



1
00:00:38,559 --> 00:00:50,310

so

2
00:00:50,320 --> 00:01:05,830

um

3
00:01:05,840 --> 00:01:27,670

foreign

4
00:01:27,680 --> 00:01:51,350

facebook

5
00:01:57,510 --> 00:01:52,630

as you know

6
00:02:01,749 --> 00:01:58,310

one

7
00:02:04,230 --> 00:02:01,759

landed successfully on our kazakhstan

8
00:02:04,240 --> 00:02:10,229

everything went successfully nominally

9
00:02:14,309 --> 00:02:13,110

and now we're very happy to welcome back

10
00:02:17,030 --> 00:02:14,319

on earth

11
00:02:19,589 --> 00:02:17,040

and it's oliver nation and kate rubins

12
00:02:22,229 --> 00:02:19,599

and i believe that our city may

13
00:02:24,229 --> 00:02:22,239

a little contribution to the future

14

00:02:27,270 --> 00:02:24,239

space exploration according to our

15

00:02:44,229 --> 00:02:27,280

tradition we have gifts for

16

00:02:44,239 --> 00:03:01,750

do

17

00:03:05,350 --> 00:03:04,070

congratulations on the successful return

18

00:03:07,350 --> 00:03:05,360

back to earth

19

00:03:08,309 --> 00:03:07,360

thank you very much for your successful

20

00:03:10,470 --> 00:03:08,319

work

21

00:03:13,270 --> 00:03:10,480

i know it was very

22

00:03:17,430 --> 00:03:15,190

today the weather was great and

23

00:03:19,830 --> 00:03:17,440

everything and everybody was welcoming

24

00:03:23,910 --> 00:03:19,840

you back home

25

00:03:25,430 --> 00:03:23,920

you did great and you look amazing

26

00:03:27,270 --> 00:03:25,440

i would like to wish you a successful

27

00:03:35,190 --> 00:03:27,280

return

28

00:03:39,589 --> 00:03:37,270

our tradition we would like to give you

29

00:03:41,589 --> 00:03:39,599

these mataroshkas russian dolls with

30

00:03:43,830 --> 00:03:41,599

your fortress on them thank you very

31

00:03:48,149 --> 00:03:43,840

much again

32

00:03:48,159 --> 00:04:13,350

thank you

33

00:04:13,360 --> 00:04:51,749

if you have any questions please ask

34

00:04:51,759 --> 00:04:58,390

uh

35

00:05:03,189 --> 00:05:00,870

he is a japanese language student and

36

00:05:21,469 --> 00:05:03,199

that's why he wanted to ask

37

00:05:21,479 --> 00:05:41,990

japanese i can speak

38

00:05:46,310 --> 00:05:43,830

our russian friends invited us to the

39

00:05:48,629 --> 00:05:46,320

russian segment to have dinner together

40

00:05:49,430 --> 00:05:48,639

and there we were speaking russian all

41

00:05:55,510 --> 00:05:49,440

of us

42

00:06:13,590 --> 00:05:58,390

next question please

43

00:06:18,469 --> 00:06:16,469

during the landing at the landing spot

44

00:06:20,629 --> 00:06:18,479

but i will ask this question once again

45

00:06:25,670 --> 00:06:20,639

did you like the new modification of the

46

00:06:31,350 --> 00:06:28,230

from the standpoint of how cosmonauts

47

00:06:37,590 --> 00:06:31,360

and astronauts feel inside the soyuz

48

00:06:42,070 --> 00:06:38,550

from

49

00:06:44,469 --> 00:06:42,080

the standpoint of the hardware

50

00:06:49,430 --> 00:06:44,479

that the new modification has

51

00:06:52,629 --> 00:06:50,710

and

52

00:06:55,749 --> 00:06:52,639

we have new modifications

53

00:06:59,430 --> 00:06:55,759

in the landing system and the ascent

54

00:07:04,790 --> 00:07:01,830

and we also had to test this

55

00:07:05,749 --> 00:07:04,800

modification in flight and all the tests

