



1
00:00:12,390 --> 00:00:10,240
well room i'm here with a special guest

2
00:00:15,730 --> 00:00:12,400
we are here for Digital Learning Network

3
00:00:17,980 --> 00:00:15,740
with the galena park school district and

4
00:00:20,470 --> 00:00:17,990
I know we are talking with six to eight

5
00:00:22,660 --> 00:00:20,480
grade students who are that theme of

6
00:00:24,450 --> 00:00:22,670
their studies is space camp so I'm here

7
00:00:26,650 --> 00:00:24,460
with a guest who goes to space camp

8
00:00:28,600 --> 00:00:26,660
astronaut scott Kelly has been to space

9
00:00:31,810 --> 00:00:28,610
three times he flew once aboard the

10
00:00:33,639 --> 00:00:31,820
space shuttle on sts-1 03 then he flew a

11
00:00:35,920 --> 00:00:33,649
second time as the commander of the

12
00:00:37,090 --> 00:00:35,930
space shuttle during sts-118 and most

13
00:00:38,950 --> 00:00:37,100

recently he flew aboard the

14

00:00:42,970 --> 00:00:38,960

International Space Station as the

15

00:00:46,810 --> 00:00:42,980

commander of expedition 26 and he was

16

00:00:56,619 --> 00:00:46,820

there for 159 days welcome Scott thank

17

00:01:03,170 --> 00:00:58,790

alright and I we're ready to go ahead

18

00:01:08,050 --> 00:01:03,180

and go with your questions so kids well

19

00:01:12,859 --> 00:01:08,060

here we have Jacob Jacob but um I was

20

00:01:16,880 --> 00:01:12,869

wondering if what would happen if the if

21

00:01:20,749 --> 00:01:16,890

the shuttle boat was at a problem like

22

00:01:27,289 --> 00:01:20,759

if they had an inferior or finest all

23

00:01:28,820 --> 00:01:27,299

use there is like that happen guys

24

00:01:32,450 --> 00:01:28,830

you're going to happen just beat you up

25

00:01:36,300 --> 00:01:32,460

a little bit and I didn't go in I'm key

26
00:01:46,380 --> 00:01:41,580
how do you hear me what have happened if

27
00:01:54,600 --> 00:01:46,390
the shuttle or the Soyuz capsules engine

28
00:01:57,300 --> 00:01:54,610
and how to failure what would you do can

29
00:01:59,520 --> 00:01:57,310
you hear us yeah we had a little bit of

30
00:02:03,929 --> 00:01:59,530
a technical difficulty there but it's

31
00:02:07,050 --> 00:02:03,939
it's fixed now so repeat your question

32
00:02:09,120 --> 00:02:07,060
one more time for sure what would happen

33
00:02:12,120 --> 00:02:09,130
the soy views or the Space Shuttle had

34
00:02:15,570 --> 00:02:12,130
an engine failure or a problem and y'all

35
00:02:19,559 --> 00:02:15,580
weren't docked to the space station for

36
00:02:22,860 --> 00:02:19,569
the the space shuttle the space shuttle

37
00:02:24,780 --> 00:02:22,870
has various ways of compensating if an

38
00:02:28,170 --> 00:02:24,790

engine fails if it was to fail on the

39

00:02:30,120 --> 00:02:28,180

launch pad after liftoff certainly

40

00:02:32,370 --> 00:02:30,130

before liftoff the shuttle wouldn't

41

00:02:35,309 --> 00:02:32,380

actually lift off the pad but it was

42

00:02:37,170 --> 00:02:35,319

after liftoff in the first part of the

43

00:02:40,160 --> 00:02:37,180

ascent you would come back to the

44

00:02:45,199 --> 00:02:40,170

Kennedy Space Center and land as you get

45

00:02:49,530 --> 00:02:45,209

faster and higher your options to abort

46

00:02:51,559 --> 00:02:49,540

improve to where the next the next

47

00:02:56,130 --> 00:02:51,569

option would be potentially landing in a

48

00:02:57,720 --> 00:02:56,140

landing site in Africa and later on in

49

00:02:59,370 --> 00:02:57,730

the eight and a half minute a cent you

50

00:03:02,580 --> 00:02:59,380

could actually do what's called an abort

51
00:03:04,800 --> 00:03:02,590
to orbit where you might get into a

52
00:03:06,599 --> 00:03:04,810
lower orbit not the one that you

53
00:03:12,059 --> 00:03:06,609
intended to go into but something that

54
00:03:14,300 --> 00:03:12,069
is safe for the Soyuz again it depends

55
00:03:17,430 --> 00:03:14,310
on where that engine failure happens

56
00:03:21,150 --> 00:03:17,440
we're in the in the launch trajectory it

57
00:03:23,460 --> 00:03:21,160
happens in the most severe case the

58
00:03:26,099 --> 00:03:23,470
Soyuz has an escape system that'll

59
00:03:30,000 --> 00:03:26,109
basically rocket the capsule away from

60
00:03:32,520 --> 00:03:30,010
the the larger rocket and allow the crew

61
00:03:34,259 --> 00:03:32,530
to land under the parachute of course

62
00:03:36,780 --> 00:03:34,269
