,029 --> 00:21:54,230

you want to go

523

00:22:01,110 --> 00:21:57,039

okay so the uh the hometown is so

524

00:22:02,710 --> 00:22:01,120

critical to i'm sure all of us

525

00:22:04,870 --> 00:22:02,720

the people there the relationships we

526

00:22:09,029 --> 00:22:04,880

had the experiences we had growing up

527

00:22:10,789 --> 00:22:09,039

whether it's with with family friends or

528

00:22:13,430 --> 00:22:10,799

academic

529

00:22:15,190 --> 00:22:13,440

it becomes part of you and you don't

530

00:22:17,669 --> 00:22:15,200

realize it for several years but you get

531

00:22:19,909 --> 00:22:17,679

uh you know 30 40 years down the road

532

00:22:21,750 --> 00:22:19,919

and you start to realize all of the

533

00:22:23,110 --> 00:22:21,760

little things that came together to make

534

00:22:26,590 --> 00:22:23,120

you who you are

535

00:22:29,510 --> 00:22:26,600

uh so when i launch on soyuz

536

00:22:32,870 --> 00:22:29,520

ms-07 on december 17th all of those

537

00:22:34,230 --> 00:22:32,880

folks back home are going to be with me

538

00:22:36,149 --> 00:22:34,240

awesome

539

00:22:39,590 --> 00:22:36,159

lima anything to add

540

00:22:40,549 --> 00:22:39,600

no my my hometown is tokyo but tokyo is

541

00:22:44,070 --> 00:22:40,559

too big

542

00:22:46,710 --> 00:22:44,080

to call myself it's my hometown

543

00:22:48,230 --> 00:22:46,720

but you know as a

544

00:22:51,430 --> 00:22:48,240

you know former

545

00:22:55,830 --> 00:22:51,440

navy officer i stationed

546

00:22:59,669 --> 00:22:55,840

many town cities in all over japan

547

00:23:01,669 --> 00:22:59,679

so i feel these you know the towns or

548

00:23:02,870 --> 00:23:01,679

people

549

00:23:05,669 --> 00:23:02,880

over there

550

00:23:07,590 --> 00:23:05,679

is kind of my you know

551  
00:23:09,590 --> 00:23:07,600  
not hometown but the

552  
00:23:10,470 --> 00:23:09,600  
close friends and

553  
00:23:12,549 --> 00:23:10,480  
you know

554  
00:23:13,430 --> 00:23:12,559  
across the family members

555  
00:23:16,149 --> 00:23:13,440  
uh

556  
00:23:17,510 --> 00:23:16,159  
i have that kind of feeling about

557  
00:23:21,669 --> 00:23:17,520  
the

558  
00:23:23,350 --> 00:23:21,679  
in tokyo are going to be very proud of

559  
00:23:41,990 --> 00:23:23,360  
you and watching you as well so it's

560  
00:23:47,350 --> 00:23:44,149  
my hometown where i was born is

561  
00:23:49,510 --> 00:23:47,360  
sevastopol and i believe that town

562  
00:23:50,390 --> 00:23:49,520  
gave me everything

563  
00:23:54,710 --> 00:23:50,400

that

564

00:23:56,870 --> 00:23:54,720

contributed to who and what i am today

565

00:23:58,149 --> 00:23:56,880

awesome thank you all all right we're

566

00:24:00,149 --> 00:23:58,159

going to take a couple questions from

567

00:24:02,149 --> 00:24:00,159

social media now if you do have a

568

00:24:03,909 --> 00:24:02,159

question you can ask it

569

00:24:06,390 --> 00:24:03,919

on social media using

570

00:24:08,870 --> 00:24:06,400

ask nasa so we have haley here our

571

00:24:11,110 --> 00:24:08,880

social media specialist haley

572

00:24:13,830 --> 00:24:11,120

awesome so the first question comes from

573

00:24:15,909 --> 00:24:13,840

francisco on facebook he wants to know

574

00:24:17,990 --> 00:24:15,919

is english the most common language on

575

00:24:24,070 --> 00:24:18,000

the iss or is there a more common

576

00:24:29,909 --> 00:24:27,510

unfortunately japanese is not the most

577

00:24:32,710 --> 00:24:29,919

language in space station but

578

00:24:33,990 --> 00:24:32,720

we use both english and the

579

00:24:37,110 --> 00:24:34,000

russian language

580

00:24:40,220 --> 00:24:37,120

simultaneously or mixed up so sometimes

581

00:24:43,750 --> 00:24:40,230

we you know call it the roonglish

582

00:24:45,510 --> 00:24:43,760

[Laughter]

