



1  
00:00:06,550 --> 00:00:03,350  
station this is houston are you ready

2  
00:00:09,840 --> 00:00:09,830  
we are ready for the event

3  
00:00:14,549 --> 00:00:12,070  
john f kennedy presidential library this

4  
00:00:21,349 --> 00:00:14,559  
is houston please call the international

5  
00:00:25,349 --> 00:00:23,429  
station this is tom putnam at the john f

6  
00:00:29,109 --> 00:00:25,359  
kennedy presidential library how do you

7  
00:00:32,389 --> 00:00:31,029  
we've got you loud and clear here on the

8  
00:00:37,910 --> 00:00:32,399  
international space station how do you

9  
00:00:41,750 --> 00:00:39,990  
we hear you fine and sonny you spoke

10  
00:00:47,990 --> 00:00:41,760  
here once before we're so happy to have

11  
00:00:52,709 --> 00:00:50,790  
well it's great to be back with you guys

12  
00:00:53,910 --> 00:00:52,719  
you're in a beautiful location a place i

13  
00:00:56,470 --> 00:00:53,920

call home

14

00:00:59,110 --> 00:00:56,480

but this is also my second home so i

15

00:01:05,270 --> 00:00:59,120

can't say the the view is bad from up

16

00:01:08,310 --> 00:01:06,950

and joe we welcome you to the kennedy

17

00:01:13,429 --> 00:01:08,320

library thank you so much for

18

00:01:16,630 --> 00:01:15,190

it's my pleasure and i'm happy to be

19

00:01:22,390 --> 00:01:16,640

with you all today and welcome aboard

20

00:01:27,990 --> 00:01:24,950

so we'll go to question number one

21

00:01:30,310 --> 00:01:28,000

okay uh suny

22

00:01:33,030 --> 00:01:30,320

from needham mass the home of athletes

23

00:01:34,630 --> 00:01:33,040

and astronauts

24

00:01:36,069 --> 00:01:34,640

were you aware growing up in

25

00:01:38,630 --> 00:01:36,079

massachusetts

26

00:01:41,190 --> 00:01:38,640

that it was president kennedy who set

27

00:01:43,749 --> 00:01:41,200

the goal for this country to be the

28

00:01:50,710 --> 00:01:43,759

first to land on the moon

29

00:01:55,270 --> 00:01:52,550

absolutely and it wasn't just because of

30

00:01:57,109 --> 00:01:55,280

the accent i think his speech in houston

31

00:01:58,310 --> 00:01:57,119

which is a anniversary is coming up in

32

00:02:01,030 --> 00:01:58,320

september

33

00:02:03,670 --> 00:02:01,040

laid the pathway for us to put people on

34

00:02:05,510 --> 00:02:03,680

the moon pretty ambitious goal pretty

35

00:02:07,749 --> 00:02:05,520

amazing that we were able to do it and

36

00:02:09,749 --> 00:02:07,759

we've done it successfully a number of

37

00:02:12,470 --> 00:02:09,759

times after that and that was all

38

00:02:15,750 --> 00:02:12,480

because of jfk's speech and his

39

00:02:17,990 --> 00:02:15,760

inspiration to the country so um we are

40

00:02:19,990 --> 00:02:18,000

now in you know stepping on to the next

41

00:02:22,229 --> 00:02:20,000

path and hopefully uh human beings will

42

00:02:23,830 --> 00:02:22,239

be following in curiosity's tracks

43

00:02:26,070 --> 00:02:23,840

before too long

44

00:02:29,589 --> 00:02:26,080

but jfk definitely was the the person

45

00:02:29,599 --> 00:02:35,190

thank you

46

00:02:39,509 --> 00:02:36,869

joe

47

00:02:41,430 --> 00:02:39,519

when you're up in the space station how

48

00:02:43,589 --> 00:02:41,440

do you know when it's daytime versus

49

00:02:48,869 --> 00:02:43,599

night time and how do you know when to

50

00:02:52,550 --> 00:02:50,630

that's a great question if we didn't

51  
00:02:54,949 --> 00:02:52,560  
have any windows on the space station we

52  
00:02:56,470 --> 00:02:54,959  
wouldn't know if it was day or night

53  
00:02:58,070 --> 00:02:56,480  
so it takes us about an hour and a half

54  
00:03:00,229 --> 00:02:58,080  
to go around the earth

55  
00:03:02,949 --> 00:03:00,239  
and so we'll have about 45 minutes of

56  
00:03:05,430 --> 00:03:02,959  
daylight and then 45 minutes of night

57  
00:03:07,030 --> 00:03:05,440  
