



Сергей КРИКАЛЁВ
Sergey KRIKALEV

Олег КОНОНЕНКО
Oleg KONONENKO

1
00:00:17,269 --> 00:00:14,070
for expedition 25 26 to the

2
00:00:20,950 --> 00:00:17,279
international space station

3
00:00:24,790 --> 00:00:20,960
prime crew alexander cullery

4
00:00:26,070 --> 00:00:24,800
commander of the manned spacecraft soyuz

5
00:00:28,870 --> 00:00:26,080
from uh

6
00:00:28,880 --> 00:00:42,630
site

7
00:00:42,640 --> 00:01:11,350
m

8
00:01:15,590 --> 00:01:13,750
26.

9
00:01:17,190 --> 00:01:15,600
the press conference will last up to one

10
00:01:19,670 --> 00:01:17,200
hour

11
00:01:32,710 --> 00:01:19,680
many languages russian and english

12
00:01:32,720 --> 00:01:56,149
to the station

13
00:02:01,350 --> 00:01:58,550

but if everybody every one of us will be

14

00:02:10,070 --> 00:02:01,360

talking about this it will take

15

00:02:14,070 --> 00:02:12,630

this is my fifth time and uh

16

00:02:16,470 --> 00:02:14,080

i never

17

00:02:20,150 --> 00:02:16,480

give way to my own habits

18

00:02:21,510 --> 00:02:20,160

and uh this is something very dear to me

19

00:02:23,670 --> 00:02:21,520

something very dear to my friends to my

20

00:02:25,910 --> 00:02:23,680

family

21

00:02:28,470 --> 00:02:25,920

something an example

22

00:02:32,949 --> 00:02:28,480

probably a teddy bear

23

00:02:48,710 --> 00:02:34,710

it's really a monkey

24

00:02:48,720 --> 00:02:56,790

additional

25

00:03:00,550 --> 00:02:58,309

something that shows

26

00:03:02,790 --> 00:03:00,560

that there is zero g

27

00:03:07,910 --> 00:03:02,800

there is only one zero g device and it

28

00:03:17,509 --> 00:03:10,869

but actually you guessed right it's a

29

00:03:20,390 --> 00:03:18,630

i have

30

00:03:23,270 --> 00:03:20,400

scott kelly

31

00:03:25,589 --> 00:03:23,280

jewelry items that are similar to our

32

00:03:27,830 --> 00:03:25,599

midfield or uh

33

00:03:31,030 --> 00:03:27,840

26th mission patch

34

00:03:36,309 --> 00:03:34,070

just some other small items from friends

35

00:03:38,070 --> 00:03:36,319

military

36

00:03:39,750 --> 00:03:38,080

emblems

37

00:03:41,509 --> 00:03:39,760

and things like that

38

00:03:44,309 --> 00:03:41,519

so what about the program other

39

00:03:46,470 --> 00:03:44,319

scientific experiments

40

00:03:48,550 --> 00:03:46,480

scientific research and are there any

41

00:03:50,869 --> 00:03:48,560

general trends in the research you're

42

00:03:53,270 --> 00:03:50,879

going to do

43

00:03:57,750 --> 00:03:53,280

what areas is this research going to be

44

00:03:57,760 --> 00:04:06,309

probably i should answer this question

45

00:04:06,319 --> 00:04:10,550

this second stage of the iss

46

00:04:15,030 --> 00:04:12,830

basically stipulates that each

47

00:04:16,550 --> 00:04:15,040

partner has

48

00:04:19,110 --> 00:04:16,560

their own

49

00:04:21,349 --> 00:04:19,120

scientific experiment program but this

50

00:04:23,670 --> 00:04:21,359

does not

51
00:04:24,950 --> 00:04:23,680
exclude participation of the other

52
00:04:27,189 --> 00:04:24,960
partners

53
00:04:28,790 --> 00:04:27,199
it's not something that we currently

54
00:04:31,350 --> 00:04:28,800
have a news

55
00:04:32,550 --> 00:04:31,360
but uh the scientific experiment program

56
00:04:35,990 --> 00:04:32,560
if something

57
00:04:38,150 --> 00:04:36,000
is very flexible and they're still being

58
00:04:41,350 --> 00:04:38,160
specified right now so

59
00:04:42,950 --> 00:04:41,360
we can never exclude a cooperation and a

60
00:04:44,790 --> 00:04:42,960
partnership

61
00:04:46,950 --> 00:04:44,800
as far as science goes

62
00:04:49,909 --> 00:04:46,960
as far as fresh the russian experiment

63
00:04:51,030 --> 00:04:49,919

program we have a few traditional

64

00:04:53,830 --> 00:04:51,040

trends

65

00:04:58,390 --> 00:04:53,840

this is life sciences

66

00:05:01,670 --> 00:04:59,590

probing

67

00:05:04,629 --> 00:05:01,680

the earth from the distance

68

00:05:06,870 --> 00:05:04,639

technical experiments

69

00:05:08,150 --> 00:05:06,880

first of all with the view of

70

00:05:09,590 --> 00:05:08,160

perfecting

71

00:05:12,390 --> 00:05:09,600

the

72

00:05:14,310 --> 00:05:12,400

equipment for uh space flights

73

00:05:17,270 --> 00:05:14,320

also education experiments

74

00:05:21,510 --> 00:05:17,280

so all kinds of areas and we have a few

75

00:05:27,909 --> 00:05:25,590

here you see a 34 but actually our data

76

00:05:28,710 --> 00:05:27,919

shows might be a bit more

77

00:05:30,550 --> 00:05:28,720

and

78

00:05:33,990 --> 00:05:30,560

we're still specifying the

79

00:05:40,710 --> 00:05:34,000

final figure is not final just yet

80

00:05:45,990 --> 00:05:42,790

you also asked a question how

81

00:05:48,310 --> 00:05:46,000

related these programs are so despite

82

00:05:50,230 --> 00:05:48,320

the fact that each program is uh

83

00:05:51,590 --> 00:05:50,240

specified by each country by each

84

00:05:53,110 --> 00:05:51,600

partner

85

00:05:54,710 --> 00:05:53,120

there are certain restrictions general

86

00:05:56,629 --> 00:05:54,720

restrictions

87

00:05:58,230 --> 00:05:56,639

say if certain program

88

00:06:00,070 --> 00:05:58,240

demands a

89

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

certain focus

90

00:06:03,189 --> 00:06:00,960

we

91

00:06:05,430 --> 00:06:03,199

can never fail take into account what

92

00:06:08,230 --> 00:06:05,440

the other side is doing so they're still

93

00:06:10,469 --> 00:06:08,240

joined it is still coordinated and

94

00:06:13,590 --> 00:06:10,479

everybody still takes into account what

95

00:06:16,070 --> 00:06:13,600

the others are doing the same question

96

00:06:17,909 --> 00:06:16,080

about the planned experiments from your

97

00:06:20,390 --> 00:06:17,919

side from the u.s side

98

00:06:22,550 --> 00:06:20,400

and about the maybe common programs that

99

00:06:27,350 --> 00:06:22,560

you have with the russian side i mean in

100

00:06:31,350 --> 00:06:29,909

same question for scott kelly when the

101
00:06:32,870 --> 00:06:31,360
west side

102
