



1  
00:00:29,840 --> 00:05:27,220

you

2  
00:05:51,350 --> 00:05:30,550

[Music]

3  
00:05:57,340 --> 00:05:52,390

scientific um

4  
00:06:32,710 --> 00:06:11,820

[Music]

5  
00:06:35,909 --> 00:06:34,150

all right welcome everybody back to the

6  
00:06:37,430 --> 00:06:35,919

kennedy space center we are here

7  
00:06:40,390 --> 00:06:37,440

celebrating nasa social and the launch

8  
00:06:42,469 --> 00:06:40,400

of nasa's spacex crew 3 mission i got an

9  
00:06:44,629 --> 00:06:42,479

awesome panel with me today i'm joshua

10  
00:06:45,990 --> 00:06:44,639

santoro at nasa communications and

11  
00:06:46,870 --> 00:06:46,000

excited to take your questions today

12  
00:06:49,350 --> 00:06:46,880

that's going to be a lot of what we're

13  
00:06:50,870 --> 00:06:49,360

going to do is just q a um so we're

14

00:06:52,469 --> 00:06:50,880

going to jump in here in just a second

15

00:06:55,029 --> 00:06:52,479

once i remind you all that we're looking

16

00:06:58,469 --> 00:06:55,039

for the launch of the crew 3 astronauts

17

00:07:01,670 --> 00:06:58,479

sunday morning 2 21 eastern time uh raja

18

00:07:04,150 --> 00:07:01,680

chari tom marshburn caleb barron and

19

00:07:05,749 --> 00:07:04,160

matthias bauer are going to be flying to

20

00:07:08,390 --> 00:07:05,759

the space station for a long duration

21

00:07:11,029 --> 00:07:08,400

mission uh super exciting uh coverage

22

00:07:13,110 --> 00:07:11,039

will kick off 10 p.m saturday

23

00:07:14,870 --> 00:07:13,120

eastern time for that mission i'm going

24

00:07:17,909 --> 00:07:14,880

to go and jump in here with my guests on

25

00:07:20,550 --> 00:07:17,919

my right starting here is bob cabana um

26

00:07:22,469 --> 00:07:20,560

and the theme i think is uh newly uh

27

00:07:24,550 --> 00:07:22,479

promoted can i use the word promoted

28

00:07:26,230 --> 00:07:24,560

does that work i guess it's a promotion

29

00:07:28,150 --> 00:07:26,240

okay newly promoted bob cabana to the

30

00:07:30,150 --> 00:07:28,160

associate administrator for nasa uh

31

00:07:32,950 --> 00:07:30,160

that's the highest ranking civil servant

32

00:07:35,110 --> 00:07:32,960

in the agency so congrats on that

33

00:07:37,110 --> 00:07:35,120

well thank you josh uh first off it's

34

00:07:39,350 --> 00:07:37,120

great to be part of this amazing team uh

35

00:07:41,430 --> 00:07:39,360

senator nelson's absolutely amazing pam

36

00:07:42,710 --> 00:07:41,440

melroy be nice to the people that work

37

00:07:45,189 --> 00:07:42,720

for you because one day you might work

38

00:07:46,309 --> 00:07:45,199

for them bam pam was an astronaut

39

00:07:48,150 --> 00:07:46,319

candidate when i was chief of the

40

00:07:49,749 --> 00:07:48,160

astronaut office and she's amazing i

41

00:07:51,350 --> 00:07:49,759

think we got a great team but it's

42

00:07:53,189 --> 00:07:51,360

really nice to come home to florida too

43

00:07:54,070 --> 00:07:53,199

here supporting the crew 3 launch

44

00:07:56,390 --> 00:07:54,080

awesome

45

00:07:59,189 --> 00:07:56,400

and on your right is cullen manning also

46

00:08:01,189 --> 00:07:59,199

newly promoted uh to the deputy center

47

00:08:03,270 --> 00:08:01,199

director here at kennedy kelvin thanks

48

00:08:05,270 --> 00:08:03,280

for joining us hey it's great to be here

49

00:08:06,869 --> 00:08:05,280

josh you know everything seems to be

50

00:08:09,189 --> 00:08:06,879

happening here at the kennedy space

51  
00:08:10,869 --> 00:08:09,199  
center our

52  
00:08:12,550 --> 00:08:10,879  
our expendable launches our human

53  
00:08:15,029 --> 00:08:12,560  
launches and then we're getting ready

54  
00:08:16,469 --> 00:08:15,039  
for the artemis mission uh coming soon

55  
00:08:18,309 --> 00:08:16,479  
so it's a pleasure to be here thanks

56  
00:08:20,869 --> 00:08:18,319  
yeah good to have you obviously kennedy

57  
00:08:22,469 --> 00:08:20,879  
is a happening place for now and it

58  
00:08:23,510 --> 00:08:22,479  
seems like it's not gonna stop uh it's

59  
00:08:25,909 --> 00:08:23,520  
busy

60  
00:08:28,629 --> 00:08:25,919  
uh and on your right we have uh woody

61  
00:08:30,790 --> 00:08:28,639  
hoberg uh woody uh i'm gonna go ahead

62  
00:08:33,829 --> 00:08:30,800  
and say newly promoted from astronaut

63  
00:08:35,430 --> 00:08:33,839

candidate to astronaut uh welcome and

64

00:08:37,670 --> 00:08:35,440

thanks for joining us thank you it's so

65

00:08:40,630 --> 00:08:37,680

good to be here i'm so excited to watch

66

00:08:42,630 --> 00:08:40,640

my friends on crew 3 fly to space i'm

67

00:08:44,949 --> 00:08:42,640

one of the turtles uh nasa's newest

68

00:08:47,030 --> 00:08:44,959

class of astronauts from 2017

69

00:08:49,190 --> 00:08:47,040

and looking forward to watching my

70

00:08:51,190 --> 00:08:49,200

classmates raja and kayla as they fly to

71

00:08:53,110 --> 00:08:51,200

space yeah so i wanted to ask you kind

72

00:08:54,470 --> 00:08:53,120

of first about that obviously it's a big

73

00:08:57,110 --> 00:08:54,480

deal i think these are the first of your

74

00:08:58,550 --> 00:08:57,120

classmates to get to fly uh what's that

75

00:09:00,470 --> 00:08:58,560

like to see

76

00:09:02,070 --> 00:09:00,480

two people who you started with who

77

00:09:04,550 --> 00:09:02,080

you've trained with and now you're gonna

78

00:09:06,310 --> 00:09:04,560

see them literally like fly into space

79

00:09:08,310 --> 00:09:06,320

yeah it's uh it's a great question i

80

00:09:11,350 --> 00:09:08,320

think every step of this journey has

81

00:09:13,030 --> 00:09:11,360

been a bit surreal um so i didn't even

82

00:09:14,389 --> 00:09:13,040

expect to get an interview

83

00:09:16,070 --> 00:09:14,399

and then i got an interview and then

84

00:09:17,509 --> 00:09:16,080

somehow i got a final round interview

85

00:09:20,070 --> 00:09:17,519

which seemed quite surreal and then

86

00:09:21,350 --> 00:09:20,080

somehow i got lucky enough to join the

87

00:09:23,190 --> 00:09:21,360

astronaut corps

88

00:09:24,470 --> 00:09:23,200

and every step of the way it kind of

89

00:09:26,070 --> 00:09:24,480

doesn't quite feel real until you're

90

00:09:27,430 --> 00:09:26,080

really there and this is just one more

91

00:09:29,590 --> 00:09:27,440

step where wow

92

00:09:30,949 --> 00:09:29,600

my classmates are about to fly to space

93

00:09:33,110 --> 00:09:30,959

that's pretty cool

94

00:09:35,430 --> 00:09:33,120

hey josh just let me jump in so i was on

95

00:09:37,190 --> 00:09:35,440

the interview selection panel to pick

96

00:09:38,870 --> 00:09:37,200

these guys and uh

97

00:09:43,430 --> 00:09:38,880

woody

98

00:09:45,350 --> 00:09:43,440

it all of them are awesome

99

00:09:47,750 --> 00:09:45,360

thank you sir well since we're jumping

100

00:09:49,750 --> 00:09:47,760

in here now i agree all of them are

101  
00:09:51,829 --> 00:09:49,760  
awesome but i gotta give a shout out to

102  
00:09:54,150 --> 00:09:51,839  
kayla baron class of 2010 from the

103  
00:09:55,910 --> 00:09:54,160  
united states naval academy