and we have a schedule that shows us

58  
00:03:08,949 --> 00:03:07,040  
when it's dark and when it's light

59  
00:03:10,869 --> 00:03:08,959  
outside and of course we do have some

60  
00:03:12,309 --> 00:03:10,879  
windows so we can look outside and see

61  
00:03:14,229 --> 00:03:12,319  
when that happens

62  
00:03:16,869 --> 00:03:14,239  
and we follow a schedule and we're on

63  
00:03:18,470 --> 00:03:16,879

what's called gmt time which is the time

64

00:03:21,910 --> 00:03:18,480

in london england

65

00:03:24,309 --> 00:03:21,920

and so we go to bed at around 9 30 gmt

66

00:03:28,070 --> 00:03:24,319

time so we go to bed around 9 30 and get

67

00:03:28,080 --> 00:03:33,589

thank you

68

00:03:42,550 --> 00:03:36,789

suny why can't you take your dog gorby

69

00:03:45,990 --> 00:03:44,309

well i really wish i could i miss him

70

00:03:46,949 --> 00:03:46,000

like crazy and i miss him probably

71

00:03:49,030 --> 00:03:46,959

because

72

00:03:50,789 --> 00:03:49,040

he represents those cool things on earth

73

00:03:51,910 --> 00:03:50,799

that you don't have up here like wind in

74

00:03:53,509 --> 00:03:51,920

your face

75

00:03:55,110 --> 00:03:53,519

and walking on the beach because that's

76

00:03:57,750 --> 00:03:55,120

what i usually do with him

77

00:03:59,429 --> 00:03:57,760

so as a replacement i go to the cupola

78

00:04:01,350 --> 00:03:59,439

and look outside and see a lot of

79

00:04:03,670 --> 00:04:01,360

beautiful places plus sunrise and

80

00:04:04,869 --> 00:04:03,680

sunsets 16 times a day like joe was

81

00:04:06,710 --> 00:04:04,879

talking about

82

00:04:09,270 --> 00:04:06,720

and a friend of mine

83

00:04:11,589 --> 00:04:09,280

made me a little stuffed garby so i have

84

00:04:13,429 --> 00:04:11,599

him up here to hang out with me so

85

00:04:21,430 --> 00:04:13,439

that's sort of good enough for now until

86

00:04:25,189 --> 00:04:23,189

good morning joe

87

00:04:25,990 --> 00:04:25,199

what's the most amazing and the unique

88

00:04:27,510 --> 00:04:26,000

thing

89

00:04:32,710 --> 00:04:27,520

you've seen out the window while in

90

00:04:36,469 --> 00:04:34,870

good morning to you um

91

00:04:39,030 --> 00:04:36,479

it's really pretty cool looking out the

92

00:04:40,950 --> 00:04:39,040

window we have the cupola which gives us

93

00:04:42,150 --> 00:04:40,960

a fantastic view of the earth so a

94

00:04:43,590 --> 00:04:42,160

couple of things that i've seen that

95

00:04:45,189 --> 00:04:43,600

really impressed me

96

00:04:48,150 --> 00:04:45,199

it's been when we've had these visiting

97

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

vehicles the dragon and htv it's pretty

98

00:04:51,909 --> 00:04:50,320

neat to see a vehicle that we have made

99

00:04:54,629 --> 00:04:51,919

come up to the international space

100

00:04:57,030 --> 00:04:54,639

station but then naturally just about a

101  
00:04:58,870 --> 00:04:57,040  
month ago before sunny and aki arrived

102  
00:04:59,909 --> 00:04:58,880  
the southern lights the auroras were

103  
00:05:02,469 --> 00:04:59,919  
just

104  
00:05:04,390 --> 00:05:02,479  
in full bloom we had some solar activity

105  
00:05:06,469 --> 00:05:04,400  
a few days previous and it was just an

106  
00:05:07,990 --> 00:05:06,479  
incredible light show and i tried to

107  
00:05:09,590 --> 00:05:08,000  
take some pictures but they just don't

108  
00:05:16,390 --> 00:05:09,600  
capture what i really saw it was

109  
00:05:21,029 --> 00:05:18,950  
sunny when you go on the spacewalk on

110  
00:05:23,510 --> 00:05:21,039  
august 30th to replace one of the

111  
00:05:25,350 --> 00:05:23,520  
electrical units how long will it take

112  
00:05:29,990 --> 00:05:25,360  
and is it easy to fix or is it

113  
00:05:34,310 --> 00:05:32,070

that's a good question because yeah

114