583

00:24:48,230 --> 00:24:45,520

and they do launch on a russian vehicle

584

00:24:49,990 --> 00:24:48,240

the soyuz so in that vehicle it's pretty

585

00:24:51,269 --> 00:24:50,000

much all russian right yeah so while

586

00:24:53,110 --> 00:24:51,279

you're launching all right great

587

00:24:56,390 --> 00:24:53,120

question you have another one so this is

588

00:24:58,549 --> 00:24:56,400

for um any of you or all three marissa

589

00:25:00,950 --> 00:24:58,559

is asking on behalf of her five-year-old

590

00:25:03,269 --> 00:25:00,960

son on facebook how do you exercise in

591

00:25:05,269 --> 00:25:03,279

space

592

00:25:07,590 --> 00:25:05,279

we have lots of equipment

593

00:25:09,269 --> 00:25:07,600

in space and it's actually very

594

00:25:10,789 --> 00:25:09,279

important to exercise

595

00:25:13,190 --> 00:25:10,799

one of the big things we see when we're

596

00:25:16,070 --> 00:25:13,200

in space is bone loss

597

00:25:18,950 --> 00:25:16,080

and we have found through active daily

598

00:25:21,110 --> 00:25:18,960

exercise that we can minimize that bone

599

00:25:22,549 --> 00:25:21,120

loss over the duration of the space

600

00:25:24,549 --> 00:25:22,559

flight

601  
00:25:27,110 --> 00:25:24,559  
and minimize the recovery uh when we

602  
00:25:29,590 --> 00:25:27,120  
return so we have a weight lifting

603  
00:25:31,190 --> 00:25:29,600  
machine called the a-red and i can't

604  
00:25:33,269 --> 00:25:31,200  
remember what that acronym stands for

605  
00:25:35,750 --> 00:25:33,279  
i'm sorry the advanced resistive

606  
00:25:38,630 --> 00:25:35,760  
exercise device excellent thank you she

607  
00:25:40,870 --> 00:25:38,640  
got me out of trouble again

608  
00:25:42,630 --> 00:25:40,880  
and and we use that to to lift weights

609  
00:25:46,549 --> 00:25:42,640  
we do a lot of squats we do a lot of you

610  
00:25:48,950 --> 00:25:46,559  
know presses we work our cores as much

611  
00:25:50,950 --> 00:25:48,960  
as we can and we're afforded a couple

612  
00:25:52,630 --> 00:25:50,960  
hours every day on the schedule to uh to

613  
00:25:55,029 --> 00:25:52,640

have a good workout we also have

614

00:25:57,909 --> 00:25:55,039

cardiovascular a treadmill up there and

615

00:26:00,070 --> 00:25:57,919

a bicycle to uh to exercise with very

616

00:26:01,990 --> 00:26:00,080

important to exercise every single day

617

00:26:04,149 --> 00:26:02,000

in space

618

00:26:07,350 --> 00:26:04,159

all right another question so this one

619

00:26:10,230 --> 00:26:07,360

is specifically for naroshika kanai but

620

00:26:11,750 --> 00:26:10,240

uh for anyone really um is there any

621

00:26:13,269 --> 00:26:11,760

special japanese food you're bringing

622

00:26:14,630 --> 00:26:13,279

with you and for everyone is there any

623

00:26:15,990 --> 00:26:14,640

special food that reminds you of home

624

00:26:17,190 --> 00:26:16,000

you're bringing

625

00:26:19,990 --> 00:26:17,200

actually

626

00:26:22,149 --> 00:26:20,000

yeah jack's a japanese space agency

627

00:26:26,149 --> 00:26:22,159

provides

628

00:26:27,430 --> 00:26:26,159

many kinds of japanese space food so i i

629

00:26:30,070 --> 00:26:27,440

will bring

630

00:26:33,029 --> 00:26:30,080

all all kinds of japanese food and share

631

00:26:35,510 --> 00:26:33,039

with my crewmates

632

00:26:37,269 --> 00:26:35,520

are you guys bringing any special food

633

00:26:38,710 --> 00:26:37,279

i'm just going to try to steal nemo's

634

00:26:40,789 --> 00:26:38,720

food when he brings it on because it's

635

00:26:42,310 --> 00:26:40,799

always really good

636

00:26:55,990 --> 00:26:42,320

what about you anton

637

00:27:01,669 --> 00:26:59,669

it's true we have food items represented

638

00:27:05,269 --> 00:27:01,679

from uh different countries on board of

639

00:27:07,590 --> 00:27:05,279

the iss mostly it's russian uh nasa food

640

00:27:10,310 --> 00:27:07,600

items and also the rest of the food

641

00:27:12,310 --> 00:27:10,320

complement depends on uh who is um

642

00:27:17,430 --> 00:27:12,320

industry astronaut flying on board of

643

00:27:17,440 --> 00:27:30,149

is

644

00:27:34,389 --> 00:27:32,389

separately for each crew member however

645

00:27:38,070 --> 00:27:34,399

we have a very good tradition of food

646

00:27:40,630 --> 00:27:38,080

sharing and we choose the items each of

647

00:27:43,190 --> 00:27:40,640

us prefers and

648

00:27:44,789 --> 00:27:43,200

that's the way we work on board

649

00:27:46,310 --> 00:27:44,799

great thank you

650

00:27:48,950 --> 00:27:46,320

i know one thing we haven't talked about

651  
00:27:50,630 --> 00:27:48,960  
yet of course is really the main job of

652  
00:27:52,389 --> 00:27:50,640  
you on the space station and that's

653  
00:27:54,230 --> 00:27:52,399  
doing science

654  
00:27:55,830 --> 00:27:54,240  