104  
00:09:57,590 --> 00:09:55,920  
probably the only school that has the

105  
00:09:59,190 --> 00:09:57,600  
most astronauts of any other

106  
00:10:00,870 --> 00:09:59,200  
undergraduate institution so i'll just

107  
00:10:02,069 --> 00:10:00,880  
throw that out there

108  
00:10:03,430 --> 00:10:02,079  
are you beating purdue because i thought

109  
00:10:05,350 --> 00:10:03,440  
it was purdue

110  
00:10:07,829 --> 00:10:05,360  
no actually

111  
00:10:09,910 --> 00:10:07,839  
undergrad naval academy all right very

112  
00:10:11,590 --> 00:10:09,920  
good i'm assuming that you say that from

113  
00:10:12,630 --> 00:10:11,600

personal experience

114

00:10:14,790 --> 00:10:12,640

well

115

00:10:16,310 --> 00:10:14,800

yes being a grad i will throw that out

116

00:10:18,230 --> 00:10:16,320

there yeah and for those that don't know

117

00:10:20,870 --> 00:10:18,240

bob is a four-time space shuttle

118

00:10:23,430 --> 00:10:20,880

astronaut uh i'll uh question for you

119

00:10:24,790 --> 00:10:23,440

bob uh what's it like to not be the guy

120

00:10:25,670 --> 00:10:24,800

on the rocket because i'm still

121

00:10:27,750 --> 00:10:25,680

expecting at some point you're gonna

122

00:10:29,269 --> 00:10:27,760

pull like a john glenn and and still hop

123

00:10:31,350 --> 00:10:29,279

on another one and get into space again

124

00:10:33,509 --> 00:10:31,360

so john glenn is definitely my hero he

125

00:10:35,350 --> 00:10:33,519

was 77 when he flew his last flight so i

126

00:10:37,190 --> 00:10:35,360

got a few good years left

127

00:10:40,389 --> 00:10:37,200

i'm looking forward to hopefully having

128

00:10:41,190 --> 00:10:40,399

that happen now um and the hardest job i

129

00:10:43,269 --> 00:10:41,200

had

130

00:10:44,150 --> 00:10:43,279

when i was chief of the astronaut office

131

00:10:46,470 --> 00:10:44,160

was

132

00:10:48,069 --> 00:10:46,480

assigning other people uh to flying

133

00:10:50,310 --> 00:10:48,079

space and going out to the launch pad

134

00:10:52,150 --> 00:10:50,320

with them when you have uh some of your

135

00:10:54,150 --> 00:10:52,160

closest friends on that rocket on that

136

00:10:56,069 --> 00:10:54,160

ball of flame going off into space i

137

00:10:57,750 --> 00:10:56,079

mean my heart's going like this it's

138

00:11:00,230 --> 00:10:57,760

just it's an emotional event it's so

139

00:11:01,750 --> 00:11:00,240

much easier to fly than watch your

140

00:11:03,590 --> 00:11:01,760

friends do it but

141

00:11:06,310 --> 00:11:03,600

you know it's it's just it truly is an

142

00:11:08,470 --> 00:11:06,320

amazing event so if i had a choice you

143

00:11:10,310 --> 00:11:08,480

know i would uh i would love to be on

144

00:11:12,230 --> 00:11:10,320

that rocket but

145

00:11:14,790 --> 00:11:12,240

my hearts and prayers are with these

146

00:11:16,150 --> 00:11:14,800

guys going up here early sunday morning

147

00:11:18,550 --> 00:11:16,160

and i know they're all going to do an

148

00:11:20,710 --> 00:11:18,560

awesome job yeah three rookies on this

149

00:11:21,590 --> 00:11:20,720

flight so uh certainly nobody's

150

00:11:23,670 --> 00:11:21,600

questioning that they're up to the

151  
00:11:25,750 --> 00:11:23,680  
challenge up to the task but kind of an

152  
00:11:28,069 --> 00:11:25,760  
exciting thing that is indicative of

153  
00:11:29,509 --> 00:11:28,079  
where we are with human space flight and

154  
00:11:30,470 --> 00:11:29,519  
this new evolution of commercial crew

155  
00:11:31,829 --> 00:11:30,480  
vehicles

156  
00:11:33,590 --> 00:11:31,839  
well you know and i want to point that

157  
00:11:35,110 --> 00:11:33,600  
out a commercial crew program is

158  
00:11:37,590 --> 00:11:35,120  
absolutely amazing there are four

159  
00:11:39,030 --> 00:11:37,600  
astronauts on this crew going up we've

160  
00:11:41,350 --> 00:11:39,040  
increased the number of astronauts that

161  
00:11:43,509 --> 00:11:41,360  
we have on the space station now for

162  
00:11:45,509 --> 00:11:43,519  
these increments now that we have uh

163  
00:11:47,030 --> 00:11:45,519

commercial crew flying and that

164

00:11:48,870 --> 00:11:47,040

increases the amount of science that we

165

00:11:50,790 --> 00:11:48,880

can do that increases the amount of

166

00:11:52,389 --> 00:11:50,800

engineering we can do to prove the

167

00:11:54,310 --> 00:11:52,399

systems that we need to be able to go to

168

00:11:56,389 --> 00:11:54,320

the moon in a sustainable way to go onto

169

00:11:58,230 --> 00:11:56,399

mars eventually so

170

00:12:00,230 --> 00:11:58,240

this is really important that we have

171

00:12:01,509 --> 00:12:00,240

this successful commercial crew program

172

00:12:04,230 --> 00:12:01,519

and what we really want to do is

173

00:12:06,310 --> 00:12:04,240

commercialize low earth orbit and become

174

00:12:07,910 --> 00:12:06,320

one of many customers rather than being

175

00:12:09,990 --> 00:12:07,920

responsible for the whole thing so that

176

00:12:12,310 --> 00:12:10,000

we can focus on that hard job of

177

00:12:14,710 --> 00:12:12,320

establishing a presence in our solar

178

00:12:17,030 --> 00:12:14,720

system off our home planet

179

00:12:18,710 --> 00:12:17,040

awesome yeah well well said well said uh

180

00:12:19,910 --> 00:12:18,720

go to go into questions we've gotten

181

00:12:21,509 --> 00:12:19,920

here so please feel free to send your

182

00:12:23,829 --> 00:12:21,519

questions in if you're watching online

183

00:12:25,750 --> 00:12:23,839

um and this one for all three of you

184

00:12:28,150 --> 00:12:25,760

kelvin we'll start with you uh what's

185

00:12:30,230 --> 00:12:28,160

your favorite launch experience so

186

00:12:32,150 --> 00:12:30,240

whether it be on a rocket or watching a

187

00:12:33,910 --> 00:12:32,160

rocket or an otherwise vehicle take off

188

00:12:35,750 --> 00:12:33,920

into space kelvin what's your favorite

189

00:12:37,430 --> 00:12:35,760

launch experience well josh i have to

190

00:12:38,790 --> 00:12:37,440

think back to the shuttle days when i

191

00:12:41,110 --> 00:12:38,800

was a flow director for the space

192

00:12:43,430 --> 00:12:41,120

shuttle atlantis my very first launch as

193

00:12:46,230 --> 00:12:43,440

flow director i was the right-hand man

194

00:12:48,230 --> 00:12:46,240

next to the launch director and

195

00:12:49,590 --> 00:12:48,240

following that flow to completion and

196

00:12:51,590 --> 00:12:49,600

watching it launch and then when the

197

00:12:52,790 --> 00:12:51,600

crew returned it doesn't get any better

198

00:12:54,870 --> 00:12:52,800

than that

199

00:12:56,629 --> 00:12:54,880

yeah so so start to finish you were

200

00:12:58,230 --> 00:12:56,639

there front seat the whole time

201  
00:12:59,829 --> 00:12:58,240  
absolutely that's awesome all right

202  
00:13:01,110 --> 00:12:59,839  
woody how about for you obviously i know

203  
00:13:03,030 --> 00:13:01,120  
you're probably thinking ahead when you

204  
00:13:04,389 --> 00:13:03,040  
get to fly uh but so far what's your

205  
