



1
00:00:04,720 --> 00:00:27,269

yes

2
00:00:27,279 --> 00:00:34,549

sergey

3
00:00:34,559 --> 00:00:50,229

mike

4
00:00:50,239 --> 00:01:01,510

oleg

5
00:01:05,990 --> 00:01:03,270
mike you've just seen your spacecraft

6
00:01:07,830 --> 00:01:06,000
ready to fly what's your feeling like oh

7
00:01:09,590 --> 00:01:07,840
it's fantastic to see it at this point

8
00:01:11,510 --> 00:01:09,600
uh it's all packed up ready to go it's

9
00:01:13,270 --> 00:01:11,520
kind of like a pilot on his last walk

10
00:01:14,870 --> 00:01:13,280
around the airplane before he takes off

11
00:01:16,310 --> 00:01:14,880
this is happening five days before the

12
00:01:17,830 --> 00:01:16,320
launch but it's

13
00:01:28,710 --> 00:01:17,840

still pretty neat to see it in its final

14

00:01:33,990 --> 00:01:31,429

my first question is for you the person

15

00:01:35,670 --> 00:01:34,000

who is flying into space for the third

16

00:01:37,670 --> 00:01:35,680

time is there a difference between a

17

00:01:39,670 --> 00:01:37,680

first flight and the second flight what

18

00:01:41,030 --> 00:01:39,680

is important for a

19

00:01:43,990 --> 00:01:41,040

cosmonaut

20

00:01:46,069 --> 00:01:44,000

to prepare to be healthy to have friends

21

00:01:50,149 --> 00:01:46,079

who are waiting for you to return to

22

00:01:51,830 --> 00:01:50,159

earth or what well it's a long question

23

00:01:54,550 --> 00:01:51,840

or

24

00:01:57,270 --> 00:01:54,560

it has rather it has many components

25

00:01:58,630 --> 00:01:57,280

so i'll answer the first half of the

26

00:02:00,709 --> 00:01:58,640

question

27

00:02:02,870 --> 00:02:00,719

each flight is unique

28

00:02:05,109 --> 00:02:02,880

it's a different vehicle

29

00:02:07,350 --> 00:02:05,119

you would you may think that it all the

30

00:02:09,830 --> 00:02:07,360

vehicles look the same but they're not

31

00:02:13,110 --> 00:02:09,840

each crew is special

32

00:02:15,190 --> 00:02:13,120

each mission is different

33

00:02:20,229 --> 00:02:15,200

including goals and objectives

34

00:02:23,270 --> 00:02:20,239

now the sense of risk and fear i think

35

00:02:25,430 --> 00:02:23,280

everybody is prone to fear

36

00:02:27,030 --> 00:02:25,440

so what's important is for you to be

37

00:02:30,470 --> 00:02:27,040

able to

38

00:02:31,750 --> 00:02:30,480

overcome this tension this sense of

39

00:02:33,589 --> 00:02:31,760

danger

40

00:02:34,830 --> 00:02:33,599

and

41

00:02:36,790 --> 00:02:34,840

fulfill your

42

00:02:39,990 --> 00:02:36,800

responsibilities i would say that our

43

00:02:42,869 --> 00:02:40,000

crew is prepared both physically and

44

00:02:45,589 --> 00:02:42,879

morally emotionally and we're prepared

45

00:02:48,470 --> 00:02:45,599

to complete the objectives of our flight

46

00:02:50,229 --> 00:02:48,480

so but health and family are also

47

00:02:51,270 --> 00:02:50,239

important right so which one is more

48

00:02:53,990 --> 00:02:51,280

important

49

00:02:55,670 --> 00:02:54,000

you can't pick one over

50

00:02:57,509 --> 00:02:55,680

the other

51
00:02:59,110 --> 00:02:57,519
you need to have reliable hardware you

52
00:03:00,550 --> 00:02:59,120
need to have

53
00:03:02,949 --> 00:03:00,560
good health

54
00:03:04,949 --> 00:03:02,959
you can't say this is more important

55
00:03:09,830 --> 00:03:04,959
this is less important

56
00:03:16,390 --> 00:03:13,030
i have more experience that is true

57
00:03:19,830 --> 00:03:16,400
and i understand what to expect during

58
00:03:21,910 --> 00:03:19,840
lunch what to expect when we're on orbit

59
00:03:23,030 --> 00:03:21,920
what to expect during the descent and

60
00:03:27,430 --> 00:03:23,040
landing

61
00:03:29,910 --> 00:03:27,440
and so that really is a good advantage

62
00:03:33,830 --> 00:03:29,920
how many flights is the maximum number

63
00:03:36,229 --> 00:03:33,840

of flights in space is it three or four

