
ИМЕНИ Ю.А
Сергей КРИКАЛЁВ
Sergey KRIKALEV

1
00:00:15,669 --> 00:00:13,910
that this is

2
00:00:21,750 --> 00:00:15,679
there will be a launch prepared for the

3
00:00:25,910 --> 00:00:24,150
which will be launching for crew 35 and

4
00:00:27,349 --> 00:00:25,920
36.

5
00:00:34,389 --> 00:00:27,359
today the following people are

6
00:00:37,990 --> 00:00:35,910
one of the crew members will be

7
00:00:40,869 --> 00:00:38,000
christopher cassidy another one will be

8
00:00:43,270 --> 00:00:40,879
alexander misurkin

9
00:00:46,630 --> 00:00:43,280
he will be flight engineer for the soyuz

10
00:00:53,990 --> 00:00:48,709
christopher cassidy will be flight

11
00:00:54,000 --> 00:01:02,470
also let us introduce the backup crew

12
00:01:10,550 --> 00:01:08,070
mr oleg kotov mr sergey erizanski

13
00:01:14,710 --> 00:01:10,560

cosmonaut from roscosmos and also

14
00:01:17,590 --> 00:01:14,720
michael hopkins flight engineer for iss

15
00:01:20,550 --> 00:01:17,600
from nasa usa

16
00:01:24,310 --> 00:01:20,560
we will begin our conference

17
00:01:27,510 --> 00:01:25,429
from

18
00:01:30,149 --> 00:01:27,520
the preparation commission which will

19
00:01:35,109 --> 00:01:30,159
talk about the preparations made for the

20
00:01:42,469 --> 00:01:38,830
where do you mention this today and we

21
00:01:47,830 --> 00:01:42,479
congratulated the crew

22
00:01:47,840 --> 00:01:56,550
this is already a big accomplishment

23
00:02:00,389 --> 00:01:59,109
the preparation commission has completed

24
00:02:02,230 --> 00:02:00,399
its meeting

25
00:02:05,109 --> 00:02:02,240
with positive

26
00:02:09,430 --> 00:02:08,309
the crew is deemed

27
00:02:12,390 --> 00:02:09,440
ready

28
00:02:14,710 --> 00:02:12,400
and the preparation steps are complete

29
00:02:20,229 --> 00:02:14,720
now the crew will continue preparing for

30
00:02:23,190 --> 00:02:21,589
this time it

31
00:02:25,510 --> 00:02:23,200
was a little bit more difficult to

32
00:02:27,750 --> 00:02:25,520
prepare because we had a new approach

33
00:02:28,949 --> 00:02:27,760
and docking scheme but we've already

34
00:02:30,630 --> 00:02:28,959
talked about

35
00:02:32,630 --> 00:02:30,640
this issue

36
00:02:34,550 --> 00:02:32,640
during all the training

37
00:02:37,270 --> 00:02:34,560
all the preparations have gone well the

38
00:02:39,990 --> 00:02:37,280

crew has shown itself capable

39
00:02:43,670 --> 00:02:40,000
working according to the new skin and

40
00:02:49,270 --> 00:02:45,830
and the crew on station has also been

41
00:02:51,430 --> 00:02:49,280
prepared to support the new scheme

42
00:02:56,070 --> 00:02:51,440
the crew has received really good grades

43
00:03:02,790 --> 00:02:57,830
so if there are any other questions i'm

44
00:03:11,750 --> 00:03:05,830
please when you ask your questions

45
00:03:15,910 --> 00:03:13,430
so what is the

46
00:03:17,190 --> 00:03:15,920
good luck charm

47
00:03:19,430 --> 00:03:17,200
for your

48
00:03:22,149 --> 00:03:19,440
this increment

49
00:03:30,830 --> 00:03:22,159
usually our listeners and readers

50
00:03:34,229 --> 00:03:32,789
this well

51
00:03:36,630 --> 00:03:34,239
i don't know maybe we should keep it a

52
00:03:38,550 --> 00:03:36,640
secret before we reveal it

53
00:03:44,869 --> 00:03:38,560
maybe we should show it to you when we

54
00:03:52,789 --> 00:03:47,270
well our good luck charm is a little

55
00:03:57,589 --> 00:03:54,710
this animal is really

56
00:04:01,030 --> 00:03:57,599
precious to me because the polar bear

57
00:04:07,910 --> 00:04:04,229
in nature it's a very powerful animal so

58
00:04:09,830 --> 00:04:07,920
that's who would be a little polar bear

59
00:04:13,030 --> 00:04:09,840
another question

60
00:04:19,590 --> 00:04:16,229
we know that on orbit

61
00:04:22,710 --> 00:04:19,600
you will be celebrating your anniversary

62
00:04:27,030 --> 00:04:24,310
how will you be celebrating your

63
00:04:31,830 --> 00:04:27,040

birthday maybe you thought about it

64
00:04:39,030 --> 00:04:34,390
for me any birthday is kind of a sad

65
00:04:44,629 --> 00:04:41,590
and as the years

66
00:04:47,189 --> 00:04:44,639
are added my time left decreases no i

67
00:04:52,629 --> 00:04:47,199
haven't thought about it no idea

68
00:04:56,150 --> 00:04:54,390
i don't know

69
00:04:59,590 --> 00:04:56,160
it's going to happen in august that's

70
00:05:10,550 --> 00:05:01,029
maybe we'll come up with something as

71
