



1
00:00:05,110 --> 00:00:03,909
do your members of the government

2
00:00:08,790 --> 00:00:05,120
commission

3
00:00:13,270 --> 00:00:10,950
today um there is a session of the

4
00:00:15,430 --> 00:00:13,280
government commission on

5
00:00:17,910 --> 00:00:15,440
making the decision and improving prime

6
00:00:19,910 --> 00:00:17,920
and backup crew of the transportation

7
00:00:20,670 --> 00:00:19,920
and vehicle so use

8
00:00:26,150 --> 00:00:20,680
a

9
00:00:41,110 --> 00:00:26,160
the

10
00:00:44,549 --> 00:00:41,120
made

11
00:00:45,910 --> 00:00:44,559
to launch on december 15 2015

12
00:00:48,549 --> 00:00:45,920
mend

13
00:00:50,709 --> 00:00:48,559

transportation vehicle

14

00:00:51,990 --> 00:00:50,719

soyuz 19m

15

00:00:54,310 --> 00:00:52,000

yesterday

16

00:00:56,229 --> 00:00:54,320

in accordance with the

17

00:00:57,510 --> 00:00:56,239

video of the preparation

18

00:00:59,990 --> 00:00:57,520

of the

19

00:01:01,990 --> 00:01:00,000

launch to the launch

20

00:01:05,350 --> 00:01:02,000

the rocket was delivered to the launch

21

00:01:09,910 --> 00:01:05,360

bed and all the work has been completed

22

00:01:15,590 --> 00:01:11,750

my recommendation is to listen to the

23

00:01:17,670 --> 00:01:15,600

report of the head of the gcdc yuri

24

00:01:20,230 --> 00:01:17,680

valentinovichoff

25

00:01:22,710 --> 00:01:20,240

on the recommendations on the signing

26
00:01:24,310 --> 00:01:22,720
prime and backup crew good afternoon

27
00:01:26,070 --> 00:01:24,320
and your colleagues members of the

28
00:01:27,830 --> 00:01:26,080
government commission in order to

29
00:01:28,870 --> 00:01:27,840
execute

30
00:01:30,310 --> 00:01:28,880
uh

31
00:01:33,510 --> 00:01:30,320
space flight

32
00:01:35,350 --> 00:01:33,520
for increment 46 47

33
00:01:38,149 --> 00:01:35,360
expeditions prime crew was trained

34
00:01:40,550 --> 00:01:38,159
malenchenko ivanovic commander of the

35
00:01:43,990 --> 00:01:40,560
vehicle flight engineer of

36
00:01:47,749 --> 00:01:44,000
expedition 4647 cooperativity

37
00:01:51,670 --> 00:01:47,759
flight engineer of the soyuz vehicle

38
00:01:54,389 --> 00:01:51,680

commander of expedition 4647 peak timity

39

00:01:58,149 --> 00:01:54,399

flight engineer of the soyuz flight

40

00:02:01,910 --> 00:01:58,159

engineer of expedition 4647 backup crew

41

00:02:04,310 --> 00:02:01,920

venetian anatoly xavies

42

00:02:06,870 --> 00:02:04,320

anisha takoya flight engineer of the

43

00:02:09,190 --> 00:02:06,880

soyuz flight engineer of the expedition

44

00:02:12,390 --> 00:02:09,200

ribbons caitlyn for attention of the

45

00:02:14,949 --> 00:02:12,400

soyuz and the ice as part of the

46

00:02:18,390 --> 00:02:14,959

cosmonaut training all the

47

00:02:19,750 --> 00:02:18,400

plans were executed in full and all the

48

00:02:24,150 --> 00:02:19,760

communities the members passed their

49

00:02:28,150 --> 00:02:26,550

crew members have passed their medical

50

00:02:29,270 --> 00:02:28,160

evaluation

51
00:02:31,030 --> 00:02:29,280
and

52
00:02:32,470 --> 00:02:31,040
during the meeting at the customer

53
00:02:34,630 --> 00:02:32,480
training center

54
00:02:38,070 --> 00:02:34,640
the commission reviewed the results of

55
00:02:43,270 --> 00:02:38,080
training and gave its recommendation the

56
00:02:45,670 --> 00:02:43,280
crew members of the long 46 47.

57
00:02:50,070 --> 00:02:45,680
increment of ready

58
00:02:53,430 --> 00:02:50,080
for lunch on soyuz 19m and working on

59
00:02:55,190 --> 00:02:53,440
the iss and the pre-launch preparation

60
00:02:58,149 --> 00:02:55,200
of the crew has been completed in full

61
00:03:03,509 --> 00:03:01,350
to improve prime crew on soyuz 19 and

62
00:03:05,350 --> 00:03:03,519
malenchenko your ivanovich commander

63
00:03:08,470 --> 00:03:05,360

flight engineering opportunity fight

64

00:03:11,350 --> 00:03:08,480

engineer peak timothy white engineer 2.

