

Google+



1
00:00:15,160 --> 00:00:12,640
oh hello I'm Johnny Burke NASA social

2
00:00:17,830 --> 00:00:15,170
media manager thank you for joining us

3
00:00:20,050 --> 00:00:17,840
today science fiction has inspired many

4
00:00:22,540 --> 00:00:20,060
of us a NASA to pursue careers in space

5
00:00:24,490 --> 00:00:22,550
exploration and today aboard the

6
00:00:27,580 --> 00:00:24,500
International Space Station traveling

7
00:00:29,440 --> 00:00:27,590
240 miles above the earth it's 17,500

8
00:00:32,080 --> 00:00:29,450
miles per hour we're helping to make

9
00:00:33,760 --> 00:00:32,090
science fiction a reality joining us

10
00:00:37,540 --> 00:00:33,770
today on the Hangout to discuss this

11
00:00:39,670 --> 00:00:37,550
topic our astronauts Mike Fink and Chell

12
00:00:41,980 --> 00:00:39,680
Linton at NASA's Johnson Space Center

13
00:00:43,360 --> 00:00:41,990

Houston Mike is a veteran of three space

14

00:00:45,820 --> 00:00:43,370

flights including the commander of

15

00:00:47,350 --> 00:00:45,830

expedition 18 and she'll his

16

00:00:52,840 --> 00:00:47,360

communications first space flight and

17

00:00:55,630 --> 00:00:52,850

expedition 44 in 2015 also joining us

18

00:01:00,940 --> 00:00:55,640

from the film star trek into darkness is

19

00:01:05,670 --> 00:01:00,950

writer producer Damon Linda and stars

20

00:01:09,940 --> 00:01:05,680

from the film Chris Pine Alice Eve and

21

00:01:13,419 --> 00:01:09,950

John Cho we're also fortunate to have

22

00:01:16,840 --> 00:01:13,429

with a state two museums we have the

23

00:01:17,459 --> 00:01:16,850

Intrepid Sea Air and Space Museum in New

24

00:01:20,020 --> 00:01:17,469

York

25

00:01:23,440 --> 00:01:20,030

the intrepid is the home of Space

26

00:01:26,590 --> 00:01:23,450

Shuttle enterprise and also with us is

27

00:01:29,099 --> 00:01:26,600

the Smithsonian's National Air and Space

28

00:01:31,809 --> 00:01:29,109

Museum in Washington DC

29

00:01:34,809 --> 00:01:31,819

at the Smithsonian they have a model of

30

00:01:38,529 --> 00:01:34,819

the starsha Starship Enterprise from the

31

00:01:39,700 --> 00:01:38,539

original classic Star Trek series we're

32

00:01:42,249 --> 00:01:39,710

now going to I'm not going to toss it

33

00:01:44,069 --> 00:01:42,259

over to Damon Lindelof with star trek

34

00:01:47,050 --> 00:01:44,079

into darkness Damon

35

00:01:50,069 --> 00:01:47,060

hi everybody thank you thank you John

36

00:01:52,870 --> 00:01:50,079

it's really wonderful to be here we've

37

00:01:56,319 --> 00:01:52,880

the movie is opening today we've just

38

00:01:58,169 --> 00:01:56,329

sort of conducted a buzz over the course

39

00:02:00,129 --> 00:01:58,179

of the entire world

40

00:02:02,679 --> 00:02:00,139

internationally starting in Australia

41

00:02:05,289 --> 00:02:02,689

across Europe finally culminating here

42

00:02:07,209 --> 00:02:05,299

in Los Angeles by New York now finally

43

00:02:10,029 --> 00:02:07,219

the final frontier we get to actually

44

00:02:12,130 --> 00:02:10,039

leave the planet to tacoma near tour for

45

00:02:14,140 --> 00:02:12,140

the day though of the opens its its

46

00:02:16,119 --> 00:02:14,150

wildly exciting we're also happy to be

47

00:02:18,789 --> 00:02:16,129

here with great regret

48

00:02:21,190 --> 00:02:18,799

unfortunately JJ could not be here today

49

00:02:21,720 --> 00:02:21,200

he is still out there selling the movie

50

00:02:24,600 --> 00:02:21,730

I think

51
00:02:27,660 --> 00:02:24,610
saw him handing tickets out on Hollywood

52
00:02:31,649 --> 00:02:27,670
Boulevard but he has recorded a special

53
00:02:33,630 --> 00:02:31,659
message any question for Michael and

54
00:02:35,430 --> 00:02:33,640
Chell that he desperately wanted

55
00:02:41,970 --> 00:02:35,440
answered so I believe that we have his

56
00:02:44,009 --> 00:02:41,980
question cued up to ask JJ Abrams hi

57
00:02:46,289 --> 00:02:44,019
it's a JJ Abrams I wish I could be there

58
00:02:49,860 --> 00:02:46,299
with you in person but of course I

59
00:02:52,979 --> 00:02:49,870
couldn't attend so I'm doing this very

60
00:02:53,430 --> 00:02:52,989
important question on video which is the

61
00:02:57,300 --> 00:02:53,440
following

62
00:02:59,220 --> 00:02:57,310
I talked to an astronaut once who told

63
00:03:01,500 --> 00:02:59,230

me that on one of his missions he

64

00:03:03,830 --> 00:03:01,510

actually did see something that was very

65

00:03:05,670 --> 00:03:03,840

strange that he couldn't explain it

66

00:03:08,099 --> 00:03:05,680

actually made him believe in

67

00:03:11,039 --> 00:03:08,109

extraterrestrial life and my question to

68

00:03:14,699 --> 00:03:11,049

you is have either of you ever seen

69

00:03:15,660 --> 00:03:14,709

anything that made you believe that or

70

00:03:18,180 --> 00:03:15,670

something that you couldn't explain

71

00:03:19,530 --> 00:03:18,190

couldn't understand that you didn't

72

00:03:22,069 --> 00:03:19,540

really necessarily report to the public

73

00:03:27,870 --> 00:03:22,079

but do you want to share with us now

74

00:03:29,640 --> 00:03:27,880

Thanks that was a great question from JJ

75

00:03:31,110 --> 00:03:29,650

and we get that question a lot we all

76

00:03:34,110 --> 00:03:31,120

want to know where we the only ones out

77

00:03:35,849 --> 00:03:34,120

there and Star Trek helps us imagine

78

00:03:37,379 --> 00:03:35,859

what it could be like if there were

79

00:03:41,699 --> 00:03:37,389

other creatures out there other people

80

00:03:44,879 --> 00:03:41,709

other species so I spent a whole year up

81

00:03:46,559 --> 00:03:44,889

in space 381 days but it was only 240

82

00:03:49,409 --> 00:03:46,569

miles up so that's not very far in

83

00:03:51,900 --> 00:03:49,419

cosmic terms so we think as we go

84

00:03:53,250 --> 00:03:51,910

farther out into the universe we might

85

00:03:55,199 --> 00:03:53,260

find something out there that we don't

86

00:03:58,050 --> 00:03:55,209

know about I've never seen anything

87

00:04:01,379 --> 00:03:58,060

maybe Chell will on his mission but I

88

00:04:02,729 --> 00:04:01,389

think that as we go farther out with the

89

00:04:05,759 --> 00:04:02,739

inspiration that we get from you guys

90

00:04:07,319 --> 00:04:05,769

making these great feats of imagination

91

00:04:09,509 --> 00:04:07,329

and excitement the movies that you make

92

00:04:13,830 --> 00:04:09,519

inspire us to be our best as human

93

00:04:16,020 --> 00:04:13,840

beings on planet earth what a what a

94

00:04:18,120 --> 00:04:16,030

fantastic answer yeah Mike can you

95

00:04:24,870 --> 00:04:18,130

confirm that you have not in fact been

96

00:04:28,530 --> 00:04:24,880

taken over by a little too polished

97

00:04:31,050 --> 00:04:28,540

but I've done this before and I'm a

98

00:04:34,350 --> 00:04:31,060

American human being who enjoys being

99

00:04:36,960 --> 00:04:34,360

part of our space program and and we all

100

00:04:38,700 --> 00:04:36,970

look up to you guys to inspire us honest

101

00:04:46,380 --> 00:04:38,710

and true oh wow now we know that

102

00:04:49,050 --> 00:04:46,390

something's wrong tickets yeah we can we

103

00:04:50,400 --> 00:04:49,060

can definitely arranged that the we're

104

00:04:52,940 --> 00:04:50,410

definitely gonna talk to you guys a

105

00:04:55,110 --> 00:04:52,950

little more we have a bunch of questions

106

00:04:57,270 --> 00:04:55,120

we're really looking forward to asking

107

00:05:00,360 --> 00:04:57,280

obviously we're gonna be talking to

108

00:05:02,640 --> 00:05:00,370

Chris up on the ISS in a moment but we

109

00:05:05,820 --> 00:05:02,650

have two questions from the Smithsonian

110

00:05:06,840 --> 00:05:05,830

National Museum yeah we have two a space

111

00:05:09,570 --> 00:05:06,850

station now I believe through the

112

00:05:13,860 --> 00:05:09,580

Smithsonian space we'll come back to

113

00:05:15,810 --> 00:05:13,870

them yeah let's go so are we ready to

114

00:05:18,750 --> 00:05:15,820

get are we ready to go to base Chris

115

00:05:22,050 --> 00:05:18,760

we're waiting for Houston

116

00:05:26,030 --> 00:05:22,060

oh that's very excitin are you ready for

117

00:05:33,510 --> 00:05:27,990

Houston station we're ready for the

118

00:05:35,580 --> 00:05:33,520

event control Houston please call

119

00:05:36,780 --> 00:05:35,590

station for a voice check station this

120

00:05:42,630 --> 00:05:36,790

is Johnny Murr with a Google+ Hangout

121

00:05:43,560 --> 00:05:42,640

how do you hear me loud and clear great

122

00:05:45,780 --> 00:05:43,570

to be with you today

123

00:05:47,430 --> 00:05:45,790

great thanks Chris we have with us Damon

124

00:05:53,610 --> 00:05:47,440

Lindelof with star trek into darkness

125

00:05:57,480 --> 00:05:53,620

I'm gonna toss over to him hello Chris

126

00:05:59,040 --> 00:05:57,490

I'm Damon one of the writers and I'll

127

00:06:01,980 --> 00:05:59,050

just act like this is a perfectly normal

128

00:06:04,800 --> 00:06:01,990

thing to be happening and producers of

129

00:06:08,700 --> 00:06:04,810

star trek into darkness we are literally

130

00:06:11,879 --> 00:06:08,710

tickled pink to be talking to you right

131

00:06:13,680 --> 00:06:11,889

now and I'll let my friends here

132

00:06:15,120 --> 00:06:13,690

introduce themselves but we've got some

133

00:06:17,129 --> 00:06:15,130

questions for you we're very excited to

134

00:06:26,129 --> 00:06:17,139

be here hey there Chris I'm Chris

135

00:06:28,650 --> 00:06:26,139

it's an incredible it's a such a trip

136

00:06:30,029 --> 00:06:28,660

thank you for joining us and I hope

137

00:06:43,710 --> 00:06:30,039

you're doing well and I can't wait to

138

00:06:45,450 --> 00:06:43,720

talk it I'm glad to be no I'm just gonna

139

00:06:48,180 --> 00:06:45,460

say I'm great to be it's great to be

140

00:06:51,000 --> 00:06:48,190

with all of you guys I watched the first

141

00:06:53,340 --> 00:06:51,010

30 minutes I was exercising this morning

142

00:06:55,170 --> 00:06:53,350

and I was riveted as you're racing

143

00:06:57,360 --> 00:06:55,180

through the woods and jumping off cliffs

144

00:06:59,879 --> 00:06:57,370

I won't spoil the rest of the movie for

145

00:07:08,460 --> 00:06:59,889

anybody that hasn't seen it but pretty

146

00:07:14,400 --> 00:07:08,470

cool scenes you know we have we have

147

00:07:16,830 --> 00:07:14,410

three devices a bicycle and a treadmill

148

00:07:18,570 --> 00:07:16,840

and then this big gigantic exercise

149

00:07:21,920 --> 00:07:18,580

machine called a red advanced resistive

150

00:07:23,700 --> 00:07:21,930

exercise device basically it's like a

151