science to figure out how we're going to

655  
00:27:57,990 --> 00:27:55,840  
live longer in space so we can go

656  
00:28:00,070 --> 00:27:58,000  
further into space and also to help us

657  
00:28:01,830 --> 00:28:00,080  
on earth so i was wondering if each of

658  
00:28:03,110 --> 00:28:01,840  
you could talk a little bit about the

659  
00:28:04,710 --> 00:28:03,120  
science you'll be doing on the space

660  
00:28:06,230 --> 00:28:04,720  
station and maybe an experiment you're

661  
00:28:07,669 --> 00:28:06,240  
looking forward to

662  
00:28:09,350 --> 00:28:07,679  
sure

663  
00:28:11,350 --> 00:28:09,360

well at any given time there's on the

664

00:28:13,990 --> 00:28:11,360

order of 250

665

00:28:16,549 --> 00:28:14,000

experiments that are that are happening

666

00:28:18,070 --> 00:28:16,559

onboard space station it's a very busy

667

00:28:20,149 --> 00:28:18,080

laboratory

668

00:28:23,110 --> 00:28:20,159

some of the specific human research that

669

00:28:25,590 --> 00:28:23,120

i'll be working on includes

670

00:28:26,710 --> 00:28:25,600

a look at the spine you know when we get

671

00:28:29,750 --> 00:28:26,720

in orbit

672

00:28:31,990 --> 00:28:29,760

into space our spines extend a little

673

00:28:33,590 --> 00:28:32,000

bit and so we're trying to see what the

674

00:28:34,950 --> 00:28:33,600

the big impacts are on that we've

675

00:28:37,750 --> 00:28:34,960

they've got a big study going that i'll

676

00:28:40,070 --> 00:28:37,760

be participating in on on that um as

677

00:28:42,789 --> 00:28:40,080

well uh we also take a lot of blood a

678

00:28:46,149 --> 00:28:42,799

lot of urine a lot of fluids to uh to

679

00:28:47,909 --> 00:28:46,159

try to see what's going on um with uh

680

00:28:50,230 --> 00:28:47,919

within uh you know humans when they get

681

00:28:52,789 --> 00:28:50,240

into space uh so that's a big part of

682

00:28:55,510 --> 00:28:52,799

the study as well as far as some of the

683

00:28:58,230 --> 00:28:55,520

physical science um we'll be looking at

684

00:29:01,190 --> 00:28:58,240

things like combustion and fluids and

685

00:29:03,190 --> 00:29:01,200

some other robotics things going on with

686

00:29:04,549 --> 00:29:03,200

through spheres of that program i'm

687

00:29:06,789 --> 00:29:04,559

actually fairly excited to see the

688

00:29:08,549 --> 00:29:06,799

spheres work and that'll be part of our

689

00:29:10,389 --> 00:29:08,559

also part of our educational outreach

690

00:29:12,789 --> 00:29:10,399

program but watching those things fly

691

00:29:14,710 --> 00:29:12,799

around station is pretty cool

692

00:29:18,789 --> 00:29:14,720

spheres are robots right little flying

693

00:29:21,269 --> 00:29:18,799

robots all right thank you nemo

694

00:29:23,590 --> 00:29:21,279

yes i'm interested in the

695

00:29:24,950 --> 00:29:23,600

small satellite deployment

696

00:29:27,430 --> 00:29:24,960

it's been

697

00:29:28,950 --> 00:29:27,440

i think five years since the first small

698

00:29:32,710 --> 00:29:28,960

satellite

699

00:29:34,149 --> 00:29:32,720

deployed from japanese mojo since then i

700

00:29:36,070 --> 00:29:34,159

overheard

701  
00:29:38,070 --> 00:29:36,080  
almost 200

702  
00:29:40,389 --> 00:29:38,080  
satellites are deployed from space

703  
00:29:42,710 --> 00:29:40,399  
station so i wish i

704  
00:29:45,430 --> 00:29:42,720  
i am going to have a chance to deploy

705  
00:29:47,590 --> 00:29:45,440  
this kind of a

706  
00:29:49,269 --> 00:29:47,600  
small satellite from a japanese

707  
00:29:51,830 --> 00:29:49,279  
experimental module

708  
00:30:09,510 --> 00:29:51,840  
very cool thank you antoine what's the

709  
00:30:14,070 --> 00:30:11,590  
all the experiments that we perform on

710  
00:30:17,190 --> 00:30:14,080  
board of the iss can be divided into

711  
00:30:19,830 --> 00:30:17,200  
different categories we study our earth

712  
00:30:34,830 --> 00:30:19,840  
we study ourselves to see how human body

713  
00:30:39,510 --> 00:30:37,269

um also the experiments are very useful

714

00:30:42,470 --> 00:30:39,520

i would say our favorite experiments are

715

00:30:44,070 --> 00:30:42,480

of the type where you can touch the

716

00:30:46,310 --> 00:30:44,080

experiment items

717

00:30:48,870 --> 00:30:46,320

you are inventing something new and you

718

00:30:58,149 --> 00:30:48,880

can see uh things grow

719

00:31:01,750 --> 00:30:59,909

unfortunately there are some experiments

720

00:31:03,669 --> 00:31:01,760

that are boring you just have to turn on

721

00:31:05,750 --> 00:31:03,679

the device and then turn the device off

722

00:31:07,350 --> 00:31:05,760

after some time but somebody has to do

723

00:31:08,950 --> 00:31:07,360

it

724

00:31:10,389 --> 00:31:08,960

nice thank you

725

00:31:11,990 --> 00:31:10,399

that was great do we have any more

726

