



1
00:00:09,910 --> 00:00:07,269
the three crew members that are getting

2
00:00:11,910 --> 00:00:09,920
ready to depart the station and end

3
00:00:12,870 --> 00:00:11,920
their six and a half month

4
00:00:15,430 --> 00:00:12,880
mission

5
00:00:17,349 --> 00:00:15,440
uh are continuing with their departure

6
00:00:20,070 --> 00:00:17,359
preps as we've seen some evidence of

7
00:00:21,830 --> 00:00:20,080
this morning the last american astronaut

8
00:00:24,150 --> 00:00:21,840
to leave the station in a soyuz

9
00:00:27,349 --> 00:00:24,160
spacecraft was the commander of the

10
00:00:30,070 --> 00:00:27,359
previous expedition expedition 42 and

11
00:00:31,750 --> 00:00:30,080
that's barry wilmore he returned to

12
00:00:33,750 --> 00:00:31,760
earth in march

13
00:00:35,350 --> 00:00:33,760

recently my colleague brandie dean

14

00:00:37,590 --> 00:00:35,360

talked with will moore about the

15

00:00:40,150 --> 00:00:37,600

experience of completing a long duration

16

00:00:44,869 --> 00:00:40,160

mission to the station and the ride home

17

00:00:47,510 --> 00:00:46,229

thanks so much for joining us butch we

18

00:00:49,110 --> 00:00:47,520

really appreciate it oh sure it's my

19

00:00:50,389 --> 00:00:49,120

pleasure all right so i guess you've

20

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

been back for a little while now yeah

21

00:00:54,549 --> 00:00:52,399

almost three months yes you feeling back

22

00:00:56,790 --> 00:00:54,559

to normal oh yeah oh first many weeks

23

00:00:59,510 --> 00:00:56,800

yeah yeah feeling great did it take long

24

00:01:00,950 --> 00:00:59,520

you know not for me um i guess everybody

25

00:01:02,869 --> 00:01:00,960

has a little bit of wobbliness a little

26

00:01:04,390 --> 00:01:02,879

neural vestibular as you adjust to

27

00:01:06,710 --> 00:01:04,400

gravity and for me that was about three

28

00:01:08,149 --> 00:01:06,720

days so i didn't have any wobbly after

29

00:01:09,670 --> 00:01:08,159

that but certainly the body getting used

30

00:01:10,870 --> 00:01:09,680

to gravity you know i've got a bum knee

31

00:01:12,390 --> 00:01:10,880

excuse me that

32

00:01:13,910 --> 00:01:12,400

that had to get used to gravity again

33

00:01:15,670 --> 00:01:13,920

that took about a month but overall yeah

34

00:01:17,590 --> 00:01:15,680

it came came back pretty quick okay well

35

00:01:19,030 --> 00:01:17,600

i guess the lack of gravity was probably

36

00:01:20,390 --> 00:01:19,040

nice on your knee for oh it was very

37

00:01:23,350 --> 00:01:20,400

nice yes

38

00:01:25,270 --> 00:01:23,360

well so i guess terry um and samantha

39

00:01:27,109 --> 00:01:25,280

and anton are all starting to get ready

40

00:01:29,590 --> 00:01:27,119

to come home now and what kind of things

41

00:01:30,870 --> 00:01:29,600

what kind of tasks are involved in that

42

00:01:31,990 --> 00:01:30,880

there's quite a bit i mean obviously

43

00:01:33,190 --> 00:01:32,000

you've got to clean up your crew

44

00:01:34,310 --> 00:01:33,200

quarters you want to have it nice and

45

00:01:35,910 --> 00:01:34,320

clean for the next person that's

46

00:01:37,830 --> 00:01:35,920

arriving so that's a big part that takes

47

00:01:39,190 --> 00:01:37,840

uh several several hours and then you've

48

00:01:40,870 --> 00:01:39,200

got a lot of multimedia stuff that

49

00:01:42,789 --> 00:01:40,880

you've acquired over the past six months

50

00:01:44,149 --> 00:01:42,799

or seven months for them and they're

51
00:01:45,830 --> 00:01:44,159
getting prepped to get all that stuff

52
00:01:47,109 --> 00:01:45,840
together there's certainly some personal

53
00:01:48,310 --> 00:01:47,119
items that they let you bring back on

54
00:01:49,749 --> 00:01:48,320
the soyuz there's not a lot of room in

55
00:01:51,350 --> 00:01:49,759
the soyuz but there's some small things

56
00:01:53,670 --> 00:01:51,360
you got to get those packed really

57
00:01:54,870 --> 00:01:53,680
tightly really small and that's the type

58
00:01:56,709 --> 00:01:54,880
of things that they're getting and going

59
00:01:58,709 --> 00:01:56,719