00:06:36,469 --> 00:06:32,880
is planning

103
00:06:38,469 --> 00:06:36,479
its experiment program are there any

104
00:06:40,710 --> 00:06:38,479
joint common experiments with the

105
00:06:42,309 --> 00:06:40,720
russian side for example life sciences

106
00:06:45,590 --> 00:06:42,319
experiments

107
00:06:47,749 --> 00:06:45,600
in most cases investigating how

108
00:06:50,629 --> 00:06:47,759
we can apply people

109
00:06:53,270 --> 00:06:50,639
in long duration space flight

110
00:06:55,430 --> 00:06:53,280
safely so eventually we go

111
00:06:57,189 --> 00:06:55,440
on to mars or you know somewhere else in

112
00:06:59,510 --> 00:06:57,199
the solar system

113
00:07:04,230 --> 00:06:59,520

we also have

114

00:07:06,870 --> 00:07:04,240

basic science type experiments in uh

115

00:07:08,309 --> 00:07:06,880

fluid dynamics physics material

116

00:07:10,150 --> 00:07:08,319

processing

117

00:07:12,390 --> 00:07:10,160

and then

118

00:07:13,830 --> 00:07:12,400

we have

119

00:07:16,710 --> 00:07:13,840

experiments that involve you know

120

00:07:18,550 --> 00:07:16,720

observing the earth

121

00:07:19,749 --> 00:07:18,560

most of them are not uh

122

00:07:21,830 --> 00:07:19,759

you know

123

00:07:23,110 --> 00:07:21,840

types that are joined between the us and

124

00:07:25,430 --> 00:07:23,120

the right side although i think there

125

00:07:27,589 --> 00:07:25,440

might be a few especially when it

126

00:07:29,270 --> 00:07:27,599

comes to like human subjects

127

00:07:31,110 --> 00:07:29,280

i'm not sure if we're

128

00:07:33,029 --> 00:07:31,120

doing that here on this flight but i

129

00:07:34,469 --> 00:07:33,039

know we have in the past

130

00:07:36,469 --> 00:07:34,479

um

131

00:07:39,189 --> 00:07:36,479

you know unfortunately now a lot of the

132

00:07:40,790 --> 00:07:39,199

operations we do on board have

133

00:07:42,870 --> 00:07:40,800

kind of uh

134

00:07:46,469 --> 00:07:42,880

turned into what's called segmented ops

135

00:07:47,909 --> 00:07:46,479

so the russian uh program is executing

136

00:07:52,309 --> 00:07:47,919

their program on their side and then the

137

00:07:58,469 --> 00:07:55,510

occasionally we help each other out but

138

00:07:59,510 --> 00:07:58,479

when it's timeline but not

139

00:08:00,469 --> 00:07:59,520

you know there's not a whole lot of

140

00:08:07,110 --> 00:08:00,479

joint

141

00:08:10,550 --> 00:08:09,510

a question in the same vein regarding

142

00:08:12,950 --> 00:08:10,560

science

143

00:08:14,790 --> 00:08:12,960

uh alexander you have already done some

144

00:08:16,629 --> 00:08:14,800

experiments on both the station but i

145

00:08:17,830 --> 00:08:16,639

have a few experiments in the area of

146

00:08:20,390 --> 00:08:17,840

physics

147

00:08:24,710 --> 00:08:20,400

a plasma crystal for example now i have

148

00:08:29,110 --> 00:08:25,749

so

149

00:08:30,869 --> 00:08:29,120

what scientific experiments you prefer

150

00:08:34,630 --> 00:08:30,879

we are going to do

151
00:08:37,430 --> 00:08:34,640
and uh if you are going to have a few

152
00:08:38,709 --> 00:08:37,440
external vehicle activities

153
00:08:40,550 --> 00:08:38,719
do you have

154
00:08:46,870 --> 00:08:40,560
some specific tasks and what do you

155
00:08:50,230 --> 00:08:48,310
plasma crystal

156
00:08:52,150 --> 00:08:50,240
is of interest to me

157
00:08:54,710 --> 00:08:52,160
because it is a very beautiful

158
00:08:56,790 --> 00:08:54,720
experiment by myself so

159
00:08:57,910 --> 00:08:56,800
the topic of research is very

160
00:08:59,190 --> 00:08:57,920
interesting

161
00:09:01,190 --> 00:08:59,200
and it's uh

162
00:09:04,150 --> 00:09:01,200
i feel very close to it

163
00:09:06,310 --> 00:09:04,160

because i know people who actually had

164

00:09:08,870 --> 00:09:06,320

have this research in mind

165

00:09:09,990 --> 00:09:08,880

and a few of them graduated from the

166

00:09:13,590 --> 00:09:10,000

same

167

00:09:16,550 --> 00:09:15,269

but i would say they sent this

168

00:09:18,550 --> 00:09:16,560

experiment

169

00:09:20,949 --> 00:09:18,560

as uh

170

00:09:23,430 --> 00:09:20,959

it requires lots of effort

171

00:09:24,630 --> 00:09:23,440

and uh the cosmonaut is not really the

172

00:09:26,310 --> 00:09:24,640

person who

173

00:09:28,870 --> 00:09:26,320

conducts experiment per se it's more

174

00:09:30,949 --> 00:09:28,880

like setting up the experiment

175

00:09:32,710 --> 00:09:30,959

and the main thing is

176

00:09:34,790 --> 00:09:32,720

analyzing the results

177

00:09:37,030 --> 00:09:34,800

and uh probably

178

00:09:39,030 --> 00:09:37,040

modifying the direction of this

179

00:09:40,470 --> 00:09:39,040

experiment and all of this is done on

180

00:09:41,190 --> 00:09:40,480

the ground

181

00:09:46,630 --> 00:09:41,200

so

182

00:09:47,990 --> 00:09:46,640

on the other hand it's

183

00:09:49,750 --> 00:09:48,000

those people who might know very well

184

00:09:51,030 --> 00:09:49,760

who deal with this experiment and on the

185

00:09:52,790 --> 00:09:51,040

other hand

186

00:09:55,350 --> 00:09:52,800

my personal

187

00:09:57,910 --> 00:09:55,360

involvement is somewhat limited

188

00:09:59,750 --> 00:09:57,920

but what i do like is experiments in the

189

00:10:02,389 --> 00:09:59,760

geophysics

190

00:10:04,550 --> 00:10:02,399

investigating doing research

191

00:10:07,430 --> 00:10:04,560

as far as the earth goes

192

00:10:09,350 --> 00:10:07,440

and uh there is a huge field you can

193

00:10:11,750 --> 00:10:09,360

experiment with

194

00:10:15,990 --> 00:10:11,760

so if you really ask me i'm going to

195

00:10:16,000 --> 00:10:19,670

what do you think

196

00:10:24,790 --> 00:10:21,829

i don't think i can talk about my

197

00:10:26,870 --> 00:10:24,800

preferences right now

198

00:10:39,750 --> 00:10:26,880

as regarding evas

199

00:10:46,470 --> 00:10:43,350

mounting a certain tissues and materials

200

00:10:48,310 --> 00:10:46,480

biomaterials which will be exposed to

201
00:10:49,350 --> 00:10:48,320
open space

202
