



1
00:00:06,710 --> 00:00:03,429
station this is houston are you ready

2
00:00:11,589 --> 00:00:09,509
hey we are ready for the event

3
00:00:24,630 --> 00:00:11,599
npr this is mission control houston

4
00:00:24,640 --> 00:00:28,830
station this is npr how do you hear

5
00:00:33,990 --> 00:00:31,750
me we have you loud and clear welcome

6
00:00:39,510 --> 00:00:34,000
aboard the space station

7
00:00:42,470 --> 00:00:41,110
hello can i ask you

8
00:00:46,950 --> 00:00:42,480
can i ask you two to introduce

9
00:00:51,510 --> 00:00:49,990
yeah so i'm uh scott kelly i'm a nasa

10
00:00:52,950 --> 00:00:51,520
astronaut commander of the space station

11
00:00:57,590 --> 00:00:52,960
up here

12
00:01:02,790 --> 00:01:00,150
hi i'm michael cronier flight engineer 2

13
00:01:04,789 --> 00:01:02,800

on board the station

14

00:01:10,390 --> 00:01:04,799

nice to meet you both can you tell me

15

00:01:14,630 --> 00:01:12,149

yeah so uh i'm gonna look at the map

16

00:01:15,590 --> 00:01:14,640

here real quick we are uh

17

00:01:18,390 --> 00:01:15,600

in the

18

00:01:20,070 --> 00:01:18,400

southern part of the pacific ocean

19

00:01:23,990 --> 00:01:20,080

approaching

20

00:01:27,910 --> 00:01:24,000

the uh southwestern part of uh south

21

00:01:29,830 --> 00:01:27,920

america and heading up towards europe

22

00:01:31,350 --> 00:01:29,840

in that direction

23

00:01:33,350 --> 00:01:31,360

i guess you say when you're in that part

24

00:01:37,670 --> 00:01:33,360

of the pacific ocean you are far above

25

00:01:42,149 --> 00:01:40,149

that is true and we will not be in that

26

00:01:44,950 --> 00:01:42,159

part of the pacific ocean for very long

27

00:01:46,389 --> 00:01:44,960

because we're going very fast 17 500

28

00:01:47,429 --> 00:01:46,399

miles per hour

29

00:01:48,950 --> 00:01:47,439

wow

30

00:01:54,789 --> 00:01:48,960

what does it look like for those of us

31

00:01:59,590 --> 00:01:57,109

well it's uh you know it's an impressive

32

00:02:02,069 --> 00:01:59,600

view i would describe it as you know

33

00:02:04,709 --> 00:02:02,079

breathtaking of you know first few times

34

00:02:08,309 --> 00:02:06,310

and uh

35

00:02:09,589 --> 00:02:08,319

you know yeah it never gets old looking

36

00:02:12,710 --> 00:02:09,599

at the earth you're it's a very

37

00:02:14,470 --> 00:02:12,720

beautiful place it's uh very blue

38

00:02:17,510 --> 00:02:14,480

there's a lot of water

39

00:02:20,790 --> 00:02:17,520

a lot of ocean down there um but other

40

00:02:22,949 --> 00:02:20,800

parts of it are an incredible uh

41

00:02:25,589 --> 00:02:22,959

place to look at and you know something

42

00:02:27,910 --> 00:02:25,599

that i think you know most astronauts

43

00:02:30,309 --> 00:02:27,920

would probably say they have a

44

00:02:31,830 --> 00:02:30,319

a uh you know a better appreciation for

45

00:02:34,070 --> 00:02:31,840

our home planet when you get to view it

46

00:02:36,229 --> 00:02:34,080

from this perspective

47

00:02:37,830 --> 00:02:36,239

you are both spending a full year on the

48

00:02:39,430 --> 00:02:37,840

international space station and you're

49

00:02:41,190 --> 00:02:39,440

not setting the record for the longest

50

00:02:42,630 --> 00:02:41,200

time in a single space flight but still

51
00:02:44,550 --> 00:02:42,640
it's the longest anyone has spent in

52
00:02:48,550 --> 00:02:44,560
space for a while what day are you on

53
00:02:55,830 --> 00:02:53,110
we are on day i think it's 193.