00:31:14,389 --> 00:31:12,000

questions in the room just raise your

727

00:31:22,789 --> 00:31:14,399

hand if you have a question

728

00:31:26,789 --> 00:31:24,950

could i just ask each of you why you

729

00:31:27,909 --> 00:31:26,799

were inspired to commit your life to

730

00:31:29,430 --> 00:31:27,919

space

731

00:31:31,269 --> 00:31:29,440

good question

732

00:31:34,230 --> 00:31:31,279

all right

733

00:31:35,590 --> 00:31:34,240

well that's uh that's a pretty big

734

00:31:37,590 --> 00:31:35,600

question but

735

00:31:39,350 --> 00:31:37,600

uh you know everybody's got their own

736

00:31:41,750 --> 00:31:39,360

reasons that for me it

737

00:31:43,750 --> 00:31:41,760

it wasn't really even a huge decision it

738

00:31:44,789 --> 00:31:43,760

was just a natural thing it was in my

739

00:31:46,950 --> 00:31:44,799

dna

740

00:31:48,870 --> 00:31:46,960

um

741

00:31:49,990 --> 00:31:48,880

that was a career path that that i was

742

00:31:51,830 --> 00:31:50,000

shooting for

743

00:31:53,750 --> 00:31:51,840

uh and all of the little milestones that

744

00:31:56,149 --> 00:31:53,760

lead up to it were were something that i

745

00:31:58,230 --> 00:31:56,159

wanted in my life just from being you

746

00:32:00,710 --> 00:31:58,240

know from being from childhood

747

00:32:02,230 --> 00:32:00,720

so you know was there one thing if it

748

00:32:03,590 --> 00:32:02,240

was anything it was neil armstrong

749

00:32:06,310 --> 00:32:03,600

walking on the moon

750

00:32:07,909 --> 00:32:06,320

um but then after that it was uh it was

751

00:32:11,029 --> 00:32:07,919

just in the middle of my head and it

752

00:32:14,230 --> 00:32:12,630

and you've taken i will elaborate a

753

00:32:16,389 --> 00:32:14,240

little bit you've taken you know many

754

00:32:17,909 --> 00:32:16,399

steps to get here can you tell a little

755

00:32:19,590 --> 00:32:17,919

bit about your journey to be an

756

00:32:21,590 --> 00:32:19,600

astronaut your background

757

00:32:23,509 --> 00:32:21,600

sure i figured out i went to a

758

00:32:24,470 --> 00:32:23,519

vocational high school

759

00:32:28,789 --> 00:32:24,480

and

760

00:32:30,230 --> 00:32:28,799

going to take a really

761

00:32:33,190 --> 00:32:30,240

in-depth

762

00:32:35,669 --> 00:32:33,200

intense education to be able to compete

763

00:32:38,070 --> 00:32:35,679

and to have value added when i to bring

764

00:32:40,630 --> 00:32:38,080

to the astronaut corps so i worked real

765

00:32:42,950 --> 00:32:40,640

hard got into undergraduate at umass

766

00:32:44,630 --> 00:32:42,960

dartmouth i worked really hard there in

767

00:32:45,990 --> 00:32:44,640

engineering and loved engineering and

768

00:32:47,909 --> 00:32:46,000

science

769

00:32:49,669 --> 00:32:47,919

and so i decided to go to graduate

770

00:32:51,909 --> 00:32:49,679

school i went to purdue university for

771

00:32:54,389 --> 00:32:51,919

graduate school i absolutely loved the

772

00:32:56,470 --> 00:32:54,399

sciences decided to just hold off i love

773

00:32:58,389 --> 00:32:56,480

flying airplanes and fast cars and

774

00:33:00,310 --> 00:32:58,399

motorcycles and things too

775

00:33:02,389 --> 00:33:00,320

but i decided to uh to hold off on the

776

00:33:04,230 --> 00:33:02,399

aviation thing and go get an engineering

777

00:33:06,149 --> 00:33:04,240

job on the west coast

778

00:33:08,310 --> 00:33:06,159

which was fantastic

779

00:33:10,389 --> 00:33:08,320

great learning great experience

780

00:33:11,909 --> 00:33:10,399

but i knew i needed to go fly airplanes

781

00:33:13,509 --> 00:33:11,919

as i was investigating the route what do

782

00:33:14,789 --> 00:33:13,519

i want to go to a phd and then try to be

783

00:33:17,269 --> 00:33:14,799

an astronaut or do i want to fly

784

00:33:19,590 --> 00:33:17,279

airplanes be a test pilot and try to fly

785

00:33:22,070 --> 00:33:19,600

and try to be an astronaut and and i

786

00:33:25,110 --> 00:33:22,080

decided that the the path for me was to

787

00:33:26,789 --> 00:33:25,120

go be a pilot and then a test pilot

788

00:33:28,070 --> 00:33:26,799

knowing that that was a very challenging

789

00:33:29,190 --> 00:33:28,080

physically challenging mentally

790

00:33:30,630 --> 00:33:29,200

challenging

791

00:33:32,710 --> 00:33:30,640

path to take

792

00:33:35,669 --> 00:33:32,720

but but it was a natural path for me to

793

00:33:38,470 --> 00:33:35,679

take so i ended up doing that and

794

00:33:40,470 --> 00:33:38,480

some years later here i am lucky there

795

00:33:42,950 --> 00:33:40,480

you go thank you all right nemo what

796

00:33:44,789 --> 00:33:42,960

inspired you to be an astronaut

797

00:33:47,350 --> 00:33:44,799

as i mentioned before

798

00:33:49,669 --> 00:33:47,360

i've never dreamed about becoming an

799

00:33:51,190 --> 00:33:49,679

astronaut when i was a kid