64

00:03:39,509 --> 00:03:36,239

well you know history that there have

65

00:03:41,670 --> 00:03:39,519

been up to seven flights for

66

00:03:43,270 --> 00:03:41,680

one person so i think you're only

67

00:03:45,350 --> 00:03:43,280

limited by your desire and by your

68

00:03:56,390 --> 00:03:45,360

health

69

00:04:01,190 --> 00:03:58,630

do you think that we have to fly in

70

00:04:04,789 --> 00:04:01,200

space overcome the

71

00:04:05,910 --> 00:04:04,799

boundaries of humanity and try to fly

72

00:04:08,149 --> 00:04:05,920

further

73

00:04:11,350 --> 00:04:08,159

yes i think that

74

00:04:14,149 --> 00:04:11,360

in the future we will always fly

75

00:04:17,349 --> 00:04:14,159

there will always be engineers who are

76

00:04:22,310 --> 00:04:17,359

striving to create new spacecraft

77

00:04:26,790 --> 00:04:24,710

if you think about it this way used to

78

00:04:28,790 --> 00:04:26,800

be it used to take a long time to travel

79

00:04:32,310 --> 00:04:28,800

even to a neighboring city and now it's

80

00:04:36,870 --> 00:04:34,550

this is our goal for the future to

81

00:04:38,390 --> 00:04:36,880

expand our space flight and the

82

00:04:49,030 --> 00:04:38,400

boundaries

83

00:04:52,870 --> 00:04:49,040

you achieve one objective you want to

84

00:04:57,110 --> 00:04:54,790

so again

85

00:04:57,909 --> 00:04:57,120

that's just part and parcel of who we

86

00:04:59,189 --> 00:04:57,919

are

87

00:05:01,990 --> 00:04:59,199

as humans

88

00:05:03,430 --> 00:05:02,000

the desire to make yet another step into

89

00:05:05,749 --> 00:05:03,440

the future

90

00:05:10,469 --> 00:05:05,759

and push the boundaries and go the

91

00:05:14,710 --> 00:05:11,990

what are the

92

00:05:16,790 --> 00:05:14,720

things about your job

93

00:05:18,390 --> 00:05:16,800

uh well they're on a plane right now

94

00:05:20,390 --> 00:05:18,400

showing up in moscow getting ready to

95

00:05:22,790 --> 00:05:20,400

come down here for for the launch so

96

00:05:24,070 --> 00:05:22,800

they're just very excited about it

97

00:05:26,150 --> 00:05:24,080

they know this is something that i've

98

00:05:27,990 --> 00:05:26,160

been working for for a long time and so

99

00:05:29,350 --> 00:05:28,000

they're just uh i'm very happy that

100

00:05:36,070 --> 00:05:29,360

they're going to be able to be here and

101
00:05:42,310 --> 00:05:40,310
i have to say that being prepared help

102
00:05:44,150 --> 00:05:42,320
helps

103
00:05:46,870 --> 00:05:44,160
it's great to be with a commander who is

104
00:05:49,350 --> 00:05:46,880
so experienced

105
00:05:51,270 --> 00:05:49,360
just a general atmosphere within our

106
00:05:53,749 --> 00:05:51,280
crew it's very important

107
00:05:57,110 --> 00:05:53,759
thank you very much are we done no one

108
00:06:02,790 --> 00:05:59,110
training

109
00:06:05,350 --> 00:06:02,800
is in a way a psychological experiment

110
00:06:07,189 --> 00:06:05,360
do you still have romantic notions of

111
00:06:08,230 --> 00:06:07,199
this profession that you started out

112
00:06:11,270 --> 00:06:08,240
with

113
00:06:19,430 --> 00:06:15,510

avoid being a romantic you have

114

00:06:22,950 --> 00:06:21,270

follow your dreams to fly in space

115

00:06:24,790 --> 00:06:22,960

especially with the second flight and

116

00:06:26,950 --> 00:06:24,800

the third flight you know exactly what

117

00:06:29,350 --> 00:06:26,960

to expect you know exactly what's going

118

00:06:32,550 --> 00:06:29,360

to happen there will be nothing new that

119

00:06:33,590 --> 00:06:32,560

you will experience but this romantic

120

00:06:37,670 --> 00:06:33,600

feeling

121

00:06:40,629 --> 00:06:37,680

this dream to see your planet from space

122

00:06:42,550 --> 00:06:40,639

your desire to do something useful and

123

00:06:43,830 --> 00:06:42,560

do new work that is something that

124

00:06:48,710 --> 00:06:43,840