65

00:03:14,470 --> 00:03:11,360

backup crew commander invention anatoly

66

00:03:17,030 --> 00:03:14,480

alexavich flight engineer anisha takoya

67

00:03:19,910 --> 00:03:17,040

and flight engineer to robin scatlin

68

00:03:23,350 --> 00:03:21,509

thank you

69

00:03:26,470 --> 00:03:23,360

i would like to listen to designer

70

00:03:29,030 --> 00:03:26,480

general of mend space

71

00:03:32,390 --> 00:03:29,040

complex uh sergey

72

00:03:33,430 --> 00:03:32,400

your ramadan

73

00:03:38,630 --> 00:03:33,440

rocket

74

00:03:42,470 --> 00:03:40,070

good afternoon

75

00:03:46,229 --> 00:03:42,480

yesterday we completed the first day

76

00:03:49,509 --> 00:03:46,239

preparations per results of the

77

00:03:53,589 --> 00:03:49,519

preparation uh rocket uh

78

00:03:55,030 --> 00:03:53,599

so soyuz and the space vehicle soyuz are

79

00:03:57,429 --> 00:03:55,040

ready for lunch

80

00:04:00,390 --> 00:03:57,439

thank you if there are no other

81

00:04:04,070 --> 00:04:00,400

presenters would like to listen to mr

82

00:04:05,750 --> 00:04:04,080

square bhagat of on their

83

00:04:08,869 --> 00:04:05,760

decision

84

00:04:10,550 --> 00:04:08,879

i would like to provide uh toward your

85

00:04:12,470 --> 00:04:10,560

review the decision the government

86

00:04:13,429 --> 00:04:12,480

commission having received the reports

87

00:04:17,270 --> 00:04:13,439

of the

88

00:04:20,710 --> 00:04:19,030

of valentinovichwan took off on the

89

00:04:23,270 --> 00:04:20,720

readiness of the crews and

90

00:04:26,790 --> 00:04:23,280

recommendations on the

91

00:04:29,350 --> 00:04:26,800

prime and backup crew members for soyuz

92

00:04:33,110 --> 00:04:29,360

19

93

00:04:35,830 --> 00:04:33,120

and the designer general sergei

94

00:04:38,230 --> 00:04:35,840

on the readiness of the rocket launch

95

00:04:40,070 --> 00:04:38,240

complex and the subsequent activities

96

00:04:41,030 --> 00:04:40,080

the governing commission has decided

97

00:04:43,430 --> 00:04:41,040

first

98

00:04:47,430 --> 00:04:43,440

approve uh the prime and backup crew

99

00:04:50,469 --> 00:04:47,440

members for soyuz tma-19m prime crew

100

00:04:52,150 --> 00:04:50,479

commander of soyuz malenchenko yuri van

101
00:04:58,710 --> 00:04:52,160
vitros cosmos

102
00:05:03,189 --> 00:05:01,510
european space agency the backup crew

103
00:05:08,070 --> 00:05:03,199
commander

104
00:05:13,909 --> 00:05:08,080
alexavich ross cosmis flight engineer

105
00:05:19,670 --> 00:05:17,510
second continue preparing the

106
00:05:21,270 --> 00:05:19,680
space lunch costumes

107
00:05:22,950 --> 00:05:21,280
complex

108
00:05:25,270 --> 00:05:22,960
to launch

109
00:05:26,870 --> 00:05:25,280
during the designated time any proposals

110
00:05:28,950 --> 00:05:26,880
or recommendations we approve the

111
00:05:31,029 --> 00:05:28,960
decision of the governing commission

112
00:05:34,469 --> 00:05:31,039
i would like to listen

113
00:05:36,070 --> 00:05:34,479

to the director general

114

00:05:39,430 --> 00:05:36,080

iguana television

115

00:05:41,749 --> 00:05:39,440

director of the russ cosmas

116

00:05:45,590 --> 00:05:41,759

dear colleagues i am glad that prime and

117

00:05:49,270 --> 00:05:45,600

backup crew of expedition 46 47

118

00:06:07,590 --> 00:05:49,280

to is to the iss have undergone all the

119

00:06:12,870 --> 00:06:11,110

have been considered ready for launch

120

00:06:15,430 --> 00:06:12,880

a lot of work has been done and i would

121

00:06:18,950 --> 00:06:15,440

like to express my appreciation

122

00:06:21,909 --> 00:06:18,960

to all the employees at

123

00:06:23,110 --> 00:06:21,919

gcdc and all the ros cosmos and

124

00:06:24,950 --> 00:06:23,120

construction employees for the

125

00:06:28,950 --> 00:06:24,960

preparation for launch

126

00:06:30,309 --> 00:06:28,960

i am confident everything will go well

127

00:06:32,629 --> 00:06:30,319

and the um

128

00:06:34,390 --> 00:06:32,639

crew members of 4647

129

00:06:37,270 --> 00:06:34,400

expeditions will join our colleagues on

130

00:06:39,430 --> 00:06:37,280

board of the iss so the best wishes for

131

00:06:44,629 --> 00:06:39,440

work

132

00:06:44,639 --> 00:07:02,469

kirk alden chairman um

133

00:07:05,670 --> 00:07:03,990

it's been a tremendous amount of work on

134

00:07:09,749 --> 00:07:05,680

your part and congratulations on your

135

00:07:15,510 --> 00:07:11,430

thank you to

136

00:07:17,749 --> 00:07:15,520

gctc roscosmos issa nasa all the

137

00:07:29,830 --> 00:07:17,759

trainers who work so hard to uh to help

138

00:07:33,589 --> 00:07:31,270

i spoke this morning with our mission

139

00:07:35,909 --> 00:07:33,599

control center in houston and the iss is

140

00:07:54,309 --> 00:07:35,919

in excellent shape and uh and waiting

141

00:07:59,670 --> 00:07:56,309

so we look forward to having you up on

142

00:08:01,589 --> 00:07:59,680

board it's a busy rest of december

143

00:08:03,350 --> 00:08:01,599

we have some space walks early next year

144

00:08:04,230 --> 00:08:03,360

both the u.s and a russian space walk

145

00:08:26,710 --> 00:08:04,240

and

146

00:08:29,670 --> 00:08:26,720

schedule in front of you

147

00:08:30,869 --> 00:08:29,680

i i look forward to your success

148

00:08:32,790 --> 00:08:30,879

completing

149

00:08:35,909 --> 00:08:32,800

all those vehicle operations as well as

150

00:08:38,709 --> 00:08:35,919

a very robust uh research program for

151
00:08:40,469 --> 00:08:38,719
both russia u.s isa

152
00:08:42,230 --> 00:08:40,479
and and including a joint research

153
00:08:44,070 --> 00:08:42,240
program we're looking forward to uh to

154
00:09:07,269 --> 00:08:44,080
you all working together to produce

155
00:09:11,350 --> 00:09:09,110
so i wish you a very successful

156
00:09:12,870 --> 00:09:11,360
increment and i look forward you look

157
00:09:15,269 --> 00:09:12,880
forward to you being back up on space

158
00:09:17,590 --> 00:09:15,279
station and uh and allowing it to make

159
00:09:34,870 --> 00:09:17,600
the noise that it normally should have

160
00:09:38,310 --> 00:09:36,389
agency please

161
00:09:40,070 --> 00:09:38,320
good morning ladies and gentlemen and

162
00:09:46,710 --> 00:09:40,080
especially good morning to the team and

163
00:09:51,030 --> 00:09:48,630

i would like especially to thank our

164

00:09:53,190 --> 00:09:51,040

international partners ross cosmod and

165

00:10:01,269 --> 00:09:53,200

nasa with whom we can work together for

166

00:10:10,870 --> 00:10:03,269

it is especially at these times of

167

00:10:14,949 --> 00:10:12,870

space is above the earth

168

00:10:16,790 --> 00:10:14,959

and therefore the space activities are