800

00:33:54,230 --> 00:33:51,200

but before

801  
00:33:58,389 --> 00:33:54,240  
becoming an astronaut i was working for

802  
00:34:01,509 --> 00:33:58,399  
the navy japan navy as a

803  
00:34:04,149 --> 00:34:01,519  
medical officer and diving officer so i

804  
00:34:05,430 --> 00:34:04,159  
was working for the diving medicine for

805  
00:34:08,629 --> 00:34:05,440  
a long time

806  
00:34:11,750 --> 00:34:08,639  
then i got interested in the extreme

807  
00:34:13,270 --> 00:34:11,760  
environment medicine and also space

808  
00:34:14,869 --> 00:34:13,280  
medicine then

809  
00:34:17,030 --> 00:34:14,879  
okay i'm

810  
00:34:19,510 --> 00:34:17,040  
let's think about becoming an

811  
00:34:22,470 --> 00:34:19,520  
astronaut or working in the space

812  
00:34:25,510 --> 00:34:22,480  
you know world then i was lucky enough

813  
00:34:42,550 --> 00:34:25,520

to be selected as a astronaut candidate

814

00:34:46,790 --> 00:34:44,310

as i've mentioned previously it was my

815

00:34:48,790 --> 00:34:46,800

childhood dream in the 1970s when i was

816

00:34:50,389 --> 00:34:48,800

born in the soviet union all boys and

817

00:34:53,349 --> 00:34:50,399

girls were dreaming of becoming

818

00:34:53,359 --> 00:35:00,230

materials

819

00:35:04,550 --> 00:35:02,630

i read a lot of books about space

820

00:35:07,270 --> 00:35:04,560

exploration and cosmonauts and i watched

821

00:35:09,910 --> 00:35:07,280

a lot of different documentaries and

822

00:35:11,750 --> 00:35:09,920

programs about space exploration and i

823

00:35:13,990 --> 00:35:11,760

prepared the plan of how i was going to

824

00:35:17,670 --> 00:35:14,000

become a cosmonaut

825

00:35:28,950 --> 00:35:19,270

first of all i decided i was going to be

826

00:35:33,270 --> 00:35:30,470

so when i was still in high school when

827

00:35:39,910 --> 00:35:33,280

i turned 15 i started flying small uh

828

00:35:46,790 --> 00:35:42,950

uh same as uh maker i

829

00:35:49,990 --> 00:35:48,150

academia

830

00:35:54,710 --> 00:35:50,000

then i graduated from the air force

831

00:36:35,030 --> 00:35:56,069

i

832

00:36:36,870 --> 00:36:35,040

awesome what a journey thank you all for

833

00:36:39,190 --> 00:36:36,880

sharing um i think we have another

834

00:36:41,990 --> 00:36:39,200

question here in the room

835

00:36:44,310 --> 00:36:42,000

from fuji television it's japan uh the

836

00:36:47,190 --> 00:36:44,320

question is related to the experiment

837

00:36:50,230 --> 00:36:47,200

and i want to ask to kanai-san as you

838

00:36:53,190 --> 00:36:50,240

said you are excited to do the research

839

00:36:55,270 --> 00:36:53,200

a lot of research in the space i know uh

840

00:36:59,190 --> 00:36:55,280

most of them is important but uh which

841

00:37:02,310 --> 00:36:59,200

one is most excited to do and uh also

842

00:37:03,109 --> 00:37:02,320

how important is it for us in the earth

843

00:37:05,349 --> 00:37:03,119

or

844

00:37:07,349 --> 00:37:05,359

in the future

845

00:37:08,550 --> 00:37:07,359

okay that can be a difficult question

846

00:37:10,550 --> 00:37:08,560

but uh

847

00:37:13,430 --> 00:37:10,560

i'm interested in the

848

00:37:17,030 --> 00:37:13,440

the human health research

849

00:37:20,230 --> 00:37:17,040

like uh scott mentioned

850

00:37:23,270 --> 00:37:20,240

we are astronaut astronauts are

851

00:37:26,630 --> 00:37:23,280

not only helping supporting uh

852

00:37:29,910 --> 00:37:26,640

experiment but also we can be a

853

00:37:32,150 --> 00:37:29,920

medical or research subject of the

854

00:37:36,790 --> 00:37:32,160

the science so we

855

00:37:37,829 --> 00:37:36,800

draw bloods or correct urines or saliva

856

00:37:40,390 --> 00:37:37,839

as a

857

00:37:43,510 --> 00:37:40,400

research specimen

858

00:37:45,829 --> 00:37:43,520

so i'm interested in that kind of human

859

00:37:48,390 --> 00:37:45,839

research because

860

00:37:52,950 --> 00:37:48,400

partially because i'm former i'm a

861

00:37:56,150 --> 00:37:54,950

how can i say you know

862

00:38:00,550 --> 00:37:56,160

uh

863

00:38:03,349 --> 00:38:00,560

the astronaut human body in space is a

864

00:38:05,270 --> 00:38:03,359

good representative of

865

00:38:06,870 --> 00:38:05,280

like a

866

00:38:08,390 --> 00:38:06,880

aged

867

00:38:09,910 --> 00:38:08,400

aging

868

00:38:11,910 --> 00:38:09,920

process of the

869

00:38:13,829 --> 00:38:11,920

the human on the

870

00:38:15,190 --> 00:38:13,839

earth so

871

00:38:16,630 --> 00:38:15,200

as

872

00:38:20,390 --> 00:38:16,640

by

873

00:38:21,829 --> 00:38:20,400

studying astronauts body in space we can

874

00:38:24,630 --> 00:38:21,839

figure out

875

00:38:27,030 --> 00:38:24,640

what is the aging process

876

00:38:30,470 --> 00:38:27,040

actually what it is it

877

00:38:35,910 --> 00:38:33,349