drives you

125

00:06:48,720 --> 00:07:09,189

foreign

126

00:07:09,199 --> 00:07:24,550

hey everyone

127

00:07:28,870 --> 00:07:27,029

we are happy to greet you here

128

00:07:34,230 --> 00:07:28,880

thank you so much and you're well and

129

00:07:34,240 --> 00:07:39,270

this is a fragment of the spacecraft

130

00:07:58,710 --> 00:07:42,150

to celebrate the 50th

131

00:07:58,720 --> 00:08:25,430

um

132

00:08:45,670 --> 00:08:26,469

and maybe

133

00:08:50,230 --> 00:08:48,070

okay should we sign it here

134

00:09:06,230 --> 00:08:50,240

yes pick a spot

135

00:09:12,310 --> 00:09:09,990

so here's the very first signature

136

00:09:14,070 --> 00:09:12,320

of one brave individual

137

00:09:23,350 --> 00:09:14,080

who signed it first

138

00:09:23,360 --> 00:09:40,070

okay

139

00:09:40,080 --> 00:09:51,990

and when you're done

140

00:10:39,509 --> 00:09:54,470

so we would like for you to sign this

141

00:10:45,670 --> 00:10:43,110

when you have a reliable friend

142

00:10:46,949 --> 00:10:45,680

and backup crew member you always feel

143

00:10:48,949 --> 00:10:46,959

secure

144

00:10:51,990 --> 00:10:48,959

thank you very much

145

00:10:55,269 --> 00:10:52,000

let's uh do another group photo

146

00:10:56,870 --> 00:10:55,279

so does it differ in any way

147

00:10:58,710 --> 00:10:56,880

well of course it's different because

148

00:11:00,230 --> 00:10:58,720

you realize that in five days you're

149

00:11:01,590 --> 00:11:00,240

gonna be actually calling on the rocket

150

00:11:03,430 --> 00:11:01,600

and getting ready to launch into space

151
00:11:05,430 --> 00:11:03,440
so there's certainly a bit of a

152
00:11:06,790 --> 00:11:05,440
different emotion here but it's

153
00:11:08,470 --> 00:11:06,800
the same tradition in the sense that we

154
00:11:10,790 --> 00:11:08,480
got to after the second pick check come

155
00:11:13,590 --> 00:11:10,800
back visit the museum here a lot of

156
00:11:29,030 --> 00:11:13,600
history here a lot of great stories and

157
00:11:29,040 --> 00:12:18,629
come on

158
00:12:18,639 --> 00:13:32,150
yes

159
00:13:32,160 --> 00:14:18,870
uh

160
00:14:18,880 --> 00:14:40,470
god

161
00:14:40,480 --> 00:15:59,110
fish

162
00:15:59,120 --> 00:16:24,949
so

163
00:16:24,959 --> 00:16:40,389

i mean

164

00:16:40,399 --> 00:16:50,389

okay

165

00:16:50,399 --> 00:17:40,070

oh

166

00:18:09,510 --> 00:17:51,990

so

167

00:18:09,520 --> 00:19:15,750

yes

168

00:19:20,870 --> 00:19:19,029

joe montabano deputy iss program manager

169

00:19:22,190 --> 00:19:20,880

here in baikonur joel

170

00:19:24,710 --> 00:19:22,200

soyuz

171

00:19:25,830 --> 00:19:24,720

tma-10m vehicle now vertical on the

172

00:19:29,830 --> 00:19:25,840

launch pad

173

00:19:31,350 --> 00:19:29,840

set to go on wednesday afternoon us time

174

00:19:33,350 --> 00:19:31,360

can it get any busier at the

175

00:19:35,110 --> 00:19:33,360

international space station right now

176

00:19:37,510 --> 00:19:35,120

you know rob it's a great day to be in

177

00:19:39,350 --> 00:19:37,520

baikonur you know standing in front of

178

00:19:41,669 --> 00:19:39,360

the launch pad that launched the first

179

00:19:43,669 --> 00:19:41,679

human in space there's just a magic here

180

00:19:45,350 --> 00:19:43,679

and you feel that magic could it get

181

00:19:46,870 --> 00:19:45,360

busier yeah it's going to get a little

182

00:19:48,390 --> 00:19:46,880

busier for the rest of the year we got a

183

00:19:50,710 --> 00:19:48,400

real busy schedule going but this is

184

00:19:52,070 --> 00:19:50,720

what we do and this is what we do best

185

00:19:53,830 --> 00:19:52,080

the three crew members you have two

186

00:19:55,510 --> 00:19:53,840

first-time flyers and mike hopkins and

187

00:19:57,270 --> 00:19:55,520

sergey ryazanskiy but a wealth of

188

00:19:59,830 --> 00:19:57,280

experience in the soyuz commander alec