169

00:10:31,030 --> 00:10:16,800

the perfect instruments to bridge

170

00:10:36,790 --> 00:10:32,470

of this flight

171

00:10:42,710 --> 00:10:39,110

if you organize it in another way

172

00:10:44,870 --> 00:10:42,720

tim tim and yuri you get tty

173

00:10:48,790 --> 00:10:44,880

yesterday

174

00:10:53,750 --> 00:10:51,350

which is a very experienced interface in

175

00:10:55,829 --> 00:10:53,760

communication and hopefully a symbol for

176
00:10:58,310 --> 00:10:55,839
the perfect cooperation between all the

177
00:11:08,710 --> 00:10:58,320
three crew members

178
00:11:13,670 --> 00:11:10,829
was elected out of

179
00:11:15,590 --> 00:11:13,680
8413 european applicants and is the

180
00:11:27,190 --> 00:11:15,600
first european astronaut of british

181
00:11:30,550 --> 00:11:29,190
the name of his special mission is

182
00:11:31,910 --> 00:11:30,560
principia

183
00:11:34,550 --> 00:11:31,920
related to

184
00:11:37,190 --> 00:11:34,560
isaac newton and at the same time to

185
00:11:39,829 --> 00:11:37,200
albert einstein who wrote his theory of

186
00:11:55,670 --> 00:11:39,839
gravitation just one hundred years ago

187
00:12:01,030 --> 00:11:59,430
that's 200 200 no 300 years ago

188
00:12:03,990 --> 00:12:01,040

isaac newton

189

00:12:27,509 --> 00:12:04,000

was a very specialized person and it

190

00:12:36,629 --> 00:12:29,750

we built too many walls and not enough

191

00:12:41,269 --> 00:12:38,629

second one i can calculate the emotion

192

00:12:49,350 --> 00:12:41,279

of heavenly bodies but not the madness

193

00:12:55,030 --> 00:12:52,550

now one for rocket technology

194

00:13:02,069 --> 00:12:55,040

technology in every action there is

195

00:13:06,710 --> 00:13:04,310

to signs

196

00:13:08,949 --> 00:13:06,720

to me there has never been a higher

197

00:13:10,870 --> 00:13:08,959

source of earthly honor or distinction

198

00:13:19,110 --> 00:13:10,880

than that connected with advances in

199

00:13:22,710 --> 00:13:20,629

and the last one

200

00:13:30,949 --> 00:13:22,720

for the whole mission what goes up must

201
00:13:34,629 --> 00:13:32,949
we wish all three of you a safe and

202
00:13:39,430 --> 00:13:34,639
successful journey and looking forward

203
00:13:44,790 --> 00:13:42,150
i'd like to listen now to the commander

204
00:13:47,430 --> 00:13:44,800
of the prime crew of the service vehicle

205
00:13:49,590 --> 00:13:47,440
malenchenko evangeer members of the

206
00:13:54,389 --> 00:13:49,600
government commission dear

207
00:13:55,750 --> 00:13:54,399
chairman uh crew of soyuz gma19m is

208
00:13:57,910 --> 00:13:55,760
ready

209
00:14:00,150 --> 00:13:57,920
for flight i would like to express our

210
00:14:01,670 --> 00:14:00,160
appreciation for

211
00:14:04,230 --> 00:14:01,680
your trust

212
00:14:07,350 --> 00:14:04,240
we will come put the mission program in

213
00:14:09,110 --> 00:14:07,360

full we have all the assets available

214

00:14:10,550 --> 00:14:09,120

for that we would like to express our

215

00:14:12,710 --> 00:14:10,560

appreciation

216

00:14:14,550 --> 00:14:12,720

to all the organizations and agencies

217

00:14:16,550 --> 00:14:14,560

for participating in our training and

218

00:14:19,430 --> 00:14:16,560

who are continuing their work uh the

219

00:14:20,949 --> 00:14:19,440

lunch bed at the cosmodrome thank you

220

00:14:24,949 --> 00:14:20,959

for your kind wishes

221

00:14:29,910 --> 00:14:27,670

i would like to express our appreciation

222

00:14:32,870 --> 00:14:29,920

to the commission for this opportunity

223

00:14:34,470 --> 00:14:32,880

to fly to the station on the soldier's

224

00:14:36,150 --> 00:14:34,480

vehicle

225

00:14:39,829 --> 00:14:36,160

our training

226

00:14:43,030 --> 00:14:39,839

in star city was great our instructors

227

00:14:45,829 --> 00:14:43,040

were highly professional dedicated to

228

00:14:47,990 --> 00:14:45,839

their mission

229

00:14:50,629 --> 00:14:48,000

we are ready for

230

00:14:53,670 --> 00:14:50,639

our flight as a result of their work we

231

00:14:55,990 --> 00:14:53,680

saw our vehicle it looks great i would

232

00:14:59,590 --> 00:14:56,000

also like to say that i am particularly

233

00:15:02,230 --> 00:14:59,600

appreciative for the opportunity to be

234

00:15:03,350 --> 00:15:02,240

a part of this international program

235

00:15:06,949 --> 00:15:03,360

thank you

236

00:15:09,269 --> 00:15:06,959

i'd like to listen to flight engineer to

237

00:15:11,269 --> 00:15:09,279

timothy

238

00:15:12,870 --> 00:15:11,279

thank you it's a great honor for me

239

00:15:14,069 --> 00:15:12,880

today to

240

00:15:16,629 --> 00:15:14,079

represent

241

00:15:19,990 --> 00:15:16,639

europa and great britain

242

00:15:23,189 --> 00:15:20,000

international space station is a great

243

00:15:26,790 --> 00:15:23,199

model of international cooperation

244

00:15:29,910 --> 00:15:26,800

i am very proud just you that i am a

245

00:15:32,310 --> 00:15:29,920

part of this program our training and

246

00:15:35,110 --> 00:15:32,320

preparation went great

247

00:15:37,990 --> 00:15:35,120

and we're ready for our mission

248

00:15:42,389 --> 00:15:38,000

i am looking forward to working on board

249

00:15:43,189 --> 00:15:42,399

of the iss and to fly to space

250

00:15:45,829 --> 00:15:43,199

with

251

00:15:47,829 --> 00:15:45,839

tim and yuri and to summarize i'd like

252

00:15:50,389 --> 00:15:47,839

to say thank you for your support dear

253

00:15:52,389 --> 00:15:50,399

your evan which timothy peek and timothy

254

00:15:54,790 --> 00:15:52,399

copper on behalf of the government

255

00:15:57,269 --> 00:15:54,800

commission we would like to express

256

00:16:00,470 --> 00:15:57,279

our heartfelt congratulations on

257

00:16:03,749 --> 00:16:00,480

assignment as a prime crew of

258

00:16:06,069 --> 00:16:03,759

a vehicle so use tma-19m we wish you

259

00:16:07,030 --> 00:16:06,079

successful completion of your mission

260

00:16:41,749 --> 00:16:07,040

and

261

00:16:43,590 --> 00:16:41,759

of iss expeditions 46 47.

262

00:16:46,949 --> 00:16:43,600

who will be launching

263

00:16:50,389 --> 00:16:46,959

on soyuz gmail

264

00:16:54,310 --> 00:16:50,399

19m on december 15th of this year

265

00:17:01,749 --> 00:16:56,629

commander of the transportation mint

266

00:17:04,390 --> 00:17:01,759

vehicle soyuz tma-19m flight engineer of

267

00:17:06,309 --> 00:17:04,400

increment 46 47 yuri ivanovich

268

00:17:09,510 --> 00:17:06,319

malenchenko russia

269

00:17:16,829 --> 00:17:09,520

russia roscosmos flight engineer of the

270

00:17:20,949 --> 00:17:19,189

engineering 46 and commander of

271

00:17:23,590 --> 00:17:20,959

expedition 47.

