



# THE COLOR OF SPACE



1  
00:00:14,230 --> 00:00:12,310

[Music]

2  
00:00:16,390 --> 00:00:14,240

we're so excited to have this special

3  
00:00:17,910 --> 00:00:16,400

collaboration with nasa johnson space

4  
00:00:20,230 --> 00:00:17,920

center and we're honored to present this

5  
00:00:22,550 --> 00:00:20,240

historic event

6  
00:00:24,950 --> 00:00:22,560

i'm also very excited to introduce the

7  
00:00:26,870 --> 00:00:24,960

moderator for our program she's also the

8  
00:00:29,109 --> 00:00:26,880

first african-american woman to be the

9  
00:00:31,669 --> 00:00:29,119

director of nasa johnson space center

10  
00:00:33,830 --> 00:00:31,679

and vanessa white

11  
00:00:35,990 --> 00:00:33,840

i'm happy to be here with you all at

12  
00:00:38,069 --> 00:00:36,000

space center houston today we're going

13  
00:00:40,310 --> 00:00:38,079

to hear from former and current

14

00:00:48,310 --> 00:00:40,320

astronauts who will share with you their

15

00:00:52,069 --> 00:00:50,310

robert kirby

16

00:00:54,229 --> 00:00:52,079

jeanette x

17

00:00:56,310 --> 00:00:54,239

bernard harris

18

00:01:00,980 --> 00:00:56,320

leland melvin

19

00:01:20,640 --> 00:01:00,990

stephanie wilson victor glover

20

00:01:26,310 --> 00:01:20,650

[Music]