00:05:17,110 --> 00:05:12,629
maybe your flight engineers will plan

72
00:05:21,110 --> 00:05:19,189
you have a very interesting program

73
00:05:24,629 --> 00:05:21,120
planned for either before

74
00:05:26,230 --> 00:05:24,639
russian progress vehicles for evas

75
00:05:27,830 --> 00:05:26,240
what about experiments what kinds of

76
00:05:29,510 --> 00:05:27,840
experiments will you have what kind of

77
00:05:33,110 --> 00:05:29,520
evas and spacewalks will you be

78
00:05:37,749 --> 00:05:35,590
well i want to add that besides russian

79
00:05:40,150 --> 00:05:37,759
vehicles and european

80
00:05:46,310 --> 00:05:40,160
vehicles

81
00:05:49,590 --> 00:05:48,390
and it's true that we have an intensive

82
00:05:53,029 --> 00:05:49,600
program

83
00:05:55,590 --> 00:05:53,039
but since we have six people in the crew

84
00:05:59,830 --> 00:05:55,600
i think we'll we'll be able to handle it

85
00:06:06,629 --> 00:06:03,510
practically all of the spacewalks are by

86
00:06:08,469 --> 00:06:06,639
and large dedicated

87
00:06:11,029 --> 00:06:08,479
the arrival

88
00:06:14,309 --> 00:06:11,039

of a new module hopefully in this year

89
00:06:26,550 --> 00:06:14,319
this is a new russian module

90
00:06:26,560 --> 00:06:30,629
a large experiment

91
00:06:35,189 --> 00:06:33,749
which explores the external atmosphere

92
00:06:39,510 --> 00:06:35,199
of the station

93
00:06:44,150 --> 00:06:42,230
we at that point realized that we know

94
00:06:45,749 --> 00:06:44,160
very little about the external part of

95
00:06:48,469 --> 00:06:45,759
the station

96
00:06:51,430 --> 00:06:48,479
and so the experiment is dedicated

97
00:06:54,870 --> 00:06:51,440
to that so one of the space box

98
00:06:57,430 --> 00:06:54,880
will involves setting up the hardware to

99
00:06:59,110 --> 00:06:57,440
support this experiment the setup is

100
00:07:03,350 --> 00:06:59,120
very complex

101
00:07:07,670 --> 00:07:03,360
there will be a lot of work

102
00:07:09,830 --> 00:07:08,790
but

103
00:07:14,950 --> 00:07:09,840
the

104
00:07:18,150 --> 00:07:14,960
all are also partially dedicated to

105
00:07:19,990 --> 00:07:18,160
supporting experiments but mostly it's

106
00:07:22,950 --> 00:07:20,000
dedicated to prepare

107
00:07:26,070 --> 00:07:22,960
for the arrival of the new

108
00:07:30,469 --> 00:07:28,550
my colleagues will be performing complex

109
00:07:33,350 --> 00:07:30,479
tasks

110
00:07:36,150 --> 00:07:33,360
they will be meeting

111
00:07:38,390 --> 00:07:36,160
the mlm to the station

112
00:07:40,390 --> 00:07:38,400
our u.s colleagues are also preparing

113
00:07:43,029 --> 00:07:40,400

for these spacewalks

114
00:07:46,150 --> 00:07:43,039
and some of the evas on the u.s side are

115
00:07:48,790 --> 00:07:46,160
also dedicated for this task

116
00:07:50,790 --> 00:07:48,800
there's a lot of preparation there will

117
00:07:52,390 --> 00:07:50,800
be routing of cables on the outside of

118
00:07:54,070 --> 00:07:52,400
the station

119
00:07:55,029 --> 00:07:54,080
the cables will have to be routed

120
00:07:57,589 --> 00:07:55,039
through the

121
00:07:58,710 --> 00:07:57,599
russian segment

122
00:08:01,270 --> 00:07:58,720
and

123
00:08:02,230 --> 00:08:01,280
a lot of the evas

124
00:08:03,510 --> 00:08:02,240
will be

125
00:08:07,189 --> 00:08:03,520
supporting

126
00:08:09,430 --> 00:08:07,199
the subsequent operation of this

127
00:08:10,869 --> 00:08:09,440
module

128
00:08:12,950 --> 00:08:10,879
our

129
00:08:14,869 --> 00:08:12,960
crew they will be following us

130
00:08:16,710 --> 00:08:14,879
or they will also have

131
00:08:19,430 --> 00:08:16,720
their work laid out for them but we will

132
00:08:23,830 --> 00:08:19,440
try everything we can to prepare it

133
00:08:26,790 --> 00:08:24,629
so

134
00:08:28,070 --> 00:08:26,800
you mentioned the new module can you

135
00:08:33,829 --> 00:08:28,080
talk a little bit more about that what

136
00:08:37,269 --> 00:08:34,870
well

137
00:08:38,230 --> 00:08:37,279
first of all

138
00:08:40,230 --> 00:08:38,240

we

139
00:08:41,829 --> 00:08:40,240
are calling it the new module because

140
00:08:44,310 --> 00:08:41,839
we're launching it this year but we've

141
00:08:53,030 --> 00:08:44,320
been preparing it for a long

142
00:08:57,670 --> 00:08:55,750
and it had been planned from

143
00:09:02,790 --> 00:08:57,680
the early stages of developing the

144
00:09:09,829 --> 00:09:05,910