56

00:07:09,270 --> 00:07:05,759

were

57

00:07:16,870 --> 00:07:09,280

successful thank you

58

00:07:21,749 --> 00:07:18,629

if you don't have any other questions

59

00:07:23,670 --> 00:07:21,759

let us say congratulations to our dear

60

00:07:26,550 --> 00:07:23,680

crew members once again

61

00:07:29,110 --> 00:07:26,560

we wish you good luck and

62

00:07:34,710 --> 00:07:29,120

i hope they will see their families very

63

00:07:39,909 --> 00:07:37,990

okay kate rubin's back after 115 days in

64

00:07:41,990 --> 00:07:39,919

space first off welcome home it's great

65

00:07:43,670 --> 00:07:42,000

to see you back here on planet earth and

66

00:07:46,150 --> 00:07:43,680

start me off just kind of how is the

67

00:07:47,830 --> 00:07:46,160

ride down how you feeling right now well

68

00:07:50,790 --> 00:07:47,840

the ride is pretty incredible you're

69

00:07:54,309 --> 00:07:50,800

going through the plasma layer uh the

70

00:07:57,350 --> 00:07:54,319

entire vehicle is is going from 17 500

71

00:07:58,950 --> 00:07:57,360

miles an hour down to impact on landing

72

00:08:00,070 --> 00:07:58,960

so it's about as dynamic as you can

73

00:08:01,990 --> 00:08:00,080

expect

74

00:08:03,430 --> 00:08:02,000

and it's pretty amazing that we can take

75

00:08:05,909 --> 00:08:03,440

three human beings and send them from

76
00:08:07,510 --> 00:08:05,919
outer space into the steps of kazakhstan

77
00:08:09,189 --> 00:08:07,520
that quickly

78
00:08:11,510 --> 00:08:09,199
and you're one of our true kind of

79
00:08:13,430 --> 00:08:11,520
scientist astronauts you did research

80
00:08:15,029 --> 00:08:13,440
all over the planet before you ever went

81
00:08:16,950 --> 00:08:15,039
to space and now you've done research

82
00:08:19,350 --> 00:08:16,960
off the planet how did the station kind

83
00:08:20,629 --> 00:08:19,360
of stack up as a laboratory in your

84
00:08:22,230 --> 00:08:20,639
experience

85
00:08:24,150 --> 00:08:22,240
well i think the space station is

86
00:08:26,790 --> 00:08:24,160
probably one of the most unique and

87
00:08:28,550 --> 00:08:26,800
amazing laboratories i've ever seen

88
00:08:30,390 --> 00:08:28,560

it's actually quite like a remote

89

00:08:31,350 --> 00:08:30,400

research environment in the middle of

90

00:08:32,870 --> 00:08:31,360

africa

91

00:08:35,670 --> 00:08:32,880

we have to think about our power

92

00:08:37,670 --> 00:08:35,680

considerations our water recycling

93

00:08:39,670 --> 00:08:37,680

but the fact that we can do science up

94

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

there while in low earth orbit is

95

00:08:46,230 --> 00:08:41,519

incredible and the kind of science that

96

00:08:49,590 --> 00:08:47,910

you did a lot of science up there was

97

00:08:51,829 --> 00:08:49,600

did you have a favorite experiment

98

00:08:53,110 --> 00:08:51,839

anything that was just really kind of oh

99

00:08:54,470 --> 00:08:53,120

wow i can't believe i'm doing this

100

00:08:56,630 --> 00:08:54,480

moment for you

101
00:08:57,910 --> 00:08:56,640
yeah when we uh sequenced dna in space

102
00:08:59,509 --> 00:08:57,920
for the first time that was pretty

103
00:09:02,310 --> 00:08:59,519
incredible it's something that my lab

104
00:09:04,310 --> 00:09:02,320