00:05:36,230 --> 00:05:34,320

every time you go what we call outside

115

00:05:38,070 --> 00:05:36,240

it is a little nerve-racking

116

00:05:39,990 --> 00:05:38,080

we have a suit sort of the similar size

117

00:05:41,990 --> 00:05:40,000

to robonaut that you see in front of us

118

00:05:44,629 --> 00:05:42,000

right here that aki and i will be

119

00:05:46,629 --> 00:05:44,639

wearing to go replace this unit aki will

120

00:05:48,469 --> 00:05:46,639

actually be doing most of the work i'm

121

00:05:50,870 --> 00:05:48,479

just unbolting part of it and he's going

122

00:05:52,629 --> 00:05:50,880

to fly it with the be in the in the on

123

00:05:55,350 --> 00:05:52,639

the robotic arm which joe is actually

124

00:05:57,510 --> 00:05:55,360

going to fly to move the big piece which

125

00:05:59,749 --> 00:05:57,520

is actually also about as big as

126

00:06:01,830 --> 00:05:59,759

robonaut the box from one part of the

127

00:06:03,670 --> 00:06:01,840

space station sort of like a tool belt

128

00:06:05,510 --> 00:06:03,680

on the space station to where that box

129

00:06:07,749 --> 00:06:05,520

needs to be changed out

130

00:06:09,350 --> 00:06:07,759

so i'll be sort of running around we

131

00:06:11,830 --> 00:06:09,360

call it a spacewalk but actually you

132

00:06:14,629 --> 00:06:11,840

sort of use your hands hand over hand on

133

00:06:16,309 --> 00:06:14,639

handrails outside i'll be doing that uh

134

00:06:18,309 --> 00:06:16,319

doing running some elect other

135

00:06:20,790 --> 00:06:18,319

electrical cables and then helping aki

136

00:06:22,230 --> 00:06:20,800

out so just to get back to your question

137

00:06:24,629 --> 00:06:22,240

yeah it is a little nerve-wracking when

138

00:06:26,950 --> 00:06:24,639

you're out there because um

139

00:06:28,550 --> 00:06:26,960

miyanaki will rely on each other if

140

00:06:30,629 --> 00:06:28,560

something happens to one of us the other

141

00:06:32,390 --> 00:06:30,639

guy has to save the other guy and bring

142

00:06:35,990 --> 00:06:32,400

them back into the airlock and get us

143

00:06:37,909 --> 00:06:36,000

back in safely the emu the space suit is

144

00:06:39,830 --> 00:06:37,919

essentially its own little spacecraft so

145

00:06:41,909 --> 00:06:39,840

all of the pieces and parts of it have

146

00:06:43,830 --> 00:06:41,919

have to work also and so we've checked

147

00:06:45,510 --> 00:06:43,840

it out to make sure it's it's working

148

00:06:46,790 --> 00:06:45,520

well before we go out but you never know

149

00:06:48,469 --> 00:06:46,800

what's going to happen so it's a little

150

00:06:50,150 --> 00:06:48,479

nerve nerve-wracking it'll take the

151  
00:06:51,430 --> 00:06:50,160  
whole spacewalk will probably take about

152  
00:06:53,749 --> 00:06:51,440  
six hours

153  
00:06:55,909 --> 00:06:53,759  
so it's going to be a long day for us

154  
00:06:59,909 --> 00:06:55,919  
we eat a good breakfast before we go and

155  
00:06:59,919 --> 00:07:04,790  
thank you both god bless you

156  
00:07:08,629 --> 00:07:06,710  
this is for joe

157  
00:07:10,710 --> 00:07:08,639  
how does your eating change in space

158  
00:07:17,430 --> 00:07:10,720  
compared to earth and do you need fewer

159  
00:07:21,350 --> 00:07:19,430  
that's a great question and just a few

160  
00:07:23,110 --> 00:07:21,360  
minutes ago we were taking some mass

161  
00:07:25,270 --> 00:07:23,120  
measurements to see

162  
00:07:27,029 --> 00:07:25,280  
how our up here we have to measure mass

163  
00:07:28,629 --> 00:07:27,039

because we're in microgravity but we

164

00:07:30,469 --> 00:07:28,639

want to see how our weight has changed

165

00:07:32,870 --> 00:07:30,479

since we've been up here and for me

166

00:07:34,870 --> 00:07:32,880

personally it's been interesting because

167

00:07:36,550 --> 00:07:34,880

i've noticed that i've started to eat

