



1
00:00:09,200 --> 00:00:07,700
hi I'm Mike Massimino

2
00:00:11,120 --> 00:00:09,210
we've been following along with the

3
00:00:12,709 --> 00:00:11,130
astronauts who are going to fly the next

4
00:00:15,169 --> 00:00:12,719
shuttle mission to the International

5
00:00:17,090 --> 00:00:15,179
Space Station what you are about to see

6
00:00:18,800 --> 00:00:17,100
is the crew practicing for their mission

7
00:00:21,320 --> 00:00:18,810
the team that is responsible for

8
00:00:22,970 --> 00:00:21,330
training them and get a sense of what

9
00:00:27,460 --> 00:00:22,980
it's like to fly the shuttle

10
00:00:29,120 --> 00:00:27,470
this is sts-131 behind the scenes

11
00:00:38,209 --> 00:00:29,130
Scottie what are you doing my

12
00:00:39,530 --> 00:00:38,219
interrupting you for real is this a joke

13
00:01:02,420 --> 00:00:39,540

not a joke

14

00:01:07,640 --> 00:01:04,220

the eye and it turns the iconic yellow

15

00:01:09,440 --> 00:01:07,650

and then you use a blue light you

16

00:01:11,540 --> 00:01:09,450

actually gonna do this not gonna do it

17

00:01:19,190 --> 00:01:11,550

today but you you have okay all right

18

00:01:23,450 --> 00:01:19,200

we'll get into that in a minute okay all

19

00:01:25,370 --> 00:01:23,460

right so right there cuz stuff floats

20

00:01:26,450 --> 00:01:25,380

around you got to watch out and stuff

21

00:01:28,820 --> 00:01:26,460

floats around you can get some in your

22

00:01:30,320 --> 00:01:28,830

eye you can inhale stuff to crumbs and

23

00:01:33,200 --> 00:01:30,330

everything and this how's your eye

24

00:01:35,240 --> 00:01:33,210

oh it hurts it's really not supposed to

25

00:01:36,469 --> 00:01:35,250

rub it I don't know I understand it's

26

00:01:41,420 --> 00:01:36,479

not looking good for him to make the

27

00:01:42,590 --> 00:01:41,430

landing I'll see you okay so we got red

28

00:01:44,540 --> 00:01:42,600

and sweating from being nervous about

29

00:01:45,920 --> 00:01:44,550

the landings firstly so your folks don't

30

00:01:47,540 --> 00:01:45,930

get worried if they're watching this

31

00:01:49,520 --> 00:01:47,550

there's really nothing wrong with your

32

00:01:51,590 --> 00:01:49,530

eyes no we're just kind of pretending

33

00:01:53,359 --> 00:01:51,600

we're simulating this this allows the

34

00:01:55,370 --> 00:01:53,369

ground right through the procedures that

35

00:01:56,750 --> 00:01:55,380

they would use if something were to hard

36

00:01:58,790 --> 00:01:56,760

so we're pretending okay so one thing

37

00:02:00,650 --> 00:01:58,800

that has happened as Jim said if you

38

00:02:02,030 --> 00:02:00,660

can't see you got to be able to see

39

00:02:04,400 --> 00:02:02,040

what's going on to land the space show

40

00:02:06,200 --> 00:02:04,410

well one good eye you got one good eye

41

00:02:08,210 --> 00:02:06,210

yeah with that you know you do the

42

00:02:11,900 --> 00:02:08,220

pirate thing you believe that all right

43

00:02:14,390 --> 00:02:11,910

so the pirates pirates were on boats

44

00:02:16,580 --> 00:02:14,400

towed X they didn't fly airplanes but

45

00:02:19,490 --> 00:02:16,590

Jim I think you might be well it's his

46

00:02:21,199 --> 00:02:19,500

call okay tell us well it's actually not

47

00:02:25,400 --> 00:02:21,209

it belongs it you know go back to call

48

00:02:28,620 --> 00:02:25,410

Mexico guys in the Michigan team

49

00:02:29,670 --> 00:02:28,630

two weeks all right Julie CEO all right

50

00:02:30,960 --> 00:02:29,680

and you already talked to the space

51
00:02:32,700 --> 00:02:30,970
station and some saw that since we have

52
00:02:34,440 --> 00:02:32,710
plenty of time they're looking over if

53
00:02:36,390 --> 00:02:34,450
you do landing he's a highly qualified

54
00:02:39,390 --> 00:02:36,400
he's just a qualified line of impact so

55
00:02:41,070 --> 00:02:39,400
we had Atlantic here in in good hands

56
00:02:42,660 --> 00:02:41,080
since you have to teach you guys lessons

57
00:02:43,890 --> 00:02:42,670
and keep you telling you to do your

58
00:02:46,530 --> 00:02:43,900
homework you didn't study enough for the

59
00:02:48,510 --> 00:02:46,540
simulation I mean I so happen you know

60
00:02:49,920 --> 00:02:48,520
Jim you don't know that you know the

61
00:02:55,949 --> 00:02:49,930
electrical system as well as you should

62
00:02:57,870 --> 00:02:55,959
you haven't been study know there are

63
00:02:59,190 --> 00:02:57,880

good students today would be good

64

00:03:02,130 --> 00:02:59,200

students yeah but I think they would be

65

00:03:09,270 --> 00:03:02,140

also kind of prone to shenanigans no no

66

00:03:12,180 --> 00:03:09,280

two of them write the smart guys yeah

67

00:03:14,550 --> 00:03:12,190

okay every once in a while you know mrs.

