



1
00:00:05,030 --> 00:00:02,869
hello welcome welcome to a live episode

2
00:00:06,710 --> 00:00:05,040
of houston we have a podcast we are

3
00:00:08,470 --> 00:00:06,720
getting in front of the cameras today

4
00:00:10,709 --> 00:00:08,480
because if you haven't heard nasa is

5
00:00:12,070 --> 00:00:10,719
accepting applications to become an

6
00:00:14,470 --> 00:00:12,080
astronaut all throughout the month of

7
00:00:15,990 --> 00:00:14,480
march so we have got a lot of questions

8
00:00:17,670 --> 00:00:16,000
and we have great guests here that are

9
00:00:19,189 --> 00:00:17,680
going to be answering them for you live

10
00:00:20,950 --> 00:00:19,199
make sure you follow along with us on

11
00:00:22,310 --> 00:00:20,960
facebook and twitter and wherever else

12
00:00:23,830 --> 00:00:22,320
we got we will be getting to your

13
00:00:25,589 --> 00:00:23,840

questions here in a second but i'd like

14

00:00:28,070 --> 00:00:25,599

to first introduce our very special

15

00:00:30,230 --> 00:00:28,080

guest starting with anne rumer and

16

00:00:31,750 --> 00:00:30,240

welcome thank you glad to be here you

17

00:00:33,510 --> 00:00:31,760

are the manager of the astronaut

18

00:00:35,750 --> 00:00:33,520

selection office you know the ins and

19

00:00:37,830 --> 00:00:35,760

outs of the application process and

20

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

you're there from the inside in fact you

21

00:00:41,430 --> 00:00:39,440

came on the podcast you actually helped

22

00:00:43,590 --> 00:00:41,440

us kick it off with episode two to talk

23

00:00:46,869 --> 00:00:43,600

about when we brought on the astronaut

24

00:00:48,389 --> 00:00:46,879

2017 class i remember that very well

25

00:00:50,150 --> 00:00:48,399

well welcome back thank you i'm curious

26

00:00:52,709 --> 00:00:50,160

to hear the insides of this thanks we

27

00:00:55,430 --> 00:00:52,719

also have kayla barron hey caitlin hi

28

00:00:58,069 --> 00:00:55,440

karen caleb uh kayla you're among the

29

00:01:00,150 --> 00:00:58,079

turtles the astronaut class of 2017. you

30

00:01:03,110 --> 00:01:00,160

went through this application process

31

00:01:04,789 --> 00:01:03,120

and competed against 18 000 other people

32

00:01:06,710 --> 00:01:04,799

and you're here and as part of the

33

00:01:08,870 --> 00:01:06,720

turtles you have a bachelor's in systems

34

00:01:10,789 --> 00:01:08,880

engineering with a from the u.s naval

35

00:01:12,390 --> 00:01:10,799

academy and a masters in nuclear

36

00:01:14,310 --> 00:01:12,400

engineering from cambridge you're a

37

00:01:16,149 --> 00:01:14,320

marine warfare officer and you just

38

00:01:17,190 --> 00:01:16,159

graduated two months ago congratulations

39

00:01:19,270 --> 00:01:17,200

thank you

40

00:01:20,870 --> 00:01:19,280

how's life been after graduation it's

41

00:01:23,030 --> 00:01:20,880

been awesome we've been really busy

42

00:01:24,950 --> 00:01:23,040

doing lots of different jobs now that

43

00:01:26,789 --> 00:01:24,960

we've graduated still in training as

44

00:01:28,149 --> 00:01:26,799

well but it's been a lot of fun to

45

00:01:30,550 --> 00:01:28,159

contribute to the office in a different

46

00:01:32,469 --> 00:01:30,560

way wonderful okay well i have a lot of

47

00:01:34,630 --> 00:01:32,479

questions but we also have are going to

48

00:01:36,230 --> 00:01:34,640

be taking questions live from you from

49

00:01:38,789 --> 00:01:36,240

the viewer and we have jennifer

50

00:01:41,749 --> 00:01:38,799

hernandez standing by hey jennifer hey

51
00:01:43,350 --> 00:01:41,759
there gary hey kayla hey anne jennifer

52
00:01:45,190 --> 00:01:43,360
works with us in our public affairs

53
00:01:47,429 --> 00:01:45,200
office she's also a fellow penn stater

54
00:01:48,710 --> 00:01:47,439
we are penn state thank you you're

55
00:01:53,030 --> 00:01:48,720
welcome we're going to be taking

56
00:01:54,469 --> 00:01:53,040
questions live ohio is rolling her eyes

57
00:01:56,149 --> 00:01:54,479
well the fellow penn stater is going to

58
00:01:57,510 --> 00:01:56,159
be taking questions i don't know about

59
00:02:00,069 --> 00:01:57,520
that yeah we'll see

60
00:02:02,389 --> 00:02:00,079
um uh from from the web uh jennifer do

61
00:02:04,870 --> 00:02:02,399
we have any questions to start us off we

62
00:02:07,590 --> 00:02:04,880
sure do we have one from twitter from

63
00:02:09,910 --> 00:02:07,600

celery what do you have to do to stand

64

00:02:11,270 --> 00:02:09,920

out from all the other applicants well

65

00:02:13,190 --> 00:02:11,280

that's a good question

66

00:02:15,110 --> 00:02:13,200

i think that questions to me

67

00:02:16,550 --> 00:02:15,120

yeah no i'm just teasing

68

00:02:18,550 --> 00:02:16,560

right so we

69

00:02:21,430 --> 00:02:18,560

we are looking for a lot of information

70

00:02:23,270 --> 00:02:21,440

on the resume that folks fill out

71

00:02:24,949 --> 00:02:23,280

so i would start by saying right we want

72

00:02:27,430 --> 00:02:24,959

people to be very detailed as they

73

00:02:29,350 --> 00:02:27,440

describe their work experience and other

74

00:02:31,509 --> 00:02:29,360

experiences we also give applicants an

75

00:02:33,350 --> 00:02:31,519

opportunity to describe hobbies and

76

00:02:35,430 --> 00:02:33,360

interests that they have

77

00:02:37,830 --> 00:02:35,440

and we encourage applicants to put as

78

00:02:40,390 --> 00:02:37,840

much information there as possible as

79

00:02:42,470 --> 00:02:40,400

well when you're reviewing 18 000

80

00:02:44,070 --> 00:02:42,480

applications sometimes it's the weird

81

00:02:46,470 --> 00:02:44,080

stuff that stands out honestly an

82

00:02:48,470 --> 00:02:46,480

interesting hobby or an interesting

83

00:02:51,509 --> 00:02:48,480

project at work that right an applicant

84

00:02:53,509 --> 00:02:51,519

may think oh that's just what i do

85

00:02:56,470 --> 00:02:53,519

and so really we're looking for them to

86

00:02:58,630 --> 00:02:56,480

give us as much information as possible

87

00:03:00,149 --> 00:02:58,640

um okay that's a starting point that's

88

00:03:01,509 --> 00:03:00,159

the starting point for standing out

89

00:03:03,270 --> 00:03:01,519

let's get into the details of what you

90

00:03:04,710 --> 00:03:03,280

need just in the first place right so

91

00:03:06,149 --> 00:03:04,720

what's the let's start from the very

92

00:03:08,309 --> 00:03:06,159

minimum requirements what are you

93

00:03:09,990 --> 00:03:08,319

looking for as a minimum requirement

94

00:03:11,750 --> 00:03:10,000

should become a nasa hashtag the minimum

95

00:03:14,869 --> 00:03:11,760

requirements are pretty straightforward

96

00:03:16,309 --> 00:03:14,879

gary uh we are we require a master's

97

00:03:17,910 --> 00:03:16,319

degree and that's actually something

98

00:03:19,990 --> 00:03:17,920

that's new this year

99

00:03:21,990 --> 00:03:20,000

we have always stated in our application

100

00:03:23,830 --> 00:03:22,000

process that that advanced degrees are

101
00:03:26,149 --> 00:03:23,840
preferred this is just trying to be a

102
00:03:28,309 --> 00:03:26,159
little bit more overt in what we're

103
00:03:30,470 --> 00:03:28,319
looking for and that most the majority

104
00:03:34,070 --> 00:03:30,480
of astronauts hired have had a master's

105
00:03:36,470 --> 00:03:34,080
degree or beyond or test pilot school

106
00:03:38,229 --> 00:03:36,480
they also beyond the degree have to have

107
00:03:40,550 --> 00:03:38,239
at least two years of professional

108
00:03:42,630 --> 00:03:40,560
experience and then

109
00:03:43,670 --> 00:03:42,640
being a us government agency we also

110
00:03:46,630 --> 00:03:43,680
require

111
00:03:49,190 --> 00:03:46,640
u.s citizenship very important okay so

112
00:03:52,390 --> 00:03:49,200
yeah master's degree i guess you had to

113
00:03:54,070 --> 00:03:52,400

deal with the 18 000 applications last

114

00:03:57,350 --> 00:03:54,080

time right but it turns out i guess this

115

00:03:59,589 --> 00:03:57,360

2017 class had a lot of masters anyway

116

00:04:00,789 --> 00:03:59,599

is that is it sort of just narrowing in

117

00:04:02,630 --> 00:04:00,799

on what you already know that you're

118

00:04:04,470 --> 00:04:02,640

looking for yeah and right the the

119

00:04:06,149 --> 00:04:04,480

announcement i encourage applicants to

120

00:04:08,400 --> 00:04:06,159

to review the announcement online it's

121

00:04:09,670 --> 00:04:08,410

got a lot of specifics um

122

00:04:11,509 --> 00:04:09,680

[Music]