through right now yeah so i know that

60
00:01:59,749 --> 00:01:58,719
y'all train for all sorts of things uh

61
00:02:02,149 --> 00:01:59,759
when you're getting ready for a space

62
00:02:03,910 --> 00:02:02,159
flight is packing part of it for that

63
00:02:04,950 --> 00:02:03,920

there's no direct uh training for that

64

00:02:06,469 --> 00:02:04,960

but i think that's a little bit

65

00:02:07,670 --> 00:02:06,479

intuitive as we go through you get you

66

00:02:10,150 --> 00:02:07,680

get a lot of packing training while

67

00:02:12,710 --> 00:02:10,160

you're on on the iss okay

68

00:02:14,150 --> 00:02:12,720

all right well um what kind of um what

69

00:02:15,910 --> 00:02:14,160

kind of activities do they have in the

70

00:02:17,350 --> 00:02:15,920

in the very last few days as they're as

71

00:02:19,110 --> 00:02:17,360

they're getting ready to actually get on

72

00:02:20,630 --> 00:02:19,120

board yeah there is some like you said

73

00:02:22,470 --> 00:02:20,640

there's some there's some a lot of the

74

00:02:24,150 --> 00:02:22,480

packing time and that does take a little

75

00:02:25,830 --> 00:02:24,160

bit of time but just just generally

76

00:02:27,030 --> 00:02:25,840

getting everything in order as far as

77

00:02:29,030 --> 00:02:27,040

around their crew quarters like i

78

00:02:30,070 --> 00:02:29,040

mentioned um there is some last things

79

00:02:31,589 --> 00:02:30,080

that you want to do that you haven't

80

00:02:33,030 --> 00:02:31,599

done maybe or some last things that you

81

00:02:34,949 --> 00:02:33,040

want to do again looking out the window

82

00:02:36,949 --> 00:02:34,959

doing those type of things there's still

83

00:02:38,869 --> 00:02:36,959

you still scheduled as well so it's not

84

00:02:40,390 --> 00:02:38,879

like they're completely have free time

85

00:02:41,750 --> 00:02:40,400

there's still items that has to be done

86

00:02:42,949 --> 00:02:41,760

on space station they're part of the

87

00:02:45,270 --> 00:02:42,959

normal crew so they're scheduled for

88

00:02:46,790 --> 00:02:45,280

those two any particular

89

00:02:48,390 --> 00:02:46,800

special activities that you took part in

90

00:02:50,229 --> 00:02:48,400

or memories that you have or things you

91

00:02:51,670 --> 00:02:50,239

wish you you'd had one more chance to do

92

00:02:53,110 --> 00:02:51,680

no i think i got most of the things

93

00:02:54,309 --> 00:02:53,120

accomplished that i wanted to do

94

00:02:55,509 --> 00:02:54,319

actually you know i thought i'd taken

95

00:02:57,750 --> 00:02:55,519

all the pictures i wanted to take but

96

00:02:59,110 --> 00:02:57,760

that last week it was another flurry of

97

00:03:00,309 --> 00:02:59,120

a bunch of things that i had that just

98

00:03:01,190 --> 00:03:00,319

came to kind of came to mind some

99

00:03:03,270 --> 00:03:01,200

certain

100

00:03:04,869 --> 00:03:03,280

shots that included the entire cupola

101
00:03:06,149 --> 00:03:04,879
and those type of things that

102
00:03:08,790 --> 00:03:06,159
you know to bring those back and have

103
00:03:10,309 --> 00:03:08,800
those for the next several decades so

104
00:03:11,750 --> 00:03:10,319
it's nice to have so have you have you

105
00:03:13,350 --> 00:03:11,760
had a chance to go through them at all

106
00:03:14,710 --> 00:03:13,360
i've gone through a large portion of

107
00:03:16,630 --> 00:03:14,720
them not all of it but certainly some

108
00:03:17,990 --> 00:03:16,640
other yeah and it uh it's it's it's a

109
00:03:19,430 --> 00:03:18,000
wonderful thing to have those those

110
00:03:20,869 --> 00:03:19,440
shots and those those memories it

111
00:03:22,949 --> 00:03:20,879
certainly is nice

112
00:03:24,789 --> 00:03:22,959
well uh what about the the actual ride

113
00:03:26,550 --> 00:03:24,799

itself back to earth i hear it can be a

114

00:03:28,869 --> 00:03:26,560

little bit of a oh my gosh i guess the

115

00:03:32,149 --> 00:03:28,879

most uh descriptive term i've ever heard

116

00:03:35,030 --> 00:03:32,159

was like mr toad's wild ride

117

00:03:36,630 --> 00:03:35,040

it is that and more um from the time you