21

00:01:30,069 --> 00:01:28,310

i'm going to start with a question and

22

00:01:32,390 --> 00:01:30,079

i'm going to throw it out and would like

23

00:01:33,830 --> 00:01:32,400

for everyone to have an opportunity to

24

00:01:35,830 --> 00:01:33,840

give a response

25

00:01:37,910 --> 00:01:35,840

describe to us a picture of who you

26

00:01:39,350 --> 00:01:37,920

thought you would be as a student or

27

00:01:41,590 --> 00:01:39,360

young child

28

00:01:44,710 --> 00:01:41,600

what were you studying and what type of

29

00:01:47,590 --> 00:01:44,720

person did you think you could be

30

00:01:49,270 --> 00:01:47,600

we'll start with stephanie well i

31

00:01:51,030 --> 00:01:49,280

when i was in middle school i was very

32

00:01:52,310 --> 00:01:51,040

fortunate that my

33

00:01:54,469 --> 00:01:52,320

parents were very supportive and

34

00:01:56,789 --> 00:01:54,479

education was very important to them

35

00:01:58,310 --> 00:01:56,799

and i was given a school assignment and

36

00:01:59,350 --> 00:01:58,320

a career awareness class to interview

37

00:02:01,190 --> 00:01:59,360

somebody

38

00:02:03,109 --> 00:02:01,200

that worked in an interesting career

39

00:02:05,670 --> 00:02:03,119

field and i was interested in astronomy

40

00:02:08,309 --> 00:02:05,680

at the time and after talking to a local

41

00:02:10,389 --> 00:02:08,319

area astronomy professor i was

42

00:02:11,830 --> 00:02:10,399

fascinated by his work

43

00:02:13,750 --> 00:02:11,840

i thought that that would be an

44

00:02:17,830 --> 00:02:13,760

excellent way to contribute

45

00:02:22,390 --> 00:02:19,910

when i was a really young kid probably

46

00:02:23,750 --> 00:02:22,400

sixth grade my mother gave me this asian

47

00:02:27,510 --> 00:02:23,760

appropriate

48

00:02:28,869 --> 00:02:27,520

non-ocean certified chemistry set

49

00:02:29,990 --> 00:02:28,879

and i mixed these two dissimilar

50

00:02:31,589 --> 00:02:30,000

chemicals and created the most

51  
00:02:34,869 --> 00:02:31,599  
incredible explosion in my mother's

52  
00:02:37,670 --> 00:02:34,879  
living room i burned a whole her carpet

53  
00:02:41,430 --> 00:02:37,680  
my mother was she was small but she had

54  
00:02:43,270 --> 00:02:41,440  
the power to knock me off the

55  
00:02:44,869 --> 00:02:43,280  
but um it was that moment that i

56  
00:02:46,949 --> 00:02:44,879  
realized that i could be a chemist

57  
00:02:48,949 --> 00:02:46,959  
because i'd already done it all i needed

58  
00:02:52,070 --> 00:02:48,959  
was a lab coat and goggles

59  
00:02:55,110 --> 00:02:52,080  
so so chemistry was something i learned

60  
00:02:58,790 --> 00:02:55,120  
at an early age and uh i love sports but

61  
00:03:01,589 --> 00:02:58,800  
i never saw myself going into

62  
00:03:03,589 --> 00:03:01,599  
the nfl because just i don't know for

63  
00:03:05,350 --> 00:03:03,599

whatever reason but i did see myself as

64

00:03:07,990 --> 00:03:05,360

a scientist so stem was always something

65

00:03:09,509 --> 00:03:08,000

that was very critical to me it's funny

66

00:03:10,710 --> 00:03:09,519

i think it all starts with chemistry

67

00:03:12,149 --> 00:03:10,720

because my mother was a chemistry

68

00:03:15,190 --> 00:03:12,159

teacher

69

00:03:17,430 --> 00:03:15,200

and as i got older the chemistry

70

00:03:19,509 --> 00:03:17,440

set kept getting bigger and bigger i

71

00:03:21,830 --> 00:03:19,519

didn't burn a hole in her carpet thank

72

00:03:24,550 --> 00:03:21,840

god because i might not be here if that

73

00:03:26,550 --> 00:03:24,560

happened but uh but um but that was

74

00:03:27,990 --> 00:03:26,560

always interesting to me and and and i

75

00:03:31,350 --> 00:03:28,000

grew up

76  
00:03:33,589 --> 00:03:31,360  
in baltimore during a time when apollo

77  
00:03:36,070 --> 00:03:33,599  
was big so i just kept seeing these

78  
00:03:38,630 --> 00:03:36,080  
larger and larger rockets being designed

79  
00:03:40,470 --> 00:03:38,640  
and it just design always interested me

80  
00:03:42,390 --> 00:03:40,480  
and i always thought i was going to be a

81  
00:03:44,149 --> 00:03:42,400  
design engineer that's what i was going

82  
00:03:47,589 --> 00:03:44,159  
to be

83  
00:03:49,750 --> 00:03:47,599  
so as a kid um i didn't really know who

84  
00:03:51,750 --> 00:03:49,760  
i thought i would be when i grew up i

85  
00:03:54,229 --> 00:03:51,760  
just kind of you know did my thing and

86  
00:03:55,990 --> 00:03:54,239  
you know did my work and

87  
00:03:58,149 --> 00:03:56,000  
one day you know when i was about nine

88  
00:04:00,869 --> 00:03:58,159

years old my twin sister and i we

89

00:04:02,789 --> 00:04:00,879

brought home our report cards and back

90

00:04:05,030 --> 00:04:02,799

then you had a report card and you had a

91

00:04:07,429 --> 00:04:05,040

row of all your grades and you could see

92

00:04:08,550 --> 00:04:07,439

immediately okay you had all a's or b's

93

00:04:10,470 --> 00:04:08,560

or whatever

94

00:04:12,949 --> 00:04:10,480

and you know janet and i we're pretty

95

00:04:14,550 --> 00:04:12,959

obedient kids and we knew that if we

96

00:04:16,629 --> 00:04:14,560

brought home anything less than a our

97

00:04:18,949 --> 00:04:16,639

mother was not going to be happy and

98

00:04:21,830 --> 00:04:18,959

yeah she she knew how to throw a shoe or

99

00:04:23,510 --> 00:04:21,840

whatever to make sure you stayed in line

100

00:04:25,909 --> 00:04:23,520

but you know one day we brought our

101  
00:04:27,350 --> 00:04:25,919  
report cards home and my older brother

102  
00:04:29,990 --> 00:04:27,360  
goes wow

103  
00:04:32,629 --> 00:04:30,000  
you guys can probably become aerospace

104  
00:04:34,310 --> 00:04:32,639  
engineers or even an astronaut and my

105  
00:04:36,310 --> 00:04:34,320  
nine-year-old brain said well they'll

106  
00:04:37,990 --> 00:04:36,320  
never pick me to be an astronaut but i

107  
00:04:41,030 --> 00:04:38,000  
can definitely become an aerospace

108  
00:04:43,189 --> 00:04:41,040  
engineer and so at nine i had set my

109  
00:04:44,550 --> 00:04:43,199  
sights on becoming an engineer an

110  
00:04:47,590 --> 00:04:44,560  
aerospace engineer i didn't even know

111  
00:04:52,150 --> 00:04:50,150  
i guess the first version of who i saw

112  
00:04:54,150 --> 00:04:52,160  
what i you know that i could become was

113  
00:04:57,189 --> 00:04:54,160

my father my father was a police officer

114

00:05:00,230 --> 00:04:57,199

in pomona where i grew up and so i just

115

00:05:02,230 --> 00:05:00,240

really was blown away by the way people

116

00:05:03,909 --> 00:05:02,240

responded to him you know and so i i

117

00:05:05,350 --> 00:05:03,919

looked up to him but other people

118

00:05:06,870 --> 00:05:05,360

clearly didn't so

119

00:05:08,070 --> 00:05:06,880

i wanted to be a police officer like my

120

00:05:11,350 --> 00:05:08,080

father

121

00:05:13,670 --> 00:05:11,360

i also looked up to marcus allen los

122

00:05:15,189 --> 00:05:13,680

angeles raiders running back and uh and

123

00:05:17,909 --> 00:05:15,199

i wanted to be like marcus allen so

124

00:05:20,150 --> 00:05:17,919

sports were important my father and his

125

00:05:22,710 --> 00:05:20,160

influence were important and then i saw

126

00:05:25,029 --> 00:05:22,720

a shuttle launch on tv and thought i

127

00:05:27,110 --> 00:05:25,039

would love to control that thing and

128

00:05:29,510 --> 00:05:27,120

drive one of those and and so the the

129

00:05:33,189 --> 00:05:29,520

interest in tinkering and machines and

130

00:05:34,550 --> 00:05:33,199

speed and power and sports and also just

131

00:05:36,390 --> 00:05:34,560

wanting to be a good person like my

132

00:05:37,110 --> 00:05:36,400

father those things all wove together

133

00:05:39,189 --> 00:05:37,120

and

134

00:05:40,870 --> 00:05:39,199

in one way or another led to me being

135

00:05:42,629 --> 00:05:40,880

here

136

00:05:44,310 --> 00:05:42,639

so i was listening to the others talk

137

00:05:47,110 --> 00:05:44,320

about what inspired them and what

138

00:05:50,550 --> 00:05:47,120

inspired me was what inspired

139

00:05:52,790 --> 00:05:50,560

a lot of american kids back in the 60s i

140

00:05:55,189 --> 00:05:52,800

grew up watching the space program

141

00:05:57,830 --> 00:05:55,199

i i learned very early that i like

142

00:06:00,230 --> 00:05:57,840

science and science fiction so i always

143

00:06:01,430 --> 00:06:00,240

like to say that i was an original star

144

00:06:04,150 --> 00:06:01,440

trek fan

145

00:06:07,670 --> 00:06:04,160

and so that got me exposed to space on

146

00:06:09,749 --> 00:06:07,680

television but in real life i watched

147

00:06:13,029 --> 00:06:09,759

the program develop you know the mercury

148

00:06:17,029 --> 00:06:13,039

program gemini program apollo program

149

00:06:19,590 --> 00:06:17,039

and in 1969 when i turned 13 years old

150

00:06:22,629 --> 00:06:19,600

i watched neil and buzzed

151  
00:06:24,040 --> 00:06:22,639  
land on the moon and i said i want to

152  
00:06:27,029 --> 00:06:24,050  
follow in their footsteps

153  
00:06:29,510 --> 00:06:27,039  
[Music]

154  
00:06:32,309 --> 00:06:29,520  
first set foot upon the moon

155  
00:06:34,390 --> 00:06:32,319  
july 1969

156  
00:06:37,909 --> 00:06:34,400  
50.

157  
00:06:40,070 --> 00:06:37,919  
and as i looked around to uh at nasa to

158  
00:06:41,830 --> 00:06:40,080  
the point that we're talking about race

159  
00:06:45,189 --> 00:06:41,840  
i didn't see anybody who looked like me

160  
00:06:46,150 --> 00:06:45,199  
i didn't see any women in fact the uh

161  
00:06:48,469 --> 00:06:46,160  
first

162  
00:06:50,390 --> 00:06:48,479  
people that they selected to be the

163  
00:06:52,710 --> 00:06:50,400

creme de la creme you know the top

164

00:06:53,589 --> 00:06:52,720

astronauts were white guys all white

165

00:06:55,510 --> 00:06:53,599

guys

166

00:06:57,110 --> 00:06:55,520

and so i remember saying to myself even

167

00:06:58,150 --> 00:06:57,120

though i don't see anybody who looks

168

00:07:03,480 --> 00:06:58,160

like me

169

00:07:09,430 --> 00:07:06,469

[Music]

170

00:07:11,430 --> 00:07:09,440

did race ever play a role in the idea of

171

00:07:13,749 --> 00:07:11,440

who you could be

172

00:07:15,830 --> 00:07:13,759

did race ever play a factor i would say

173

00:07:18,309 --> 00:07:15,840

one major area where race played a

174

00:07:20,150 --> 00:07:18,319

factor was i in high school so as i'm

175

00:07:23,189 --> 00:07:20,160

kind of starting to develop this plan on

176

00:07:25,110 --> 00:07:23,199

how do i become those things and and i

177

00:07:26,710 --> 00:07:25,120

knew college was in my path but i i

178

00:07:28,469 --> 00:07:26,720

didn't have any neither of my parents

179

00:07:31,510 --> 00:07:28,479

went to college so you know we were

180

00:07:33,830 --> 00:07:31,520

having to figure this out together and

181

00:07:35,510 --> 00:07:33,840

the naval academy came to my house and

182

00:07:38,230 --> 00:07:35,520

said do you want to play football at

183

00:07:40,790 --> 00:07:38,240

annapolis and i was like no thank you

184

00:07:42,230 --> 00:07:40,800

and west point came said the same thing

185

00:07:44,390 --> 00:07:42,240

and i said nope

186

00:07:46,390 --> 00:07:44,400

and annapolis actually came back and

187

00:07:48,230 --> 00:07:46,400

says would you like to wrestle and that

188

00:07:49,589 --> 00:07:48,240

was really my main sport i love football

189

00:07:51,670 --> 00:07:49,599

i wanted to be like marcus allen but i

190

00:07:53,350 --> 00:07:51,680

was a better wrestler and you want to

191

00:07:55,189 --> 00:07:53,360

come grapple at annapolis and i said no

192

00:07:57,670 --> 00:07:55,199

thank you and so i don't know if any of

193

00:07:59,189 --> 00:07:57,680

you have seen uh the movie boys in the

194

00:08:01,589 --> 00:07:59,199

hood but the father in that movie is

195

00:08:02,869 --> 00:08:01,599

furious styles and and the conversation

196

00:08:05,350 --> 00:08:02,879

that he has with his son is something

197

00:08:07,189 --> 00:08:05,360

very similar to how i felt it it was

198

00:08:09,510 --> 00:08:07,199

that there wasn't a place for me in the

199

00:08:11,589 --> 00:08:09,520

military and so i go to college i go off

200

00:08:12,869 --> 00:08:11,599

to college and one of my mentors i'm in

201

00:08:14,550 --> 00:08:12,879

his office waiting for him to come in

202

00:08:16,309 --> 00:08:14,560

he's one of the few black faculty

203

00:08:18,550 --> 00:08:16,319

members at my university and he comes

204

00:08:20,550 --> 00:08:18,560

into the room and as he steps in he is

205

00:08:22,629 --> 00:08:20,560

in this full regalia the black suit with

206

00:08:24,150 --> 00:08:22,639

the gold around the wrist and the hat

207

00:08:25,749 --> 00:08:24,160

and i was like wow sir when did you

208

00:08:28,390 --> 00:08:25,759

enlist and he said i'm actually an

209

00:08:30,230 --> 00:08:28,400

officer in the navy reserves

210

00:08:32,949 --> 00:08:30,240

boom

211

00:08:34,870 --> 00:08:32,959

the next version of what i could become

212

00:08:36,949 --> 00:08:34,880

and that to me was there's so many

213

00:08:38,709 --> 00:08:36,959

lessons i pulled from that but the power

214

00:08:39,589 --> 00:08:38,719

of exposure and seeing yourself in

215

00:08:40,949 --> 00:08:39,599

something

216

00:08:42,709 --> 00:08:40,959

hello everyone

217

00:08:43,909 --> 00:08:42,719

victor glover here checking in during my

218

00:08:46,220 --> 00:08:43,919

six-month mission aboard the

219

00:08:51,430 --> 00:08:46,230

international space station

220

00:08:53,990 --> 00:08:51,440

[Applause]

221

00:08:56,150 --> 00:08:54,000

[Music]

222

00:08:57,670 --> 00:08:56,160

we were growing up in the 60s it was

223

00:08:59,190 --> 00:08:57,680

interesting to

224

00:09:02,310 --> 00:08:59,200

well see

225

00:09:04,310 --> 00:09:02,320

some of the greatest feats of humankind

226

00:09:07,190 --> 00:09:04,320

on the television will black and white

227

00:09:09,030 --> 00:09:07,200

television but turn the channel and see

228

00:09:12,470 --> 00:09:09,040

some of the greatest challenges that we

229

00:09:14,150 --> 00:09:12,480

had in the united states at the time so

230

00:09:16,070 --> 00:09:14,160

watching martin luther king at the same

231

00:09:19,110 --> 00:09:16,080

time we're going up to going to the moon

232

00:09:21,509 --> 00:09:19,120

it was incredible

233

00:09:23,590 --> 00:09:21,519

talking to my mom and who was a teacher

234

00:09:24,949 --> 00:09:23,600

who said you know would always ask us

235

00:09:27,910 --> 00:09:24,959

what do you want to do when you grow up

236

00:09:29,750 --> 00:09:27,920

and kind of pushing us

237

00:09:31,750 --> 00:09:29,760

i remember going to her and saying mom i

238

00:09:33,030 --> 00:09:31,760

know what i want to be i want to be an

239

00:09:38,389 --> 00:09:33,040

astronaut

240

00:09:42,630 --> 00:09:40,070

and started to turn around but then

241

00:09:44,550 --> 00:09:42,640

again she turned back she said but

242

00:09:47,509 --> 00:09:44,560

if that's what you want to do you can be

243

00:09:49,560 --> 00:09:47,519

and do anything that you want

244

00:09:50,030 --> 00:09:49,570

good time

245

00:09:51,870 --> 00:09:50,040

[Music]