123

00:04:13,350 --> 00:04:11,519

that they can count towards them right

124

00:04:15,030 --> 00:04:13,360

if they're in a phd program and have a

125

00:04:17,430 --> 00:04:15,040

certain number of hours that can count

126
00:04:18,949 --> 00:04:17,440
towards a master's degree etc so

127
00:04:20,629 --> 00:04:18,959
read the announcement

128
00:04:22,150 --> 00:04:20,639
it's got all the information that folks

129
00:04:24,390 --> 00:04:22,160
need to know whether they're qualified

130
00:04:26,870 --> 00:04:24,400
or not

131
00:04:29,110 --> 00:04:26,880
now this might be a stupid question but

132
00:04:30,950 --> 00:04:29,120
stem now you know we always talk about

133
00:04:32,469 --> 00:04:30,960
stem science technology engineering myth

134
00:04:33,749 --> 00:04:32,479
why science technology engineering

135
00:04:35,270 --> 00:04:33,759
method i'm a marketing major i want to

136
00:04:37,510 --> 00:04:35,280
go to space why can't i go i've heard

137
00:04:39,510 --> 00:04:37,520
that from a lot of people lately uh

138
00:04:41,749 --> 00:04:39,520

right the the core component of what

139

00:04:43,510 --> 00:04:41,759

we're asking folks to do and to train

140

00:04:45,830 --> 00:04:43,520

and kayla can probably speak to this as

141

00:04:48,710 --> 00:04:45,840

well um right there's a technical

142

00:04:50,230 --> 00:04:48,720

technological component of that um

143

00:04:52,870 --> 00:04:50,240

and so

144

00:04:54,469 --> 00:04:52,880

a lot of the jobs at nasa require that

145

00:04:55,270 --> 00:04:54,479

stem background

146

00:04:57,510 --> 00:04:55,280

so

147

00:04:59,110 --> 00:04:57,520

okay yeah it's ultimately

148

00:05:00,469 --> 00:04:59,120

well how has it helped you kayla with

149

00:05:02,230 --> 00:05:00,479

just some of your astronaut candidate

150

00:05:03,830 --> 00:05:02,240

training having that stem background how

151
00:05:05,189 --> 00:05:03,840
has it helped you in just the first few

152
00:05:07,110 --> 00:05:05,199
years of training

153
00:05:08,790 --> 00:05:07,120
um that's a really good question i think

154
00:05:11,189 --> 00:05:08,800
in our training we're really generalists

155
00:05:12,870 --> 00:05:11,199
we're asked to understand and be able to

156
00:05:14,790 --> 00:05:12,880
be able to operate in a lot of different

157
00:05:16,629 --> 00:05:14,800
contexts whether that's learning how to

158
00:05:18,629 --> 00:05:16,639
operate systems on the space station or

159
00:05:20,070 --> 00:05:18,639
fly a t-38 or even work in mission

160
00:05:21,990 --> 00:05:20,080
control

161
00:05:23,909 --> 00:05:22,000
and so i think having

162
00:05:25,749 --> 00:05:23,919
a tech you know a stem background of

163
00:05:28,550 --> 00:05:25,759

some kind helps give you sort of the

164

00:05:30,150 --> 00:05:28,560

baseline skills you need to understand

165

00:05:32,950 --> 00:05:30,160

those things because a lot gets thrown

166

00:05:34,629 --> 00:05:32,960

at you really fast um so having a

167

00:05:36,150 --> 00:05:34,639

foundation that even though people come

168

00:05:38,629 --> 00:05:36,160

from a lot of different areas whether

169

00:05:40,790 --> 00:05:38,639

that's geology microbiology engineering

170

00:05:41,909 --> 00:05:40,800

aviation different parts of the military

171

00:05:44,150 --> 00:05:41,919

medicine

172

00:05:45,670 --> 00:05:44,160

it kind of gives you a starting point to

173

00:05:47,590 --> 00:05:45,680

approach a lot of those problems yeah

174

00:05:49,670 --> 00:05:47,600

that's huge because you know you have to

175

00:05:51,590 --> 00:05:49,680

train on so many different areas right

176

00:05:53,670 --> 00:05:51,600

so having a baseline to be able to

177

00:05:55,029 --> 00:05:53,680

tackle all these different problems stem

178

00:05:55,749 --> 00:05:55,039

is probably one of the best ways to do

179

00:05:57,749 --> 00:05:55,759

that

180

00:06:00,710 --> 00:05:57,759

very interesting uh so you talk about

181

00:06:02,710 --> 00:06:00,720

related experiences anne so um i'm

182

00:06:04,629 --> 00:06:02,720

assuming it has to deal with

183

00:06:06,710 --> 00:06:04,639

the related experience of what you have

184

00:06:08,629 --> 00:06:06,720

a degree in yeah right and there's some

185

00:06:11,590 --> 00:06:08,639

there's some flexibility for example

186

00:06:13,110 --> 00:06:11,600

though right finishing uh your degree

187

00:06:15,670 --> 00:06:13,120

and your master's degree and going and

188

00:06:17,909 --> 00:06:15,680

working as a ski instructor although fun

189

00:06:19,430 --> 00:06:17,919

and wonderful uh wouldn't we wouldn't

190

00:06:21,430 --> 00:06:19,440

count that towards the two-year

191

00:06:23,110 --> 00:06:21,440

professional experience so it would need

192

00:06:25,830 --> 00:06:23,120

to be in a discipline

193

00:06:28,070 --> 00:06:25,840

ideally equated with the degree we see

194

00:06:29,990 --> 00:06:28,080

right some of the more general physics

195

00:06:31,830 --> 00:06:30,000

is an example you can get a degree in

196

00:06:33,590 --> 00:06:31,840

physics and do a lot of different things

197

00:06:35,990 --> 00:06:33,600

so we're looking for that

198

00:06:37,670 --> 00:06:36,000

technology experience that that

199

00:06:39,909 --> 00:06:37,680

technological experience beyond the

200

00:06:42,070 --> 00:06:39,919

degree beyond the degree okay now what

201
00:06:45,270 --> 00:06:42,080
if you're a pilot is there a little bit

202
00:06:47,430 --> 00:06:45,280
different scenario there pilots um you

203
00:06:48,870 --> 00:06:47,440
know it's interesting we still used and

204
00:06:51,270 --> 00:06:48,880
kayla i'm sure we'll talk about this as

205
00:06:53,189 --> 00:06:51,280
well we still use the t-38 as a training

206
00:06:55,909 --> 00:06:53,199
vehicle and so we do still have pilot

207
00:06:57,430 --> 00:06:55,919
astronauts in the astronaut office

208
00:06:59,110 --> 00:06:57,440
if applying to

209
00:07:00,950 --> 00:06:59,120
as a pilot

210
00:07:04,309 --> 00:07:00,960
folks need to have a minimum of a

211
00:07:06,950 --> 00:07:04,319
thousand hours of pilot in command type

212
00:07:09,670 --> 00:07:06,960
pilot in command hours and a high

213
00:07:12,150 --> 00:07:09,680

performance jet aircraft okay and kayla

214

00:07:13,029 --> 00:07:12,160

i'm guessing now you were not a pilot

215

00:07:14,870 --> 00:07:13,039

you have

216

00:07:18,070 --> 00:07:14,880

various engineering degrees but you're

217

00:07:20,390 --> 00:07:18,080

training in the t-38 anyway yeah so we

218

00:07:21,909 --> 00:07:20,400

our class has a number of pilots but

219

00:07:23,350 --> 00:07:21,919

also a number of people from different

220

00:07:25,430 --> 00:07:23,360

backgrounds my background is in the

221

00:07:27,189 --> 00:07:25,440

submarine force in the navy

222

00:07:29,029 --> 00:07:27,199

so after

223

00:07:30,469 --> 00:07:29,039

graduating from my master's program i

224

00:07:32,230 --> 00:07:30,479

went through the navy's nuclear power

225

00:07:34,230 --> 00:07:32,240

training and then worked in a very

226

00:07:36,230 --> 00:07:34,240

operational context aboard submarines

227

00:07:37,990 --> 00:07:36,240

deploying in the pacific so that was

228

00:07:39,990 --> 00:07:38,000

kind of applying engineering that's how

229

00:07:42,230 --> 00:07:40,000

i got my you know years of professional

230

00:07:43,990 --> 00:07:42,240

experience that ann is talking about

231

00:07:46,550 --> 00:07:44,000

but when we come here even if you're not

232

00:07:48,390 --> 00:07:46,560

a pilot you learn how to fly so we

233

00:07:51,189 --> 00:07:48,400

trained to fly in the back seat of the

234

00:07:53,029 --> 00:07:51,199

t-38 originally in a role kind of doing

235

00:07:55,189 --> 00:07:53,039

communications and navigation but once

236

00:07:57,909 --> 00:07:55,199

we get qualified we also help fly the

237

00:07:59,749 --> 00:07:57,919

jet too so we use it as an opportunity

238

00:08:02,390 --> 00:07:59,759

to train with other crewmates other

239

00:08:03,990 --> 00:08:02,400

astronauts to learn how to communicate

240

00:08:05,830 --> 00:08:04,000

when you're in a high-risk environment

241

00:08:07,110 --> 00:08:05,840

operating real machinery make decisions

242

00:08:08,790 --> 00:08:07,120

when things aren't going according to

243

00:08:10,629 --> 00:08:08,800

plan and things like that so i feel like

244

00:08:12,869 --> 00:08:10,639

this communication aspect has got to be

245

00:08:14,309 --> 00:08:12,879

a big part of being an astronaut because

246

00:08:15,749 --> 00:08:14,319

what we're talking about now is when

247

00:08:17,749 --> 00:08:15,759

we're talking about this new class of

248

00:08:19,830 --> 00:08:17,759

astronauts we can actually bring up the

249

00:08:21,510 --> 00:08:19,840

application here in a second but we're

250

00:08:22,869 --> 00:08:21,520

talking about this artemis generation

251

00:08:24,150 --> 00:08:22,879

you're talking about people who are

252

00:08:26,070 --> 00:08:24,160

going to be going to different planets

253

00:08:28,469 --> 00:08:26,080

and have to live together for a long

254

00:08:29,909 --> 00:08:28,479

period of time they have to coexist so

255

00:08:31,909 --> 00:08:29,919

getting along with your crewmates has

256

00:08:33,509 --> 00:08:31,919

got to be pretty important

257

00:08:35,029 --> 00:08:33,519

do you find that and the turtles you

258

00:08:37,269 --> 00:08:35,039

guys get along with each other yeah we

259

00:08:39,350 --> 00:08:37,279

get along really great i think

260

00:08:41,029 --> 00:08:39,360

graduation was really fun for us as a

261

00:08:43,110 --> 00:08:41,039

group because it was just a huge

262

00:08:44,630 --> 00:08:43,120

accomplishment for us as a team yeah i

263

00:08:46,790 --> 00:08:44,640

mean you get here and you start training

264

00:08:49,269 --> 00:08:46,800

and the lot is being asked of you and

265

00:08:50,870 --> 00:08:49,279

most of our evaluations are really about

266

00:08:52,389 --> 00:08:50,880

our individual skills and performance

267

00:08:55,269 --> 00:08:52,399

you're kind of in the hot seat alone but

268

00:08:57,590 --> 00:08:55,279

we chose to approach our training as a

269

00:08:59,509 --> 00:08:57,600

team and wanted everybody to get to the

270

00:09:00,949 --> 00:08:59,519

finish line together

271

00:09:02,790 --> 00:09:00,959

and that made a huge difference for us

272

00:09:04,710 --> 00:09:02,800

because everybody had something that

273

00:09:06,150 --> 00:09:04,720

they were really naturally good at and

274

00:09:07,590 --> 00:09:06,160

everyone also on the other side had

275

00:09:09,509 --> 00:09:07,600

something that was harder for them than

276

00:09:11,829 --> 00:09:09,519

they might have expected and so having

277

00:09:13,829 --> 00:09:11,839

the support of your peers made all of

278

00:09:15,750 --> 00:09:13,839

the difference in the world and we also

279

00:09:17,269 --> 00:09:15,760

do specific training geared towards

280

00:09:19,750 --> 00:09:17,279

getting to know each other and become

281

00:09:21,910 --> 00:09:19,760

good teammates we do things like we went

282

00:09:23,910 --> 00:09:21,920

on a backpacking course with knolls in

283

00:09:25,829 --> 00:09:23,920

the canyonlands and utah

284

00:09:27,190 --> 00:09:25,839

that was really fun we also incorporate

285

00:09:28,230 --> 00:09:27,200

that kind of training whenever we're

286

00:09:29,910 --> 00:09:28,240

doing

287

00:09:31,190 --> 00:09:29,920

other kinds of training as well so we

288

00:09:32,630 --> 00:09:31,200

get that kind of training in the neutral

289

00:09:33,670 --> 00:09:32,640

buoyancy lab when you're working with a

290

00:09:35,509 --> 00:09:33,680

teammate

291

00:09:37,269 --> 00:09:35,519

practicing spacewalk skills or things

292

00:09:39,750 --> 00:09:37,279

like our geology training where we go

293

00:09:42,389 --> 00:09:39,760

out in the field and try to learn about

294

00:09:44,470 --> 00:09:42,399

the geology of our planet so that we can

295

00:09:46,150 --> 00:09:44,480

apply that in future exploration but a

296

00:09:47,910 --> 00:09:46,160

lot of that is about working as a team

297

00:09:49,910 --> 00:09:47,920

doing that in a group and taking

298

00:09:52,070 --> 00:09:49,920

advantage of everybody's skill sets to

299

00:09:53,509 --> 00:09:52,080

accomplish a mission i really want to go

300

00:09:54,949 --> 00:09:53,519

into what it's like just these first

301
00:09:56,630 --> 00:09:54,959
couple years but first i want to take a

302
00:09:59,430 --> 00:09:56,640
look at the application and see what

303
00:10:01,430 --> 00:09:59,440
people can actually do so in order to uh

304
00:10:02,790 --> 00:10:01,440
go to apply to be an astronaut thank you

305
00:10:05,190 --> 00:10:02,800
jennifer for taking us here we're going

306
00:10:06,790 --> 00:10:05,200
to take a look at usa jobs uh if you're

307
00:10:08,310 --> 00:10:06,800
looking to apply to become an astronaut

308
00:10:10,150 --> 00:10:08,320
i would assume you would just search the

309
00:10:11,910 --> 00:10:10,160
title astronaut there it is astronaut

310
00:10:13,990 --> 00:10:11,920
candidate okay because you're you're a

311
00:10:16,150 --> 00:10:14,000
candidate for the first couple of years

312
00:10:18,389 --> 00:10:16,160
okay so you would go there you would

313
00:10:20,310 --> 00:10:18,399

click on linda b johnson space center

314

00:10:21,750 --> 00:10:20,320

that's where we are today

315

00:10:23,509 --> 00:10:21,760

and uh here you go this is the

316

00:10:24,790 --> 00:10:23,519

application process and and actually

317

00:10:26,790 --> 00:10:24,800

i've gone through this a couple times

318

00:10:29,190 --> 00:10:26,800

it's it's pretty dense there's a lot to

319

00:10:30,389 --> 00:10:29,200

it a lot of different responsibilities

320

00:10:33,030 --> 00:10:30,399

my favorite though is that one right

321

00:10:34,310 --> 00:10:33,040

there extensive travel required i'm sure

322

00:10:35,670 --> 00:10:34,320

you're going to have to go many

323

00:10:37,110 --> 00:10:35,680

different places all over the world

324

00:10:39,670 --> 00:10:37,120

outside of the world that's going to be

325

00:10:41,910 --> 00:10:39,680

an expectation of being a nasa astronaut

326

00:10:45,030 --> 00:10:41,920

let's see specialized okay here's a good

327

00:10:47,110 --> 00:10:45,040

section right here the uh degree fields

328

00:10:48,630 --> 00:10:47,120

when related to sciences because okay

329

00:10:50,230 --> 00:10:48,640

here's that's a good point because we're

330

00:10:52,310 --> 00:10:50,240

talking about stem right we've said that

331

00:10:53,910 --> 00:10:52,320

science technology engineering math

332

00:10:56,069 --> 00:10:53,920

degrees in technology are actually not

333

00:10:58,230 --> 00:10:56,079

considered qualifying that's interesting

334

00:11:00,790 --> 00:10:58,240

are there are but it looks like even

335

00:11:02,949 --> 00:11:00,800

some sciences though so what looking at

336

00:11:05,030 --> 00:11:02,959

what's not what you uh what's not

337

00:11:07,509 --> 00:11:05,040

considered qualifying what give me some

338

00:11:09,350 --> 00:11:07,519

examples of uh different engineering

339

00:11:11,269 --> 00:11:09,360

math sciences

340

00:11:13,509 --> 00:11:11,279

that you're looking for

341

00:11:15,829 --> 00:11:13,519

so right i think engineering we probably

342

00:11:17,509 --> 00:11:15,839

see the majority of degrees coming from

343

00:11:19,110 --> 00:11:17,519

aerospace engineering mechanical

344

00:11:20,470 --> 00:11:19,120

engineering electrical engineering

345

00:11:22,470 --> 00:11:20,480

kayla's sitting here next to me with

346

00:11:24,949 --> 00:11:22,480

systems engineering and also nuclear

347

00:11:27,829 --> 00:11:24,959

engineering so i think i think the the

348

00:11:29,829 --> 00:11:27,839