00:10:51,829 --> 00:10:49,360
as well as

203
00:10:55,110 --> 00:10:51,839
new experiments and new hardware

204
00:10:57,509 --> 00:10:55,120
monitoring the surface of the earth

205
00:11:02,870 --> 00:11:00,310
following the processes that go in uh in

206
00:11:12,150 --> 00:11:02,880
the earth atmosphere and checking out

207
00:11:16,069 --> 00:11:14,389
another question

208
00:11:18,710 --> 00:11:16,079
you've had two flights on board the

209
00:11:20,790 --> 00:11:18,720
space shuttle

210
00:11:22,550 --> 00:11:20,800
uh now you're going to fly

211
00:11:24,550 --> 00:11:22,560
this new way

212
00:11:26,949 --> 00:11:24,560
is there any difference between the way

213
00:11:29,190 --> 00:11:26,959

you did it when on board the shuttle and

214

00:11:37,990 --> 00:11:29,200

the way your band prepares one flying

215

00:11:44,790 --> 00:11:39,910

in some ways

216

00:11:47,030 --> 00:11:44,800

because you you know first learn how to

217

00:11:49,750 --> 00:11:47,040

systems operate and then you

218

00:11:53,110 --> 00:11:49,760

uh work up to doing

219

00:11:55,750 --> 00:11:53,120

malfunctions and single systems and then

220

00:11:58,150 --> 00:11:56,870

systems

221

00:11:59,670 --> 00:11:58,160

um

222

00:12:00,949 --> 00:11:59,680

you know the vehicles are obviously much

223

00:12:03,110 --> 00:12:00,959

different and they're designed to do

224

00:12:05,110 --> 00:12:03,120

different things

225

00:12:06,550 --> 00:12:05,120

as a

226

00:12:09,990 --> 00:12:06,560

you know

227

00:12:11,990 --> 00:12:10,000

diverse mechanical performance

228

00:12:13,590 --> 00:12:12,000

you know it does

229

00:12:15,750 --> 00:12:13,600

you know very well carries people to

230

00:12:17,509 --> 00:12:15,760

orbit into the space station so from a

231

00:12:19,030 --> 00:12:17,519

mission perspective the training is

232

00:12:21,430 --> 00:12:19,040

somewhat different but

233

00:12:34,069 --> 00:12:21,440

you know same philosophies for ascent

234

00:12:37,590 --> 00:12:35,670

the training in its

235

00:12:40,069 --> 00:12:37,600

basics is the same

236

00:12:42,710 --> 00:12:40,079

first we learn about the systems then we

237

00:12:44,389 --> 00:12:42,720

learn about how the systems operate in

238

00:12:47,509 --> 00:12:44,399

optimal situations

239

00:12:49,030 --> 00:12:47,519

how they operate jointly

240

00:12:53,990 --> 00:12:49,040

as a an

241

00:12:58,870 --> 00:12:55,509

the service vehicle is performing its

242

00:13:01,350 --> 00:12:58,880

function delivering crew and cargo

243

00:13:02,790 --> 00:13:01,360

attention to detail that we have in the

244

00:13:04,949 --> 00:13:02,800

shuttle is

245

00:13:05,590 --> 00:13:04,959

doing the sleeves

246

00:13:07,269 --> 00:13:05,600

on my uh

247

00:13:10,710 --> 00:13:07,279

shuttle flights i was a pilot in the

248

00:13:12,150 --> 00:13:10,720

commander's mission i'll be in a

249

00:13:14,069 --> 00:13:12,160

less of a

250

00:13:18,310 --> 00:13:14,079

significant role

251
00:13:24,150 --> 00:13:21,750
one more question russian space

252
00:13:25,829 --> 00:13:24,160
this is actually testing a new type of

253
00:13:27,829 --> 00:13:25,839
the service vehicle are there any

254
00:13:41,509 --> 00:13:27,839
differences

255
00:13:45,269 --> 00:13:44,069
to some extent this is a modified

256
00:13:51,750 --> 00:13:45,279
vehicle

257
00:13:54,470 --> 00:13:51,760
modified systems

258
00:13:56,710 --> 00:13:54,480
two systems basically have been modified

259
00:13:59,350 --> 00:13:56,720
this is the

260
00:14:00,870 --> 00:13:59,360
the system of

261
00:14:05,189 --> 00:14:00,880
performing

262
00:14:07,430 --> 00:14:05,199
movement yeah and uh we have a new ombud

263
00:14:13,430 --> 00:14:07,440

equipment which provides for

264

00:14:16,629 --> 00:14:15,509

this vehicle is kind of a test vehicle

265

00:14:18,710 --> 00:14:16,639

to show

266

00:14:20,389 --> 00:14:18,720

how this new equipment

267

00:14:21,990 --> 00:14:20,399

will work and whether it's worth

268

00:14:23,030 --> 00:14:22,000

installing it on all the subsequent

269

00:14:26,629 --> 00:14:23,040

vehicles

270

00:14:30,389 --> 00:14:26,639

and next is a new telemetry system

271

00:14:32,069 --> 00:14:30,399

which provides for building the right

272

00:14:34,389 --> 00:14:32,079

computer systems and computer

273

00:14:36,629 --> 00:14:34,399

calculations

274

00:14:38,629 --> 00:14:36,639

all the other modifications and all the

275

00:14:40,629 --> 00:14:38,639

other systems

276

00:14:41,910 --> 00:14:40,639

what they do they adapt themselves to

277

00:14:42,790 --> 00:14:41,920

these two

278

00:14:47,590 --> 00:14:42,800

main

279

00:14:52,150 --> 00:14:50,550

all in all the way we control the

280

00:14:52,870 --> 00:14:52,160

spacecraft

281

00:14:55,509 --> 00:14:52,880

we

282

00:14:57,110 --> 00:14:55,519

perform the algorithms are the same even

283

00:14:58,550 --> 00:14:57,120

though

284

00:15:00,550 --> 00:14:58,560

there have been some modifications there

285

00:15:03,670 --> 00:15:00,560

where we control the vehicle

286

00:15:05,189 --> 00:15:03,680

and uh as a result of our training i can

287

00:15:05,990 --> 00:15:05,199

see that

288

00:15:09,910 --> 00:15:06,000

it

289

00:15:12,389 --> 00:15:09,920

has become is more easier and uh simpler

290

00:15:14,230 --> 00:15:12,399

to perform a few maneuvers uh if we

291

00:15:16,629 --> 00:15:14,240

compare it to the old version of the

292

00:15:18,629 --> 00:15:16,639

vehicle but the rest or the real flight

293

00:15:21,030 --> 00:15:18,639

will tell us

294

00:15:22,230 --> 00:15:21,040

would you like this spacecraft there are

295

00:15:24,310 --> 00:15:22,240

certain

296

00:15:26,710 --> 00:15:24,320

rough points but

297

00:15:27,509 --> 00:15:26,720

this is what these modifications are for

298

00:15:38,710 --> 00:15:27,519

to

299

00:15:38,720 --> 00:15:49,990

a new

300

00:15:55,509 --> 00:15:53,509

the results of my exams are satisfactory

301
00:15:57,829 --> 00:15:55,519
i don't think i need to tell you my

302
00:16:03,590 --> 00:15:57,839