68

00:03:16,229 --> 00:03:14,560

done your son's a very nice boy but you

69

00:03:20,340 --> 00:03:16,239

know maybe that would happen once in a

70

00:03:27,960 --> 00:03:20,350

while yes something like that but you

71

00:03:29,250 --> 00:03:27,970

had him check that kind of thing no come

72

00:03:31,170 --> 00:03:29,260

on you're a model you it must have been

73

00:03:34,979 --> 00:03:31,180

a perfect yeah yeah yeah right would you

74

00:03:44,250 --> 00:03:34,989

do to your poor mom if you had five boys

75

00:03:49,020 --> 00:03:44,260

a little girl probably sweet one little

76
00:03:50,699 --> 00:03:49,030
girl as much work as probably but my mom

77
00:03:53,820 --> 00:03:50,709
had five boys I was a second of five

78
00:03:55,979 --> 00:03:53,830
yeah I think I think they didn't she had

79
00:03:57,810 --> 00:03:55,989
enough work with me for at least ten I'm

80
00:03:59,350 --> 00:03:57,820
not doing this by I was terrible but

81
00:04:01,030 --> 00:03:59,360
she's not three FD a-- though

82
00:04:03,040 --> 00:04:01,040
so you know my throat I was the youngest

83
00:04:06,610 --> 00:04:03,050
no my mother said if I was first I would

84
00:04:08,890 --> 00:04:06,620
have been last yeah my mom felt when I

85
00:04:23,020 --> 00:04:08,900
was a third that was it I was looking I

86
00:04:26,470 --> 00:04:23,030
was a third one oh yeah everything's

87
00:04:30,790 --> 00:04:26,480
fine in there 480 seconds for the RPM

88
00:04:34,660 --> 00:04:30,800

every two seconds to do that so we'll

89

00:04:36,070 --> 00:04:34,670

use 240 is number 50 yeah perfect you

90

00:04:39,100 --> 00:04:36,080

say a lot of numbers growing it that is

91

00:04:42,130 --> 00:04:39,110

it is like Jethro Bodine naught x naught

92

00:04:43,900 --> 00:04:42,140

is not your relative if you have

93

00:04:45,460 --> 00:04:43,910

calculated for that stuff now records

94

00:04:48,340 --> 00:04:45,470

you know what I already do that next

95

00:04:50,020 --> 00:04:48,350

cheapest you can X or 1x plane

96

00:04:57,180 --> 00:04:50,030

controllers this is interesting you are

97

00:05:00,670 --> 00:04:59,320

what was your flight and so are you

98

00:05:04,510 --> 00:05:00,680

Margit clay weren't you a flight

99

00:05:05,560 --> 00:05:04,520

controller to all right another wise in

100

00:05:08,170 --> 00:05:05,570

other words you were but you don't want

101

00:05:11,739 --> 00:05:08,180

to take any responsibility okay what

102

00:05:15,850 --> 00:05:13,959

dance means dangerous officer we're

103

00:05:18,759 --> 00:05:15,860

basically responsible for monitoring the

104

00:05:20,919 --> 00:05:18,769

at Michelle's onboard guidance systems

105

00:05:23,589 --> 00:05:20,929

navigation systems responsible for the

106

00:05:26,610 --> 00:05:23,599

procedures of court procedures manual

107

00:05:28,110 --> 00:05:26,620

procedures and burns on the parents

108

00:05:29,730 --> 00:05:28,120

now that I give you enough time to

109

00:05:32,220 --> 00:05:29,740

answer that question I didn't answer

110

00:05:34,920 --> 00:05:32,230

before I asked I want to make sure you

111

00:05:37,260 --> 00:05:34,930

give you enough time to talk you guys

112

00:05:38,670 --> 00:05:37,270

leave him enough time cuz what the heck

113

00:05:39,210 --> 00:05:38,680

is going on here you guys are busy today

114

00:05:41,120 --> 00:05:39,220

aren't you

115

00:05:43,590 --> 00:05:41,130

we are yes they're doing an inspection

116

00:05:46,200 --> 00:05:43,600

inspection the inspection that happens

117

00:05:48,030 --> 00:05:46,210