majority of engineering disciplines

349

00:11:32,150 --> 00:11:29,839

we've probably had applications or

350

00:11:33,350 --> 00:11:32,160

candidates come from in the in the

351
00:11:35,670 --> 00:11:33,360
science re

352
00:11:37,750 --> 00:11:35,680
arena right we have biological science

353
00:11:39,590 --> 00:11:37,760
majors we have the physical science

354
00:11:41,670 --> 00:11:39,600
majors we have

355
00:11:43,430 --> 00:11:41,680
we see a lot of applications from

356
00:11:45,110 --> 00:11:43,440
medical doctors

357
00:11:46,710 --> 00:11:45,120
and that's an important skill set for

358
00:11:49,190 --> 00:11:46,720
the astronaut office to have and

359
00:11:51,030 --> 00:11:49,200
continue to have available to us as we

360
00:11:53,670 --> 00:11:51,040
look at putting together long-duration

361
00:11:55,269 --> 00:11:53,680
crews etc so

362
00:11:58,069 --> 00:11:55,279
yeah most of the degrees that aren't

363
00:12:01,190 --> 00:11:58,079

qualifying are listed there

364

00:12:03,670 --> 00:12:01,200

you know as as curriculums change and

365

00:12:06,150 --> 00:12:03,680

majors evolve if there's ever any doubt

366

00:12:07,590 --> 00:12:06,160

we actually do research the degree

367

00:12:09,269 --> 00:12:07,600

program

368

00:12:11,430 --> 00:12:09,279

and look at the amount of math and

369

00:12:13,590 --> 00:12:11,440

science classes that are required so if

370

00:12:15,590 --> 00:12:13,600

if there is a questionable degree we

371

00:12:17,990 --> 00:12:15,600

actually do the research and and make

372

00:12:20,230 --> 00:12:18,000

sure that it would be qualifying okay

373

00:12:22,550 --> 00:12:20,240

now kayla what made you want to pursue

374

00:12:23,750 --> 00:12:22,560

systems engineering and then nuclear

375

00:12:25,910 --> 00:12:23,760

engineering when you were in school what

376

00:12:27,430 --> 00:12:25,920

were you thinking about um

377

00:12:29,190 --> 00:12:27,440

ann probably knows this from perusing

378

00:12:30,710 --> 00:12:29,200

applications but systems engineering

379

00:12:32,150 --> 00:12:30,720

means a lot of different things a lot of

380

00:12:34,150 --> 00:12:32,160

different universities at the naval

381

00:12:35,910 --> 00:12:34,160

academy it's actually control systems

382

00:12:37,509 --> 00:12:35,920

and robotics engineering so i was

383

00:12:40,310 --> 00:12:37,519

attracted to that major initially

384

00:12:42,069 --> 00:12:40,320

because it was super interdisciplinary i

385

00:12:43,190 --> 00:12:42,079

liked electrical engineering i liked

386

00:12:44,710 --> 00:12:43,200

coding

387

00:12:46,870 --> 00:12:44,720

and i liked doing things with an

388

00:12:48,710 --> 00:12:46,880

application focus and so that was a good

389

00:12:50,550 --> 00:12:48,720

fit for me because i got to dabble in a

390

00:12:52,230 --> 00:12:50,560

lot of different types of engineering

391

00:12:54,310 --> 00:12:52,240

and also work on bringing those

392

00:12:55,990 --> 00:12:54,320

disciplines together to accomplish

393

00:12:57,990 --> 00:12:56,000

something really tangible and i found

394

00:12:59,509 --> 00:12:58,000

that really attractive

395

00:13:01,590 --> 00:12:59,519

and then during my time at the naval

396

00:13:04,150 --> 00:13:01,600

academy i got really interested in

397

00:13:05,829 --> 00:13:04,160

climate change and new energy

398

00:13:08,470 --> 00:13:05,839

technologies that would help us deal

399

00:13:11,190 --> 00:13:08,480

with that longer term and i came to feel

400

00:13:13,509 --> 00:13:11,200

that nuclear was a huge part of that uh

401
00:13:15,269 --> 00:13:13,519
future you know developing new nuclear

402
00:13:16,710 --> 00:13:15,279
generation technologies that had better

403
00:13:18,629 --> 00:13:16,720
waste management profiles that were

404
00:13:19,990 --> 00:13:18,639
safer and all these other things and so

405
00:13:21,509 --> 00:13:20,000
that's why i wanted to do that in grad

406
00:13:22,470 --> 00:13:21,519
school so i went and did a research

407
00:13:25,269 --> 00:13:22,480
degree

408
00:13:26,790 --> 00:13:25,279
helping develop the fuel cycle for a

409
00:13:28,389 --> 00:13:26,800
reactor that hopefully will build some

410
00:13:29,430 --> 00:13:28,399
day soon see that's interesting because

411
00:13:30,550 --> 00:13:29,440
what you're talking about you were

412
00:13:31,990 --> 00:13:30,560
passionate when you were pursuing

413
00:13:34,230 --> 00:13:32,000

systems you were just passionate about

414

00:13:35,829 --> 00:13:34,240

systems engineering and we were pursuing

415

00:13:37,509 --> 00:13:35,839

nuclear it was you were just passionate

416

00:13:39,350 --> 00:13:37,519

about it it seems like astronaut wasn't

417

00:13:40,870 --> 00:13:39,360

even on your mind at the time

418

00:13:42,310 --> 00:13:40,880

yeah you know that's a good question a

419

00:13:44,069 --> 00:13:42,320

lot of my colleagues wanted to be

420

00:13:46,629 --> 00:13:44,079

astronauts from when they were a little

421

00:13:48,230 --> 00:13:46,639

kid and they definitely were making

422

00:13:49,910 --> 00:13:48,240

choices to pursue things they were

423

00:13:51,590 --> 00:13:49,920

passionate about too but always with the

424

00:13:53,910 --> 00:13:51,600

mind of keeping those doors open for

425

00:13:55,910 --> 00:13:53,920

themselves by studying the right things

426
00:13:57,750 --> 00:13:55,920
maybe joining the military there's a lot

427
00:13:58,870 --> 00:13:57,760
of different tracks to get to these

428
00:14:01,110 --> 00:13:58,880
seats

429
00:14:03,269 --> 00:14:01,120
but for me i

430
00:14:05,670 --> 00:14:03,279
was always looked looking towards

431
00:14:07,750 --> 00:14:05,680
challenging myself as much as i could in

432
00:14:09,030 --> 00:14:07,760
each subsequent opportunity so

433
00:14:10,389 --> 00:14:09,040
astronaut wasn't really a thing in the

434
00:14:11,509 --> 00:14:10,399
back of my mind it was something i

435
00:14:13,910 --> 00:14:11,519
always thought was really cool but

436
00:14:15,990 --> 00:14:13,920
didn't really picture myself doing um

437
00:14:18,069 --> 00:14:16,000
and so i actually didn't become inspired

438
00:14:20,629 --> 00:14:18,079

to apply until after i had served on the

439

00:14:22,150 --> 00:14:20,639

submarine um when i left my submarine i

440

00:14:23,509 --> 00:14:22,160

went back to the naval academy to work

441

00:14:25,350 --> 00:14:23,519

there and i got to meet a lot of really

442

00:14:26,710 --> 00:14:25,360

interesting people including a couple of

443

00:14:28,629 --> 00:14:26,720

astronauts

444

00:14:30,790 --> 00:14:28,639

and chatting with them talking about the

445

00:14:32,710 --> 00:14:30,800

time when they were building the space

446

00:14:34,230 --> 00:14:32,720

station i found really fascinating

447

00:14:35,910 --> 00:14:34,240

because it reminded me a lot of the

448

00:14:37,910 --> 00:14:35,920

equipment that we use on submarines

449

00:14:39,269 --> 00:14:37,920

you're also trying to keep people alive

450

00:14:41,110 --> 00:14:39,279

in an environment where they shouldn't

451
00:14:42,710 --> 00:14:41,120
exist you know whether you're hundreds

452
00:14:44,790 --> 00:14:42,720
of feet below the surface of the ocean

453
00:14:46,230 --> 00:14:44,800
or you know hundreds of miles above the

454
00:14:47,110 --> 00:14:46,240
surface of the earth

455
00:14:48,629 --> 00:14:47,120
and so

456
00:14:50,150 --> 00:14:48,639
that really inspired me because i

457
00:14:51,910 --> 00:14:50,160
started thinking of the space station as

458
00:14:53,910 --> 00:14:51,920
a submarine in space

459
00:14:55,189 --> 00:14:53,920
and the astronauts who i talked to

460
00:14:57,030 --> 00:14:55,199
really encouraged me to keep thinking

461
00:14:58,710 --> 00:14:57,040
about that and once it's stuck in my

462
00:15:00,150 --> 00:14:58,720
mind it becomes became something that i

463
00:15:01,990 --> 00:15:00,160

could actually picture myself doing

464

00:15:04,629 --> 00:15:02,000

because i felt the role was so so

465

00:15:06,310 --> 00:15:04,639

similar um and so for me it was just

466

00:15:07,590 --> 00:15:06,320

always about pursuing things i was

467

00:15:08,790 --> 00:15:07,600

passionate about and that would be

468

00:15:10,790 --> 00:15:08,800

challenging because if i was doing

469

00:15:12,389 --> 00:15:10,800

something i liked even if it was hard i

470

00:15:13,350 --> 00:15:12,399

was going to enjoy it and get the most

471

00:15:14,949 --> 00:15:13,360

out of it and find it the most

472

00:15:16,550 --> 00:15:14,959

fulfilling so i think

473

00:15:18,389 --> 00:15:16,560

something you see

474

00:15:20,389 --> 00:15:18,399

around our office and especially in our

475

00:15:23,269 --> 00:15:20,399

class is everybody who was hired was

476
00:15:26,470 --> 00:15:23,279
doing something that they really loved

477
00:15:28,310 --> 00:15:26,480
you know that they they obviously

478
00:15:29,590 --> 00:15:28,320
got their dream job by getting the call

479
00:15:31,670 --> 00:15:29,600
to come and be an astronaut and they

480
00:15:33,670 --> 00:15:31,680
would never trade that for anything but

481
00:15:34,870 --> 00:15:33,680
we all in some ways really miss what we

482
00:15:37,030 --> 00:15:34,880
were doing before because we were

483
00:15:39,350 --> 00:15:37,040
pursuing things we're passionate about

484
00:15:42,150 --> 00:15:39,360
um and so i think that's a common thread

485
00:15:43,990 --> 00:15:42,160
you see across the astronaut office and

486
00:15:45,350 --> 00:15:44,000
i think that's right kayla hits upon a

487
00:15:48,069 --> 00:15:45,360
point i think that's one of the best

488
00:15:50,230 --> 00:15:48,079

pieces of advice we can give folks and

489

00:15:52,550 --> 00:15:50,240

even especially young folks who may

490

00:15:55,269 --> 00:15:52,560

still be aspiring to pursue a stem

491

00:15:57,030 --> 00:15:55,279

degree etc is pursue something that

492

00:15:58,230 --> 00:15:57,040

you're passionate about and that you

493

00:16:00,230 --> 00:15:58,240

enjoy

494

00:16:01,590 --> 00:16:00,240

we receive thousands of applications to

495

00:16:03,110 --> 00:16:01,600

be an astronaut

496

00:16:03,910 --> 00:16:03,120

right and obviously only a limited

497

00:16:05,590 --> 00:16:03,920

number

498

00:16:07,910 --> 00:16:05,600

are chosen but

499

00:16:10,550 --> 00:16:07,920

it really resonates when when folks get

500

00:16:11,990 --> 00:16:10,560

invited in and get come into interview

501
00:16:13,509 --> 00:16:12,000
that they're happy in their jobs and

502
00:16:14,949 --> 00:16:13,519
they've liked what they've done and

503
00:16:17,509 --> 00:16:14,959
right they've put their heart and soul

504
00:16:19,670 --> 00:16:17,519
into it yeah that seems to be a pretty

505
00:16:22,629 --> 00:16:19,680
consistent theme right so yeah so not

506
00:16:24,790 --> 00:16:22,639
only do they have the qualifications to

507
00:16:27,269 --> 00:16:24,800
become a nasa astronaut but they were

508
00:16:29,269 --> 00:16:27,279
good and they would be happy in this job

509
00:16:31,350 --> 00:16:29,279
that they had in the first place because

510
00:16:33,590 --> 00:16:31,360
you're picking the people that are best

511
00:16:35,110 --> 00:16:33,600
in their field right so you know systems

512
00:16:37,350 --> 00:16:35,120
engineering nuclear engineering you were

513
00:16:39,189 --> 00:16:37,360

one of the best in that field with the

514

00:16:41,269 --> 00:16:39,199

confined spaces and living in those

515

00:16:42,870 --> 00:16:41,279

areas so yeah you pulled that but even

516

00:16:44,790 --> 00:16:42,880

if you were still on the submarine you

517

00:16:46,230 --> 00:16:44,800

would still be happy yeah absolutely and

518

00:16:48,470 --> 00:16:46,240

i think we get questions about that a

519

00:16:50,310 --> 00:16:48,480

lot and yeah people say should i major

520

00:16:51,990 --> 00:16:50,320

in aerospace engineering or mechanical

521

00:16:54,150 --> 00:16:52,000

engineering and you're like which one do

522

00:16:55,829 --> 00:16:54,160

you like a lot of times um college

523

00:16:57,910 --> 00:16:55,839

students ask me should i take russian

524

00:16:59,590 --> 00:16:57,920

i'm like do you want to learn russian or

525

00:17:01,430 --> 00:16:59,600

you know they're just trying to see like

526

00:17:03,269 --> 00:17:01,440

do i need to be checking these boxes and

527

00:17:06,309 --> 00:17:03,279

it's like like ann was saying you do

528

00:17:08,230 --> 00:17:06,319

have to choose certain fields there but

529

00:17:09,990 --> 00:17:08,240

there's a broad range of things you can

530

00:17:12,470 --> 00:17:10,000

do and you just look at our class as an

531

00:17:14,549 --> 00:17:12,480

example we have everything from you know

532

00:17:16,870 --> 00:17:14,559

emergency medicine physicians to mars

533

00:17:18,630 --> 00:17:16,880

geologists to microbiologists that study

534

00:17:21,029 --> 00:17:18,640

cave slime and a bunch of different

535

00:17:23,590 --> 00:17:21,039

military roles too so there's a lot of

536

00:17:25,429 --> 00:17:23,600

different paths to get to be

537

00:17:27,429 --> 00:17:25,439

you know a competitive applicant for the

538

00:17:29,029 --> 00:17:27,439

astronaut office now of course we're

539

00:17:30,950 --> 00:17:29,039

talking about degrees i think we have a

540

00:17:32,870 --> 00:17:30,960

really good question about just physical

541

00:17:34,549 --> 00:17:32,880

fitness from the web jennifer do we have

542

00:17:36,710 --> 00:17:34,559

a question about physical fitness yeah

543

00:17:39,669 --> 00:17:36,720

we sure do we have one from twitter from

544

00:17:41,669 --> 00:17:39,679

marie are there particular exercises or

545

00:17:43,430 --> 00:17:41,679

fitness regimes a person ought to do if

546

00:17:45,510 --> 00:17:43,440

they wish to apply to be an astronaut in

547

00:17:47,510 --> 00:17:45,520

the future okay so i guess just yeah

548

00:17:49,909 --> 00:17:47,520

about about fitness kayla do you have do

549

00:17:51,590 --> 00:17:49,919

you have any recommendations on just

550

00:17:53,669 --> 00:17:51,600

exercises or fitness

551
00:17:55,430 --> 00:17:53,679
you know it's really interesting and in

552
00:17:58,310 --> 00:17:55,440
our office there are people who are

553
00:17:59,830 --> 00:17:58,320
passionate about a whole range of

554
00:18:02,150 --> 00:17:59,840
different fitness approaches whether

555
00:18:04,390 --> 00:18:02,160
they like to run or do triathlons or

556
00:18:06,630 --> 00:18:04,400
participate more in team sports

557
00:18:08,070 --> 00:18:06,640
a lot of everybody has sort of their own

558
00:18:11,190 --> 00:18:08,080
thing they're passionate about doing and

559
00:18:13,830 --> 00:18:11,200
have fun doing and it's important to be

560
00:18:16,230 --> 00:18:13,840
fit of course and healthy because flying

561
00:18:18,150 --> 00:18:16,240
in space does a lot of puts a lot of

562
00:18:20,950 --> 00:18:18,160
stress on your body

563
00:18:23,669 --> 00:18:20,960

but there's no like particular aspect i

564

00:18:25,350 --> 00:18:23,679

think that you have to do i think

565

00:18:27,669 --> 00:18:25,360

investing in your own fitness and health

566

00:18:29,750 --> 00:18:27,679

is super important but you can do that a

567

00:18:32,150 --> 00:18:29,760

lot of different ways okay yeah so it's

568

00:18:33,909 --> 00:18:32,160

just once once again here's this that

569

00:18:35,510 --> 00:18:33,919

same theme finding something you're

570

00:18:36,870 --> 00:18:35,520

passionate about whether it's cycling

571

00:18:38,870 --> 00:18:36,880

whether it's swimming whether it's

572

00:18:42,150 --> 00:18:38,880

weightlifting finding that thing and

573

00:18:44,230 --> 00:18:42,160

just having that be a habit for you to

574

00:18:46,070 --> 00:18:44,240

maintain that fitness consistently

575

00:18:47,669 --> 00:18:46,080