grades but i will tell you that we all

303
00:16:07,350 --> 00:16:05,110
integrated training

304
00:16:09,670 --> 00:16:07,360
we did have this and

305
00:16:11,829 --> 00:16:09,680
we tested the equipment

306
00:16:14,389 --> 00:16:11,839
we were controlling the equipment for

307
00:16:15,670 --> 00:16:14,399
the spacecraft and the station and

308
00:16:17,509 --> 00:16:15,680
both crews

309
00:16:19,189 --> 00:16:17,519
have been allowed to

310
00:16:20,710 --> 00:16:19,199
go in for subsequent training and to

311
00:16:24,790 --> 00:16:20,720
finish this training

312
00:16:28,069 --> 00:16:26,870
and we just had the conclusion of the

313
00:16:30,069 --> 00:16:28,079

board

314

00:16:32,310 --> 00:16:30,079

uh of the commission which basically

315

00:16:33,990 --> 00:16:32,320

said the same

316

00:16:36,150 --> 00:16:34,000

that both crews

317

00:16:38,150 --> 00:16:36,160

are allowed to finish their training at

318

00:16:39,749 --> 00:16:38,160

the baikonur

319

00:16:41,749 --> 00:16:39,759

and i'd like to point out that our

320

00:16:46,310 --> 00:16:41,759

training is not done here at the center

321

00:16:49,430 --> 00:16:47,670

of the

322

00:16:55,670 --> 00:16:49,440

of this month when they will find out to

323

00:16:59,030 --> 00:16:57,269

they will be seeing their new soyuz

324

00:17:01,350 --> 00:16:59,040

vehicle and

325

00:17:04,150 --> 00:17:01,360

they will get final touches as regards

326

00:17:06,710 --> 00:17:04,160

the ascending experiments and what will

327

00:17:08,630 --> 00:17:06,720

be done when changing the crews on board

328

00:17:12,870 --> 00:17:08,640

the station they also receive the final

329

00:17:21,829 --> 00:17:12,880

data as far as the proof experiments go

330

00:17:26,309 --> 00:17:23,829

you've been in space for quite a long

331

00:17:38,310 --> 00:17:26,319

and i would like to know a few things

332

00:17:42,950 --> 00:17:41,510

are there any uh boundaries any borders

333

00:17:45,510 --> 00:17:42,960

on border stations between different

334

00:17:47,830 --> 00:17:45,520

segments how do you interact

335

00:17:51,190 --> 00:17:47,840

now we don't have any customers there i

336

00:17:55,590 --> 00:17:54,230

the only document which we have as a

337

00:17:57,830 --> 00:17:55,600

guideline at least the russian crew

338

00:18:00,549 --> 00:17:57,840

members is uh

339

00:18:05,909 --> 00:18:00,559

the id of a cosmonaut by the

340

00:18:05,919 --> 00:18:08,870

which is a

341

00:18:12,710 --> 00:18:11,110

representative of an international

342

00:18:14,310 --> 00:18:12,720

organization

343

00:18:16,549 --> 00:18:14,320

and this is something it was introduced

344

00:18:20,470 --> 00:18:16,559

for russian and soviet cosmonauts and

345

00:18:22,710 --> 00:18:20,480

this is a formal idea for space flights

346

00:18:24,470 --> 00:18:22,720

but we've never used it to

347

00:18:26,549 --> 00:18:24,480

fly into the segment of our partner

348

00:18:28,710 --> 00:18:26,559

because we all live together and even

349

00:18:31,110 --> 00:18:28,720

though we do work in separate segments

350

00:18:33,029 --> 00:18:31,120

in separate corners but as the previous

351
00:18:35,669 --> 00:18:33,039
crews said

352
00:18:39,270 --> 00:18:35,679
normally we have our meals together even

353
00:18:40,950 --> 00:18:39,280
though we do have two uh calories

354
00:18:43,510 --> 00:18:40,960
we always have

355
00:18:45,750 --> 00:18:43,520
our meals together

356
00:18:48,310 --> 00:18:45,760
this is a tradition we'll see what

357
00:18:49,590 --> 00:18:48,320
will occur between our two crews when we

358
00:18:50,710 --> 00:18:49,600
are there

359
00:18:53,909 --> 00:18:50,720
but i don't think there will be any

360
00:18:57,430 --> 00:18:55,110
i don't think

361
00:19:03,590 --> 00:18:57,440
it makes any sense to break these good

362
00:19:09,270 --> 00:19:07,270
nikolai borden is here and his uh

363
00:19:10,470 --> 00:19:09,280

representative of

364

00:19:12,950 --> 00:19:10,480

the

365

00:19:19,669 --> 00:19:12,960

of that space organization and uh

366

00:19:23,669 --> 00:19:22,710

first of all i'd like to congratulate

367

00:19:39,909 --> 00:19:23,679

the

368

00:19:42,630 --> 00:19:39,919

international astronautics organization

369

00:19:47,510 --> 00:19:45,110

the cosmonaut who is being trained for

370

00:19:55,909 --> 00:19:47,520

his first flight or her flight they're

371

00:19:59,350 --> 00:19:57,510

and this is

372

00:20:01,750 --> 00:19:59,360

his id

373

00:20:02,710 --> 00:20:01,760

number 131

374

00:20:04,950 --> 00:20:02,720

and

375

00:20:23,590 --> 00:20:04,960

it's my pleasure to

376

00:20:29,110 --> 00:20:26,149

and i don't know if he will use it to

377

00:20:32,230 --> 00:20:29,120

pass somewhere or not

378

00:20:34,230 --> 00:20:32,240

but this is something he will have

379

00:20:35,350 --> 00:20:34,240

for this time and for all the second

380

00:20:38,149 --> 00:20:35,360

flights

381

00:20:40,230 --> 00:20:38,159

that he will have

382

00:20:41,830 --> 00:20:40,240

our training for the first flight

383

00:20:44,070 --> 00:20:41,840

will be remembered very well by the

384

00:20:45,590 --> 00:20:44,080

cosmonaut and i do remember that before

385

00:20:48,070 --> 00:20:45,600

my first flight

386

00:20:50,390 --> 00:20:48,080

a long time ago also i was also given

387

00:20:51,830 --> 00:20:50,400

this id and

388

00:20:53,990 --> 00:20:51,840

i used to take it

389

00:20:56,390 --> 00:20:54,000

with me to all the second flights don't

390

00:20:58,870 --> 00:20:56,400

really need it to go anywhere

391

00:21:01,590 --> 00:20:58,880

but this idea is a tradition

392

00:21:05,270 --> 00:21:01,600

and this is probably something

393

00:21:09,990 --> 00:21:07,270

one of the possible scenarios in case of

394

00:21:12,390 --> 00:21:10,000

an off normal situation is an urgent

395

00:21:14,710 --> 00:21:12,400

egress

396

00:21:16,789 --> 00:21:14,720

and this idea is

397

00:21:18,710 --> 00:21:16,799

something that can show that you are not

398