00:13:06,949 --> 00:13:04,399  
favorite launch experience i've actually

206  
00:13:09,430 --> 00:13:06,959  
seen exactly one launch in person so far

207  
00:13:11,190 --> 00:13:09,440  
which was the launch uh the the crew 2

208  
00:13:12,870 --> 00:13:11,200  
mission so the mission before this i was

209  
00:13:14,389 --> 00:13:12,880  
lucky enough to be out here at kennedy

210  
00:13:16,870 --> 00:13:14,399  
and and watch it in person like this

211  
00:13:19,269 --> 00:13:16,880  
launch will be it was a night

212  
00:13:21,829 --> 00:13:19,279  
launch and it was spectacular we were

213  
00:13:24,389 --> 00:13:21,839

able to witness staging we were able to

214

00:13:26,710 --> 00:13:24,399

witness the second stage ignition

215

00:13:28,629 --> 00:13:26,720

um on just a beautiful night and it

216

00:13:30,069 --> 00:13:28,639

truly took my breath away awesome so

217

00:13:30,949 --> 00:13:30,079

woody where are you from

218

00:13:32,470 --> 00:13:30,959

obviously if you haven't been around

219

00:13:33,590 --> 00:13:32,480

rocket launches you're not from around

220

00:13:34,389 --> 00:13:33,600

here

221

00:13:37,030 --> 00:13:34,399

yeah i grew up in pittsburgh

222

00:13:38,389 --> 00:13:37,040

pennsylvania and then i ended up

223

00:13:40,550 --> 00:13:38,399

spending some time in california

224

00:13:41,350 --> 00:13:40,560

washington and boston cool yeah i know

225

00:13:43,030 --> 00:13:41,360

here at kennedy there's a lot of

226

00:13:45,030 --> 00:13:43,040

pittsburgh fans there's a shocking

227

00:13:46,310 --> 00:13:45,040

number of pittsburgh fans around here so

228

00:13:47,509 --> 00:13:46,320

welcome to kennedy space center glad to

229

00:13:48,710 --> 00:13:47,519

have you back for your second rocket

230

00:13:52,389 --> 00:13:48,720

launch

231

00:13:57,110 --> 00:13:54,629

i have so many uh

232

00:13:59,430 --> 00:13:57,120

you know i was privileged as a uh as a

233

00:14:02,069 --> 00:13:59,440

midshipman at the naval academy to come

234

00:14:03,430 --> 00:14:02,079

down here on a physics honor society

235

00:14:05,110 --> 00:14:03,440

took a field trip down i got to see

236

00:14:07,750 --> 00:14:05,120

apollo 13 launch

237

00:14:09,829 --> 00:14:07,760

and to see a saturn v take off that that

238

00:14:11,990 --> 00:14:09,839

was special

239

00:14:14,230 --> 00:14:12,000

the first shuttle launch that i saw was

240

00:14:17,030 --> 00:14:14,240

actually my first launch

241

00:14:19,829 --> 00:14:17,040

and that was pretty darned amazing uh i

242

00:14:22,069 --> 00:14:19,839

think the shuttle you know the

243

00:14:24,550 --> 00:14:22,079

the falcon 9 it it lifts off very

244

00:14:26,949 --> 00:14:24,560

majestically the shuttle just got up and

245

00:14:28,710 --> 00:14:26,959

left town with those solids and i tell

246

00:14:32,069 --> 00:14:28,720

you what i'm really looking forward to

247

00:14:33,829 --> 00:14:32,079

is the launch of uh sls and orion on

248

00:14:36,150 --> 00:14:33,839

artemis one seeing that big rocket

249

00:14:37,750 --> 00:14:36,160

stacked up over in the vab and when

250

00:14:40,629 --> 00:14:37,760

those five segments solid slight and

251

00:14:42,870 --> 00:14:40,639

those four rs-25s light off that thing

252

00:14:45,110 --> 00:14:42,880

is just going to be absolutely amazing

253

00:14:46,949 --> 00:14:45,120

that's going to be a real event yeah i'm

254

00:14:48,230 --> 00:14:46,959

a little bit nervous uh rocket launches

255

00:14:50,710 --> 00:14:48,240

if you if you've been around they're

256

00:14:52,949 --> 00:14:50,720

loud you can feel them in your chest and

257

00:14:54,949 --> 00:14:52,959

this is the sls will be

258

00:14:56,470 --> 00:14:54,959

on another level um so i'm excited to

259

00:14:58,710 --> 00:14:56,480

get that get that rumble of the solids

260

00:15:00,790 --> 00:14:58,720

back in back at the kennedy space center

261

00:15:02,470 --> 00:15:00,800

maurice wants to know where are the

262

00:15:06,629 --> 00:15:02,480

astronauts right now and what are they

263

00:15:09,430 --> 00:15:08,389

sure um i don't know exactly where they

264

00:15:11,590 --> 00:15:09,440

are but they're here at kennedy and

265

00:15:13,269 --> 00:15:11,600

quarantine and likely spending some time

266

00:15:17,030 --> 00:15:13,279

with their loved ones with their

267

00:15:19,269 --> 00:15:17,040

immediate families and just enjoying a a

268

00:15:20,949 --> 00:15:19,279

little bit of maybe

269

00:15:23,110 --> 00:15:20,959

peaceful downtime if you can call it

270

00:15:23,910 --> 00:15:23,120

that before such a big event where they

271

00:15:25,189 --> 00:15:23,920

can

272

00:15:27,829 --> 00:15:25,199

just enjoy being with their loved ones

273

00:15:29,509 --> 00:15:27,839

and and get ready for lunch

274

00:15:32,069 --> 00:15:29,519

so i will throw out that the crew

275

00:15:34,230 --> 00:15:32,079

quarters are over in the uh

276  
00:15:36,470 --> 00:15:34,240  
neil armstrong operations and checkout

277  
00:15:39,189 --> 00:15:36,480  
building on the third floor overlooking

278  
00:15:41,269 --> 00:15:39,199  
the high bay where they build the

279  
00:15:43,990 --> 00:15:41,279  
orion vehicle that used to be the

280  
00:15:45,350 --> 00:15:44,000  
processing for the apollo and uh

281  
00:15:46,949 --> 00:15:45,360  
originally that's where crew quarters

282  
00:15:49,269 --> 00:15:46,959  
were for the apollo program and those

283  
00:15:51,269 --> 00:15:49,279  
rooms since have been modified over the

284  
00:15:52,550 --> 00:15:51,279  
years and we added more to accommodate

285  
00:15:54,629 --> 00:15:52,560  
all the crews going up to the space

286  
00:15:57,030 --> 00:15:54,639  
station and so on so the crew is in

287  
00:15:59,350 --> 00:15:57,040  
isolation over there and then there is a

288  
00:16:00,710 --> 00:15:59,360

tradition there is one house remaining

289

00:16:01,509 --> 00:16:00,720

out on the beach

290

00:16:03,590 --> 00:16:01,519

and

291

00:16:05,590 --> 00:16:03,600

from when the government took over on

292

00:16:06,790 --> 00:16:05,600

eminent domain to build the kennedy

293

00:16:08,949 --> 00:16:06,800

space center

294

00:16:10,310 --> 00:16:08,959

and uh that became

295

00:16:11,590 --> 00:16:10,320

a place of

296

00:16:13,990 --> 00:16:11,600

refuge from

297

00:16:15,269 --> 00:16:14,000

life here at uh you know preparing for

298

00:16:17,189 --> 00:16:15,279

launch and everything for astronauts

299

00:16:19,269 --> 00:16:17,199

just to get away it's the beach house

300

00:16:21,110 --> 00:16:19,279

and walk the beach with their loved ones

301  
00:16:22,550 --> 00:16:21,120  
and just have some time to themselves so

302  
00:16:23,590 --> 00:16:22,560  
i'm sure they're going to take advantage

303  
00:16:24,550 --> 00:16:23,600  
of that

304  
00:16:26,470 --> 00:16:24,560  
awesome

305  
00:16:28,870 --> 00:16:26,480  
bob i'll stick with you and ask uh my

306  
00:16:30,470 --> 00:16:28,880  
nine-year-old uh son excuse me question

307  
00:16:32,069 --> 00:16:30,480  
from christina uh she said my