throughout your time as an astronaut

576

00:18:50,070 --> 00:18:47,679

yeah and we actually have trainers here

577

00:18:51,430 --> 00:18:50,080

at nasa who specialize in advising us

578

00:18:53,029 --> 00:18:51,440

both when we're in space but also

579

00:18:54,870 --> 00:18:53,039

preparing to go to space and then

580

00:18:56,150 --> 00:18:54,880

recovering when we get home and that's

581

00:18:57,190 --> 00:18:56,160

what they encourage they say what do you

582

00:18:59,190 --> 00:18:57,200

like to do what are you going to do

583

00:19:01,510 --> 00:18:59,200

consistently because that's way better

584

00:19:03,830 --> 00:19:01,520

than us prescribing you know a very

585

00:19:05,669 --> 00:19:03,840

specific regimen that you're not going

586

00:19:07,590 --> 00:19:05,679

to stick to yeah now obviously when you

587

00:19:08,470 --> 00:19:07,600

are on the space station for example

588

00:19:10,470 --> 00:19:08,480

there's

589

00:19:13,029 --> 00:19:10,480

only specific equipment

590

00:19:15,669 --> 00:19:13,039

without choice option

591

00:19:17,029 --> 00:19:15,679

but that being said they believe that

592

00:19:20,710 --> 00:19:17,039

you can prepare in a lot of different

593

00:19:22,630 --> 00:19:20,720

ways okay so let's uh let's talk about

594

00:19:24,150 --> 00:19:22,640

just coming in right

595

00:19:25,190 --> 00:19:24,160

we talked about the application process

596

00:19:27,270 --> 00:19:25,200

we've talked about the minimum

597

00:19:28,950 --> 00:19:27,280

applications kayla let's talk about that

598

00:19:31,029 --> 00:19:28,960

first time where you got the call that

599

00:19:32,630 --> 00:19:31,039

says hey we're ready for you to come in

600

00:19:33,990 --> 00:19:32,640

we're ready for you to come in and keep

601
00:19:35,909 --> 00:19:34,000
interviewing what was that like those

602
00:19:36,950 --> 00:19:35,919
first those first rounds of interviews

603
00:19:39,430 --> 00:19:36,960
um

604
00:19:41,909 --> 00:19:39,440
you know every time best experience of

605
00:19:43,990 --> 00:19:41,919
your life right every time i got a call

606
00:19:45,990 --> 00:19:44,000
whether it was from ann letting me know

607
00:19:47,190 --> 00:19:46,000
i was invited for an interview or the

608
00:19:49,909 --> 00:19:47,200
final call letting me know i was

609
00:19:51,350 --> 00:19:49,919
selected i kind of always was like are

610
00:19:53,909 --> 00:19:51,360
you are you sure you had the right

611
00:19:56,470 --> 00:19:53,919
number you know it's like very double

612
00:19:59,350 --> 00:19:56,480
checked yeah the whole the whole process

613
00:20:01,350 --> 00:19:59,360

is uh very exciting but also

614

00:20:03,669 --> 00:20:01,360

very intimidating you know there are a

615

00:20:05,830 --> 00:20:03,679

lot of impressive people that apply and

616

00:20:08,549 --> 00:20:05,840

the selection panel is made up of really

617

00:20:11,029 --> 00:20:08,559

impressive people here at nasa both in

618

00:20:12,470 --> 00:20:11,039

and out of the astronaut office

619

00:20:15,510 --> 00:20:12,480

and for me especially because it was

620

00:20:17,750 --> 00:20:15,520

such a new thing and i didn't really

621

00:20:19,350 --> 00:20:17,760

you know chart my course specifically

622

00:20:20,390 --> 00:20:19,360

after that i was always just amazed that

623

00:20:22,390 --> 00:20:20,400

they were still

624

00:20:24,470 --> 00:20:22,400

interested in in meeting and talking to

625

00:20:26,470 --> 00:20:24,480

me more um

626

00:20:28,070 --> 00:20:26,480

so i feel really grateful to be there be

627

00:20:29,990 --> 00:20:28,080

here and every time they called me i was

628

00:20:32,630 --> 00:20:30,000

really grateful that they were giving me

629

00:20:35,669 --> 00:20:32,640

you know a shot shot at it

630

00:20:37,909 --> 00:20:35,679

so beyond your expertise in your field

631

00:20:40,070 --> 00:20:37,919

and it seems like humility is one of

632

00:20:42,870 --> 00:20:40,080

those qualities that's actually a nice

633

00:20:45,029 --> 00:20:42,880

thing to have in an astronaut uh yeah

634

00:20:47,110 --> 00:20:45,039

right it is certainly i think there are

635

00:20:48,789 --> 00:20:47,120

a lot of

636

00:20:50,870 --> 00:20:48,799

qualities that go in right we're looking

637

00:20:52,789 --> 00:20:50,880

for good humans is kind of the phrase

638

00:20:54,549 --> 00:20:52,799

i've been using right good at

639

00:20:57,669 --> 00:20:54,559

communicating good at interpersonal

640

00:21:00,070 --> 00:20:57,679

skills and and interacting with others

641

00:21:01,830 --> 00:21:00,080

uh leadership but also knowing how to

642

00:21:04,390 --> 00:21:01,840

follow right a lot of what an astronaut

643

00:21:06,950 --> 00:21:04,400

does on orbit is follow directions down

644

00:21:09,750 --> 00:21:06,960

to you know dotting the t's or dotting

645

00:21:11,590 --> 00:21:09,760

the eyes and crossing the t's um

646

00:21:13,669 --> 00:21:11,600

and so we're looking for a lot of those

647

00:21:16,630 --> 00:21:13,679

intangible

648

00:21:18,630 --> 00:21:16,640

qualities about people i think uh having

649

00:21:20,390 --> 00:21:18,640

sat on the board a couple of times right

650

00:21:22,310 --> 00:21:20,400

and a lot of the astronauts are are

651
00:21:24,470 --> 00:21:22,320
sitting around that table

652
00:21:27,110 --> 00:21:24,480
you know looking at you thinking hmm

653
00:21:29,430 --> 00:21:27,120
would i want to fly in space with kayla

654
00:21:31,590 --> 00:21:29,440
or or is do am i getting vibes that

655
00:21:33,430 --> 00:21:31,600
right that would she'd drive me crazy so

656
00:21:35,190 --> 00:21:33,440
i mean i think i think that's really

657
00:21:36,789 --> 00:21:35,200
can't be understated the importance of

658
00:21:39,510 --> 00:21:36,799
that when it comes down to the interview

659
00:21:41,750 --> 00:21:39,520
phase a huge question is would i want to

660
00:21:44,070 --> 00:21:41,760
fly with this person why is this person

661
00:21:46,230 --> 00:21:44,080
capable of what i want

662
00:21:48,789 --> 00:21:46,240
i mean we don't we don't get really any

663
00:21:51,190 --> 00:21:48,799

applications from past right people

664

00:21:52,870 --> 00:21:51,200

coming in with astronaut like experience

665

00:21:55,750 --> 00:21:52,880

as kayla mentioned we do a lot of the

666

00:21:57,990 --> 00:21:55,760

training for what what they need to be

667

00:21:59,430 --> 00:21:58,000

an astronaut so a lot of the intangible

668

00:22:01,190 --> 00:21:59,440

skills

669

00:22:03,430 --> 00:22:01,200

and competencies are

670

00:22:05,029 --> 00:22:03,440

are equally important

671

00:22:06,070 --> 00:22:05,039

kayla tell me about the call when you

672

00:22:07,750 --> 00:22:06,080

find out you're going through this

673

00:22:09,270 --> 00:22:07,760

interview process you're you're saying i

674

00:22:10,950 --> 00:22:09,280

do i even deserve to be here but but you

675

00:22:13,750 --> 00:22:10,960

got selected yeah

676
00:22:15,270 --> 00:22:13,760
um so for me i was serving at the naval

677
00:22:16,789 --> 00:22:15,280
academy for a couple years kind of

678
00:22:19,029 --> 00:22:16,799
between tours on submarines i was

679
00:22:21,270 --> 00:22:19,039
expecting to go back to a submarine to

680
00:22:22,710 --> 00:22:21,280
be an engineer and you know deploy a

681
00:22:25,110 --> 00:22:22,720
bunch more times and that's kind of what

682
00:22:26,390 --> 00:22:25,120
i thought i would end up doing

683
00:22:28,149 --> 00:22:26,400
but at the time i was working at the

684
00:22:31,110 --> 00:22:28,159
naval academy for the superintendent the

685
00:22:32,710 --> 00:22:31,120
admiral that runs that institution and

686
00:22:34,870 --> 00:22:32,720
it was during graduation week it was the

687
00:22:36,710 --> 00:22:34,880
day before graduation for the senior

688
00:22:39,190 --> 00:22:36,720

class so it was very busy and we were at

689

00:22:40,710 --> 00:22:39,200

a formal military parade where all of

690

00:22:42,950 --> 00:22:40,720

the midshipmen you have thousands of

691

00:22:45,110 --> 00:22:42,960

midshipmen march onto the field in their

692

00:22:47,029 --> 00:22:45,120

fancy uniforms it's a very like

693

00:22:49,270 --> 00:22:47,039

ceremonial event and i had to

694

00:22:51,190 --> 00:22:49,280

participate in it because i was the

695

00:22:53,350 --> 00:22:51,200

admiral's assistant so i would go out

696

00:22:55,510 --> 00:22:53,360

there and help you know coordinate the

697

00:22:57,110 --> 00:22:55,520

official party and all that and i was so

698

00:22:58,710 --> 00:22:57,120

nervous that i would get the call during

699

00:23:00,149 --> 00:22:58,720

that one time in the day where i really

700

00:23:01,430 --> 00:23:00,159

couldn't have my phone because i'm

701
00:23:03,669 --> 00:23:01,440
standing at attention in front of

702
00:23:05,909 --> 00:23:03,679
hundreds of people watching this uh

703
00:23:07,510 --> 00:23:05,919
parade and sure enough i got back to my

704
00:23:09,909 --> 00:23:07,520
phone right after the parade and four

705
00:23:11,669 --> 00:23:09,919
minutes before that i had a missed call

706
00:23:12,870 --> 00:23:11,679
and my boss admiral carter was like you

707
00:23:14,310 --> 00:23:12,880
got to call him back you got to call

708
00:23:16,070 --> 00:23:14,320
back and i was like sir you can't call

709
00:23:17,830 --> 00:23:16,080
this number back it's like a generic you

710
00:23:18,950 --> 00:23:17,840
know jsc number is the way it shows up

711
00:23:22,230 --> 00:23:18,960
on your phone i was like i think i just

712
00:23:23,590 --> 00:23:22,240
gotta wait and so about 45 minutes later

713
00:23:25,590 --> 00:23:23,600

they must have cycled back through the

714

00:23:26,630 --> 00:23:25,600

rotation and called me again

715

00:23:28,470 --> 00:23:26,640

because we knew they were going to call

716

00:23:31,590 --> 00:23:28,480

us on that day to let us know one way or

717

00:23:34,230 --> 00:23:31,600

another if we got selected um and we had

718

00:23:37,590 --> 00:23:34,240

heard the you know the applicant rumor

719

00:23:39,270 --> 00:23:37,600

mill that if either uh brian kelly bk or

720

00:23:41,350 --> 00:23:39,280

chris cassie called you that probably

721

00:23:43,190 --> 00:23:41,360

meant you were getting selected and it

722

00:23:44,870 --> 00:23:43,200

so i would i answered that i get to make

723

00:23:47,190 --> 00:23:44,880

the bad phone call you made the bad

724

00:23:49,269 --> 00:23:47,200

phone calls yeah so that was the rumor

725

00:23:51,830 --> 00:23:49,279

so i answered the phone and it was bk

726

00:23:53,669 --> 00:23:51,840

and chris but of course i got to listen

727

00:23:55,350 --> 00:23:53,679

in yeah of course you're like

728

00:23:56,789 --> 00:23:55,360

uh you know you don't want to get too

729

00:23:57,909 --> 00:23:56,799

excited until you actually hear the

730

00:23:59,990 --> 00:23:57,919

words

731

00:24:01,190 --> 00:24:00,000

and i just remember bk asking kayla

732

00:24:02,549 --> 00:24:01,200

we're calling to see if you still want

733

00:24:04,950 --> 00:24:02,559

to come down to houston to be a part of

734

00:24:06,950 --> 00:24:04,960

the next class and it is like just the

735

00:24:09,350 --> 00:24:06,960

easiest question in the whole world

736

00:24:10,870 --> 00:24:09,360

so you're just like absolutely yeah um

737

00:24:12,230 --> 00:24:10,880

but it's a pretty short call you know

738

00:24:13,590 --> 00:24:12,240

they're just like hey do you still want

739

00:24:15,029 --> 00:24:13,600

to do this and you're like of course i

740

00:24:18,149 --> 00:24:15,039

don't know i can't imagine anyone saying

741

00:24:20,549 --> 00:24:18,159

no at that point right um but yeah we i

742

00:24:21,510 --> 00:24:20,559

was just so pumped high-fived admiral

743

00:24:23,430 --> 00:24:21,520

carter

744

00:24:25,269 --> 00:24:23,440

called my husband and let him know and

745

00:24:27,510 --> 00:24:25,279

we were just really excited wow and you

746

00:24:29,350 --> 00:24:27,520

got to be a part of that yeah i get to i

747

00:24:31,269 --> 00:24:29,360

get to at least listen in on the good on

748

00:24:33,990 --> 00:24:31,279

the good phone calls too yeah you

749

00:24:35,750 --> 00:24:34,000

deserve that thanks thanks yeah i got i

750

00:24:37,510 --> 00:24:35,760

got to imagine though just you know you

751
00:24:40,070 --> 00:24:37,520
have to narrow it down to 12 people for

752
00:24:42,070 --> 00:24:40,080
this 2017 class 12 people

753
00:24:43,990 --> 00:24:42,080
out of 18 000 applicants even just

754
00:24:45,029 --> 00:24:44,000
narrowing it down there where did it go

755
00:24:50,310 --> 00:24:45,039
from

756
00:24:52,630 --> 00:24:50,320
12 that had to be hard just by itself

757
00:24:55,029 --> 00:24:52,640
yeah well each each step in the process

758
00:24:57,590 --> 00:24:55,039
it gets a little more difficult to to

759
00:24:59,510 --> 00:24:57,600
continue narrowing it down um certainly

760
00:25:01,510 --> 00:24:59,520
it's a multiple there are multiple steps

761
00:25:02,470 --> 00:25:01,520
in the process that help us narrow this

762
00:25:05,190 --> 00:25:02,480
down

763
00:25:07,029 --> 00:25:05,200

typically write multiple sets of of

764

00:25:08,470 --> 00:25:07,039

reviewing applications

765

00:25:10,390 --> 00:25:08,480

we are

766

00:25:12,789 --> 00:25:10,400

we do two rounds of interviews actually

767

00:25:15,269 --> 00:25:12,799

so we typically bring around 120 folks

768

00:25:17,669 --> 00:25:15,279

in for the first round of interviews and

769

00:25:20,070 --> 00:25:17,679

then from there we we kind of

770

00:25:22,070 --> 00:25:20,080

keep squeezing the numbers we have about

771

00:25:24,070 --> 00:25:22,080

generally between 40 and 50 that come

772

00:25:25,909 --> 00:25:24,080

back for the second round and then that

773

00:25:27,909 --> 00:25:25,919

gradually gets us into whatever number

774

00:25:29,430 --> 00:25:27,919

we're going to select oh that's got to

775

00:25:31,350 --> 00:25:29,440

be tough all right let's see what we

776

00:25:33,750 --> 00:25:31,360

have on online jennifer do we have any

777

00:25:36,630 --> 00:25:33,760

questions from some of our viewers we

778

00:25:39,110 --> 00:25:36,640

sure do we have one from m31 on twitter

779

00:25:42,549 --> 00:25:39,120

can physicians be astronauts

780

00:25:45,269 --> 00:25:42,559

physicians okay doctors yes yes is there

781

00:25:47,830 --> 00:25:45,279

any type of physician that is uh you

782

00:25:50,149 --> 00:25:47,840

know pediatrician or or internal

783

00:25:53,430 --> 00:25:50,159

medicine or emergency medicine yeah

784

00:25:55,269 --> 00:25:53,440

we've we've seen applications um from a

785

00:25:57,510 --> 00:25:55,279

wide range of physicians so i can't

786

00:25:59,990 --> 00:25:57,520

think of you know the the medical degree

787

00:26:00,710 --> 00:26:00,000

in and of itself whether an md or a do

788

00:26:05,269 --> 00:26:00,720

is

789

00:26:06,710 --> 00:26:05,279

meets those requirements of a master's

790

00:26:08,950 --> 00:26:06,720

degree it meets those requirements of

791

00:26:10,230 --> 00:26:08,960

science technology and engineering math

792

00:26:12,789 --> 00:26:10,240

and of course you have to be a us

793

00:26:16,390 --> 00:26:12,799

citizen yep okay so

794

00:26:17,750 --> 00:26:16,400

kayla you got selected you came to nasa

795

00:26:19,830 --> 00:26:17,760

i'm sure that was a whole process of

796

00:26:21,269 --> 00:26:19,840

moving and your first day and everything

797

00:26:22,789 --> 00:26:21,279

tell me about some of the training you

798

00:26:24,870 --> 00:26:22,799

went through we talked about t38

799

00:26:25,909 --> 00:26:24,880

training which is in the plane but what

800

00:26:28,310 --> 00:26:25,919

are some of the other things you're

801
00:26:31,029 --> 00:26:28,320