246

00:09:52,510 --> 00:09:51,880

[Applause]

247

00:09:58,710 --> 00:09:52,520

[Music]

248

00:10:04,870 --> 00:09:58,720

[Applause]

249

00:10:06,710 --> 00:10:04,880

[Music]

250

00:10:09,030 --> 00:10:06,720

as a kid i became interested in

251  
00:10:11,750 --> 00:10:09,040  
airplanes and i liked making model

252  
00:10:14,790 --> 00:10:11,760  
airplanes and reading books on airplanes

253  
00:10:16,710 --> 00:10:14,800  
and i was fascinated by airplanes and so

254  
00:10:19,509 --> 00:10:16,720  
that proved to be

255  
00:10:21,110 --> 00:10:19,519  
what i find later on to be my

256  
00:10:23,110 --> 00:10:21,120  
passion

257  
00:10:25,990 --> 00:10:23,120  
you know i don't know if i had a vision

258  
00:10:28,069 --> 00:10:26,000  
of who i wanted to be when i was younger

259  
00:10:30,389 --> 00:10:28,079  
but i will tell you this i think i was

260  
00:10:32,470 --> 00:10:30,399  
born to be an engineer i think

261  
00:10:35,030 --> 00:10:32,480  
specifically i was born to be an

262  
00:10:36,949 --> 00:10:35,040  
electrical engineer i remember being in

263  
00:10:38,310 --> 00:10:36,959

i think it was seventh grade we had this

264

00:10:40,389 --> 00:10:38,320

assignment before we could take off

265

00:10:41,670 --> 00:10:40,399

early to go to recesses you had to write

266

00:10:43,750 --> 00:10:41,680

down

267

00:10:46,389 --> 00:10:43,760

where you saw yourself in

268

00:10:48,069 --> 00:10:46,399

i don't know 10 15 25 years and i simply

269

00:10:49,430 --> 00:10:48,079

wrote down on my little assignment sheet

270

00:10:50,790 --> 00:10:49,440

that i want to be able to look up from

271

00:10:52,949 --> 00:10:50,800

where i was working and see the

272

00:10:54,389 --> 00:10:52,959

curvature of the earth from space

273

00:10:56,710 --> 00:10:54,399

and i plunked that down on the desk and

274

00:10:59,269 --> 00:10:56,720

hit it off the recess my mother

275

00:11:01,030 --> 00:10:59,279

was my main inspiration that they

276

00:11:02,630 --> 00:11:01,040

discovered art

277

00:11:05,190 --> 00:11:02,640

uh when i was

278

00:11:07,110 --> 00:11:05,200

in preschool and she had me in every art

279

00:11:09,350 --> 00:11:07,120

class that ever was

280

00:11:10,150 --> 00:11:09,360

and she got me a library card when i was

281

00:11:12,790 --> 00:11:10,160

four

282

00:11:15,110 --> 00:11:12,800

and we and we had conversations and she

283

00:11:17,350 --> 00:11:15,120

would talk about astronomy and orbital

284

00:11:20,150 --> 00:11:17,360

mechanics and space i grew up in the

285

00:11:22,470 --> 00:11:20,160

segregated south so i am a son of the

286

00:11:24,790 --> 00:11:22,480

south if you will blacks and whites went

287

00:11:26,470 --> 00:11:24,800

to separate schools and had separate

288

00:11:27,269 --> 00:11:26,480

facilities and everything

289

00:11:29,509 --> 00:11:27,279

but

290

00:11:31,670 --> 00:11:29,519

in the mid 50s or so there were lots of

291

00:11:32,949 --> 00:11:31,680

programs on television that talked about

292

00:11:34,630 --> 00:11:32,959

life in the military and actually

293

00:11:36,470 --> 00:11:34,640

promoted the military so that's where i

294

00:11:37,750 --> 00:11:36,480

saw the naval academy i fell in love

295

00:11:39,670 --> 00:11:37,760

with the uniforms more than anything

296

00:11:42,069 --> 00:11:39,680

else and the beauty of the what's called

297

00:11:43,910 --> 00:11:42,079

the yard it's the the campus of the u.s

298

00:11:45,750 --> 00:11:43,920

naval academy and it didn't hurt that

299

00:11:47,269 --> 00:11:45,760

all the pretty girls from all over the

300

00:11:50,810 --> 00:11:47,279

northeast came there on the weekends

301  
00:11:55,350 --> 00:11:53,269

[Music]