308  
00:16:34,230 --> 00:16:32,079  
nine-year-old son wants to know what it

309  
00:16:35,829 --> 00:16:34,240  
feels like to be in space

310  
00:16:37,430 --> 00:16:35,839  
oh it's awesome i wish i could get your

311  
00:16:40,389 --> 00:16:37,440  
nine-year-old son up there with me or

312  
00:16:43,509 --> 00:16:40,399  
any any young child and weightlessness

313  
00:16:45,670 --> 00:16:43,519

is just it is so amazing it's just

314

00:16:47,990 --> 00:16:45,680

effortless and you adapt so readily it's

315

00:16:49,749 --> 00:16:48,000

amazing how quickly the human body uh

316

00:16:52,230 --> 00:16:49,759

adapts to microgravity and then

317

00:16:53,990 --> 00:16:52,240

re-adapts to 1g and the amazing thing is

318

00:16:56,389 --> 00:16:54,000

the more times you fly the quicker you

319

00:16:58,790 --> 00:16:56,399

have that adaptation both to zero g and

320

00:17:01,189 --> 00:16:58,800

back to uh to 1g

321

00:17:02,870 --> 00:17:01,199

but it's just it's effortless it is so

322

00:17:04,789 --> 00:17:02,880

fun but the best thing about being in

323

00:17:05,990 --> 00:17:04,799

space is sticking your nose up to a

324

00:17:07,590 --> 00:17:06,000

window and looking down on the earth

325

00:17:10,069 --> 00:17:07,600

from a couple hundred miles high it is

326

00:17:12,630 --> 00:17:10,079

just an absolutely beautiful blue jewel

327

00:17:15,829 --> 00:17:12,640

of a planet yep kelvin question for you

328

00:17:17,029 --> 00:17:15,839

uh why is launch at 2 21 am we'd all

329

00:17:18,789 --> 00:17:17,039

love to get a little bit more sleep so

330

00:17:21,669 --> 00:17:18,799

what's going on there and is it safer to

331

00:17:23,829 --> 00:17:21,679

launch during the day

332

00:17:25,110 --> 00:17:23,839

well the launch is the launch window is

333

00:17:26,870 --> 00:17:25,120

determined by

334

00:17:28,630 --> 00:17:26,880

what the mission is in this case it's a

335

00:17:30,470 --> 00:17:28,640

rendezvous with the international space

336

00:17:31,830 --> 00:17:30,480

station so orbital mechanics i could

337

00:17:34,230 --> 00:17:31,840

tell you a little bit about that from my

338

00:17:36,470 --> 00:17:34,240

air force days but uh to make that all

339

00:17:38,870 --> 00:17:36,480

happen at this particular time that's

340

00:17:40,549 --> 00:17:38,880

what's driving that nighttime launch is

341

00:17:43,190 --> 00:17:40,559

it safer to launch

342

00:17:44,870 --> 00:17:43,200

at daytime versus night time

343

00:17:47,510 --> 00:17:44,880

in the event you did have some type of a

344

00:17:50,310 --> 00:17:47,520

contingency the rescue effort would be

345

00:17:51,510 --> 00:17:50,320

much easier during the daytime so so yes

346

00:17:54,710 --> 00:17:51,520

but

347

00:17:57,029 --> 00:17:54,720

we're practice train rehearse so uh we

348

00:17:59,350 --> 00:17:57,039

can cover that contingency at night time

349

00:18:01,510 --> 00:17:59,360

as well yeah very good

350

00:18:03,270 --> 00:18:01,520

a couple questions for you woody uh

351

00:18:04,630 --> 00:18:03,280

first one what inspired you to be an

352

00:18:06,310 --> 00:18:04,640

astronaut

353

00:18:07,270 --> 00:18:06,320

and it sounded like you got the

354

00:18:09,669 --> 00:18:07,280

interview

355

00:18:11,110 --> 00:18:09,679

on your first try is that true yeah i

356

00:18:13,110 --> 00:18:11,120

was lucky enough to get the interview my

357

00:18:14,870 --> 00:18:13,120

first try it's kind of funny i remember

358

00:18:16,950 --> 00:18:14,880

as a young child having dreams and

359

00:18:18,630 --> 00:18:16,960

aspirations of becoming an astronaut

360

00:18:21,350 --> 00:18:18,640

and then i remember

361

00:18:24,070 --> 00:18:21,360

kind of as i finished up graduate school

362

00:18:25,430 --> 00:18:24,080

i got so involved and just deeply

363

00:18:27,750 --> 00:18:25,440

committed to all the things i was

364

00:18:30,070 --> 00:18:27,760

working on that frankly i kind of forgot

365

00:18:33,270 --> 00:18:30,080

about that aspiration for a little bit

366

00:18:35,510 --> 00:18:33,280

and then a friend of mine uh we were we

367

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

were working out and he was the one that

368

00:18:38,390 --> 00:18:36,880

told me hey there's a call out for

369

00:18:39,590 --> 00:18:38,400

astronauts

370

00:18:41,590 --> 00:18:39,600

to apply

371

00:18:43,430 --> 00:18:41,600

we should apply and i said yeah that is

372

00:18:45,909 --> 00:18:43,440

a thing i always wanted to do let's

373

00:18:48,070 --> 00:18:45,919

apply but it's funny when i threw my

374

00:18:50,230 --> 00:18:48,080

name in the hat for that application

375

00:18:52,310 --> 00:18:50,240

process i never i i mean i never

376

00:18:54,549 --> 00:18:52,320

expected to actually get an interview

377

00:18:58,150 --> 00:18:54,559

it just felt like this impossible

378

00:19:00,710 --> 00:18:58,160

dream and so um i feel so lucky to have

379

00:19:02,310 --> 00:19:00,720

uh had the chance to even even to come

380

00:19:05,190 --> 00:19:02,320

interview because what a fun process

381

00:19:07,029 --> 00:19:05,200

that is um and then beyond that to

382

00:19:08,230 --> 00:19:07,039

actually get the job is there something

383

00:19:09,590 --> 00:19:08,240

sp sorry kelvin i'll come back to you in

384

00:19:11,590 --> 00:19:09,600

a second something that inspired you

385

00:19:13,270 --> 00:19:11,600

like that made you have that desire or

386

00:19:14,630 --> 00:19:13,280

was that just like you were young and

387

00:19:16,710 --> 00:19:14,640

that's what you remember

388

00:19:19,750 --> 00:19:16,720

growing up i always loved things that

389

00:19:20,630 --> 00:19:19,760

fly um i built model rockets as a young

390

00:19:23,669 --> 00:19:20,640

child

391

00:19:25,270 --> 00:19:23,679

i loved airplanes i always wanted to fly

392

00:19:28,230 --> 00:19:25,280

airplanes

393

00:19:30,549 --> 00:19:28,240

and so i just always loved aerospace i

394

00:19:32,789 --> 00:19:30,559

became an aerospace engineer in college

395

00:19:34,870 --> 00:19:32,799

and i don't know it just always seemed

396

00:19:36,470 --> 00:19:34,880

like something that's so natural and

397

00:19:37,510 --> 00:19:36,480

easy to be excited about i don't

398

00:19:39,990 --> 00:19:37,520

understand how you could not love

399

00:19:43,830 --> 00:19:41,830

kelvin but josh let me tell you about

400

00:19:45,590 --> 00:19:43,840

woody here i remember from the interview

401  
00:19:47,510 --> 00:19:45,600  
so it wasn't just like little model

402  
00:19:49,110 --> 00:19:47,520  
rockets you were building big model

403  
00:19:50,470 --> 00:19:49,120  
rockets in fact where people were

404  
00:19:52,549 --> 00:19:50,480  
getting suspicious because of the

405  
00:19:56,150 --> 00:19:52,559  
propellants required to build these big

406  
00:19:57,990 --> 00:19:56,160  
rockets and it's like man what a guy

407  
00:20:00,390 --> 00:19:58,000  
that's true right that is true i was

408  
00:20:02,310 --> 00:20:00,400  
actually building these before i was 18.