118

00:03:38,630 --> 00:03:36,640

close the hatch it's roughly five and a

119

00:03:40,710 --> 00:03:38,640

half to six hours until you're on deck

120

00:03:42,789 --> 00:03:40,720

so there's it's a bluster of activity as

121

00:03:44,229 --> 00:03:42,799

you can imagine um closing the hatch

122

00:03:46,550 --> 00:03:44,239

like i said and then you've got several

123

00:03:48,070 --> 00:03:46,560

an hour and a half two hours of downtime

124

00:03:49,350 --> 00:03:48,080

as you get ready for deorbit burn but

125

00:03:50,390 --> 00:03:49,360

from deorbit burn all the way down to

126

00:03:51,350 --> 00:03:50,400

touchdown i mean there's deer but

127

00:03:53,509 --> 00:03:51,360

burning this you know the engine's

128

00:03:54,710 --> 00:03:53,519

firing you can feel the g you can hear

129

00:03:56,710 --> 00:03:54,720

things creaking then you've got

130

00:03:57,990 --> 00:03:56,720

separation where the the bale the top

131

00:03:59,110 --> 00:03:58,000

portion the round portion on top that

132

00:04:00,789 --> 00:03:59,120

comes apart and of course the engine

133

00:04:02,949 --> 00:04:00,799

compartment separates and those are

134

00:04:04,550 --> 00:04:02,959

dynamic evolutions with jarring and i

135

00:04:06,949 --> 00:04:04,560

actually looked out the window you could

136

00:04:07,990 --> 00:04:06,959

see the bayou kind of glistening red a

137

00:04:09,350 --> 00:04:08,000

little bit because we're starting to get

138

00:04:10,789 --> 00:04:09,360

into the heating areas it was kind of

139

00:04:13,350 --> 00:04:10,799

floating away in the distance kind of

140

00:04:14,949 --> 00:04:13,360

eerily looking out the window and then

141

00:04:17,909 --> 00:04:14,959

of course you get into the entry itself

142

00:04:19,509 --> 00:04:17,919

and oh my what a ride i mean it starts

143

00:04:21,110 --> 00:04:19,519

off with a little bit of

144

00:04:22,230 --> 00:04:21,120

you can hear the wind as you're starting

145

00:04:23,909 --> 00:04:22,240

to get in the atmosphere and then of

146

00:04:26,310 --> 00:04:23,919

course you start getting into the the

147

00:04:28,469 --> 00:04:26,320

plasma and you're literally you know 17

148

00:04:30,710 --> 00:04:28,479

000 miles an hour and a 3000 degree

149

00:04:32,469 --> 00:04:30,720

fireball and looking out the window and

150

00:04:34,550 --> 00:04:32,479

the plasma going by and it's you know

151
00:04:36,390 --> 00:04:34,560
you're shaking and the g is building up

152
00:04:39,189 --> 00:04:36,400
we got 4.4 g's i think was what we

153
00:04:41,110 --> 00:04:39,199
peaked out on first you know for not not

154
00:04:42,390 --> 00:04:41,120
the g itself but as it g rises and come

155
00:04:44,390 --> 00:04:42,400
down it's you know like four and four

156
00:04:46,390 --> 00:04:44,400
and a half five minutes uh peaked out

157
00:04:48,390 --> 00:04:46,400
about a minute at 4.4 like i said so

158
00:04:50,070 --> 00:04:48,400
that's dynamic as you're shaking and

159
00:04:51,350 --> 00:04:50,080
then you get the parachute opening and

160
00:04:52,870 --> 00:04:51,360
it's jarring and literally you're

161
00:04:54,550 --> 00:04:52,880
flipping and flopping upside down it

162
00:04:55,990 --> 00:04:54,560
seems like and just

163
00:04:58,150 --> 00:04:56,000

it's just really something else and then

164

00:04:59,749 --> 00:04:58,160

of course on down the seats up

165

00:05:01,510 --> 00:04:59,759

little short observers on the back these

166

00:05:02,950 --> 00:05:01,520

up about several thousand feet so

167

00:05:04,629 --> 00:05:02,960

the dash is here and then all of a

168

00:05:05,830 --> 00:05:04,639

sudden the dash is here and it happens

169

00:05:07,590 --> 00:05:05,840

pretty quick

170

00:05:09,830 --> 00:05:07,600

uh and then of course touchdown the soft

171

00:05:11,990 --> 00:05:09,840

rocket engines fire

172

00:05:13,909 --> 00:05:12,000

big blast and i thought we had hit down

173

00:05:15,830 --> 00:05:13,919

at that point at the end of that it felt

174

00:05:17,830 --> 00:05:15,840

a little bit firmer like we'd hit and

175

00:05:19,909 --> 00:05:17,840