00:21:20,310 --> 00:21:18,720

on the on the ground on the earth just

399

00:21:25,990 --> 00:21:20,320

out of the way but this is something

400

00:21:28,789 --> 00:21:27,669

all the distance that we've had so far

401
00:21:31,510 --> 00:21:28,799
have been

402
00:21:33,590 --> 00:21:31,520
monitored and under control more or less

403
00:21:35,669 --> 00:21:33,600
so we've never had a chance to make use

404
00:21:40,470 --> 00:21:35,679
of this idea but it's good to have it in

405
00:21:44,870 --> 00:21:42,390
and probably should continue as regards

406
00:21:47,510 --> 00:21:44,880
your question about going from one

407
00:21:49,110 --> 00:21:47,520
module to another

408
00:21:50,950 --> 00:21:49,120
yes in fact we're talking about

409
00:21:53,110 --> 00:21:50,960
segmented operations

410
00:21:55,830 --> 00:21:53,120
i'd like to underscore

411
00:21:57,510 --> 00:21:55,840
that these segment operations uh is

412
00:21:59,830 --> 00:21:57,520
something which is more related to

413
00:22:01,990 --> 00:21:59,840

planning operations that is that each

414

00:22:03,350 --> 00:22:02,000

control center is planning the work

415

00:22:04,710 --> 00:22:03,360

which has been done on each of the

416

00:22:06,390 --> 00:22:04,720

segments

417

00:22:07,830 --> 00:22:06,400

but uh

418

00:22:09,029 --> 00:22:07,840

as far as i remember

419

00:22:11,190 --> 00:22:09,039

even from

420

00:22:13,750 --> 00:22:11,200

the very first expeditions

421

00:22:16,230 --> 00:22:13,760

the crews the crew members are the main

422

00:22:17,909 --> 00:22:16,240

resource for all the experiments and for

423

00:22:20,390 --> 00:22:17,919

everything especially regarding of

424

00:22:21,190 --> 00:22:20,400

normal situations

425

00:22:22,789 --> 00:22:21,200

then

426

00:22:24,149 --> 00:22:22,799

the crew all the crew members are

427

00:22:26,710 --> 00:22:24,159

supposed to act

428

00:22:28,230 --> 00:22:26,720

as a single wholesome

429

00:22:29,590 --> 00:22:28,240

a single hoe

430

00:22:32,230 --> 00:22:29,600

and uh

431

00:22:34,470 --> 00:22:32,240

even though the segments are different

432

00:22:36,710 --> 00:22:34,480

and we have different voltage

433

00:22:39,270 --> 00:22:36,720

numbers in different segments does it

434

00:22:41,909 --> 00:22:39,280

not mean that the crew are supposed to

435

00:22:44,630 --> 00:22:41,919

use any ids to pass from one module to

436

00:22:45,990 --> 00:22:44,640

another module or if there are any

437

00:22:47,990 --> 00:22:46,000

any

438

00:23:01,029 --> 00:22:48,000

bars barring our entrance to another

439

00:23:05,350 --> 00:23:03,830

and the traditional uh wish of

440

00:23:14,390 --> 00:23:05,360

50 kilometers

441

00:23:17,990 --> 00:23:16,549

are there any rules spoken rules or

442

00:23:20,470 --> 00:23:18,000

unspoken rules

443

00:23:34,950 --> 00:23:20,480

that you you're all going to follow

444

00:23:39,270 --> 00:23:37,350

any outspoken conditions

445

00:23:42,230 --> 00:23:39,280

i think all the dishes that we have it's

446

00:23:43,909 --> 00:23:42,240

just uh support a normal life

447

00:23:46,070 --> 00:23:43,919

of course whenever we have a new crew

448

00:23:47,590 --> 00:23:46,080

everybody gathers and it's a welcoming

449

00:23:51,269 --> 00:23:47,600

ceremony

450

00:23:53,669 --> 00:23:51,279

this is something of a tradition

451
00:23:55,669 --> 00:23:53,679
and we always have we also have a

452
00:24:02,630 --> 00:23:55,679
predrill a pre-brief for security

453
00:24:11,510 --> 00:24:05,269
when they have uh the shuttle

454
00:24:14,870 --> 00:24:13,029
the shuttle relocates

455
00:24:29,830 --> 00:24:14,880
they're calling us so this is somewhat

456
00:24:32,390 --> 00:24:31,510
the ceremony of

457
00:24:34,630 --> 00:24:32,400
changing

458
00:24:36,549 --> 00:24:34,640
crews was very beautiful

459
00:24:38,149 --> 00:24:36,559
and the enthusiasts

460
00:24:39,350 --> 00:24:38,159
were watching us

461
00:24:41,190 --> 00:24:39,360
and it was

462
00:24:43,269 --> 00:24:41,200
very interesting to change the emblems

463
00:24:44,470 --> 00:24:43,279

and uh

464

00:24:56,390 --> 00:24:44,480

there's something

465

00:25:00,310 --> 00:24:57,750

and uh

466

00:25:13,430 --> 00:25:00,320

we've had these patches these symbols

467

00:25:18,549 --> 00:25:15,909

we're saying uh when uh

468

00:25:20,310 --> 00:25:18,559

we're talking about this ceremony this

469

00:25:21,750 --> 00:25:20,320

is something which

470

00:25:23,590 --> 00:25:21,760

has come from

471

00:25:25,510 --> 00:25:23,600

the navy

472

00:25:27,669 --> 00:25:25,520

when we ring the bell

473

00:25:28,950 --> 00:25:27,679

and uh when we have these patches and

474

00:25:36,549 --> 00:25:28,960

one way

475

00:25:41,110 --> 00:25:38,630

there we have had some crew members from

476
00:25:43,029 --> 00:25:41,120
the navy onboard the station

477
00:25:44,070 --> 00:25:43,039
and those who have something unable to

478
00:25:46,710 --> 00:25:44,080
do

479
00:25:48,789 --> 00:25:46,720
they always follow this tradition of the

480
00:25:51,110 --> 00:25:48,799
new command arriving

481
00:25:53,750 --> 00:25:51,120
to the spacecraft

482
00:25:55,430 --> 00:25:53,760
or the craft for that matter

483
00:25:57,110 --> 00:25:55,440
another question

484
00:26:04,950 --> 00:25:57,120
not forgotten the flight but regarding

485
00:26:04,960 --> 00:26:16,230
it has been announced

486
00:26:20,950 --> 00:26:18,070
after the first flight of the crew

487
00:26:23,110 --> 00:26:20,960
member is not going to have

488
00:26:24,710 --> 00:26:23,120

the official uh

489

00:26:26,149 --> 00:26:24,720

name of

490

00:26:28,950 --> 00:26:26,159

the hero of the russian federation they

491

00:26:30,789 --> 00:26:28,960

will have some medals but not uh the

492

00:26:34,310 --> 00:26:30,799

title of the hero

493

00:26:51,590 --> 00:26:35,269

uh

494

00:26:56,310 --> 00:26:53,990

i think after our first expedition i

495

00:26:58,630 --> 00:26:56,320

think we received our awards only one

496

00:27:00,310 --> 00:26:58,640

year after but those who have in the

497