the astronaut research can contribute to

878

00:38:39,430 --> 00:38:35,920

a good medical

879

00:38:42,150 --> 00:38:39,440

treatment on the earth

880

00:38:44,630 --> 00:38:42,160

great that's a great example of a

881

00:38:46,069 --> 00:38:44,640

benefit from space flight that as you

882

00:38:48,470 --> 00:38:46,079

talked about you know the muscles and

883

00:38:50,550 --> 00:38:48,480

the bones deteriorate so much faster and

884

00:38:53,270 --> 00:38:50,560

a different pace in space

885

00:38:55,589 --> 00:38:53,280

and so we can study in space what it

886

00:38:57,670 --> 00:38:55,599

takes much longer to study on the ground

887

00:38:59,910 --> 00:38:57,680

for the bones and the muscles

888

00:39:02,150 --> 00:38:59,920

and i know that one of the benefits for

889

00:39:04,230 --> 00:39:02,160

people with osteoporosis is space

890

00:39:05,910 --> 00:39:04,240

research and changing the diet and

891

00:39:07,910 --> 00:39:05,920

medicines and things like that to help

892

00:39:09,190 --> 00:39:07,920

with that so it's great

893

00:39:10,310 --> 00:39:09,200

all right we have another question over

894

00:39:13,030 --> 00:39:10,320

here

895

00:39:14,870 --> 00:39:13,040

hi i'm george carlson the kc5 rcc with

896

00:39:17,670 --> 00:39:14,880

the makerspace

897

00:39:19,430 --> 00:39:17,680

uh maker barn in magnolia texas and and

898

00:39:21,349 --> 00:39:19,440

i'm an amateur radio guy and i was

899

00:39:23,270 --> 00:39:21,359

wondering if you guys were amateur radio

900

00:39:25,910 --> 00:39:23,280

guys and uh if you're going to activate

901  
00:39:28,470 --> 00:39:25,920  
the station on board the

902  
00:39:31,670 --> 00:39:28,480  
iss while you're up there

903  
00:39:34,150 --> 00:39:31,680  
yep i'm a ham radio guy and uh we've got

904  
00:39:36,870 --> 00:39:34,160  
several events uh already planned out to

905  
00:39:38,470 --> 00:39:36,880  
as part of our outreach uh effort while

906  
00:39:42,630 --> 00:39:38,480  
while i'm on station so hopefully i'll

907  
00:39:46,790 --> 00:39:44,950  
yes uh we were taking a tour before we

908  
00:39:49,109 --> 00:39:46,800  
got here we noticed that all the patches

909  
00:39:50,710 --> 00:39:49,119  
are different for each mission and they

910  
00:39:53,510 --> 00:39:50,720  
said that you guys designed the patch

911  
00:39:55,190 --> 00:39:53,520  
for your mission and it has special

912  
00:39:58,390 --> 00:39:55,200  
meaning i'm sure to you guys could you

913  
00:39:59,510 --> 00:39:58,400

explain the artwork on your patch

914

00:40:01,750 --> 00:39:59,520

sure

915

00:40:04,390 --> 00:40:01,760

this patch was actually designed by tim

916

00:40:06,710 --> 00:40:04,400

gagnon and we looked at it and modified

917

00:40:09,510 --> 00:40:06,720

it a little bit

918

00:40:11,670 --> 00:40:09,520

obviously the 55 is our expedition

919

00:40:13,510 --> 00:40:11,680

uh when you look at the earth the earth

920

00:40:15,829 --> 00:40:13,520

and the colors represent how beautiful

921

00:40:18,150 --> 00:40:15,839

our our planet is and and how we take

922

00:40:20,950 --> 00:40:18,160

care of it we've got the flags that come

923

00:40:22,150 --> 00:40:20,960

up that represent the three uh countries

924

00:40:24,390 --> 00:40:22,160

that are

925

00:40:25,589 --> 00:40:24,400

represented by the crew on the on this

926

00:40:27,270 --> 00:40:25,599

expedition

927

00:40:29,349 --> 00:40:27,280

and as well we've got the three rings

928

00:40:30,630 --> 00:40:29,359

together coming together to fill a

929

00:40:32,710 --> 00:40:30,640

common goal

930

00:40:34,790 --> 00:40:32,720

and getting the science done on station

931

00:40:36,790 --> 00:40:34,800

and those three rings represent russia

932

00:40:39,190 --> 00:40:36,800

united states and

933

00:40:41,829 --> 00:40:39,200

japan as part of the crew represented on

934

00:40:43,670 --> 00:40:41,839

in this expedition for that keep in mind

935

00:40:45,270 --> 00:40:43,680

there are 16 to 18 international

936

00:40:48,390 --> 00:40:45,280

partners at any time and we are

937

00:40:50,150 --> 00:40:48,400

appreciative of all of them

938

00:40:52,390 --> 00:40:50,160

great thank you very interesting all

939

00:40:53,430 --> 00:40:52,400

right i think we have another question

940

00:40:54,710 --> 00:40:53,440

in the room

941

00:40:55,990 --> 00:40:54,720

everybody else

942

00:41:02,069 --> 00:40:56,000

all right do we have one for social

943

00:41:05,750 --> 00:41:04,150

he asks have you ever wished others

944

00:41:07,910 --> 00:41:05,760

could travel to the space station to

945

00:41:09,349 --> 00:41:07,920

gain your perspective and maybe you can

946

00:41:11,030 --> 00:41:09,359

talk a little bit about how you might

947

00:41:14,140 --> 00:41:11,040

plan to share that with us on social

948

00:41:14,150 --> 00:41:27,510

[Laughter]