doing in your first few years first few

802
00:26:33,669 --> 00:26:31,039
years as an astronaut candidate yeah so

803
00:26:36,789 --> 00:26:33,679
basically six big areas we're training

804
00:26:39,190 --> 00:26:36,799
in you mentioned t-38 we also do sort of

805
00:26:40,710 --> 00:26:39,200
basic spacewalk training that's mostly

806
00:26:43,029 --> 00:26:40,720
done in the neutral buoyancy lab where

807
00:26:45,590 --> 00:26:43,039
you train underwater in a spacesuit

808
00:26:47,269 --> 00:26:45,600
we also do robotics operations training

809
00:26:49,669 --> 00:26:47,279
learn how to operate the robotic arm

810
00:26:51,909 --> 00:26:49,679
that's on the space station we learn all

811
00:26:53,909 --> 00:26:51,919
about space station systems and how to

812
00:26:55,350 --> 00:26:53,919
operate you know the cooling systems the

813
00:26:57,590 --> 00:26:55,360

electrical systems and how to respond

814

00:27:00,230 --> 00:26:57,600

when something breaks uh so to prepare

815

00:27:02,470 --> 00:27:00,240

for a mission on the space station um we

816

00:27:04,310 --> 00:27:02,480

all learned to speak russian uh which is

817

00:27:06,549 --> 00:27:04,320

a challenge for many of us i hear that's

818

00:27:08,070 --> 00:27:06,559

one of the harder ones yeah it's it's

819

00:27:10,549 --> 00:27:08,080

tough i mean some people are natural

820

00:27:11,590 --> 00:27:10,559

language learners and some like me are

821

00:27:13,909 --> 00:27:11,600

not

822

00:27:16,230 --> 00:27:13,919

but we are lucky that we have very

823

00:27:18,389 --> 00:27:16,240

talented and patient instructors to help

824

00:27:19,909 --> 00:27:18,399

us through that um and then the sixth

825

00:27:21,269 --> 00:27:19,919

area that we sometimes don't mention but

826

00:27:23,750 --> 00:27:21,279

i really think we should is

827

00:27:25,669 --> 00:27:23,760

expeditionary skills training which or

828

00:27:27,830 --> 00:27:25,679

teamwork training really and we touched

829

00:27:29,830 --> 00:27:27,840

on that a bit earlier um but i think

830

00:27:31,909 --> 00:27:29,840

that's just a huge such a huge component

831

00:27:33,350 --> 00:27:31,919

of what we do here at nasa you know you

832

00:27:35,430 --> 00:27:33,360

can

833

00:27:37,830 --> 00:27:35,440

be technically qualified in a lot of

834

00:27:40,070 --> 00:27:37,840

ways but if you're not able to work

835

00:27:42,630 --> 00:27:40,080

effectively with people from different

836

00:27:44,470 --> 00:27:42,640

backgrounds if you're not able to you

837

00:27:46,310 --> 00:27:44,480

know address and move on from conflict

838

00:27:47,510 --> 00:27:46,320

if you're not able to figure out how to

839

00:27:49,590 --> 00:27:47,520

bring out the best in yourself and

840

00:27:50,470 --> 00:27:49,600

others to really be a high functioning

841

00:27:52,789 --> 00:27:50,480

team

842

00:27:53,830 --> 00:27:52,799

then we're really doing a disservice to

843

00:27:56,310 --> 00:27:53,840

um

844

00:27:58,149 --> 00:27:56,320

you know the the whole country and world

845

00:28:00,630 --> 00:27:58,159

you know being one of these getting this

846

00:28:02,950 --> 00:28:00,640

huge opportunity to work off the planet

847

00:28:04,789 --> 00:28:02,960

um i think we owe it to everyone to be

848

00:28:06,630 --> 00:28:04,799

our best selves and work as a team to

849

00:28:08,310 --> 00:28:06,640

accomplish the mission now i'm sure that

850

00:28:09,830 --> 00:28:08,320

takes quite a long time let's see if we

851
00:28:11,350 --> 00:28:09,840
have any questions about training online

852
00:28:13,430 --> 00:28:11,360
jennifer do we have any questions yeah

853
00:28:15,110 --> 00:28:13,440
speaking of training we have anna from

854
00:28:18,070 --> 00:28:15,120
twitter how long does the training

855
00:28:20,389 --> 00:28:18,080
process take okay yeah how long um our

856
00:28:22,870 --> 00:28:20,399
initial training is about two years okay

857
00:28:24,710 --> 00:28:22,880
um and that's where we accomplish our

858
00:28:27,029 --> 00:28:24,720
exams and all of the areas i just talked

859
00:28:28,470 --> 00:28:27,039
about and qualify to become astronauts

860
00:28:30,470 --> 00:28:28,480
so when you graduate you go from being

861
00:28:31,830 --> 00:28:30,480
an astronaut candidate to an astronaut

862
00:28:34,230 --> 00:28:31,840
and being eligible for a mission

863
00:28:37,029 --> 00:28:34,240

assignment but really you keep training

864

00:28:39,110 --> 00:28:37,039

your entire time because there's a long

865

00:28:40,549 --> 00:28:39,120

time between your you know getting hired

866

00:28:44,070 --> 00:28:40,559

in your first mission but also between

867

00:28:46,389 --> 00:28:44,080

your missions and so we are constantly

868

00:28:47,909 --> 00:28:46,399

continuing to train in all of the areas

869

00:28:49,350 --> 00:28:47,919

i talked about so that when you are

870

00:28:51,029 --> 00:28:49,360

assigned to a specific mission you're

871

00:28:53,110 --> 00:28:51,039

ready to go and do more advanced

872

00:28:55,350 --> 00:28:53,120

training with your actual crewmates to

873

00:28:57,669 --> 00:28:55,360

get ready to fly so what are some of the

874

00:28:59,110 --> 00:28:57,679

things that might be in the realm of

875

00:29:01,430 --> 00:28:59,120

advanced training like what are you

876
00:29:03,669 --> 00:29:01,440
going to be zeroing in on yeah so we're

877
00:29:05,510 --> 00:29:03,679
kind of doing basic generic skills

878
00:29:07,590 --> 00:29:05,520
during our astronaut candidate training

879
00:29:09,590 --> 00:29:07,600
kind of just the foundation

880
00:29:11,430 --> 00:29:09,600
upon which we can build later but when

881
00:29:13,110 --> 00:29:11,440
we get assigned to a specific mission

882
00:29:15,110 --> 00:29:13,120
instead of just learning you know

883
00:29:17,350 --> 00:29:15,120
generically about what's in the u.s

884
00:29:19,350 --> 00:29:17,360
laboratory module on the space station

885
00:29:21,190 --> 00:29:19,360
we'll be actually practicing setting up

886
00:29:23,750 --> 00:29:21,200
experiments we'll do

887
00:29:25,590 --> 00:29:23,760
we'll be practicing more with how to do

888
00:29:27,830 --> 00:29:25,600

photography and

889

00:29:29,430 --> 00:29:27,840

how to operate

890

00:29:31,110 --> 00:29:29,440

you know all the equipment that we might

891

00:29:32,630 --> 00:29:31,120

actually be using and then our spacewalk

892

00:29:34,470 --> 00:29:32,640

training becomes really specialized too

893

00:29:36,149 --> 00:29:34,480

if there's a spacewalk planned for that

894

00:29:38,630 --> 00:29:36,159

mission we'll start training those very

895

00:29:40,630 --> 00:29:38,640

specific procedures basically as a dress

896

00:29:42,870 --> 00:29:40,640

rehearsal for doing it in real life okay

897

00:29:45,029 --> 00:29:42,880

so you're you're past the phase where

898

00:29:47,430 --> 00:29:45,039

you during astronaut candidate training

899

00:29:49,669 --> 00:29:47,440

you're just developing the basic skills

900

00:29:51,669 --> 00:29:49,679

now it's just when you get to assign to

901
00:29:53,669 --> 00:29:51,679
a mission you can learn it's kind of

902
00:29:55,350 --> 00:29:53,679
exactly what you'll be doing exactly so

903
00:29:57,750 --> 00:29:55,360
whether it's changing a battery or

904
00:29:59,990 --> 00:29:57,760
whether it's installing a new

905
00:30:03,029 --> 00:30:00,000
new science hardware you'll specialize

906
00:30:05,350 --> 00:30:03,039
in that okay yeah very cool now you

907
00:30:07,350 --> 00:30:05,360
graduated recently too

908
00:30:09,909 --> 00:30:07,360
that was a pretty cool event to see i'll

909
00:30:12,310 --> 00:30:09,919
say just because uh what what's unique

910
00:30:14,470 --> 00:30:12,320
for at least for me in a selfish way i

911
00:30:17,110 --> 00:30:14,480
got to interview you guys when you came

912
00:30:19,590 --> 00:30:17,120
on and then two years later there you

913
00:30:22,070 --> 00:30:19,600

are on the stage you know graduating how

914

00:30:23,590 --> 00:30:22,080

was that just just the event just did it

915

00:30:26,630 --> 00:30:23,600

was it significant to you in the sense

916

00:30:28,470 --> 00:30:26,640

that wow i actually i actually did this

917

00:30:30,389 --> 00:30:28,480

yeah you know i like i kind of mentioned

918

00:30:31,430 --> 00:30:30,399

before i think the coolest part for us

919

00:30:32,230 --> 00:30:31,440

was

920

00:30:34,389 --> 00:30:32,240

the

921

00:30:36,950 --> 00:30:34,399

class experience of graduating of kind

922

00:30:39,029 --> 00:30:36,960

of getting to that point that the

923

00:30:41,590 --> 00:30:39,039

senior astronauts in the office

924

00:30:43,990 --> 00:30:41,600

were saying they trusted us to continue

925

00:30:45,110 --> 00:30:44,000

on and that that meant a lot to us you

926

00:30:47,029 --> 00:30:45,120

know having

927

00:30:49,590 --> 00:30:47,039

pat forster the chief of the office give

928

00:30:51,990 --> 00:30:49,600

us our silver astronaut pin

929

00:30:54,710 --> 00:30:52,000

and jeremy hanson our class supervisor

930

00:30:56,310 --> 00:30:54,720

who was kind of our guide through the

931

00:30:58,549 --> 00:30:56,320

day-to-day life of being an astronaut

932

00:31:00,310 --> 00:30:58,559

candidate you know meant a lot to get to

933

00:31:03,830 --> 00:31:00,320

that stage together

934

00:31:07,190 --> 00:31:03,840

and to be on the cusp of the next phase

935

00:31:09,269 --> 00:31:07,200

of our careers as young astronauts

936

00:31:11,350 --> 00:31:09,279

so it was a big deal in that sense and

937

00:31:13,190 --> 00:31:11,360

it was also really cool opportunity

938

00:31:15,590 --> 00:31:13,200

really to acknowledge and thank the

939

00:31:18,310 --> 00:31:15,600

people who selected us the people who

940

00:31:21,590 --> 00:31:18,320

supported us in training our instructors

941

00:31:24,149 --> 00:31:21,600

our mentors and of course our families

942

00:31:26,070 --> 00:31:24,159

without their support we wouldn't have

943

00:31:27,430 --> 00:31:26,080

the opportunity to come here and do this

944

00:31:30,470 --> 00:31:27,440

amazing thing

945

00:31:32,149 --> 00:31:30,480

so i think for us it was a team success

946

00:31:34,389 --> 00:31:32,159

and also a chance to acknowledge the

947

00:31:36,149 --> 00:31:34,399

people who built us up to get there in

948

00:31:38,070 --> 00:31:36,159

the first place wonderful it must have

949

00:31:39,750 --> 00:31:38,080

been cool for you too and to see because

950

00:31:42,310 --> 00:31:39,760

you selected them and there they were on

951
00:31:44,389 --> 00:31:42,320
the stage i was i was very proud yeah

952
00:31:46,950 --> 00:31:44,399
proud moment and i was grateful to be in

953
00:31:47,990 --> 00:31:46,960
the audience very cool now

954
00:31:49,909 --> 00:31:48,000
you know you're i'm sure you're

955
00:31:51,669 --> 00:31:49,919
reflecting at this time of graduation on

956
00:31:52,950 --> 00:31:51,679
some of the some of the training and

957
00:31:54,950 --> 00:31:52,960
just what you had to go through you

958
00:31:56,549 --> 00:31:54,960
talked about this diverse set of

959
00:31:57,909 --> 00:31:56,559
experiences and you got to do it with

960
00:32:00,549 --> 00:31:57,919
some of your crewmates you even told

961
00:32:02,389 --> 00:32:00,559
stories on the stage of just your time

962
00:32:04,549 --> 00:32:02,399
together you have a memorable moment

963
00:32:07,269 --> 00:32:04,559

from from that two from those two years

964

00:32:09,029 --> 00:32:07,279

maybe during one of the geology trips or

965

00:32:11,430 --> 00:32:09,039

maybe a particular time during one of

966

00:32:13,350 --> 00:32:11,440

the space walks or the the mbl the

967

00:32:15,590 --> 00:32:13,360

neutral point yeah you know there's

968

00:32:18,149 --> 00:32:15,600

there's almost too many to count like

969

00:32:19,750 --> 00:32:18,159

it's such a wonderful group to be a part

970

00:32:21,750 --> 00:32:19,760

of like i feel so lucky that i get to

971

00:32:23,350 --> 00:32:21,760

come to work every day and work with my

972

00:32:24,789 --> 00:32:23,360

colleagues in my class in the astronaut

973

00:32:27,190 --> 00:32:24,799

office and then in the larger nasa

974

00:32:28,630 --> 00:32:27,200

community like everyone is here because

975

00:32:30,630 --> 00:32:28,640

they're really passionate about it

976
00:32:32,789 --> 00:32:30,640
people choose to work here at johnson

977
00:32:36,149 --> 00:32:32,799
space center people choose to dedicate

978
00:32:37,190 --> 00:32:36,159
their lives to human space exploration

979
00:32:41,669 --> 00:32:37,200
and

980
00:32:43,430 --> 00:32:41,679
exciting team to be a part of i think

981
00:32:45,110 --> 00:32:43,440
for most of us our favorite memories

982
00:32:47,750 --> 00:32:45,120
from training are things that we did in

983
00:32:49,430 --> 00:32:47,760
the field a lot of us think of our time

984
00:32:51,350 --> 00:32:49,440
on that backpacking trip with knowles

985
00:32:53,909 --> 00:32:51,360
that we did as kind of a keystone

986
00:32:55,269 --> 00:32:53,919
experience for us

987
00:32:58,230 --> 00:32:55,279
because we already knew each other

988
00:33:01,110 --> 00:32:58,240

really well but kind of working in that

989

00:33:02,870 --> 00:33:01,120

more extreme context of having to figure

990

00:33:05,350 --> 00:33:02,880

out where we're going to get water how

991

00:33:07,110 --> 00:33:05,360

to cook our food together and just you

992

00:33:08,789 --> 00:33:07,120

know traversing in the backcountry

993

00:33:10,230 --> 00:33:08,799

making decisions and supporting each

994

00:33:12,630 --> 00:33:10,240

other kind of seeing everybody at their

995

00:33:14,950 --> 00:33:12,640

best and their worst

996

00:33:16,710 --> 00:33:14,960

hopefully johnny would think it's okay

997

00:33:18,389 --> 00:33:16,720

for me to tell this story but one of my

998

00:33:20,070 --> 00:33:18,399

favorite moments from

999

00:33:21,990 --> 00:33:20,080

that trip

1000

00:33:24,630 --> 00:33:22,000

we so there's not much water in that

1001
00:33:26,149 --> 00:33:24,640
part of utah a lot of times you're kind

1002
00:33:28,070 --> 00:33:26,159
of scooping it out of these little

1003
00:33:30,230 --> 00:33:28,080
potholes in the rock just that like an

1004
00:33:33,029 --> 00:33:30,240
inch thick of water trying to fill your

1005
00:33:34,389 --> 00:33:33,039
you know various vessels for the day

1006
00:33:36,950 --> 00:33:34,399
so it's kind of hard to get water

1007
00:33:39,509 --> 00:33:36,960
sometimes but one night it started just

1008
00:33:41,990 --> 00:33:39,519
this torrential downpour of rain

1009
00:33:43,669 --> 00:33:42,000
and it was cold and we're all huddled

1010
00:33:44,950 --> 00:33:43,679
sort of under this overhang trying to

1011
00:33:46,630 --> 00:33:44,960
stay dry

1012
00:33:49,430 --> 00:33:46,640
and johnny's tromping around in the

1013
00:33:51,909 --> 00:33:49,440

puddles he's wearing this big camouflage

1014

00:33:53,590 --> 00:33:51,919

poncho and i just remember looking up at

1015

00:33:54,870 --> 00:33:53,600

him and my my headlamp was shining on

1016

00:33:58,149 --> 00:33:54,880

him it was dark

1017

00:34:00,710 --> 00:33:58,159

and he was using his poncho as a funnel

1018

00:34:02,870 --> 00:34:00,720

to shoot rain water into all the water

1019

00:34:04,710 --> 00:34:02,880

bottles and pots and pans and he just

1020

00:34:06,950 --> 00:34:04,720

looked up at me with this really excited

1021

00:34:09,109 --> 00:34:06,960

look on his face and said kayla look at

1022

00:34:11,349 --> 00:34:09,119

all this free water

1023

00:34:13,030 --> 00:34:11,359

and it made me laugh so hard because

1024

00:34:16,069 --> 00:34:13,040

it's just like it's in those moments

1025

00:34:18,230 --> 00:34:16,079

where people are cold and tired

1026
00:34:20,629 --> 00:34:18,240
and you know maybe a little bit bummed

1027