we have high hopes for it as an addition

145
00:09:12,790 --> 00:09:09,839
to the russian segment as an expansion

146
00:09:16,870 --> 00:09:13,990
the

147
00:09:19,590 --> 00:09:16,880
module which will be used as a docking

148
00:09:25,750 --> 00:09:19,600
module for additional modules will be

149
00:09:30,070 --> 00:09:29,269
this is a laboratory module

150
00:09:31,910 --> 00:09:30,080
so

151
00:09:34,630 --> 00:09:31,920
basically it will be the second

152
00:09:35,430 --> 00:09:34,640
fundamental

153
00:09:38,070 --> 00:09:35,440
link

154
00:09:45,910 --> 00:09:38,080
of the russian side of the international

155
00:09:51,030 --> 00:09:49,030
for chris cassidy for nasa tv you've

156
00:09:53,670 --> 00:09:51,040
just finished your qualification exams

157
00:09:55,350 --> 00:09:53,680
for the first ever for orbit rendezvous

158
00:09:57,430 --> 00:09:55,360
single day launch to docking to the

159
00:09:59,110 --> 00:09:57,440
space station can you talk about some of

160
00:10:21,829 --> 00:09:59,120
the examinations you did this week and

161
00:10:26,230 --> 00:10:24,310
well in addition to the typical two days

162
00:10:27,590 --> 00:10:26,240
one day in the russian segment and the

163
00:10:31,190 --> 00:10:27,600

normal

164
00:10:33,430 --> 00:10:31,200
soyuz exam we added a short

165
00:10:35,430 --> 00:10:33,440
program for the rendezvous

166
00:10:51,269 --> 00:10:35,440
qualification center

167
00:10:56,470 --> 00:10:53,750
and although it's a very new program for

168
00:10:58,710 --> 00:10:56,480
our actions inside the crew uh it's very

169
00:11:01,269 --> 00:10:58,720
similar to what we're used to doing

170
00:11:03,509 --> 00:11:01,279
all of the the sequence of events that

171
00:11:22,310 --> 00:11:03,519
we do are the same just without a break

172
00:11:26,550 --> 00:11:23,750
the space center here has done a

173
00:11:27,430 --> 00:11:26,560
tremendous job to prepare us for uh for

174
00:11:29,829 --> 00:11:27,440
this

175
00:11:31,910 --> 00:11:29,839
new rendezvous approach and the board

176
00:11:34,470 --> 00:11:31,920
documentation the flight data file are

177
00:11:37,030 --> 00:11:34,480
all in great shape and we as a crew are

178
00:11:50,790 --> 00:11:37,040
feel very prepared and ready for this

179
00:11:50,800 --> 00:12:07,269
my

180
00:12:11,509 --> 00:12:10,150
what are you expecting from this flight

181
00:12:22,310 --> 00:12:11,519
from your first flight to the

182
00:12:25,269 --> 00:12:23,269
i am

183
00:12:28,470 --> 00:12:25,279
expecting the same thing as anyone would

184
00:12:31,509 --> 00:12:28,480
expect from the most exciting adventure

185
00:12:50,710 --> 00:12:31,519
and trip of their life

186
00:12:55,190 --> 00:12:52,949
so alexander you had a lot of

187
00:12:56,550 --> 00:12:55,200
preparation to do how was it was it

188
00:12:59,430 --> 00:12:56,560

difficult

189
00:13:02,069 --> 00:12:59,440
for you how were you able to prepare

190
00:13:03,750 --> 00:13:02,079
well if i talk about everything that i i

191
00:13:05,190 --> 00:13:03,760
went through

192
00:13:07,269 --> 00:13:05,200
there are so many exams and there are

193
00:13:10,949 --> 00:13:07,279
still exams waiting for me

194
00:13:15,910 --> 00:13:12,710
but i don't want to talk about all the

195
00:13:17,350 --> 00:13:15,920
details of that about my grades

196
00:13:18,870 --> 00:13:17,360
a lot of

197
00:13:21,670 --> 00:13:18,880
i didn't have any

198
00:13:24,310 --> 00:13:21,680
really big difficulties anything that

199
00:13:44,069 --> 00:13:24,320
really complicated our preparations no

200
00:13:46,870 --> 00:13:45,910
a very interesting biography you were

201
00:13:53,030 --> 00:13:46,880
born in

202
00:13:59,670 --> 00:13:56,389
you have traveled a long journey from

203
00:14:03,750 --> 00:14:00,470
what

204
00:14:09,829 --> 00:14:03,760
propelled you to embark upon a career as

205
00:14:09,839 --> 00:14:20,150
that's a complicated question

206
00:14:25,910 --> 00:14:22,870
you know it's hard to talk about

207
00:14:28,629 --> 00:14:25,920
all of your influences but of course i

208
00:14:31,110 --> 00:14:28,639
grew up we grew up in the 60s and 70s

209
00:14:36,230 --> 00:14:31,120
and space was a really big thing back

210
00:14:46,310 --> 00:14:38,550
yuri gagarin

211
00:14:48,389 --> 00:14:47,189
but

212
00:14:50,389 --> 00:14:48,399
and that was

213
00:14:51,509 --> 00:14:50,399