00:07:25,950 --> 00:07:23,710
multi-function weight machine that we

152
00:07:27,450 --> 00:07:25,960
can put heavy loads on and do some

153
00:07:27,810 --> 00:07:27,460
squats and benchpress and that sort of

154
00:07:33,570 --> 00:07:27,820
thing

155
00:07:36,270 --> 00:07:33,580
and how long you up there for Chris I'm

156
00:07:38,610 --> 00:07:36,280
up here for first six months so that's a

157
00:07:41,310 --> 00:07:38,620
the duration that we do a Space Station

158
00:07:43,200 --> 00:07:41,320
and it's really from Sawyer's the Soyuz

159
00:07:46,140 --> 00:07:43,210
drives that that's our vehicle to get up

160
00:07:47,850 --> 00:07:46,150
here and there's three seats in the

161
00:07:49,830 --> 00:07:47,860
Soyuz and there's six people in the

162
00:07:51,810 --> 00:07:49,840
station so that so you need to Soyuz and

163
00:07:53,629 --> 00:07:51,820

we rotate out every three months so my

164

00:07:56,010 --> 00:07:53,639

buddy's just left a couple days ago and

165

00:07:58,320 --> 00:07:56,020

and my other buddies are about to launch

166

00:07:59,460 --> 00:07:58,330

here and a couple in a week or 10 two

167

00:08:03,330 --> 00:07:59,470

weeks oh yeah

168

00:08:06,149 --> 00:08:03,340

Chris please this is John Cho I play

169

00:08:07,170 --> 00:08:06,159

Sulu and just because I cannot believe

170

00:08:09,240 --> 00:08:07,180

this is real

171

00:08:10,980 --> 00:08:09,250

would you mind taking your hands off the

172

00:08:31,740 --> 00:08:10,990

microphone putting them behind your head

173

00:08:34,410 --> 00:08:31,750

and saying look ma no hands you can't

174

00:08:38,100 --> 00:08:34,420

drop the mic in space is what we just

175

00:08:40,920 --> 00:08:38,110

learned here Chris one of the questions

176

00:08:44,940 --> 00:08:40,930

that I think a lot of us Earthlings yes

177

00:08:48,570 --> 00:08:44,950

come on man come on seriously how can

178

00:08:49,950 --> 00:08:48,580

you decide to stand one of one of the

179

00:08:51,690 --> 00:08:49,960

questions oh that's a good question

180

00:08:53,940 --> 00:08:51,700

actually yes will you ask that again

181

00:09:01,320 --> 00:08:53,950

please how can you just decide to stand

182

00:09:03,870 --> 00:09:01,330

again well you mean stand here and

183

00:09:05,310 --> 00:09:03,880

orient myself this way as opposed to any

184

00:09:09,660 --> 00:09:05,320

other crazy direction that I want to be

185

00:09:11,880 --> 00:09:09,670

well it's a I think yeah I think part of

186

00:09:14,490 --> 00:09:11,890

it is because we spend it's a little bit

187

00:09:16,520 --> 00:09:14,500

of muscle memory we spend a lot of time

188

00:09:18,840 --> 00:09:16,530

and in Houston and places on earth

189

00:09:21,300 --> 00:09:18,850

training in these very modules and

190

00:09:23,940 --> 00:09:21,310

they're labeled with deck and overhead

191

00:09:27,420 --> 00:09:23,950

and port and starboard which is nautical

192

00:09:29,160 --> 00:09:27,430

for left and right and so we tend to

193

00:09:30,900 --> 00:09:29,170

orient ourselves in that direction but

194

00:09:32,790 --> 00:09:30,910

once you're up been up here for a couple

195

00:09:35,070 --> 00:09:32,800

weeks it really doesn't matter and I'm

196

00:09:38,880 --> 00:09:35,080

at that point now I can just go into any

197

00:09:41,040 --> 00:09:38,890

module in any orientation and and and

198

00:09:42,960 --> 00:09:41,050

find stuff now it's be a little

199

00:09:44,820 --> 00:09:42,970

disorienting for you if I was constantly

200

00:09:46,770 --> 00:09:44,830

upside down or twirling around so that's

201
00:09:52,140 --> 00:09:46,780
why I'm positioning my stuff so it looks

202
00:09:54,270 --> 00:09:52,150
normal for you as we talk so so Chris I

203
00:09:56,070 --> 00:09:54,280
think one of the one of the things that

204
00:09:59,870 --> 00:09:56,080
were fairly obsessed with down here on

205
00:10:03,180 --> 00:09:59,880
earth is is what you did outside the ISS

206
00:10:04,950 --> 00:10:03,190
this past week apparently well it was

207
00:10:07,800 --> 00:10:04,960
big news down here there was an ammonia

208
00:10:09,060 --> 00:10:07,810
leak can you just talk up in layman's

209
00:10:12,480 --> 00:10:09,070
terms because we're idiots

210
00:10:17,610 --> 00:10:12,490
a what what you did what happened up

211
00:10:22,180 --> 00:10:19,900
layman's terms is how I speak because

212
00:10:26,500 --> 00:10:22,190
I'm a fellow idiot so that's the kind of

213
00:10:28,660 --> 00:10:26,510

talk I need to speak in and and so it

214

00:10:31,180 --> 00:10:28,670

all happened very fairly quickly driven

215

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

by the fact that the Soyuz was undocking

216

00:10:35,560 --> 00:10:33,770

on Monday and you need two people to go

217

00:10:37,420 --> 00:10:35,570

out and do a spacewalk in a couple days

218

00:10:41,230 --> 00:10:37,430

Breyer I think it was Wednesday night

219

00:10:43,360 --> 00:10:41,240

perhaps or maybe even Thursday I forget

220

00:10:44,680 --> 00:10:43,370

the days it all blurs together but Pavel

221

00:10:46,870 --> 00:10:44,690

Vinogradov one of the Russians his

222

00:10:49,000 --> 00:10:46,880

sleeping quarters looks out the window

223

00:10:50,560 --> 00:10:49,010

his window looks right to this

224

00:10:53,530 --> 00:10:50,570

particular area and he happened to

225

00:10:55,390 --> 00:10:53,540

notice some unusual small small small

226
00:10:57,310 --> 00:10:55,400
flecks coming out and he came down and

227
00:10:59,530 --> 00:10:57,320
told something to us and sure enough we

228
00:11:01,900 --> 00:10:59,540
got to some big lenses and looked and

229
00:11:03,910 --> 00:11:01,910
saw that there was some type of leak

230
00:11:06,490 --> 00:11:03,920
conferred with the ground they shot they

231
00:11:09,340 --> 00:11:06,500
showed a very slow trend and a drop of

232
00:11:11,460 --> 00:11:09,350
the pressure so we decided it was a leak

233
00:11:14,590 --> 00:11:11,470
we went to bed on third Thursday night

234
00:11:16,270 --> 00:11:14,600
Tom and Chris and myself thinking

235
00:11:17,800 --> 00:11:16,280
there's no way that we'd ever do in a VA

236
00:11:19,990 --> 00:11:17,810
because it takes a couple weeks to get

237
00:11:22,810 --> 00:11:20,000
that done get all that preparation made

238
00:11:24,760 --> 00:11:22,820

it's not like you can rescue Spock from

239

00:11:26,320 --> 00:11:24,770

a volcano and push a button that doesn't

240

00:11:27,970 --> 00:11:26,330

happen up here where we can just go

241

00:11:31,600 --> 00:11:27,980

outside unfortunately it'd be kind of

242

00:11:33,310 --> 00:11:31,610

cool if it was but and then we put the

243

00:11:34,690 --> 00:11:33,320

spacesuits on got them ready to on

244

00:11:38,650 --> 00:11:34,700

Friday put the spacesuits on and

245

00:11:41,770 --> 00:11:38,660

Saturday went out and Tom and I just

246

00:11:43,810 --> 00:11:41,780

removed a box with a failed pump package

247

00:11:46,540 --> 00:11:43,820

and put another one in we got lucky and

248

00:11:49,300 --> 00:11:46,550

that the we think the leak was inside of

249

00:11:52,240 --> 00:11:49,310

this box that you can replace and not

250

00:11:54,280 --> 00:11:52,250

deep inside some bed embedded in some

251
00:11:57,100 --> 00:11:54,290
piping that we would have no access to

252
00:11:59,560 --> 00:11:57,110
so that's the story are you guys

253
00:12:02,890 --> 00:11:59,570
prepared for it are you trained to deal

254
00:12:04,360 --> 00:12:02,900
with all sorts of complications like

255
00:12:06,340 --> 00:12:04,370
when you're on the ground here training

256
00:12:09,190 --> 00:12:06,350
or you trained for that specifically are

257
00:12:15,730 --> 00:12:09,200
you just trained to be generally handy

258
00:12:18,910 --> 00:12:15,740
with space equipment space gear no you

259
00:12:21,940 --> 00:12:18,920
you lat you left but you left but that's

260
00:12:24,940 --> 00:12:21,950
a very good trade I think it's it's very

261
00:12:26,500 --> 00:12:24,950
helpful with to be had a garage tinker

262
00:12:27,760 --> 00:12:26,510
of a person if you're going to come up

263
00:12:30,040 --> 00:12:27,770

here in a space station so that's what

264

00:12:31,180 --> 00:12:30,050

we do all day long is turn bolts and

265

00:12:34,300 --> 00:12:31,190

assemble things and fix

266

00:12:35,950 --> 00:12:34,310

broken equipment it's hard to train

267

00:12:37,870 --> 00:12:35,960

specifically for that kind of stuff on

268

00:12:40,120 --> 00:12:37,880

the ground because how do you know

269

00:12:41,470 --> 00:12:40,130

what's gonna break which widget

270

00:12:45,220 --> 00:12:41,480

you really don't you just have to kind

271

00:12:47,020 --> 00:12:45,230

of have a generic sense of of how to of

272

00:12:49,710 --> 00:12:47,030

how things should run and fix stuff

273

00:12:51,880 --> 00:12:49,720

that's broken and then we have a really

274

00:12:54,520 --> 00:12:51,890

smart ground team that sends up

275

00:12:57,520 --> 00:12:54,530

procedures with real nice steps in

276

00:13:00,250 --> 00:12:57,530

pictures and and just so that you and I

277

00:13:01,930 --> 00:13:00,260

can do procedures like that what we do

278

00:13:04,020 --> 00:13:01,940

strain specifically for is emergencies

279

00:13:06,400 --> 00:13:04,030

but the big ones are a fire a

280

00:13:08,200 --> 00:13:06,410

depressurization if some meter I came

281

00:13:10,480 --> 00:13:08,210

and smacked the hole and we started

282

00:13:12,310 --> 00:13:10,490

losing air pressure or we have the

283

00:13:14,170 --> 00:13:12,320

ammonia that we just talked about if it

284

00:13:15,910 --> 00:13:14,180

leaked inside into the cabin then that's

285

00:13:17,500 --> 00:13:15,920

a big problem too so those are kind of

286

00:13:19,720 --> 00:13:17,510

our three big emergencies that we train

287

00:13:22,330 --> 00:13:19,730

for open / you should also watch out for

288

00:13:24,430 --> 00:13:22,340

Benedict Cumberbatch apparently he's

289

00:13:27,520 --> 00:13:24,440

very threatening but from from what I

290

00:13:30,520 --> 00:13:27,530

understand we now know man my

291

00:13:33,010 --> 00:13:30,530

understanding is that you have R is a

292

00:13:35,530 --> 00:13:33,020

the population of the ISS right now is

293

00:13:41,010 --> 00:13:35,540

yourself and to others and they are

294

00:13:44,050 --> 00:13:41,020

Russians is that correct that's right

295

00:13:47,170 --> 00:13:44,060

Pavel and Sasha we flew up in the Soyuz

296

00:13:48,880 --> 00:13:47,180

together at the end of of March there

297

00:13:52,060 --> 00:13:48,890

and we'll go home together

298

00:13:53,620 --> 00:13:52,070

in in September and and so we're a

299