after we undock so it's uh you know we

118

00:05:49,950 --> 00:05:48,040

inspected it before we were on the food

119

00:05:52,110 --> 00:05:49,960

and then we did this rendezvous pitch

120

00:05:54,120 --> 00:05:52,120

maneuver okay and this is their last

121

00:05:56,250 --> 00:05:54,130

chance to look at the vehicles heat

122

00:05:58,170 --> 00:05:56,260

shield before we come on the land and we

123

00:06:01,230 --> 00:05:58,180

want to make sure that we check it one

124

00:06:10,260 --> 00:06:01,240

more time to make sure that no orbital

125

00:06:12,720 --> 00:06:10,270

debris yes right so Jim body and the

126

00:06:15,450 --> 00:06:12,730

Elco and Stephanie have been hard-headed

127

00:06:17,850 --> 00:06:15,460

ever since we undocked oh my god doing

128

00:06:20,070 --> 00:06:17,860

this inspection piston discovery for the

129

00:06:25,980 --> 00:06:20,080

bottom of 7-30 main and the port survey

130

00:06:27,810 --> 00:06:25,990

or the recording happy all right so

131

00:06:30,120 --> 00:06:27,820

what's going on in here am i distracting

132

00:06:31,440 --> 00:06:30,130

you yes but I won't be here on the

133

00:06:35,750 --> 00:06:31,450

mission you're not worried about that is

134

00:06:39,900 --> 00:06:38,430

we're doing is you're inspecting aren't

135

00:06:42,840 --> 00:06:39,910

you Jim inspecting you're inspecting

136

00:06:44,250 --> 00:06:42,850

like a queen vector all right so you got

137

00:06:45,630 --> 00:06:44,260

like out here out the windows it's just

138

00:06:47,670 --> 00:06:45,640

a simulation this is because you'll be

139

00:06:55,040 --> 00:06:47,680

floating right now you know you'd be

140

00:06:58,189 --> 00:06:56,519

okay

141

00:07:00,320 --> 00:06:58,199

I receive her

142

00:07:02,420 --> 00:07:00,330

so the arms moving now so you're looking

143

00:07:05,089 --> 00:07:02,430

at like a little video monitor of that

144

00:07:07,999 --> 00:07:05,099

long straight thing is the robot arm and

145

00:07:09,469 --> 00:07:08,009

then the bottom screen right there yeah

146

00:07:11,119 --> 00:07:09,479

that's a robot arm and then a bottom

147

00:07:12,679 --> 00:07:11,129

screen is showing what the sensor is

148

00:07:13,939 --> 00:07:12,689

seeing right that's right and then out

149

00:07:15,559 --> 00:07:13,949

here if we look at this is a pretend

150

00:07:17,239 --> 00:07:15,569

this is only a graphical image but you

151
00:07:19,670 --> 00:07:17,249
know you can see like to pretend Space

152
00:07:21,080 --> 00:07:19,680
Shuttle thing out here all right what's

153
00:07:22,610 --> 00:07:21,090
that you play a little bit us empl I'm

154
00:07:24,860 --> 00:07:22,620
coming home though it's a big closet

155
00:07:26,989 --> 00:07:24,870
okay and you're gonna be it so this is

156
00:07:29,119 --> 00:07:26,999
what's happen is can I distract you some

157
00:07:31,070 --> 00:07:29,129
more sure play tell what is going on

158
00:07:32,360 --> 00:07:31,080
here what is happening right now what do

159
00:07:33,829 --> 00:07:32,370
you guys don't we just end doc this

160
00:07:35,300 --> 00:07:33,839
morning so you're on the space station

161
00:07:39,189 --> 00:07:35,310
you've course you weren't there really

162
00:07:41,360 --> 00:07:39,199
there but you Yun dr. then what happened

163
00:07:43,219 --> 00:07:41,370

you got to do that that's when you fly

164

00:07:45,140 --> 00:07:43,229

to space shift did you like climbing

165

00:07:48,050 --> 00:07:45,150

they do a good job you like flying a

166

00:07:48,589 --> 00:07:48,060

spaceship did you feel kaftan he kept me