409  
00:20:05,430 --> 00:20:02,320  
and they were so large at the time you

410  
00:20:06,950 --> 00:20:05,440  
needed from the the atf the

411  
00:20:08,950 --> 00:20:06,960  
bureau of alcohol tobacco and firearms

412  
00:20:11,190 --> 00:20:08,960  
you needed a low explosives permit in

413  
00:20:12,230 --> 00:20:11,200

order to have the propellants

414

00:20:13,990 --> 00:20:12,240

that we were using in these rockets and

415

00:20:15,990 --> 00:20:14,000

i wasn't 18 so i couldn't get the permit

416

00:20:18,549 --> 00:20:16,000

so my father

417

00:20:21,110 --> 00:20:18,559

was kind enough to help me out get a

418

00:20:23,190 --> 00:20:21,120

permit for us and and we were able to uh

419

00:20:24,710 --> 00:20:23,200

pursue this amazing hobby so for anyone

420

00:20:26,630 --> 00:20:24,720

interested in rocketry the tripoli

421

00:20:29,270 --> 00:20:26,640

rocketry association is an amazing

422

00:20:31,350 --> 00:20:29,280

organization uh where you can go out and

423

00:20:33,029 --> 00:20:31,360

build large rockets and it's an amazing

424

00:20:34,710 --> 00:20:33,039

community to be a part of

425

00:20:37,029 --> 00:20:34,720

so moral the story there is follow

426

00:20:38,710 --> 00:20:37,039

regulations obey the law get frontal

427

00:20:40,870 --> 00:20:38,720

supervision but have lots of fun and

428

00:20:42,470 --> 00:20:40,880

build big rockets uh awesome other

429

00:20:44,630 --> 00:20:42,480

question for you woody um

430

00:20:47,110 --> 00:20:44,640

congratulations first up uh what did you

431

00:20:49,430 --> 00:20:47,120

get to learn from the crew 3 astronauts

432

00:20:50,789 --> 00:20:49,440

and would you like to be on board a

433

00:20:52,870 --> 00:20:50,799

future mission to the international

434

00:20:54,470 --> 00:20:52,880

space station and what would you do when

435

00:20:56,789 --> 00:20:54,480

you get up there

436

00:20:58,630 --> 00:20:56,799

i've learned so much from the crew 3

437

00:21:01,029 --> 00:20:58,640

astronauts you look at this crew it

438

00:21:02,950 --> 00:21:01,039

includes three rookies

439

00:21:05,110 --> 00:21:02,960

i think that's really special what uh

440

00:21:06,870 --> 00:21:05,120

what better way is there to train for

441

00:21:08,310 --> 00:21:06,880

the missions we are going to do in the

442

00:21:09,669 --> 00:21:08,320

future like going to the moon through

443

00:21:12,149 --> 00:21:09,679

artemis what better way is there to

444

00:21:14,230 --> 00:21:12,159

train for that than to go fly in space

445

00:21:16,470 --> 00:21:14,240

and spend six months living and working

446

00:21:19,110 --> 00:21:16,480

on the international space station

447

00:21:21,350 --> 00:21:19,120

um dance yeah i've i've learned i've

448

00:21:23,510 --> 00:21:21,360

lost track of the countless

449

00:21:26,149 --> 00:21:23,520

uh leadership lessons i've learned from

450

00:21:28,149 --> 00:21:26,159

my classmates raja and kayla who will be

451  
00:21:30,310 --> 00:21:28,159  
on this mission

452  
00:21:32,149 --> 00:21:30,320  
and yes do i want to go yeah i'd love to

453  
00:21:34,390 --> 00:21:32,159  
go so someday i'm definitely looking

454  
00:21:35,909 --> 00:21:34,400  
forward to it um and i'm looking forward

455  
00:21:38,230 --> 00:21:35,919  
to just the

456  
00:21:39,669 --> 00:21:38,240  
dynamic varied activities that we have

457  
00:21:42,310 --> 00:21:39,679  
to do on board whether it's doing

458  
00:21:44,149 --> 00:21:42,320  
science or maintenance or

459  
00:21:46,710 --> 00:21:44,159  
like kayla and tom will do in a few

460  
00:21:49,909 --> 00:21:46,720  
weeks going outside on an eva to replace

461  
00:21:51,190 --> 00:21:49,919  
a failed communication unit um just that

462  
00:21:54,230 --> 00:21:51,200  
kind of

463  
00:21:56,070 --> 00:21:54,240

dynamic every day getting it done uh

464

00:21:57,909 --> 00:21:56,080

attitude that has to happen up there i'm

465

00:21:59,110 --> 00:21:57,919

really excited for that awesome all

466

00:22:01,270 --> 00:21:59,120

right question for each of you we'll

467

00:22:03,350 --> 00:22:01,280

start here with you bob uh

468

00:22:04,950 --> 00:22:03,360

where will you be on launch day and more

469

00:22:07,430 --> 00:22:04,960

importantly will you be wearing a

470

00:22:09,909 --> 00:22:07,440

halloween costume

471

00:22:12,630 --> 00:22:09,919

so i'm going to be over in

472

00:22:15,830 --> 00:22:12,640

osb 2 with the administrator for the

473

00:22:19,350 --> 00:22:15,840

launch i'd rather be sitting on console

474

00:22:20,420 --> 00:22:19,360

and um i'll be honest i was going to and

475

00:22:21,669 --> 00:22:20,430

i didn't

476

00:22:23,430 --> 00:22:21,679

[Music]