54
00:03:00,070 --> 00:02:55,840
yeah 193.

55
00:03:04,550 --> 00:03:03,110
yeah that's true more than halfway

56
00:03:09,910 --> 00:03:04,560
i wonder how it's affecting you guys

57
00:03:14,390 --> 00:03:11,350
can you can you say that one more time

58
00:03:16,070 --> 00:03:14,400
please sure how is it affecting you each

59
00:03:20,309 --> 00:03:16,080
i mean and is it affecting you each in

60
00:03:25,350 --> 00:03:23,110
well i think what you mean is you know

61
00:03:29,190 --> 00:03:25,360
how is being up here for a really long

62
00:03:30,710 --> 00:03:29,200
time affecting us um

63
00:03:33,030 --> 00:03:30,720

you know for both of us have flown

64

00:03:34,149 --> 00:03:33,040

long-duration flights before for me

65

00:03:35,750 --> 00:03:34,159

personally

66

00:03:36,710 --> 00:03:35,760

i think that was a good experience to

67

00:03:38,550 --> 00:03:36,720

know

68

00:03:41,030 --> 00:03:38,560

uh what it would be like when i was here

69

00:03:42,869 --> 00:03:41,040

last time i was here for 159 days and

70

00:03:44,390 --> 00:03:42,879

that seemed like a long time

71

00:03:46,630 --> 00:03:44,400

and i knew

72

00:03:48,390 --> 00:03:46,640

this was going gonna be yeah this was

73

00:03:49,270 --> 00:03:48,400

gonna be a lot longer

74

00:03:50,550 --> 00:03:49,280

um

75

00:03:53,190 --> 00:03:50,560

you know i'm getting to the point now

76
00:03:55,270 --> 00:03:53,200
where it i almost seems it almost seems

77
00:03:57,830 --> 00:03:55,280
like i've forgotten what it's like to

78
00:03:59,910 --> 00:03:57,840
live on earth and um

79
00:04:02,229 --> 00:03:59,920
you know just becoming more of a a

80
00:04:05,030 --> 00:04:02,239
citizen of the space station of space i

81
00:04:08,470 --> 00:04:06,309
i guess i could ask this question of

82
00:04:11,190 --> 00:04:08,480
mikhail um have there been any any

83
00:04:22,150 --> 00:04:11,200
surprises up there on this on this

84
00:04:25,909 --> 00:04:24,070
well surprises if you can call them

85
00:04:28,950 --> 00:04:25,919
surprises maybe

86
00:04:33,350 --> 00:04:28,960
they were unpleasant surprises as you

87
00:04:38,629 --> 00:04:35,270
at the same time we were able to

88
00:04:40,710 --> 00:04:38,639

overcome that and it did not affect our

89

00:04:42,710 --> 00:04:40,720

work here even though

90

00:04:45,189 --> 00:04:42,720

we it have to

91

00:04:46,469 --> 00:04:45,199

make a couple of changes so it's really

92

00:04:47,350 --> 00:04:46,479

hard to call

93

00:04:50,070 --> 00:04:47,360

these

94

00:04:54,710 --> 00:04:50,080

failures as surprises but

95

00:04:56,950 --> 00:04:54,720

in general everything else is nominal

96

00:04:58,710 --> 00:04:56,960

and i cannot single out any other

97

00:05:01,189 --> 00:04:58,720

surprises

98

00:05:04,870 --> 00:05:01,199

except for these two incidents that we

99

00:05:06,390 --> 00:05:04,880

were able to successfully overcome

100

00:05:11,189 --> 00:05:06,400

can you give us a sense of how small

101
00:05:15,670 --> 00:05:13,189
it's uh i wouldn't characterize it as

102
00:05:17,590 --> 00:05:15,680
small it's um

103
00:05:19,189 --> 00:05:17,600
you know people describe it like the

104
00:05:21,510 --> 00:05:19,199
amount of room you might have in a five

105
00:05:22,790 --> 00:05:21,520
bedroom house it's uh

106
00:05:24,790 --> 00:05:22,800
you know pretty spacious although

107
00:05:27,670 --> 00:05:24,800
there's a lot of stuff up here we have a

108
00:05:30,469 --> 00:05:27,680
lot of equipment i never think of it as

109
00:05:32,469 --> 00:05:30,479
a place that i would really want or need

110