302  
00:11:57,990 --> 00:11:55,360

it was sort of assumed that astronauts

303  
00:11:59,509 --> 00:11:58,000

never had hard times yes i've had hard

304  
00:12:00,710 --> 00:11:59,519

times too at some point in everybody's

305  
00:12:02,150 --> 00:12:00,720

life they're going to have that moment

306  
00:12:03,670 --> 00:12:02,160

where they're going to have to

307  
00:12:05,910 --> 00:12:03,680

step off the ledge they're going to have

308  
00:12:07,910 --> 00:12:05,920

to just make that push out into the void

309  
00:12:08,949 --> 00:12:07,920

and it's always always always going to

310  
00:12:10,870 --> 00:12:08,959

be a

311  
00:12:13,509 --> 00:12:10,880

extreme gut check but i think the

312  
00:12:16,310 --> 00:12:13,519

important thing is to keep your goal in

313  
00:12:18,870 --> 00:12:16,320

mind and my goal was to succeed and

314

00:12:21,670 --> 00:12:18,880

eventually become an astronaut and to be

315

00:12:23,990 --> 00:12:21,680

patient enough to in order to hang in

316

00:12:26,470 --> 00:12:24,000

there in other words don't quit don't

317

00:12:28,069 --> 00:12:26,480

ever let anybody tell you that you can't

318

00:12:30,790 --> 00:12:28,079

do something and always have an

319

00:12:33,670 --> 00:12:30,800

alternative plan if things in your life

320

00:12:37,590 --> 00:12:33,680

kind of go awry you never

321

00:12:39,670 --> 00:12:37,600

learn a damn thing with your successes

322

00:12:41,190 --> 00:12:39,680

and so so the idea of failure is

323

00:12:42,310 --> 00:12:41,200

probably the best thing that can happen

324

00:12:45,430 --> 00:12:42,320

to people

325

00:12:47,430 --> 00:12:45,440

who will want lasting success

326

00:12:49,110 --> 00:12:47,440

because on the next time around you

327

00:12:51,590 --> 00:12:49,120

think your way through

328

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

a better way a more creative way to get

329

00:12:55,269 --> 00:12:52,800

through

330

00:13:01,990 --> 00:12:55,279

to your success and then it forces you

331

00:13:06,870 --> 00:13:03,910

well i feel very honored to be the first

332

00:13:08,629 --> 00:13:06,880

black astronaut to fly in space and in

333

00:13:10,710 --> 00:13:08,639

that role one of the things that i

334

00:13:11,750 --> 00:13:10,720

wanted to do is not only be a role model

335

00:13:14,310 --> 00:13:11,760

for

336

00:13:17,509 --> 00:13:14,320

african americans on the ground but also

337

00:13:20,470 --> 00:13:17,519

be a leader in helping pull other black

338

00:13:22,790 --> 00:13:20,480

astronauts into space with me it is

339

00:13:23,910 --> 00:13:22,800

hugely important to see people who look

340

00:13:27,190 --> 00:13:23,920

like you

341

00:13:30,389 --> 00:13:27,200

um and who can inspire you especially in

342

00:13:32,710 --> 00:13:30,399

fields that you want um because it shows

343

00:13:34,150 --> 00:13:32,720

you i mean right there

344

00:13:35,509 --> 00:13:34,160

the people that are there that you can

345

00:13:38,069 --> 00:13:35,519

touch that you can feel that you can

346

00:13:40,629 --> 00:13:38,079

reach out to that you can talk to

347

00:13:42,710 --> 00:13:40,639

that you know if they can do it then

348

00:13:44,470 --> 00:13:42,720

there's a chance for me to do it too

349

00:13:46,790 --> 00:13:44,480

when i was first thinking about becoming

350

00:13:48,629 --> 00:13:46,800

an astronaut i asked my father can black

351

00:13:49,829 --> 00:13:48,639

people become astronauts remember this

352

00:13:51,590 --> 00:13:49,839

is just a few years after the civil

353

00:13:53,110 --> 00:13:51,600

rights act of 64 had been passed and

354

00:13:54,790 --> 00:13:53,120

there was still a lot of segregation it

355

00:13:56,470 --> 00:13:54,800

didn't go away overnight

356

00:13:58,230 --> 00:13:56,480

and he looked at me he says

357

00:13:59,990 --> 00:13:58,240

not only can you be an astronaut there

358

00:14:01,350 --> 00:14:00,000

have been people black people it was at

359

00:14:03,030 --> 00:14:01,360

least one black pilot who was selected

360

00:14:05,189 --> 00:14:03,040

to be an astronaut but the fact that he

361

00:14:08,710 --> 00:14:05,199

had gone out there and had blazed that

362

00:14:09,509 --> 00:14:08,720

trail meant to me as a five-year-old boy

363

00:14:11,110 --> 00:14:09,519

that

364

00:14:12,949 --> 00:14:11,120

there was no limit there was no there

365

00:14:14,230 --> 00:14:12,959

wasn't nobody's going to stand in my way

366

00:14:15,829 --> 00:14:14,240

the only way i was not going to become

367

00:14:17,670 --> 00:14:15,839

an astronaut is if i decided not to

368

00:14:20,069 --> 00:14:17,680

become an astronaut and i needed that

369

00:14:22,230 --> 00:14:20,079

role model out there to inspire me i you

370

00:14:24,150 --> 00:14:22,240

know i have a connection to all the

371

00:14:26,150 --> 00:14:24,160

african-american astronauts because in

372

00:14:28,870 --> 00:14:26,160

some way either we were in the office

373

00:14:31,030 --> 00:14:28,880

together and so we share experiences

374

00:14:32,790 --> 00:14:31,040

from that or they came before me and i

375

00:14:35,189 --> 00:14:32,800

met them and

376

00:14:37,350 --> 00:14:35,199

it's just a small

377

00:14:38,949 --> 00:14:37,360

sorority slash fraternity

378

00:14:40,150 --> 00:14:38,959

and we try to support each other and you

379

00:14:43,829 --> 00:14:40,160

know we get together every once in a

380

00:14:46,069 --> 00:14:43,839

while and talk and so it's a great group

381

00:15:10,870 --> 00:14:46,079

to be a part of and i appreciate each

382

00:15:10,880 --> 00:15:21,990

and

383

00:15:25,269 --> 00:15:23,670

i want to frame this as this is all

384

00:15:29,030 --> 00:15:25,279

about you guys because you are our

385

00:15:30,310 --> 00:15:29,040

future and again he said ask us anything

386

00:15:33,030 --> 00:15:30,320

but the transparency and the

387

00:15:35,509 --> 00:15:33,040

authenticity is is so important that you

388

00:15:37,829 --> 00:15:35,519

guys go back because you're the leaders

389

00:15:39,110 --> 00:15:37,839

what would the next big culture shift

390

00:15:42,150 --> 00:15:39,120

would you like to see would you want it

391

00:15:45,269 --> 00:15:42,160

to be when i think about what

392

00:15:47,670 --> 00:15:45,279

bus is doing jeff bezos

393

00:15:48,710 --> 00:15:47,680

these billionaires are spending a lot of

394

00:15:50,710 --> 00:15:48,720

money

395

00:15:53,829 --> 00:15:50,720

on these new platforms that's going to

396

00:15:55,430 --> 00:15:53,839

enable us to have that life to have that

397

00:15:57,350 --> 00:15:55,440

economy in space

398

00:15:59,509 --> 00:15:57,360

but then when i go to

399

00:16:00,949 --> 00:15:59,519

you know our communities our black and

400

00:16:03,350 --> 00:16:00,959

brown communities

401  
00:16:04,629 --> 00:16:03,360  
and see what the kids are doing and

402  
00:16:07,590 --> 00:16:04,639  
seeing and seeing whether they're

403  
00:16:10,870 --> 00:16:07,600  
prepared for that future that's when i'm

404  
00:16:13,110 --> 00:16:10,880  
gonna go oh we got a lot of work to do

405  
00:16:15,590 --> 00:16:13,120  
because if we're not there

406  
00:16:17,990 --> 00:16:15,600  
and we're gonna be stuck on earth right

407  
00:16:20,230 --> 00:16:18,000  
so they're gonna leave us behind

408  
00:16:22,870 --> 00:16:20,240  
so my vision is that we don't get meth

409  
00:16:26,870 --> 00:16:22,880  
behind as a people

410  
00:16:28,150 --> 00:16:26,880  
i got to tell a quick story so yesterday

411  
00:16:31,990 --> 00:16:28,160  
i was in

412  
00:16:33,829 --> 00:16:32,000  
national car rental getting my car

413  
00:16:35,829 --> 00:16:33,839

and this whole lady was running i was

414

00:16:37,030 --> 00:16:35,839

like hey you know she saw my nasty shirt

415

00:16:37,990 --> 00:16:37,040

on she said

416

00:16:40,389 --> 00:16:38,000

nasa

417

00:16:41,910 --> 00:16:40,399

oh is there this thing tomorrow at space

418

00:16:43,749 --> 00:16:41,920

center houston i'm like yeah are you

419

00:16:45,910 --> 00:16:43,759

coming oh no i didn't fill out the

420

00:16:49,110 --> 00:16:45,920

application i didn't know i said and she

421

00:16:51,829 --> 00:16:49,120

was supposed to be off yesterday right

422

00:16:54,710 --> 00:16:51,839

she was there i was there

423

00:16:56,710 --> 00:16:54,720

and she is here today because she was

424

00:16:58,069 --> 00:16:56,720

supposed to be here today to hear this

425

00:17:00,069 --> 00:16:58,079

chemistry major

426  
00:17:02,790 --> 00:17:00,079  
going to rule the world one day maybe be

427  
00:17:04,549 --> 00:17:02,800  
elon elana musk too

428  
00:17:05,990 --> 00:17:04,559  
i don't know right right but this is

429  
00:17:07,270 --> 00:17:06,000  
where it starts like we're talking a lot

430  
00:17:08,949 --> 00:17:07,280  
about what we see for the future and

431  
00:17:09,909 --> 00:17:08,959  
like shaping a lot of the stuff for the

432  
00:17:11,829 --> 00:17:09,919  
future

433  
00:17:13,669 --> 00:17:11,839  
and there's so many

434  
00:17:15,029 --> 00:17:13,679  
schools so many

435  
00:17:16,870 --> 00:17:15,039  
um elementary schools that don't have a

436  
00:17:19,270 --> 00:17:16,880  
lot of funds and et cetera but people

437  
00:17:21,350 --> 00:17:19,280  
like you come in and they talk and then

438  
00:17:23,510 --> 00:17:21,360

my life has changed now i'm an astronaut

439

00:17:24,630 --> 00:17:23,520