167

00:07:51,559 --> 00:07:48,599

out of trouble

168

00:07:52,550 --> 00:07:51,569

yeah there is a cool do you feel early

169

00:07:54,649 --> 00:07:52,560

call your client you're flying a

170

00:07:55,700 --> 00:07:54,659

spaceship you know that's like not too

171

00:07:57,589 --> 00:07:55,710

many people get to do that

172

00:07:59,629 --> 00:07:57,599

that's pretty cool all right Steph he's

173

00:08:00,890 --> 00:07:59,639

back there are trying to keep track of

174

00:08:02,059 --> 00:08:00,900

everything Stephanie's I can add some

175

00:08:05,089 --> 00:08:02,069

more computers making eye contact

176
00:08:09,920 --> 00:08:05,099
computers yes yeah Stephanie look at the

177
00:08:19,089 --> 00:08:09,930
camera it's a situation where we mean

178
00:08:22,700 --> 00:08:21,800
right you've got a well and daddys

179
00:08:24,439 --> 00:08:22,710
working us as well

180
00:08:25,909 --> 00:08:24,449
yeah have four people working this oh

181
00:08:27,439 --> 00:08:25,919
it's good you take turns and everything

182
00:08:28,989 --> 00:08:27,449
yeah yeah cuz yeah you can go a little

183
00:08:36,879 --> 00:08:28,999
nutty doing this too long for too long

184
00:08:44,199 --> 00:08:38,899
that'll be anything you put to put your

185
00:08:48,980 --> 00:08:47,060
any prep in the cabin still yeah make

186
00:08:52,610 --> 00:08:48,990
sure you got everything fit away yeah

187
00:08:54,499 --> 00:08:52,620
cleanup discovery okay I see it tip-top

188
00:08:57,110 --> 00:08:54,509

shape just like that okay see folks gave

189

00:08:59,420 --> 00:08:57,120

it to us right you're gonna really clean

190

00:09:00,199 --> 00:08:59,430

it up that much it was my my observation

191

00:09:01,759 --> 00:09:00,209

is you know they give it to you very

192

00:09:06,259 --> 00:09:01,769

pristine and then returns it to a frat

193

00:09:07,850 --> 00:09:06,269

house it's like Oh mom and dad let us

194

00:09:09,379 --> 00:09:07,860

have that you know so you gotta try to

195

00:09:10,910 --> 00:09:09,389

fake it you gotta clean up before your

196

00:09:12,290 --> 00:09:10,920

pan before you give the car back to your

197

00:09:14,990 --> 00:09:12,300

parents Jimmy this is what's kind of

198

00:09:16,430 --> 00:09:15,000

going on well you'll find out I'm

199

00:09:18,379 --> 00:09:16,440

telling you and you get up there what

200

00:09:20,150 --> 00:09:18,389

the heck well it's a come with this food

201

00:09:22,220 --> 00:09:20,160

over here so seven this is your third

202

00:09:23,379 --> 00:09:22,230

flight and I would think by this time in

203

00:09:25,180 --> 00:09:23,389

a mission you would have already

204

00:09:27,620 --> 00:09:25,190

concurrent

205

00:09:29,870 --> 00:09:27,630

Jim and a Yoko on their first flight to

206

00:09:33,199 --> 00:09:29,880

look out the window and enjoy the view

207

00:09:34,790 --> 00:09:33,209

and everything deep yeah did you do more

208

00:09:37,249 --> 00:09:34,800

of that on your other flights your you

209

00:09:39,050 --> 00:09:37,259

know your kind of fun stuff looking at

210

00:09:40,850 --> 00:09:39,060

the window and enjoying the environment

211

00:09:42,920 --> 00:09:40,860

was that more when you were docked or is

212

00:09:44,569 --> 00:09:42,930

that afterwards we did not have any time

213

00:09:50,139 --> 00:09:44,579

at all to do that because you're always

214

00:09:55,840 --> 00:09:50,149

busy yeah

215

00:10:00,410 --> 00:09:55,850

yeah this is what you want to do okay

216

00:10:02,120 --> 00:10:00,420

yeah that's that's what I was getting to