00:05:34,150 --> 00:05:32,479
more room

111
00:05:37,430 --> 00:05:34,160
you know there are modules that we use

112
00:05:40,150 --> 00:05:37,440
more than others

113
00:05:41,990 --> 00:05:40,160

so it's it's it's pretty spacious and

114

00:05:43,510 --> 00:05:42,000

it's uh you know pretty effective for

115

00:05:45,029 --> 00:05:43,520

what it's designed for which is an

116

00:05:47,270 --> 00:05:45,039

orbiting laboratory and a lot of the

117

00:05:49,909 --> 00:05:47,280

modules are science modules to do all

118

00:05:52,150 --> 00:05:49,919

the experiments we do so uh you know

119

00:05:53,830 --> 00:05:52,160

that's what they're used primarily for

120

00:05:55,430 --> 00:05:53,840

so we have you know we have a lot of

121

00:05:56,950 --> 00:05:55,440

space

122

00:05:58,390 --> 00:05:56,960

give us a sense of the research you're

123

00:06:02,790 --> 00:05:58,400

doing while you're there what are you

124

00:06:06,550 --> 00:06:03,909

well

125

00:06:09,909 --> 00:06:06,560

while i'm here uh there's about and

126

00:06:11,350 --> 00:06:09,919

misha of course there are 400

127

00:06:13,029 --> 00:06:11,360

different types of scientific

128

00:06:13,990 --> 00:06:13,039

experiments going on

129

00:06:15,510 --> 00:06:14,000

and

130

00:06:17,110 --> 00:06:15,520

they're

131

00:06:18,870 --> 00:06:17,120

generally in in three different

132

00:06:21,350 --> 00:06:18,880

categories there are the

133

00:06:23,830 --> 00:06:21,360

exploration-based science it's it's the

134

00:06:26,950 --> 00:06:23,840

stuff that we need to know

135

00:06:29,590 --> 00:06:26,960

uh to travel further from earth you know

136

00:06:32,150 --> 00:06:29,600

perhaps uh you know go to mars someday

137

00:06:33,909 --> 00:06:32,160

or or other destinations like that and

138

00:06:36,230 --> 00:06:33,919

that's you know part of this one-year

139

00:06:38,550 --> 00:06:36,240

mission is to understanding better the

140

00:06:41,270 --> 00:06:38,560

physiology and the the negative effects

141

00:06:43,990 --> 00:06:41,280

of really long-duration space flight on

142

00:06:46,390 --> 00:06:44,000

our our physiology in terms of you know

143

00:06:49,270 --> 00:06:46,400

the effects on our bones our muscle our

144

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

vision our immune system

145

00:06:54,469 --> 00:06:50,880

there's an experiment with my brother to

146

00:06:55,909 --> 00:06:54,479

understand the the genetic component

147

00:06:58,629 --> 00:06:55,919

of the

148

00:07:00,550 --> 00:06:58,639

microgravity effects

149

00:07:03,909 --> 00:07:00,560

and what kind of systems we need to go

150

00:07:06,629 --> 00:07:03,919

to mars with regards to

151
00:07:08,710 --> 00:07:06,639
cleansing the atmosphere

152
00:07:10,309 --> 00:07:08,720
you know how we may need to produce food

153
00:07:13,909 --> 00:07:10,319
we recently had a

154
00:07:16,309 --> 00:07:13,919
scientific experiment where we we grew

155
00:07:17,990 --> 00:07:16,319
grew lettuce up here so those are the

156
00:07:20,790 --> 00:07:18,000
the exploration-based things and they're

157
00:07:22,870 --> 00:07:20,800
the the types of experiments that

158
00:07:25,029 --> 00:07:22,880
are designed to improve life on earth

159
00:07:27,110 --> 00:07:25,039
the uh you know the medical research

160
00:07:29,110 --> 00:07:27,120
type experiments the

161
00:07:31,029 --> 00:07:29,120
uh the fundamental

162
00:07:33,589 --> 00:07:31,039
science in

163
00:07:35,830 --> 00:07:33,599

in physics and chemistry biology those

164

00:07:37,189 --> 00:07:35,840