important for me but in in the when i

214
00:14:53,110 --> 00:14:51,519
started

215
00:15:07,509 --> 00:14:53,120
studying at the university then i

216
00:15:12,470 --> 00:15:09,990
i made the decision and it was just a

217
00:15:14,310 --> 00:15:12,480
great pleasure to prepare and to study

218
00:15:16,389 --> 00:15:14,320
in that direction

219
00:15:21,509 --> 00:15:16,399
there was a lot of professionals in my

220
00:15:26,949 --> 00:15:23,590
i appreciated all of their

221
00:15:29,990 --> 00:15:26,959
expertise and their feedback

222
00:15:31,350 --> 00:15:30,000
but specifically what helped me become a

223
00:15:33,670 --> 00:15:31,360
cosmonaut

224
00:15:36,230 --> 00:15:33,680
i don't know

225
00:15:38,550 --> 00:15:36,240
personally i think it's the best

226
00:15:40,470 --> 00:15:38,560
most fascinating

227
00:15:42,629 --> 00:15:40,480
career in the world it's the most

228
00:15:45,990 --> 00:15:42,639
interesting thing that that mankind can

229
00:15:50,629 --> 00:15:48,470
of course i have to say

230
00:15:56,550 --> 00:15:50,639
great things to my mom and dad they they

231
00:16:00,550 --> 00:15:57,829
as a boy

232
00:16:01,910 --> 00:16:00,560
you have the mentality that whatever mom

233
00:16:13,350 --> 00:16:01,920
and dad don't allow that's what you want

234
00:16:17,910 --> 00:16:16,150
so question for chris

235
00:16:20,629 --> 00:16:17,920
actually it was uh

236
00:16:23,350 --> 00:16:20,639
another astronaut who flew with sergey

237
00:16:25,749 --> 00:16:23,360
killed bill shepard was my motivation to

238
00:16:28,069 --> 00:16:25,759

become an astronaut when my background

239
00:16:29,829 --> 00:16:28,079
was similar to his and he motivated me

240
00:16:36,629 --> 00:16:29,839
to apply

241
00:16:36,639 --> 00:16:56,870
is

242
00:17:02,310 --> 00:16:59,110
i don't want to sound like a children's

243
00:17:04,069 --> 00:17:02,320
book that all kids dream of becoming an

244
00:17:05,189 --> 00:17:04,079
astronaut

245
00:17:08,309 --> 00:17:05,199
but

246
00:17:10,470 --> 00:17:08,319
that's pretty much true

247
00:17:13,350 --> 00:17:10,480
as a child

248
00:17:15,189 --> 00:17:13,360
i knew for sure that i didn't want to do

249
00:17:17,429 --> 00:17:15,199
a nine-to-five job

250
00:17:19,029 --> 00:17:17,439
doing a repetitive task a monotonous

251
00:17:20,069 --> 00:17:19,039
task that would be very interesting for

252
00:17:22,230 --> 00:17:20,079
me

253
00:17:24,390 --> 00:17:22,240
so i sought out a profession that would

254
00:17:26,470 --> 00:17:24,400
be interesting challenging something

255
00:17:28,630 --> 00:17:26,480
different every day

256
00:17:30,870 --> 00:17:28,640
and when i

257
00:17:32,950 --> 00:17:30,880
started to think about those kinds of

258
00:17:35,190 --> 00:17:32,960
jobs the first thing that came to mind

259
00:17:37,430 --> 00:17:35,200
was to be a pilot

260
00:17:38,789 --> 00:17:37,440
and then to be a

261
00:17:40,390 --> 00:17:38,799
cosmonaut

262
00:17:41,909 --> 00:17:40,400
and fortunately i was able to become a

263
00:17:49,830 --> 00:17:41,919

pilot and now i'm practically a

264
00:17:54,470 --> 00:17:52,710
well the question is for us too but let

265
00:17:55,669 --> 00:17:54,480
us think another half a year we're not

266
00:18:08,710 --> 00:17:55,679
flying yet

267
00:18:18,950 --> 00:18:12,310
you know that the time is really close

268
00:18:23,430 --> 00:18:20,789
but so that you know

269
00:18:25,190 --> 00:18:23,440
that the time is almost upon us

270
00:18:32,070 --> 00:18:25,200
um

271
00:18:37,190 --> 00:18:34,230
first i would like to

272
00:18:44,070 --> 00:18:37,200
congratulate

273
00:18:47,110 --> 00:18:44,080
kavalienko president of the russian

274
00:18:49,270 --> 00:18:47,120
space agency

275
00:18:51,110 --> 00:18:49,280
i would like to congratulate everyone

276
00:18:53,830 --> 00:18:51,120
with the successful completion of the

277
00:18:55,350 --> 00:18:53,840
appropriate preparatory steps

278
00:18:56,630 --> 00:18:55,360
and all of the training that you had to

279
00:19:02,630 --> 00:18:56,640
undergo

280
00:19:07,990 --> 00:19:05,430
as you know the tradition

281
00:19:09,669 --> 00:19:08,000
that we have is a cosmonaut that has

282
00:19:11,750 --> 00:19:09,679
trained and prepared for his very first

283
00:19:15,110 --> 00:19:11,760
flight

284
00:19:18,549 --> 00:19:15,120
he receives a special document

285
00:19:22,390 --> 00:19:18,559