you know as you get just like the space

63
00:03:40,680 --> 00:03:36,790

shuttle as you get faster and higher you

64

00:03:42,750 --> 00:03:40,690

have better options and in some cases if

65

00:03:45,539 --> 00:03:42,760

the engine fails very late in the in the

66

00:03:47,390 --> 00:03:45,549

asset you don't have to really do

67

00:03:49,470 --> 00:03:47,400

anything at all you have enough

68

00:03:50,140 --> 00:03:49,480

capability in the remaining engines to

69

00:04:00,369 --> 00:03:50,150

get to where you

70

00:04:04,449 --> 00:04:00,379

to go alrighty that's a wonderful answer

71

00:04:06,039 --> 00:04:04,459

thank you Scott Kelly we're gonna go

72

00:04:07,809 --> 00:04:06,049

ahead and go to the next question galena

73

00:04:09,429 --> 00:04:07,819

park I see if you can just make sure you

74

00:04:11,729 --> 00:04:09,439

can speak as loudly and clearly into the

75

00:04:16,870 --> 00:04:11,739

microphone as you can we'd appreciate it

76
00:04:19,749 --> 00:04:16,880
okay my name is Daniel and uh how was it

77
00:04:23,170 --> 00:04:19,759
how was it like during the lunches like

78
00:04:25,360 --> 00:04:23,180
how'd you feel you know it's interesting

79
00:04:30,070 --> 00:04:25,370
on my on my first flight on the space

80
00:04:33,159 --> 00:04:30,080
shuttle the Space Shuttle on the launch

81
00:04:34,719 --> 00:04:33,169
pad weighs about 5 million pounds and

82
00:04:37,659 --> 00:04:34,729
has about seven and a half million

83
00:04:41,529 --> 00:04:37,669
pounds of thrust that launches it into

84
00:04:45,000 --> 00:04:41,539
space and on the first your first flight

85
00:04:48,040 --> 00:04:45,010
into space it really gets your attention

86
00:04:49,779 --> 00:04:48,050
it feels like you feel every pound of

87
00:04:52,810 --> 00:04:49,789
that seven and a half million pounds of

88
00:04:55,089 --> 00:04:52,820

thrust you you get the sense that you're

89

00:04:56,830 --> 00:04:55,099

going somewhere you're not sure where

90

00:04:58,180 --> 00:04:56,840

you know you're going there in a hurry

91

00:05:00,580 --> 00:04:58,190

and you know you're not coming back to

92

00:05:04,360 --> 00:05:00,590

Florida I mean it just it just leaps off

93

00:05:08,110 --> 00:05:04,370

the launch pad the Soyuz is a little bit

94

00:05:09,760 --> 00:05:08,120

different for for a number of reasons it

95

00:05:12,850 --> 00:05:09,770

doesn't have the same amount of thrust

96

00:05:15,610 --> 00:05:12,860

although it does have a higher

97

00:05:19,719 --> 00:05:15,620

acceleration so you feel higher g-forces

98

00:05:23,070 --> 00:05:19,729

later in the in the ascent and then the

99

00:05:27,820 --> 00:05:23,080

other difference with the Soyuz is that

100

00:05:30,730 --> 00:05:27,830

when the second and third stages of the

101
00:05:33,550 --> 00:05:30,740
the Soyuz light when the engines light

102
00:05:38,740 --> 00:05:33,560
they do it you know after the previous

103
00:05:40,210 --> 00:05:38,750
stages has shut down so at least in the

104
00:05:43,300 --> 00:05:40,220
case of the second and the third stage

105
00:05:47,110 --> 00:05:43,310
so you feel like you're accelerating and

106
00:05:49,480 --> 00:05:47,120
then you stop accelerating and you kind

107
00:05:51,430 --> 00:05:49,490
of go to like a zero-g kind of feeling

108
00:05:54,460 --> 00:05:51,440
and then the engines kick on and it's

109
00:05:56,379 --> 00:05:54,470
really like a real kick in the pants so

110
00:05:59,430 --> 00:05:56,389
to speak that it starts accelerating you

111
00:06:02,679 --> 00:05:59,440
out again so there is some differences

112
00:06:06,309 --> 00:06:02,689
you know it's very exciting

113
00:06:09,339 --> 00:06:06,319

time certainly and and certainly a lot

114

00:06:11,350 --> 00:06:09,349

of fun too very good question and also

115

00:06:13,089 --> 00:06:11,360

there's some significant differences in

116

00:06:15,909 --> 00:06:13,099

the landing and those two vehicles as

117

00:06:18,159 --> 00:06:15,919

well you want to yeah the the landing of

118

00:06:20,439 --> 00:06:18,169

the Soyuz and the and the and the

119

00:06:24,219 --> 00:06:20,449

shuttle are much different the shuttle

120

00:06:28,149 --> 00:06:24,229

lands kind of like an airplane it is

121

00:06:30,399 --> 00:06:28,159

much more gentle and it's because it was

122

00:06:33,129 --> 00:06:30,409

designed to be a reusable vehicle that