949

00:41:31,990 --> 00:41:29,510

i should say that we spent about six

950

00:41:44,470 --> 00:41:32,000

months on board of the iss it's hard

951  
00:41:49,270 --> 00:41:46,150  
you see we have a well-built team on

952  
00:41:51,030 --> 00:41:49,280  
board of the iss and if i were somehow

953  
00:41:53,589 --> 00:41:51,040  
given a chance to bring all my friends

954  
00:41:57,430 --> 00:41:53,599  
and family members on board of the iss i

955  
00:42:00,790 --> 00:41:59,349  
yeah same for me if i had a choice i'd

956  
00:42:02,950 --> 00:42:00,800  
bring you all with me it would just make

957  
00:42:04,150 --> 00:42:02,960  
it so much easier a lot of us wish that

958  
00:42:05,750 --> 00:42:04,160  
could happen right

959  
00:42:07,270 --> 00:42:05,760  
that would be so great and even though

960  
00:42:08,950 --> 00:42:07,280  
we can't physically i will be bringing

961  
00:42:11,589 --> 00:42:08,960  
you bringing you all and my family and

962  
00:42:13,589 --> 00:42:11,599  
friends with me in my heart and soul

963  
00:42:15,270 --> 00:42:13,599

but through social media you know it's

964

00:42:17,270 --> 00:42:15,280

really a great

965

00:42:18,630 --> 00:42:17,280

um capability with technology that we

966

00:42:20,950 --> 00:42:18,640

have these days we'll be sending down

967

00:42:24,470 --> 00:42:20,960

pictures we'll be sending down uh

968

00:42:27,349 --> 00:42:24,480

information and you know 120 word bytes

969

00:42:29,270 --> 00:42:27,359

on twit on twitter uh as well as other

970

00:42:31,510 --> 00:42:29,280

public releases that megan's gonna kinda

971

00:42:32,870 --> 00:42:31,520

set up for us and uh and get out so

972

00:42:34,950 --> 00:42:32,880

we're gonna try really hard to give you

973

00:42:37,349 --> 00:42:34,960

the the best window that we can into uh

974

00:42:39,829 --> 00:42:37,359

into the cosmos and into our daily

975

00:42:41,589 --> 00:42:39,839

routine so that uh so you can see what

976

00:42:43,829 --> 00:42:41,599

it's like up there and what we're doing

977

00:42:45,190 --> 00:42:43,839

and and the benefits that we're bringing

978

00:42:47,750 --> 00:42:45,200

um so

979

00:42:50,069 --> 00:42:47,760

um stay tuned

980

00:42:51,829 --> 00:42:50,079

you know anything to add nope all right

981

00:42:53,030 --> 00:42:51,839

yeah one thing we all look forward to

982

00:42:55,109 --> 00:42:53,040

here on the ground is to see the

983

00:42:57,030 --> 00:42:55,119

pictures that you guys take from space

984

00:42:58,790 --> 00:42:57,040

it's really a perspective that most of

985

00:43:00,790 --> 00:42:58,800

us will never have a chance to see but

986

00:43:02,870 --> 00:43:00,800

you guys will see that and so we enjoy

987

00:43:04,710 --> 00:43:02,880

being able to to see your pictures and

988

00:43:06,710 --> 00:43:04,720

as easily as getting on twitter or

989

00:43:07,589 --> 00:43:06,720

facebook and all that so thank you for

990

00:43:09,829 --> 00:43:07,599

that

991

00:43:12,069 --> 00:43:09,839

all right we have one more reporter on

992

00:43:16,790 --> 00:43:12,079

the phone bridge barbara lebron with

993

00:43:23,670 --> 00:43:21,030

hi thank you i'm i just had a question

994

00:43:26,230 --> 00:43:23,680

about the cooperative nature of this do

995

00:43:28,550 --> 00:43:26,240

you see this as a model in any way for

996

00:43:32,069 --> 00:43:28,560

international cooperation other

997

00:43:35,589 --> 00:43:32,079

seemingly intractable issues

998

00:43:37,670 --> 00:43:35,599

that are out there that are out there

999

00:43:39,910 --> 00:43:37,680

absolutely you know this program has

1000

00:43:42,630 --> 00:43:39,920

been has been steady it's been

1001

00:43:45,270 --> 00:43:42,640

consistent and it's been reliable uh

1002

00:43:47,750 --> 00:43:45,280

when at the working level we are very

1003

00:43:49,910 --> 00:43:47,760

tight when i go over to train in russia

1004

00:43:51,990 --> 00:43:49,920

they treat me like their family and and

1005

00:43:53,910 --> 00:43:52,000