you know that's that's crazy for me i've

440

00:17:26,789 --> 00:17:24,640

always wanted to be a scientist i've

441

00:17:28,390 --> 00:17:26,799

always wanted to work like in

442

00:17:30,870 --> 00:17:28,400

nasa i've always wanted to do this has

443

00:17:32,470 --> 00:17:30,880

been my entire life like when i was two

444

00:17:33,830 --> 00:17:32,480

years old i drew a permanent marker on

445

00:17:35,909 --> 00:17:33,840

the wall all of my friends and they were

446

00:17:37,590 --> 00:17:35,919

all astronauts

447

00:17:39,110 --> 00:17:37,600

etc and i've always known what i wanted

448

00:17:40,230 --> 00:17:39,120

to do with myself so it was beautiful

449

00:17:41,990 --> 00:17:40,240

that i felt like the universe came up

450

00:17:43,190 --> 00:17:42,000

with the confirmation like hey

451

00:17:45,110 --> 00:17:43,200

well you're a little bit nervous about

452

00:17:47,110 --> 00:17:45,120

starting classes back up but

453

00:17:48,789 --> 00:17:47,120

here goes leland and

454

00:17:50,390 --> 00:17:48,799

he comes in with all this positivity and

455

00:17:52,870 --> 00:17:50,400

like yeah you should do it and

456

00:17:54,630 --> 00:17:52,880

i did honestly coming from places where

457

00:17:56,310 --> 00:17:54,640

i came from i didn't never see anybody

458

00:17:58,150 --> 00:17:56,320

aspire to work for nasa to be an

459

00:18:00,470 --> 00:17:58,160

astronaut or to be in these fields but

460

00:18:02,470 --> 00:18:00,480

seeing people these heroes

461

00:18:03,750 --> 00:18:02,480

excuse me reaching these heights it lets

462

00:18:04,630 --> 00:18:03,760

me know you know what i can do it's

463

00:18:07,669 --> 00:18:04,640

possible

464

00:18:09,590 --> 00:18:07,679

i have to find myself you know like um

465

00:18:10,950 --> 00:18:09,600

10 times having a lack of motivation

466

00:18:12,710 --> 00:18:10,960

often telling myself i can't do

467

00:18:14,630 --> 00:18:12,720

something if something gets too

468

00:18:16,870 --> 00:18:14,640

difficult if i if i just get frustrated

469

00:18:19,029 --> 00:18:16,880

if i fail too many times or something

470

00:18:21,270 --> 00:18:19,039

so i often just come like i see myself

471

00:18:22,789 --> 00:18:21,280

kind of like almost giving up

472

00:18:24,630 --> 00:18:22,799

so it was all like you ought to be in

473

00:18:27,029 --> 00:18:24,640

such you know leadership in strong

474

00:18:29,750 --> 00:18:27,039

positions it coffee so much within your

475

00:18:31,990 --> 00:18:29,760

time like how do i stay motivated

476

00:18:34,150 --> 00:18:32,000

so one thing that i think about

477

00:18:36,230 --> 00:18:34,160

um which can kind of seem like a burden

478

00:18:37,750 --> 00:18:36,240

at times but it can also be the power to

479

00:18:39,510 --> 00:18:37,760

keep going like i love thinking about

480

00:18:40,950 --> 00:18:39,520

the civil rights era and like the fact

481

00:18:42,390 --> 00:18:40,960

that when you see them getting off those

482

00:18:43,909 --> 00:18:42,400

buses and going to the march on

483

00:18:45,270 --> 00:18:43,919

washington for jobs and freedom say the

484

00:18:47,350 --> 00:18:45,280

whole time

485

00:18:49,430 --> 00:18:47,360

they had bags in their hands they didn't

486

00:18:51,270 --> 00:18:49,440

make those sandwiches there was a party

487

00:18:52,630 --> 00:18:51,280

making sandwiches and then there was a

488

00:18:54,310 --> 00:18:52,640

different group of people that took the

489

00:18:55,430 --> 00:18:54,320

sandwiches to the people and then there

490

00:18:56,789 --> 00:18:55,440

was a different group of people

491

00:18:59,029 --> 00:18:56,799

directing them to get on the buses they

492

00:19:00,870 --> 00:18:59,039

were organized right and that all that

493

00:19:02,150 --> 00:19:00,880

that work was done so you could sit in

494

00:19:03,830 --> 00:19:02,160

this seat

495

00:19:05,510 --> 00:19:03,840

and when you think about that

496

00:19:07,110 --> 00:19:05,520

our legacy runs from the very beginning

497

00:19:09,350 --> 00:19:07,120

up to you right now

498

00:19:10,789 --> 00:19:09,360

it's your job to keep it on

499

00:19:12,950 --> 00:19:10,799

and sometimes that can seem like a

500

00:19:14,630 --> 00:19:12,960

burden but it's also a privilege we are

501  
00:19:18,470 --> 00:19:14,640  
we are connected to all you know we come

502  
00:19:23,190 --> 00:19:21,029  
what are the emotions uh that come to

503  
00:19:24,390 --> 00:19:23,200  
you to your mind when you think about

504  
00:19:26,870 --> 00:19:24,400  
juneteenth

505  
00:19:28,070 --> 00:19:26,880  
and the role that you play today

506  
00:19:28,870 --> 00:19:28,080  
oh wow

507  
00:19:32,470 --> 00:19:28,880  
so

508  
00:19:35,029 --> 00:19:32,480  
juneteenth is a way that we honor

509  
00:19:35,830 --> 00:19:35,039  
uh the fact that right here not far from

510  
00:19:37,430 --> 00:19:35,840  
us

511  
00:19:39,350 --> 00:19:37,440  
after the emancipation proclamation was

512  
00:19:41,990 --> 00:19:39,360  
signed we had slaves that were still

513  
00:19:44,630 --> 00:19:42,000

enslaved and it was two years after that

514

00:19:46,150 --> 00:19:44,640

process that they were able to actually

515

00:19:48,470 --> 00:19:46,160

attain the freedom

516

00:19:50,230 --> 00:19:48,480

and so juneteenth is uh

517

00:19:51,590 --> 00:19:50,240

now received a lot of attention but it

518

00:19:53,510 --> 00:19:51,600

was something that wasn't widely

519

00:19:56,070 --> 00:19:53,520

celebrated so one i'm encouraged to know

520

00:19:57,990 --> 00:19:56,080

that it's become something that is

521

00:19:59,669 --> 00:19:58,000

gaining national and and maybe even

522

00:20:01,590 --> 00:19:59,679

global attention

523

00:20:03,750 --> 00:20:01,600

but it also is a reminder that you know

524

00:20:06,630 --> 00:20:03,760

we we have come a long way but we have a

525

00:20:08,870 --> 00:20:06,640

long way to go

526

00:20:11,590 --> 00:20:08,880

the person who started

527

00:20:14,390 --> 00:20:11,600

the journal of negro history and then

528

00:20:16,630 --> 00:20:14,400

started negro history week which is what

529

00:20:17,990 --> 00:20:16,640

we now celebrate as black history month

530

00:20:22,070 --> 00:20:18,000

when he started it he wrote in the

531

00:20:22,950 --> 00:20:22,080

journal he said we we need not celebrate

532

00:20:24,390 --> 00:20:22,960

uh

533

00:20:27,029 --> 00:20:24,400

negro history

534

00:20:30,390 --> 00:20:27,039

we celebrate the negro in history what

535

00:20:33,029 --> 00:20:30,400

we need is history void of racial gender

536

00:20:36,149 --> 00:20:33,039

and religious bias because it's our

537

00:20:37,990 --> 00:20:36,159

story all of our stories and so i'm just

538

00:20:42,549 --> 00:20:38,000

encouraged that we have a chance now to

539

00:20:47,669 --> 00:20:44,789

so victor i'm going to ask you what

540

00:20:50,230 --> 00:20:47,679

strategic steps are needed to offer more

541

00:20:51,590 --> 00:20:50,240

persons of color in more active roles

542

00:20:53,110 --> 00:20:51,600

there's a lot of things we could do and

543

00:20:54,549 --> 00:20:53,120

we don't have time we could take all the

544

00:20:56,549 --> 00:20:54,559

time we have today to talk about just

545

00:20:58,789 --> 00:20:56,559

what we can do but one thing that we

546

00:21:01,669 --> 00:20:58,799

must do is those of us who are already

547

00:21:03,830 --> 00:21:01,679

in this enterprise we have to go and you

548

00:21:05,430 --> 00:21:03,840

know it's not just like encouraging you

549

00:21:07,430 --> 00:21:05,440

you know we i love this saying we say

550

00:21:09,590 --> 00:21:07,440

that we have space for you listen we

551  
00:21:11,909 --> 00:21:09,600  
need you we need you

552  
00:21:13,669 --> 00:21:11,919  
when the baby boomer generation retires

553  
00:21:15,510 --> 00:21:13,679  
the science and technology jobs that are

554  
00:21:17,270 --> 00:21:15,520  
going to go away if you look at the

555  
00:21:18,870 --> 00:21:17,280  
university students in undergrad and

556  
00:21:19,990 --> 00:21:18,880  
graduate school right now we don't have

557  
00:21:21,909 --> 00:21:20,000  
enough of you

558  
00:21:24,070 --> 00:21:21,919  
in science and tech to fill those jobs

559  
00:21:25,990 --> 00:21:24,080  
so we need you it is a national security

560  
00:21:27,750 --> 00:21:26,000  
imperative for you all to become the

561  
00:21:28,950 --> 00:21:27,760  
best you you can be so that we can keep

562  
00:21:31,669 --> 00:21:28,960  
doing what we do

563  
00:21:34,310 --> 00:21:31,679

so we have an audience with students and

564

00:21:36,710 --> 00:21:34,320

i know that they want to hear about your

565

00:21:38,149 --> 00:21:36,720

space time so what was your most

566

00:21:39,750 --> 00:21:38,159

challenging

567

00:21:42,310 --> 00:21:39,760

time in space can you tell us that

568

00:21:45,669 --> 00:21:42,320

stephanie

569

00:21:47,750 --> 00:21:45,679

probably my most challenging time was uh

570

00:21:49,750 --> 00:21:47,760

during the sts-120 mission we were

571

00:21:51,990 --> 00:21:49,760

building the international space station

572

00:21:54,070 --> 00:21:52,000

and so we were bringing the node 2

573

00:21:55,029 --> 00:21:54,080

module to the international space

574

00:21:57,960 --> 00:21:55,039

station

575

00:22:01,110 --> 00:21:57,970

solar a deploy starting on my mark

576

00:22:02,470 --> 00:22:01,120

[Music]