217

00:10:03,470 --> 00:10:02,130

is don't yeah these are the days you

218

00:10:04,939 --> 00:10:03,480

know you're doing your inspector once

219

00:10:06,410 --> 00:10:04,949

you get that out of the way stick your

220

00:10:07,939 --> 00:10:06,420

head in those windows really looked up

221

00:10:12,559 --> 00:10:07,949

Stephanie where'd you look I looked up

222

00:10:13,069 --> 00:10:12,569

front mainly not the f10 overhead a lot

223

00:10:15,079 --> 00:10:13,079

really

224

00:10:20,389 --> 00:10:15,089

I like sticking my head underneath like

225

00:10:21,829 --> 00:10:20,399

in there in the forward windows and

226

00:10:23,900 --> 00:10:21,839

looking at getting jammed up in there

227

00:10:31,790 --> 00:10:23,910

and listening to your music and make

228

00:10:38,199 --> 00:10:31,800

sure you get a chance to do that but

229

00:10:42,350 --> 00:10:40,370

turnabout on your time off or your

230

00:10:46,100 --> 00:10:42,360

relaxing time when you time off your

231

00:10:47,629 --> 00:10:46,110

relaxing days make sure that's good yeah

232

00:10:51,970 --> 00:10:47,639

make sure make sure you think cuz this

233

00:10:54,350 --> 00:10:51,980

is incredible all right all right well

234

00:10:55,490 --> 00:10:54,360

I'll let you guys get back to work do

235

00:10:57,559 --> 00:10:55,500

you mind taking the rest of your day

236

00:10:59,689 --> 00:10:57,569

I'll take the camera I will I will but

237

00:11:01,309 --> 00:10:59,699

I'm probably probably screwed up let's

238

00:11:02,540 --> 00:11:01,319

see what point are we up to here we're

239

00:11:09,070 --> 00:11:02,550

just getting to point one know this is

240

00:11:14,920 --> 00:11:10,630

it was a what do you want to be when you

241

00:11:15,850 --> 00:11:14,930

grow up okay captain bottom out of a

242

00:11:17,949 --> 00:11:15,860

ketchup bottle

243

00:11:23,170 --> 00:11:17,959

you still have it can you bring it in

244

00:11:37,630 --> 00:11:23,180

maybe sometime okay we can refer to it

245

00:11:40,030 --> 00:11:37,640

okay obviously back when I was in space

246

00:11:44,440 --> 00:11:40,040

I think the 80s I mean obviously shuttle

247

00:11:46,509 --> 00:11:44,450

was just starting to launch and we now

248

00:11:47,949 --> 00:11:46,519

have women in space I was you know I was

249

00:11:51,639 --> 00:11:47,959

like second third grade so I was really

250

00:11:53,470 --> 00:11:51,649

excited about that and Halley's Comet so

251

00:11:55,240 --> 00:11:53,480

we went to my parents and we're in

252

00:11:57,579 --> 00:11:55,250

Colorado we have great skies I caught up

253

00:11:59,680 --> 00:11:57,589

and so my parents would go out to try to

254

00:12:07,530 --> 00:11:59,690

look for Haley's comment and not really

255

00:12:13,210 --> 00:12:10,420

and and then one Christmas Santa Claus

256

00:12:15,069 --> 00:12:13,220

brought me a telescope really how old we

257

00:12:17,769 --> 00:12:15,079

have been do you remember I was I was

258

00:12:19,960 --> 00:12:17,779

sixth grade so Wow yeah I thought that

259

00:12:23,829 --> 00:12:19,970

was the best until later I discovered

260

00:12:25,569 --> 00:12:23,839

that that telescope is a refractor which

261

00:12:27,160 --> 00:12:25,579

is okay but you're not great and now I

262

00:12:29,139 --> 00:12:27,170

have a reflecting telescope and we're

263

00:12:33,160 --> 00:12:29,149

waving ended quickly what can you

264

00:12:35,380 --> 00:12:33,170

explain a difference factor uses lenses

265

00:12:39,530 --> 00:12:35,390

and mine are probably plastic lenses of