00:27:02,630 --> 00:27:00,320

military receive their awards sooner

498

00:27:04,789 --> 00:27:02,640

than those who are civilians

499

00:27:08,149 --> 00:27:04,799

that's true sometimes

500

00:27:12,310 --> 00:27:09,669

the paper saying that they're going to

501
00:27:14,789 --> 00:27:12,320
be awarded something was actually done

502
00:27:17,750 --> 00:27:14,799
on the uh on the day of the landing

503
00:27:21,590 --> 00:27:17,760
but then some rules uh changed and uh

504
00:27:23,190 --> 00:27:21,600
the rules for those the process of

505
00:27:24,549 --> 00:27:23,200
the paperwork

506
00:27:26,230 --> 00:27:24,559
were separate

507
00:27:27,669 --> 00:27:26,240
one way for the military one way for

508
00:27:31,029 --> 00:27:27,679
civilians

509
00:27:33,110 --> 00:27:31,039
and we've had such thing such

510
00:27:34,870 --> 00:27:33,120
situations when there are two people

511
00:27:36,870 --> 00:27:34,880
land at the same time but one was on the

512
00:27:40,149 --> 00:27:36,880
other one was the military and they

513
00:27:41,590 --> 00:27:40,159

received their awards at different times

514

00:27:44,310 --> 00:27:41,600

but more or less this was done

515

00:27:46,630 --> 00:27:44,320

simultaneously

516

00:27:49,029 --> 00:27:46,640

but because of the recent changes in the

517

00:27:50,870 --> 00:27:49,039

ministry of the defense

518

00:27:53,510 --> 00:27:50,880

again this process of doing the

519

00:27:55,350 --> 00:27:53,520

paperwork has been modified

520

00:27:57,430 --> 00:27:55,360

and

521

00:27:59,669 --> 00:27:57,440

it turned out that the way the paperwork

522

00:28:00,830 --> 00:27:59,679

for the military personnel

523

00:28:03,510 --> 00:28:00,840

was

524

00:28:05,350 --> 00:28:03,520

uh processed

525

00:28:07,830 --> 00:28:05,360

it takes longer for those documents than

526

00:28:09,669 --> 00:28:07,840

for surveillance and maxim is in the

527

00:28:11,590 --> 00:28:09,679

military so

528

00:28:14,230 --> 00:28:11,600

these documents are still

529

00:28:16,789 --> 00:28:14,240

in the pipeline

530

00:28:19,029 --> 00:28:16,799

i've never seen such a paper signed by

531

00:28:21,269 --> 00:28:19,039

our president understand they showed on

532

00:28:23,110 --> 00:28:21,279

tv recently

533

00:28:24,789 --> 00:28:23,120

well i don't have this information yet

534

00:28:27,190 --> 00:28:24,799

so once i do have some facts we can

535

00:28:29,350 --> 00:28:27,200

discuss this not earlier

536

00:28:30,470 --> 00:28:29,360

i don't have three evas

537

00:28:32,389 --> 00:28:30,480

can you

538

00:28:41,350 --> 00:28:32,399

say something about what you will be

539

00:28:45,269 --> 00:28:43,909

i think something like this has already

540

00:28:47,990 --> 00:28:45,279

been asked

541

00:28:51,510 --> 00:28:48,000

we have three evas

542

00:28:58,230 --> 00:28:51,520

this is mostly regarding installation

543

00:29:01,990 --> 00:28:59,830

my research

544

00:29:05,110 --> 00:29:02,000

will be dealing with the

545

00:29:07,590 --> 00:29:05,120

atmosphere of our planet

546

00:29:09,590 --> 00:29:07,600

and whether surveying the surface of the

547

00:29:13,029 --> 00:29:09,600

earth

548

00:29:15,350 --> 00:29:13,039

okay then another question

549

00:29:16,230 --> 00:29:15,360

during your training you've learned each

550

00:29:17,350 --> 00:29:16,240

other

551
00:29:18,870 --> 00:29:17,360
well enough

552
00:29:38,230 --> 00:29:18,880
could you each could each of you say

553
00:29:41,830 --> 00:29:39,909
and i have known each other for quite a

554
00:29:43,590 --> 00:29:41,840
long time it's not the first time that

555
00:29:45,430 --> 00:29:43,600
we've been together

556
00:29:49,430 --> 00:29:45,440
we're together as crew members of

557
00:29:54,549 --> 00:29:50,630
and

558
00:29:58,870 --> 00:29:54,559
that's back then when they

559
00:30:03,190 --> 00:30:00,630
but now we actually

560
00:30:10,389 --> 00:30:03,200
dig different where now we know each

561
00:30:13,269 --> 00:30:11,190
so

562
00:30:15,269 --> 00:30:13,279
back then he was a commander and he had

563
00:30:19,830 --> 00:30:15,279

a long duration flight so he's been a

564

00:30:24,789 --> 00:30:20,830

he's very

565

00:30:25,830 --> 00:30:24,799

professional very qualified this is

566

00:30:28,470 --> 00:30:25,840

probably

567

00:30:30,470 --> 00:30:28,480

any pilot who is in the navy or any navy

568

00:30:33,269 --> 00:30:30,480

officer

569

00:30:34,310 --> 00:30:33,279

and it's very easy to work with him and

570

00:30:37,590 --> 00:30:34,320

i think

571

00:30:40,630 --> 00:30:37,600

our mutual understanding is very good

572

00:30:42,389 --> 00:30:40,640

and we have everything

573

00:30:47,430 --> 00:30:42,399

we have everything clear between us as

574

00:30:52,389 --> 00:30:49,350

i haven't been working with him for such

575

00:30:54,070 --> 00:30:52,399

a long time as i have with scott

576
00:30:55,430 --> 00:30:54,080
but i've been observing him for quite a

577
00:31:01,110 --> 00:30:55,440
long time and

578
00:31:06,950 --> 00:31:05,190
everything that i've seen so far

579
00:31:08,789 --> 00:31:06,960
showed to me that

580
00:31:10,149 --> 00:31:08,799
he is available on the professional crew

581
00:31:13,269 --> 00:31:10,159
member and

582
00:31:15,110 --> 00:31:13,279
he's a very good friend too

583
00:31:16,870 --> 00:31:15,120
so it turned out that

584
00:31:17,990 --> 00:31:16,880
now we're together

585
00:31:19,990 --> 00:31:18,000
and

586
00:31:21,430 --> 00:31:20,000
again this training here has been very

587
00:31:22,950 --> 00:31:21,440
successful

588
00:31:26,149 --> 00:31:22,960

and i don't think you're going to have

589

00:31:35,110 --> 00:31:27,669

and it's very easy for me to work with

590

00:31:39,990 --> 00:31:38,149

okay then what about your other friends

591

00:31:41,909 --> 00:31:40,000

it's more like a psychological

592

00:31:43,190 --> 00:31:41,919

experiment when you ask somebody to tell

593

00:31:44,789 --> 00:31:43,200

something about

594

00:31:58,870 --> 00:31:44,799

the colleagues or the friends who are