577

00:22:04,230 --> 00:22:02,480

and it's a smaller module it's a

578

00:22:06,070 --> 00:22:04,240

connecting module on the end of the us

579

00:22:08,789 --> 00:22:06,080

laboratory but it allows our partner

580

00:22:11,190 --> 00:22:08,799

laboratories to have a connection point

581

00:22:12,870 --> 00:22:11,200

on the space station uh our partners

582

00:22:16,310 --> 00:22:12,880

from europe and japan

583

00:22:17,990 --> 00:22:16,320

and um during that mission we had

584

00:22:20,710 --> 00:22:18,000

installed that module and it also

585

00:22:23,270 --> 00:22:20,720

required reconfiguring the electrical

586

00:22:26,950 --> 00:22:23,280

system so we had to move uh one of the

587

00:22:28,789 --> 00:22:26,960

solar arrays from a central position to

588

00:22:29,830 --> 00:22:28,799

the end of the truss on the space

589

00:22:31,990 --> 00:22:29,840

station

590

00:22:34,149 --> 00:22:32,000

and in order to do that with the robotic

591

00:22:35,750 --> 00:22:34,159

arm basically have to fold up the solar

592

00:22:38,630 --> 00:22:35,760

array move it with the robotic arm and

593

00:22:42,149 --> 00:22:38,640

then extend it re-extend it and during

594

00:22:46,630 --> 00:22:42,159

that extension we had a dynamic event

595

00:22:51,510 --> 00:22:48,630

we

596

00:22:54,149 --> 00:22:51,520

detected some

597

00:22:56,549 --> 00:22:54,159

what appears to be a wraparound or some

598

00:22:59,190 --> 00:22:56,559

damage and we're zoomed in on it on

599

00:23:01,909 --> 00:22:59,200

camera 24 right now

600

00:23:04,390 --> 00:23:01,919

so uh similar to what you may have heard

601  
00:23:06,390 --> 00:23:04,400  
about apollo 13 where when we're in

602  
00:23:08,310 --> 00:23:06,400  
space we have limited resources we have

603  
00:23:10,230 --> 00:23:08,320  
limited

604  
00:23:12,549 --> 00:23:10,240  
materials we have to fix whatever

605  
00:23:14,470 --> 00:23:12,559  
happens with what we have on board

606  
00:23:16,390 --> 00:23:14,480  
because of this

607  
00:23:18,630 --> 00:23:16,400  
relocation it was hard for spacewalkers

608  
00:23:20,230 --> 00:23:18,640  
to reach so we had to do something that

609  
00:23:23,190 --> 00:23:20,240  
we had not practiced before with a

610  
00:23:25,190 --> 00:23:23,200  
robotic arm and the boom sensor system

611  
00:23:26,870 --> 00:23:25,200  
that we used at the time for the orbiter

612  
00:23:29,350 --> 00:23:26,880  
we hooked those two together put space

613  
00:23:31,029 --> 00:23:29,360

walker at the end and then sent him out

614

00:23:33,669 --> 00:23:31,039

to the work site with what we had

615

00:23:35,190 --> 00:23:33,679

fabricated on board these cuff links to

616

00:23:38,310 --> 00:23:35,200

tear across to

617

00:23:41,029 --> 00:23:38,320

drape across the hole to give the

618

00:23:41,990 --> 00:23:41,039

panel system additional rigidity so that

619

00:23:44,870 --> 00:23:42,000

we could

620

00:23:47,590 --> 00:23:44,880

continue the extension

621

00:23:48,870 --> 00:23:47,600

so i say all that to say

622

00:23:50,950 --> 00:23:48,880

we work together with our mission

623

00:23:53,110 --> 00:23:50,960

control team to come up with a solution

624

00:23:56,390 --> 00:23:53,120

but we had to use the resources that we

625

00:23:57,909 --> 00:23:56,400

had in hand uh do robotics and space

626

00:24:00,230 --> 00:23:57,919

walking operations that we had not

627

00:24:02,149 --> 00:24:00,240

performed before and rely on each

628

00:24:03,840 --> 00:24:02,159

other's and our skills

629

00:24:04,420 --> 00:24:03,850

the good days work right there

630

00:24:05,620 --> 00:24:04,430

[Applause]

631

00:24:10,549 --> 00:24:05,630

[Music]

632

00:24:14,470 --> 00:24:11,990

i'm gonna go back a little bit because

633

00:24:17,110 --> 00:24:14,480

it ties into the story she just told and

634

00:24:18,549 --> 00:24:17,120

so i go into test pilot school and we as

635

00:24:20,710 --> 00:24:18,559

a student as a class have to go to a

636

00:24:23,510 --> 00:24:20,720

conference and at this conference the

637

00:24:25,430 --> 00:24:23,520

keynote speaker is pam melroy and pam

638

00:24:27,909 --> 00:24:25,440

melroy who is i believe the second

639

00:24:29,830 --> 00:24:27,919

female shuttle commander stands up and

640

00:24:31,830 --> 00:24:29,840

tells that story she tells the story

641

00:24:33,590 --> 00:24:31,840

about we the cufflinks that's the they

642

00:24:35,750 --> 00:24:33,600

use the cufflinks and she tells that

643

00:24:37,750 --> 00:24:35,760

story and that's the day i decided all

644

00:24:39,669 --> 00:24:37,760

right i'm throwing an application in so

645

00:24:41,830 --> 00:24:39,679

i also think it's neat how our stories

646

00:24:43,190 --> 00:24:41,840

do link together like you just said uh

647

00:24:45,830 --> 00:24:43,200

and i think that that's beautiful this

648

00:24:58,230 --> 00:24:45,840

legacy here that can continues to to

649

00:25:03,669 --> 00:25:00,549

i found myself immediately thrown into a

650

00:25:05,590 --> 00:25:03,679

leadership situation uh for which i was

651  
00:25:08,630 --> 00:25:05,600  
unbelievably well prepared but i didn't

652  
00:25:10,710 --> 00:25:08,640  
know it because my idea of what i was

653  
00:25:13,669 --> 00:25:10,720  
going to have to do as a leader as the

654  
00:25:16,070 --> 00:25:13,679  
leader of nasa the leader of human space

655  
00:25:18,470 --> 00:25:16,080  
flight the leader of science the leader

656  
00:25:20,470 --> 00:25:18,480  
of space stuff for the whole world if

657  
00:25:22,470 --> 00:25:20,480  
you've ever heard of there is something

658  
00:25:24,950 --> 00:25:22,480  
called the imposter syndrome

659  
00:25:25,990 --> 00:25:24,960  
it's a feeling that people get i get all

660  
00:25:27,029 --> 00:25:26,000  
the time

661  
00:25:29,830 --> 00:25:27,039  
that

662  
00:25:32,310 --> 00:25:29,840  
you don't belong where you are um

663  
00:25:34,390 --> 00:25:32,320

and it's really important for you to

664

00:25:36,310 --> 00:25:34,400

recognize that you that you're suffering

665

00:25:38,549 --> 00:25:36,320

from the imposter syndrome

666

00:25:40,149 --> 00:25:38,559

because it is a syndrome it's not real

667

00:25:42,310 --> 00:25:40,159

you you do belong

668

00:25:44,230 --> 00:25:42,320

where you are but but you have had

669

00:25:45,269 --> 00:25:44,240

people put doubts in your mind for so

670

00:25:47,190 --> 00:25:45,279

long

671

00:25:49,269 --> 00:25:47,200

and i had grown up in the segregated

672

00:25:52,070 --> 00:25:49,279

south where you know i was taught to

673

00:25:53,909 --> 00:25:52,080

believe that that that things like being

674

00:25:55,990 --> 00:25:53,919

the nasa administrator or like being the

675

00:25:57,669 --> 00:25:56,000

president of the united states were not

676

00:25:59,750 --> 00:25:57,679

things to which i should aspire that's

677

00:26:01,430 --> 00:25:59,760

not what black people did where i

678

00:26:03,909 --> 00:26:01,440

thought i didn't belong it turned out

679

00:26:05,430 --> 00:26:03,919

that not only did i belong but but i i

680

00:26:09,930 --> 00:26:05,440

tended to

681

00:26:14,070 --> 00:26:12,070

[Music]

682

00:26:16,390 --> 00:26:14,080

i mean if you're really passionate about

683

00:26:18,149 --> 00:26:16,400

doing something you what you do you end

684

00:26:19,350 --> 00:26:18,159

up finding out who who does it really

685

00:26:22,149 --> 00:26:19,360

really well

686

00:26:23,430 --> 00:26:22,159

uh you know uh and because i had

687

00:26:24,390 --> 00:26:23,440

difficulty

688

00:26:26,470 --> 00:26:24,400

because there were things a lot of

689

00:26:28,870 --> 00:26:26,480

things i didn't know about art

690

00:26:31,830 --> 00:26:28,880

but i had to think my way through it a

691

00:26:34,630 --> 00:26:31,840

tragic story the guy called me aside and

692

00:26:36,930 --> 00:26:34,640

asked me uh uh don't bring any more of

693

00:26:38,310 --> 00:26:36,940

those things here

694

00:26:40,789 --> 00:26:38,320

[Music]