477

00:22:25,430 --> 00:22:23,440

didn't get one but i had this awesome

478

00:22:27,110 --> 00:22:25,440

alien costume that i think would have

479

00:22:28,870 --> 00:22:27,120

been just perfect but

480

00:22:31,590 --> 00:22:28,880

no i'm not going to be wearing a costume

481

00:22:33,430 --> 00:22:31,600

all right maybe next time then kelvin

482

00:22:35,270 --> 00:22:33,440

so i'll be across the street in the

483

00:22:38,230 --> 00:22:35,280

launch control center

484

00:22:40,390 --> 00:22:38,240

uh firing room four with the spacex and

485

00:22:42,310 --> 00:22:40,400

nasa launch team i i won't have a

486

00:22:45,029 --> 00:22:42,320

costume on i'll have a headset on but

487

00:22:46,549 --> 00:22:45,039

maybe uh some halloween colors orange

488

00:22:48,149 --> 00:22:46,559

tie something like that all right that

489

00:22:49,669 --> 00:22:48,159

sounds like a good plan i like it i like

490

00:22:51,669 --> 00:22:49,679

it tom

491

00:22:53,990 --> 00:22:51,679

excuse me woody forgive me

492

00:22:57,190 --> 00:22:54,000

he's not here you're woody tom will be

493

00:22:59,350 --> 00:22:57,200

on the rocket and i will be uh in osb2

494

00:23:01,029 --> 00:22:59,360

as well um and i suspect i'll probably

495

00:23:04,630 --> 00:23:01,039

be dressed quite a bit like i am right

496

00:23:05,909 --> 00:23:04,640

now okay yeah tom will maybe be dressed

497

00:23:08,710 --> 00:23:05,919

for halloween but his will look more

498

00:23:11,190 --> 00:23:08,720

like a spacex flight suit uh so anyway

499

00:23:14,630 --> 00:23:11,200

sorry woody about that um

500

00:23:16,070 --> 00:23:14,640

uh any tips for a future astronaut so

501  
00:23:18,230 --> 00:23:16,080  
and i'll be curious from any three of

502  
00:23:19,590 --> 00:23:18,240  
you because kelvin uh as

503  
00:23:21,830 --> 00:23:19,600  
i believe you've sat on a number of

504  
00:23:23,350 --> 00:23:21,840  
panels now to select astronauts and so

505  
00:23:24,870 --> 00:23:23,360  
you may be able to provide us more

506  
00:23:26,950 --> 00:23:24,880  
wisdom and insight than anybody because

507  
00:23:29,110 --> 00:23:26,960  
you've seen behind the scenes

508  
00:23:32,390 --> 00:23:29,120  
so i've been on the last three

509  
00:23:33,270 --> 00:23:32,400  
and what we're looking for we're looking

510  
00:23:35,669 --> 00:23:33,280  
for

511  
00:23:36,950 --> 00:23:35,679  
people that follow their passion you

512  
00:23:39,270 --> 00:23:36,960  
know of course you got to have the

513  
00:23:41,190 --> 00:23:39,280

smarts you got to have the

514

00:23:43,510 --> 00:23:41,200

uh education

515

00:23:45,029 --> 00:23:43,520

but the thing that a lot of people

516

00:23:46,310 --> 00:23:45,039

don't really think about they don't

517

00:23:47,269 --> 00:23:46,320

think about

518

00:23:49,029 --> 00:23:47,279

um

519

00:23:50,710 --> 00:23:49,039

you know doing things that they love

520

00:23:53,990 --> 00:23:50,720

hands-on

521

00:23:55,830 --> 00:23:54,000

just being that all-around um good

522

00:23:58,149 --> 00:23:55,840

person and that's what i was really

523

00:23:59,590 --> 00:23:58,159

getting to the ability to get along with

524

00:24:00,870 --> 00:23:59,600

others a lot of times you don't think

525

00:24:02,950 --> 00:24:00,880

about that you got you could be the

526

00:24:05,110 --> 00:24:02,960

smartest person in the world but if

527

00:24:07,269 --> 00:24:05,120

nobody wants you on their team then

528

00:24:08,149 --> 00:24:07,279

you're not going to make a a great ass

529

00:24:08,950 --> 00:24:08,159

or not

530

00:24:10,870 --> 00:24:08,960

yeah

531

00:24:13,909 --> 00:24:10,880

bob or woody any other thoughts there

532

00:24:15,350 --> 00:24:13,919

anybody you lucky lucky socks uh well

533

00:24:17,830 --> 00:24:15,360

good luck charms anything that kind of

534

00:24:19,909 --> 00:24:17,840

gave you the edge

535

00:24:21,590 --> 00:24:19,919

i'll follow on uh

536

00:24:23,669 --> 00:24:21,600

i for me

537

00:24:25,110 --> 00:24:23,679

i was pursuing a graduate degree in

538

00:24:27,510 --> 00:24:25,120

computer science

539

00:24:28,390 --> 00:24:27,520

and my passion was search and rescue at

540

00:24:30,630 --> 00:24:28,400

the time

541

00:24:33,029 --> 00:24:30,640

and i wanted to be off uh doing search

542

00:24:34,630 --> 00:24:33,039

and rescue missions and so i worked for

543

00:24:37,669 --> 00:24:34,640

yosemite search and rescue and i bring

544

00:24:40,230 --> 00:24:37,679

it up because at the time many of my

545

00:24:42,230 --> 00:24:40,240

most trusted mentors in academia advised

546

00:24:44,230 --> 00:24:42,240

me not to do it because they told me

547

00:24:46,070 --> 00:24:44,240

that it was going to distract me from

548

00:24:48,390 --> 00:24:46,080

the important career in academia that i

549

00:24:49,590 --> 00:24:48,400

was pursuing but i just really wanted to

550

00:24:51,190 --> 00:24:49,600

do it

551  
00:24:54,390 --> 00:24:51,200  
and i am so

552  
00:24:57,110 --> 00:24:54,400  
glad that i did and so grateful um to be

553  
00:24:59,190 --> 00:24:57,120  
here now in an organization where for

554  
00:25:01,909 --> 00:24:59,200  
the first time actually in my entire

555  
00:25:03,909 --> 00:25:01,919  
career these sort of two sides of me a

556  
00:25:06,149 --> 00:25:03,919  
very technical side and a very

557  
00:25:07,430 --> 00:25:06,159  
operational side have been truly valued

558  
00:25:09,350 --> 00:25:07,440  
both sides

559  
00:25:11,909 --> 00:25:09,360  
that's so special and it's such a big

560  
00:25:14,070 --> 00:25:11,919  
part of what makes human space flight

561  
00:25:15,990 --> 00:25:14,080  
possible whether it's as an astronaut or

562  
00:25:17,430 --> 00:25:16,000  
a flight controller or

563  
00:25:20,390 --> 00:25:17,440

any of the countless people that

564

00:25:21,830 --> 00:25:20,400

contribute to our mission here

565

00:25:23,430 --> 00:25:21,840

so i'm going to pile onto what kelvin

566

00:25:25,029 --> 00:25:23,440

said you know we look for people that

567

00:25:26,870 --> 00:25:25,039