189

00:20:01,830 --> 00:19:59,840

kotov how will this crew blend on orbit

190

00:20:03,590 --> 00:20:01,840

for what promises to be a very busy five

191

00:20:05,270 --> 00:20:03,600

and a half months this crew is going to

192

00:20:06,870 --> 00:20:05,280

do great oleg is an outstanding

193

00:20:09,029 --> 00:20:06,880

commander we have a lot of experience

194

00:20:10,630 --> 00:20:09,039

with him on board the two rookies have

195

00:20:12,549 --> 00:20:10,640

trained together the whole crew has

196

00:20:14,470 --> 00:20:12,559

trained together they've trained across

197

00:20:16,470 --> 00:20:14,480

the globe at the different different

198

00:20:18,149 --> 00:20:16,480

partner centers we're looking forward to

199

00:20:20,470 --> 00:20:18,159

them we expect these guys are just going

200

00:20:22,149 --> 00:20:20,480

to do a fantastic job on orbit

201
00:20:24,230 --> 00:20:22,159
you mentioned the busy time ahead for

202
00:20:27,110 --> 00:20:24,240
the space station just six weeks from

203
00:20:28,390 --> 00:20:27,120
now yet another soyuz will be on the pad

204
00:20:29,669 --> 00:20:28,400
you're gonna have nine crew members on

205
00:20:32,149 --> 00:20:29,679
the station for about three and a half

206
00:20:34,870 --> 00:20:32,159
days an olympic torch arriving on board

207
00:20:36,549 --> 00:20:34,880
symbolic for next year's winter olympics

208
00:20:39,029 --> 00:20:36,559
talk a little bit about this air traffic

209
00:20:41,110 --> 00:20:39,039
control pattern at the station well as

210
00:20:43,510 --> 00:20:41,120
you said rob you know we have the soyuz

211
00:20:45,190 --> 00:20:43,520
in november we have an orbital mission

212
00:20:46,710 --> 00:20:45,200
right now that's in free flight that

213
00:20:48,310 --> 00:20:46,720

will be birthing to the space station

214

00:20:51,190 --> 00:20:48,320

this week we have another orbital

215

00:20:52,950 --> 00:20:51,200

mission scheduled in december spacex

216

00:20:55,510 --> 00:20:52,960

early next year but this is what the

217

00:20:57,270 --> 00:20:55,520

partnership does we work together we

218

00:20:59,430 --> 00:20:57,280

have a european vehicle up there right

219

00:21:02,070 --> 00:20:59,440

now we just deorbited the japanese

220

00:21:04,149 --> 00:21:02,080

transfer vehicle again we work together

221

00:21:06,149 --> 00:21:04,159

we get things done we use space station

222

00:21:08,390 --> 00:21:06,159

for what it's designed for and as you

223

00:21:11,110 --> 00:21:08,400

know space station is the largest

224

00:21:13,190 --> 00:21:11,120

project ever taken upon by human

225

00:21:15,270 --> 00:21:13,200

human mankind and we just do a great job

226

00:21:16,470 --> 00:21:15,280

and the partnership they pull together

227

00:21:19,270 --> 00:21:16,480

when you need them

228

00:21:21,669 --> 00:21:19,280

and in november 15th anniversary joel of

229

00:21:23,350 --> 00:21:21,679

the first element launch of the zarya

230

00:21:24,149 --> 00:21:23,360

module the fgb

231

00:21:26,470 --> 00:21:24,159

uh

232

00:21:28,710 --> 00:21:26,480

talk a little bit about how this complex

233

00:21:31,909 --> 00:21:28,720

has grown into this research city in the

234

00:21:34,070 --> 00:21:31,919

sky from that single lone module

235

00:21:36,149 --> 00:21:34,080

you know when we started space station

236

00:21:38,230 --> 00:21:36,159

we worked with the partnership we had

237

00:21:40,710 --> 00:21:38,240

the first launch the fgb launch from

238

00:21:42,470 --> 00:21:40,720

baikonur and we've built upon it now

239

00:21:44,310 --> 00:21:42,480

that assembly is complete we use the

240

00:21:46,630 --> 00:21:44,320

space station for utilization that's

241

00:21:49,190 --> 00:21:46,640

what it was designed for we are doing

242

00:21:52,549 --> 00:21:49,200

we're scheduled to do up to 40 hours of

243

00:21:53,990 --> 00:21:52,559