272

00:17:27,510 --> 00:17:23,600

flight engineer iss 46 flight engineer

273

00:17:29,669 --> 00:17:27,520

iss 47 commander timothy kofra nasa the

274

00:17:32,789 --> 00:17:29,679

united states of america aboard

275

00:17:39,990 --> 00:17:35,110

of transportation vehicle flight

276
00:17:43,750 --> 00:17:40,000
engineer of expedition 4647 timothy peak

277
00:17:45,350 --> 00:17:43,760
engineer 2 isis 4647 flight engineer the

278
00:17:51,190 --> 00:17:45,360
united kingdom of great britain and

279
00:17:56,549 --> 00:17:53,430
commander of the men transportation

280
00:18:13,110 --> 00:17:56,559
vehicle flight engineer of the iss

281
00:18:18,150 --> 00:18:15,590
takoya is jaxa

282
00:18:21,510 --> 00:18:18,160
engineer 2 of soyuz vehicle flight

283
00:18:25,669 --> 00:18:21,520
engineer of the iss kaitlyn ribbons

284
00:18:30,630 --> 00:18:28,390
conference we would like to start our

285
00:18:31,669 --> 00:18:30,640
press conference for prime

286
00:18:33,430 --> 00:18:31,679
and

287
00:18:34,710 --> 00:18:33,440
we are studying our press conference so

288
00:18:36,789 --> 00:18:34,720

the crews are ready to answer your

289

00:18:38,150 --> 00:18:36,799

questions and the first is roscosmos

290

00:18:39,990 --> 00:18:38,160

asking

291

00:18:43,270 --> 00:18:40,000

wd

292

00:18:45,029 --> 00:18:43,280

good afternoon congratulations on

293

00:18:47,029 --> 00:18:45,039

approval by the government commission

294

00:18:53,270 --> 00:18:47,039

two questions first question to yuri

295

00:18:58,070 --> 00:18:55,510

fifth flight to the iss i would like to

296

00:18:59,270 --> 00:18:58,080

ask you what are you expecting to see

297

00:19:00,390 --> 00:18:59,280

new

298

00:19:05,190 --> 00:19:00,400

you have

299

00:19:07,669 --> 00:19:05,200

are you expecting to see anything new

300

00:19:08,830 --> 00:19:07,679

i would like to say that each flight

301
00:19:14,549 --> 00:19:08,840
it

302
00:19:16,310 --> 00:19:14,559
way and there is always a program

303
00:19:18,470 --> 00:19:16,320
that is different from the previous ones

304
00:19:22,549 --> 00:19:18,480
and the station is changing

305
00:19:25,430 --> 00:19:22,559
inside it's been equipped and outfitted

306
00:19:27,990 --> 00:19:25,440
so all on every time you will see

307
00:19:29,110 --> 00:19:28,000
something you see for the first time

308
00:19:31,190 --> 00:19:29,120
and also

309
00:19:34,950 --> 00:19:31,200
for results of the dynamic operations

310
00:19:40,150 --> 00:19:39,190
two russian vehicles and for

311
00:19:42,549 --> 00:19:40,160
uh

312
00:19:44,390 --> 00:19:42,559
partner vehicles they will be looking

313
00:19:46,630 --> 00:19:44,400

very interesting interesting to work

314

00:19:47,909 --> 00:19:46,640

with all of that so we're hoping to see

315

00:19:50,830 --> 00:19:47,919

all of it

316

00:19:53,510 --> 00:19:50,840

thank you and my second question for

317

00:19:56,549 --> 00:19:53,520

timothy congratulations it's your first

318

00:19:59,029 --> 00:19:56,559

space flight congratulations on it

319

00:20:00,950 --> 00:19:59,039

see my chris

320

00:20:07,750 --> 00:20:00,960

my question is i know that

321

00:20:12,950 --> 00:20:11,029

and isaac newton is the theme of the

322

00:20:16,310 --> 00:20:12,960

mission

323

00:20:19,830 --> 00:20:16,320

is your science program going to allow

324

00:20:22,149 --> 00:20:19,840

you to get so deeply involved in science

325

00:20:31,830 --> 00:20:22,159

as isaac newton did

326

00:20:36,470 --> 00:20:33,990

the the wonderful thing about this uh

327

00:20:39,190 --> 00:20:36,480

mission is that i'm able to actually

328

00:20:53,590 --> 00:20:39,200

conduct some of the experiments that sir

329

00:20:57,350 --> 00:20:55,430

the point of the international space

330

00:21:00,310 --> 00:20:57,360

station is that we do science in

331

00:21:02,390 --> 00:21:00,320

microgravity that's why it's there and

332

00:21:04,230 --> 00:21:02,400

newton of course uh was one of the the

333

00:21:10,710 --> 00:21:04,240

founding fathers in understanding

334

00:21:10,720 --> 00:21:14,710

experiments

335

00:21:14,720 --> 00:21:17,909

come

336

00:21:22,870 --> 00:21:19,590

so i'm delighted we have a very busy

337

00:21:25,270 --> 00:21:22,880

program ahead of us uh over 265

338

00:21:27,590 --> 00:21:25,280

experiments during the six month mission

339

00:21:29,430 --> 00:21:27,600

coming up so it'll be a busy time and i

340

00:21:39,190 --> 00:21:29,440

think now we're just ready to

341

00:21:39,200 --> 00:21:46,789

experience

342

00:21:51,270 --> 00:21:49,029

thank you please next

343

00:21:53,830 --> 00:21:51,280

rob navy is from nasa television i have

344

00:21:55,350 --> 00:21:53,840

two questions first for tim copra tim

345

00:21:57,510 --> 00:21:55,360

you and your crewmates

346

00:21:59,190 --> 00:21:57,520

will arrive on station in what arguably

347

00:22:00,950 --> 00:21:59,200

will be one of the busiest periods in

348

00:22:01,909 --> 00:22:00,960

station history

349

00:22:04,149 --> 00:22:01,919

how will

350

00:22:06,390 --> 00:22:04,159

how complex will it be for you guys to

351
00:22:07,669 --> 00:22:06,400
orient yourself right off the bat hit

352
00:22:09,750 --> 00:22:07,679
the ground running

353
00:22:11,510 --> 00:22:09,760
and yet blend in with the home stretch

354
00:22:13,669 --> 00:22:11,520
of the one-year mission visiting vehicle

355
00:22:15,990 --> 00:22:13,679
operations a spacewalk in the offing in

356
00:22:17,669 --> 00:22:16,000
january and all the rest

357
00:22:19,909 --> 00:22:17,679
you know space station has always been

358
00:22:21,830 --> 00:22:19,919
very busy and one thing i can say is

359
00:22:23,350 --> 00:22:21,840
that i've seen the progress of both our

360
00:22:25,830 --> 00:22:23,360
training and the operations onboard

361
00:22:28,149 --> 00:22:25,840
station improve over time and so really

362
00:22:29,669 --> 00:22:28,159
in in our opinion the hardest job is the

363
00:22:31,990 --> 00:22:29,679

the grounds job to coordinate all the

364

00:22:33,590 --> 00:22:32,000

activities but we're going into a great

365

00:22:35,430 --> 00:22:33,600

place because scott kelly has been there

366

00:22:37,430 --> 00:22:35,440

for nine months now he's a very

367

00:22:40,310 --> 00:22:37,440

competent and calm commander and we're

368

00:22:42,789 --> 00:22:40,320

looking forward to working with him

369

00:22:45,029 --> 00:22:42,799

and for tim and tim the inevitable

370

00:22:46,630 --> 00:22:45,039

question how do you guys plan to spend

371

00:22:48,070 --> 00:22:46,640

christmas on board the international

372

00:22:51,909 --> 00:22:48,080

space station and what are your thoughts

373

00:22:53,590 --> 00:22:51,919

on being away from home for the holidays

374

00:22:55,669 --> 00:22:53,600

you know we've been so busy focused on

375

00:22:57,190 --> 00:22:55,679

this mission um that i kind of forgot

376

00:22:59,510 --> 00:22:57,200

christmas is just over a week away

377

00:23:01,590 --> 00:22:59,520

actually um and so of course we'll be

378

00:23:03,669 --> 00:23:01,600

fairly new on board the space station

379

00:23:07,350 --> 00:23:03,679

and for myself my first time i'll still

380

00:23:09,270 --> 00:23:07,360

be adapting to zero gravity

381

00:23:11,830 --> 00:23:09,280

but of course we'll be enjoying the

382

00:23:14,070 --> 00:23:11,840

fantastic view of planet earth and our

383

00:23:15,590 --> 00:23:14,080

thoughts will be with everybody on earth

384

00:23:17,190 --> 00:23:15,600

enjoying uh christmas and with our

385

00:23:19,190 --> 00:23:17,200

friends and family of course and we'll

386

00:23:21,110 --> 00:23:19,200

thankfully be able to give them a call

387

00:23:22,630 --> 00:23:21,120

on christmas day

388

00:23:24,870 --> 00:23:22,640

i also heard that the christmas pudding

389

00:23:26,070 --> 00:23:24,880