type of things we have we have a furnace

165

00:07:40,150 --> 00:07:37,199

right here next to us that does

166

00:07:45,189 --> 00:07:40,160

combustion research how to make

167

00:07:47,270 --> 00:07:45,199

combustion systems uh more efficient um

168

00:07:49,430 --> 00:07:47,280

and the third type of science we do is

169

00:07:51,670 --> 00:07:49,440

the the science that's the science of

170

00:07:53,189 --> 00:07:51,680

our international partners that span

171

00:07:55,270 --> 00:07:53,199

both both of those

172

00:07:57,350 --> 00:07:55,280

those general categories

173

00:07:58,869 --> 00:07:57,360

um so it's a pretty broad program we

174

00:08:00,629 --> 00:07:58,879

have

175

00:08:03,430 --> 00:08:00,639

this might be an awkward question to ask

176
00:08:05,990 --> 00:08:03,440
with you both right there but how do you

177
00:08:13,029 --> 00:08:06,000
keep from getting annoyed with each

178
00:08:15,510 --> 00:08:13,830
so

179
00:08:18,390 --> 00:08:15,520
it's uh you know i've been asked that

180
00:08:20,710 --> 00:08:18,400
question often and um

181
00:08:22,150 --> 00:08:20,720
you know it's it's it's a valid a valid

182
00:08:24,150 --> 00:08:22,160
question i think

183
00:08:26,710 --> 00:08:24,160
you know not only nasa but our

184
00:08:28,950 --> 00:08:26,720
international partners

185
00:08:31,110 --> 00:08:28,960
pick people

186
00:08:33,509 --> 00:08:31,120
that you know are probably the right

187
00:08:35,269 --> 00:08:33,519
kind of people to be in this environment

188
00:08:38,389 --> 00:08:35,279

people that are

189

00:08:40,469 --> 00:08:38,399

not easily annoyed maybe and you know

190

00:08:42,310 --> 00:08:40,479

understand the type

191

00:08:44,149 --> 00:08:42,320

the type of behavior

192

00:08:46,550 --> 00:08:44,159

uh the type of like expeditionary

193

00:08:49,269 --> 00:08:46,560

behavior we call it that uh

194

00:08:51,269 --> 00:08:49,279

you know requires uh you know just

195

00:08:53,670 --> 00:08:51,279

certain i think personal characteristics

196

00:08:55,829 --> 00:08:53,680

and we do a good job at screening

197

00:08:57,590 --> 00:08:55,839

you know future candidates for for this

198

00:08:59,190 --> 00:08:57,600

job as well as training people to do

199

00:09:00,630 --> 00:08:59,200

these kind of things

200

00:09:12,310 --> 00:09:00,640

let me ask misha the same question i

201

00:09:18,150 --> 00:09:15,110

i believe that argument is part of

202

00:09:20,710 --> 00:09:18,160

normal working process when you work as

203

00:09:23,990 --> 00:09:20,720

part of a big team

204

00:09:27,590 --> 00:09:24,000

but i would like to say very definitely

205

00:09:30,550 --> 00:09:27,600

they are never destructive

206

00:09:32,470 --> 00:09:30,560

we always find a compromise and find the

207

00:09:35,590 --> 00:09:32,480

middle ground and we never have

208

00:09:36,389 --> 00:09:35,600

arguments in a bad way maybe sometimes

209

00:09:38,710 --> 00:09:36,399

we

210

00:09:41,750 --> 00:09:38,720

see differently how a certain experiment

211

00:09:44,870 --> 00:09:41,760

can be performed maybe faster maybe more

212

00:09:47,190 --> 00:09:44,880

efficiently but at the same time

213

00:09:49,190 --> 00:09:47,200

the international space station is not

214

00:09:51,509 --> 00:09:49,200

the place for arguments everybody

215

00:09:54,070 --> 00:09:51,519

understands that perfectly

216

00:09:56,550 --> 00:09:54,080

and of course we have been screamed not

217

00:09:58,550 --> 00:09:56,560

only from the physiological standpoint

218

00:10:01,590 --> 00:09:58,560

but from the psychological standpoint as