and so this document number 140 is

286
00:19:25,350 --> 00:19:22,400
prepared by the russian space agency

287
00:19:27,990 --> 00:19:25,360
this is given to alexander

288
00:19:29,909 --> 00:19:28,000

misurkin because he has prepared and

289
00:19:32,950 --> 00:19:29,919
successfully trained for his first

290
00:19:36,549 --> 00:19:33,909
at the

291
00:19:38,470 --> 00:19:36,559
last stage

292
00:19:40,710 --> 00:19:38,480
there's a

293
00:19:43,190 --> 00:19:40,720
request

294
00:19:45,029 --> 00:19:43,200
asking for assistance in case it will

295
00:19:47,990 --> 00:19:45,039
have to be to all of the different

296
00:19:49,830 --> 00:19:48,000
countries if there is an emergency

297
00:20:02,470 --> 00:19:49,840
and it is my pleasure to give this

298
00:20:02,480 --> 00:20:10,630
thank you

299
00:20:14,549 --> 00:20:12,950
also i want to wish

300
00:20:16,230 --> 00:20:14,559
the whole crew

301
00:20:17,430 --> 00:20:16,240
a safe flight

302
00:20:18,830 --> 00:20:17,440
as you

303
00:20:44,149 --> 00:20:18,840
ascend to the

304
00:20:49,350 --> 00:20:46,789
i have a question for the second crew

305
00:20:52,470 --> 00:20:49,360
which still has a half a year to train

306
00:20:55,669 --> 00:20:52,480
there are different specializations

307
00:20:56,630 --> 00:20:55,679
are you planning to continue training

308
00:20:58,950 --> 00:20:56,640
yes

309
00:21:01,510 --> 00:20:58,960
we our program is still undergoing

310
00:21:06,070 --> 00:21:01,520
changes we will continue to deepen our

311
00:21:21,190 --> 00:21:08,870
we will have another half a year to

312
00:21:24,630 --> 00:21:22,950
this is your first flight

313
00:21:26,630 --> 00:21:24,640

and it just happened that this first

314
00:21:29,990 --> 00:21:26,640
flight is also the first

315
00:21:52,470 --> 00:21:30,000
uh short rendezvous docking scheme can

316
00:21:59,029 --> 00:21:55,669
i've answered these questions before

317
00:22:00,070 --> 00:21:59,039
about my concerns and my

318
00:22:01,830 --> 00:22:00,080
fears

319
00:22:07,110 --> 00:22:01,840
i think those questions should be

320
00:22:11,750 --> 00:22:09,350
if a person has gone through the whole

321
00:22:14,149 --> 00:22:11,760
training flow they should not have any

322
00:22:16,230 --> 00:22:14,159
fears any concerns they should be

323
00:22:18,549 --> 00:22:16,240
thrilled to be able to participate and

324
00:22:24,630 --> 00:22:18,559
to have a chance to

325
00:22:28,950 --> 00:22:26,549
now everyone's talking about this

326
00:22:30,789 --> 00:22:28,960
shorter rendezvous and docking scheme

327
00:22:33,669 --> 00:22:30,799
can you tell us why it has

328
00:22:37,510 --> 00:22:33,679
suddenly become possible

329
00:22:39,110 --> 00:22:37,520
and why is it becoming relevant now

330
00:22:41,430 --> 00:22:39,120
i just want to say a few words about

331
00:22:45,830 --> 00:22:41,440
that

332
00:22:48,710 --> 00:22:45,840
a new scheme

333
00:22:56,950 --> 00:22:48,720
we started talking about this new

334
00:23:01,990 --> 00:22:59,830
and if you recall even before my first

335
00:23:04,630 --> 00:23:02,000
which was even before my first flight

336
00:23:06,549 --> 00:23:04,640
which was over 20 years ago

337
00:23:08,310 --> 00:23:06,559
we flew according to a scheme that is

338
00:23:11,510 --> 00:23:08,320

even two times shorter than what we are

339
00:23:15,190 --> 00:23:13,830
it was very important to have a short

340
00:23:17,830 --> 00:23:15,200
scheme

341
00:23:18,710 --> 00:23:17,840
so that the crew could adapt

342
00:23:21,590 --> 00:23:18,720
to

343
00:23:22,950 --> 00:23:21,600
the important process of docking

344
00:23:27,430 --> 00:23:22,960
then the

345
00:23:31,190 --> 00:23:28,710
and so

346
00:23:33,190 --> 00:23:31,200
to accommodate for all the needs we had

347
00:23:33,990 --> 00:23:33,200
tested several schemes

348
00:23:36,630 --> 00:23:34,000
this

349
00:23:39,510 --> 00:23:36,640
later scheme was

350
00:23:41,430 --> 00:23:39,520
possible to be performed even earlier

351
00:23:43,990 --> 00:23:41,440
but now we have a lot of

352
00:23:45,669 --> 00:23:44,000
experience and statistics

353
00:23:48,470 --> 00:23:45,679
that confirm

354
00:23:51,110 --> 00:23:48,480
that this scheme is a good idea also

355
00:23:53,669 --> 00:23:51,120
there are a lot of calculations on

356
00:23:56,390 --> 00:23:53,679
uh station that confirm that this will

357
00:23:58,710 --> 00:23:56,400