00:34:23,190 --> 00:34:20,639
out and seeing one of your peers your

1028
00:34:24,869 --> 00:34:23,200
teammates like literally the glass is

1029
00:34:26,550 --> 00:34:24,879
half full for him you know he's just

1030
00:34:27,829 --> 00:34:26,560
like this

1031
00:34:29,270 --> 00:34:27,839
look at all this free water and you're

1032
00:34:30,869 --> 00:34:29,280
like you can think like oh it's cold

1033
00:34:32,069 --> 00:34:30,879
terrible rain but for him he was

1034
00:34:34,149 --> 00:34:32,079
choosing to see it from a different

1035
00:34:35,909 --> 00:34:34,159
perspective and that's the kind of

1036
00:34:37,510 --> 00:34:35,919
teammate you really want in those hard

1037
00:34:39,669 --> 00:34:37,520
moments because all of a sudden

1038
00:34:41,750 --> 00:34:39,679

everyone's laughing everyone's morale is

1039

00:34:43,430 --> 00:34:41,760

boosted and that's just johnny being

1040

00:34:45,270 --> 00:34:43,440

johnny you know johnny being himself and

1041

00:34:47,349 --> 00:34:45,280

being willing to share himself with us

1042

00:34:48,710 --> 00:34:47,359

really brought the team out of you know

1043

00:34:50,230 --> 00:34:48,720

a tough moment

1044

00:34:52,230 --> 00:34:50,240

and so it's things like that that you

1045

00:34:53,909 --> 00:34:52,240

just always think about yeah you know

1046

00:34:55,190 --> 00:34:53,919

you can you can say all you need these

1047

00:34:57,190 --> 00:34:55,200

team skills all you want but it's

1048

00:34:59,109 --> 00:34:57,200

stories that like that that really lock

1049

00:35:01,510 --> 00:34:59,119

it in just like when when things are

1050

00:35:04,470 --> 00:35:01,520

really down being able to rely on each

1051
00:35:07,030 --> 00:35:04,480
other um and and knowing each other's

1052
00:35:08,310 --> 00:35:07,040
strengths weaknesses ups downs um

1053
00:35:09,190 --> 00:35:08,320
knowing what everyone's going through

1054
00:35:10,870 --> 00:35:09,200
that's

1055
00:35:12,710 --> 00:35:10,880
critical to the success of a mission

1056
00:35:14,950 --> 00:35:12,720
because it's just you sorry that's a

1057
00:35:16,069 --> 00:35:14,960
wonderful story yeah so this is this is

1058
00:35:18,069 --> 00:35:16,079
what you're talking about when you talk

1059
00:35:19,829 --> 00:35:18,079
about when you talk about your your

1060
00:35:21,109 --> 00:35:19,839
interpersonal skills i'm sure that's a

1061
00:35:23,270 --> 00:35:21,119
big part of the

1062
00:35:25,430 --> 00:35:23,280
the interview process just by itself is

1063
00:35:26,870 --> 00:35:25,440

just how not only who they are and

1064

00:35:28,550 --> 00:35:26,880

understanding their background but how

1065

00:35:30,790 --> 00:35:28,560

they're interacting with each other yeah

1066

00:35:32,710 --> 00:35:30,800

we get asked a lot right what advice can

1067

00:35:34,710 --> 00:35:32,720

you give somebody who's

1068

00:35:37,030 --> 00:35:34,720

got been invited to do an interview and

1069

00:35:39,670 --> 00:35:37,040

right again the advice comes to just be

1070

00:35:40,390 --> 00:35:39,680

yourself right and not you're not trying

1071

00:35:41,990 --> 00:35:40,400

to

1072

00:35:43,990 --> 00:35:42,000

kind of fake your way through the

1073

00:35:45,670 --> 00:35:44,000

interview process being someone you're

1074

00:35:47,829 --> 00:35:45,680

not we're really looking for people who

1075

00:35:49,589 --> 00:35:47,839

are genuine and real so if you know

1076
00:35:50,950 --> 00:35:49,599
having interviewed johnny that story

1077
00:35:52,790 --> 00:35:50,960
doesn't really surprise me that's

1078
00:35:54,630 --> 00:35:52,800
exactly what i would have expected from

1079
00:35:56,470 --> 00:35:54,640
him yeah i remember

1080
00:35:58,310 --> 00:35:56,480
coming down for my first interview and

1081
00:36:00,550 --> 00:35:58,320
we come to we came down in groups of 10

1082
00:36:03,190 --> 00:36:00,560
for our class and meeting all the other

1083
00:36:05,190 --> 00:36:03,200
candidates i was just so blown away by

1084
00:36:07,910 --> 00:36:05,200
how talented and wonderful all of them

1085
00:36:09,670 --> 00:36:07,920
were and it's it's hard not to feel a

1086
00:36:11,190 --> 00:36:09,680
little bit of imposter syndrome you know

1087
00:36:13,190 --> 00:36:11,200
you're like what am i doing here like

1088
00:36:14,390 --> 00:36:13,200

what did they really see in me and kind

1089

00:36:15,510 --> 00:36:14,400

of wondering you know when i go into

1090

00:36:16,870 --> 00:36:15,520

that interview

1091

00:36:18,790 --> 00:36:16,880

interview room it's at the end of this

1092

00:36:21,190 --> 00:36:18,800

long table with all these astronauts and

1093

00:36:22,390 --> 00:36:21,200

senior national nasa officials like what

1094

00:36:24,950 --> 00:36:22,400

are they looking for what do they want

1095

00:36:26,630 --> 00:36:24,960

from me and i remember going into my

1096

00:36:28,150 --> 00:36:26,640

interview for some reason last thing i

1097

00:36:30,870 --> 00:36:28,160

thought before i walked in the door was

1098

00:36:32,310 --> 00:36:30,880

i i said don't make any jokes because

1099

00:36:34,230 --> 00:36:32,320

i'm so worried i was going to say

1100

00:36:35,910 --> 00:36:34,240

something sarcastic or

1101

00:36:36,870 --> 00:36:35,920

whatever you know show my sense of humor

1102

00:36:37,910 --> 00:36:36,880

and it wouldn't be received the right

1103

00:36:39,430 --> 00:36:37,920

way because they didn't know me very

1104

00:36:41,109 --> 00:36:39,440

well and i sat down

1105

00:36:42,470 --> 00:36:41,119

and we were talking and it didn't take

1106

00:36:45,109 --> 00:36:42,480

long before

1107

00:36:47,270 --> 00:36:45,119

uh tanto reid weisman made some sort of

1108

00:36:48,710 --> 00:36:47,280

joke at me and just instinctually you

1109

00:36:50,150 --> 00:36:48,720

know that's just how you interact he's a

1110

00:36:51,910 --> 00:36:50,160

naval officer too that's just how you

1111

00:36:54,470 --> 00:36:51,920

interact you kind of talk trash to each

1112

00:36:57,589 --> 00:36:55,910

and there was this moment of silence and

1113

00:36:59,109 --> 00:36:57,599

i was like oh no that was the one thing

1114

00:36:59,990 --> 00:36:59,119

you weren't supposed to do

1115

00:37:01,670 --> 00:37:00,000

but then

1116

00:37:03,430 --> 00:37:01,680

lindgren started laughing everyone

1117

00:37:05,510 --> 00:37:03,440

started laughing and it just relaxed me

1118

00:37:06,630 --> 00:37:05,520

and i just went you know in that moment

1119

00:37:08,470 --> 00:37:06,640

really quick i was just like you know

1120

00:37:10,069 --> 00:37:08,480

i'm just going to be myself and if

1121

00:37:11,990 --> 00:37:10,079

that's what they're looking for

1122

00:37:13,829 --> 00:37:12,000

awesome i'll feel authentic in doing it

1123

00:37:16,310 --> 00:37:13,839

and if not they probably know that too

1124

00:37:18,470 --> 00:37:16,320

so that's okay yeah um and so that

1125

00:37:22,069 --> 00:37:18,480

moment really helps me just be like be a

1126

00:37:24,069 --> 00:37:22,079

human be myself yeah show who you are um

1127

00:37:26,310 --> 00:37:24,079

and that'll carry the day or it won't

1128

00:37:27,750 --> 00:37:26,320

and so that sort of healthy fatalism of

1129

00:37:29,910 --> 00:37:27,760

just be yourself

1130

00:37:31,430 --> 00:37:29,920

be honest about who you are i think goes

1131

00:37:33,510 --> 00:37:31,440

a long way yeah because when you're

1132

00:37:34,710 --> 00:37:33,520

thinking about it can these people work

1133

00:37:36,390 --> 00:37:34,720

together there's that level of

1134

00:37:37,829 --> 00:37:36,400

authenticity that you're looking for

1135

00:37:39,910 --> 00:37:37,839

because you're not looking for this

1136

00:37:41,109 --> 00:37:39,920

facade whenever you're you're selecting

1137

00:37:43,109 --> 00:37:41,119

an astronaut you know you want to know

1138

00:37:44,950 --> 00:37:43,119

the true person because ultimately to

1139

00:37:47,270 --> 00:37:44,960

that story you just told with johnny kim

1140

00:37:48,790 --> 00:37:47,280

it's going to be relying on that person

1141

00:37:50,390 --> 00:37:48,800

so you want to know that person and who

1142

00:37:51,750 --> 00:37:50,400

they really are not just the facade of

1143

00:37:53,750 --> 00:37:51,760

who they are yep

1144

00:37:55,030 --> 00:37:53,760

let's see if there's another question um

1145

00:37:57,829 --> 00:37:55,040

jennifer do we have another question

1146

00:38:00,390 --> 00:37:57,839

from online we sure do from stephanie

1147

00:38:02,470 --> 00:38:00,400

jackson on twitter is there an age limit

1148

00:38:05,750 --> 00:38:02,480

of applying to be an astronaut that's a

1149

00:38:08,230 --> 00:38:05,760

popular one there is not an age limit uh

1150

00:38:10,150 --> 00:38:08,240

and that includes right a a limit a

1151

00:38:12,790 --> 00:38:10,160

floor and a ceiling there are there are

1152

00:38:14,069 --> 00:38:12,800

no limits folks need to meet the minimum

1153

00:38:15,589 --> 00:38:14,079

requirements

1154

00:38:16,630 --> 00:38:15,599

um

1155

00:38:18,790 --> 00:38:16,640

you know

1156

00:38:21,190 --> 00:38:18,800

the requirement comes in as we get down

1157

00:38:23,349 --> 00:38:21,200

to the final group candidates have to be

1158

00:38:26,150 --> 00:38:23,359

able to pass nasa's long-duration space

1159

00:38:27,510 --> 00:38:26,160

flight physical um and and provided they

1160

00:38:29,270 --> 00:38:27,520

can do that

1161

00:38:31,030 --> 00:38:29,280

that's all good that's that's the core

1162

00:38:33,430 --> 00:38:31,040

that's the corvette not an age but just

1163

00:38:35,589 --> 00:38:33,440

the skill set and the ability correct

1164

00:38:37,829 --> 00:38:35,599

yeah i understand um

1165

00:38:40,069 --> 00:38:37,839

now kayla you you talked about this

1166

00:38:42,950 --> 00:38:40,079

camaraderie um that makes me think of

1167

00:38:44,310 --> 00:38:42,960

just your class name that the turtles

1168

00:38:46,470 --> 00:38:44,320

why are you called the turtles did you

1169

00:38:48,950 --> 00:38:46,480

name that together as a group

1170

00:38:51,270 --> 00:38:48,960

no there is a long tradition of the

1171

00:38:53,589 --> 00:38:51,280

class just above you

1172

00:38:55,990 --> 00:38:53,599

gives you your class nickname so for us

1173

00:38:58,310 --> 00:38:56,000

the 2013 class the eight balls were in

1174

00:39:01,270 --> 00:38:58,320

charge of giving us our nickname

1175

00:39:04,470 --> 00:39:01,280

um and it's kind of i think comes a bit

1176

00:39:06,390 --> 00:39:04,480

from an aviation call sign or nickname

1177

00:39:07,670 --> 00:39:06,400

uh tradition where there's always more

1178

00:39:10,390 --> 00:39:07,680

than one meaning

1179

00:39:12,069 --> 00:39:10,400

um but the inspiration for the name

1180

00:39:14,150 --> 00:39:12,079

actually came from the vice president's

1181

00:39:16,870 --> 00:39:14,160

speech that he gave at our announcement

1182

00:39:18,870 --> 00:39:16,880

he was talking about how you know our

1183

00:39:21,030 --> 00:39:18,880

families and friends had supported us in

1184

00:39:24,069 --> 00:39:21,040

order to be there on that stage that day

1185

00:39:25,910 --> 00:39:24,079

and he used a metaphor that if you see a

1186

00:39:27,589 --> 00:39:25,920

box turtle on a fence post you know it

1187

00:39:29,750 --> 00:39:27,599

didn't get there on its own

1188

00:39:32,310 --> 00:39:29,760

and so that was the original genesis of

1189

00:39:34,069 --> 00:39:32,320

the question or of the the call sign the

1190

00:39:35,510 --> 00:39:34,079

nickname because

1191

00:39:37,589 --> 00:39:35,520

you guys didn't get there on there on

1192

00:39:39,349 --> 00:39:37,599

your own it was the support of everyone

1193

00:39:41,670 --> 00:39:39,359

around you that helped you to get you to

1194

00:39:43,349 --> 00:39:41,680

that point yeah very cool and a lot of

1195

00:39:45,910 --> 00:39:43,359

times the names have always been things

1196

00:39:48,550 --> 00:39:45,920

that don't fly correct yes

1197

00:39:51,109 --> 00:39:48,560

don't fly turtles don't fly they're slow

1198

00:39:52,630 --> 00:39:51,119

get back in their shell et cetera okay

1199

00:39:54,069 --> 00:39:52,640

so there's a there's yeah there's always

1200

00:39:57,030 --> 00:39:54,079

a double there's always a double meeting

1201
00:39:59,190 --> 00:39:57,040
that's hilarious now um let's zoom in on

1202
00:40:00,550 --> 00:39:59,200
on this class that you're looking for

1203
00:40:02,150 --> 00:40:00,560
and because we're talking about this

1204
00:40:04,309 --> 00:40:02,160
next class right i love the stories of

1205
00:40:06,309 --> 00:40:04,319
the 2017 class yeah it keeps getting

1206
00:40:07,430 --> 00:40:06,319
referred to as the artemis generation

1207
00:40:10,309 --> 00:40:07,440
let's just start there what does that

1208
00:40:12,150 --> 00:40:10,319
mean what are we looking for so i'm

1209
00:40:13,910 --> 00:40:12,160
optimistic that

1210
00:40:16,710 --> 00:40:13,920
most people know that we're trying to go

1211
00:40:18,630 --> 00:40:16,720
back to the moon by 2024

1212
00:40:21,030 --> 00:40:18,640
and certainly to us that's just the next

1213
00:40:23,270 --> 00:40:21,040

stopping point i i hope we're on our way

1214

00:40:26,870 --> 00:40:23,280

to mars beyond that i think that's the

1215

00:40:28,710 --> 00:40:26,880

long-term goal um and so artemis are is

1216

00:40:30,870 --> 00:40:28,720

kind of the umbrella for the missions

1217

00:40:32,390 --> 00:40:30,880

that will take us back to the moon okay

1218

00:40:34,390 --> 00:40:32,400

so so

1219

00:40:36,069 --> 00:40:34,400

is there differences

1220

00:40:37,589 --> 00:40:36,079

that you know from different classes

1221

00:40:39,750 --> 00:40:37,599

just from thinking about international

1222

00:40:41,510 --> 00:40:39,760

space station crews are we you know are

1223

00:40:42,950 --> 00:40:41,520

we talking about being together

1224

00:40:44,390 --> 00:40:42,960

and i keep going back to this

1225

00:40:45,589 --> 00:40:44,400

interpersonal skills and getting along

1226
00:40:46,710 --> 00:40:45,599
with each other because how i imagine

1227
00:40:49,030 --> 00:40:46,720
this going is they're going to be

1228
00:40:50,309 --> 00:40:49,040
together by themselves for really long

1229
00:40:52,950 --> 00:40:50,319
periods of time

1230
00:40:55,349 --> 00:40:52,960
eventually yeah so right surprisingly

1231
00:40:57,589 --> 00:40:55,359
what we've looked for um whether looking

1232
00:40:59,829 --> 00:40:57,599
back through the shuttle selection era

1233
00:41:01,910 --> 00:40:59,839
um through international space station

1234
00:41:03,270 --> 00:41:01,920
on to the moon and hopefully on to mars

1235
00:41:04,950 --> 00:41:03,280
the skill set that we've looked for

1236
00:41:07,510 --> 00:41:04,960
really hasn't changed that much right

1237
00:41:09,750 --> 00:41:07,520
the intangible skills have have remained

1238
00:41:11,910 --> 00:41:09,760

pretty consistent right and and we've

1239

00:41:14,710 --> 00:41:11,920

hit upon one of them extensively today

1240

00:41:16,950 --> 00:41:14,720

which is being a good teammate and and

1241

00:41:18,870 --> 00:41:16,960

understanding really what that means

1242

00:41:21,030 --> 00:41:18,880

sometimes it may mean leading the team

1243

00:41:24,390 --> 00:41:21,040

sometimes it may mean being a follower

1244

00:41:26,630 --> 00:41:24,400

on the team etc um and so really what

1245

00:41:28,790 --> 00:41:26,640

we've been focusing on with this class

1246

00:41:30,550 --> 00:41:28,800

isn't really much different than what

1247

00:41:32,870 --> 00:41:30,560

we've always focused on in astronaut

1248

00:41:35,030 --> 00:41:32,880

selection okay that's good to know i

1249

00:41:36,790 --> 00:41:35,040

want to zoom in on the the technical

1250

00:41:38,150 --> 00:41:36,800