266

00:12:41,300 --> 00:12:39,540

a trip and you rely on optics and

267

00:12:43,970 --> 00:12:41,310

and basically we're at uh scope what you

268

00:12:47,840 --> 00:12:43,980

want is a big bucket to gather light and

269

00:12:49,160 --> 00:12:47,850

so with the refractor mine was small so

270

00:12:52,639 --> 00:12:49,170

I'm they're gathering that much light

271

00:12:54,710 --> 00:12:52,649

right now I have a reflector with an 8

272

00:12:56,210 --> 00:12:54,720

inch mirror so I have a much bigger

273

00:13:00,530 --> 00:12:56,220

bucket to gather light

274

00:13:02,870 --> 00:13:00,540

plus when you use the optics of glass

275

00:13:04,460 --> 00:13:02,880

lenses you get some bending of light and

276

00:13:06,889 --> 00:13:04,470

you know like like prisms like rainbows

277

00:13:10,850 --> 00:13:06,899

are created and everything it's just not

278

00:13:12,860 --> 00:13:10,860

as good and mirror doesn't do that so so

279

00:13:14,840 --> 00:13:12,870

now i have my big the only problem is my

280

00:13:16,730 --> 00:13:14,850

telescope now is it has a 6-foot focal

281

00:13:18,889 --> 00:13:16,740

length so let's make this big and what

282

00:13:20,360 --> 00:13:18,899

you have to set your house okay yeah my

283

00:13:25,100 --> 00:13:20,370

husband I built it when I was a teacher

284

00:13:27,199 --> 00:13:25,110

you built it we ground the mirror and

285

00:13:29,900 --> 00:13:27,209

then we send in a way to get the

286

00:13:31,699 --> 00:13:29,910

aluminum plating fine and it's our house

287

00:13:39,769 --> 00:13:31,709

and we take it out everyone's loud the

288

00:13:40,450 --> 00:13:39,779

neighbors all done it's really fun and

289

00:13:43,450 --> 00:13:40,460

when I was

290

00:13:45,130 --> 00:13:43,460

I put my astronomy students and we'd go

291

00:13:47,950 --> 00:13:45,140

out at night in the parking lot at the

292

00:13:50,260 --> 00:13:47,960

high school and and look at all sorts of

293

00:13:52,150 --> 00:13:50,270

stuff yeah well my favorite memory is

294

00:13:54,610 --> 00:13:52,160

when I took it out for a little

295

00:13:56,200 --> 00:13:54,620

five-year-old and there up on the on a

296

00:14:02,400 --> 00:13:56,210

chair and they're looking in there and

297

00:14:06,790 --> 00:14:04,570

that's cool sharing it with other people

298

00:14:09,790 --> 00:14:06,800

when you share with others okay so you

299

00:14:11,020 --> 00:14:09,800

built the paper mache astronaut and said

300

00:14:13,060 --> 00:14:11,030

third grade

301

00:14:15,040 --> 00:14:13,070

we got the telescope when you're in

302

00:14:16,090 --> 00:14:15,050

sixth grade you built your own telescope

303

00:14:17,950 --> 00:14:16,100

so you this is something you've always

304

00:14:19,930 --> 00:14:17,960

dreamt about yeah did it did it ever

305

00:14:30,730 --> 00:14:19,940

waiver did you always thought you wanted

306

00:14:34,060 --> 00:14:30,740

to so I'm just trying to figure out what

307

00:14:37,570 --> 00:14:34,070

I I really enjoyed in life right so like

308

00:14:39,070 --> 00:14:37,580

and then and then get to NASA size you

309

00:14:40,630 --> 00:14:39,080

know right that was always the goal the

310

00:14:43,480 --> 00:14:40,640

big butts but I think that's a cool

311

00:14:45,310 --> 00:14:43,490

thing because no NASA is more than you

312

00:14:47,830 --> 00:14:45,320

know it's lots of different disciplines

313

00:14:51,910 --> 00:14:47,840

right and it's and you know even if

314

00:14:54,070 --> 00:14:51,920

you're not I mean but for everybody no