00:13:55,120 --> 00:13:53,630

three-person crew we stay together the

300

00:13:57,580 --> 00:13:55,130

whole six months and then the other

301

00:13:59,800 --> 00:13:57,590

Soyuz just rotated out as I mentioned

302

00:14:01,360 --> 00:13:59,810

and one was coming up I got a question

303

00:14:04,060 --> 00:14:01,370

for one of you guys whoever wants the

304

00:14:05,170 --> 00:14:04,070

answer there's commercial companies

305

00:14:07,330 --> 00:14:05,180

coming online

306

00:14:09,250 --> 00:14:07,340

would you ever if money was not an

307

00:14:13,240 --> 00:14:09,260

object would you ever buy a ticket and

308

00:14:21,730 --> 00:14:13,250

come up and visit we'll see you on

309

00:14:24,160 --> 00:14:21,740

Friday okay very very good I just now -

310

00:14:25,660 --> 00:14:24,170

we have four sleeping quarters here in

311

00:14:27,610 --> 00:14:25,670

the US side of the space station there's

312

00:14:29,620 --> 00:14:27,620

two on the Russian side and there's two

313

00:14:32,320 --> 00:14:29,630

of Aitkin seas right now so whoever can

314

00:14:41,980 --> 00:14:32,330

rush to Iraq at first you got a place to

315

00:14:44,450 --> 00:14:41,990

sleep I have a question please do I just

316

00:14:45,680 --> 00:14:44,460

just this is dovetailing on

317

00:14:48,020 --> 00:14:45,690

Krista's question but I have a

318

00:14:51,080 --> 00:14:48,030

five-year-old son and if he tells me one

319

00:14:53,180 --> 00:14:51,090

day he wants to be an astronaut what

320

00:15:00,470 --> 00:14:53,190

classes should I tell him not to fall

321

00:15:02,270 --> 00:15:00,480

asleep during I think the class that

322

00:15:03,770 --> 00:15:02,280

teaches you how to be a nice person

323

00:15:05,210 --> 00:15:03,780

don't fall asleep in that one we don't

324

00:15:06,860 --> 00:15:05,220

want people that are jerks to come up

325

00:15:10,610 --> 00:15:06,870

here in Space Station all the rest of

326

00:15:12,950 --> 00:15:10,620

stuff we can train for you you were most

327

00:15:15,530 --> 00:15:12,960

certainly not asleep in that guy clearly

328

00:15:17,330 --> 00:15:15,540

one of the things that we were very

329

00:15:21,050 --> 00:15:17,340

excited about when we were looking over

330

00:15:23,480 --> 00:15:21,060

your very impressive bio is that you are

331

00:15:26,300 --> 00:15:23,490

a Navy SEAL and I think that a lot of

332

00:15:27,800 --> 00:15:26,310

people don't think of astronauts as

333

00:15:30,020 --> 00:15:27,810

having that kind of background can you

334

00:15:38,570 --> 00:15:30,030

talk just a little bit about what what

335

00:15:40,460 --> 00:15:38,580

your road up to the ISS was my road was

336

00:15:43,070 --> 00:15:40,470

through the water I guess you'd say I

337

00:15:44,690 --> 00:15:43,080

went to the Naval Academy and I decided

338

00:15:47,750 --> 00:15:44,700

to go in the SEAL Teams never really

339

00:15:52,490 --> 00:15:47,760

thought about life in space and I was

340

00:15:53,870 --> 00:15:52,500

intrigued by a astronaut the profession

341

00:15:55,370 --> 00:15:53,880

of astronaut but I never had thought it

342

00:15:59,630 --> 00:15:55,380

was something I would apply for or even

343

00:16:02,150 --> 00:15:59,640

do and then I was well in my career as a

344

00:16:04,850 --> 00:16:02,160

in the Navy SEAL Teams when I learned

345

00:16:06,860 --> 00:16:04,860

about another astronaut who was in the

346

00:16:08,600 --> 00:16:06,870

SEAL Teams bill Shepard he happened to

347

00:16:17,950 --> 00:16:08,610

be the commander of the first crew to

348

00:16:23,570 --> 00:16:21,050

it was through him and talking with him

349

00:16:25,070 --> 00:16:23,580

that I realized hey if he did it my

350

00:16:27,170 --> 00:16:25,080

background was kind of similar maybe I

351
00:16:30,140 --> 00:16:27,180
should apply and I applied one time and

352
00:16:32,510 --> 00:16:30,150
was not chosen and then applied to the

353
00:16:34,820 --> 00:16:32,520
astronaut office in for the class of

354
00:16:37,310 --> 00:16:34,830
2004 and was lucky enough to get picked

355
00:16:39,380 --> 00:16:37,320
but we have all kind of different

356
00:16:42,380 --> 00:16:39,390
backgrounds as astronauts you know

357
00:16:44,930 --> 00:16:42,390
medical doctors of veterinarian military

358
00:16:48,350 --> 00:16:44,940
half was military about half is civilian

359
00:16:49,970 --> 00:16:48,360
and of the military guys most are pilots

360
00:16:52,850 --> 00:16:49,980
but there's a handful like me that did

361
00:16:54,560 --> 00:16:52,860
other things besides fly so anyone can

362
00:16:57,260 --> 00:16:54,570
apply just have to be a US citizen to

363
00:16:58,519 --> 00:16:57,270

fly for NASA the other countries have

364

00:17:02,160 --> 00:16:58,529

their own application

365

00:17:03,720 --> 00:17:02,170

can I ask a question Chris um I see that

366

00:17:06,120 --> 00:17:03,730

you have a wedding ring on and obviously

367

00:17:07,980 --> 00:17:06,130

you must have internet up there I guess

368

00:17:10,710 --> 00:17:07,990

for us to be talking to you something

369

00:17:16,559 --> 00:17:10,720

like that and do you get to FaceTime

370

00:17:19,860 --> 00:17:16,569

with your wife yeah as a matter of fact

371

00:17:23,519 --> 00:17:19,870

it's not actually FaceTime but on once a

372

00:17:27,269 --> 00:17:23,529

week we arrange for Mission Control sets

373

00:17:28,799 --> 00:17:27,279

up a family conference for us and it's

374

00:17:31,289 --> 00:17:28,809

routed through Mission Control and then

375

00:17:33,120 --> 00:17:31,299

comes comes up and it's with video and

376

00:17:35,879 --> 00:17:33,130

and just basically just like what we're

377

00:17:37,409 --> 00:17:35,889

doing right now except I'll see her on a

378

00:17:41,220 --> 00:17:37,419

computer screen and I'm just looking at

379

00:17:45,240 --> 00:17:41,230

a camera today and we have email of

380

00:17:47,070 --> 00:17:45,250

course but the email only synchronizes

381

00:17:50,580 --> 00:17:47,080

about four times a day

382

00:17:52,680 --> 00:17:50,590

so what we're used we're all used to

383

00:17:54,360 --> 00:17:52,690

with email where you hit Send and you

384

00:17:56,070 --> 00:17:54,370

look at your watch like what the heck

385

00:17:57,570 --> 00:17:56,080

it's two minutes of pass how come he

386

00:18:00,750 --> 00:17:57,580

hasn't answered me yet that doesn't

387

00:18:03,149 --> 00:18:00,760

happen it's it's sort of a time lag with

388

00:18:05,870 --> 00:18:03,159

it with the email but very thankful to

389

00:18:08,340 --> 00:18:05,880

have it and we don't have we have a

390

00:18:10,320 --> 00:18:08,350

internet we do have the ability to go to

391

00:18:13,529 --> 00:18:10,330

the internet but it's it's not super

392

00:18:15,480 --> 00:18:13,539

fast it's not super reliable so it's

393

00:18:17,970 --> 00:18:15,490

just really to get news and that sort of

394

00:18:19,409 --> 00:18:17,980

thing is what I use it for mostly we use

395

00:18:22,009 --> 00:18:19,419

the onboard station

396

00:18:24,389 --> 00:18:22,019

computers in essence is there only one

397

00:18:27,240 --> 00:18:24,399

internet console so you're like oh the

398

00:18:37,919 --> 00:18:27,250

Russians are on the internet again Jess

399

00:18:39,539 --> 00:18:37,929

for God's sake no no that we each have a

400

00:18:41,430 --> 00:18:39,549

computer we do have a computer it's not

401
00:18:43,019 --> 00:18:41,440
like those of those days we're back you

402
00:18:44,190 --> 00:18:43,029
know back when I was in college there

403
00:18:45,539 --> 00:18:44,200
was a payphone you know and you're

404
00:18:47,490 --> 00:18:45,549
sitting there cussing out the person

405
00:18:49,019 --> 00:18:47,500
who's talking to their girlfriend for

406
00:18:49,919 --> 00:18:49,029
two hours and hogging the whole payphone

407
00:18:55,230 --> 00:18:49,929
it's not like that

408
00:18:57,240 --> 00:18:55,240
I am curious from the pragmatic

409
00:18:58,950 --> 00:18:57,250
realities of what it is you do and you

410
00:19:00,720 --> 00:18:58,960
and you are up there you are living it

411
00:19:03,180 --> 00:19:00,730
this is your life that's your it's your

412
00:19:04,799 --> 00:19:03,190
vocation when you see science fiction

413
00:19:07,169 --> 00:19:04,809

movies particularly ones that involve

414

00:19:09,210 --> 00:19:07,179

space travel like ours is there a part

415

00:19:11,470 --> 00:19:09,220

of you that says like oh they're just

416

00:19:12,970 --> 00:19:11,480

getting it so wrong like what it

417

00:19:16,380 --> 00:19:12,980

what is the thing that kind of annoys

418

00:19:19,480 --> 00:19:16,390

you the most when you when you see our

419

00:19:22,150 --> 00:19:19,490

our our big-time Hollywood block the

420

00:19:31,030 --> 00:19:22,160

outfits other than the very very tight

421

00:19:33,310 --> 00:19:31,040

sexy outfits no comment there but the

422

00:19:38,200 --> 00:19:33,320

the thing that always does grab my

423

00:19:40,870 --> 00:19:38,210

attention it it the thing that does grab

424

00:19:42,610 --> 00:19:40,880

my attention is the everybody's always

425

00:19:44,980 --> 00:19:42,620

walking around and walking through

426

00:19:46,870 --> 00:19:44,990

walking on to the bridge of the ship or

427

00:19:49,890 --> 00:19:46,880

things like that and and it's probably

428

00:19:51,820 --> 00:19:49,900

hard hard to make that in a movie we're

429

00:19:55,960 --> 00:19:51,830

technically how would you make everybody

430

00:19:57,640 --> 00:19:55,970

float so I understand but it'd be far

431

00:19:59,410 --> 00:19:57,650

more fun if you could because trust me

432

00:20:05,800 --> 00:19:59,420

it's a pretty cool thing to just be able

433

00:20:07,450 --> 00:20:05,810

to like do this anytime you want yeah I

434

00:20:10,780 --> 00:20:07,460

feel like we just have to keep talking

435

00:20:15,130 --> 00:20:10,790

but what we want to do is like make you

436

00:20:16,750 --> 00:20:15,140

do things Chris yeah yeah what do you

437

00:20:19,300 --> 00:20:16,760

guys spend most of your days do it what

438

00:20:22,810 --> 00:20:19,310

you have certain mission parameters for

439

00:20:28,150 --> 00:20:22,820

this tour in space is it experiments or

440

00:20:33,400 --> 00:20:28,160

is it what what is it exactly yeah

441

00:20:35,920 --> 00:20:33,410

that's a good question really I'm me my

442

00:20:38,170 --> 00:20:35,930

time that and all our crewmates time is

443

00:20:39,940 --> 00:20:38,180

something that the ground manages and

444

00:20:43,210 --> 00:20:39,950

the program managers and the decision

445

00:20:46,240 --> 00:20:43,220

makers really allocate our time as if it

446