595

00:32:09,750 --> 00:32:00,950

a big chunk of luck for me

596

00:32:14,789 --> 00:32:11,830

and actually i'm the only one on our

597

00:32:16,870 --> 00:32:14,799

crew who on our team who hasn't had

598

00:32:19,430 --> 00:32:16,880

an experience of

599

00:32:21,350 --> 00:32:19,440

a space flight

600

00:32:23,029 --> 00:32:21,360

and i'm sure my friends will

601
00:32:24,549 --> 00:32:23,039
tell me lots of new information they'll

602
00:32:25,909 --> 00:32:24,559
show me lots of new things and they'll

603
00:32:30,310 --> 00:32:25,919
learn a lot

604
00:32:34,950 --> 00:32:32,789
we support each other all the time and i

605
00:32:38,470 --> 00:32:34,960
think that our joint work will be very

606
00:32:43,430 --> 00:32:41,190
and i have similar

607
00:32:46,630 --> 00:32:43,440
you know personalities that were not

608
00:32:48,549 --> 00:32:46,640
very easily excitable and

609
00:32:51,350 --> 00:32:48,559
you know kind of deal with things in a

610
00:32:52,230 --> 00:32:51,360
very kind of calm and quiet way so i

611
00:32:55,110 --> 00:32:52,240
think

612
00:33:00,789 --> 00:32:58,710
very good working relationship um

613
00:33:03,110 --> 00:33:00,799

because we kind of

614

00:33:19,669 --> 00:33:03,120

have i think the same temperament all

615

00:33:31,029 --> 00:33:21,750

and i think that's something that we all

616

00:33:31,039 --> 00:33:43,110

yes

617

00:33:43,120 --> 00:33:46,870

now that the shuttles are retiring

618

00:33:49,430 --> 00:33:47,669

uh

619

00:33:51,350 --> 00:33:49,440

the russian federation is going to have

620

00:33:53,590 --> 00:33:51,360

more flights than ever do you think

621

00:33:55,190 --> 00:33:53,600

crash will cope russia is already coping

622

00:33:57,350 --> 00:33:55,200

with this

623

00:34:04,950 --> 00:33:57,360

i'd like to underscore that

624

00:34:09,829 --> 00:34:08,149

when the shuttles did bring some uh

625

00:34:11,510 --> 00:34:09,839

international space station crew members

626
00:34:13,990 --> 00:34:11,520
to the station but

627
00:34:15,909 --> 00:34:14,000
it's been some time that uh

628
00:34:17,430 --> 00:34:15,919
international space station crew members

629
00:34:19,750 --> 00:34:17,440
are taken to the station on both the

630
00:34:21,190 --> 00:34:19,760
service vehicles

631
00:34:23,270 --> 00:34:21,200
so i don't really understand the

632
00:34:25,030 --> 00:34:23,280
question mark in your question

633
00:34:26,389 --> 00:34:25,040
what you're asking is already been done

634
00:34:27,990 --> 00:34:26,399
has already been done

635
00:34:29,750 --> 00:34:28,000
and russia is already providing for the

636
00:34:31,190 --> 00:34:29,760
security and for the safety of the crew

637
00:34:32,790 --> 00:34:31,200
members and

638
00:34:37,349 --> 00:34:32,800

for delivering crew members to the

639

00:34:41,109 --> 00:34:38,069

so

640

00:34:43,750 --> 00:34:41,119

i would rather say that

641

00:34:45,589 --> 00:34:43,760

with the shuttle being retired

642

00:34:47,589 --> 00:34:45,599

we are

643

00:34:50,550 --> 00:34:47,599

actually

644

00:34:55,430 --> 00:34:50,560

not going to have any more redundancy

645

00:34:58,390 --> 00:34:56,389

but

646

00:34:59,349 --> 00:34:58,400

i don't think that we're going to have

647

00:35:06,230 --> 00:34:59,359

any

648

00:35:06,240 --> 00:35:11,349

what about delivering cargo items

649

00:35:17,190 --> 00:35:13,829

the service vehicles do deliver some

650

00:35:20,470 --> 00:35:17,200

cargo items and it's probably between 40

651
00:35:22,470 --> 00:35:20,480
and 70 kilograms of equipment are for

652
00:35:24,630 --> 00:35:22,480
scientific experiments

653
00:35:25,910 --> 00:35:24,640
as far as the shuttle goes

654
00:35:27,109 --> 00:35:25,920
its main

655
00:35:36,950 --> 00:35:27,119
objective

656
00:35:40,950 --> 00:35:38,310
even

657
00:35:41,990 --> 00:35:40,960
the small russian modules like the mri

658
00:35:43,510 --> 00:35:42,000
modules

659
00:35:45,910 --> 00:35:43,520
they had

660
00:35:47,510 --> 00:35:45,920
their own propulsion system and they

661
00:35:50,870 --> 00:35:47,520
could perform some approach to the

662
00:35:52,630 --> 00:35:50,880
station as far as the vs models go

663
00:35:55,430 --> 00:35:52,640

the shuttles were necessary because the

664

00:35:59,349 --> 00:35:55,440

us models did not have this

665

00:36:01,190 --> 00:35:59,359

propulsion system of their own

666

00:36:06,310 --> 00:36:01,200

this was something that the assad needed

667

00:36:10,470 --> 00:36:08,230

now i have a new module that will uh

668

00:36:11,349 --> 00:36:10,480

serve as a certain warehouse and border

669

00:36:13,030 --> 00:36:11,359

station

670

00:36:14,710 --> 00:36:13,040

and we're not going to have any more

671

00:36:17,750 --> 00:36:14,720

modules like this

672

00:36:18,790 --> 00:36:17,760

so i don't really see any need in an

673

00:36:20,390 --> 00:36:18,800

orbiter

674

00:36:22,390 --> 00:36:20,400

per se as

675

00:36:23,270 --> 00:36:22,400

a way for delivering

676
00:36:25,829 --> 00:36:23,280
such

677
00:36:27,510 --> 00:36:25,839
bulky cargo

678
00:36:29,829 --> 00:36:27,520
then the scientific

679
00:36:33,589 --> 00:36:29,839
program is being changed right now and

680
00:36:34,710 --> 00:36:33,599
there are more and more uh cases when

681
00:36:37,670 --> 00:36:34,720
we deliver scientific

682
00:36:40,310 --> 00:36:37,680
evidence-scientific data not as physical

683
00:36:42,710 --> 00:36:40,320
objects but rather as data to the ground

684
00:36:47,829 --> 00:36:42,720
so i don't really need this physical

685
00:36:50,710 --> 00:36:49,190
and then

686
00:36:51,829 --> 00:36:50,720
we have

687
00:36:54,790 --> 00:36:51,839
new

688
00:36:57,430 --> 00:36:54,800

cargo vehicles and there are also

689

00:36:59,670 --> 00:36:57,440

new commercial projects as far as

690

00:37:03,910 --> 00:36:59,680

delivering objects to the station and

691

00:37:05,750 --> 00:37:04,790

so

692

00:37:07,750 --> 00:37:05,760

indeed

693

00:37:10,069 --> 00:37:07,760

yes i will probably there will probably

694

00:37:11,990 --> 00:37:10,079