be possible for the station

358
00:24:01,269 --> 00:23:58,720
to maneuver into the right attitude and

359
00:24:08,070 --> 00:24:01,279
not to use a lot of prop which is always

360
00:24:12,950 --> 00:24:10,310
the quality of light and also the amount

361
00:24:15,350 --> 00:24:12,960
of propellant consumed is always

362
00:24:16,230 --> 00:24:15,360
a priority for us

363
00:24:18,789 --> 00:24:16,240

so

364
00:24:21,350 --> 00:24:18,799
now we have seen that it is all good

365
00:24:23,590 --> 00:24:21,360
in terms of theory and it is a we are in

366
00:24:24,950 --> 00:24:23,600
a good position to test it to perform it

367
00:24:26,950 --> 00:24:24,960
in practice

368
00:24:28,630 --> 00:24:26,960
it has been already tested

369
00:24:29,909 --> 00:24:28,640
during the flight of several progress

370
00:24:34,230 --> 00:24:29,919
vehicles

371
00:24:34,240 --> 00:24:50,149
perform this short flight themselves

372
00:24:54,390 --> 00:24:52,470
this is a question for pablo vinogradov

373
00:24:56,549 --> 00:24:54,400
about the experiment

374
00:24:57,990 --> 00:24:56,559
which experiment of those that you plan

375
00:25:01,350 --> 00:24:58,000
to perform on station is the most

376
00:25:02,789 --> 00:25:01,360
important and most complex

377
00:25:05,110 --> 00:25:02,799
well

378
00:25:09,590 --> 00:25:05,120
it's hard to pick the most important

379
00:25:17,669 --> 00:25:12,789
let's see there are 42 experiments

380
00:25:23,669 --> 00:25:20,390
they undergo all the experiments undergo

381
00:25:25,830 --> 00:25:23,679
a long process of concurrence

382
00:25:27,110 --> 00:25:25,840
and review

383
00:25:30,230 --> 00:25:27,120
and so

384
00:25:32,549 --> 00:25:30,240
only the most important interesting

385
00:25:35,190 --> 00:25:32,559
critical experiments end up making it to

386
00:25:43,350 --> 00:25:35,200
the station this is a highly selective

387
00:25:47,430 --> 00:25:44,950
there is no

388
00:25:49,190 --> 00:25:47,440

experiment that is insignificant that is

389
00:25:51,590 --> 00:25:49,200
just a filler

390
00:25:54,070 --> 00:25:51,600
each experiment is very important and

391
00:25:56,710 --> 00:25:54,080
has the same level of priority

392
00:25:58,230 --> 00:25:56,720
expert but they are experiments in

393
00:25:59,830 --> 00:25:58,240
different fields

394
00:26:02,870 --> 00:25:59,840
some are in

395
00:26:05,110 --> 00:26:02,880
biological fields and chemical fields

396
00:26:06,310 --> 00:26:05,120
medical fields and so

397
00:26:07,750 --> 00:26:06,320
it's not

398
00:26:11,430 --> 00:26:07,760
possible to compare them it would be

399
00:26:13,350 --> 00:26:11,440
like comparing apples and oranges

400
00:26:16,070 --> 00:26:13,360
well what about which experiment would

401
00:26:18,310 --> 00:26:16,080
be the most difficult

402
00:26:20,710 --> 00:26:18,320
way to operate

403
00:26:22,950 --> 00:26:20,720
we'll have a new experiment called obsta

404
00:26:25,669 --> 00:26:22,960
novka

405
00:26:27,990 --> 00:26:25,679
this experiment will include a space

406
00:26:30,230 --> 00:26:28,000
walk in which we will be installing

407
00:26:37,669 --> 00:26:30,240
various sensors on the outside of the

408
00:26:41,909 --> 00:26:40,149
very complex physical

409
00:26:43,430 --> 00:26:41,919
processes dedicated

410
00:26:45,350 --> 00:26:43,440
to the setup

411
00:26:48,230 --> 00:26:45,360
of this experiment we'll have to

412
00:26:52,950 --> 00:26:48,240
maneuver large objects in

413
00:26:58,230 --> 00:26:54,870

and we know very little about the

414
00:26:59,990 --> 00:26:58,240
behavior of large objects

415
00:27:02,630 --> 00:27:00,000
outside of

416
00:27:11,909 --> 00:27:02,640
the earth's gravity

417
00:27:16,390 --> 00:27:13,909
also we don't know how various

418
00:27:19,110 --> 00:27:16,400
environmental effects

419
00:27:20,549 --> 00:27:19,120
affect the external portions of the

420
00:27:21,830 --> 00:27:20,559
station

421
00:27:24,470 --> 00:27:21,840
this is very important for us to

422
00:27:25,750 --> 00:27:24,480
understand in order to be able to move

423
00:27:27,430 --> 00:27:25,760
forward

424
00:27:31,269 --> 00:27:27,440
and this is the first experiment that

425
00:27:33,190 --> 00:27:31,279
tests this this experiment of stannovka

426
00:27:35,190 --> 00:27:33,200
based on the results of this experiment

427
00:27:38,230 --> 00:27:35,200
we will know how to better build

428