168

00:07:38,629 --> 00:07:36,560

more after being here for about two

169

00:07:40,309 --> 00:07:38,639

months so it took my body maybe a little

170

00:07:43,029 --> 00:07:40,319

bit longer than other people to get used

171

00:07:44,790 --> 00:07:43,039

to being in this environment

172

00:07:46,469 --> 00:07:44,800

you know i'm not sure if we need more or

173

00:07:48,869 --> 00:07:46,479

less calories as we calculate our

174

00:07:51,189 --> 00:07:48,879

calories we use the amount that we need

175

00:07:53,189 --> 00:07:51,199

on earth um even though we're not

176

00:07:55,510 --> 00:07:53,199

walking all the time we are working out

177

00:07:57,749 --> 00:07:55,520

at least a couple of hours every day so

178

00:07:59,589 --> 00:07:57,759

that does take quite a few calories so

179

00:08:01,589 --> 00:07:59,599

your your eating habits do change a

180

00:08:03,430 --> 00:08:01,599

little bit but after a while the body

181

00:08:05,350 --> 00:08:03,440

does adjust and i think i'm right now

182

00:08:06,790 --> 00:08:05,360

about back to normal but i do look

183

00:08:13,029 --> 00:08:06,800

forward to getting home and having a

184

00:08:16,070 --> 00:08:14,390

i'm from

185

00:08:18,230 --> 00:08:16,080

norwalk connecticut west rock middle

186

00:08:20,309 --> 00:08:18,240

school and this one's for sunny

187

00:08:29,510 --> 00:08:20,319

can you explain exercises that you do on

188

00:08:33,670 --> 00:08:31,270

yeah like joe was talking about we work

189

00:08:36,469 --> 00:08:33,680

out probably about two hours a day we've

190

00:08:38,630 --> 00:08:36,479

got a a couple different exercise pieces

191

00:08:41,029 --> 00:08:38,640

of equipment that help you know our

192

00:08:42,949 --> 00:08:41,039

cardiovascular as well as our strength

193

00:08:44,710 --> 00:08:42,959

and conditioning so we have a bicycle

194

00:08:46,790 --> 00:08:44,720

right here which is right in front of

195

00:08:48,230 --> 00:08:46,800

robonaut um maybe you can see it it

196

00:08:50,310 --> 00:08:48,240

doesn't have a seat you don't need to

197

00:08:51,910 --> 00:08:50,320

sit down up here in space all you do is

198

00:08:54,389 --> 00:08:51,920

click your pedals in your feet and the

199

00:08:57,829 --> 00:08:54,399

pedals and and start to ride

200

00:08:59,430 --> 00:08:57,839

we also have a treadmill which to run in

201  
00:09:01,269 --> 00:08:59,440  
space you have to have a harness on

202  
00:09:03,590 --> 00:09:01,279  
which is sort of connected by bungees to

203  
00:09:06,230 --> 00:09:03,600  
hold you down on the treadmill and then

204  
00:09:08,389 --> 00:09:06,240  
thirdly we have an resistive exercise

205  
00:09:11,750 --> 00:09:08,399  
device which is based on

206  
00:09:14,230 --> 00:09:11,760  
using vacuum to create a load and it's

207  
00:09:17,030 --> 00:09:14,240  
just like you're lifting in a gym with a

208  
00:09:19,350 --> 00:09:17,040  
bar to do squats and deadlifts and all

209  
00:09:21,910 --> 00:09:19,360  
of that is required because we lose we

210  
00:09:23,590 --> 00:09:21,920  
obviously start losing muscle mass and

211  
00:09:25,350 --> 00:09:23,600  
bone mass as soon as we get up here

212  
00:09:27,590 --> 00:09:25,360  
because we don't have to fight against

213  
00:09:29,750 --> 00:09:27,600

gravity so with those three exercises

214

00:09:31,030 --> 00:09:29,760

we're able to exercise or those p three

215

00:09:33,509 --> 00:09:31,040

pieces of equipment we're able to

216

00:09:35,350 --> 00:09:33,519

exercise our cardiovascular system and

217

00:09:41,110 --> 00:09:35,360

then work on our bone density and our

218

00:09:49,990 --> 00:09:43,269

for both of you and

219

00:09:50,000 --> 00:10:05,509

oh let's see if we can do that

220

00:10:16,630 --> 00:10:07,110

i got stuck

221

00:10:25,509 --> 00:10:17,590

joe

222