00:20:47,920 --> 00:20:46,250

was a budget and and how we brought how

447

00:20:49,810 --> 00:20:47,930

that gets broken down there's lots of

448

00:20:52,270 --> 00:20:49,820

that goes into that but basically the

449

00:20:54,400 --> 00:20:52,280

things that we do are we maintain the

450

00:20:56,890 --> 00:20:54,410

space station we need the place to be

451
00:20:59,890 --> 00:20:56,900
functioning well so that it can support

452
00:21:02,110 --> 00:20:59,900
all the science that goes on but the

453
00:21:04,930 --> 00:21:02,120
main mission of the space station is is

454
00:21:07,900 --> 00:21:04,940
science it's a national it's a research

455
00:21:10,600 --> 00:21:07,910
laboratory and so that's our number one

456
00:21:13,750 --> 00:21:10,610
thing is is the ability to execute these

457
00:21:15,130 --> 00:21:13,760
experiments now I already described to

458
00:21:17,880 --> 00:21:15,140
you that we astronauts come in all

459
00:21:21,640 --> 00:21:17,890
shapes and sizes and all of us are not

460
00:21:25,510 --> 00:21:21,650
really research scientists ourselves I

461
00:21:29,290 --> 00:21:25,520
am not so so what we do is we

462
00:21:31,900 --> 00:21:29,300
as subjects or we implement the the

463
00:21:34,570 --> 00:21:31,910

procedure the the experiment that and

464

00:21:36,700 --> 00:21:34,580

usually the principal investigator the

465

00:21:38,920 --> 00:21:36,710

actual scientist is on the other end of

466

00:21:40,480 --> 00:21:38,930

the radio and with a video we have a

467

00:21:42,790 --> 00:21:40,490

video camera overlooking our shoulder

468

00:21:45,010 --> 00:21:42,800

and we'll be doing the things with that

469

00:21:49,500 --> 00:21:45,020

scientist to give him the best he or she

470

00:21:54,280 --> 00:21:52,480

sorry I apologize a slightly more

471

00:21:56,530 --> 00:21:54,290

philosophical question you know one of

472

00:21:59,530 --> 00:21:56,540

the things that I like about do you

473

00:22:01,870 --> 00:21:59,540

believe in free will yeah one of the

474

00:22:04,260 --> 00:22:01,880

things I like about Star Trek is that it

475

00:22:07,210 --> 00:22:04,270

has kind of an optimistic view of our

476
00:22:08,770 --> 00:22:07,220
species that were you know in the future

477
00:22:12,070 --> 00:22:08,780
our fleet is not a military organization

478
00:22:14,440 --> 00:22:12,080
it's a scientific organization and I was

479
00:22:17,770 --> 00:22:14,450
wondering being an astronaut does it

480
00:22:24,610 --> 00:22:17,780
make you feel optimistic or pessimistic

481
00:22:28,960 --> 00:22:24,620
about the future of our species good

482
00:22:32,020 --> 00:22:28,970
question for me it's optimism when when

483
00:22:34,480 --> 00:22:32,030
when I look out the window and you're

484
00:22:37,330 --> 00:22:34,490
looking down at our beautiful planet you

485
00:22:39,220 --> 00:22:37,340
see the beautiful blues of the ocean and

486
00:22:41,560 --> 00:22:39,230
the white clouds and white mountaintops

487
00:22:44,080 --> 00:22:41,570
and browns and greens of the of the of

488
00:22:45,730 --> 00:22:44,090

the land and there's no borders down

489

00:22:48,820 --> 00:22:45,740

there you can't see like a little yellow

490

00:22:50,830 --> 00:22:48,830

line painted on the on the green part it

491

00:22:53,200 --> 00:22:50,840

just looks like a big peaceful place and

492

00:22:54,910 --> 00:22:53,210

you know that there's traffic jams in LA

493

00:22:57,130 --> 00:22:54,920

and you know that there's problems in

494

00:22:59,800 --> 00:22:57,140

Kabul in all these different places

495

00:23:01,510 --> 00:22:59,810

around the country not to signal those

496

00:23:03,310 --> 00:23:01,520

places out but I mean around the world

497

00:23:07,510 --> 00:23:03,320

but you know what I mean

498

00:23:09,190 --> 00:23:07,520

and and when you see that all our planet

499

00:23:12,100 --> 00:23:09,200

from this perspective it's just such a

500

00:23:14,560 --> 00:23:12,110

peaceful tranquil looking location and

501

00:23:18,370 --> 00:23:14,570

it's our home it's our spaceship as a

502

00:23:21,490 --> 00:23:18,380

whole and it makes me reflect on how

503

00:23:25,300 --> 00:23:21,500

thankful I am to have it and that I hope

504

00:23:27,130 --> 00:23:25,310

that we take care of it I wish that

505

00:23:29,500 --> 00:23:27,140

every everybody could have that

506

00:23:31,900 --> 00:23:29,510

experience but just hearing you talk

507

00:23:34,000 --> 00:23:31,910

about it having had it I think that I

508

00:23:35,950 --> 00:23:34,010

speak for everyone watching that's

509

00:23:37,390 --> 00:23:35,960

incredibly meaningful I know we only

510

00:23:39,430 --> 00:23:37,400

have time for a couple more questions

511

00:23:42,220 --> 00:23:39,440

and I did want to get

512

00:23:43,509 --> 00:23:42,230

from from Google+ and this is I

513

00:23:47,320 --> 00:23:43,519

apologize if I've mispronounced your

514

00:23:50,049 --> 00:23:47,330

name Carlos Nazareno asks and this is

515

00:23:52,600 --> 00:23:50,059

very serious what happens when you

516

00:24:02,980 --> 00:23:52,610

sneeze while inside your space suit on a

517

00:24:05,680 --> 00:24:02,990

spacewalk no-cut Carlos Carlos is

518

00:24:08,169 --> 00:24:05,690

obviously a practical guy because what

519

00:24:10,930 --> 00:24:08,179

your ability to see has to do with how

520

00:24:12,310 --> 00:24:10,940

clear that visor is and we wipe it off

521

00:24:13,899 --> 00:24:12,320

and make sure it's nice and clean before

522

00:24:16,629 --> 00:24:13,909

we put it on but once the help that

523

00:24:18,700 --> 00:24:16,639

helmet goes on any schmutz that gets on

524

00:24:22,990 --> 00:24:18,710

there is just an impediment to your

525

00:24:24,430 --> 00:24:23,000

ability to see clearly so and in reality

526

00:24:25,810 --> 00:24:24,440

what you do is you kind of just tilt

527

00:24:28,930 --> 00:24:25,820

your nose down underneath the lid

528

00:24:30,940 --> 00:24:28,940

underneath the neck ring and sneeze it

529

00:24:36,570 --> 00:24:30,950

schmutz a technical term is that a NASA

530

00:24:41,440 --> 00:24:40,180

you know it it probably is an acronym if

531

00:24:43,029 --> 00:24:41,450

you look it up I'm sure there's a

532

00:24:45,639 --> 00:24:43,039

million NASA acronyms I don't know em

533

00:24:47,919 --> 00:24:45,649

all but my ocular it's a it's a

534

00:24:49,930 --> 00:24:47,929

non-technical term I think that was the

535

00:24:57,519 --> 00:24:49,940

original line from Apollo 13 houston we

536

00:24:58,930 --> 00:24:57,529

have the same Marcus but um any of you

537

00:25:00,100 --> 00:24:58,940

guys have any other questions for Chris

538

00:25:01,749 --> 00:25:00,110

because I know we're about to lose him

539

00:25:03,430 --> 00:25:01,759

in a minute and I don't know when the

540

00:25:05,320 --> 00:25:03,440

next time we're gonna get to have an

541

00:25:23,649 --> 00:25:05,330

experience like this is going is going

542

00:25:26,019 --> 00:25:23,659

to roll around let me just say this it's

543

00:25:27,669 --> 00:25:26,029

it's been a it's been a real treat been

544

00:25:30,340 --> 00:25:27,679

fun to be talking with you guys today I

545

00:25:32,259 --> 00:25:30,350

best of luck with though I'm sure I've

546

00:25:35,409 --> 00:25:32,269

never been part of what's involved with

547

00:25:38,139 --> 00:25:35,419

the the the opening of a movie of this

548

00:25:39,460 --> 00:25:38,149

size or any of any size really but what

549

00:25:42,039 --> 00:25:39,470

you guys must be going through these

550

00:25:43,779 --> 00:25:42,049

weeks hectic schedule hectic schedule

551
00:25:46,330 --> 00:25:43,789
and all that so thanks for taking time

552
00:25:47,950 --> 00:25:46,340
out of your day to come aboard the space

553
00:25:49,570 --> 00:25:47,960
station you're welcome here anytime and

554
00:25:51,789 --> 00:25:49,580
like I said we got to open beds the

555
00:25:53,110 --> 00:25:51,799
first two here get them I think that I

556
00:25:55,240 --> 00:25:53,120
speak for JJ when I say

557
00:25:58,000 --> 00:25:55,250
you have an open invitation to be in

558
00:26:00,490 --> 00:25:58,010
Star Trek 3 she works it enough to make

559
00:26:02,799 --> 00:26:00,500
it we would we would be honored to have

560
00:26:06,970 --> 00:26:02,809
you and you obviously might can tell

561
00:26:08,950 --> 00:26:06,980
your colleagues make cameos running in

562
00:26:11,020 --> 00:26:08,960
whatever sort of silly scenarios we

563
00:26:13,540 --> 00:26:11,030

construct to the next adventure maybe

564

00:26:19,150 --> 00:26:13,550

you could class up the joint a bit we're

565

00:26:21,370 --> 00:26:19,160

really grateful for your time yeah my

566

00:26:22,840 --> 00:26:21,380

pleasure JJ I particularly like that

567

00:26:24,730 --> 00:26:22,850

opening scene when they dove off the

568

00:26:26,799 --> 00:26:24,740

cliff and then submerged to themselves

569

00:26:28,240 --> 00:26:26,809

and to the to the ship I love that

570

00:26:30,340 --> 00:26:28,250

because that's what I did in my previous

571

00:26:32,470 --> 00:26:30,350

life I drove underwater vehicles so I've

572

00:26:34,030 --> 00:26:32,480

haven't jumped off a cliff that high but

573

00:26:36,610 --> 00:26:34,040

I've definitely gone from the land into

574

00:26:40,299 --> 00:26:36,620

the water and gotten in a sub so great

575

00:26:42,160 --> 00:26:40,309

scene yeah Chris actually did that I was

576

00:26:43,480 --> 00:26:42,170

not a stunt as if there's only one way

577

00:26:45,790 --> 00:26:43,490

to get a shot are you gonna are you

578

00:26:47,799 --> 00:26:45,800

gonna go back to after your astronaut

579

00:26:54,549 --> 00:26:47,809

too dumb are you gonna go back to being

580

00:27:00,160 --> 00:26:54,559

a Navy SEAL no no I don't think so

581

00:27:02,890 --> 00:27:00,170

I'm 43 which in in seal terms is old I

582

00:27:06,400 --> 00:27:02,900

don't think I'm old but I am so there's

583

00:27:11,169 --> 00:27:09,790

well I I we we disagree there's yeah

584

00:27:13,030 --> 00:27:11,179

there's there's more than nothing for

585

00:27:16,090 --> 00:27:13,040

you as you so eloquently stated earlier

586

00:27:18,400 --> 00:27:16,100

so again thank you Chris for for

587

00:27:20,530 --> 00:27:18,410

spending this time with us do we have

588

00:27:22,299 --> 00:27:20,540

more time I'm unclear that you were

589

00:27:22,780 --> 00:27:22,309

saying a minute oh we have three minutes

590

00:27:24,730 --> 00:27:22,790

left

591

00:27:27,280 --> 00:27:24,740

oh my god that's very exciting we

592

00:27:31,890 --> 00:27:27,290

definitely you have to stay fit in space

593

00:27:35,500 --> 00:27:33,090

[Music]

