



1
00:00:03,830 --> 00:00:01,750
a unique opportunity for you this

2
00:00:06,230 --> 00:00:03,840
morning fox 45 is given the chance that

3
00:00:08,390 --> 00:00:06,240
is literally out of this world thanks to

4
00:00:11,030 --> 00:00:08,400
nasa we are able to talk with local

5
00:00:13,589 --> 00:00:11,040
astronaut and commander of expedition 43

6
00:00:15,910 --> 00:00:13,599
terry verts while he is aboard the

7
00:00:19,029 --> 00:00:15,920
international space station as he lives

8
00:00:20,550 --> 00:00:19,039
and works in space commander

9
00:00:22,870 --> 00:00:20,560
uh so many questions for you that we

10
00:00:25,189 --> 00:00:22,880
have here you have been in space for

11
00:00:27,509 --> 00:00:25,199
months now and you've been working with

12
00:00:29,669 --> 00:00:27,519
an international crew and you're part of

13
00:00:31,349 --> 00:00:29,679

a 15-year production here as the

14

00:00:32,630 --> 00:00:31,359

international space station continues to

15

00:00:36,069 --> 00:00:32,640

grow in fact that's happening this

16

00:00:41,990 --> 00:00:36,079

november so what do you and the crew

17

00:00:45,350 --> 00:00:43,830

well we discuss all kinds of things like

18

00:00:47,350 --> 00:00:45,360

you mentioned we've we've been here for

19

00:00:49,029 --> 00:00:47,360

four months i'm here with italian

20

00:00:51,910 --> 00:00:49,039

astronaut samantha christopher ferretti

21

00:00:52,869 --> 00:00:51,920

and russian cosmonaut anton shkaplerov

22

00:00:56,310 --> 00:00:52,879

and

23

00:00:57,430 --> 00:00:56,320

have dinner lunch together as often as

24

00:00:59,590 --> 00:00:57,440

we can and

25

00:01:01,349 --> 00:00:59,600

topics range from what are we going to

26
00:01:03,590 --> 00:01:01,359
do when we get back to earth to how did

27
00:01:06,310 --> 00:01:03,600
your day go that day and i'm trying to

28
00:01:08,390 --> 00:01:06,320
explain baseball and football to them so

29
00:01:14,149 --> 00:01:08,400
there's all different kinds of topics as

30
00:01:18,070 --> 00:01:15,749
yeah and of course just looking at your

31
00:01:19,990 --> 00:01:18,080
attire right now obviously a baltimore

32
00:01:22,230 --> 00:01:20,000
fan right here from columbia maryland

33
00:01:24,789 --> 00:01:22,240
born though in our city of baltimore

34
00:01:26,630 --> 00:01:24,799
love the o's jersey uh so i'm sure that

35
00:01:28,789 --> 00:01:26,640
baseball is one of the topics right now

36
00:01:29,990 --> 00:01:28,799
but um let's get back to before i get to

37
00:01:31,910 --> 00:01:30,000
that i really want to talk to you about

38
00:01:33,350 --> 00:01:31,920

the research that the crew is doing what

39

00:01:38,149 --> 00:01:33,360

are you guys most proud of that you're

40

00:01:41,429 --> 00:01:39,830

what are we most proud of well there's

41

00:01:43,109 --> 00:01:41,439

been so much different research that

42

00:01:45,670 --> 00:01:43,119

we've done uh just about every

43

00:01:48,710 --> 00:01:45,680

discipline from science is covered here

44

00:01:50,870 --> 00:01:48,720

we're doing biology human research we're

45

00:01:52,310 --> 00:01:50,880

doing physics experiments there's

46

00:01:54,149 --> 00:01:52,320

something on the outside called an alpha

47

00:01:55,590 --> 00:01:54,159

magnetic spectrometer that's looking for

48

00:01:57,109 --> 00:01:55,600

dark matter and dark energy in the

49

00:02:00,230 --> 00:01:57,119

universe it's a really fascinating

50

00:02:01,910 --> 00:02:00,240