219

00:10:04,230 --> 00:10:01,600

well we are friends here on board the

220

00:10:06,550 --> 00:10:04,240

iss and i would like to thank you my

221

00:10:08,230 --> 00:10:06,560

colleagues on the iss for that

222

00:10:09,990 --> 00:10:08,240

well uh

223

00:10:11,910 --> 00:10:10,000

nasa astronaut mark kelly and russian

224

00:10:16,949 --> 00:10:11,920

cosmonaut misha konyenko thank you so

225

00:10:21,110 --> 00:10:19,509

my pleasure my name's scott

226

00:10:22,310 --> 00:10:21,120

sorry it was wrong i read it wrong in

227

00:10:23,269 --> 00:10:22,320

the thing i'm so sorry your brother's

228

00:10:25,110 --> 00:10:23,279

mark

229

00:10:26,790 --> 00:10:25,120

nasa astronaut scott kelly and russian

230

00:10:30,230 --> 00:10:26,800

cosmonaut michel konienko thank you so

231

00:10:34,470 --> 00:10:31,990

station this is houston acr that

232

00:10:36,230 --> 00:10:34,480

concludes the npr portion of the event

233

00:10:43,110 --> 00:10:36,240

please stand by for a voice check from

234

00:10:49,269 --> 00:10:47,190

station this is nbc how do you hear me

235

00:10:53,350 --> 00:10:49,279

captain scott we have you loud and clear

236

00:10:57,030 --> 00:10:55,670

loud thank you scott kale good to see

237

00:10:59,750 --> 00:10:57,040

both of you

238

00:11:02,069 --> 00:10:59,760

scott you've been up there 193 days now

239

00:11:04,150 --> 00:11:02,079

this is not an endurance contest

240

00:11:05,910 --> 00:11:04,160

this is science i know a lot of

241

00:11:07,509 --> 00:11:05,920

measurements are being taken between

242

00:11:09,190 --> 00:11:07,519

where you are and your brother mark on

243

00:11:11,269 --> 00:11:09,200

the ground but what does your body tell

244

00:11:15,110 --> 00:11:11,279

you about the effects of being in space

245

00:11:19,110 --> 00:11:17,190

you know physically i i feel pretty good

246

00:11:21,269 --> 00:11:19,120

and we we have a good uh

247

00:11:23,430 --> 00:11:21,279

you know group of people down on the

248

00:11:25,590 --> 00:11:23,440

ground that watch over us uh

249

00:11:28,710 --> 00:11:25,600

you know we have good exercise and and

250

00:11:29,750 --> 00:11:28,720

uh protocols and nutrition up here

251

00:11:35,750 --> 00:11:29,760

so

252

00:11:37,670 --> 00:11:35,760

how i feel physically i feel fine

253

00:11:40,310 --> 00:11:37,680

but there's a lot of research that is

254

00:11:42,310 --> 00:11:40,320

being done on us that we can't

255

00:11:44,470 --> 00:11:42,320

you know we don't feel and and see those

256

00:11:46,630 --> 00:11:44,480

effects the stuff like you mentioned

257

00:11:48,949 --> 00:11:46,640

with my brother the the stuff that would

258

00:11:51,190 --> 00:11:48,959

be on our you know our genetics or you

259

00:11:55,670 --> 00:11:51,200

know bone loss effects on our vision but

260

00:12:00,069 --> 00:11:58,150

and mikhail do you and scott compare

261

00:12:01,910 --> 00:12:00,079

notes about how you're feeling and

262

00:12:20,629 --> 00:12:01,920

wondering if you're feeling the the same

263

00:12:25,030 --> 00:12:23,110

actually we don't even have to compare

264

00:12:27,110 --> 00:12:25,040

that verbally we understand each other

265

00:12:28,550 --> 00:12:27,120

without words i understand

266

00:12:30,710 --> 00:12:28,560

scott

267

00:12:32,870 --> 00:12:30,720

very well i see how he's feeling and i

268

00:12:36,230 --> 00:12:32,880

totally agree

269

00:12:38,069 --> 00:12:36,240

with what scott has said

270

00:12:42,790 --> 00:12:38,079

and i believe everything goes very

271