123

00:06:36,549 --> 00:06:33,139

you know brought potentially sensitive

124

00:06:38,709 --> 00:06:36,559

scientific experiments and other and

125

00:06:39,909 --> 00:06:38,719

other sensitive equipment home not to

126

00:06:41,769 --> 00:06:39,919

mention the vehicle is somewhat

127

00:06:45,790 --> 00:06:41,779

sensitive because we needed to reuse it

128

00:06:49,929 --> 00:06:45,800

so the the Soyuz is much different the

129

00:06:53,799 --> 00:06:49,939

sleeves enters as a capsule it lands

130

00:06:58,419 --> 00:06:53,809

under a parachute and lands and lands in

131

00:07:00,939 --> 00:06:58,429

the in the desert the shuttle landing is

132

00:07:05,589 --> 00:07:00,949

is much more gentle it's actually flown

133

00:07:08,100 --> 00:07:05,599

by the commander the Soyuz is generally

134

00:07:10,059 --> 00:07:08,110

speaking all automatic and is more like

135

00:07:11,739 --> 00:07:10,069

whereas the shuttles like an airplane

136

00:07:14,709 --> 00:07:11,749

the sleeves is more like going over

137

00:07:17,949 --> 00:07:14,719

Niagara Falls in a barrel it's it's a

138

00:07:28,959 --> 00:07:17,959

very very dynamic we call it dynamic

139

00:07:34,569 --> 00:07:31,929

I want to know how long does it take to

140

00:07:38,409 --> 00:07:34,579

get into to get out at Mysterio and get

141

00:07:43,899 --> 00:07:38,419

into space well you know spaces is

142

00:07:46,059 --> 00:07:43,909

defined as a fifty-mile barrier and it

143

00:07:48,459 --> 00:07:46,069

takes several minutes to get get to that

144

00:07:50,499 --> 00:07:48,469

altitude both in the in the space

145

00:07:52,389 --> 00:07:50,509

shuttle and in the Soyuz doesn't

146

00:07:55,919 --> 00:07:52,399

actually feel like you're in space until

147

00:07:58,649 --> 00:07:55,929

the engines of those vehicles cut off

148

00:08:01,869 --> 00:07:58,659

and that's when you go from this

149

00:08:04,749 --> 00:08:01,879

acceleration getting you to a very fast

150

00:08:08,169 --> 00:08:04,759

speed to where you actually feel zero

151

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

gravity and that takes on the shuttle

152

00:08:12,789 --> 00:08:10,189

eight and a half minutes on the Soyuz a

153

00:08:15,579 --> 00:08:12,799

little over nine minutes before it's

154

00:08:17,469 --> 00:08:15,589

before your you know not only are you in

155

00:08:23,379 --> 00:08:17,479

space but you feel like you're in space

156

00:08:24,969 --> 00:08:23,389

because you're then floating and we're

157

00:08:34,380 --> 00:08:24,979

looking at now that was just a video

158

00:08:40,560 --> 00:08:36,810

do you ever get used the feeling of

159

00:08:45,840 --> 00:08:40,570

going into space and landing from coming

160

00:08:49,220 --> 00:08:45,850

back you know having flown three times i

161

00:08:51,360 --> 00:08:49,230

would say i haven't gotten used to it

162

00:08:55,230 --> 00:08:51,370

you know there are aspects of it that

163

00:08:57,660 --> 00:08:55,240

get more comfortable you know i flew

164

00:09:00,350 --> 00:08:57,670

twice on the sleeves and one hour twice

165

00:09:02,670 --> 00:09:00,360

on the shuttle and once on the Soyuz so

166

00:09:06,480 --> 00:09:02,680

you know it's only only one of those

167

00:09:08,790 --> 00:09:06,490

vehicles did I fly on twice but I think

168

00:09:11,310 --> 00:09:08,800

it would take me many many flights

169

00:09:13,290 --> 00:09:11,320

before I got completely comfortable with

170

00:09:16,080 --> 00:09:13,300

either the launch or the landing of

171

00:09:19,290 --> 00:09:16,090

either the shuttle or the sleeves so I

172

00:09:21,410 --> 00:09:19,300

don't think he's done I'd like to have

173

00:09:29,580 --> 00:09:21,420

the opportunity to get very comfortable

174

00:09:32,889 --> 00:09:29,590

next question what do you like about

175

00:09:39,429 --> 00:09:34,569

can you repeat the question one more

176
00:09:41,949 --> 00:09:39,439
time what do you like being um what do

177
00:09:43,179 --> 00:09:41,959
you like about being in it what do I

178
00:09:45,850 --> 00:09:43,189
like about being an astronaut well

179
00:09:51,549 --> 00:09:45,860
certainly you know flying in space is a

180
00:09:55,799 --> 00:09:51,559
great part of the job but to me the best

181
00:09:58,569 --> 00:09:55,809
part about being an astronaut is that

182
00:10:04,179 --> 00:09:58,579