crew utilization crew time per week on

244

00:21:55,510 --> 00:21:54,000

the average for this expedition that

245

00:21:57,510 --> 00:21:55,520

will be the largest amount of

246

00:22:00,149 --> 00:21:57,520

utilization we've done since we've been

247

00:22:01,750 --> 00:22:00,159

flying space station

248

00:22:03,270 --> 00:22:01,760

helen ochoa director of the johnson

249

00:22:04,870 --> 00:22:03,280

space center ellen welcome back to

250

00:22:07,549 --> 00:22:04,880

baikonur

251

00:22:10,789 --> 00:22:07,559

crystal clear day today for the soyuz

252

00:22:12,230 --> 00:22:10,799

tma-10m spacecraft

253

00:22:13,750 --> 00:22:12,240

it is a complex time at the

254

00:22:16,149 --> 00:22:13,760

international space station a very

255

00:22:18,310 --> 00:22:16,159

intricate choreography about to unfold

256

00:22:19,750 --> 00:22:18,320

talk a little bit about the preparedness

257

00:22:21,590 --> 00:22:19,760

of our three crew members about to

258

00:22:23,110 --> 00:22:21,600

embark on this journey

259

00:22:25,270 --> 00:22:23,120

well the three crew of course have been

260

00:22:27,669 --> 00:22:25,280

trained all over the world including at

261

00:22:30,230 --> 00:22:27,679

johnson space center the well-prepared

262

00:22:31,830 --> 00:22:30,240

no concerns at all about that

263

00:22:34,310 --> 00:22:31,840

it's a very interesting time at the

264

00:22:36,230 --> 00:22:34,320

station i was lucky enough to be at

265

00:22:38,710 --> 00:22:36,240

wallops on the east coast of the united

266

00:22:41,110 --> 00:22:38,720

states last week to see the launch of

267

00:22:43,029 --> 00:22:41,120

antares in cygnus and now i get to be

268

00:22:45,430 --> 00:22:43,039

here for this launch and so we're

269

00:22:47,669 --> 00:22:45,440

looking forward to two vehicles

270

00:22:49,669 --> 00:22:47,679

coming toward this station this week

271

00:22:51,990 --> 00:22:49,679

air traffic control around the station a

272

00:22:53,510 --> 00:22:52,000

very very complex choreography about to

273

00:22:55,350 --> 00:22:53,520

unfold

274

00:22:57,430 --> 00:22:55,360

just six weeks from now yet another

275

00:22:59,669 --> 00:22:57,440

soyuz will be on the pad for the next

276

00:23:00,950 --> 00:22:59,679

trio to be launched

277

00:23:02,870 --> 00:23:00,960

the five and a half months that lie

278

00:23:04,470 --> 00:23:02,880

ahead from mike hopkins alec kotov and

279

00:23:06,549 --> 00:23:04,480

sergey ryazanskiy

280

00:23:09,029 --> 00:23:06,559

will be very challenging talk a little

281

00:23:10,470 --> 00:23:09,039

bit about that yeah so the the vehicle

282

00:23:13,270 --> 00:23:10,480

traffic is one of the things that

283

00:23:15,190 --> 00:23:13,280

they'll be having to deal with

284

00:23:18,149 --> 00:23:15,200

but as well it's a very busy time in

285

00:23:20,390 --> 00:23:18,159

terms of science on board the station

286

00:23:22,390 --> 00:23:20,400

so we do fundamental science up there we

287

00:23:24,870 --> 00:23:22,400

do research and development that's more

288

00:23:28,549 --> 00:23:24,880

associated with direct benefits on earth

289

00:23:30,470 --> 00:23:28,559

including in human health as well as

290

00:23:32,549 --> 00:23:30,480

earth observing

291

00:23:34,630 --> 00:23:32,559

uh many other types of things and then

292

00:23:36,630 --> 00:23:34,640

of course we're using as as a test bed

293

00:23:38,789 --> 00:23:36,640

for exploration

294

00:23:41,590 --> 00:23:38,799

we've got an experiment on board or a

295

00:23:43,510 --> 00:23:41,600

ming swing bed a test bed that's looking

296

00:23:45,350 --> 00:23:43,520

at a new way of scrubbing

297

00:23:47,909 --> 00:23:45,360

co2 out of the atmosphere that we hope

298

00:23:50,390 --> 00:23:47,919

to use for the orion spacecraft

299

00:23:52,710 --> 00:23:50,400

which will take crew beyond low earth