00:10:29,829 --> 00:10:27,829

we do a lot of flips for fun because we

223

00:10:31,990 --> 00:10:29,839

can so that's pretty cool

224

00:10:34,550 --> 00:10:32,000

floating in space you never get tired of

225

00:10:36,230 --> 00:10:34,560

that every morning when i wake up and i

226

00:10:38,310 --> 00:10:36,240

float out of my little sleep station i'm

227

00:10:40,550 --> 00:10:38,320

pretty excited about doing that

228

00:10:43,509 --> 00:10:40,560

but again looking out the window is a

229

00:10:45,190 --> 00:10:43,519

view like you can't get anywhere else so

230

00:10:47,430 --> 00:10:45,200

looking out the window is something else

231

00:10:49,030 --> 00:10:47,440

that i really enjoy doing and when i get

232

00:10:51,430 --> 00:10:49,040

back home i won't have that so i'm

233

00:10:53,990 --> 00:10:51,440

enjoying every moment of it uh we're

234

00:10:55,269 --> 00:10:54,000

also able to uh watch some movies a

235

00:10:56,710 --> 00:10:55,279

little tv

236

00:10:58,790 --> 00:10:56,720

so a lot of things that you do at home

237

00:11:05,670 --> 00:10:58,800

we can do up here we just do it in a

238

00:11:11,350 --> 00:11:08,790

for sunny has the iss been hit by any

239

00:11:16,389 --> 00:11:11,360

debris and how do you monitor and repair

240

00:11:20,069 --> 00:11:18,150

yeah as a matter of fact i was a little

241

00:11:22,230 --> 00:11:20,079

surprised we've been hit by a couple

242

00:11:24,790 --> 00:11:22,240

more things than i had imagined and i

243

00:11:26,230 --> 00:11:24,800

just found that out just recently

244

00:11:28,230 --> 00:11:26,240

just when we were preparing for our

245

00:11:30,550 --> 00:11:28,240

space walk one of the things they sent

246

00:11:32,389 --> 00:11:30,560

us up are photos detailed photos of all

247

00:11:33,990 --> 00:11:32,399

over the space station

248

00:11:36,150 --> 00:11:34,000

where the space station has been hit by

249

00:11:37,910 --> 00:11:36,160

little micro meteorites and it's pretty

250

00:11:39,990 --> 00:11:37,920

interesting they're going really fast

251  
00:11:42,069 --> 00:11:40,000  
and so when they hit the space station

252  
00:11:44,230 --> 00:11:42,079  
part of the metal it makes like a little

253  
00:11:45,750 --> 00:11:44,240  
crater as though you know like just like

254  
00:11:47,509 --> 00:11:45,760  
we have craters on earth like if a

255  
00:11:49,269 --> 00:11:47,519  
meteorite hit the earth it makes a

256  
00:11:51,190 --> 00:11:49,279  
little crater and it has little rigid

257  
00:11:52,230 --> 00:11:51,200  
edges on the side and that's what we

258  
00:11:54,310 --> 00:11:52,240  
have to be worried about when we're

259  
00:11:56,470 --> 00:11:54,320  
doing a spacewalk so we don't cut our

260  
00:11:58,629 --> 00:11:56,480  
gloves on some of these little craters

261  
00:12:00,629 --> 00:11:58,639  
so it's been hit quite a few times but

262  
00:12:02,790 --> 00:12:00,639  
they've all been pretty little

263  
00:12:04,550 --> 00:12:02,800

if we got hit by something big that

264

00:12:06,470 --> 00:12:04,560

actually penetrated the space station

265

00:12:08,150 --> 00:12:06,480

then we'd have to do an emergency

266

00:12:10,470 --> 00:12:08,160

procedure and then maybe do a repair

267

00:12:11,670 --> 00:12:10,480

from the inside to prevent anything bad

268

00:12:13,829 --> 00:12:11,680

from happening

269

00:12:16,069 --> 00:12:13,839

but the little ones are okay the big

270

00:12:18,230 --> 00:12:16,079

ones we avoid because the ground and a

271

00:12:20,230 --> 00:12:18,240

lot of people on earth track the big

272

00:12:21,509 --> 00:12:20,240

stuff outside and make sure the space

273

00:12:27,190 --> 00:12:21,519

station is not going to get hit by

274

00:12:27,200 --> 00:12:34,870

yo how do you do your laundry

275

00:12:39,509 --> 00:12:36,949

yeah sunny smelling me i'm not sure how