did at whitehead at mit and so to be

105
00:09:05,750 --> 00:09:04,320
doing that as we're orbiting the planet

106
00:09:07,750 --> 00:09:05,760
was amazing

107
00:09:09,910 --> 00:09:07,760
and i mean any space flight is just kind

108
00:09:11,190 --> 00:09:09,920
of one constant memorable moment was

109
00:09:13,670 --> 00:09:11,200
there any kind of one thing that's

110
00:09:15,509 --> 00:09:13,680
always going to stand out for you

111
00:09:18,630 --> 00:09:15,519
yeah i think getting a chance to do some

112
00:09:19,910 --> 00:09:18,640
space walks is going to not ever fade

113
00:09:21,829 --> 00:09:19,920

so that's a

114

00:09:23,990 --> 00:09:21,839

pretty amazing thing to do to be outside

115

00:09:26,470 --> 00:09:24,000

the vehicle and just have the vacuum of

116

00:09:28,150 --> 00:09:26,480

space between you and your helmet and

117

00:09:29,750 --> 00:09:28,160

the planet

118

00:09:31,430 --> 00:09:29,760

all right well kate rubens thanks for a

119

00:09:33,269 --> 00:09:31,440

couple quick questions great to see you

120

00:09:35,670 --> 00:09:33,279

and safe flight home to houston thank

121

00:09:36,550 --> 00:09:35,680

you very much appreciate it

122

00:09:39,990 --> 00:09:36,560

and then

123

00:09:41,910 --> 00:09:40,000

tokuya onishi back from over 115 days in

124

00:09:44,070 --> 00:09:41,920

space first off welcome back to earth

125

00:09:45,670 --> 00:09:44,080

it's good to see you down here you start

126
00:09:48,630 --> 00:09:45,680
me off you know describe the landing a

127
00:09:50,949 --> 00:09:48,640
little bit how are you feeling right now

128
00:09:52,870 --> 00:09:50,959
feeling right now is not so

129
00:09:55,990 --> 00:09:52,880
good of course it's a

130
00:09:59,190 --> 00:09:56,000
motion sickness but uh i felt so happy

131
00:10:01,110 --> 00:09:59,200
that uh when i saw when i saw the sky of

132
00:10:03,829 --> 00:10:01,120
kazakhstan

133
00:10:07,110 --> 00:10:03,839
inside the sky was just beautiful and

134
00:10:11,829 --> 00:10:07,120
gorgeous and i realized that that's

135
00:10:15,829 --> 00:10:13,750
the lining was a little bit

136
00:10:19,030 --> 00:10:15,839
rough right yeah but

137
00:10:20,069 --> 00:10:19,040
everybody told me about that so i think

138
00:10:22,870 --> 00:10:20,079

i was

139

00:10:23,990 --> 00:10:22,880

well prepared for that so i actually

140

00:10:26,870 --> 00:10:24,000

enjoyed

141

00:10:28,949 --> 00:10:26,880

that rough ride home

142

00:10:30,389 --> 00:10:28,959

how was that kind of first breath of

143

00:10:31,750 --> 00:10:30,399

cold air because you're landing in the

144

00:10:33,190 --> 00:10:31,760

winter what was it like to get out of

145

00:10:34,630 --> 00:10:33,200

the hatch and you know feel the wind on

146

00:10:37,750 --> 00:10:34,640

your face again

147

00:10:39,990 --> 00:10:37,760

uh light breeze and cold air that was

148

00:10:42,230 --> 00:10:40,000

great

149

00:10:43,829 --> 00:10:42,240

okay this was your first space flight

150

00:10:45,190 --> 00:10:43,839

was there anything you know really

151
00:10:46,550 --> 00:10:45,200
memorable that you're always going to

152
00:10:47,750 --> 00:10:46,560
take away from this you're always going

153
00:10:48,870 --> 00:10:47,760
to you know that's the first story

154
00:10:51,030 --> 00:10:48,880