flying in space is very very challenging

183
00:10:07,090 --> 00:10:04,189
it's it's very difficult and there's a

184
00:10:09,069 --> 00:10:07,100
lot of satisfaction to be had by being a

185
00:10:11,559 --> 00:10:09,079
part of something that is very very

186
00:10:15,129 --> 00:10:11,569
challenging very hard working hard at it

187
00:10:17,619 --> 00:10:15,139
working with a team and then being

188
00:10:20,199 --> 00:10:17,629

successful in and proud of your success

189

00:10:23,169 --> 00:10:20,209

so you know it's not the individual you

190

00:10:24,999 --> 00:10:23,179

know launching in space or landing or

191

00:10:26,739 --> 00:10:25,009

looking at the earth or floating it's

192

00:10:29,319 --> 00:10:26,749

it's being a part of something that's

193

00:10:31,210 --> 00:10:29,329

much larger than yourself something that

194

00:10:35,559 --> 00:10:31,220

you consider important something that

195

00:10:37,509 --> 00:10:35,569

you work with a team and then you know

196

00:10:38,889 --> 00:10:37,519

you're proud of your success and when I

197

00:10:41,230 --> 00:10:38,899

go around the country and talk about the

198

00:10:43,600 --> 00:10:41,240

space program and talk to kids what I

199

00:10:45,549 --> 00:10:43,610

say is that same type of satisfaction

200

00:10:48,579 --> 00:10:45,559

and challenge that you know we

201
00:10:50,199 --> 00:10:48,589
experience in the space program you can

202
00:10:53,230 --> 00:10:50,209
also experience in your own lives

203
00:10:55,509 --> 00:10:53,240
whether it's with your schoolwork you

204
00:10:57,730 --> 00:10:55,519
know if it's you know if you find

205
00:10:59,679 --> 00:10:57,740
something that's difficult and you work

206
00:11:01,629 --> 00:10:59,689
hard at it then you can be proud of your

207
00:11:03,610 --> 00:11:01,639
success and you can do that you know

208
00:11:05,769 --> 00:11:03,620
with your schoolwork and sports and

209
00:11:08,259 --> 00:11:05,779
other careers that you may decide to

210
00:11:09,549 --> 00:11:08,269
pursue you know I encourage you to

211
00:11:12,970 --> 00:11:09,559
pursue something that's challenging

212
00:11:15,280 --> 00:11:12,980
something that's not necessarily easy

213
00:11:18,039 --> 00:11:15,290

for you you know challenge yourself with

214

00:11:19,569 --> 00:11:18,049

your school work with what you decide to

215

00:11:29,900 --> 00:11:19,579

do in your life and then be proud of

216

00:11:35,550 --> 00:11:33,180

hi my name is miracle I like to know

217

00:11:40,470 --> 00:11:35,560

what type of training do you have to go

218

00:11:42,840 --> 00:11:40,480

through to be a astronaut it's a you

219

00:11:45,120 --> 00:11:42,850

know to become an astronaut nasa looks

220

00:11:47,640 --> 00:11:45,130

for people that certainly have the

221

00:11:50,100 --> 00:11:47,650

appropriate technical background in

222

00:11:52,830 --> 00:11:50,110

science or math or engineering some

223

00:11:54,710 --> 00:11:52,840

technical field but also you know people

224

00:11:57,870 --> 00:11:54,720

that have proven themselves in whatever

225

00:12:02,610 --> 00:11:57,880

job they're currently and in my case I

226

00:12:06,390 --> 00:12:02,620

was a military test pilot prior to

227

00:12:10,380 --> 00:12:06,400

becoming an astronaut the the selection

228

00:12:13,050 --> 00:12:10,390

process is is pretty it's pretty

229

00:12:14,730 --> 00:12:13,060

selective because there's only so many

230

00:12:16,290 --> 00:12:14,740

people here and a lot of people that

231

00:12:19,830 --> 00:12:16,300

that want the job but I wouldn't

232

00:12:23,250 --> 00:12:19,840

discourage anyone from from pursuing

233

00:12:24,360 --> 00:12:23,260

this as a career just because you know

234

00:12:25,950 --> 00:12:24,370

there aren't a whole lot of

235

00:12:28,140 --> 00:12:25,960

opportunities right now because

236

00:12:31,920 --> 00:12:28,150

obviously you know somebody has to has

237

00:12:33,930 --> 00:12:31,930

to do it and you know people that you

238

00:12:35,550 --> 00:12:33,940

know are very motivated and work hard a

239

00:12:37,590 --> 00:12:35,560

lot of times have this kind of

240

00:12:40,800 --> 00:12:37,600

opportunity so I wouldn't be

241

00:12:42,780 --> 00:12:40,810

discouraging to anyone that that wanted

242

00:12:45,360 --> 00:12:42,790

to do this just because there's there's

243

00:12:46,890 --> 00:12:45,370