excel in their field having sat on a

568

00:25:28,950 --> 00:25:26,880

number of boards

569

00:25:30,549 --> 00:25:28,960

but you have to be a team player and

570

00:25:33,350 --> 00:25:30,559

that is absolutely we look for those

571

00:25:34,710 --> 00:25:33,360

skills we look for uh folks that not

572

00:25:37,190 --> 00:25:34,720

only do well in their field but they

573

00:25:38,950 --> 00:25:37,200

also have an operational background that

574

00:25:40,710 --> 00:25:38,960

you know they've got some hands-on work

575

00:25:43,110 --> 00:25:40,720

that they can apply uh one of my

576

00:25:44,549 --> 00:25:43,120

favorite stories is uh don pettit you

577

00:25:45,990 --> 00:25:44,559

ask how do you be an astronaut first off

578

00:25:47,990 --> 00:25:46,000

i say you got to be persistent don't

579

00:25:49,510 --> 00:25:48,000

give up you know i didn't get anything

580

00:25:51,269 --> 00:25:49,520

that i wanted to necessarily on the

581

00:25:53,590 --> 00:25:51,279

first try but i was persistent and kept

582

00:25:55,590 --> 00:25:53,600

trying don got picked on his fifth try

583

00:25:57,510 --> 00:25:55,600

but when don was i think he was like 9

584

00:25:59,269 --> 00:25:57,520

10 years old his brother went to the

585

00:26:01,029 --> 00:25:59,279

junkyard and brought home an automatic

586

00:26:02,950 --> 00:26:01,039

uh transmission for him to take apart

587

00:26:05,909 --> 00:26:02,960

and figure out how it worked but you

588

00:26:06,710 --> 00:26:05,919

know having uh hands-on skills along

589

00:26:08,470 --> 00:26:06,720

with

590

00:26:10,710 --> 00:26:08,480

your learning and being an expert in

591

00:26:12,149 --> 00:26:10,720

your field and a team player it's a lot

592

00:26:15,029 --> 00:26:12,159

to ask but that that's what we're

593

00:26:16,230 --> 00:26:15,039

looking for and having done things in an

594

00:26:18,470 --> 00:26:16,240

environment where

595

00:26:20,149 --> 00:26:18,480

you know when you do something when you

596

00:26:22,230 --> 00:26:20,159

make a bad decision bad things can

597

00:26:24,630 --> 00:26:22,240

happen you know you

598

00:26:27,029 --> 00:26:24,640

climb mountains deep sea diving flying

599

00:26:29,029 --> 00:26:27,039

airplanes whatever so having that

600

00:26:30,390 --> 00:26:29,039

background helps also i'm so glad i got

601  
00:26:32,230 --> 00:26:30,400  
picked when i did i i wouldn't have been

602  
00:26:33,350 --> 00:26:32,240  
competitive in woody's class i don't

603  
00:26:42,390 --> 00:26:33,360  
think

604  
00:26:44,789 --> 00:26:42,400  
000. it was definitely a big pile yeah

605  
00:26:46,710 --> 00:26:44,799  
and that's why i say i i truly didn't

606  
00:26:49,350 --> 00:26:46,720  
think i would even get an interview yeah

607  
00:26:50,789 --> 00:26:49,360  
awesome um so we got a question here

608  
00:26:52,630 --> 00:26:50,799  
thank you for answering our questions

609  
00:26:54,149 --> 00:26:52,640  
i'm a senior in high school

610  
00:26:56,470 --> 00:26:54,159  
and was wondering if there's a specific

611  
00:26:58,470 --> 00:26:56,480  
area of study i should focus on if i

612  
00:26:59,510 --> 00:26:58,480  
want to become an astronaut one day so

613  
00:27:01,190 --> 00:26:59,520

we obviously have some military

614

00:27:03,510 --> 00:27:01,200

background we've got computer science

615

00:27:04,710 --> 00:27:03,520

but what else do we have so first off to

616

00:27:07,190 --> 00:27:04,720

be an astronaut you have to have a

617

00:27:09,510 --> 00:27:07,200

technical degree math engineering or one

618

00:27:12,390 --> 00:27:09,520

of the physical sciences but i would

619

00:27:14,310 --> 00:27:12,400

tell you exactly what woody and what

620

00:27:15,510 --> 00:27:14,320

kelvin said you got to follow your

621

00:27:16,549 --> 00:27:15,520

passion

622

00:27:18,230 --> 00:27:16,559

if you're doing something you're

623

00:27:19,990 --> 00:27:18,240

passionate about two things happen first

624

00:27:21,430 --> 00:27:20,000

off studying is easy you study because

625

00:27:23,110 --> 00:27:21,440

you want to study get good grades

626  
00:27:24,950 --> 00:27:23,120  
because you're passionate about it and

627  
00:27:26,950 --> 00:27:24,960  
then when you do get a job works not

628  
00:27:28,710 --> 00:27:26,960  
work my passion was flying i wanted to

629  
00:27:30,710 --> 00:27:28,720  
fly airplanes and

630  
00:27:32,230 --> 00:27:30,720  
that i pursued that goal and then i

631  
00:27:33,990 --> 00:27:32,240  
wanted to be a test pilot and use all

632  
00:27:35,190 --> 00:27:34,000  
the math and engineering i had in school

633  
00:27:37,029 --> 00:27:35,200  
along with flying and that's what

634  
00:27:38,230 --> 00:27:37,039  
prepared me to be an astronaut it wasn't

635  
00:27:39,830 --> 00:27:38,240  
you know i never dreamed i could be an

636  
00:27:41,190 --> 00:27:39,840  
astronaut i held astronauts in such high

637  
00:27:42,950 --> 00:27:41,200  
esteem but it was a progression from

638  
00:27:44,710 --> 00:27:42,960

being a pilot to a test pilot that

639

00:27:46,070 --> 00:27:44,720

enabled me to be an astronaut i kind of

640

00:27:49,029 --> 00:27:46,080

had that in the back of my mind when i

641

00:27:50,470 --> 00:27:49,039

saw apollo 13 launch but you know

642

00:27:51,830 --> 00:27:50,480

making it happen that's another thing so

643

00:27:53,269 --> 00:27:51,840

i tell folks

644

00:27:55,269 --> 00:27:53,279

that far-out goal is kind of hard to

645

00:27:57,269 --> 00:27:55,279

reach but there are intermediate goals

646

00:27:58,310 --> 00:27:57,279

that you can work toward work toward

647

00:27:59,830 --> 00:27:58,320

those intermediate goals when you

648

00:28:01,669 --> 00:27:59,840

achieve it then set a new one that gets

649

00:28:03,669 --> 00:28:01,679

you on that path you want to be on but

650

00:28:04,870 --> 00:28:03,679

follow your passion like woody said man

651  
00:28:06,310 --> 00:28:04,880  
if you're doing something you're

652  
00:28:07,909 --> 00:28:06,320  
passionate about it makes life a whole

653  