315

00:14:57,820 --> 00:14:54,080

matter what if you're not necessarily in

316

00:15:02,290 --> 00:14:57,830

a one part of science or yet scientists

317

00:15:04,210 --> 00:15:02,300

but you like but you're or geologists

318

00:15:05,440 --> 00:15:04,220

yeah we have we have all different types

319

00:15:07,270 --> 00:15:05,450

and each badge will become astronauts

320

00:15:08,650 --> 00:15:07,280

too you know it's not just say you can't

321

00:15:10,840 --> 00:15:08,660

you're eligible to become an astronaut

322

00:15:13,000 --> 00:15:10,850

as well but guys it's if you have an

323

00:15:14,500 --> 00:15:13,010

interest if you have a field of interest

324

00:15:16,210 --> 00:15:14,510

but you have a love for the space

325

00:15:17,710 --> 00:15:16,220

program but you have an interest in

326

00:15:19,570 --> 00:15:17,720

whatever it is you can apply it to the

327

00:15:21,700 --> 00:15:19,580

space program whether it's you know

328

00:15:25,840 --> 00:15:21,710

whether it's flying airplanes or writing

329

00:15:28,510 --> 00:15:25,850

books right or you know we call it

330

00:15:30,010 --> 00:15:28,520

economics we're the financial people we

331

00:15:32,170 --> 00:15:30,020

have a budgets right I mean we have to

332

00:15:34,030 --> 00:15:32,180

people figure out budgets right and

333

00:15:36,550 --> 00:15:34,040

people who have good public speakers and

334

00:15:38,500 --> 00:15:36,560

people who are you know whatever every

335

00:15:40,180 --> 00:15:38,510

everything anything you love you can

336

00:15:42,190 --> 00:15:40,190

apply for the space program and your

337

00:15:43,449 --> 00:15:42,200

case had a lot of teaching but also had

338

00:15:47,499 --> 00:15:43,459

a good background science of

339

00:15:49,179 --> 00:15:47,509

I mean so yeah so it sets you up for the

340

00:15:50,619 --> 00:15:49,189

astronaut but I think what's cool about

341

00:15:52,299 --> 00:15:50,629

it is that you followed what you loved

342

00:15:53,439 --> 00:15:52,309

right and they're like a people said I

343

00:15:54,910 --> 00:15:53,449

want to go up to be an astronaut and you

344

00:15:56,230 --> 00:15:54,920

tried to like say what do I need to do

345

00:15:57,669 --> 00:15:56,240

to be an astronaut they'll probably want

346

00:15:59,350 --> 00:15:57,679

to work necessarily right you know

347

00:16:01,059 --> 00:15:59,360

you're gonna be really the importance to

348

00:16:02,679 --> 00:16:01,069

follow what you love doing and then the

349

00:16:03,850 --> 00:16:02,689

opportunities kind of a rose for you

350

00:16:05,889 --> 00:16:03,860

right you wouldn't necessarily think

351
00:16:07,059 --> 00:16:05,899
that I'm gonna become a teacher and then

352
00:16:08,319 --> 00:16:07,069
that's gonna leave but that's what

353
00:16:09,309 --> 00:16:08,329
happened you would never know but you

354
00:16:13,389 --> 00:16:09,319
followed what you know I think that's

355
00:16:16,359 --> 00:16:15,129
and then things kind of work out yeah

356
00:16:18,489 --> 00:16:16,369
you got to have that faith through it a

357
00:16:20,109 --> 00:16:18,499
little bit you can fake but it works out

358
00:16:22,210 --> 00:16:20,119
well thanks very much now you know I was

359
00:16:23,290 --> 00:16:22,220
thinking you saw you saw the stars you

360
00:16:25,119 --> 00:16:23,300
said with that one

361
00:16:26,859 --> 00:16:25,129
that refractive telescope you had when

362
00:16:31,350 --> 00:16:26,869
you were younger yeah and yeah you go

363
00:16:39,069 --> 00:16:35,319

what are you guys unbelievable you know