00:27:51,590 --> 00:27:38,240
vehicles which are more tolerant to the

429
00:27:56,549 --> 00:27:54,149
this experiment will just help us make a

430
00:27:58,549 --> 00:27:56,559
lot of improvements in our technologies

431
00:28:01,269 --> 00:27:58,559
improve the quality of

432
00:28:05,029 --> 00:28:01,279
uh subsequent vehicles and satellites

433
00:28:10,389 --> 00:28:07,190
also the experiment will show how the

434
00:28:11,590 --> 00:28:10,399
earth behaves the electromagnetic fields

435
00:28:14,789 --> 00:28:11,600
that

436
00:28:18,549 --> 00:28:17,669
the weather and various elements on the

437
00:28:26,549 --> 00:28:18,559
earth

438
00:28:31,590 --> 00:28:28,070

the results from the experiment will

439
00:28:33,909 --> 00:28:31,600
help us approach the question of safety

440
00:28:36,470 --> 00:28:33,919
for all of mankind

441
00:28:42,149 --> 00:28:36,480
it will give us more information that we

442
00:28:46,070 --> 00:28:44,710
and in this field too unfortunately we

443
00:28:48,630 --> 00:28:46,080
don't know much

444
00:28:51,590 --> 00:28:48,640
ahead of time we can only study the

445
00:28:54,310 --> 00:28:51,600
natural disasters after they occur after

446
00:28:56,070 --> 00:28:54,320
hundreds of thousands of people perish

447
00:28:57,590 --> 00:28:56,080
this is why it's very important to have

448
00:28:58,950 --> 00:28:57,600
more knowledge

449
00:29:00,470 --> 00:28:58,960
about

450
00:29:02,630 --> 00:29:00,480
natural disasters

451
00:29:04,630 --> 00:29:02,640
before they happen

452
00:29:07,029 --> 00:29:04,640
there's a lot i can say about all of the

453
00:29:09,190 --> 00:29:07,039
experiments there are

454
00:29:10,870 --> 00:29:09,200
very interesting experiments they're

455
00:29:12,389 --> 00:29:10,880
interesting for the specialists that

456
00:29:14,950 --> 00:29:12,399
designed them

457
00:29:16,630 --> 00:29:14,960
they are interesting for us the physics

458
00:29:21,750 --> 00:29:16,640
that is involved

459
00:29:26,389 --> 00:29:23,350
some of the most interesting experiments

460
00:29:28,070 --> 00:29:26,399
will also be performed on the us segment

461
00:29:30,310 --> 00:29:28,080
i don't know what else you want to hear

462
00:29:35,029 --> 00:29:30,320
i can talk about this for hours and

463
00:29:45,750 --> 00:29:37,750

the work that we do on station is of

464
00:29:49,350 --> 00:29:47,190
there isn't a lot of

465
00:29:51,669 --> 00:29:49,360
free time for example we take ebooks to

466
00:29:53,190 --> 00:29:51,679
read on station but

467
00:29:55,350 --> 00:29:53,200
we don't actually spend a lot of time

468
00:29:58,230 --> 00:29:55,360
doing that

469
00:30:07,590 --> 00:29:59,909
question about music

470
00:30:11,909 --> 00:30:11,029
there's is there someone who plays an ex

471
00:30:13,110 --> 00:30:11,919
an

472
00:30:14,389 --> 00:30:13,120
instrument

473
00:30:22,310 --> 00:30:14,399
someone who will be playing their

474
00:30:22,320 --> 00:30:27,350
is an excellent uh guitar player

475
00:30:31,909 --> 00:30:28,549
unfortunately

476
00:30:33,990 --> 00:30:31,919
i just dabble in it

477
00:30:35,909 --> 00:30:34,000
but i think if we have

478
00:30:37,590 --> 00:30:35,919
some time like in the evening to gather

479
00:30:50,070 --> 00:30:37,600
together

480
00:30:59,509 --> 00:30:51,990
so we talked about experiments about

481
00:31:04,630 --> 00:31:02,789
the 16th we will be preparing to depart

482
00:31:06,230 --> 00:31:04,640
for baikonur thank you so much for all

483
00:31:08,230 --> 00:31:06,240
the questions thank you for the

484
00:31:10,470 --> 00:31:08,240
cosmonauts and astronauts

485
00:31:13,509 --> 00:31:10,480
for answering the questions

486
00:31:15,509 --> 00:31:13,519
now the crew will go to the museum

487
00:31:18,789 --> 00:31:15,519
of space scientists

488
00:31:21,029 --> 00:31:18,799

of space science

489
00:31:22,789 --> 00:31:21,039
again thank you everyone for your

490
00:31:25,350 --> 00:31:22,799
participating

491
00:31:27,830 --> 00:31:25,360
thank you for your interest

492
00:31:30,310 --> 00:31:27,840
we will be

493
00:31:33,110 --> 00:31:30,320
seeing them off on the 15th

494
00:31:52,950 --> 00:31:33,120
and everyone

495
00:31:56,710 --> 00:31:55,269
let's do a handshake

496
00:31:58,870 --> 00:31:56,720
traditionally

497
00:32:21,190 --> 00:31:58,880
that's what we do before

498
00:32:21,200 --> 00:32:34,630
foreign

499
00:32:52,710 --> 00:32:37,190