594

00:27:38,470 --> 00:27:35,510

the short answer is no it's not because

595

00:27:40,840 --> 00:27:38,480

I'm a seal it's because staying fit is

596

00:27:43,360 --> 00:27:40,850

is the best way to keep our bones

597

00:27:45,430 --> 00:27:43,370

healthy when we get back what happens

598

00:27:47,410 --> 00:27:45,440

while you're up here on a long a long

599

00:27:50,350 --> 00:27:47,420

duration in space your bones get

600

00:27:52,060 --> 00:27:50,360

basically osteoporosis per OSIS and they

601
00:27:53,950 --> 00:27:52,070
get used to not having a load on them

602
00:27:56,200 --> 00:27:53,960
and so they say I'm done I don't need to

603
00:27:57,520 --> 00:27:56,210
work hard and if you don't put stress on

604
00:28:00,250 --> 00:27:57,530
your bones and you come back to earth

605
00:28:02,440 --> 00:28:00,260
like a chicken noodle sandwich so that's

606
00:28:03,820 --> 00:28:02,450
not a good thing so then when you come

607
00:28:05,050 --> 00:28:03,830
back to earth do you have to spend a

608
00:28:05,970 --> 00:28:05,060
certain amount of time and like a

609
00:28:07,710 --> 00:28:05,980
pressure

610
00:28:18,870 --> 00:28:07,720
zone to kind of gradually build your

611
00:28:21,240 --> 00:28:18,880
body back up to gravity or whatever we

612
00:28:24,750 --> 00:28:21,250
land and right right away we'll we'll

613
00:28:29,159 --> 00:28:24,760

start right away we'll start flying back

614

00:28:32,010 --> 00:28:29,169

to Houston and be at home about 20 24

615

00:28:34,650 --> 00:28:32,020

hours after after landing and the

616

00:28:36,870 --> 00:28:34,660

process is slow it takes on the order of

617

00:28:38,990 --> 00:28:36,880

the amount of time you're in space to

618

00:28:42,150 --> 00:28:39,000

totally 100% get back to your normal

619

00:28:44,760 --> 00:28:42,160

pre-launch self so several months it'll

620

00:28:47,460 --> 00:28:44,770

be a rehabilitation and you know

621

00:28:51,140 --> 00:28:47,470

building up the the stamina that you

622

00:28:54,630 --> 00:28:51,150

used to have I have a silly question

623

00:28:56,760 --> 00:28:54,640

when we finish a movie will we have

624

00:28:59,159 --> 00:28:56,770

mixed emotions leaving the set and

625

00:29:02,039 --> 00:28:59,169

coming home and not seeing each other

626

00:29:03,720 --> 00:29:02,049

and also relief you know seeing your

627

00:29:05,610 --> 00:29:03,730

family again regularly and all that

628

00:29:13,980 --> 00:29:05,620

stuff what's it like for you emotionally

629

00:29:17,490 --> 00:29:13,990

to come home after a stint like this my

630

00:29:19,080 --> 00:29:17,500

first my first mission was on a shuttle

631

00:29:21,260 --> 00:29:19,090

which was only two weeks long I've done

632

00:29:26,159 --> 00:29:21,270

lots of two-week training trips so that

633

00:29:28,740 --> 00:29:26,169

time difference was not a big deal in

634

00:29:31,140 --> 00:29:28,750

the military I have done. we my family

635

00:29:33,539 --> 00:29:31,150

and I have done for six-month

636

00:29:35,310 --> 00:29:33,549

deployments prior to this so it's not

637

00:29:38,159 --> 00:29:35,320

that we're experienced because nobody

638

00:29:39,810 --> 00:29:38,169

likes that separation but there's a nun

639

00:29:42,930 --> 00:29:39,820

really to be answer your question

640

00:29:44,820 --> 00:29:42,940

completely truthfully you have to as the

641

00:29:47,039 --> 00:29:44,830

person that's been away your family kind

642

00:29:48,810 --> 00:29:47,049

of get keeps on going and they get in a

643

00:29:50,789 --> 00:29:48,820

routine without you and you got to

644

00:29:53,760 --> 00:29:50,799

slowly inject yourself back into that

645

00:29:56,730 --> 00:29:53,770

equation so you in a nice way so you

646

00:29:59,400 --> 00:29:56,740

don't get rejected so to speak no I'm

647

00:30:02,549 --> 00:29:59,410

being a little joking but it's it's that

648

00:30:04,080 --> 00:30:02,559

it's a slow process to to get back and

649

00:30:07,440 --> 00:30:04,090

but it's definitely one that we can't

650

00:30:09,270 --> 00:30:07,450

wait to do also well Chris I have a

651
00:30:11,909 --> 00:30:09,280
six-year-old son and when I leave for

652
00:30:13,080 --> 00:30:11,919
work he I say I'm going to I'm going to

653
00:30:14,430 --> 00:30:13,090
work today I'm going to make up stories

654
00:30:16,140 --> 00:30:14,440
I'm going to make movies and he's like

655
00:30:18,000 --> 00:30:16,150
great have a good day this morning I

656
00:30:19,590 --> 00:30:18,010
left and said I'm going to talk to a

657
00:30:23,010 --> 00:30:19,600
real astronaut up in

658
00:30:26,010 --> 00:30:23,020
face and he said awesome so thank you

659
00:30:27,960 --> 00:30:26,020
for giving us this experience I think my

660
00:30:33,659 --> 00:30:27,970
son probably echoes the feelings of

661
00:30:35,549 --> 00:30:33,669
everybody watching this chat let me show

662
00:30:39,480 --> 00:30:35,559
you one share one story about mice my

663
00:30:41,669 --> 00:30:39,490

son was five when I came to NASA and the

664

00:30:43,110 --> 00:30:41,679

very first day I went to work and what

665

00:30:45,029 --> 00:30:43,120

do you do the first time the first day

666

00:30:47,880 --> 00:30:45,039

of any job you get your badge you learn

667

00:30:49,500 --> 00:30:47,890

where to park you go talk to the IT guy

668

00:30:51,360 --> 00:30:49,510

and get your computer password that's

669

00:30:53,340 --> 00:30:51,370

what I my day was like on day one I came

670

00:30:56,120 --> 00:30:53,350

home and my son met me at the door and

671

00:30:58,830 --> 00:30:56,130

said did you go to the moon today dad no

672

00:31:07,640 --> 00:30:58,840

son asked me on when's ask me on

673

00:31:09,409 --> 00:31:07,650

Wednesday cool beans are we are we

674

00:31:11,820 --> 00:31:09,419

losing Chris or

675

00:31:13,200 --> 00:31:11,830

just I just love the idea that there's

676

00:31:16,140 --> 00:31:13,210

somebody talking in my ear right now

677

00:31:19,020 --> 00:31:16,150

it's so John Dewey station this is

678

00:31:43,049 --> 00:31:19,030

Houston ACR thank you that concludes our

679

00:31:46,289 --> 00:31:43,059

event let's just absorb the awesome on a

680

00:31:48,210 --> 00:31:46,299

second I feel I feel a little bad for

681

00:31:52,919 --> 00:31:48,220

you now Mike and shale because you can't

682

00:31:56,250 --> 00:31:52,929

float around but but we do have I think

683

00:31:57,810 --> 00:31:56,260

now that we probably can go to the to

684

00:32:00,659 --> 00:31:57,820

the Smithsonian and get some questions

685

00:32:01,529 --> 00:32:00,669

from there are we are we good to go this

686

00:32:06,299 --> 00:32:01,539

is for you now

687

00:32:09,419 --> 00:32:06,309

all right hi everybody I'm Jessica how

688

00:32:11,549 --> 00:32:09,429

are you awesome how are you Jessica I'm

689

00:32:19,380 --> 00:32:11,559

doing okay yeah I like your little

690

00:32:21,659 --> 00:32:19,390

Enterprise back there some wheels all

691

00:32:22,740 --> 00:32:21,669

right I am Jessica tozer with armed with

692

00:32:24,240 --> 00:32:22,750

science the Department of Defense

693

00:32:26,640 --> 00:32:24,250

science blog and I have a question for

694

00:32:28,289 --> 00:32:26,650

the astronauts I want to know what type

695

00:32:30,539 --> 00:32:28,299

of science fiction technology you want

696

00:32:33,390 --> 00:32:30,549

to see actualized or have you seen

697

00:32:37,320 --> 00:32:35,520

well that's a that's a neat question I

698

00:32:39,210 --> 00:32:37,330

think that's one of the real fun things

699

00:32:41,850 --> 00:32:39,220

about these movies and science fiction

700

00:32:43,710 --> 00:32:41,860

is general it's just that opportunity to

701
00:32:45,299 --> 00:32:43,720
imagine what the future could be like

702
00:32:47,360 --> 00:32:45,309
and what technology is going to be like

703
00:32:49,230 --> 00:32:47,370
and we're really kind of living in that

704
00:32:51,540 --> 00:32:49,240
experience right now I mean we've had

705
00:32:54,870 --> 00:32:51,550
people living in space since 2001 a

706
00:32:57,720 --> 00:32:54,880
constant human presence since 2001 and

707
00:32:59,880 --> 00:32:57,730
just amazing technologies really spun

708
00:33:02,160 --> 00:32:59,890
spun off from the space program as a

709
00:33:04,110 --> 00:33:02,170
result I'm a physician by training so

710
00:33:05,880 --> 00:33:04,120
I'm really looking forward to a medical

711
00:33:08,130 --> 00:33:05,890
tricorder it would be great to just kind

712
00:33:11,250 --> 00:33:08,140
of wait for somebody and have the

713
00:33:14,310 --> 00:33:11,260

tricorder telling me what's going on I'd

714

00:33:16,590 --> 00:33:14,320

like to see a work drive after we can

715

00:33:18,240 --> 00:33:16,600

get away and and travel the big part of

716

00:33:21,630 --> 00:33:18,250

the universe the better I think

717

00:33:23,520 --> 00:33:21,640

and every time we make good investments

718

00:33:25,560 --> 00:33:23,530

in space we get better technology and

719

00:33:33,419 --> 00:33:25,570

better life here on planet earth so when

720

00:33:34,650 --> 00:33:33,429

we make a couple calls for you do we do

721

00:33:35,540 --> 00:33:34,660

we have any other questions from the

722

00:33:41,669 --> 00:33:35,550

Smithsonian

723

00:33:43,200 --> 00:33:41,679

feel free hi my name is Annie and the

724

00:33:45,360 --> 00:33:43,210

movie was awesome guys I saw it last

725

00:33:47,430 --> 00:33:45,370

night thanks so much I have a question

726

00:33:49,980 --> 00:33:47,440

for the astronauts and the guys in

727

00:33:51,450 --> 00:33:49,990

Hollywood if you had to choose would be

728

00:33:54,870 --> 00:33:51,460

rather the International Space Station

729

00:33:57,570 --> 00:33:54,880

be held by Captain Kirk Picard Sisko

730

00:33:59,370 --> 00:33:57,580

Janeway or Archer and why so which of

731

00:34:02,640 --> 00:33:59,380

those captains has the qualities you

732

00:34:04,080 --> 00:34:02,650

need to actually be in space that's a

733

00:34:06,870 --> 00:34:04,090

hard call I think Kingston's got a

734

00:34:09,000 --> 00:34:06,880

handle that first okay we'll go first of

735

00:34:11,369 --> 00:34:09,010

course you know Chris Pine does a great

736

00:34:13,080 --> 00:34:11,379

commander and I was commander so I

737

00:34:16,169 --> 00:34:13,090

appreciate that

738

00:34:18,360 --> 00:34:16,179

I got when I was up in space on one of

739

00:34:21,020 --> 00:34:18,370

my last missions I got to talk to Scott

740

00:34:22,889 --> 00:34:21,030

Bakula and I thought Archer was a good

741

00:34:25,169 --> 00:34:22,899

transitional from the time we left

742

00:34:27,570 --> 00:34:25,179

planet Earth to you're the first warp

743

00:34:30,840 --> 00:34:27,580

drive but each captain helps inspire

744

00:34:32,310 --> 00:34:30,850

their crew and each captain can help

745

00:34:33,600 --> 00:34:32,320

bring out the best in their team and I

746

00:34:36,210 --> 00:34:33,610

think you guys see that every day

747

00:34:38,610 --> 00:34:36,220

whether you're at work we have making a

748

00:34:40,379 --> 00:34:38,620

phenomenal movie or here at NASA or

749

00:34:41,820 --> 00:34:40,389

wherever you are you know your

750

00:34:43,740 --> 00:34:41,830

leadership you if you have a good leader