695

00:26:42,230 --> 00:26:40,799

so now i had to be creative

696

00:26:44,390 --> 00:26:42,240

oh really

697

00:26:46,950 --> 00:26:44,400

so i went straight to the bank and i

698

00:26:49,350 --> 00:26:46,960

borrowed 60 000

699

00:26:51,110 --> 00:26:49,360

and built a boundary

700

00:26:53,430 --> 00:26:51,120

and i didn't know how

701  
00:26:55,750 --> 00:26:53,440  
to build a foundry

702  
00:26:57,430 --> 00:26:55,760  
so i went to the people who make foundry

703  
00:26:59,669 --> 00:26:57,440  
equipment

704  
00:27:01,590 --> 00:26:59,679  
and then they when i got to the molds i

705  
00:27:03,750 --> 00:27:01,600  
didn't know how to make a mold

706  
00:27:04,950 --> 00:27:03,760  
so i went to the people who sold more

707  
00:27:07,830 --> 00:27:04,960  
material

708  
00:27:10,789 --> 00:27:07,840  
because i i have to do it myself because

709  
00:27:12,710 --> 00:27:10,799  
the larger community won't do it for me

710  
00:27:13,990 --> 00:27:12,720  
so i've done that throughout my entire

711  
00:27:16,390 --> 00:27:14,000  
art career

712  
00:27:22,950 --> 00:27:16,400  
you know they close a door in my face

713  
00:27:27,430 --> 00:27:25,669

i am inspired i am very hopeful that in

714

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

the future there will be

715

00:27:31,750 --> 00:27:29,360

more women of color in space to the

716

00:27:33,750 --> 00:27:31,760

point where we cannot

717

00:27:34,870 --> 00:27:33,760

name the number right the the numbers

718

00:27:36,710 --> 00:27:34,880

are relevant

719

00:27:39,269 --> 00:27:36,720

as i said my mother was a librarian so i

720

00:27:42,070 --> 00:27:39,279

grew up loving books and poetry and

721

00:27:45,110 --> 00:27:42,080

stuff like that and my favorite poet is

722

00:27:48,389 --> 00:27:45,120

is a woman by the name of nikki giovanni

723

00:27:50,789 --> 00:27:48,399

she she wrote a poem many years ago

724

00:27:52,230 --> 00:27:50,799

and it's called quilting the black-eyed

725

00:27:55,190 --> 00:27:52,240

pea

726

00:27:56,389 --> 00:27:55,200

we are going to mars and this was before

727

00:27:58,389 --> 00:27:56,399

we started

728

00:28:00,310 --> 00:27:58,399

talking about taking trips to mars

729

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

because in it she tells

730

00:28:04,470 --> 00:28:01,840

you know why black people why people

731

00:28:06,310 --> 00:28:04,480

like me are ideally suited to lead the

732

00:28:08,710 --> 00:28:06,320

path to mars

733

00:28:11,269 --> 00:28:08,720

quilting the black eyed pea

734

00:28:16,789 --> 00:28:11,279

we're going to mars

735

00:28:19,590 --> 00:28:16,799

marco polo rocketed to china

736

00:28:22,149 --> 00:28:19,600

for the same reason columbus trimmed his

737

00:28:24,950 --> 00:28:22,159

sails on the dream of spices

738

00:28:26,870 --> 00:28:24,960

for the very same reason shackleton was

739

00:28:29,350 --> 00:28:26,880

enchanted with penguins

740

00:28:32,070 --> 00:28:29,360

for the reason we fall in love

741

00:28:33,750 --> 00:28:32,080

it's the only adventure

742

00:28:35,590 --> 00:28:33,760

and that's the way the trip to mars is

743

00:28:37,909 --> 00:28:35,600

going to be we're going to be holed up

744

00:28:39,110 --> 00:28:37,919

in our spaceship and the first few days

745

00:28:40,470 --> 00:28:39,120

we're going to be able to look back at

746

00:28:41,669 --> 00:28:40,480

our planet earth and we'll see this

747

00:28:43,430 --> 00:28:41,679

little blue dot

748

00:28:45,590 --> 00:28:43,440

and and after a couple of weeks that

749

00:28:47,110 --> 00:28:45,600

little blue dot's gonna almost disappear

750

00:28:49,110 --> 00:28:47,120

and there'll come a time somewhere in

751

00:28:50,230 --> 00:28:49,120

that eight months their journey when it

752

00:28:52,149 --> 00:28:50,240

doesn't make any difference which

753

00:28:53,430 --> 00:28:52,159

direction you look you're not going to

754

00:28:54,549 --> 00:28:53,440

know where you're going and you're not

755

00:28:56,149 --> 00:28:54,559

going to know where you came from

756

00:29:03,669 --> 00:28:56,159

because it's all going to look just kind

757

00:29:07,990 --> 00:29:06,470

and also now joining us is dr bobby

758

00:29:13,430 --> 00:29:08,000

satcher

759

00:29:16,389 --> 00:29:13,440

and he has logged over 259 hours in

760

00:29:19,029 --> 00:29:16,399

space and is currently a doctor in

761

00:29:21,400 --> 00:29:19,039

surgical oncology at md anderson so

762

00:29:26,549 --> 00:29:21,410

thank you for joining

763

00:29:33,029 --> 00:29:29,990

well my story is of course i i grew up

764

00:29:34,950 --> 00:29:33,039

in hampton virginia and um there was

765

00:29:35,830 --> 00:29:34,960

langley that was there

766

00:29:39,350 --> 00:29:35,840

and

767

00:29:41,909 --> 00:29:39,360

uh was inspired you know to want to try

768

00:29:42,870 --> 00:29:41,919

to be an astronaut pretty early on from

769

00:29:45,430 --> 00:29:42,880

watching

770

00:29:47,830 --> 00:29:45,440

apollo missions and of course didn't see

771

00:29:51,830 --> 00:29:47,840

anybody that looked like myself during

772

00:29:54,710 --> 00:29:51,840

that um it wasn't until the shuttle era

773

00:29:56,710 --> 00:29:54,720

and you know some of my

774

00:29:59,110 --> 00:29:56,720

co-astronauts here that

775

00:30:03,350 --> 00:29:59,120

sort of blazed that trail when i was in

776

00:30:07,110 --> 00:30:05,430

you know thought that i could do it

777

00:30:09,590 --> 00:30:07,120

had the chance

778

00:30:11,830 --> 00:30:09,600

to meet ron mcnair he also

779

00:30:14,870 --> 00:30:11,840

uh you know went to mit for his graduate

780

00:30:17,110 --> 00:30:14,880

studies and he was there giving a talk

781

00:30:18,549 --> 00:30:17,120

and so that was the first time that i

782

00:30:20,789 --> 00:30:18,559

sort of said to myself i was an

783

00:30:22,549 --> 00:30:20,799

undergraduate at mit but first time i

784

00:30:24,389 --> 00:30:22,559

sort of said yeah you know maybe that's

785

00:30:27,029 --> 00:30:24,399

something i could do so that was a very

786

00:30:28,789 --> 00:30:27,039

inspirational moment

787

00:30:30,710 --> 00:30:28,799

we did talk about you know the fact that

788

00:30:33,510 --> 00:30:30,720

representation matters

789

00:30:37,990 --> 00:30:33,520

and uh so two of our

790

00:30:40,389 --> 00:30:38,000

space heroes that actually sacrifice

791

00:30:42,630 --> 00:30:40,399

on behalf of all of us

792

00:30:44,789 --> 00:30:42,640

their spouses are here today and i want

793

00:30:47,430 --> 00:30:44,799

to recognize them

794

00:30:51,860 --> 00:30:47,440

i want to recognize cheryl mcnair and i

795

00:30:57,830 --> 00:30:55,350

[Applause]