only you know limited opportunities at

244

00:12:49,590 --> 00:12:46,900

this point you never know what what

245

00:12:52,320 --> 00:12:49,600

might be in the future once you become

246

00:12:55,860 --> 00:12:52,330

an astronaut the the training is pretty

247

00:12:58,079 --> 00:12:55,870

extensive and you know I've been here

248

00:13:01,170 --> 00:12:58,089

for 16 years and I still sometimes say

249

00:13:03,840 --> 00:13:01,180

to my my daughters that i have a class

250

00:13:06,000 --> 00:13:03,850

and my eight-year-old looks at me and

251
00:13:07,890 --> 00:13:06,010
she's like you know why do you have a

252
00:13:11,550 --> 00:13:07,900
class dad you're old you shouldn't be

253
00:13:14,400 --> 00:13:11,560
having a class but you know as an

254
00:13:16,260 --> 00:13:14,410
astronaut you train you know not every

255
00:13:18,810 --> 00:13:16,270
day but all the time and some of that

256
00:13:21,300 --> 00:13:18,820
training is academic training some of

257
00:13:23,730 --> 00:13:21,310
its studying on your own some of its

258
00:13:25,590 --> 00:13:23,740
doing you know robotic operations or

259
00:13:28,560 --> 00:13:25,600
training for launch and landing in a

260
00:13:33,060 --> 00:13:28,570
simulator or training in a pool in a big

261
00:13:34,950 --> 00:13:33,070
bulky space suit for spacewalks so you

262
00:13:37,920 --> 00:13:34,960
know I feel like I've been going to

263
00:13:41,470 --> 00:13:37,930

school continuously since kindergarten

264

00:13:45,129 --> 00:13:41,480

and you know that's over 40 years

265

00:13:46,480 --> 00:13:45,139

oh I guess the message there is that you

266

00:13:48,879 --> 00:13:46,490

know if you want to be successful in

267

00:13:51,189 --> 00:13:48,889

life and you want to you know have a

268

00:13:53,079 --> 00:13:51,199

career that challenges you never you

269

00:13:55,090 --> 00:13:53,089

never stop learning you always need to

270

00:13:57,579 --> 00:13:55,100

consider yourself a student of something

271

00:14:01,300 --> 00:13:57,589

and that's the way you you know continue

272

00:14:03,240 --> 00:14:01,310

to improve and and increases your

273

00:14:05,740 --> 00:14:03,250

chances of being successful in life

274

00:14:07,420 --> 00:14:05,750

that's also a very very good message

275

00:14:08,740 --> 00:14:07,430

that you talk about not to just be

276

00:14:10,990 --> 00:14:08,750

discouraged because of the opportunity

277

00:14:13,689 --> 00:14:11,000

but also be you know look at your

278

00:14:18,730 --> 00:14:13,699

background I mean you were a son of two

279

00:14:21,040 --> 00:14:18,740

police officers and you know becoming an

280

00:14:23,650 --> 00:14:21,050

astronaut wasn't necessarily you know

281

00:14:24,910 --> 00:14:23,660

something that was right there laid out

282

00:14:27,780 --> 00:14:24,920

in the stars I mean you actually had to

283

00:14:31,509 --> 00:14:27,790

work for that yeah I came from a

284

00:14:33,329 --> 00:14:31,519

blue-collar family you know essentially

285

00:14:35,470 --> 00:14:33,339

my brother and I were the first

286

00:14:39,340 --> 00:14:35,480

generations in her and her and her

287

00:14:41,259 --> 00:14:39,350

family to go to college and you know

288

00:14:42,970 --> 00:14:41,269

being a you know an officer in the

289

00:14:45,759 --> 00:14:42,980

military and a pilot was not something

290

00:14:50,559 --> 00:14:45,769

that people really did from you know

291

00:14:54,280 --> 00:14:50,569

where I was from at that time so it you

292

00:14:56,620 --> 00:14:54,290

know it was it was basically you know my

293

00:14:57,819 --> 00:14:56,630

brother and I becoming astronauts you

294

00:15:02,920 --> 00:14:57,829

know we basically had the same

295

00:15:04,809 --> 00:15:02,930

opportunity as many kids out there which

296

00:15:07,809 --> 00:15:04,819

basically I think what I'm trying to say

297

00:15:09,819 --> 00:15:07,819

is we didn't have any extra special help

298

00:15:12,400 --> 00:15:09,829

to do this because of you know the

299

00:15:13,960 --> 00:15:12,410

background that we came from exactly so

300

00:15:23,510 --> 00:15:13,970

bottom line is it's up to you good

301

00:15:29,000 --> 00:15:26,420

hi my name is Kennedy I like to know

302

00:15:35,480 --> 00:15:29,010

when your space are you ever afraid of

303

00:15:37,550 --> 00:15:35,490

what you might discover their um you