751

00:34:45,330 --> 00:34:43,750

that can really make the best of the

752

00:34:47,010 --> 00:34:45,340

team and when you're going out into

753

00:34:51,240 --> 00:34:47,020

space you need to have the best you

754

00:34:52,860 --> 00:34:51,250

yeah we can't beat that answer yeah we

755

00:34:54,720 --> 00:34:52,870

got speed there and also it forces us to

756

00:34:56,100 --> 00:34:54,730

choose our favorite which is you can't

757

00:35:02,790 --> 00:34:56,110

do it's like it's like choosing your

758

00:35:02,800 --> 00:35:12,320

original original Kirk would find of you

759

00:35:17,880 --> 00:35:15,270

Michael and she'll a it would seem just

760

00:35:20,370 --> 00:35:17,890

by dropping Archer knowledge that you

761

00:35:22,620 --> 00:35:20,380

guys have some understanding of the of

762

00:35:24,840 --> 00:35:22,630

the Trek universe where do you guys put

763

00:35:29,090 --> 00:35:24,850

yourself on the on the truck scale from

764

00:35:32,520 --> 00:35:29,100

sort of casual fan to living in basement

765

00:35:35,700 --> 00:35:32,530

building building replicating bridge of

766

00:35:40,080 --> 00:35:35,710

enterprise let's hear it it's it's

767

00:35:42,870 --> 00:35:40,090

confession time voice I definitely enjoy

768

00:35:44,850 --> 00:35:42,880

a speculative fiction I would put myself

769

00:35:48,720 --> 00:35:44,860

closer to the more casual side from a

770

00:35:52,320 --> 00:35:48,730

Star Trek universe but I really really

771

00:35:53,820 --> 00:35:52,330

enjoyed the reboot of Star Trek and so

772

00:35:57,000 --> 00:35:53,830

I'm looking forward to seeing the new

773

00:35:59,160 --> 00:35:57,010

movie yeah here's a here's a secret for

774

00:36:02,640 --> 00:35:59,170

you guys at NASA sometimes we have to go

775

00:36:04,320 --> 00:36:02,650

to meetings sometimes we end up in

776

00:36:06,000 --> 00:36:04,330

places and hearing things we don't want

777

00:36:08,730 --> 00:36:06,010

to we'd rather be doing something else

778

00:36:12,060 --> 00:36:08,740

and and when we do we kind of sometimes

779

00:36:14,490 --> 00:36:12,070

get that you know 240-mile look in our

780

00:36:16,890 --> 00:36:14,500

eyes same out I wish I were up at space

781

00:36:19,410 --> 00:36:16,900

and I wish are up in space right now but

782

00:36:21,180 --> 00:36:19,420

you know and then you think about some

783

00:36:23,190 --> 00:36:21,190

of the recent Star Trek episodes you're

784

00:36:24,780 --> 00:36:23,200

watched and you start to say yeah

785

00:36:26,760 --> 00:36:24,790

that's inspirational that's why I'm here

786

00:36:28,440 --> 00:36:26,770

at NASA because that vision that you

787

00:36:31,460 --> 00:36:28,450

guys share with us now we don't have as

788

00:36:33,990 --> 00:36:31,470

much as excitement we don't jump off of

789

00:36:36,030 --> 00:36:34,000

50,000 foot cliffs and things like that

790

00:36:38,210 --> 00:36:36,040

but when we do have our excitement like

791

00:36:41,580 --> 00:36:38,220

on spacewalks it's because you know we

792

00:36:44,550 --> 00:36:41,590

stuck with it and that we were inspired

793

00:36:46,620 --> 00:36:44,560

when we needed to be thank you okay

794

00:36:53,420 --> 00:36:46,630

although I'll respond to that by saying

795

00:36:57,300 --> 00:36:53,430

you cannot imagine how stupid we feel we

796

00:37:00,810 --> 00:36:57,310

we've got a question from Twitter at

797

00:37:03,330 --> 00:37:00,820

least a fuller McGee 4-h

798

00:37:06,030 --> 00:37:03,340

where any devices at NASA specifically

799

00:37:07,980 --> 00:37:06,040

developed because of Star Trek because

800

00:37:11,340 --> 00:37:07,990

someone liked to watch Star Trek is

801
00:37:14,850 --> 00:37:11,350
there did the show obviously has been

802
00:37:16,410 --> 00:37:14,860
around since the since the late 60s have

803
00:37:19,400 --> 00:37:16,420
you heard that it had any direct

804
00:37:22,770 --> 00:37:19,410
influence on on development of NASA tech

805
00:37:23,910 --> 00:37:22,780
of course everyone knows that you know

806
00:37:25,110 --> 00:37:23,920
there were for a while there there is

807
00:37:27,090 --> 00:37:25,120
these flip telephones that

808
00:37:30,150 --> 00:37:27,100
coincidentally look like the original

809
00:37:33,690 --> 00:37:30,160
series of communicators but here at NASA

810
00:37:35,400 --> 00:37:33,700
a lot of things would you know what you

811
00:37:37,560 --> 00:37:35,410
guys imagine how small to make sense

812
00:37:38,910 --> 00:37:37,570
something how cool we can make it we try

813
00:37:41,340 --> 00:37:38,920

to image imitate it

814

00:37:43,350 --> 00:37:41,350

we don't have phasers but we do have

815

00:37:46,200 --> 00:37:43,360

things like Joe was talking about with

816

00:37:47,700 --> 00:37:46,210

the with with tricorders alright so we

817

00:37:50,130 --> 00:37:47,710

don't have a tricorder that can get

818

00:37:52,320 --> 00:37:50,140

everything yet but we're working on it

819

00:37:54,300 --> 00:37:52,330

so that we can get some be a little data

820

00:37:56,370 --> 00:37:54,310

package that can tell us how someone's

821

00:37:58,200 --> 00:37:56,380

doing we have an experiment up on

822

00:38:00,720 --> 00:37:58,210

station right now called micro flow

823

00:38:04,800 --> 00:38:00,730

which instead of using the really big

824

00:38:06,990 --> 00:38:04,810

tubes of liquids to get an analysis a

825

00:38:10,140 --> 00:38:07,000

chemical analysis uses these really tiny

826

00:38:12,000 --> 00:38:10,150

little disposable cartridges and chips

827

00:38:13,770 --> 00:38:12,010

and that same technology finds its way

828

00:38:15,780 --> 00:38:13,780

into the hospital room just a few years

829

00:38:18,150 --> 00:38:15,790

after we you know experiment with it at

830

00:38:20,460 --> 00:38:18,160

NASA and it's it's pretty neat we're

831

00:38:23,970 --> 00:38:20,470

working towards a tricorder and warp

832

00:38:28,200 --> 00:38:23,980

drive well uh which one of you is a

833

00:38:30,300 --> 00:38:28,210

doctor that's you have you have you have

834

00:38:39,450 --> 00:38:30,310

you ever found occasion to say damn it

835

00:38:46,560 --> 00:38:39,460

man I'm a doctor I can say that I try to

836

00:38:48,690 --> 00:38:46,570

say that you can work it in some way in

837

00:38:53,820 --> 00:38:48,700

the next 24 hours paramount will pay you

838

00:38:59,310 --> 00:38:53,830

100 American dollars I think is good for

839

00:39:00,870 --> 00:38:59,320

that yeah \$200 now my understanding is

840

00:39:04,500 --> 00:39:00,880

that we also have some questions if the

841

00:39:06,420 --> 00:39:04,510

intrepid is that correct yes you guys

842

00:39:09,890 --> 00:39:06,430

send me by we would love to hear hi guys

843

00:39:12,040 --> 00:39:09,900

hi in Trappe wow you look so you look so

844

00:39:17,500 --> 00:39:12,050

poised

845

00:39:20,140 --> 00:39:17,510

please ask away okay um my name is

846

00:39:22,720 --> 00:39:20,150

Nadine Kavanaugh I am a journalist and a

847

00:39:24,790 --> 00:39:22,730

journalist I am a junior at world

848

00:39:28,510 --> 00:39:24,800

journalism preparatory school and my

849

00:39:30,970 --> 00:39:28,520

question is for Mike Fink in the film

850

00:39:32,859 --> 00:39:30,980

and television series Star Trek the crew

851

00:39:34,900 --> 00:39:32,869

assigned that the enterprise come from a

852

00:39:38,470 --> 00:39:34,910

variety of backgrounds and in some cases

853

00:39:40,990 --> 00:39:38,480

species the ISS is run by a group of

854

00:39:43,120 --> 00:39:41,000

varied social educational and cultural

855

00:39:45,400 --> 00:39:43,130

backgrounds as well they are very

856

00:39:48,700 --> 00:39:45,410

diverse what are the advantages and

857

00:39:52,839 --> 00:39:48,710

disadvantages of having diverse crew and

858

00:39:55,510 --> 00:39:52,849

team on board the ISS what a great

859

00:39:59,710 --> 00:39:55,520

question and it's not coincidental

860

00:40:01,180 --> 00:39:59,720

either it's by having a diverse crew

861

00:40:04,839 --> 00:40:01,190

like we do aboard the space station

862

00:40:06,609 --> 00:40:04,849

which is not coincidental with how Star

863

00:40:09,250 --> 00:40:06,619

Trek did it and Gene Roddenberry's

864

00:40:10,750 --> 00:40:09,260

original vision but we have the diverse

865

00:40:13,990 --> 00:40:10,760

crews that we have everyone brings their

866

00:40:16,089 --> 00:40:14,000

talents and their skills and not even

867

00:40:17,859 --> 00:40:16,099

Captain Kirk has all the skills he needs

868

00:40:20,109 --> 00:40:17,869

a spot to balance them out and have

869

00:40:21,849 --> 00:40:20,119

bones in there too and the same thing

870

00:40:25,210 --> 00:40:21,859

aboard space station we have Americans

871

00:40:27,880 --> 00:40:25,220

Russians Canadians Japanese we have

872

00:40:31,180 --> 00:40:27,890

people that are Navy SEALs or like Chow

873

00:40:33,730 --> 00:40:31,190

here a doctor or myself an A or an Air

874

00:40:35,109 --> 00:40:33,740

Force flight test engineer and we all

875

00:40:37,300 --> 00:40:35,119

bring out the best in each other and

876

00:40:38,620 --> 00:40:37,310

that's what really happens that's why we

877

00:40:40,240 --> 00:40:38,630

get the mission done because we are

878

00:40:43,690 --> 00:40:40,250

diverse I have a five-year-old daughter

879

00:40:45,160 --> 00:40:43,700

and she stunned me one day when she told

880

00:40:46,930 --> 00:40:45,170

me when she was three years old that

881

00:40:48,849 --> 00:40:46,940

girls can't be astronauts so every day

882

00:40:50,620 --> 00:40:48,859

every time I get a chance I say hey look

883

00:40:52,720 --> 00:40:50,630

girls can be astronauts boys can be

884

00:40:54,430 --> 00:40:52,730

astronauts black white yellow tan

885

00:40:57,280 --> 00:40:54,440

whatever color you want to be whatever

886

00:41:00,490 --> 00:40:57,290

species I was accused being alien

887

00:41:05,650 --> 00:41:00,500

earlier and therm up in space and we

888

00:41:08,260 --> 00:41:05,660

need you and we need your talent yeah it

889

00:41:10,390 --> 00:41:08,270

was a compliment it was definitely a

890

00:41:11,920 --> 00:41:10,400

compliment I think John's gonna got

891

00:41:14,380 --> 00:41:11,930

another social media question for you

892

00:41:16,359 --> 00:41:14,390

gentlemen by the way thank you for that

893

00:41:17,950 --> 00:41:16,369

answer especially I that was something

894

00:41:20,079 --> 00:41:17,960

that was very important to me watching

895

00:41:24,040 --> 00:41:20,089

the original series as well and thank

896

00:41:25,809 --> 00:41:24,050

you guys for focusing on diversity I got

897

00:41:30,339 --> 00:41:25,819

a question from two

898

00:41:30,880 --> 00:41:30,349

user at Samantha right I'm sorry that's

899

00:41:33,939 --> 00:41:30,890

nothing

900

00:41:36,099 --> 00:41:33,949

no at Steve on ski 981 for each

901
00:41:39,549 --> 00:41:36,109
astronaut can bring a personal item

902
00:41:44,049 --> 00:41:39,559
weighing one kilogram to space what

903
00:41:46,120 --> 00:41:44,059
would you bring with you yeah we get to

904
00:41:49,239 --> 00:41:46,130
bring out the little thing so I bring up

905
00:41:52,870 --> 00:41:49,249
pictures of my my family I wish I could

906
00:41:54,579 --> 00:41:52,880