then we hit you know

176

00:05:21,590 --> 00:05:19,919

literally i've heard it said and i agree

177

00:05:24,469 --> 00:05:21,600

it's like getting in the back hit hit in

178

00:05:26,629 --> 00:05:24,479

the back by mack truck really oh my it

179

00:05:27,990 --> 00:05:26,639

was something else so march wasn't the

180

00:05:29,830 --> 00:05:28,000

first time that you've you've made the

181

00:05:31,830 --> 00:05:29,840

trip but the first time on first time on

182

00:05:33,590 --> 00:05:31,840

soldiers yeah the soyuz landing is much

183

00:05:35,510 --> 00:05:33,600

much much harder than us than a shuttle

184

00:05:37,590 --> 00:05:35,520

landing yeah

185

00:05:38,870 --> 00:05:37,600

were people able to like prepare you for

186

00:05:40,870 --> 00:05:38,880

it did you did you feel like you knew

187

00:05:41,749 --> 00:05:40,880

what to expect i did by and large i mean

188

00:05:43,189 --> 00:05:41,759

the one thing that you know and the

189

00:05:44,230 --> 00:05:43,199

things that they said okay you want to

190

00:05:45,350 --> 00:05:44,240

as soon as you hit down you want to look

191

00:05:46,870 --> 00:05:45,360

out the window and see all the people

192

00:05:48,230 --> 00:05:46,880

the helicopters landing people scurrying

193

00:05:50,150 --> 00:05:48,240

over and i did that i looked out the

194

00:05:51,749 --> 00:05:50,160

windows right after we hit down and

195

00:05:53,990 --> 00:05:51,759

nothing because i didn't know it at the

196

00:05:55,670 --> 00:05:54,000

time we'd landed in the ice fog so

197

00:05:58,469 --> 00:05:55,680

nothing nothing like for 10 minutes

198

00:05:59,909 --> 00:05:58,479

finally we saw a vehicle one of the

199

00:06:01,590 --> 00:05:59,919

all-terrain vehicles drive up and then a

200

00:06:03,110 --> 00:06:01,600

helicopter land in the distance and then

201
00:06:05,430 --> 00:06:03,120
you know the games began at that point

202
00:06:07,830 --> 00:06:05,440
to get us out so do you do you get a

203
00:06:09,749 --> 00:06:07,840
chance to give the crew on orbit now any

204
00:06:11,189 --> 00:06:09,759
any tips or do you think they have all

205
00:06:12,710 --> 00:06:11,199
the tips oh they've got all the tips

206
00:06:13,749 --> 00:06:12,720
they'll be ready but hey it's it's a

207
00:06:15,430 --> 00:06:13,759
great ride and they're they're going to

208
00:06:16,710 --> 00:06:15,440
enjoy all of it yeah i heard somebody

209
00:06:18,550 --> 00:06:16,720
say that they'd go through the six

210
00:06:21,029 --> 00:06:18,560
months on orbit just to get the ride

211
00:06:22,710 --> 00:06:21,039
home

212
00:06:24,629 --> 00:06:22,720
uh yeah sure yeah

213
00:06:27,189 --> 00:06:24,639

it is pretty exciting well what is what

214

00:06:29,029 --> 00:06:27,199

is uh next for you what else what else

215

00:06:29,990 --> 00:06:29,039

you're still in the debrief process and

216

00:06:31,110 --> 00:06:30,000

even though it's been several months

217

00:06:32,469 --> 00:06:31,120

down the road and you know you want to

218

00:06:33,749 --> 00:06:32,479

share the experience that's the great

219

00:06:35,590 --> 00:06:33,759

thing about this if you couldn't share

220

00:06:37,350 --> 00:06:35,600

it with anyone it would not be as as

221

00:06:38,550 --> 00:06:37,360

meaningful i guess so here i mean that

222

00:06:39,909 --> 00:06:38,560

period where i get to go out and share

223

00:06:42,070 --> 00:06:39,919

some of the some of the things that took

224

00:06:44,070 --> 00:06:42,080

place and with those that uh that want

225

00:06:45,670 --> 00:06:44,080

to hear it and uh

226

00:06:47,670 --> 00:06:45,680

and doing that now and then back into

227

00:06:49,270 --> 00:06:47,680

the back in the run of just uh

228

00:06:50,870 --> 00:06:49,280

supporting human space flight so we'll

229

00:06:52,150 --> 00:06:50,880

see what that entails as we go forward

230

00:06:53,670 --> 00:06:52,160

should be something interesting it'll be

231

00:06:55,189 --> 00:06:53,680

interesting absolutely all right well

232

00:06:56,950 --> 00:06:55,199

thank you so much we really appreciate