304

00:15:41,620 --> 00:15:37,560

know I think people that are astronauts

305

00:15:46,100 --> 00:15:41,630

are our explorers in at heart and

306

00:15:47,930 --> 00:15:46,110

they're looking for discoveries and you

307

00:15:52,130 --> 00:15:47,940

know not really afraid of what they

308

00:15:54,260 --> 00:15:52,140

might find you know as far as like big

309

00:15:56,060 --> 00:15:54,270

surprises if you're referring to things

310

00:15:58,220 --> 00:15:56,070

that might you know you might have seen

311

00:16:00,350 --> 00:15:58,230

on a science fiction movie or something

312

00:16:03,500 --> 00:16:00,360

or that that kind of stuff that might

313

00:16:05,090 --> 00:16:03,510

scare you now we actually don't really

314

00:16:06,860 --> 00:16:05,100

think about that in space certainly

315

00:16:09,050 --> 00:16:06,870

certainly there are some things that

316

00:16:11,260 --> 00:16:09,060

worry you and might be a little bit

317

00:16:15,230 --> 00:16:11,270

scary most most astronauts are more

318

00:16:16,970 --> 00:16:15,240

scared about making mistakes than they

319

00:16:20,000 --> 00:16:16,980

are about their you know physical

320

00:16:23,600 --> 00:16:20,010

well-being on the on the rocket you know

321

00:16:27,590 --> 00:16:23,610

most of the times in space that are the

322

00:16:29,570 --> 00:16:27,600

riskiest riskiest are the are the times

323

00:16:31,340 --> 00:16:29,580

where you're most focused on what you're

324

00:16:33,950 --> 00:16:31,350

doing so you really don't have time to

325

00:16:37,130 --> 00:16:33,960

be scared you're you're you know focused

326

00:16:38,660 --> 00:16:37,140

on your job and completing that and not

327

00:16:47,240 --> 00:16:38,670

really worrying about what could happen

328

00:16:52,250 --> 00:16:50,630

oh who inspired you to become an

329

00:16:55,330 --> 00:16:52,260

astronaut and a father or were you

330

00:16:58,420 --> 00:16:55,340

planning your brother's death you know

331

00:17:02,360 --> 00:16:58,430

my brother and I were both in the same

332

00:17:04,340 --> 00:17:02,370

astronaut class and although he was in

333

00:17:07,160 --> 00:17:04,350

the Navy a year before me it was really

334

00:17:11,510 --> 00:17:07,170

my idea to join the Navy and be a pilot

335

00:17:13,850 --> 00:17:11,520

and he kind of stole that from me as far

336

00:17:17,840 --> 00:17:13,860

as as far as inspiration I just thought

337

00:17:20,750 --> 00:17:17,850

that I do remember reading the book the

338

00:17:24,050 --> 00:17:20,760

right stuff it's called it's about the

339

00:17:27,500 --> 00:17:24,060

early test pilots in the in the jet age

340

00:17:29,540 --> 00:17:27,510

when we first broke the speed of sound

341

00:17:32,450 --> 00:17:29,550

and about the early astronauts and I

342

00:17:33,890 --> 00:17:32,460

remember reading that book and while I

343

00:17:35,780 --> 00:17:33,900

was reading it I'm thinking you know I

344

00:17:37,580 --> 00:17:35,790

think I can do this you know this seems

345

00:17:39,350 --> 00:17:37,590

really exciting but you know I didn't

346

00:17:42,580 --> 00:17:39,360

see anything in that book that made

347

00:17:46,670 --> 00:17:42,590

those pilots or those astronauts really

348

00:17:50,120 --> 00:17:46,680

you know stand out above what i thought

349

00:17:53,120 --> 00:17:50,130

i had the capability to achieve maybe I

350

00:17:55,190 --> 00:17:53,130

was being naive at the time but but you

351

00:17:56,780 --> 00:17:55,200

know I was certainly a dreamer like a

352

00:17:59,300 --> 00:17:56,790

lot of kids and I thought hey I could

353

00:18:02,810 --> 00:17:59,310

probably do this and I thought it would

354

00:18:04,490 --> 00:18:02,820

be really fun to be a pilot of a high

355

00:18:07,010 --> 00:18:04,500

performance jet airplane and I thought

356

00:18:08,900 --> 00:18:07,020

to myself you know what would be the

357

00:18:10,730 --> 00:18:08,910

most challenging type of flying and I

358

00:18:13,970 --> 00:18:10,740

you know figured it would be landing on

359

00:18:26,760 --> 00:18:13,980

an aircraft carrier especially at night

360

00:18:34,740 --> 00:18:31,170

next question hi my name is Eddie Anna

361

00:18:39,980 --> 00:18:34,750

Alan X milk um how you felt when you

362

00:18:46,530 --> 00:18:39,990

were in how I felt when I was we're

363

00:18:48,780 --> 00:18:46,540