276

00:12:41,430 --> 00:12:39,519

i smell but one of the many we have a

277

00:12:43,269 --> 00:12:41,440

lot of great things about being up here

278

00:12:45,910 --> 00:12:43,279

but one of the nice things is i don't

279

00:12:46,790 --> 00:12:45,920

have to do laundry we don't do laundry

280

00:12:48,870 --> 00:12:46,800

um

281

00:12:51,430 --> 00:12:48,880

so we'll wear our clothes for uh you

282

00:12:53,030 --> 00:12:51,440

know a few days depending on which

283

00:12:54,949 --> 00:12:53,040

piece of clothing i think i've had these

284

00:12:58,069 --> 00:12:54,959

pants on for maybe a month and a half

285

00:12:59,509 --> 00:12:58,079

now but uh when we feel like they're

286

00:13:02,470 --> 00:12:59,519

dirty we just go ahead and we throw them

287

00:13:10,949 --> 00:13:02,480

away so we don't have to do laundry and

288

00:13:20,150 --> 00:13:13,190

why did you

289

00:13:23,750 --> 00:13:21,590

well for me it was a little bit of

290

00:13:25,509 --> 00:13:23,760

happenstance um you know i was a

291

00:13:27,590 --> 00:13:25,519

helicopter pilot before i became an

292

00:13:29,269 --> 00:13:27,600

astronaut uh you know i thought all the

293

00:13:31,750 --> 00:13:29,279

people who are astronauts are

294

00:13:33,670 --> 00:13:31,760

really smart and you know way you know

295

00:13:35,509 --> 00:13:33,680

too clever for me

296

00:13:37,350 --> 00:13:35,519

but i went to test pilot school and when

297

00:13:39,269 --> 00:13:37,360

i was there we had the opportunity to

298

00:13:41,030 --> 00:13:39,279

come go down to johnson space center

299

00:13:43,269 --> 00:13:41,040

it's the first time i ever met an

300

00:13:45,430 --> 00:13:43,279

astronaut and i met a guy by the name of

301  
00:13:47,829 --> 00:13:45,440  
john young and he talked about landing

302  
00:13:49,750 --> 00:13:47,839  
vertically on the moon and it sounded a

303  
00:13:51,269 --> 00:13:49,760  
whole lot like helicopter flying so i

304  
00:13:52,790 --> 00:13:51,279  
thought wow you know maybe i have the

305  
00:13:55,509 --> 00:13:52,800  
same type of skills that these people

306  
00:13:57,990 --> 00:13:55,519  
have and so i started looking at uh the

307  
00:13:59,829 --> 00:13:58,000  
application process and what i had to do

308  
00:14:01,829 --> 00:13:59,839  
and then i went and got my masters and

309  
00:14:04,310 --> 00:14:01,839  
then that's how i became an astronaut

310  
00:14:05,110 --> 00:14:04,320  
but before that i never even imagined it

311  
00:14:06,870 --> 00:14:05,120  
so

312  
00:14:08,230 --> 00:14:06,880  
my one advice to all you guys out there

313  
00:14:10,710 --> 00:14:08,240

if you're thinking about this and

314

00:14:12,949 --> 00:14:10,720

thinking about you know flying on a a

315

00:14:15,030 --> 00:14:12,959

rocket to you know up to the station or

316

00:14:17,750 --> 00:14:15,040

over to mars

317

00:14:19,509 --> 00:14:17,760

you your dreams can come true just

318

00:14:22,230 --> 00:14:19,519

do the best that you can at what you

319

00:14:24,389 --> 00:14:22,240

like and somehow it seems to all line up

320

00:14:31,910 --> 00:14:24,399

and it fall into place and you'll become

321

00:14:40,550 --> 00:14:34,069

joe what do you have to do to become an

322

00:14:44,710 --> 00:14:42,870

that's a that's a tough question and

323

00:14:46,150 --> 00:14:44,720

like sunny said

324

00:14:49,189 --> 00:14:46,160

astronauts come from all different

325

00:14:50,949 --> 00:14:49,199

backgrounds she was a helicopter pilot

326

00:14:52,710 --> 00:14:50,959

my background's in geology and i was

327

00:14:54,790 --> 00:14:52,720

actually a school teacher before i was

328

00:14:56,790 --> 00:14:54,800

selected to become an astronaut so like

329

00:14:57,590 --> 00:14:56,800

sunny said do what you really enjoy

330

00:14:59,430 --> 00:14:57,600

doing

331