aspect because because i do keep going

1251

00:41:40,150 --> 00:41:38,160

back to this theme of team aspect

1252

00:41:41,750 --> 00:41:40,160

because i find it really fascinating but

1253

00:41:43,829 --> 00:41:41,760

just having a systems engineering

1254

00:41:45,670 --> 00:41:43,839

background having a nuclear engineering

1255

00:41:47,270 --> 00:41:45,680

background i want to understand better

1256

00:41:49,030 --> 00:41:47,280

just the application

1257

00:41:51,030 --> 00:41:49,040

maybe that you found in your training

1258

00:41:53,510 --> 00:41:51,040

just you know taking your classes and

1259

00:41:55,589 --> 00:41:53,520

going through the brutal courses of what

1260

00:41:57,109 --> 00:41:55,599

it takes to become a systems engineer

1261

00:41:58,150 --> 00:41:57,119

bachelors and then a nuclear engineer

1262

00:42:00,069 --> 00:41:58,160

masters

1263

00:42:02,550 --> 00:42:00,079

things that you found the skills that

1264

00:42:04,309 --> 00:42:02,560

you've taken from that that are directly

1265

00:42:05,910 --> 00:42:04,319

applicable to some of your early

1266

00:42:08,230 --> 00:42:05,920

astronaut training

1267

00:42:10,309 --> 00:42:08,240

um you know for me i think my formal

1268

00:42:13,030 --> 00:42:10,319

education in engineering really taught

1269

00:42:15,109 --> 00:42:13,040

me how to think critically about tough

1270

00:42:16,790 --> 00:42:15,119

problems how to come up with ideas and

1271

00:42:18,470 --> 00:42:16,800

test them

1272

00:42:20,870 --> 00:42:18,480

and how to

1273

00:42:22,790 --> 00:42:20,880

take in a lot of data and parse out from

1274

00:42:24,470 --> 00:42:22,800

that useful information upon which i

1275

00:42:26,150 --> 00:42:24,480

could make a decision

1276

00:42:28,710 --> 00:42:26,160

but i think for me

1277

00:42:31,510 --> 00:42:28,720

i'm constantly leaning on my experience

1278

00:42:33,270 --> 00:42:31,520

in the navy which of course my education

1279

00:42:36,390 --> 00:42:33,280

informed as well

1280

00:42:38,950 --> 00:42:36,400

a submarine is a very technical

1281

00:42:40,630 --> 00:42:38,960

crazy complicated machine and whether

1282

00:42:42,550 --> 00:42:40,640

that's working in on the engineering

1283

00:42:44,150 --> 00:42:42,560

side which we all do at first or

1284

00:42:46,069 --> 00:42:44,160

actually more on the operation side like

1285

00:42:47,190 --> 00:42:46,079

driving the boat and making tactical

1286

00:42:48,470 --> 00:42:47,200

decisions

1287

00:42:51,349 --> 00:42:48,480

um

1288

00:42:52,710 --> 00:42:51,359

i i constantly rely on that experience

1289

00:42:55,270 --> 00:42:52,720

because i think it's really similar to a

1290

00:42:57,190 --> 00:42:55,280

lot of things we do here at nasa so that

1291

00:42:58,710 --> 00:42:57,200

operational context really helps because

1292

00:43:00,790 --> 00:42:58,720

that you have to understand all of that

1293

00:43:03,190 --> 00:43:00,800

engineering equipment but you also have

1294

00:43:05,589 --> 00:43:03,200

to work as a team to keep that you know

1295

00:43:07,109 --> 00:43:05,599

everything working correctly and make

1296

00:43:09,270 --> 00:43:07,119

really critical decisions in a

1297

00:43:10,710 --> 00:43:09,280

time-sensitive environment

1298

00:43:12,870 --> 00:43:10,720

and so i

1299

00:43:15,510 --> 00:43:12,880

i find myself leaning on those

1300

00:43:17,270 --> 00:43:15,520

lessons of how you bring the best out of

1301

00:43:20,550 --> 00:43:17,280

everybody to do something that's really

1302

00:43:23,510 --> 00:43:20,560

hard yeah um i i rely on those lessons a

1303

00:43:25,190 --> 00:43:23,520

lot and the way i trained for

1304

00:43:26,870 --> 00:43:25,200

that to deploy on a submarine and be

1305

00:43:28,390 --> 00:43:26,880

successful there is really similar to

1306

00:43:30,150 --> 00:43:28,400

the way i approach my training here at

1307

00:43:31,990 --> 00:43:30,160

nasa but i think that's true for all of

1308

00:43:33,829 --> 00:43:32,000

us even people from very different

1309

00:43:35,510 --> 00:43:33,839

backgrounds like you know you have

1310

00:43:37,750 --> 00:43:35,520

people who

1311

00:43:40,790 --> 00:43:37,760

like my classmate jessica watkins who's

1312

00:43:42,309 --> 00:43:40,800

a mars geologist and worked um at jpl on

1313

00:43:44,069 --> 00:43:42,319

the mars rovers

1314

00:43:46,150 --> 00:43:44,079

you know that's that was a she was doing

1315

00:43:48,870 --> 00:43:46,160

that as a postdoc it's very academic but

1316

00:43:50,870 --> 00:43:48,880

it's also a team working together with

1317

00:43:53,670 --> 00:43:50,880

limited resources to try to do something

1318

00:43:55,349 --> 00:43:53,680

incredible right and so she in the same

1319

00:43:56,710 --> 00:43:55,359

way relies on that experience even

1320

00:43:58,790 --> 00:43:56,720

though it's very different than what i

1321

00:44:00,230 --> 00:43:58,800

did in the navy um

1322

00:44:03,510 --> 00:44:00,240

and so i think

1323

00:44:05,270 --> 00:44:03,520

those academic experiences inform our

1324

00:44:07,030 --> 00:44:05,280

professional experiences too and those

1325

00:44:08,790 --> 00:44:07,040

are also really important yeah let's

1326

00:44:10,230 --> 00:44:08,800

zoom in on on an aspect of that of

1327

00:44:12,069 --> 00:44:10,240

working in a team because because ann

1328

00:44:13,750 --> 00:44:12,079

you mentioned this you said

1329

00:44:15,510 --> 00:44:13,760

there's a skill of knowing when to lead

1330

00:44:17,750 --> 00:44:15,520

and when to follow and doing both is

1331

00:44:19,270 --> 00:44:17,760

really critical to being an astronaut

1332

00:44:20,950 --> 00:44:19,280

i'm sure you had to deal with this on a

1333

00:44:23,910 --> 00:44:20,960

submarine too knowing when to leave when

1334

00:44:25,990 --> 00:44:23,920

to follow what's that like is is there

1335

00:44:28,069 --> 00:44:26,000

you know a mindset you have to be in of

1336

00:44:29,349 --> 00:44:28,079

yes now it's time to lead and yes now

1337

00:44:30,790 --> 00:44:29,359

it's time to follow

1338

00:44:31,910 --> 00:44:30,800

sure yeah i mean i think there are

1339

00:44:33,430 --> 00:44:31,920

definitely

1340

00:44:35,430 --> 00:44:33,440

times where you're going to be in a

1341

00:44:37,510 --> 00:44:35,440

designated leadership role that's always

1342

00:44:40,069 --> 00:44:37,520

been you know the nasa

1343

00:44:42,150 --> 00:44:40,079

and the astronaut program has its roots

1344

00:44:43,430 --> 00:44:42,160

in military aviation so people are used

1345

00:44:46,069 --> 00:44:43,440

to that you know you have spatial

1346

00:44:47,910 --> 00:44:46,079

commanders or space station commanders

1347

00:44:49,829 --> 00:44:47,920

and they're used to that formal

1348

00:44:53,430 --> 00:44:49,839

designated authority but sometimes the

1349

00:44:55,270 --> 00:44:53,440

harrier parts are followership and also

1350

00:44:58,309 --> 00:44:55,280

self-leadership you know like i think

1351
00:45:00,710 --> 00:44:58,319
thinking about followership as actually

1352
00:45:02,390 --> 00:45:00,720
being a self-leader like that that makes

1353
00:45:05,589 --> 00:45:02,400
it more actionable like you're it's not

1354
00:45:07,589 --> 00:45:05,599
my job just to follow you it's my job to

1355
00:45:09,750 --> 00:45:07,599
actively figure out how to support you

1356
00:45:10,710 --> 00:45:09,760
as a designated leader and contribute to

1357
00:45:13,430 --> 00:45:10,720
the team

1358
00:45:14,950 --> 00:45:13,440
and they're you know our our office is

1359
00:45:16,790 --> 00:45:14,960
pretty small and we're constantly

1360
00:45:18,390 --> 00:45:16,800
working in different roles so sometimes

1361
00:45:20,390 --> 00:45:18,400
i might be in charge of something even

1362
00:45:22,790 --> 00:45:20,400
though i have very little experience and

1363
00:45:25,030 --> 00:45:22,800

sometimes i might be you know i might

1364

00:45:26,150 --> 00:45:25,040

have a peer in charge of me or vice

1365

00:45:27,670 --> 00:45:26,160

versa

1366

00:45:29,910 --> 00:45:27,680

and being able to

1367

00:45:33,030 --> 00:45:29,920

sort of transition very seamlessly

1368

00:45:34,630 --> 00:45:33,040

between those roles and understand the

1369

00:45:36,069 --> 00:45:34,640

different contexts and what that means

1370

00:45:37,829 --> 00:45:36,079

is really important

1371

00:45:39,750 --> 00:45:37,839

that's huge now

1372

00:45:42,470 --> 00:45:39,760

let's let's zoom in on

1373

00:45:44,309 --> 00:45:42,480

this class once again because i want to

1374

00:45:46,630 --> 00:45:44,319

take bring us back to the fact of why

1375

00:45:49,190 --> 00:45:46,640

we're here right it's it's march 6th we

1376

00:45:51,670 --> 00:45:49,200

have until march 31st that's correct

1377

00:45:53,910 --> 00:45:51,680

these applications are open where do we

1378

00:45:55,990 --> 00:45:53,920

sit right now in terms of

1379

00:45:57,910 --> 00:45:56,000

ballpark applications because

1380

00:46:00,150 --> 00:45:57,920

it was 600 in the first few days or

1381

00:46:01,829 --> 00:46:00,160

something it was that's why i don't get

1382

00:46:03,910 --> 00:46:01,839

daily updates

1383

00:46:06,870 --> 00:46:03,920

i don't need to be freaked out uh no

1384

00:46:10,069 --> 00:46:06,880

when i checked yesterday we were close

1385

00:46:12,309 --> 00:46:10,079

to 2000 wow so and that that's pretty

1386

00:46:14,309 --> 00:46:12,319

normal right the first the the beginning

1387

00:46:16,150 --> 00:46:14,319

opening period and then the end of the

1388

00:46:17,910 --> 00:46:16,160

opening period we typically see big

1389

00:46:20,470 --> 00:46:17,920

spikes especially with this with the

1390

00:46:21,670 --> 00:46:20,480

special attention on the the last day we

1391

00:46:24,630 --> 00:46:21,680

have a lot of people that wait to the

1392

00:46:30,230 --> 00:46:27,270

maybe just beefing up their resume maybe

1393

00:46:31,990 --> 00:46:30,240

that constant month to fine-tune

1394

00:46:34,069 --> 00:46:32,000

everything

1395

00:46:37,589 --> 00:46:34,079

um yeah so i guess there's people

1396

00:46:39,750 --> 00:46:37,599

thinking about what it takes for um you

1397

00:46:42,630 --> 00:46:39,760

know walking on the moon what it takes

1398

00:46:44,309 --> 00:46:42,640

for working in teams um when you're

1399

00:46:46,230 --> 00:46:44,319

looking at a resume you know because all

1400

00:46:48,950 --> 00:46:46,240

of this is going to be digital right

1401
00:46:50,790 --> 00:46:48,960
we're going through through usa jobs is

1402
00:46:53,109 --> 00:46:50,800
there something that pops up to you

1403
00:46:55,190 --> 00:46:53,119
maybe maybe a weird skill or just some

1404
00:46:56,390 --> 00:46:55,200
some sort of of diverse

1405
00:46:58,710 --> 00:46:56,400
something different

1406
00:47:00,630 --> 00:46:58,720
um that that might make someone pop

1407
00:47:02,550 --> 00:47:00,640
versus another 2000 people that you're

1408
00:47:04,710 --> 00:47:02,560
looking at you know i think i think i've

1409
00:47:07,109 --> 00:47:04,720
seen a lot of weird skills on resumes if

1410
00:47:09,030 --> 00:47:07,119
i'm being honest um some people employ

1411
00:47:10,390 --> 00:47:09,040
creative writing even which is always

1412
00:47:12,550 --> 00:47:10,400
very entertaining

1413
00:47:14,309 --> 00:47:12,560

um

1414

00:47:17,349 --> 00:47:14,319

you know i again i think that's where

1415

00:47:20,309 --> 00:47:17,359

that hobbies and other other interests

1416

00:47:22,470 --> 00:47:20,319

section can be really informative uh

1417

00:47:23,829 --> 00:47:22,480

that's a section where again it needs a

1418

00:47:25,270 --> 00:47:23,839

little bit of context we have a lot of

1419

00:47:27,750 --> 00:47:25,280

people who tell us oh i'm scuba

1420

00:47:29,589 --> 00:47:27,760

certified okay well that doesn't tell me

1421

00:47:31,510 --> 00:47:29,599

if they're scuba certified and that's

1422

00:47:34,950 --> 00:47:31,520

all they've done or have they gone on

1423

00:47:36,790 --> 00:47:34,960

200 dives or you know marathon runner

1424

00:47:39,190 --> 00:47:36,800

okay well did you train and run one

1425

00:47:41,349 --> 00:47:39,200

marathon or have you run 50

1426

00:47:43,910 --> 00:47:41,359

um so there's a lot of room in that

1427

00:47:44,950 --> 00:47:43,920

section for people to tell us and right

1428

00:47:46,790 --> 00:47:44,960

we see

1429

00:47:48,710 --> 00:47:46,800

coding language i remember the last

1430

00:47:50,870 --> 00:47:48,720

selection cycle having to look up

1431

00:47:53,910 --> 00:47:50,880

somebody wrote that they spoke python

1432

00:47:56,710 --> 00:47:53,920

and i'm like i i don't know what python

1433

00:47:59,430 --> 00:47:56,720

is it's a code it's a coding language

1434

00:48:01,670 --> 00:47:59,440

but right i mean so you you i've seen

1435

00:48:03,349 --> 00:48:01,680

the gamut of things but but all of those

1436

00:48:05,430 --> 00:48:03,359

things the fact that i went and looked

1437

00:48:07,270 --> 00:48:05,440

up what speaking python meant i was like

1438

00:48:09,829 --> 00:48:07,280

oh okay that's interesting i learned

1439

00:48:11,510 --> 00:48:09,839

something so you know i wouldn't i

1440

00:48:12,870 --> 00:48:11,520

wouldn't not put anything down that

1441

00:48:14,470 --> 00:48:12,880

could be relevant

1442

00:48:16,230 --> 00:48:14,480

interesting all right let's see if we

1443

00:48:18,309 --> 00:48:16,240

have a case study online jennifer do we

1444

00:48:20,230 --> 00:48:18,319

have a question from some of you

1445

00:48:22,549 --> 00:48:20,240

speaking of you know the gamut of skills

1446

00:48:25,190 --> 00:48:22,559

and backgrounds we have one from diesel

1447

00:48:27,510 --> 00:48:25,200

from twitter is nasa accepting pilot

1448

00:48:30,230 --> 00:48:27,520

applications from pilots who have not

1449

00:48:32,630 --> 00:48:30,240

graduated from tps is weapon school

1450

00:48:35,589 --> 00:48:32,640

graduation and test flight experience a

1451

00:48:37,190 --> 00:48:35,599

suitable alternative sure so i would um

1452

00:48:39,109 --> 00:48:37,200

i'd encourage folks to read the

1453

00:48:42,549 --> 00:48:39,119

application but so i'm going off memory

1454

00:48:44,790 --> 00:48:42,559

here we we added test pilot school as

1455

00:48:47,510 --> 00:48:44,800

a way for pilots and others to

1456

00:48:49,990 --> 00:48:47,520

demonstrate that they have a master's

1457

00:48:52,470 --> 00:48:50,000

degree right because basically that's

1458

00:48:53,430 --> 00:48:52,480

extra schooling in the math and science

1459

00:48:55,109 --> 00:48:53,440

arena

1460

00:48:57,270 --> 00:48:55,119

um

1461

00:48:59,829 --> 00:48:57,280

for our pilots they are not required to

1462

00:49:02,710 --> 00:48:59,839

have gone to test pilot school however

1463

00:49:05,190 --> 00:49:02,720

uh they they that would not they would

1464

00:49:07,030 --> 00:49:05,200

still have to have the master's degree

1465

00:49:08,549 --> 00:49:07,040

though the advanced master's degree in a

1466

00:49:10,710 --> 00:49:08,559

technical field

1467

00:49:12,230 --> 00:49:10,720

so so they right i'd encourage folks

1468

00:49:14,470 --> 00:49:12,240

that are interested or considering

1469

00:49:17,349 --> 00:49:14,480

whether test pilot school works or

1470

00:49:20,230 --> 00:49:17,359

doesn't work to very specifically read

1471

00:49:22,630 --> 00:49:20,240

um that section of the announcement yeah

1472

00:49:24,870 --> 00:49:22,640

okay so definitely get the details there

1473

00:49:27,349 --> 00:49:24,880

are a few little nuances there well

1474

00:49:29,829 --> 00:49:27,359

kayla what did you do to uh make

1475

00:49:31,750 --> 00:49:29,839

yourself stand out in terms of was it

1476

00:49:33,510 --> 00:49:31,760

was it maybe just your skills or did you