landing that's hurt um my last landing

364

00:18:52,560 --> 00:18:48,790

in the in the space shuttle I was

365

00:18:54,960 --> 00:18:52,570

actually flying it so like I said before

366

00:18:59,850 --> 00:18:54,970

I was really focused on I'm doing my job

367

00:19:02,130 --> 00:18:59,860

you feel a little bit dizzy you haven't

368

00:19:06,690 --> 00:19:02,140

been exposed to gravity for that in that

369

00:19:09,060 --> 00:19:06,700

case 13 days so you're what's called

370

00:19:13,710 --> 00:19:09,070

vestibular system your balance system is

371

00:19:20,550 --> 00:19:13,720

not normal it's not how it how it is on

372

00:19:22,320 --> 00:19:20,560

earth because it uses gravity to to you

373

00:19:24,540 --> 00:19:22,330

know know which way is up and down and

374

00:19:26,970 --> 00:19:24,550

to stabilize yourself so when you're

375

00:19:28,760 --> 00:19:26,980

coming back into gravity you're dizzy

376

00:19:31,080 --> 00:19:28,770

and in this case I'm trying to fly the

377

00:19:34,530 --> 00:19:31,090

the space shuttle so it's somewhat

378

00:19:35,820 --> 00:19:34,540

challenging certainly a very exciting

379

00:19:38,570 --> 00:19:35,830

because you're at the end of this very

380

00:19:43,260 --> 00:19:38,580

you know challenging and exciting and

381

00:19:46,620 --> 00:19:43,270

time in your life and the Soyuz though

382

00:19:48,540 --> 00:19:46,630

is different it's much more dynamic when

383

00:19:50,070 --> 00:19:48,550

the drogue chute opens it has several

384

00:19:53,250 --> 00:19:50,080

parachutes one of them is called the

385

00:19:55,650 --> 00:19:53,260

drogue chute that stabilizes the the

386

00:19:58,410 --> 00:19:55,660

vehicle and pulls out the main chute and

387

00:20:00,240 --> 00:19:58,420

when that opens it's kind of like a the

388

00:20:04,050 --> 00:20:00,250

wildest roller coaster you could ever

389

00:20:06,510 --> 00:20:04,060

imagine it really you know the Soyuz

390

00:20:08,160 --> 00:20:06,520

really moves around and feels probably

391

00:20:10,260 --> 00:20:08,170

feels a lot worse than it really is

392

00:20:12,330 --> 00:20:10,270

because of your like I said your balance

393

00:20:15,660 --> 00:20:12,340

system is somewhat messed up so it

394

00:20:18,150 --> 00:20:15,670

really tumbles and for it feels like

395

00:20:19,650 --> 00:20:18,160

it's you know more than a minute as you

396

00:20:21,480 --> 00:20:19,660

can see on the TV here they show the

397

00:20:24,660 --> 00:20:21,490

drogue chute and this is the main chute

398

00:20:26,400 --> 00:20:24,670

the main parachute opening once the main

399

00:20:28,740 --> 00:20:26,410

parachute opens it gets pretty stable

400

00:20:32,240 --> 00:20:28,750

but then when it hits the ground it's

401
00:20:34,100 --> 00:20:32,250
like again like kind of like a car crash

402
00:20:36,290 --> 00:20:34,110
if you could imagine like a racecar

403
00:20:37,700 --> 00:20:36,300
driver when they actually flipped the

404
00:20:40,100 --> 00:20:37,710
car and it's kind of tumbling through

405
00:20:42,020 --> 00:20:40,110
the air down the track actually feels a

406
00:20:44,780 --> 00:20:42,030
lot like what I would imagine that to

407
00:20:55,250 --> 00:20:44,790
feel like exhilarating do we have any

408
00:21:02,210 --> 00:20:58,040
my name is Dean and what I want to know

409
00:21:04,610 --> 00:21:02,220
is our astronauts affected by deep vein

410
00:21:07,280 --> 00:21:04,620
thrombosis otherwise known as blood

411
00:21:13,310 --> 00:21:07,290
clots since they are move using their

412
00:21:16,100 --> 00:21:13,320
muscles too often yeah that so the the

413
00:21:19,580 --> 00:21:16,110

deep vein thrombosis that I think you

414

00:21:23,930 --> 00:21:19,590

hear about people experience excuse me

415

00:21:25,880 --> 00:21:23,940

experiencing you know sometimes people

416

00:21:27,710 --> 00:21:25,890

on airplanes like I guess there's

417

00:21:29,990 --> 00:21:27,720

anecdotal information that's sitting for

418

00:21:33,470 --> 00:21:30,000

long periods of time could cause those

419

00:21:36,560 --> 00:21:33,480

type of blood clots you know I don't

420

00:21:38,600 --> 00:21:36,570

think there's any history of us having

421

00:21:43,460 --> 00:21:38,610

certainly not any history of us having

422

00:21:46,310 --> 00:21:43,470

anything like that in space but in some

423