00:15:01,829 --> 00:14:59,440

and then you'll excel at it and you'll

332

00:15:04,710 --> 00:15:01,839

do a great job but all of us do have a

333

00:15:06,550 --> 00:15:04,720

background in the sciences technology

334

00:15:09,189 --> 00:15:06,560

engineering or mathematics so that is a

335

00:15:11,670 --> 00:15:09,199

requirement that you have to have but

336

00:15:14,150 --> 00:15:11,680

after you have that those basic uh those

337

00:15:17,189 --> 00:15:14,160

basic understandings then after that do

338

00:15:18,790 --> 00:15:17,199

whatever you want to do and we're a very

339

00:15:20,470 --> 00:15:18,800

a diverse group and that's what makes

340

00:15:22,310 --> 00:15:20,480

the astronaut core special is that we

341

00:15:24,069 --> 00:15:22,320

have these different backgrounds and we

342

00:15:25,910 --> 00:15:24,079

all work together so do what you like to

343

00:15:34,069 --> 00:15:25,920

do but you do got to study hard in

344

00:15:38,550 --> 00:15:36,710

just questions for sunny

345

00:15:40,150 --> 00:15:38,560

you've sort of answered this already but

346

00:15:42,310 --> 00:15:40,160

did your military career help you

347

00:15:43,910 --> 00:15:42,320

prepare for the astronaut program

348

00:15:45,990 --> 00:15:43,920

and what advice would you give someone

349

00:15:47,990 --> 00:15:46,000

interested in becoming an astronaut and

350

00:15:49,670 --> 00:15:48,000

i know you did some deep-sea

351  
00:15:55,110 --> 00:15:49,680  
adventures and whether that helps with

352  
00:15:59,749 --> 00:15:57,509  
yeah i would absolutely say for sure

353  
00:16:00,470 --> 00:15:59,759  
like joe said we have people who are you

354  
00:16:03,110 --> 00:16:00,480  
know

355  
00:16:06,310 --> 00:16:03,120  
teachers military pilots doctors

356  
00:16:07,910 --> 00:16:06,320  
veterinarians engineers biochemists

357  
00:16:09,829 --> 00:16:07,920  
physicists in the office so we've got a

358  
00:16:11,430 --> 00:16:09,839  
really big background we're definitely

359  
00:16:13,990 --> 00:16:11,440  
not all military there's a there is a

360  
00:16:16,230 --> 00:16:14,000  
group of military people and i think um

361  
00:16:18,069 --> 00:16:16,240  
from having responsibility at a at a

362  
00:16:21,350 --> 00:16:18,079  
pretty young age flying a helicopter and

363  
00:16:23,189 --> 00:16:21,360

being a helicopter commander at like 24

364

00:16:24,949 --> 00:16:23,199

years old gives you a little bit of an

365

00:16:26,870 --> 00:16:24,959

idea of some of the responsibilities you

366

00:16:29,430 --> 00:16:26,880

have when you come live and work on a

367

00:16:31,509 --> 00:16:29,440

space station or a part of a a crew on a

368

00:16:33,189 --> 00:16:31,519

soyuz or a space shuttle or whatever the

369

00:16:35,350 --> 00:16:33,199

next vehicle is going to be

370

00:16:37,430 --> 00:16:35,360

there is a lot of responsibility you you

371

00:16:40,310 --> 00:16:37,440

learn about

372

00:16:42,470 --> 00:16:40,320

how to handle stress also

373

00:16:44,150 --> 00:16:42,480

you're put in some situations that you

374

00:16:45,670 --> 00:16:44,160

haven't planned for

375

00:16:47,189 --> 00:16:45,680

but you have a lot of training in your

376

00:16:49,509 --> 00:16:47,199

background and you know how to handle it

377

00:16:52,230 --> 00:16:49,519

so i think from my military background a

378

00:16:54,629 --> 00:16:52,240

lot of that came through as well as uh

379

00:16:56,470 --> 00:16:54,639

teamwork leadership and followership you

380

00:16:58,389 --> 00:16:56,480

know we're we're a team up here it's

381

00:17:00,069 --> 00:16:58,399

there's six of us on the station but

382

00:17:01,509 --> 00:17:00,079

there's also you know hundreds and

383

00:17:03,670 --> 00:17:01,519

actually thousands of people on the

384

00:17:05,270 --> 00:17:03,680

ground all over the world that we work