experiment we're doing material science

51
00:02:03,830 --> 00:02:01,920
things that can help produce better

52
00:02:05,749 --> 00:02:03,840
materials on earth and also better

53
00:02:07,910 --> 00:02:05,759
spaceships one in particular that i

54
00:02:09,910 --> 00:02:07,920
worked on is going to help help make

55
00:02:11,190 --> 00:02:09,920
spaceship fuel tanks more efficient so

56
00:02:12,390 --> 00:02:11,200
we can get every drop of fuel out of

57
00:02:14,150 --> 00:02:12,400
them

58
00:02:15,030 --> 00:02:14,160
so basically every

59
00:02:17,350 --> 00:02:15,040
different

60
00:02:18,869 --> 00:02:17,360
uh scientific discipline we we've done

61
00:02:20,309 --> 00:02:18,879
here and it's been fun the thing i'm

62
00:02:26,710 --> 00:02:20,319
most proud about is the diversity of

63
00:02:31,030 --> 00:02:29,270

i i agree with that and um now i know

64

00:02:32,949 --> 00:02:31,040

that we were we were able to take you

65

00:02:34,869 --> 00:02:32,959

live just a few weeks ago while you were

66

00:02:37,589 --> 00:02:34,879

out on one of your

67

00:02:38,710 --> 00:02:37,599

your three six hour space walks out

68

00:02:40,390 --> 00:02:38,720

there and you were working on things now

69

00:02:42,390 --> 00:02:40,400

we could not tell what you were actually

70

00:02:45,190 --> 00:02:42,400

doing out there but if you're out in

71

00:02:46,869 --> 00:02:45,200

space for six hour shifts um can you

72

00:02:50,869 --> 00:02:46,879

kind of describe that what what you're

73

00:02:54,229 --> 00:02:52,949

man i wish i could uh the view from

74

00:02:55,670 --> 00:02:54,239

inboard the space station is

75

00:02:57,110 --> 00:02:55,680

unbelievable we have several different

76

00:02:58,790 --> 00:02:57,120

windows and there's one in particular

77

00:03:00,390 --> 00:02:58,800

called a cupola that has

78

00:03:01,830 --> 00:03:00,400

seven windows that you're surrounded by

79

00:03:03,110 --> 00:03:01,840

and the view from there is unbelievable

80

00:03:05,430 --> 00:03:03,120

so i didn't think it could get better

81

00:03:07,110 --> 00:03:05,440

than that but when i went outside and

82

00:03:08,869 --> 00:03:07,120

you're out in space

83

00:03:10,790 --> 00:03:08,879

and all you have is that thin visor

84

00:03:13,589 --> 00:03:10,800

between you and the universe and all of

85

00:03:15,830 --> 00:03:13,599

creation it's it's truly amazing

86

00:03:17,270 --> 00:03:15,840

the the colors that i saw were colors

87

00:03:18,790 --> 00:03:17,280

that i'd never seen before especially

88

00:03:20,869 --> 00:03:18,800

shades of blue

89

00:03:22,710 --> 00:03:20,879

the sunrise and sunsets tend to last a

90

00:03:25,350 --> 00:03:22,720

long time because the orbit that we're

91

00:03:27,589 --> 00:03:25,360

in is kind of paralleling

92

00:03:29,430 --> 00:03:27,599

the direction of the sun and so it was a

93

00:03:31,430 --> 00:03:29,440

little bit of thin blue for a long time

94

00:03:32,869 --> 00:03:31,440

during our night passes and seeing those

95

00:03:34,390 --> 00:03:32,879

sunrises and sunsets were just

96

00:03:35,830 --> 00:03:34,400

remarkable i wish i could describe it

97

00:03:42,229 --> 00:03:35,840

better but it's one of those things that

98

00:03:45,270 --> 00:03:43,830

well you've been doing a great job on

99

00:03:46,869 --> 00:03:45,280

social media sending out some of those

100

00:03:48,309 --> 00:03:46,879

samples but i want to talk to you a

101

00:03:50,149 --> 00:03:48,319

little bit more about the