went up and opened before so some treats

390

00:23:28,789 --> 00:23:26,080

as well

391

00:23:31,270 --> 00:23:28,799

hi dallas campbell bbc tv for stargazing

392

00:23:33,350 --> 00:23:31,280

live a question for tim peake tim for

393

00:23:35,590 --> 00:23:33,360

months now you've been uh

394

00:23:37,190 --> 00:23:35,600

answering thousands and thousands of

395

00:23:38,950 --> 00:23:37,200

questions from people all up and down

396

00:23:40,710 --> 00:23:38,960

the uk from young

397

00:23:42,630 --> 00:23:40,720

young people especially there are young

398

00:23:44,230 --> 00:23:42,640

girls and boys who could probably write

399

00:23:46,549 --> 00:23:44,240

doctoral theses

400

00:23:47,909 --> 00:23:46,559

on uh going to the bathroom

401
00:23:49,669 --> 00:23:47,919
in space

402
00:23:50,950 --> 00:23:49,679
i just want to say when you leave

403
00:23:53,909 --> 00:23:50,960
tomorrow

404
00:23:56,630 --> 00:23:53,919
you will be taking the pride and

405
00:23:59,110 --> 00:23:56,640
excitement of everybody back home so

406
00:24:01,110 --> 00:23:59,120
much so you probably won't need any fuel

407
00:24:03,430 --> 00:24:01,120
to get into orbit i think that'll

408
00:24:04,870 --> 00:24:03,440
probably do it but i just wanted to just

409
00:24:07,830 --> 00:24:04,880
sort of check with you that you will

410
00:24:09,669 --> 00:24:07,840
have time to pause and just reflect on

411
00:24:11,510 --> 00:24:09,679
all that good will that's uh that's

412
00:24:12,950 --> 00:24:11,520
that's that's going there with you and

413
00:24:14,870 --> 00:24:12,960

have a little bit of a bit of time to

414

00:24:16,830 --> 00:24:14,880

relax too

415

00:24:21,190 --> 00:24:16,840

that's

416

00:24:22,870 --> 00:24:21,200

of advice i've been given by many

417

00:24:26,310 --> 00:24:22,880

astronauts and cosmonauts who have flown

418

00:24:28,390 --> 00:24:26,320

before is to make sure you get time to

419

00:24:30,230 --> 00:24:28,400

look out the window not for taking a

420

00:24:32,630 --> 00:24:30,240

photograph but just to enjoy it for your

421

00:24:35,590 --> 00:24:32,640

own benefit and thankfully in a six

422

00:24:37,269 --> 00:24:35,600

month mission 173 days on orbit i hope

423

00:24:45,190 --> 00:24:37,279

to get plenty of opportunities to do

424

00:24:49,110 --> 00:24:47,510

center space the question is to

425

00:24:51,750 --> 00:24:49,120

cosmetics and astronauts who already

426
00:24:53,269 --> 00:24:51,760
have some spaceflight experience

427
00:24:55,830 --> 00:24:53,279
a question

428
00:24:58,710 --> 00:24:55,840
what things that you are used to in your

429
00:25:09,830 --> 00:24:58,720
regular life do you miss in space most

430
00:25:16,070 --> 00:25:12,310
personally i always

431
00:25:20,950 --> 00:25:18,310
emotional communication that people

432
00:25:22,070 --> 00:25:20,960
experience on earth with

433
00:25:26,630 --> 00:25:22,080
your

434
00:25:28,470 --> 00:25:26,640
coworkers you usually work with the

435
00:25:30,549 --> 00:25:28,480
orange

436
00:25:32,230 --> 00:25:30,559
number of people this is something we

437
00:25:34,870 --> 00:25:32,240
lack in space

438
00:25:38,070 --> 00:25:34,880

and it is very noticeable however right

439

00:25:41,269 --> 00:25:38,080

now on board there are six people

440

00:25:43,110 --> 00:25:41,279

on board of the iss it is a

441

00:25:44,870 --> 00:25:43,120

tight-knit community and i'm looking

442

00:25:47,510 --> 00:25:44,880

forward to this flight

443

00:25:49,269 --> 00:25:47,520

miss our friends and our family but

444

00:25:51,350 --> 00:25:49,279

we have a great crew on board and we

445

00:25:53,430 --> 00:25:51,360

have the means to connect with them via

446

00:25:55,110 --> 00:25:53,440

technology so we can call our friends

447

00:25:56,390 --> 00:25:55,120

and family as well as have video

448

00:26:00,390 --> 00:25:56,400

conferences those are probably the

449

00:26:04,630 --> 00:26:02,230

channel 1

450

00:26:07,430 --> 00:26:04,640

of a question for all of uh customers

451
00:26:10,070 --> 00:26:07,440
and astronauts of prime crew

452
00:26:11,510 --> 00:26:10,080
the ava program that you're going to

453
00:26:14,710 --> 00:26:11,520
have

454
00:26:16,950 --> 00:26:14,720
what are their goals what was your

455
00:26:19,269 --> 00:26:16,960
special training about

456
00:26:22,149 --> 00:26:19,279
and if it's going to be someone's first

457
00:26:23,590 --> 00:26:22,159
cva what can you compare it to

458
00:26:25,510 --> 00:26:23,600
on

459
00:26:27,510 --> 00:26:25,520
the ground here when we experience

460
00:26:30,149 --> 00:26:27,520
something unusual we're saying it's like

461
00:26:31,990 --> 00:26:30,159
outer space what can you compare

462
00:26:32,950 --> 00:26:32,000
your ava with

463
00:26:35,430 --> 00:26:32,960

thank you

464

00:26:37,590 --> 00:26:35,440

so we have uh one u.s spacewalk that's

465

00:26:40,390 --> 00:26:37,600

currently being coordinated the primary

466

00:26:41,909 --> 00:26:40,400

activity for this eva will be to replace

467

00:26:43,669 --> 00:26:41,919

a box that helps

468

00:26:46,230 --> 00:26:43,679

work with the electrical control system

469

00:26:47,909 --> 00:26:46,240

on board and so uh that needs to get

470

00:26:49,590 --> 00:26:47,919

repaired it's on the very end of space

471

00:27:17,830 --> 00:26:49,600

station and so that'll be a very

472

00:27:22,950 --> 00:27:20,630

in the secondary large task is to lay

473

00:27:25,110 --> 00:27:22,960

some cables along the the pressurized

474

00:27:27,909 --> 00:27:25,120

volumes of space station and so i think

475

00:27:32,310 --> 00:27:27,919

we'll have a full day if we end up doing

476

00:27:37,510 --> 00:27:35,190

and the secondary large task is to lay

477

00:27:39,590 --> 00:27:37,520

some cables along the the pressurized

478

00:27:42,470 --> 00:27:39,600

volumes of space station and so i think

479

00:27:49,750 --> 00:27:42,480

we'll have a full day if we end up doing

480

00:27:55,190 --> 00:27:52,789

i have a question uh you probably

481

00:27:57,669 --> 00:27:55,200

know the star wars are going to hit the

482

00:27:59,669 --> 00:27:57,679

screens in a week

483

00:28:02,710 --> 00:27:59,679

teenagers and everyone does looking

484

00:28:04,389 --> 00:28:02,720

forward to watching the movie um guys

485

00:28:05,430 --> 00:28:04,399

like space

486

00:28:10,230 --> 00:28:05,440

movies

487

00:28:12,389 --> 00:28:10,240

you planning to take any videos during

488

00:28:26,630 --> 00:28:12,399

your expedition maybe some educational

489

00:28:30,789 --> 00:28:28,870

that is not being studied right now do

490

00:28:32,630 --> 00:28:30,799

you think it needs to be returned into

491

00:28:34,710 --> 00:28:32,640

the high school program question for

492

00:28:37,830 --> 00:28:34,720

yuri i think it should be returned into

493

00:28:42,310 --> 00:28:38,789

i know

494

00:28:46,870 --> 00:28:44,950

are introducing that subject

495

00:28:49,110 --> 00:28:46,880

as part of their own initiative even

496

00:28:52,549 --> 00:28:49,120

though it's not in the mandatory school

497

00:28:54,789 --> 00:28:52,559

program and children are interested in

498

00:29:03,590 --> 00:28:54,799

our solar system before they started to

499

00:29:07,350 --> 00:29:05,029

the russian

500

00:29:10,470 --> 00:29:07,360

expedition program

501
00:29:13,510 --> 00:29:10,480
has a number of experiments and a number

502
00:29:16,389 --> 00:29:13,520
of educational

503
00:29:18,389 --> 00:29:16,399
events that we're going to conduct as

504
00:29:21,269 --> 00:29:18,399
part of

505
00:29:24,950 --> 00:29:21,279
making popular our activities in space

506
00:29:27,510 --> 00:29:24,960
and attracting the young generation and

507
00:29:30,310 --> 00:29:27,520
inspiring their interests to

508
00:29:34,870 --> 00:29:30,320
make sure they're able