00:12:47,110 --> 00:12:45,509

as far as our health is concerned as far

272

00:12:48,150 --> 00:12:47,120

as our psychological climate is

273

00:12:49,990 --> 00:12:48,160

concerned

274

00:12:52,629 --> 00:12:50,000

we are exercising

275

00:12:54,790 --> 00:12:52,639

twice a day it helps a lot and we're in

276

00:12:57,430 --> 00:12:54,800

great shape

277

00:12:58,870 --> 00:12:57,440

i would like to point out one more thing

278

00:13:02,389 --> 00:12:58,880

here

279

00:13:05,430 --> 00:13:02,399

on orbit we also have our own climate

280

00:13:07,110 --> 00:13:05,440

for example i'm tired and i'm not

281

00:13:10,470 --> 00:13:07,120

feeling well

282

00:13:14,790 --> 00:13:10,480

and i see that my colleagues are also

283

00:13:17,110 --> 00:13:14,800

feeling not so well so yes there is some

284

00:13:21,430 --> 00:13:17,120

common climate for all of us just like

285

00:13:25,509 --> 00:13:23,350

scott your brother mark wrote a terrific

286

00:13:27,269 --> 00:13:25,519

essay he's talking about life on the

287

00:13:29,509 --> 00:13:27,279

space station he says you wake up in an

288

00:13:31,990 --> 00:13:29,519

environment that is exactly the same as

289

00:13:34,870 --> 00:13:32,000

the day before it imagine being stuck in

290

00:13:37,590 --> 00:13:34,880

your office for 173 days and no way to

291

00:13:39,670 --> 00:13:37,600

go outside and with no up and no down

292

00:13:41,189 --> 00:13:39,680

and nothing ever changing and know

293

00:13:43,430 --> 00:13:41,199

you've got nearly six months to go

294

00:13:45,350 --> 00:13:43,440

before you can leave that's a pretty

295

00:13:47,750 --> 00:13:45,360

decimal description tell me where you

296

00:13:49,829 --> 00:13:47,760

are right now what you know how much

297

00:13:55,030 --> 00:13:49,839

freedom of movement do you have to just

298

00:14:00,069 --> 00:13:57,829

well um the space station is

299

00:14:00,949 --> 00:14:00,079

as far as where we are over the earth

300

00:14:03,269 --> 00:14:00,959

we're

301

00:14:04,870 --> 00:14:03,279

or above the atlantic ocean as far as

302

00:14:07,189 --> 00:14:04,880

where we are in the space station we're

303

00:14:10,150 --> 00:14:07,199

in the in the u.s laboratory module

304

00:14:11,670 --> 00:14:10,160

which is uh one of the main uh modules

305

00:14:14,069 --> 00:14:11,680

of the space station it's a science

306

00:14:15,670 --> 00:14:14,079

laboratory but it's also the

307

00:14:16,949 --> 00:14:15,680

kind of like the almost the bridge of

308

00:14:18,150 --> 00:14:16,959

the ship

309

00:14:20,949 --> 00:14:18,160

um

310

00:14:22,870 --> 00:14:20,959

for the space station at least on the us

311

00:14:24,790 --> 00:14:22,880

side of the space station but the

312

00:14:27,910 --> 00:14:24,800

station itself is like a you know about

313

00:14:30,069 --> 00:14:27,920

the size of a five-bedroom house we

314

00:14:32,550 --> 00:14:30,079

never feel like we could use more room

315

00:14:34,710 --> 00:14:32,560

it's very spacious it's got a lot of

316

00:14:37,189 --> 00:14:34,720

laboratories science laboratories on

317

00:14:39,829 --> 00:14:37,199

here so there's uh there's plenty of

318

00:14:43,110 --> 00:14:39,839

space for us as far as you know getting

319

00:14:46,069 --> 00:14:43,120

uh you know alone time we have these uh

320

00:14:48,389 --> 00:14:46,079

crew quarters so we can it's the size of

321

00:14:52,949 --> 00:14:48,399

like a phone booth so we can get some

322

00:14:57,990 --> 00:14:55,430

a couple of the supply resupply ships

323

00:15:00,310 --> 00:14:58,000