102

00:03:51,910 --> 00:03:50,159

the gym that's on board now i know that

103

00:03:53,990 --> 00:03:51,920

the international space station is

104

00:03:55,750 --> 00:03:54,000

compared to a six-room house but i also

105

00:03:57,509 --> 00:03:55,760

found out that there's a gym on board

106

00:03:58,630 --> 00:03:57,519

it's not just so that you guys can stay

107

00:04:00,149 --> 00:03:58,640

in shape and look good while you're

108

00:04:01,750 --> 00:04:00,159

doing interviews there's a little bit

109

00:04:04,630 --> 00:04:01,760

more to it tell us about that research

110

00:04:07,750 --> 00:04:06,390

that's a perfectly timed question my

111

00:04:09,589 --> 00:04:07,760

crewmate samantha christopher freddie

112

00:04:11,190 --> 00:04:09,599

just floated by as she's going down

113

00:04:13,429 --> 00:04:11,200

there to work out right now

114

00:04:15,830 --> 00:04:13,439

so we spend several hours every day

115

00:04:17,430 --> 00:04:15,840

doing aerobic and anaerobic exercises

116

00:04:19,430 --> 00:04:17,440

basically weight lifting there's no

117

00:04:21,509 --> 00:04:19,440

weight in space but we use a vacuum

118

00:04:23,189 --> 00:04:21,519

system that kind of acts as a spring to

119

00:04:24,790 --> 00:04:23,199

generate weight and that's very

120

00:04:26,230 --> 00:04:24,800

important to keep our bodies in shape if

121

00:04:27,510 --> 00:04:26,240

you spend a lot of time in

122

00:04:30,950 --> 00:04:27,520

weightlessness your muscles and your

123

00:04:32,230 --> 00:04:30,960

bones would atrophy so through

124

00:04:34,150 --> 00:04:32,240

some diet

125

00:04:36,550 --> 00:04:34,160

and we take vitamin d pills but mainly

126

00:04:38,870 --> 00:04:36,560

the exercise that we do we've learned

127

00:04:40,629 --> 00:04:38,880

after having 15 years of people coming

128

00:04:42,550 --> 00:04:40,639

to the space station that when we get

129

00:04:44,230 --> 00:04:42,560

back to earth we're in good shape a

130

00:04:46,550 --> 00:04:44,240

little dizzy the first few days but your

131

00:04:48,150 --> 00:04:46,560

your body is very strong and able to

132

00:04:50,310 --> 00:04:48,160

spend time in space and get back to the

133

00:04:51,749 --> 00:04:50,320

earth and so it's a great accomplishment

134

00:04:54,070 --> 00:04:51,759

of the space station it's proved that

135

00:04:56,070 --> 00:04:54,080

humans can live in space and then go to

136

00:05:04,469 --> 00:04:56,080

a planet and not only survive but

137

00:05:07,670 --> 00:05:05,830

all right commander i know that you're a

138

00:05:09,909 --> 00:05:07,680

father of two yourself one last question

139

00:05:11,430 --> 00:05:09,919

for you right here my my children 11 and

140

00:05:13,110 --> 00:05:11,440

8 year old both had questions for you if

141

00:05:16,150 --> 00:05:13,120

one asked about the food because we saw

142

00:05:17,670 --> 00:05:16,160

one of your turkey sausage burritos

143

00:05:19,510 --> 00:05:17,680

floating on there so we want to find out

144

00:05:20,950 --> 00:05:19,520

how good the food is my eight-year-old

145

00:05:22,230 --> 00:05:20,960

wanted to know do you ever push one of

146

00:05:23,749 --> 00:05:22,240

the wrong buttons there because there's

147

00:05:25,029 --> 00:05:23,759

so much that seems to be around you

148

00:05:26,390 --> 00:05:25,039

while you're floating around have you

149

00:05:30,310 --> 00:05:26,400

ever hit something wrong and that's my

150