bring up you know a tricorder or

907
00:41:56,529 --> 00:41:54,589
something like that or something with

908
00:41:58,630 --> 00:41:56,539
something useful a universal translator

909
00:42:02,439 --> 00:41:58,640
sometimes Russians a tough language

910
00:42:03,969 --> 00:42:02,449
those kind of things but you bring up

911
00:42:06,160 --> 00:42:03,979
something that it's meaningful to you I

912
00:42:08,380 --> 00:42:06,170
brought up my wedding ring memories of

913
00:42:12,039 --> 00:42:08,390

my family that helped keep me going

914

00:42:13,209 --> 00:42:12,049

Joe that's a great question and that's

915

00:42:15,279 --> 00:42:13,219

something that actually I'm actually

916

00:42:18,749 --> 00:42:15,289

wrestling with right now I will launch

917

00:42:22,689 --> 00:42:18,759

in about two years from now May 2015 and

918

00:42:24,339 --> 00:42:22,699

so I'm actually at this moment trying to

919

00:42:25,870 --> 00:42:24,349

figure out what it is that that I'd like

920

00:42:36,069 --> 00:42:25,880

to bring with me I don't have an answer

921

00:42:38,049 --> 00:42:36,079

yet so how about a head shot of me John

922

00:42:45,189 --> 00:42:38,059

showed all you could bring several and

923

00:42:50,199 --> 00:42:45,199

hand them out all right the hair is too

924

00:42:53,410 --> 00:42:50,209

big this is actually the question that

925

00:42:55,449 --> 00:42:53,420

John abandoned from at Samantha Wray in

926
00:42:57,339 --> 00:42:55,459
the films there has always been some

927
00:43:00,759 --> 00:42:57,349
sort of gravitational force aboard the

928
00:43:05,319 --> 00:43:00,769
ships how close is NASA to making this a

929
00:43:09,999 --> 00:43:05,329
reality why would we you saw how funny

930
00:43:12,579 --> 00:43:10,009
it is to fly and and Chris Chris up on

931
00:43:13,989 --> 00:43:12,589
board station he he actually was holding

932
00:43:15,370 --> 00:43:13,999
back on you guys because he he could

933
00:43:17,769 --> 00:43:15,380
have flown back and forth the whole time

934
00:43:23,759 --> 00:43:17,779
and none of it CGI none of it's computer

935
00:43:28,779 --> 00:43:26,259
after whole year I never got tired of

936
00:43:30,400 --> 00:43:28,789
flying it was really really fun so

937
00:43:32,620 --> 00:43:30,410
that's one reason why we don't do

938
00:43:34,150 --> 00:43:32,630

gravity it would be great for us if we

939

00:43:36,339 --> 00:43:34,160

could if we could master the force of

940

00:43:38,949 --> 00:43:36,349

gravity that could help us learn better

941

00:43:39,549 --> 00:43:38,959

propulsion systems make you know really

942

00:43:41,589 --> 00:43:39,559

good energy

943

00:43:43,569 --> 00:43:41,599

systems here on planet Earth so we don't

944

00:43:45,279 --> 00:43:43,579

pay so much for oil those kind of things

945

00:43:46,749 --> 00:43:45,289

all that kind of cool technology is

946

00:43:49,179 --> 00:43:46,759

something that you guys are helping

947

00:43:51,549 --> 00:43:49,189

inspire that to get some really smart

948

00:43:53,679 --> 00:43:51,559

people to figure out how we can do that

949

00:43:56,319 --> 00:43:53,689

and once we do that then we can go do

950

00:43:58,449 --> 00:43:56,329

some real exploration can I ask doesn't

951
00:44:00,339 --> 00:43:58,459
is NASA active in recruiting people you

952
00:44:02,199 --> 00:44:00,349
mean physician scientists are they do

953
00:44:06,429 --> 00:44:02,209
they go out and look for people or is it

954
00:44:10,029 --> 00:44:06,439
mostly incoming where you guys want to

955
00:44:12,219 --> 00:44:10,039
be part of the program and ask well

956
00:44:14,410 --> 00:44:12,229
that's a great question and NASA is

957
00:44:18,729 --> 00:44:14,420
actively out recruiting I mean we really

958
00:44:22,509 --> 00:44:18,739
want the best minds and we want

959
00:44:24,579 --> 00:44:22,519
inquisitive minds to okay to come and

960
00:44:26,380 --> 00:44:24,589
work with us to help us to explore and

961
00:44:28,839 --> 00:44:26,390
so we're definitely out in universities

962
00:44:30,969 --> 00:44:28,849
we actually have a group that does a

963
00:44:32,289 --> 00:44:30,979

destination station and goes out and

964

00:44:35,319 --> 00:44:32,299

talks with universities to talks with

965

00:44:37,329 --> 00:44:35,329

businesses to actively recruit to come

966

00:44:40,209 --> 00:44:37,339

people to come work at NASA that's I

967

00:44:41,620 --> 00:44:40,219

think what makes NASA so strong is just

968

00:44:44,410 --> 00:44:41,630

the quality of people that we have

969

00:44:47,019 --> 00:44:44,420

working here and and to turn that back

970

00:44:49,779 --> 00:44:47,029

to you though I mean I think you know I

971

00:44:51,309 --> 00:44:49,789

was inspired by by science fiction by

972

00:44:53,079 --> 00:44:51,319

the written word by film when I was

973

00:44:56,769 --> 00:44:53,089

little and that's what really made me

974

00:45:00,579 --> 00:44:56,779

pursue a career in science inspired me

975

00:45:02,259 --> 00:45:00,589

to try and reach this goal I have a

976

00:45:05,349 --> 00:45:02,269

question for do you guys ever feel the

977

00:45:08,049 --> 00:45:05,359

weight of being a role model or or what

978

00:45:12,579 --> 00:45:08,059

you were doing to inspire folks to to

979

00:45:15,189 --> 00:45:12,589

get involved in science I don't know I

980

00:45:17,469 --> 00:45:15,199

think it's what's so wonderful about

981

00:45:21,669 --> 00:45:17,479

talking with you is is how the arts and

982

00:45:22,959 --> 00:45:21,679

science have where they meet somewhere

983

00:45:25,359 --> 00:45:22,969

in the middle I always thought growing

984

00:45:27,130 --> 00:45:25,369

up I wasn't ever scientifically minded

985

00:45:29,499 --> 00:45:27,140

as much as I would have loved to have

986

00:45:32,919 --> 00:45:29,509

had a brain for for math and technology

987

00:45:35,259 --> 00:45:32,929

but it's it's great that that our worlds

988

00:45:40,089 --> 00:45:35,269

can meet at some point in the middle and

989

00:45:43,900 --> 00:45:40,099

hopefully inspire people to do to do

990

00:45:46,089 --> 00:45:43,910

good things in to explore into and the

991

00:45:48,839 --> 00:45:46,099

great thing about the vision of Gene

992

00:45:51,339 --> 00:45:48,849

Roddenberry is that there's this kind of

993

00:45:53,080 --> 00:45:51,349

hopefulness to what people can do when

994

00:45:57,220 --> 00:45:53,090

they work together

995

00:45:58,900 --> 00:45:57,230

and that spirit of unity and and instead

996

00:46:00,700 --> 00:45:58,910

of what we often see in the world that

997

00:46:02,410 --> 00:46:00,710

you know divisive nough sand violence

998

00:46:05,740 --> 00:46:02,420

and all that I think is a great thing

999

00:46:08,760 --> 00:46:05,750

it's been really inspiring talking I I

1000

00:46:11,320 --> 00:46:08,770

do have a question for you guys which is

1001
00:46:15,610 --> 00:46:11,330
obviously here we are now in the year

1002
00:46:18,850 --> 00:46:15,620
2013 if you were to just close your eyes

1003
00:46:22,690 --> 00:46:18,860
and imagine what is the future of the

1004
00:46:26,860 --> 00:46:22,700
space program or or just mankind's sort

1005
00:46:28,780 --> 00:46:26,870
of experience with the world around us

1006
00:46:30,640 --> 00:46:28,790
and the world beyond where do you think

1007
00:46:34,390 --> 00:46:30,650
we're going to be in 20 years that we

1008
00:46:36,700 --> 00:46:34,400
aren't now well I think one of the

1009
00:46:39,040 --> 00:46:36,710
things personally I would love to see us

1010
00:46:42,580 --> 00:46:39,050
to go on to Mars I think that's been a

1011
00:46:45,130 --> 00:46:42,590
target for Humanity for a long time to

1012
00:46:46,480 --> 00:46:45,140
see this beautiful red planet you know

1013
00:46:47,860 --> 00:46:46,490

you can see it in the sky see it through

1014

00:46:49,720 --> 00:46:47,870

a telescope and now beautiful pictures

1015

00:46:52,570 --> 00:46:49,730

coming from curiosity and all of the

1016

00:46:54,610 --> 00:46:52,580

Rovers that we've had out there but more

1017

00:46:56,170 --> 00:46:54,620

importantly I think that projects like

1018

00:46:59,650 --> 00:46:56,180

that and projects like the International

1019

00:47:01,630 --> 00:46:59,660

Space Station what an amazing thing to

1020

00:47:04,600 --> 00:47:01,640

bring countries together from all over

1021

00:47:07,900 --> 00:47:04,610

the world to work on a peaceful a

1022

00:47:09,610 --> 00:47:07,910

peaceful project that's dedicated to

1023

00:47:12,570 --> 00:47:09,620

science investigation to research to

1024

00:47:14,470 --> 00:47:12,580

making life better on the earth and not

1025

00:47:16,690 --> 00:47:14,480

individually working against each other

1026

00:47:19,960 --> 00:47:16,700

I mean we have a team of nations now

1027

00:47:21,790 --> 00:47:19,970

that were mortal enemies you know three

1028

00:47:24,400 --> 00:47:21,800

50 60 years ago and now we're working

1029

00:47:26,260 --> 00:47:24,410

together to a common goal and so

1030

00:47:28,780 --> 00:47:26,270

continue to work like that I think is

1031

00:47:31,120 --> 00:47:28,790

the most important thing but to work

1032

00:47:34,720 --> 00:47:31,130

together to a project to get to Mars to

1033

00:47:37,150 --> 00:47:34,730

get to to another planet and maybe for a

1034

00:47:39,240 --> 00:47:37,160

peaceful I'm sorry for a permanent stay

1035

00:47:41,830 --> 00:47:39,250

there that would be an incredible thing

1036

00:47:44,260 --> 00:47:41,840

do you guys always want to be astronauts

1037

00:47:46,960 --> 00:47:44,270

and secondly what are those qualities

1038

00:47:48,400 --> 00:47:46,970

that you you believe are the the kind of

1039

00:47:53,260 --> 00:47:48,410

the important qualities that an

1040

00:47:55,690 --> 00:47:53,270

astronaut needs to exhibit well for

1041

00:47:57,460 --> 00:47:55,700

myself I have as for as long as I can

1042

00:47:59,770 --> 00:47:57,470

remember I always wanted to become an

1043

00:48:02,260 --> 00:47:59,780

astronaut it's not something that that I

1044

00:48:04,840 --> 00:48:02,270

necessarily ever thought would would

1045

00:48:06,010 --> 00:48:04,850

occur it seems like a and an

1046

00:48:10,900 --> 00:48:06,020

out-of-this-world type

1047

00:48:12,910 --> 00:48:10,910

a possibility but it's something that

1048

00:48:16,810 --> 00:48:12,920

I've always I always kept kind of kept

1049

00:48:18,900 --> 00:48:16,820

as a very distant goal I always pursued

1050

00:48:22,000 --> 00:48:18,910

things that I was interested in doing

1051
00:48:23,650 --> 00:48:22,010
specifically medicine and and then I was

1052
00:48:26,590 --> 00:48:23,660
investigating ways how hey how can I

1053
00:48:28,810 --> 00:48:26,600
practice medicine with the space program

1054
00:48:31,960 --> 00:48:28,820
and so I I was able to get a job working

1055
00:48:34,120 --> 00:48:31,970
here as a flight surgeon taking care of

1056
00:48:35,650 --> 00:48:34,130
the astronauts and and you know things

1057
00:48:38,110 --> 00:48:35,660
worked out and I had this tremendous

1058
00:48:39,730 --> 00:48:38,120
blessing now of working for NASA as an

1059
00:48:43,990 --> 00:48:39,740
astronaut and being a part of this

1060
00:48:45,760 --> 00:48:44,000
incredible team here and and for me you

1061