you're going to tell people about when

155
00:10:53,990 --> 00:10:51,040
they ask you what it was like in space

156
00:10:57,190 --> 00:10:54,000
i would say everything was memorable but

157
00:11:03,030 --> 00:11:00,389
experiments we did on this station

158
00:11:08,470 --> 00:11:03,040
those experiments were just just great

159
00:11:14,470 --> 00:11:11,509
expedition 48 commander jeff williams as

160
00:11:16,470 --> 00:11:14,480
well as 50 commander

161
00:11:19,430 --> 00:11:16,480
shane kimball those

162
00:11:21,350 --> 00:11:19,440
experienced crew members told us a lot

163
00:11:22,389 --> 00:11:21,360

so i think

164

00:11:24,550 --> 00:11:22,399

i hope

165

00:11:27,670 --> 00:11:24,560

i can do the same thing for the second

166

00:11:29,430 --> 00:11:27,680

flight for new rookies

167

00:11:30,949 --> 00:11:29,440

and one final question there's a lot of

168

00:11:33,030 --> 00:11:30,959

science a lot of different experiments

169

00:11:34,949 --> 00:11:33,040

that take place on board the station was

170

00:11:36,790 --> 00:11:34,959

there anyone did you have a favorite

171

00:11:38,470 --> 00:11:36,800

kind of i know jax that does a lot of

172

00:11:39,990 --> 00:11:38,480

biomedical research and other things

173

00:11:40,870 --> 00:11:40,000

like that was there one thing that you

174

00:11:42,470 --> 00:11:40,880

really

175

00:11:44,949 --> 00:11:42,480

was kind of just wow i can't believe i'm

176

00:11:47,829 --> 00:11:44,959

working on this in space i

177

00:11:51,750 --> 00:11:47,839

i studied materials science in my

178

00:11:54,310 --> 00:11:51,760

university so i was really interested in

179

00:11:57,030 --> 00:11:54,320

that kind of experiment and

180

00:11:58,629 --> 00:11:57,040

in japanese experiment module

181

00:12:00,150 --> 00:11:58,639

kibo there is an

182

00:12:02,310 --> 00:12:00,160

experiment

183

00:12:03,590 --> 00:12:02,320

which is right now going on

184

00:12:05,949 --> 00:12:03,600

it's called the

185

00:12:08,389 --> 00:12:05,959

elf electrostatic

186

00:12:10,389 --> 00:12:08,399

electromagnetic study

187

00:12:11,509 --> 00:12:10,399

levitation furnace

188

00:12:14,069 --> 00:12:11,519

and uh

189

00:12:17,910 --> 00:12:14,079

when i had that when i had a training in

190

00:12:20,389 --> 00:12:17,920

scuba about that experiment i was really

191

00:12:21,269 --> 00:12:20,399

interested in that idea

192

00:12:23,030 --> 00:12:21,279

of

193

00:12:25,350 --> 00:12:23,040

how

194

00:12:29,030 --> 00:12:25,360

it is using the unique

195

00:12:30,790 --> 00:12:29,040

uh space environment then i actually got

196

00:12:31,990 --> 00:12:30,800

to

197

00:12:34,629 --> 00:12:32,000

hand on

198

00:12:35,750 --> 00:12:34,639

that experiment so that was very cool

199

00:12:37,509 --> 00:12:35,760

yeah

200

00:12:40,310 --> 00:12:37,519

all right fascinating stuff well again

201

00:12:42,150 --> 00:12:40,320

takuyo onishi back from 115 days in

202

00:13:03,590 --> 00:12:42,160

space here in kazakhstan thank you so

203

00:13:10,550 --> 00:13:07,110

chairman of the state commission

204

00:13:17,829 --> 00:13:10,560

increment 49 has performed their mission

205

00:13:17,839 --> 00:13:24,790

very good to see you so good to see you

206

00:13:24,800 --> 00:13:29,269

hello