509
00:29:37,430 --> 00:29:34,880
to dedicate their life to a number of um

510
00:29:44,870 --> 00:29:37,440
space exploration related professions

511
00:29:49,269 --> 00:29:47,430
in the future thank you good afternoon

512
00:29:53,430 --> 00:29:49,279
alina

513
00:29:55,990 --> 00:29:53,440

winner of the roscosmos competition my

514

00:29:58,070 --> 00:29:56,000

question is for yuri ivanovic as we all

515

00:29:59,350 --> 00:29:58,080

know at present hour senator gays

516

00:30:02,789 --> 00:29:59,360

working

517

00:30:06,789 --> 00:30:04,710

question are you pointing to flying the

518

00:30:13,029 --> 00:30:06,799

space on this

519

00:30:18,630 --> 00:30:15,590

it's hard to plan so far

520

00:30:21,669 --> 00:30:18,640

into the future tomorrow there will be a

521

00:30:23,590 --> 00:30:21,679

launch and six months of intense work

522

00:30:26,149 --> 00:30:23,600

and this is what i'm currently focused

523

00:30:26,950 --> 00:30:26,159

on as to the new vehicle

524

00:30:29,909 --> 00:30:26,960

we

525

00:30:31,830 --> 00:30:29,919

are hoping that six months from now and

526
00:30:35,110 --> 00:30:31,840
the most likely

527
00:30:36,870 --> 00:30:35,120
crew who would be launching on that

528
00:30:39,110 --> 00:30:36,880
this would be

529
00:30:41,669 --> 00:30:39,120
uh the crew

530
00:30:43,510 --> 00:30:41,679
who are going to start training within

531
00:30:45,990 --> 00:30:43,520
the next several days in order to be

532
00:30:47,669 --> 00:30:46,000
able to launch on that new vehicle thank

533
00:30:50,789 --> 00:30:47,679
you

534
00:30:52,870 --> 00:30:50,799
palab gosh bbc news

535
00:30:53,669 --> 00:30:52,880
first of all good luck tim

536
00:30:55,510 --> 00:30:53,679
um

537
00:30:58,549 --> 00:30:55,520
what is the thing you most want this

538
00:31:00,470 --> 00:30:58,559

mission to achieve and secondly what is

539

00:31:02,549 --> 00:31:00,480

the thing you're most looking forward to

540

00:31:06,310 --> 00:31:02,559

personally once you're on board the

541

00:31:10,870 --> 00:31:08,310

uh with regards to the first part of the

542

00:31:13,430 --> 00:31:10,880

question um i think it's really an

543

00:31:15,750 --> 00:31:13,440

important step that great britain is now

544

00:31:18,230 --> 00:31:15,760

part of the international space station

545

00:31:20,310 --> 00:31:18,240

program within the european space agency

546

00:31:22,549 --> 00:31:20,320

so i'm delighted that that's occurred

547

00:31:24,950 --> 00:31:22,559

and uh to some extent i i think the

548

00:31:26,710 --> 00:31:24,960

first part has already achieved

549

00:31:28,789 --> 00:31:26,720

in terms of what i hope for this mission

550

00:31:30,870 --> 00:31:28,799

and that's educational outreach i think

551
00:31:32,549 --> 00:31:30,880
it's a wonderful opportunity to inspire

552
00:31:34,389 --> 00:31:32,559
a new generation of scientists and

553
00:31:35,830 --> 00:31:34,399
engineers and

554
00:31:38,149 --> 00:31:35,840
we certainly have i think the most

555
00:31:40,470 --> 00:31:38,159
ambitious educational programme with

556
00:31:42,710 --> 00:31:40,480
this mission of any european space

557
00:31:44,710 --> 00:31:42,720
mission so i'm delighted with that and i

558
00:31:46,310 --> 00:31:44,720
i thoroughly look forward to following

559
00:31:47,350 --> 00:31:46,320
that program throughout the next six

560
00:31:49,029 --> 00:31:47,360
months

561
00:31:50,070 --> 00:31:49,039
and i'll be enjoying that as well some

562
00:31:51,990 --> 00:31:50,080
of the experiments we'll be doing on

563
00:31:54,310 --> 00:31:52,000

board the space station will be

564

00:31:56,470 --> 00:31:54,320

a lot of fun with the kids and the

565

00:31:58,789 --> 00:31:56,480

second part of the question

566

00:32:01,509 --> 00:31:58,799

it really has to be the view of planet

567

00:32:03,750 --> 00:32:01,519

earth and as much as i've spoken to flow

568

00:32:05,990 --> 00:32:03,760

nationals and as much advice as they

569

00:32:08,230 --> 00:32:06,000

have given me i don't think anything can

570

00:32:10,950 --> 00:32:08,240

truly prepare you for that moment and

571

00:32:13,029 --> 00:32:10,960

that will occur in the soyuz spacecraft

572

00:32:15,590 --> 00:32:13,039

once we get injected into orbit and i'll

573

00:32:17,029 --> 00:32:15,600

be able to look out the the right window

574

00:32:21,590 --> 00:32:17,039

and see that wonderful view of planet

575

00:32:24,789 --> 00:32:22,950

tim peake

576

00:32:26,630 --> 00:32:24,799

six years of training will have prepared

577

00:32:29,269 --> 00:32:26,640

you very well technically for this

578

00:32:32,230 --> 00:32:29,279

mission you are a human being though

579

00:32:34,070 --> 00:32:32,240

how will you prepare emotionally for the

580

00:32:39,190 --> 00:32:34,080

ride of your life

581

00:32:43,590 --> 00:32:41,430

that that is a good question and the the

582

00:32:45,350 --> 00:32:43,600

space agencies do a great job in

583

00:32:47,269 --> 00:32:45,360

preparing us both physically and

584

00:32:48,870 --> 00:32:47,279

psychologically a couple of training

585

00:32:50,950 --> 00:32:48,880

events i've taken part in that have

586

00:32:53,430 --> 00:32:50,960

helped have been the european space

587

00:32:55,110 --> 00:32:53,440

agency caves mission seven days living

588

00:32:57,750 --> 00:32:55,120

down a cave with international

589

00:33:00,149 --> 00:32:57,760

astronauts and of course the nasa's nemo

590

00:33:02,389 --> 00:33:00,159

mission as well 12 days underwater and

591

00:33:04,950 --> 00:33:02,399

these missions really are space analogs

592

00:33:06,549 --> 00:33:04,960

and they help us to prepare for space

593

00:33:08,149 --> 00:33:06,559

missions and the psychological elements

594

00:33:10,230 --> 00:33:08,159

of flying into space

595

00:33:13,669 --> 00:33:10,240

but i think more importantly than that

596

00:33:15,110 --> 00:33:13,679

it's the informal casual discussions

597

00:33:17,110 --> 00:33:15,120

with your friends and colleagues who've

598

00:33:19,830 --> 00:33:17,120

flown in space that's what truly

599

00:33:22,549 --> 00:33:19,840

prepares you for what's to come

600

00:33:25,669 --> 00:33:22,559

um dan rivers from itv news you seem

601
00:33:26,710 --> 00:33:25,679
absolutely cool as a cucumber about this

602
00:33:29,750 --> 00:33:26,720
mission

603
00:33:31,430 --> 00:33:29,760
but what words of reassurance do you use

604
00:33:32,870 --> 00:33:31,440
for your family particularly your two

605
00:33:35,190 --> 00:33:32,880
young boys the head of this mission and

606
00:33:38,710 --> 00:33:35,200
the long separation as well that's going

607
00:33:43,029 --> 00:33:40,549
yeah that's another good question and i

608
00:33:45,509 --> 00:33:43,039
think that that process has been ongoing

609
00:33:47,830 --> 00:33:45,519
over two and a half years as well um my

610
00:33:50,070 --> 00:33:47,840
family have been living in houston and

611
00:33:52,230 --> 00:33:50,080
i've made sure that we've spoken about

612
00:33:54,070 --> 00:33:52,240
the training they've been to see me at

613
00:33:55,430 --> 00:33:54,080

johnson space center

614

00:33:57,029 --> 00:33:55,440

through the space station mock-up

615

00:33:58,389 --> 00:33:57,039

facilities they've seen where i'm going

616

00:33:59,669 --> 00:33:58,399

to eat where i'm going to sleep where

617

00:34:02,149 --> 00:33:59,679

i'm going to use the loo which is the

618

00:34:03,830 --> 00:34:02,159

most exciting part for them

619

00:34:05,750 --> 00:34:03,840

and they've also been to watch me go

620

00:34:07,750 --> 00:34:05,760

underwater in the neutral buoyancy

621

00:34:10,069 --> 00:34:07,760

facility and practice for eva

622

00:34:12,950 --> 00:34:10,079

spacewalking so that's all really helped

623

00:34:14,869 --> 00:34:12,960

them to appreciate what is coming up