00:21:48,260 --> 00:21:46,320

ways and I'm just kind of guessing here

424

00:21:53,000 --> 00:21:48,270

you might be less susceptible to that

425

00:21:56,000 --> 00:21:53,010

kind of thing in space because in space

426

00:21:58,580 --> 00:21:56,010

the you know you don't have gravity

427

00:22:00,770 --> 00:21:58,590

pushing all the blood down from your

428

00:22:02,830 --> 00:22:00,780

upper body into your lower body and I

429

00:22:04,790 --> 00:22:02,840

think that kind of phenomenon is

430

00:22:07,220 --> 00:22:04,800

potentially do too like if you're

431

00:22:08,810 --> 00:22:07,230

sitting a long time you have you know

432

00:22:10,580 --> 00:22:08,820

you're not moving around potentially the

433

00:22:13,700 --> 00:22:10,590

blood and you're in your lower

434

00:22:15,710 --> 00:22:13,710

extremities are kind of you know a

435

00:22:19,640 --> 00:22:15,720

little bit more stagnant than they might

436

00:22:21,950 --> 00:22:19,650

otherwise would be so in space where

437

00:22:25,130 --> 00:22:21,960

everything floats your the blood in your

438

00:22:28,880 --> 00:22:25,140

body is distributed you know perfectly

439

00:22:30,650 --> 00:22:28,890

evenly and is not you know affected by

440

00:22:32,150 --> 00:22:30,660

gravity so I think there's probably less

441

00:22:40,520 --> 00:22:32,160

of a chance to have something like that

442

00:22:42,050 --> 00:22:40,530

in in orbit or in space all right thank

443

00:22:43,670 --> 00:22:42,060

you for that answer Scott Kelly we are

444

00:22:45,410 --> 00:22:43,680

going to do one more question from

445

00:22:47,480 --> 00:22:45,420

galena park isd and then wrap up from

446

00:22:49,700 --> 00:22:47,490

there so one more question speak loud

447

00:22:52,340 --> 00:22:49,710

and clearly in the microphone and we'll

448

00:22:54,350 --> 00:22:52,350

go from there morning my name is

449

00:22:56,180 --> 00:22:54,360

Jacqueline and I wanted to know when you

450

00:22:58,910 --> 00:22:56,190

finally reach outer space and you're

451

00:23:01,340 --> 00:22:58,920

able to gaze at them the Magnificent

452

00:23:03,980 --> 00:23:01,350

earth in person that must be so surreal

453

00:23:06,440 --> 00:23:03,990

and how does that make you feel you know

454

00:23:09,049 --> 00:23:06,450

I couldn't you know my last flight I had

455

00:23:11,930 --> 00:23:09,059

six months of looking at the earth and

456

00:23:17,649 --> 00:23:11,940

it's very beautiful have certain

457

00:23:25,749 --> 00:23:22,639

my my first flight on sds 103 hi Kermit

458

00:23:28,369 --> 00:23:25,759

we launched at night and I can remember

459

00:23:33,769 --> 00:23:28,379

turning to the commander of the space

460

00:23:35,360 --> 00:23:33,779

shuttle and asking him what I said

461

00:23:38,600 --> 00:23:35,370

something I forget exactly how I put it

462

00:23:40,249 --> 00:23:38,610

but I was like what is that you know it

463

00:23:43,430 --> 00:23:40,259

was just so amazing looking and

464

00:23:45,830 --> 00:23:43,440

basically it was the sunrise and then

465

00:23:47,779 --> 00:23:45,840

the earth and it was just this brilliant

466

00:23:51,619 --> 00:23:47,789

blue color like the bluest thing I've

467

00:23:54,139 --> 00:23:51,629

ever seen in my life perfectly clear the

468

00:23:57,649 --> 00:23:54,149

you know just the clarity of it was was

469

00:24:00,440 --> 00:23:57,659

impressive you know just absolutely

470

00:24:02,119 --> 00:24:00,450

brehtaking and then you know it's

471

00:24:04,879 --> 00:24:02,129

interesting the places on earth that are

472

00:24:08,659 --> 00:24:04,889

most beautiful are the places that are

473

00:24:11,840 --> 00:24:08,669

kind of the least habitable you know the

474

00:24:13,580 --> 00:24:11,850

water you know most of the planet is

475

00:24:15,259 --> 00:24:13,590

water it's kind of surprising that we

476

00:24:17,419 --> 00:24:15,269

decided to call it planet Earth and we

477

00:24:19,700 --> 00:24:17,429

didn't call it planet water but anyway

478

00:24:22,039 --> 00:24:19,710

so the you know water is very beautiful

479

00:24:25,850 --> 00:24:22,049

in certain areas and as well as the

480

00:24:28,850 --> 00:24:25,860

deserts are incredibly beautiful that's

481

00:24:31,700 --> 00:24:28,860

a wrap good questions guys and you hold

482

00:24:34,159 --> 00:24:31,710

it here dream big challenge yourself