385

00:17:06,789 --> 00:17:05,280

with and you have to realize that you're

386

00:17:08,870 --> 00:17:06,799

part of a team

387

00:17:10,309 --> 00:17:08,880

everything that gets done up here is is

388

00:17:11,909 --> 00:17:10,319

not just because of our individual

389

00:17:13,590 --> 00:17:11,919

efforts it's because of everybody the

390

00:17:15,750 --> 00:17:13,600

planning and the group that puts it all

391

00:17:17,350 --> 00:17:15,760

together and so you have to recognize

392

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

that and understand that and understand

393

00:17:20,710 --> 00:17:19,120

what the other team members are are

394

00:17:22,870 --> 00:17:20,720

dealing with and i think all of that

395

00:17:24,789 --> 00:17:22,880

came from my military background

396

00:17:27,590 --> 00:17:24,799

just specifically from the diver part of

397

00:17:29,350 --> 00:17:27,600

it also it's really parallel to doing a

398

00:17:31,430 --> 00:17:29,360

space walk you know when i was doing a

399

00:17:33,270 --> 00:17:31,440

little deep sea diving for a while and

400

00:17:35,029 --> 00:17:33,280

the suits are the same you go into an

401  
00:17:37,669 --> 00:17:35,039  
environment that's not really uh

402  
00:17:40,150 --> 00:17:37,679  
hospitable to human life and but you get

403  
00:17:41,750 --> 00:17:40,160  
used to it and you understand

404  
00:17:44,150 --> 00:17:41,760  
where the dangers are and you know how

405  
00:17:45,909 --> 00:17:44,160  
to take the risks the calculator risks

406  
00:17:47,510 --> 00:17:45,919  
that you need to take to get the the

407  
00:17:49,110 --> 00:17:47,520  
jobs done so

408  
00:17:50,789 --> 00:17:49,120  
if anybody's interested in going into

409  
00:17:52,470 --> 00:17:50,799  
the military i would highly recommend it

410  
00:17:54,150 --> 00:17:52,480  
because it gives you really

411  
00:17:55,830 --> 00:17:54,160  
a good background on a whole bunch of

412  
00:17:58,230 --> 00:17:55,840  
different things joe also was in the

413  
00:18:01,110 --> 00:17:58,240

military for a while too and uh i think

414

00:18:04,070 --> 00:18:01,120

um it it is just a great way

415

00:18:06,710 --> 00:18:04,080

to learn a lot of vocational skills

416

00:18:12,710 --> 00:18:06,720

technical skills leadership followership

417

00:18:16,070 --> 00:18:14,390

um joe

418

00:18:21,590 --> 00:18:16,080

what do you do if someone gets really

419

00:18:26,070 --> 00:18:23,190

yeah we uh we go through a lot of

420

00:18:27,510 --> 00:18:26,080

training in houston on some of the basic

421

00:18:29,830 --> 00:18:27,520

medical

422

00:18:32,630 --> 00:18:29,840

ways to treat people and if we do have

423

00:18:33,990 --> 00:18:32,640

any accidents what we can do up here and

424

00:18:36,070 --> 00:18:34,000

one thing we're very fortunate like

425

00:18:37,750 --> 00:18:36,080

sonny said we're part of a big team so

426

00:18:38,870 --> 00:18:37,760

somebody were to get sick we have flight

427

00:18:41,110 --> 00:18:38,880

surgeons

428

00:18:43,590 --> 00:18:41,120

on the ground that can help us

429

00:18:45,270 --> 00:18:43,600

we do have medication up here that we

430

00:18:47,110 --> 00:18:45,280

can take we have all the equipment we

431

00:18:48,950 --> 00:18:47,120

need if someone were to get a cut or

432

00:18:50,789 --> 00:18:48,960

something were to happen so we're very

433

00:18:51,909 --> 00:18:50,799

well trained we have a lot of support on

434

00:18:53,350 --> 00:18:51,919

the ground

435

00:18:55,270 --> 00:18:53,360

and if anything really really bad

436

00:18:56,950 --> 00:18:55,280

happened we do have our soyuz vehicle

437

00:19:03,190 --> 00:18:56,960

here and we could get back to earth

438

00:19:12,150 --> 00:19:06,230

station this is houston acr thank you

439

00:19:12,160 --> 00:19:18,150

thank you that was fun