624

00:34:17,190 --> 00:34:14,879

also i think this process of coming to

625

00:34:19,510 --> 00:34:17,200

view the launch coming to see a part of

626

00:34:21,990 --> 00:34:19,520

our life of what we train for

627

00:34:23,510 --> 00:34:22,000

i think that all helps in to prepare the

628

00:34:26,230 --> 00:34:23,520

family and the friends for what's to

629

00:34:28,550 --> 00:34:26,240

come over the next six months

630

00:34:30,950 --> 00:34:28,560

good morning my name is maria from

631

00:34:32,629 --> 00:34:30,960

russia today in spanish my question is

632

00:34:35,030 --> 00:34:32,639

for timothy pique

633

00:34:37,669 --> 00:34:35,040

and you say that you have to choose

634

00:34:38,470 --> 00:34:37,679

three songs to listen before the lunch

635

00:34:41,270 --> 00:34:38,480

off

636

00:34:42,470 --> 00:34:41,280

and i would like to know which ones

637

00:34:44,389 --> 00:34:42,480

are they

638

00:34:46,550 --> 00:34:44,399

so that's my question thank you very

639

00:34:49,669 --> 00:34:46,560

much good luck for everyone and drive

640

00:34:52,869 --> 00:34:50,950

yes i had a little bit of help with

641

00:34:55,669 --> 00:34:52,879

twitter on this but the three songs i've

642

00:34:57,829 --> 00:34:55,679

chosen was uh queen don't stop me now

643

00:34:59,990 --> 00:34:57,839

which i thought was very appropriate

644

00:35:01,990 --> 00:35:00,000

u2 beautiful day

645

00:35:05,190 --> 00:35:02,000

great band and a i'm a huge fan of

646

00:35:07,030 --> 00:35:05,200

youtube and coldplay a sky full of stars

647

00:35:08,390 --> 00:35:07,040

um i've also got a couple of surprises

648

00:35:10,069 --> 00:35:08,400

for the other crewmates but i won't tell

649

00:35:11,750 --> 00:35:10,079

you about it just yet

650

00:35:13,510 --> 00:35:11,760

hey there william whiteman russia today

651
00:35:15,430 --> 00:35:13,520
as well um my question is for tim peake

652
00:35:17,990 --> 00:35:15,440
as well first let me say good luck as

653
00:35:20,310 --> 00:35:18,000
well obviously as a fellow brit um

654
00:35:21,670 --> 00:35:20,320
you've um i saw on twitter that you said

655
00:35:23,270 --> 00:35:21,680
that uh even though you're gonna be up

656
00:35:25,510 --> 00:35:23,280
in space you're not gonna miss out on

657
00:35:26,950 --> 00:35:25,520
seeing the new star wars film can you uh

658
00:35:30,390 --> 00:35:26,960
fill us in on how exactly this is gonna

659
00:35:33,750 --> 00:35:32,069
we're very fortunate on board the space

660
00:35:35,510 --> 00:35:33,760
station to have great communication

661
00:35:37,109 --> 00:35:35,520
these days um and we've already

662
00:35:39,109 --> 00:35:37,119
mentioned about the ability to phone

663
00:35:40,790 --> 00:35:39,119

friends and family um from the space

664

00:35:42,870 --> 00:35:40,800

station once a week we get a private

665

00:35:44,790 --> 00:35:42,880

video conference with family as well but

666

00:35:46,870 --> 00:35:44,800

in addition to that our crew support

667

00:35:50,150 --> 00:35:46,880

guys on the ground who do a fantastic

668

00:35:53,109 --> 00:35:50,160

job can also upload the occasional movie

669

00:35:54,710 --> 00:35:53,119

or tv program for us to watch so uh we

670

00:35:56,790 --> 00:35:54,720

will have access to that and on board

671

00:35:58,470 --> 00:35:56,800

the space station earlier this year

672

00:36:01,430 --> 00:35:58,480

scott kelly was the first person to

673

00:36:03,990 --> 00:36:01,440

deploy a projector and a a flat screen

674

00:36:05,349 --> 00:36:04,000

as well um a white projector screen so

675

00:36:08,550 --> 00:36:05,359

we'll be able to watch star wars up on

676

00:36:10,870 --> 00:36:08,560

board the space station at some point

677

00:36:12,470 --> 00:36:10,880

hey tim take a question for some big

678

00:36:14,390 --> 00:36:12,480

game from bbc

679

00:36:16,230 --> 00:36:14,400

uh i'm curious how do you plan on

680

00:36:19,750 --> 00:36:16,240

spending your last night for now on

681

00:36:24,069 --> 00:36:21,750

well the last night on earth

682

00:36:26,150 --> 00:36:24,079

is traditionally spent with the family

683

00:36:27,910 --> 00:36:26,160

watching the the russian movie white sun

684

00:36:30,390 --> 00:36:27,920

in the desert so that's what we'll be

685

00:36:32,069 --> 00:36:30,400

doing later on today and then getting a

686

00:36:33,829 --> 00:36:32,079

good night's sleep ready for tomorrow's

687

00:36:35,670 --> 00:36:33,839

launch

688

00:36:37,510 --> 00:36:35,680

hello rory challenge from al jazeera

689

00:36:39,829 --> 00:36:37,520

english news um i've heard that

690

00:36:43,030 --> 00:36:39,839

astronauts and cosmonauts are suspicious

691

00:36:46,230 --> 00:36:44,550

believe in certain rituals and things

692

00:36:47,990 --> 00:36:46,240

like that that they do before the before

693

00:36:50,310 --> 00:36:48,000

the launch can you tell us what you're

694

00:36:51,910 --> 00:36:50,320

going to be doing uh and any little

695

00:36:53,430 --> 00:36:51,920

lucky charms or anything like that that

696

00:37:00,390 --> 00:36:53,440

you've you're going to be taking with

697

00:37:04,230 --> 00:37:02,230

i'm not sure that uh that astronauts and

698

00:37:06,630 --> 00:37:04,240

cosmonauts are any more

699

00:37:08,950 --> 00:37:06,640

superstitious than your average pilot so

700

00:37:10,790 --> 00:37:08,960

maybe we are a little bit superstitious

701
00:37:12,390 --> 00:37:10,800
but one symbol that we have on board

702
00:37:14,550 --> 00:37:12,400
that i think will be very meaningful is

703
00:37:16,150 --> 00:37:14,560
a zero g indicator and the zero g

704
00:37:19,030 --> 00:37:16,160
indicator will be

705
00:37:21,109 --> 00:37:19,040
a commemoration to the 55th anniversary

706
00:37:24,069 --> 00:37:21,119
of your gagarin's launch in april of

707
00:37:26,710 --> 00:37:24,079
1961 so it'll be a little medallion and

708
00:37:33,750 --> 00:37:26,720
a rocket and so once we hit zero gravity

709
00:37:37,990 --> 00:37:36,230
i'd like to add that tim

710
00:37:41,109 --> 00:37:38,000
remembered about the indicator of zero

711
00:37:42,950 --> 00:37:41,119
gravity a very good coincidence we're

712
00:37:46,069 --> 00:37:42,960
going to celebrate

713
00:37:49,030 --> 00:37:46,079

the 55th anniversary of the flight of

714

00:37:52,870 --> 00:37:49,040

the first um

715

00:37:55,829 --> 00:37:52,880

flight of the cosmetics

716

00:37:58,950 --> 00:37:55,839

and it's going to be a valentine's

717

00:38:01,990 --> 00:37:58,960

uh gagarin will be celebrating 80th

718

00:38:05,030 --> 00:38:02,000

anniversary we're going to be

719

00:38:08,230 --> 00:38:05,040

mentally sending our congratulations

720

00:38:11,109 --> 00:38:08,240

uh we're glad that these such very good

721

00:38:12,069 --> 00:38:11,119

events fall into the time frame of our

722

00:38:13,750 --> 00:38:12,079

fight

723

00:38:15,829 --> 00:38:13,760

my name is monica grady i'm from the

724

00:38:17,990 --> 00:38:15,839

open university and i'm also here for

725

00:38:19,990 --> 00:38:18,000

the royal institution christmas lectures

726
00:38:21,990 --> 00:38:20,000
kevin fong is going to be talking about

727
00:38:24,950 --> 00:38:22,000
living and working in space

728
00:38:27,990 --> 00:38:24,960
can you give us a bit of a

729
00:38:28,710 --> 00:38:28,000
clue about how you think you're going to

730
00:38:31,750 --> 00:38:28,720
be

731
00:38:33,829 --> 00:38:31,760
working in terms of the dedication that

732
00:38:37,109 --> 00:38:33,839
you need what have you been through to

733
00:38:39,270 --> 00:38:37,119
get get to this point

734
00:38:43,349 --> 00:38:39,280
what bit did you enjoy most of your

735
00:38:47,190 --> 00:38:45,589
well monica yes it is six years since i

736
00:38:48,710 --> 00:38:47,200
joined the space agency in two and a

737
00:38:51,030 --> 00:38:48,720