00:05:33,830 --> 00:05:32,310

those are two great questions the food

151
00:05:35,749 --> 00:05:33,840
is actually pretty good it's much better

152
00:05:37,510 --> 00:05:35,759
than what i would cook if i were a

153
00:05:39,510 --> 00:05:37,520
bachelor and

154
00:05:40,550 --> 00:05:39,520
the variety is pretty good there's all

155
00:05:41,749 --> 00:05:40,560
different kinds of meat we have

156
00:05:45,909 --> 00:05:41,759
vegetables

157
00:05:48,310 --> 00:05:45,919
potatoes pasta desserts fruits uh nuts

158
00:05:49,670 --> 00:05:48,320
so that's a pretty good variety of food

159
00:05:50,950 --> 00:05:49,680
and if you're here for six months that's

160
00:05:52,150 --> 00:05:50,960
really important to have something

161
00:05:53,990 --> 00:05:52,160
different so you're not eating the same

162
00:05:55,909 --> 00:05:54,000
thing every day and as far as pushing

163
00:05:57,670 --> 00:05:55,919

the wrong button the hardest part about

164

00:05:59,029 --> 00:05:57,680

being here is that every day all day

165

00:06:01,189 --> 00:05:59,039

long you're doing

166

00:06:03,430 --> 00:06:01,199

very sometimes tedious procedures

167

00:06:04,950 --> 00:06:03,440

they're they're long procedures you have

168

00:06:06,390 --> 00:06:04,960

to make sure that you're doing the right

169

00:06:07,590 --> 00:06:06,400

switch or right button constantly

170

00:06:09,270 --> 00:06:07,600

because you don't want to break anything

171

00:06:10,790 --> 00:06:09,280

and of course we're human and we make

172

00:06:12,710 --> 00:06:10,800

mistakes and yes i have pushed the wrong

173

00:06:14,790 --> 00:06:12,720

button thankfully

174

00:06:16,150 --> 00:06:14,800

nothing nothing bad has happened and the

175

00:06:17,749 --> 00:06:16,160

mistakes that i've made have all been

176

00:06:18,950 --> 00:06:17,759

easily recovered but

177

00:06:20,070 --> 00:06:18,960

it's something that you really have to

178

00:06:26,150 --> 00:06:20,080

pay attention to when you're up here for

179

00:06:29,670 --> 00:06:28,070

commander thank you so much for your

180

00:06:31,590 --> 00:06:29,680

for your questions i do have a colleague

181

00:06:32,710 --> 00:06:31,600

of mine uh candace dole is about to ask

182

00:06:36,150 --> 00:06:32,720

you some other questions about social

183

00:06:41,830 --> 00:06:38,629

great hello candice mary i'm candace and

184

00:06:42,710 --> 00:06:41,840

i uh i follow your tweets just fast

185

00:06:44,870 --> 00:06:42,720

hi

186

00:06:46,790 --> 00:06:44,880

so i follow your tweets and just

187

00:06:48,950 --> 00:06:46,800

absolutely fascinating what do you think

188

00:06:51,029 --> 00:06:48,960

when you tweet pictures of maryland and

189

00:06:54,950 --> 00:06:51,039

in dc you have to look at them with such

190

00:06:59,430 --> 00:06:57,029

it's really cool for lack of a better

191

00:07:00,870 --> 00:06:59,440

word to see your home from space and

192

00:07:02,950 --> 00:07:00,880

it's very recognizable especially the

193

00:07:05,270 --> 00:07:02,960

chesapeake bay you can pick that out

194

00:07:07,589 --> 00:07:05,280

from hundreds of miles away

195

00:07:09,350 --> 00:07:07,599

and maryland is a beautiful state

196

00:07:11,430 --> 00:07:09,360

the whole earth is a beautiful earth and

197

00:07:13,189 --> 00:07:11,440

there's lots of different colors and

198

00:07:14,629 --> 00:07:13,199

aspects of all these different regions

199

00:07:17,110 --> 00:07:14,639

on the earth and now

200