were lost on the way up to you was that

324

00:15:04,870 --> 00:15:00,320

disheartening and did it cause any major

325

00:15:09,189 --> 00:15:06,550

yeah so we had a

326

00:15:12,389 --> 00:15:09,199

you know a bad year um

327

00:15:14,949 --> 00:15:12,399

with regards to resupply we lost three

328

00:15:17,030 --> 00:15:14,959

cargo vehicles in the in the span of i

329

00:15:19,350 --> 00:15:17,040

guess about a year's time

330

00:15:21,509 --> 00:15:19,360

so you know on one hand it's it's

331

00:15:23,829 --> 00:15:21,519

unfortunate we lost a lot of you know

332

00:15:25,670 --> 00:15:23,839

science equipment and other supplies

333

00:15:27,269 --> 00:15:25,680

um you know at the same time i think it

334

00:15:28,389 --> 00:15:27,279

demonstrates the resiliency of our

335

00:15:31,269 --> 00:15:28,399

program

336

00:15:32,150 --> 00:15:31,279

um where we we can lose that

337

00:15:34,949 --> 00:15:32,160

uh

338

00:15:35,749 --> 00:15:34,959

type of hardware and and still continue

339

00:15:37,430 --> 00:15:35,759

on

340

00:15:39,269 --> 00:15:37,440

we have a certain level of redundancy

341

00:15:41,749 --> 00:15:39,279

between you know the us and the russian

342

00:15:43,590 --> 00:15:41,759

system so that helps a lot and i think

343

00:15:44,949 --> 00:15:43,600

it just you know shows the the

344

00:15:47,590 --> 00:15:44,959

flexibility and like i said the

345

00:15:49,749 --> 00:15:47,600

resiliency of our our program so

346

00:15:52,710 --> 00:15:49,759

yeah it kind of stinks especially for

347

00:15:54,310 --> 00:15:52,720

the the people that you know

348

00:15:56,150 --> 00:15:54,320

some of this is their scientific

349

00:15:57,829 --> 00:15:56,160

experiments and they're going to have to

350

00:15:58,790 --> 00:15:57,839

you know rebuild them and re-fly them

351
00:16:00,310 --> 00:15:58,800
again

352
00:16:01,749 --> 00:16:00,320
you know for us i think it's a little

353
00:16:05,749 --> 00:16:01,759
bit more

354
00:16:09,749 --> 00:16:07,430
and i'm looking off to your right i see

355
00:16:11,030 --> 00:16:09,759
a couple of big long lens cameras there

356
00:16:12,710 --> 00:16:11,040
are those the ones you've been sending

357
00:16:14,550 --> 00:16:12,720
back these terrific pictures of i've

358
00:16:18,230 --> 00:16:14,560
seen your your pictures of sports

359
00:16:19,910 --> 00:16:18,240
stadiums of of hurricanes uh how

360
00:16:24,230 --> 00:16:19,920
much is that a hobby and how much is

361
00:16:29,590 --> 00:16:27,189
um you know it's it's i think it's

362
00:16:31,350 --> 00:16:29,600
some of it is science um you know there

363
00:16:33,509 --> 00:16:31,360

are certain experiments that we do when

364

00:16:36,550 --> 00:16:33,519

we take pictures of the hurricanes to to

365

00:16:39,749 --> 00:16:36,560

see if you can judge um you know the

366

00:16:41,430 --> 00:16:39,759

speed and the the uh

367

00:16:43,430 --> 00:16:41,440

um

368

00:16:46,150 --> 00:16:43,440

the the danger of a hurricane without

369

00:16:48,550 --> 00:16:46,160

actually having to send a uh an airplane

370

00:16:50,949 --> 00:16:48,560

into the eye of the storm like like we

371

00:16:53,990 --> 00:16:50,959

often do um

372

00:16:56,629 --> 00:16:54,000

you know some of it is is hobby and and

373

00:16:58,710 --> 00:16:56,639

more like uh you know public outreach

374

00:17:01,350 --> 00:16:58,720

kind of things but uh you know i do it

375

00:17:03,430 --> 00:17:01,360

because because i enjoy it uh it's not

376

00:17:04,470 --> 00:17:03,440

um you know most of the stuff i do isn't

377