so now

500
00:33:04,070 --> 00:32:54,789
okay i'll hold

501
00:33:04,080 --> 00:33:19,509
go for it right in the middle

502
00:33:57,830 --> 00:33:21,110
okay look interested see what he's

503
00:33:57,840 --> 00:34:15,669
sure

504
00:34:15,679 --> 00:34:59,510
thank you

505
00:34:59,520 --> 00:35:03,990
oh

506
00:35:04,000 --> 00:35:24,950
foreign

507
00:35:51,190 --> 00:35:41,910
is

508
00:35:51,200 --> 00:35:58,150
team

509
00:35:58,160 --> 00:36:12,630
good

510
00:36:12,640 --> 00:36:31,670
foreign

511
00:36:31,680 --> 00:36:57,349
okay

512
00:37:47,670 --> 00:37:16,069
so

513
00:37:47,680 --> 00:38:17,030

he showed us

514
00:38:21,510 --> 00:38:19,349
okay uh chris today we're here at red

515
00:38:22,710 --> 00:38:21,520
square and the kremlin a few weeks

516
00:38:24,470 --> 00:38:22,720
before you

517
00:38:26,069 --> 00:38:24,480
head to baikonur and go to the uh for

518
00:38:27,750 --> 00:38:26,079
your launch to the international space

519
00:38:29,910 --> 00:38:27,760
station can you tell us what you're

520
00:38:31,829 --> 00:38:29,920
doing here at the kremlin today and

521
00:38:33,349 --> 00:38:31,839
maybe compare it to what it was like for

522
00:38:34,710 --> 00:38:33,359
you to do this as a backup crew member

523
00:38:36,870 --> 00:38:34,720
and now you're here

524
00:38:38,550 --> 00:38:36,880
for your watch right it's really

525
00:38:40,150 --> 00:38:38,560
exciting actually to be here for my own

526
00:38:42,950 --> 00:38:40,160
launch show when i was here backing up

527
00:38:44,870 --> 00:38:42,960
kevin ford who's soon to come home

528
00:38:46,870 --> 00:38:44,880
uh from the space station it was

529
00:38:48,950 --> 00:38:46,880
interesting to see the whole process

530
00:38:50,870 --> 00:38:48,960
um almost as an observer i knew i was

531
00:38:51,750 --> 00:38:50,880
part of the crew and the backup crew but

532
00:38:53,270 --> 00:38:51,760
when

533
00:38:54,950 --> 00:38:53,280
you're here and it's for your own launch

534
00:38:56,630 --> 00:38:54,960
and i know that i'm inside of three

535
00:38:58,950 --> 00:38:56,640
weeks from launch it brings a whole

536
00:39:00,630 --> 00:38:58,960
special feeling to going through this

537
00:39:02,310 --> 00:39:00,640
process and sort of the historical

538
00:39:06,390 --> 00:39:02,320

moments of laying the flowers down in

539
00:39:08,790 --> 00:39:06,400
front of gagarin's um and coral

540
00:39:09,990 --> 00:39:08,800
stones there and then as we walk through

541
00:39:12,710 --> 00:39:10,000
the kremlin

542
00:39:14,790 --> 00:39:12,720
uh the significance of where we are and

543
00:39:16,390 --> 00:39:14,800
the history that's here and the space

544
00:39:17,910 --> 00:39:16,400
fliers prior to me that have gone

545
00:39:20,870 --> 00:39:17,920
through the same exact process it's

546
00:39:22,390 --> 00:39:20,880
really a neat uh

547
00:39:24,870 --> 00:39:22,400
a neat experience the whole thing is

548
00:39:26,150 --> 00:39:24,880
pretty fantastic from the get-go

549
00:39:27,910 --> 00:39:26,160
and this is you're going to be your

550
00:39:29,990 --> 00:39:27,920
first launch into soyuz the last time

551
00:39:32,870 --> 00:39:30,000
you prepared for a flight you were down

552
00:39:34,470 --> 00:39:32,880
in florida getting ready for sts-127 and

553
00:39:37,109 --> 00:39:34,480
this is this is a lot different than

554
00:39:39,589 --> 00:39:37,119
that right exactly july in florida is

555
00:39:43,430 --> 00:39:39,599
quite significantly different than

556
00:39:45,750 --> 00:39:43,440
than march in russia but um you know

557
00:39:47,829 --> 00:39:45,760
part of the thing about going to space

558
00:39:50,230 --> 00:39:47,839
is who you fly with and i really enjoyed

559
00:39:51,510 --> 00:39:50,240
my crewmates on sts-127

560
00:39:53,990 --> 00:39:51,520
on a shuttle mission there's more

561
00:39:56,630 --> 00:39:54,000
crewmates on a soyuz i really enjoyed

562
00:39:59,030 --> 00:39:56,640
becoming close buddies with um sasha and

563
00:40:00,470 --> 00:39:59,040

knowing their families and being a

564
00:40:02,630 --> 00:40:00,480
tight-knit crew

565
00:40:04,309 --> 00:40:02,640
and uh even though it's fewer people and

566
00:40:05,910 --> 00:40:04,319
soyuz in the shuttle it's the same

567
00:40:07,190 --> 00:40:05,920
camaraderie feeling that you have as

568
00:40:08,550 --> 00:40:07,200
you're when you're a member of a team