00:48:47,140 --> 00:48:45,770
know I tried to think back to what was

1062
00:48:48,700 --> 00:48:47,150
it that inspired me to do this and

1063
00:48:53,200 --> 00:48:48,710

they're always really kind of come back

1064

00:48:55,660 --> 00:48:53,210

to the the worlds that were created and

1065

00:48:59,470 --> 00:48:55,670

on film and in books with science

1066

00:49:02,170 --> 00:48:59,480

fiction you know ever since I was three

1067

00:49:04,660 --> 00:49:02,180

years old I wanted to be a director and

1068

00:49:07,690 --> 00:49:04,670

writer but I fell directly writer school

1069

00:49:13,210 --> 00:49:07,700

and then I tried acting and that didn't

1070

00:49:22,420 --> 00:49:13,220

work out so now I go on spacewalks we're

1071

00:49:24,040 --> 00:49:22,430

off are there any actors in space you

1072

00:49:27,670 --> 00:49:24,050

guys need entertainment up there for God

1073

00:49:29,800 --> 00:49:27,680

say yeah Chris Hadfield just to just to

1074

00:49:33,250 --> 00:49:29,810

determine this job

1075

00:49:37,950 --> 00:49:33,260

I think harnessing the the visuals of

1076

00:49:41,560 --> 00:49:37,960

space and and Tom Marshburn as well and

1077

00:49:43,300 --> 00:49:41,570

in producing some of the songs and

1078

00:49:45,160 --> 00:49:43,310

visuals that we've seen on YouTube

1079

00:49:49,060 --> 00:49:45,170

lately and so getting being able to

1080

00:49:52,960 --> 00:49:49,070

share that experiences is tremendous now

1081

00:49:56,560 --> 00:49:52,970

you talked about Mars and obviously that

1082

00:49:59,530 --> 00:49:56,570

that could be years down the road but if

1083

00:50:01,830 --> 00:49:59,540

it was in the next couple years would

1084

00:50:05,560 --> 00:50:01,840

you would you sign up for that mission

1085

00:50:09,070 --> 00:50:05,570

even even if you were gone obviously in

1086

00:50:12,280 --> 00:50:09,080

Star Trek there's a Simon Pegg goes to

1087

00:50:15,640 --> 00:50:12,290

Jupiter takes about a minute two minutes

1088

00:50:17,470 --> 00:50:15,650

huh it would be a much more long long

1089

00:50:19,720 --> 00:50:17,480

and involved journey but would you go

1090

00:50:23,200 --> 00:50:19,730

for it would you do it

1091

00:50:28,390 --> 00:50:23,210

that's a tough question right now I look

1092

00:50:30,819 --> 00:50:28,400

right away I think one of the this is

1093

00:50:31,930 --> 00:50:30,829

such an amazing job and the opportunity

1094

00:50:34,720 --> 00:50:31,940

to go to the space station to do

1095

00:50:36,460 --> 00:50:34,730

research and science is an amazing thing

1096

00:50:38,680 --> 00:50:36,470

I think one of the toughest parts of

1097

00:50:42,430 --> 00:50:38,690

this job is being away from family and

1098

00:50:45,040 --> 00:50:42,440

that is our training I'm currently in

1099

00:50:46,210 --> 00:50:45,050

the training flow for my mission that's

1100

00:50:48,460 --> 00:50:46,220

two and a half years and about half that

1101
00:50:49,900 --> 00:50:48,470
time is spent overseas training with the

1102
00:50:54,490 --> 00:50:49,910
Russians with the Japanese with the

1103
00:50:57,579 --> 00:50:54,500
Europeans we develop ways to make that

1104
00:51:00,730 --> 00:50:57,589
work FaceTime Skype and all those sorts

1105
00:51:02,079 --> 00:51:00,740
of things and we have great ways to

1106
00:51:04,450 --> 00:51:02,089
communicate while we're up on the space

1107
00:51:06,819 --> 00:51:04,460
station it would be hard to to be away

1108
00:51:08,950 --> 00:51:06,829
from the family for as long as would

1109
00:51:11,530 --> 00:51:08,960
take to get to Mars but boy what an

1110
00:51:15,069 --> 00:51:11,540
amazing opportunity and I think I don't

1111
00:51:17,290 --> 00:51:15,079
throw my hat in that ring when one more

1112
00:51:20,530 --> 00:51:17,300
question this is from actually the Star

1113
00:51:24,640 --> 00:51:20,540

Trek the Star Trek app is accepting

1114

00:51:26,950 --> 00:51:24,650

questions Kirsten asks if you had your

1115

00:51:31,390 --> 00:51:26,960

own starship what would you name it

1116

00:51:35,220 --> 00:51:31,400

don't think too hard for me I would name

1117

00:51:39,339 --> 00:51:35,230

it the the USS endurance yeah

1118

00:51:40,780 --> 00:51:39,349

Shackleton's expedition to to the

1119

00:51:43,809 --> 00:51:40,790

Antarctic I don't know if you've heard

1120

00:51:45,880 --> 00:51:43,819

about that it's an amazing story of

1121

00:51:49,150 --> 00:51:45,890

these guys getting shipwrecked and

1122

00:51:52,300 --> 00:51:49,160

spending essentially over a year almost

1123

00:51:56,680 --> 00:51:52,310

two years surviving that that that

1124

00:51:58,300 --> 00:51:56,690

ordeal can Branum one Shackleton there's

1125

00:52:00,250 --> 00:51:58,310

I think there's a movie about that cuz

1126
00:52:04,089 --> 00:52:00,260
we don't we don't actually study history

1127
00:52:05,620 --> 00:52:04,099
we just watch each other's movies it's

1128
00:52:09,819 --> 00:52:05,630
like oh yeah I can brown off that's

1129
00:52:11,470 --> 00:52:09,829
right he did that we should watch the

1130
00:52:12,190 --> 00:52:11,480
movie to read the book because it's it's

1131
00:52:16,359 --> 00:52:12,200
pretty incredible

1132
00:52:20,109 --> 00:52:16,369
excellent what about you my price I'm

1133
00:52:22,780 --> 00:52:20,119
not big Aegis neither are we

1134
00:52:25,359 --> 00:52:22,790
I mean look we're you know we this has

1135
00:52:27,280 --> 00:52:25,369
been around for 40 years and that's the

1136
00:52:29,680 --> 00:52:27,290
best we could come up with victory when

1137
00:52:31,809 --> 00:52:29,690
I was off oh that's good yeah it's very

1138
00:52:33,520 --> 00:52:31,819

nice I don't know victorious over what

1139

00:52:37,210 --> 00:52:33,530

but maybe we made it to

1140

00:52:38,650 --> 00:52:37,220

the victory I think that we have time

1141

00:52:40,240 --> 00:52:38,660

for actually just one final last

1142

00:52:43,090 --> 00:52:40,250

question which is my understanding is

1143

00:52:46,750 --> 00:52:43,100

that one of you gentlemen appeared as

1144

00:52:50,110 --> 00:52:46,760

the grand marshal at Trek fest a year

1145

00:52:52,330 --> 00:52:50,120

ago did you have to yell did you see

1146

00:52:54,100 --> 00:52:52,340

what is that what is that involved is is

1147

00:52:57,850 --> 00:52:54,110

there a splash do you have to speak

1148

00:52:59,230 --> 00:52:57,860

Klingon what outfit was the Grand

1149

00:53:03,840 --> 00:52:59,240

Marshal entail

1150

00:53:11,770 --> 00:53:07,420

send them immediately to go to Riverside

1151
00:53:14,520 --> 00:53:11,780
Iowa the proposed birthplace in the not

1152
00:53:17,680 --> 00:53:14,530
too distant future and I think also the

1153
00:53:21,570 --> 00:53:17,690
where they build starships in the in the

1154
00:53:24,580 --> 00:53:21,580
first movie I got to be in a parade and

1155
00:53:25,810 --> 00:53:24,590
talk with a bunch of folks out there and

1156
00:53:27,640 --> 00:53:25,820
it was a it's a really neat opportunity

1157
00:53:30,160 --> 00:53:27,650
they had their great folks out there

1158
00:53:33,460 --> 00:53:30,170
very excited about the Star Trek

1159
00:53:36,370 --> 00:53:33,470
universe and and it was inspiring to

1160
00:53:38,380 --> 00:53:36,380
talk with them and and and was it you

1161
00:53:39,820 --> 00:53:38,390
Cho who actually appeared on the the

1162
00:53:43,360 --> 00:53:39,830
television program Enterprise in the

1163
00:53:44,740 --> 00:53:43,370

finale oh that was you know and so you

1164

00:53:46,870 --> 00:53:44,750

were on the show enterprise no wonder

1165

00:53:48,490 --> 00:53:46,880

you pick Archer as your as your favorite

1166

00:53:54,040 --> 00:53:48,500

captain you've actually had the Bakula

1167

00:53:55,600 --> 00:53:54,050

experience as we call it right exactly

1168

00:54:00,940 --> 00:53:55,610

yeah exactly

1169

00:54:06,310 --> 00:54:00,950

count Bakula well guys I just have to

1170

00:54:09,130 --> 00:54:06,320

say genuinely I speak for all of us the

1171

00:54:10,990 --> 00:54:09,140

these guys are absolutely exhausted but

1172

00:54:13,390 --> 00:54:11,000

when we got word earlier this week that

1173

00:54:17,380 --> 00:54:13,400

you were available to talk to us we were

1174

00:54:21,880 --> 00:54:17,390

all energized if I can use a pond thank

1175

00:54:24,010 --> 00:54:21,890

you so much for your time we aspire to

1176

00:54:25,690 --> 00:54:24,020

what you do in real life I'm not

1177

00:54:32,680 --> 00:54:25,700

enjoying it I'm gonna quit I want to

1178

00:54:35,410 --> 00:54:32,690

come yeah thank you for your service

1179

00:54:36,910 --> 00:54:35,420

yeah we really appreciate it you have

1180

00:54:45,130 --> 00:54:36,920

the coolest job in the world live long

1181

00:54:46,670 --> 00:54:45,140

and prosper we we really appreciate how

1182

00:54:49,040 --> 00:54:46,680

you guys really inspire the plan

1183

00:54:51,350 --> 00:54:49,050

what you guys show about humanity at its

1184

00:54:54,800 --> 00:54:51,360

finest we we fall for it every time here

1185

00:54:56,750 --> 00:54:54,810

at NASA and and big thanks to the other

1186

00:54:58,550 --> 00:54:56,760

teams out there that the intrepid and

1187

00:55:01,880 --> 00:54:58,560

the Smithsonian and everyone else out

1188

00:55:03,710 --> 00:55:01,890

there in the Google+ universe we're

1189

00:55:06,320 --> 00:55:03,720

really touched that though we had this

1190

00:55:08,720 --> 00:55:06,330

great conversation today and mutual

1191

00:55:10,490 --> 00:55:08,730

admiration society is we really think

1192

00:55:13,400 --> 00:55:10,500

what you guys is great good luck on your

1193

00:55:20,450 --> 00:55:13,410

on your film hope you break 1 billion on

1194

00:55:22,280 --> 00:55:20,460

opening night the Sony and are you still

1195

00:55:26,420 --> 00:55:22,290

there can we get your best Vulcan salute

1196

00:55:28,250 --> 00:55:26,430

Oh intrepid Vulcan salute come on guys

1197

00:55:30,470 --> 00:55:28,260

you can do it let's see ah there we go

1198

00:55:32,570 --> 00:55:30,480

yes there we go you should have been

1199

00:55:35,540 --> 00:55:32,580

practicing guys all right thank you so

1200

00:55:39,290 --> 00:55:35,550

much for everybody who who tuned in on

1201
00:55:42,170 --> 00:55:39,300
behalf of us silly filmmakers please go

1202
00:55:45,650 --> 00:55:42,180
see our movie we are really proud of it

1203
00:55:47,540 --> 00:55:45,660
but more importantly support NASA and

1204
00:55:49,880 --> 00:55:47,550
SpaceX will break exploration is really

1205
00:55:51,290 --> 00:55:49,890
just an incredible thing when you just

1206
00:55:53,120 --> 00:55:51,300
wrap your brain around what just

1207
00:55:56,510 --> 00:55:53,130
happened to your time we really like to

1208
00:55:58,550 --> 00:55:56,520
thank our hosts Google for for making

1209
00:55:59,900 --> 00:55:58,560
this happen and of course NASA for

1210
00:56:02,210 --> 00:55:59,910
enabling us and giving us that

1211
00:56:10,820 --> 00:56:02,220
incredible rare window of opportunity to

1212
00:56:11,390 --> 00:56:10,830
talk to the ISS hasten love guys thanks

1213
00:56:12,710 --> 00:56:11,400

everyone

1214

00:56:13,730 --> 00:56:12,720

really appreciate joining us ever wants

1215

00:56:15,290 --> 00:56:13,740

to learn more about the International