00:17:06,630 --> 00:17:04,480

required

378

00:17:11,590 --> 00:17:06,640

but hopefully it has

379

00:17:15,590 --> 00:17:13,350

part of what the two of you are doing is

380

00:17:17,829 --> 00:17:15,600

demonstrating what the effects would be

381

00:17:20,390 --> 00:17:17,839

on an astronaut to travel on a mars

382

00:17:23,189 --> 00:17:20,400

mission i saw a picture of of you all

383

00:17:25,669 --> 00:17:23,199

watching the movie the martian and i'd

384

00:17:30,830 --> 00:17:25,679

like both of your opinions how real was

385

00:17:35,669 --> 00:17:33,190

it um

386

00:17:38,470 --> 00:17:35,679

there was a lot of uh stuff in the movie

387

00:17:40,710 --> 00:17:38,480

that was uh very realistic and i think

388

00:17:43,190 --> 00:17:40,720

part of that was because nasa

389

00:17:45,190 --> 00:17:43,200

um you know helped the production

390

00:17:47,909 --> 00:17:45,200

company in making the movie so a lot of

391

00:17:49,750 --> 00:17:47,919

the hardware and procedures terminology

392

00:17:52,070 --> 00:17:49,760

and stuff you know one of my colleagues

393

00:17:54,150 --> 00:17:52,080

said one of the when he was uh when the

394

00:17:55,669 --> 00:17:54,160

matt damon character was looking at his

395

00:17:56,789 --> 00:17:55,679

menu it was actually the food that we

396

00:17:59,029 --> 00:17:56,799

have up here

397

00:18:00,710 --> 00:17:59,039

and we it was the same stuff so there

398

00:18:03,190 --> 00:18:00,720

was a lot of realism

399

00:18:07,669 --> 00:18:04,710

so

400

00:18:09,830 --> 00:18:07,679

you know it was uh it was great to

401
00:18:11,430 --> 00:18:09,840
to watch it up here it's great to watch

402
00:18:13,029 --> 00:18:11,440
space movies up here you might not think

403
00:18:15,110 --> 00:18:13,039
so

404
00:18:16,630 --> 00:18:15,120
almost counter-intuitive to

405
00:18:17,830 --> 00:18:16,640
think you we would enjoy watching a

406
00:18:20,230 --> 00:18:17,840
movie about

407
00:18:22,070 --> 00:18:20,240
like the movie gravity for instance or

408
00:18:26,870 --> 00:18:22,080
you know about a guy being stuck on mars

409
00:18:30,470 --> 00:18:28,630
and mikhail what did you think of it and

410
00:18:32,870 --> 00:18:30,480
did it make you wonder whether we will

411
00:18:48,870 --> 00:18:32,880
see a trip to mars a man trip in your

412
00:18:53,909 --> 00:18:51,350
i liked the movie very much and i agree

413
00:18:56,710 --> 00:18:53,919

with scott it was very realistic a lot

414

00:18:59,750 --> 00:18:56,720

of true details

415

00:19:01,350 --> 00:18:59,760

all technical details were very very

416

00:19:04,310 --> 00:19:01,360

close to reality

417

00:19:06,150 --> 00:19:04,320

it was a very well made movie

418

00:19:08,789 --> 00:19:06,160

and as far as the

419

00:19:10,630 --> 00:19:08,799

flight to mars is concerned

420

00:19:13,029 --> 00:19:10,640

i believe that during our lifetime we

421

00:19:14,950 --> 00:19:13,039

will be able to witness it

422

00:19:16,710 --> 00:19:14,960

maybe it won't happen as soon as we

423

00:19:19,669 --> 00:19:16,720

would like it to happen but it will

424

00:19:23,590 --> 00:19:21,190

all right maybe you can take matt damon

425

00:19:26,230 --> 00:19:23,600

with you gentlemen thank you very much

426

00:19:27,990 --> 00:19:26,240

for your time and continued

427

00:19:31,830 --> 00:19:28,000

safe travels in space hope to talk to

428

00:19:31,840 --> 00:19:37,110

yeah our pleasure thanks for your time

429

00:19:41,669 --> 00:19:38,950

station this is houston acr that

430

00:19:44,150 --> 00:19:41,679

concludes the event thank you