they're very interested in my success

1006

00:43:56,710 --> 00:43:53,920

and when folks from from russia come

1007

00:43:58,630 --> 00:43:56,720

over here uh they do exactly the same

1008

00:44:01,270 --> 00:43:58,640

thing same thing here and the same with

1009

00:44:02,630 --> 00:44:01,280

japan the same with europe the same as

1010

00:44:05,030 --> 00:44:02,640

any other country that we're working

1011

00:44:07,270 --> 00:44:05,040

with um i i think anybody in this

1012

00:44:09,510 --> 00:44:07,280

program will pretty much agree that that

1013

00:44:12,870 --> 00:44:09,520

this is a real good model for

1014

00:44:12,880 --> 00:44:26,309

anything to add

1015

00:44:30,630 --> 00:44:28,470

i always had a dream of gathering

1016

00:44:32,710 --> 00:44:30,640

together the leaders of all the largest

1017

00:44:34,550 --> 00:44:32,720

uh countries in the world putting them

1018

00:44:50,309 --> 00:44:34,560

in one spaceship and launching them into

1019

00:44:54,390 --> 00:44:51,910

and the main reason not what you were

1020

00:44:57,109 --> 00:44:54,400

thinking is to

1021

00:45:02,150 --> 00:44:57,119

let them see our planet from space and

1022

00:45:02,160 --> 00:45:14,069

by much

1023

00:45:18,230 --> 00:45:15,990

i hope that after they come back to

1024

00:45:20,150 --> 00:45:18,240

earth they will understand that iss is a

1025

00:45:21,910 --> 00:45:20,160

great example of how people with

1026  
00:45:24,390 --> 00:45:21,920  
different backgrounds coming from

1027  
00:45:26,710 --> 00:45:24,400  
different cultures can create

1028  
00:45:29,510 --> 00:45:26,720  
something together and contribute to the

1029  
00:45:33,589 --> 00:45:31,430  
great i think that's a great way to end

1030  
00:45:36,150 --> 00:45:33,599  
we're excited to see you guys go to

1031  
00:45:37,910 --> 00:45:36,160  
space and such an international crew and

1032  
00:45:39,829 --> 00:45:37,920  
we can't wait to see you launch so i

1033  
00:45:41,589 --> 00:45:39,839  
just want to remind everybody you guys

1034  
00:45:43,750 --> 00:45:41,599  
can follow this whole crew on social

1035  
00:45:46,790 --> 00:45:43,760  
media they're all on twitter

1036  
00:45:49,510 --> 00:45:46,800  
scott is at astro underscore maker nemo

1037  
00:45:51,910 --> 00:45:49,520  
is at astro underscore kanai and anton

1038  
00:45:54,630 --> 00:45:51,920

is at anton ashtray and then you can

1039

00:45:56,230 --> 00:45:54,640

also follow scott and anton on instagram

1040

00:45:58,150 --> 00:45:56,240

so definitely look forward to all the

1041

00:46:00,230 --> 00:45:58,160

pictures that they'll be sending down

1042

00:46:01,190 --> 00:46:00,240

and following them throughout their

1043

00:46:02,309 --> 00:46:01,200

mission

1044

00:46:03,990 --> 00:46:02,319

and you can follow the international

1045

00:46:04,870 --> 00:46:04,000

space station and everything going on on

1046

00:46:06,710 --> 00:46:04,880

board

1047

00:46:09,190 --> 00:46:06,720

the work they're doing every day to

1048

00:46:11,190 --> 00:46:09,200

benefit humanity at

1049

00:46:13,190 --> 00:46:11,200

space station at twitter instagram and

1050

00:46:16,630 --> 00:46:13,200

facebook and learn more about the space

1051

00:46:18,870 --> 00:46:16,640

station at nasa.gov station and don't

1052

00:46:21,430 --> 00:46:18,880

forget to tune in to their launch on

1053

00:46:23,349 --> 00:46:21,440

december 17th you can watch it live at

1054

00:46:24,790 --> 00:46:23,359

nasa.gov live

1055

00:46:27,430 --> 00:46:24,800

and also on the international space

1056

00:46:29,109 --> 00:46:27,440

station facebook page on facebook live

1057

00:46:31,030 --> 00:46:29,119

so thank you all so much for being here

1058

00:46:33,349 --> 00:46:31,040

with the room and online today and thank

1059

00:46:35,430 --> 00:46:33,359

you guys for sharing your mission and we

1060

00:46:37,750 --> 00:46:35,440

look forward to seeing you in space

1061

00:46:40,170 --> 00:46:37,760

thank you have a good one