1477

00:49:35,670 --> 00:49:33,520

have that weird thing i can answer that

1478

00:49:38,470 --> 00:49:35,680

i have no idea i remember

1479

00:49:41,349 --> 00:49:38,480

uh right i mean if i recall kayla's

1480

00:49:42,630 --> 00:49:41,359

application being one of the first three

1481

00:49:45,190 --> 00:49:42,640

i think

1482

00:49:46,950 --> 00:49:45,200

women in this in the submarine force is

1483

00:49:48,069 --> 00:49:46,960

that correct to kind of um so i was in

1484

00:49:48,950 --> 00:49:48,079

the first

1485

00:49:50,549 --> 00:49:48,960

year

1486

00:49:51,910 --> 00:49:50,559

yeah that women were accepted in the

1487

00:49:53,190 --> 00:49:51,920

submarine force

1488

00:49:54,870 --> 00:49:53,200

um

1489

00:49:56,630 --> 00:49:54,880

yeah and on my on my submarine there

1490

00:49:58,230 --> 00:49:56,640

were like between three and five of us

1491

00:50:00,390 --> 00:49:58,240

at a time yeah but yeah it was still

1492

00:50:02,230 --> 00:50:00,400

pretty new yeah it was very new right

1493

00:50:03,990 --> 00:50:02,240

and that stood out and then i think also

1494

00:50:05,430 --> 00:50:04,000

the direct correlation that kayla

1495

00:50:07,829 --> 00:50:05,440

already spoke to

1496

00:50:09,910 --> 00:50:07,839

with the environment of living and

1497

00:50:12,309 --> 00:50:09,920

working on a submarine

1498

00:50:14,150 --> 00:50:12,319

translates directly to basically the

1499

00:50:16,630 --> 00:50:14,160

space station if kayla thinks of the

1500

00:50:17,589 --> 00:50:16,640

space station as a as a flying sub i

1501

00:50:20,309 --> 00:50:17,599

love that

1502

00:50:22,870 --> 00:50:20,319

um i'm gonna use that submarine

1503

00:50:24,390 --> 00:50:22,880

submarine in space i like it so i mean

1504

00:50:26,950 --> 00:50:24,400

right those are two things right there

1505

00:50:29,670 --> 00:50:26,960

that i even recall reading kayla's

1506

00:50:31,750 --> 00:50:29,680

resume years ago what uh and what are

1507

00:50:33,589 --> 00:50:31,760

you in for for the next few months maybe

1508

00:50:34,870 --> 00:50:33,599

years for looking at what's the

1509

00:50:37,430 --> 00:50:34,880

application because they closed on the

1510

00:50:40,230 --> 00:50:37,440

31st your job's not even close to done

1511

00:50:42,790 --> 00:50:40,240

no it's actually just starting we

1512

00:50:45,030 --> 00:50:42,800

anticipate nasa anticipates announcing

1513

00:50:47,910 --> 00:50:45,040

the next class of astronauts and

1514

00:50:50,309 --> 00:50:47,920

and i always say the early summer of

1515

00:50:52,549 --> 00:50:50,319

2021 i don't know houston summer tends

1516

00:50:54,870 --> 00:50:52,559

to start in march so

1517

00:50:56,309 --> 00:50:54,880

i'm already feeling it may junish of

1518

00:50:59,190 --> 00:50:56,319

2021

1519

00:51:03,030 --> 00:50:59,200

um but as we talked about earlier this

1520

00:51:04,549 --> 00:51:03,040

is a multi-step process and so there are

1521

00:51:06,790 --> 00:51:04,559

things that we'll start doing from the

1522

00:51:08,710 --> 00:51:06,800

day that announcement closes to try and

1523

00:51:10,390 --> 00:51:08,720

you know continually whittle down the

1524

00:51:12,150 --> 00:51:10,400

numbers and make sure that we're looking

1525

00:51:14,630 --> 00:51:12,160

at the highly qualified folks and

1526
00:51:15,829 --> 00:51:14,640
inviting those folks for interviews etc

1527
00:51:17,829 --> 00:51:15,839
so

1528
00:51:19,670 --> 00:51:17,839
yeah it's about another

1529
00:51:21,829 --> 00:51:19,680
year plus in the making yeah it's going

1530
00:51:22,870 --> 00:51:21,839
to be a long one yeah now kayla you're

1531
00:51:24,230 --> 00:51:22,880
we're talking about the artemis

1532
00:51:27,829 --> 00:51:24,240
generation

1533
00:51:29,829 --> 00:51:27,839
also very apparent that you're part of

1534
00:51:31,670 --> 00:51:29,839
this you you are the artemis generation

1535
00:51:33,349 --> 00:51:31,680
tell me what some of the folks that are

1536
00:51:35,270 --> 00:51:33,359
applying to the astronauts what they can

1537
00:51:36,549 --> 00:51:35,280
expect if they eventually do become

1538
00:51:37,430 --> 00:51:36,559

astronauts what we have to look forward

1539

00:51:41,670 --> 00:51:37,440

to

1540

00:51:43,910 --> 00:51:41,680

be starting work at nasa because we're

1541

00:51:45,829 --> 00:51:43,920

continuing the amazing work we're doing

1542

00:51:47,990 --> 00:51:45,839

on the space station we just celebrated

1543

00:51:50,309 --> 00:51:48,000

20 years of continuous human presence

1544

00:51:52,470 --> 00:51:50,319

there which is incredible and we've

1545

00:51:54,630 --> 00:51:52,480

gotten really good at knowing how to

1546

00:51:56,790 --> 00:51:54,640

operate up there and accomplish a lot

1547

00:51:59,270 --> 00:51:56,800

and so we're really excited to be a part

1548

00:52:00,870 --> 00:51:59,280

of and continue to build on that legacy

1549

00:52:02,710 --> 00:52:00,880

but what makes it really exciting is we

1550

00:52:04,230 --> 00:52:02,720

have also have a lot of other things

1551
00:52:06,150 --> 00:52:04,240
going on we're about to bring the

1552
00:52:08,230 --> 00:52:06,160
commercial crew program online where

1553
00:52:10,549 --> 00:52:08,240
we'll launch nasa astronauts from the

1554
00:52:12,710 --> 00:52:10,559
cape in florida again on boeing and

1555
00:52:14,150 --> 00:52:12,720
spacex vehicles which is super exciting

1556
00:52:16,790 --> 00:52:14,160
those will be going to the space station

1557
00:52:19,109 --> 00:52:16,800
so be another way to get a ride there

1558
00:52:20,710 --> 00:52:19,119
but also we're developing all of our

1559
00:52:22,230 --> 00:52:20,720
systems for the artemis program are

1560
00:52:23,910 --> 00:52:22,240
returned to the moon with the goal of

1561
00:52:26,790 --> 00:52:23,920
putting humans back on the surface of

1562
00:52:29,510 --> 00:52:26,800
the moon by 2024 and so

1563
00:52:32,230 --> 00:52:29,520

that involves a new rocket a new space

1564

00:52:34,549 --> 00:52:32,240

capsule new space suits thinking about

1565

00:52:36,710 --> 00:52:34,559

power generation technologies in-situ

1566

00:52:38,710 --> 00:52:36,720

resource utilization on the moon and all

1567

00:52:40,390 --> 00:52:38,720

of these things you can really nerd out

1568

00:52:42,309 --> 00:52:40,400

on with the people you find around

1569

00:52:44,390 --> 00:52:42,319

johnson space center

1570

00:52:46,710 --> 00:52:44,400

so for us it's super exciting because it

1571

00:52:47,990 --> 00:52:46,720

feels like we're on the cusp

1572

00:52:48,870 --> 00:52:48,000

of a whole

1573

00:52:50,390 --> 00:52:48,880

new

1574

00:52:51,670 --> 00:52:50,400

mission

1575

00:52:53,589 --> 00:52:51,680

so we're

1576
00:52:55,829 --> 00:52:53,599
the timing's good because you gotta get

1577
00:52:57,829 --> 00:52:55,839
to be a part of that sort of legacy

1578
00:53:00,870 --> 00:52:57,839
mission of the space station but also be

1579
00:53:02,870 --> 00:53:00,880
a part of building the future of nasa

1580
00:53:04,630 --> 00:53:02,880
which is returning to the moon hopefully

1581
00:53:07,270 --> 00:53:04,640
to eventually go on to mars which would

1582
00:53:09,030 --> 00:53:07,280
be just so incredible so it's a really

1583
00:53:11,190 --> 00:53:09,040
fun time to be here yeah and i know

1584
00:53:13,670 --> 00:53:11,200
right there's a lot of excitement i hope

1585
00:53:15,670 --> 00:53:13,680
it at nasa and hopefully beyond across

1586
00:53:18,150 --> 00:53:15,680
the country to return flying us

1587
00:53:18,870 --> 00:53:18,160
astronauts from u.s soil on u.s rocket

1588
00:53:20,790 --> 00:53:18,880

so

1589

00:53:22,309 --> 00:53:20,800

it's a great time

1590

00:53:23,750 --> 00:53:22,319

to work at nasa are the turtles part of

1591

00:53:25,910 --> 00:53:23,760

that right now because we're building up

1592

00:53:27,829 --> 00:53:25,920

to that yeah absolutely so a lot of us

1593

00:53:30,549 --> 00:53:27,839

have been involved in different ways in

1594

00:53:32,549 --> 00:53:30,559

the commercial crew program

1595

00:53:34,790 --> 00:53:32,559

some of us have been doing verification

1596

00:53:36,549 --> 00:53:34,800

testing with them you know just kind of

1597

00:53:38,390 --> 00:53:36,559

finalizing the details of their system

1598

00:53:39,829 --> 00:53:38,400

getting to test them out with fresh eyes

1599

00:53:40,790 --> 00:53:39,839

and give them feedback on how things

1600

00:53:42,549 --> 00:53:40,800

work

1601
00:53:44,950 --> 00:53:42,559

people are involved

1602
00:53:47,349 --> 00:53:44,960

in operations getting ready for those

1603
00:53:49,589 --> 00:53:47,359

actual launches from cape canaveral in

1604
00:53:51,750 --> 00:53:49,599

florida so really thinking through

1605
00:53:53,190 --> 00:53:51,760

you know how to get the astronauts ready

1606
00:53:54,390 --> 00:53:53,200

for launch how do we take care of their

1607
00:53:56,710 --> 00:53:54,400

families and what do we do when they

1608
00:53:58,390 --> 00:53:56,720

land how do we get them back to safety

1609
00:53:59,910 --> 00:53:58,400

so there's a lot of things that are

1610
00:54:02,309 --> 00:53:59,920

spinning back up that we haven't really

1611
00:54:04,790 --> 00:54:02,319

been doing since the space space shuttle

1612
00:54:06,790 --> 00:54:04,800

stopped flying so yeah it's an exciting

1613
00:54:08,309 --> 00:54:06,800

time it's a very exciting time we have a

1614

00:54:10,150 --> 00:54:08,319

lot of

1615

00:54:11,510 --> 00:54:10,160

i guess new skills to look forward to

1616

00:54:13,030 --> 00:54:11,520

right let's see if we have one more

1617

00:54:15,349 --> 00:54:13,040

question from online jennifer can we

1618

00:54:17,910 --> 00:54:15,359

squeeze in one more we sure do

1619

00:54:19,990 --> 00:54:17,920

we have one from drew from twitter

1620

00:54:22,470 --> 00:54:20,000

will current astronauts be required to

1621

00:54:24,950 --> 00:54:22,480

do updated training to go to the moon

1622

00:54:26,309 --> 00:54:24,960

okay well i guess is maybe kayla you

1623

00:54:27,349 --> 00:54:26,319

mentioned specialized training maybe

1624

00:54:28,710 --> 00:54:27,359

that'll be part of the specialized

1625

00:54:31,109 --> 00:54:28,720

training i don't know if the candidate

1626
00:54:32,390 --> 00:54:31,119
training will be updated but no well i

1627
00:54:34,549 --> 00:54:32,400
think as kayla mentioned right the

1628
00:54:36,630 --> 00:54:34,559
candidate training kind of focuses on

1629
00:54:38,470 --> 00:54:36,640
the basic things that every

1630
00:54:40,549 --> 00:54:38,480
astronaut needs to know and then there's

1631
00:54:43,030 --> 00:54:40,559
always mission specific training beyond

1632
00:54:45,349 --> 00:54:43,040
that so yeah i think a lot of the

1633
00:54:47,910 --> 00:54:45,359
training the new class will do will be

1634
00:54:50,710 --> 00:54:47,920
pretty similar to what our class did

1635
00:54:52,710 --> 00:54:50,720
but as we start to fly to the moon of

1636
00:54:55,030 --> 00:54:52,720
course we'll be doing specific training

1637
00:54:56,470 --> 00:54:55,040
to include advanced geology training so

1638
00:54:58,150 --> 00:54:56,480

that we can be ready to do some awesome

1639

00:54:59,270 --> 00:54:58,160

science when we're up there

1640

00:55:01,670 --> 00:54:59,280

uh we'll

1641

00:55:03,589 --> 00:55:01,680

modify and expand our spacewalk training

1642

00:55:05,510 --> 00:55:03,599

so that we can learn how to operate

1643

00:55:06,950 --> 00:55:05,520

correctly in one sixth grad earth

1644

00:55:08,789 --> 00:55:06,960

gravity as opposed to the apparent

1645

00:55:10,950 --> 00:55:08,799

microgravity environment we have on

1646

00:55:12,789 --> 00:55:10,960

space station now lots of different

1647

00:55:14,230 --> 00:55:12,799

tools lots of different vehicles you

1648

00:55:17,109 --> 00:55:14,240

know we have to fly a new capsule we

1649

00:55:18,630 --> 00:55:17,119

have to fly a lander um all this new

1650

00:55:20,390 --> 00:55:18,640

sort of mission specific equipment

1651
00:55:22,069 --> 00:55:20,400
absolutely we'll be doing some

1652
00:55:23,430 --> 00:55:22,079
additional training on that

1653
00:55:24,870 --> 00:55:23,440
but i think it'll be more part of

1654
00:55:26,470 --> 00:55:24,880
mission specific training that you do

1655
00:55:28,390 --> 00:55:26,480
after you graduate from astronaut

1656
00:55:29,589 --> 00:55:28,400
candidate training so if you had a if

1657
00:55:31,510 --> 00:55:29,599
you ought to put your name in the hat

1658
00:55:32,710 --> 00:55:31,520
for one of those specialized training i

1659
00:55:34,789 --> 00:55:32,720
know what i would pick what would you

1660
00:55:36,950 --> 00:55:34,799
pick you know i

1661
00:55:39,430 --> 00:55:36,960
i really love the space walk training we

1662
00:55:41,589 --> 00:55:39,440
do and i've been helping out a little

1663
00:55:43,270 --> 00:55:41,599

bit with the next generation spacesuit

1664

00:55:45,910 --> 00:55:43,280

that we'll wear on the next moonwalk the

1665

00:55:46,870 --> 00:55:45,920

exploration emu or xcmu

1666

00:55:49,190 --> 00:55:46,880

so

1667

00:55:51,589 --> 00:55:49,200

i'm constantly nerding out and getting

1668

00:55:53,750 --> 00:55:51,599

excited about those moon walks just

1669

00:55:56,150 --> 00:55:53,760

yesterday we were over in the

1670

00:55:58,150 --> 00:55:56,160

rock yard where they have simulated soil

1671

00:56:00,230 --> 00:55:58,160

environments looking at the first

1672

00:56:01,589 --> 00:56:00,240

generation of the geology tools we'll be

1673

00:56:03,589 --> 00:56:01,599

using

1674

00:56:05,589 --> 00:56:03,599

and it just gets your your head in that

1675

00:56:07,430 --> 00:56:05,599

mindset of standing on the moon looking

1676
00:56:10,150 --> 00:56:07,440
back at earth and collecting these

1677
00:56:12,710 --> 00:56:10,160
samples that will inform science for

1678
00:56:15,030 --> 00:56:12,720
decades if not centuries to come

1679
00:56:16,309 --> 00:56:15,040
so it's definitely

1680
00:56:18,710 --> 00:56:16,319
cool to be thinking about that stuff

1681
00:56:21,430 --> 00:56:18,720
that's huge and if you had to pick one

1682
00:56:23,829 --> 00:56:21,440
specialized training oh

1683
00:56:24,789 --> 00:56:23,839
my feet are happy on the earth so i

1684
00:56:26,710 --> 00:56:24,799
don't know

1685
00:56:28,870 --> 00:56:26,720
i might actually choose russian you'd be

1686
00:56:30,549 --> 00:56:28,880
the trainer yeah i know i would sign up

1687
00:56:32,549 --> 00:56:30,559
for the moonwalking

1688
00:56:34,069 --> 00:56:32,559

anne and kayla this has been so fun

1689

00:56:35,910 --> 00:56:34,079

thank you so much for coming on the

1690

00:56:37,589 --> 00:56:35,920

podcast today and describing the inside

1691

00:56:39,349 --> 00:56:37,599

experience this has been really really

1692

00:56:41,670 --> 00:56:39,359

fun and i appreciate your time i really

1693

00:56:43,270 --> 00:56:41,680

do jennifer thanks for being our face

1694

00:56:44,630 --> 00:56:43,280

for the for the viewers and the

1695

00:56:46,789 --> 00:56:44,640

listeners and taking in some of your

1696

00:56:48,950 --> 00:56:46,799

questions you got it it was so nice to

1697

00:56:50,230 --> 00:56:48,960

be with you all today and thanks to the

1698

00:56:51,510 --> 00:56:50,240

listeners for actually submitting

1699

00:56:52,950 --> 00:56:51,520

questions they were all really great and

1700

00:56:55,030 --> 00:56:52,960

i think we it really stimulated a

1701

00:56:57,510 --> 00:56:55,040

fantastic conversation again the

1702

00:57:00,230 --> 00:56:57,520

astronaut operations are open until the

1703

00:57:02,069 --> 00:57:00,240

march 31st so beef up those resumes and

1704

00:57:03,910 --> 00:57:02,079

go on usajobs and you can submit it

1705

00:57:05,589 --> 00:57:03,920

there before then and subscribe to