be a period when we can physically bring

695

00:37:14,069 --> 00:37:12,000

cargo items back only on the service

696

00:37:15,750 --> 00:37:14,079

vehicles

697

00:37:18,150 --> 00:37:15,760

but this will only be a limited period

698

00:37:20,470 --> 00:37:18,160

of time but then in the future

699

00:37:21,670 --> 00:37:20,480

this possibility will expand

700

00:37:24,550 --> 00:37:21,680

we'll be also developing a new

701
00:37:25,349 --> 00:37:24,560
generation vehicle in russia that will

702
00:37:27,349 --> 00:37:25,359
have

703
00:37:30,390 --> 00:37:27,359
a bigger volume and bigger cargo

704
00:37:35,109 --> 00:37:32,790
also take an account that we still have

705
00:37:36,790 --> 00:37:35,119
the usa developing

706
00:37:39,270 --> 00:37:36,800
its programs and will have commercial

707
00:37:40,470 --> 00:37:39,280
vehicles this will

708
00:37:43,030 --> 00:37:40,480
not be

709
00:37:46,950 --> 00:37:43,040
something of a

710
00:37:51,030 --> 00:37:48,630
we don't have a

711
00:37:53,030 --> 00:37:51,040
full-fledged internet

712
00:37:55,109 --> 00:37:53,040
neither on the russian segment or on the

713
00:37:57,109 --> 00:37:55,119

us segment

714

00:37:59,510 --> 00:37:57,119

you said something that uh now we have

715

00:38:00,710 --> 00:37:59,520

more data been delivered to the ground

716

00:38:02,390 --> 00:38:00,720

well

717

00:38:04,470 --> 00:38:02,400

doesn't mean that

718

00:38:05,589 --> 00:38:04,480

we're constantly

719

00:38:07,430 --> 00:38:05,599

working

720

00:38:11,349 --> 00:38:07,440

on the network

721

00:38:16,870 --> 00:38:14,710

providing pictures on a constant way to

722

00:38:18,790 --> 00:38:16,880

the station so it's not really being in

723

00:38:21,349 --> 00:38:18,800

the network

724

00:38:24,470 --> 00:38:21,359

yes the us segment

725

00:38:29,109 --> 00:38:24,480

data channels are more

726

00:38:32,550 --> 00:38:31,589

there are still some systems which

727

00:38:38,310 --> 00:38:32,560

support

728

00:38:41,510 --> 00:38:40,550

the channels have been expanded

729

00:38:44,150 --> 00:38:41,520

and

730

00:38:47,349 --> 00:38:44,160

in some way both segments support each

731

00:38:50,230 --> 00:38:49,349

as a result of the experiments that

732

00:38:52,470 --> 00:38:50,240

which

733

00:38:54,790 --> 00:38:52,480

will be conducted will probably be

734

00:39:02,710 --> 00:38:54,800

expanding russian segment capabilities

735

00:39:05,990 --> 00:39:04,630

one of the main steps would be using the

736

00:39:08,069 --> 00:39:06,000

new satellite

737

00:39:09,829 --> 00:39:08,079

similar to what we used to have on the

738

00:39:11,270 --> 00:39:09,839

onboard the merge station

739

00:39:15,510 --> 00:39:11,280

and once we have the satellites we'll

740

00:39:19,589 --> 00:39:17,589

but this is not really a question to us

741

00:39:21,910 --> 00:39:19,599

who are in the men's space flight

742

00:39:24,310 --> 00:39:21,920

program this is to a question to other

743

00:39:26,710 --> 00:39:24,320

specialists

744

00:39:32,710 --> 00:39:26,720

but this sandwich will be developed and

745

00:39:40,390 --> 00:39:34,150

there was one more question if i

746

00:39:44,310 --> 00:39:42,550

can you compare the training you receive

747

00:39:46,230 --> 00:39:44,320

in moscow and in houston are there any

748

00:39:48,790 --> 00:39:46,240

differences and any difficulties any

749

00:39:50,950 --> 00:39:48,800

comments i think uh

750

00:39:51,750 --> 00:39:50,960

publishers

751

00:39:53,109 --> 00:39:51,760

um

752

00:39:54,470 --> 00:39:53,119

it's a good question thank you the

753

00:40:02,390 --> 00:39:54,480

training is very similar in a lot of

754

00:40:06,630 --> 00:40:04,470

but what i'll add

755

00:40:09,109 --> 00:40:06,640

is in the same way we train in the

756

00:40:11,349 --> 00:40:09,119

united states where we rely on the

757

00:40:12,790 --> 00:40:11,359

experienced astronauts to learn from

758

00:40:25,829 --> 00:40:12,800

from their experience and previous

759

00:40:30,790 --> 00:40:28,710

uh we do the same thing here um a few

760

00:40:33,430 --> 00:40:30,800

years ago i had the opportunity to fly

761

00:40:35,349 --> 00:40:33,440

to the space station and when we opened

762

00:40:48,630 --> 00:40:35,359

up the hatch these two guys smiling

763

00:40:51,829 --> 00:40:49,910

and we had a very challenging

764

00:40:53,750 --> 00:40:51,839

construction mission in and i was

765

00:40:55,829 --> 00:40:53,760

absolutely amazed at how talented they

766

00:40:57,990 --> 00:40:55,839

were how much help they gave us

767

00:40:59,270 --> 00:40:58,000

and it i experienced the same thing here

768

00:41:01,270 --> 00:40:59,280

going through the

769

00:41:02,950 --> 00:41:01,280

soyuz and the russian segment uh

770

00:41:14,150 --> 00:41:02,960

training with the backup current that

771

00:41:19,589 --> 00:41:17,589

and in addition to relying on our fellow

772

00:41:20,870 --> 00:41:19,599

crewmates just

773

00:41:22,630 --> 00:41:20,880

as in the united states when the

774

00:41:24,790 --> 00:41:22,640

instructors are very dedicated and very

775

00:41:26,950 --> 00:41:24,800

professional and really believe in what

776
00:41:29,109 --> 00:41:26,960
they're doing it's the same thing here i

777
00:41:31,270 --> 00:41:29,119
was very very impressed with the

778
00:41:33,270 --> 00:41:31,280
with the dedication of the instructors

779
00:41:34,950 --> 00:41:33,280
that worked very hard and made many

780
00:41:59,990 --> 00:41:34,960
sacrifices to ensure that we're ready

781
00:42:28,950 --> 00:42:02,630
this will be the last one if you don't

782
00:42:46,470 --> 00:42:32,790
no it's a much different uh mission and

783
00:42:46,480 --> 00:43:00,550
um

784
00:43:00,560 --> 00:43:26,630
certain city

785
00:43:26,640 --> 00:43:47,750
okay

786
00:43:47,760 --> 00:44:06,069
oh

787
00:44:06,079 --> 00:44:33,910
on to the canada

788
00:44:33,920 --> 00:44:55,589

foreign

789

00:44:55,599 --> 00:45:05,349

oh

790

00:45:05,359 --> 00:45:40,230

that's the best red square toys