00:28:10,070 --> 00:28:07,919  
lot more fun and it's a lot easier to

654  
00:28:11,590 --> 00:28:10,080  
study and do well at it

655  
00:28:12,630 --> 00:28:11,600  
uh woody question for you actually

656  
00:28:15,350 --> 00:28:12,640  
question for all three of you really

657  
00:28:17,110 --> 00:28:15,360  
quickly uh is there a song that comes to

658  
00:28:19,029 --> 00:28:17,120  
mind when you think about a ride-out

659  
00:28:20,630 --> 00:28:19,039  
playlist uh so our astronauts put

660  
00:28:22,630 --> 00:28:20,640  
together a ride-out playlist they get to

661  
00:28:24,630 --> 00:28:22,640  
listen to on their way to the launch pad

662  
00:28:25,590 --> 00:28:24,640  
is there one song that off the top of

663  
00:28:28,149 --> 00:28:25,600

your head that you would say i want to

664

00:28:31,750 --> 00:28:28,159

listen to that on the way

665

00:28:33,510 --> 00:28:31,760

it's such a good question

666

00:28:36,549 --> 00:28:33,520

there are so many there's so many

667

00:28:37,750 --> 00:28:36,559

options uh man i um

668

00:28:40,149 --> 00:28:37,760

i remember

669

00:28:42,630 --> 00:28:40,159

some climbing trips listening to darude

670

00:28:44,470 --> 00:28:42,640

have you heard of this band

671

00:28:46,070 --> 00:28:44,480

great band um

672

00:28:47,350 --> 00:28:46,080

i think that could be some fun play ride

673

00:28:49,669 --> 00:28:47,360

on music but i need to think more about

674

00:28:51,750 --> 00:28:49,679

it what's the genre uh it's basically

675

00:28:53,110 --> 00:28:51,760

edm okay all right there you go listen

676

00:28:54,070 --> 00:28:53,120

i'll get you amped up for launch yeah

677

00:28:56,630 --> 00:28:54,080

there you go

678

00:28:58,950 --> 00:28:56,640

kelvin uh for me it would be theme from

679

00:29:00,470 --> 00:28:58,960

the avengers you know with iron man

680

00:29:01,909 --> 00:29:00,480

captain america

681

00:29:04,070 --> 00:29:01,919

all those guys

682

00:29:07,029 --> 00:29:04,080

how can you not get pumped up listening

683

00:29:09,269 --> 00:29:07,039

to that love it

684

00:29:11,830 --> 00:29:09,279

so i can't pick a song but it would

685

00:29:13,350 --> 00:29:11,840

definitely be something classic rock i i

686

00:29:15,909 --> 00:29:13,360

think something that really gets you

687

00:29:17,830 --> 00:29:15,919

going very good all right gentlemen uh

688

00:29:19,669 --> 00:29:17,840

we're about out of time um really

689

00:29:21,029 --> 00:29:19,679

quickly we have just a minute left uh

690

00:29:21,990 --> 00:29:21,039

want to get any final thoughts from the

691

00:29:23,350 --> 00:29:22,000

three of you bob we'll start with you

692

00:29:26,230 --> 00:29:23,360

and we'll just go down uh again trying

693

00:29:28,310 --> 00:29:26,240

to be a little bit quicker to wrap up so

694

00:29:29,830 --> 00:29:28,320

it's awesome being part of this amazing

695

00:29:31,269 --> 00:29:29,840

team uh

696

00:29:33,350 --> 00:29:31,279

i want all of you to come and be part of

697

00:29:35,110 --> 00:29:33,360

this i want i want to get everybody in

698

00:29:36,950 --> 00:29:35,120

america down here to see a rocket launch

699

00:29:37,990 --> 00:29:36,960

and see the amazing things going on at

700

00:29:40,389 --> 00:29:38,000

nasa

701

00:29:43,909 --> 00:29:40,399

all i can say is uh you know

702

00:29:45,590 --> 00:29:43,919

go go crew 3 go go dragon go falcon 9

703

00:29:47,350 --> 00:29:45,600

it's going to be awesome can't wait to

704

00:29:49,190 --> 00:29:47,360

get these guys safely on orbit to the

705

00:29:50,950 --> 00:29:49,200

iss

706

00:29:52,950 --> 00:29:50,960

hey when i was a kid i didn't know

707

00:29:55,750 --> 00:29:52,960

anybody that looked like me that worked

708

00:29:56,870 --> 00:29:55,760

for nasa but nasa is the best place to

709

00:29:58,950 --> 00:29:56,880

work in the federal government for the

710

00:30:01,510 --> 00:29:58,960

last nine years in a row

711

00:30:03,430 --> 00:30:01,520

if you have an interest in aerospace we

712

00:30:06,070 --> 00:30:03,440

want you we'd love to have you here

713

00:30:08,710 --> 00:30:06,080

thanks go crew 3.

714

00:30:12,070 --> 00:30:08,720

i am so excited to watch my friends on

715

00:30:13,269 --> 00:30:12,080

crew 3 uh take to the skies

716

00:30:15,269 --> 00:30:13,279

this uh

717

00:30:17,190 --> 00:30:15,279

launches are always emotional and this

718

00:30:19,110 --> 00:30:17,200

one particularly when your friends and

719

00:30:21,909 --> 00:30:19,120

loved ones are on board

720

00:30:23,669 --> 00:30:21,919

it's especially emotional and special

721

00:30:24,710 --> 00:30:23,679

and so we wish them safe travels to the

722

00:30:26,470 --> 00:30:24,720

iss

723

00:30:29,190 --> 00:30:26,480

and our hearts are with them

724

00:30:31,190 --> 00:30:29,200

goku three yeah go crew three uh a big

725

00:30:32,710 --> 00:30:31,200

thanks to you for tuning in here uh want

726

00:30:35,110 --> 00:30:32,720

to make sure that you guys know tomorrow

727

00:30:38,149 --> 00:30:35,120

saturday evening 10 p.m we'll kick off

728

00:30:40,070 --> 00:30:38,159

our broadcast coverage nasa.gov live uh

729

00:30:41,269 --> 00:30:40,080

we kick off at 10 pm because that's

730

00:30:43,190 --> 00:30:41,279

about the time that crew will be suiting

731

00:30:45,269 --> 00:30:43,200

up in their flight suits and then launch

732

00:30:46,950 --> 00:30:45,279

is scheduled for sunday morning at 2 21

733

00:30:48,549 --> 00:30:46,960

a.m eastern time

734

00:30:50,549 --> 00:30:48,559

so i hope that you'll watch i hope that

735

00:30:51,990 --> 00:30:50,559

you'll tune in if you're in the area

736

00:30:53,830 --> 00:30:52,000

step outside and watch i know it's early

737

00:30:55,110 --> 00:30:53,840

in the morning but it is beautiful uh

738

00:30:57,029 --> 00:30:55,120

and there are humans that are defying

739

00:30:58,710 --> 00:30:57,039

gravity to get to space station and

740

00:31:00,870 --> 00:30:58,720

advance science for the benefit of all

741

00:31:02,789 --> 00:31:00,880

mankind all humanity appreciate you