half years since i've been assigned to

738
00:38:53,349 --> 00:38:51,040

this flight so there is an awful lot of

739

00:38:55,510 --> 00:38:53,359

training that goes on in preparation for

740

00:38:58,470 --> 00:38:55,520

a six-month mission to the international

741

00:39:00,390 --> 00:38:58,480

space station and uh it's very hard to

742

00:39:02,150 --> 00:39:00,400

sort of narrow it down to just one thing

743

00:39:04,230 --> 00:39:02,160

that you've enjoyed the most but a

744

00:39:06,630 --> 00:39:04,240

couple of the highlights of the training

745

00:39:09,030 --> 00:39:06,640

have been experiencing weightlessness

746

00:39:12,069 --> 00:39:09,040

albeit just for 30 seconds at the time

747

00:39:14,950 --> 00:39:12,079

during the parabolic flights that we do

748

00:39:16,390 --> 00:39:14,960

and also for me eva training um wearing

749

00:39:18,550 --> 00:39:16,400

the pressurized suit and going

750

00:39:20,790 --> 00:39:18,560

underwater doing six hours of of

751
00:39:22,470 --> 00:39:20,800
training for a spacewalk that's been a

752
00:39:24,950 --> 00:39:22,480
real highlight as well

753
00:39:27,190 --> 00:39:24,960
um and of course i think the fact that

754
00:39:28,390 --> 00:39:27,200
uh you know we're here we're ready to go

755
00:39:30,150 --> 00:39:28,400
for the mission

756
00:39:32,870 --> 00:39:30,160
to fly to space tomorrow it's just

757
00:39:35,030 --> 00:39:32,880
thanks to the hundreds of people who

758
00:39:35,750 --> 00:39:35,040
have trained us over the last six years

759
00:39:39,510 --> 00:39:35,760
and

760
00:39:43,670 --> 00:39:39,520
who actually support the station

761
00:39:48,950 --> 00:39:45,829
rob navy is nasa television for tim

762
00:39:50,710 --> 00:39:48,960
cobra speaking of anniversaries

763
00:39:52,550 --> 00:39:50,720

you'll be launching on the 50th

764

00:39:55,990 --> 00:39:52,560

anniversary of the first rendezvous in

765

00:39:58,390 --> 00:39:56,000

space gemini 6 gemini 7 in 1965 flying

766

00:40:00,230 --> 00:39:58,400

within a foot of each other

767

00:40:02,150 --> 00:40:00,240

as you settle up to the international

768

00:40:04,710 --> 00:40:02,160

space station for docking will your

769

00:40:06,790 --> 00:40:04,720

thoughts harken back a bit to how far

770

00:40:08,790 --> 00:40:06,800

we've come in human space flight in a

771

00:40:11,430 --> 00:40:08,800

half century

772

00:40:14,470 --> 00:40:11,440

it's a great uh question rob because i

773

00:40:16,309 --> 00:40:14,480

think uh all of us are really humbled by

774

00:40:20,550 --> 00:40:16,319

the effort that's been put into building

775

00:40:23,430 --> 00:40:21,670

and

776

00:40:25,190 --> 00:40:23,440

to continue on that

777

00:40:26,790 --> 00:40:25,200

i think that the thing that uh that we

778

00:40:29,829 --> 00:40:26,800

can take from that is the fact that it's

779

00:40:31,109 --> 00:40:29,839

really been an evolutionary uh path for

780

00:40:33,510 --> 00:40:31,119

us to be able to build this space

781

00:40:37,829 --> 00:40:35,829

and and then one final word word on that

782

00:40:39,270 --> 00:40:37,839

is the fact that i think all of us

783

00:40:42,230 --> 00:40:39,280

really look at those

784

00:40:44,630 --> 00:40:42,240

those predecessors to us as our heroes

785

00:40:47,510 --> 00:40:44,640

just as they are to many people in the

786

00:40:48,950 --> 00:40:47,520

american and international public

787

00:40:50,790 --> 00:40:48,960

um first of all you've been quoted

788

00:40:52,710 --> 00:40:50,800

saying that the most difficult part of

789

00:40:54,390 --> 00:40:52,720

doing any of this was learning russian

790

00:40:56,630 --> 00:40:54,400

and i just want to say i have immense

791

00:40:57,670 --> 00:40:56,640

sympathy for you with that i was

792

00:40:59,349 --> 00:40:57,680

wondering if you could say a couple of

793

00:41:01,270 --> 00:40:59,359

words of that secondly a question no

794

00:41:04,950 --> 00:41:01,280

one's asked just how irritating have

795

00:41:07,349 --> 00:41:04,960

references to david bowie been

796

00:41:09,030 --> 00:41:07,359

and thirdly really a crew for a question

797

00:41:10,550 --> 00:41:09,040

for everybody

798

00:41:13,190 --> 00:41:10,560

where do you see the future of manned

799

00:41:15,349 --> 00:41:13,200

space flight going can you see a time in

800

00:41:17,430 --> 00:41:15,359

the foreseeable future when we perhaps

801
00:41:19,829 --> 00:41:17,440
return to the moon or maybe even carry

802
00:41:21,990 --> 00:41:19,839
on to mars

803
00:41:24,390 --> 00:41:22,000
so yes the first part of the question uh

804
00:41:26,150 --> 00:41:24,400
very difficult it's been a struggle but

805
00:41:27,589 --> 00:41:26,160
it's a very different experience

806
00:41:29,990 --> 00:41:27,599
conversational russian versus the

807
00:41:32,069 --> 00:41:30,000
technical russian and for me i find that

808
00:41:33,910 --> 00:41:32,079
once we get in the the spacecraft and we

809
00:41:35,270 --> 00:41:33,920
open up the flight documentation and we

810
00:41:36,069 --> 00:41:35,280
start working through our procedures

811
00:41:38,069 --> 00:41:36,079
then

812
00:41:40,230 --> 00:41:38,079
we work extremely well as a crew

813
00:41:43,109 --> 00:41:40,240

together and everything flows very

814

00:41:45,430 --> 00:41:43,119

smoothly and a lot of thanks to to yuri

815

00:41:46,470 --> 00:41:45,440

for helping out um in that respect as

816

00:41:50,550 --> 00:41:46,480

well

817

00:41:52,550 --> 00:41:50,560

a great job and i think he really opened

818

00:41:54,790 --> 00:41:52,560

up human space flight to many people

819

00:41:57,270 --> 00:41:54,800

around the world who wouldn't otherwise

820

00:41:58,950 --> 00:41:57,280

have looked at it so um i won't be

821

00:42:00,630 --> 00:41:58,960

playing the guitar or singing any songs

822

00:42:02,390 --> 00:42:00,640

but uh we'll certainly be having as much

823

00:42:04,950 --> 00:42:02,400

fun as we can during the mission

824

00:42:07,990 --> 00:42:04,960

and more seriously the the future of

825

00:42:09,589 --> 00:42:08,000

human space flight is very exciting

826

00:42:11,589 --> 00:42:09,599

we're in a phase now with the

827

00:42:14,230 --> 00:42:11,599

international space station where we've

828

00:42:17,030 --> 00:42:14,240

spent 10 years building it we're now

829

00:42:19,430 --> 00:42:17,040

firmly into the operational phase where

830

00:42:21,030 --> 00:42:19,440

we're running science experiments on a

831

00:42:23,430 --> 00:42:21,040

daily basis the number of hours of

832

00:42:25,910 --> 00:42:23,440

science we do each week goes up and up

833

00:42:27,910 --> 00:42:25,920

and we're working of course science for

834

00:42:29,750 --> 00:42:27,920

the future of space exploration but also

835

00:42:32,710 --> 00:42:29,760

science for the benefit of people back

836

00:42:34,550 --> 00:42:32,720

on earth and we have a very firm program

837

00:42:36,710 --> 00:42:34,560

within the european space agency to go

838

00:42:39,190 --> 00:42:36,720

to the moon as a stepping stone to going

839

00:42:41,190 --> 00:42:39,200

to mars and this is not a one-off visit

840

00:42:43,670 --> 00:42:41,200

this is human exploration of the solar

841

00:42:45,990 --> 00:42:43,680

system to to remain there and to do

842

00:42:47,670 --> 00:42:46,000

further scientific research dear ladies

843

00:42:49,670 --> 00:42:47,680

and gentlemen we are ending our

844

00:42:52,390 --> 00:42:49,680

conference so thank you for interesting

845

00:42:54,790 --> 00:42:52,400

questions and uh i think that it's uh

846

00:42:56,870 --> 00:42:54,800

the time to see and to wish good luck to

847

00:42:59,510 --> 00:42:56,880

our crew and

848

00:43:15,430 --> 00:42:59,520

those and please crew backup and prime

849

00:43:19,430 --> 00:43:18,390

thank you very much please um