00:07:18,309 --> 00:07:17,120

i recognize places on earth by color

201
00:07:20,070 --> 00:07:18,319
from what i've seen in space but

202
00:07:21,990 --> 00:07:20,080
maryland is especially beautiful it's

203
00:07:29,510 --> 00:07:22,000
been really white this winter i think i

204
00:07:32,550 --> 00:07:31,110
uh space talk about that shark that

205
00:07:34,309 --> 00:07:32,560
you're wearing right there that orioles

206
00:07:35,749 --> 00:07:34,319
shirt and i saw somebody gave one to you

207
00:07:37,990 --> 00:07:35,759
for your birthday while you were up

208
00:07:39,589 --> 00:07:38,000
there if you could send a message to the

209
00:07:44,070 --> 00:07:39,599
o's who are training right now what

210
00:07:48,950 --> 00:07:47,589
i would say go o's best team uh in the

211
00:07:50,550 --> 00:07:48,960
american leagues for the last three

212
00:07:52,230 --> 00:07:50,560
years i think the most number of wins

213
00:07:53,990 --> 00:07:52,240

and it's been so much fun being an

214

00:07:56,070 --> 00:07:54,000

orioles fan the last few years with buck

215

00:07:57,830 --> 00:07:56,080

and all the great players that we have

216

00:07:59,029 --> 00:07:57,840

and there's lots and lots of fans out

217

00:07:59,909 --> 00:07:59,039

there we're very proud of what you've

218

00:08:00,710 --> 00:07:59,919

done

219

00:08:02,070 --> 00:08:00,720

and

220

00:08:03,270 --> 00:08:02,080

last year was great but we're really

221

00:08:09,749 --> 00:08:03,280

looking forward to winning that last

222

00:08:13,189 --> 00:08:11,029

your mother and i have been sending

223

00:08:15,589 --> 00:08:13,199

messages back and forth on social media

224

00:08:17,670 --> 00:08:15,599

her last message to me this morning he

225

00:08:19,830 --> 00:08:17,680

wanted to do this from the time he was

226

00:08:22,790 --> 00:08:19,840

born i'm proud of the man he is

227

00:08:25,350 --> 00:08:22,800

extremely down to earth for a guy who

228

00:08:26,869 --> 00:08:25,360

loves to fly so high and that has to

229

00:08:30,469 --> 00:08:26,879

mean a lot to you hearing that from mom

230

00:08:34,149 --> 00:08:32,310

that's that's awesome yeah mom is always

231

00:08:35,990 --> 00:08:34,159

mom no matter how old you are no matter

232

00:08:37,750 --> 00:08:36,000

what you do and i know she's been very

233

00:08:39,829 --> 00:08:37,760

proud of me and this is something i've

234

00:08:41,829 --> 00:08:39,839

wanted to do since i was a little kid

235

00:08:44,550 --> 00:08:41,839

my mom and my dad my stepdad all worked

236

00:08:46,710 --> 00:08:44,560

at nasa goddard there in maryland and so

237

00:08:48,310 --> 00:08:46,720

it's been kind of just flying in

238

00:08:49,509 --> 00:08:48,320

aviation and space has been something

239

00:08:54,870 --> 00:08:49,519

i've been interested in since i was a

240

00:08:58,070 --> 00:08:56,230

well we are all proud of you

241

00:09:00,070 --> 00:08:58,080

congratulations on all of your success

242

00:09:01,990 --> 00:09:00,080

and we look forward to many more tweets

243

00:09:03,269 --> 00:09:02,000

posts everything in between thanks so

244

00:09:06,870 --> 00:09:03,279

much and we'll see you when you get back

245

00:09:10,470 --> 00:09:08,550

thank you very much uh hello to all the

246

00:09:12,710 --> 00:09:10,480

folks there in maryland and pennsylvania

247

00:09:13,910 --> 00:09:12,720

virginia d.c that area looking forward

248

00:09:19,110 --> 00:09:13,920

to coming back in a few months when i