796

00:31:03,990 --> 00:30:57,840

of mike anderson so thank you both for

797

00:31:06,710 --> 00:31:05,509

jeanette want to bring you into the

798

00:31:07,990 --> 00:31:06,720

conversation

799

00:31:10,389 --> 00:31:08,000

all right well

800

00:31:12,070 --> 00:31:10,399

my um journey is very similar to

801  
00:31:14,149 --> 00:31:12,080  
everyone's here but there's always these

802  
00:31:16,950 --> 00:31:14,159  
different uh nuances you know we were

803  
00:31:18,230 --> 00:31:16,960  
talking earlier about you know

804  
00:31:19,990 --> 00:31:18,240  
you're going to have things to get

805  
00:31:22,389 --> 00:31:20,000  
through and i think all of us had

806  
00:31:24,630 --> 00:31:22,399  
similar experiences and you know you

807  
00:31:27,269 --> 00:31:24,640  
grew up in segregated segregated

808  
00:31:29,750 --> 00:31:27,279  
areas and things happen but i always

809  
00:31:31,190 --> 00:31:29,760  
focus on how do you handle those things

810  
00:31:33,509 --> 00:31:31,200  
when they do occur because they're going

811  
00:31:35,590 --> 00:31:33,519  
to occur you know there's a verse in the

812  
00:31:36,549 --> 00:31:35,600  
bible that always says that you know in

813  
00:31:39,509 --> 00:31:36,559

this world you're going to have

814

00:31:41,750 --> 00:31:39,519

tribulation but take heart you've over

815

00:31:44,149 --> 00:31:41,760

i've overcome the world and so that just

816

00:31:46,549 --> 00:31:44,159

tells me that troubles are going to come

817

00:31:49,029 --> 00:31:46,559

and so how do you handle those and you

818

00:31:51,830 --> 00:31:49,039

know having a sense of self and knowing

819

00:31:53,750 --> 00:31:51,840

who you are and what you're capable of

820

00:31:56,149 --> 00:31:53,760

and not letting people feed negative

821

00:31:58,710 --> 00:31:56,159

energy into your life is hugely

822

00:32:01,269 --> 00:31:58,720

important but also being a proactive

823

00:32:03,350 --> 00:32:01,279

person rather than being reactive has

824

00:32:06,070 --> 00:32:03,360

been things that i've stood on for my

825

00:32:07,990 --> 00:32:06,080

entire career i'm like a black female

826

00:32:09,590 --> 00:32:08,000

and aerospace engineer

827

00:32:11,909 --> 00:32:09,600

there was no one that looked like me in

828

00:32:14,870 --> 00:32:11,919

aerospace engineering but that never

829

00:32:17,110 --> 00:32:14,880

even dawned on me until i left there

830

00:32:18,950 --> 00:32:17,120

these are the kind of things that

831

00:32:20,870 --> 00:32:18,960

i always love to tell students you know

832

00:32:23,269 --> 00:32:20,880

there's going to be times when you have

833

00:32:24,950 --> 00:32:23,279

to figure out who you are and it's in

834

00:32:26,950 --> 00:32:24,960

those tough times

835

00:32:30,470 --> 00:32:26,960

that you actually really realize what

836

00:32:33,909 --> 00:32:32,470

i really appreciate that because a lot

837

00:32:35,590 --> 00:32:33,919

of times

838

00:32:38,630 --> 00:32:35,600

as a person you get stuck in this place

839

00:32:39,830 --> 00:32:38,640

of fear to do something

840

00:32:41,190 --> 00:32:39,840

i don't know if i'm going to fit into

841

00:32:42,470 --> 00:32:41,200

this space i don't know if i should be

842

00:32:44,149 --> 00:32:42,480

here i don't know what i should be doing

843

00:32:46,310 --> 00:32:44,159

or how i should be doing it

844

00:32:48,070 --> 00:32:46,320

and you don't do it

845

00:32:49,830 --> 00:32:48,080

you just sit you just sit

846

00:32:50,950 --> 00:32:49,840

and it's it's easy to do that when you

847

00:32:53,110 --> 00:32:50,960

don't have people around you you're not

848

00:32:54,789 --> 00:32:53,120

meeting people who are doing things i

849

00:32:56,389 --> 00:32:54,799

think you hit the nail on the head right

850

00:32:58,470 --> 00:32:56,399

there it's all about supporting one

851  
00:32:59,990 --> 00:32:58,480  
another you know there's enough threats

852  
00:33:01,990 --> 00:33:00,000  
outside of the tent

853  
00:33:04,149 --> 00:33:02,000  
to fill a whole day

854  
00:33:06,389 --> 00:33:04,159  
so we have to support each other all the

855  
00:33:08,789 --> 00:33:06,399  
time if we do that

856  
00:33:11,430 --> 00:33:08,799  
i don't want to stop them

857  
00:33:12,310 --> 00:33:11,440  
like i often limited myself just because

858  
00:33:13,750 --> 00:33:12,320  
um

859  
00:33:15,350 --> 00:33:13,760  
basically like my surroundings i just

860  
00:33:17,190 --> 00:33:15,360  
thought like the world like i thought

861  
00:33:19,029 --> 00:33:17,200  
this was my world

862  
00:33:20,630 --> 00:33:19,039  
and like one thing i'm learning too is

863  
00:33:21,669 --> 00:33:20,640

all like you know a lot of stuff may

864

00:33:23,269 --> 00:33:21,679

come up

865

00:33:25,269 --> 00:33:23,279

and you may be in a situation where you

866

00:33:27,990 --> 00:33:25,279

may not know where you are

867

00:33:30,549 --> 00:33:28,000

or you can't find yourself but

868

00:33:33,110 --> 00:33:30,559

we can't give up like we just can't i

869

00:33:34,070 --> 00:33:33,120

mean i always knew i wanted to do more

870

00:33:36,149 --> 00:33:34,080

than

871

00:33:40,149 --> 00:33:36,159

just be there

872

00:33:41,110 --> 00:33:40,159

watching cars go by stop

873

00:33:43,669 --> 00:33:41,120

and

874

00:33:46,789 --> 00:33:43,679

you know i didn't i didn't allow that to

875

00:33:48,710 --> 00:33:46,799

you know define my imagination in terms

876

00:33:49,990 --> 00:33:48,720

of i mean i sit there staring up at the

877

00:33:51,669 --> 00:33:50,000

sky

878

00:33:52,950 --> 00:33:51,679

and imagining what it would be like to

879

00:33:54,070 --> 00:33:52,960

go there

880

00:33:55,590 --> 00:33:54,080

so

881

00:33:58,789 --> 00:33:55,600

i don't think i've ever said that before

882

00:34:00,710 --> 00:33:58,799

but i you know i actually would do that

883

00:34:03,029 --> 00:34:00,720

okay so i told my mom

884

00:34:05,350 --> 00:34:03,039

uh that i was uh i was gonna do this i'm

885

00:34:06,630 --> 00:34:05,360

gonna show her that uh my notebook cuz

886

00:34:08,310 --> 00:34:06,640

like that's actually my notebook that i

887

00:34:10,869 --> 00:34:08,320

still use for class right now i'm gonna

888

00:34:12,069 --> 00:34:10,879

use this as like my my motivation to

889

00:34:16,230 --> 00:34:12,079

really

890

00:34:18,310 --> 00:34:16,240

means the world to me like this is like

891

00:34:20,230 --> 00:34:18,320

easily one of my most strict

892

00:34:21,990 --> 00:34:20,240

items right now there's not always going

893

00:34:23,430 --> 00:34:22,000

to be somebody there to cheer you on and

894

00:34:24,710 --> 00:34:23,440

as much as i would love to i would love

895

00:34:25,909 --> 00:34:24,720

to be that person you know break out

896

00:34:28,470 --> 00:34:25,919

your cell phone i'll i'll make a

897

00:34:30,550 --> 00:34:28,480

ringtone for you right now

898

00:34:31,829 --> 00:34:30,560

but but that's not reality and you're

899

00:34:33,669 --> 00:34:31,839

going to have to build something that

900

00:34:34,950 --> 00:34:33,679

works for you so one that's one of the

901  
00:34:36,230 --> 00:34:34,960  
important parts of learning and getting

902  
00:34:38,310 --> 00:34:36,240  
around groups of people like this that

903  
00:34:40,389 --> 00:34:38,320  
are diverse you learn and you you add

904  
00:34:42,629 --> 00:34:40,399  
another facet you put another tool in

905  
00:34:44,950 --> 00:34:42,639  
your toolbox i always go back to like

906  
00:34:46,629 --> 00:34:44,960  
how my mother is very religious for a

907  
00:34:49,030 --> 00:34:46,639  
christian household but she always says

908  
00:34:51,829 --> 00:34:49,040  
walk face walk by faith and not by sight

909  
00:34:53,829 --> 00:34:51,839  
baby so it's just it's something that i

910  
00:34:55,909 --> 00:34:53,839  
feel like the black community we have a

911  
00:34:58,069 --> 00:34:55,919  
hard time with because it's not only

912  
00:35:00,470 --> 00:34:58,079  
what we see but it's what we're told

913  
00:35:02,870 --> 00:35:00,480

from other people so i feel like

914

00:35:04,550 --> 00:35:02,880

all of us can do it i practice it try to

915

00:35:06,470 --> 00:35:04,560

every day because it's just so hard when

916

00:35:07,910 --> 00:35:06,480

the world's like telling you you can't

917

00:35:10,069 --> 00:35:07,920

you can't you can't or that's impossible

918

00:35:12,150 --> 00:35:10,079

or are you sure you can do that but it's

919

00:35:16,910 --> 00:35:12,160

just like i'm not walking by what i see

920

00:35:22,950 --> 00:35:19,829

[Music]

921

00:35:25,510 --> 00:35:22,960

so i want to ask one of our astronauts

922

00:35:28,470 --> 00:35:25,520

to talk about his time of doing a

923

00:35:30,230 --> 00:35:28,480

spacewalk so the record holder for a

924

00:35:32,390 --> 00:35:30,240

single space flight mission of

925

00:35:35,109 --> 00:35:32,400

spacewalks is robert kirby can you tell

926  
00:35:37,670 --> 00:35:35,119  
us about what it's like hello beamer oh

927  
00:35:39,750 --> 00:35:37,680  
my gosh it's an amazing experience and

928  
00:35:40,950 --> 00:35:39,760  
bernard could tell you too you know so

929  
00:35:43,030 --> 00:35:40,960  
when i first

930  
00:35:46,550 --> 00:35:43,040  
came to the office shortly after i came

931  
00:35:48,950 --> 00:35:46,560  
into the office bernard did his first so

932  
00:35:51,109 --> 00:35:48,960  
now i blaze the trail and i tell people

933  
00:35:52,870 --> 00:35:51,119  
all the time that's the best way to go

934  
00:35:56,870 --> 00:35:52,880  
you have someone else to blaze the trail

935  
00:35:59,990 --> 00:35:58,470  
i'm very thankful for that and then

936  
00:36:00,630 --> 00:36:00,000  
after him winston

937  
00:36:04,630 --> 00:36:00,640  
and

938  
00:36:06,870 --> 00:36:04,640

but we always had this thing you know

939

00:36:08,630 --> 00:36:06,880

you you train like you fly you fly like

940

00:36:10,310 --> 00:36:08,640

you train and then the first thing they

941

00:36:11,750 --> 00:36:10,320

tell you is but when you go on a

942

00:36:13,190 --> 00:36:11,760

spacewalk

943

00:36:14,310 --> 00:36:13,200

something's going to be different than

944

00:36:16,310 --> 00:36:14,320

you planned

945

00:36:17,670 --> 00:36:16,320

and it is so

946

00:36:20,470 --> 00:36:17,680

true

947

00:36:22,870 --> 00:36:20,480

my very first spacewalk so i'm out there

948

00:36:26,790 --> 00:36:22,880

doing my thing trying to follow the

949

00:36:27,750 --> 00:36:26,800

timeline and all of a sudden i am

950

00:36:46,550 --> 00:36:27,760

i

951  
00:36:48,630 --> 00:36:46,560  
emergency actually your heart rate went

952  
00:36:51,030 --> 00:36:48,640  
down

953  
00:36:53,190 --> 00:36:51,040  
and it's because you know

954  
00:36:55,270 --> 00:36:53,200  
the hard work's really done before you

955  
00:36:57,829 --> 00:36:55,280  
go on the space walk when you're getting

956  
00:36:59,270 --> 00:36:57,839  
ready for it so when things happen like

957  
00:37:01,589 --> 00:36:59,280  
that and your

958  
00:37:04,790 --> 00:37:01,599  
you know front of your suit has an inch

959  
00:37:06,870 --> 00:37:04,800  
or two of ammonia ice on it and later on

960  
00:37:09,270 --> 00:37:06,880  
you realize that you cannot go back in

961  
00:37:12,630 --> 00:37:09,280  
the spacecraft with this so you hope

962  
00:37:13,910 --> 00:37:12,640  
that someone has a plan to get it off

963  
00:37:15,910 --> 00:37:13,920

and they did

964

00:37:18,470 --> 00:37:15,920

yeah and and um

965

00:37:21,430 --> 00:37:18,480

you know but but but the lesson learned

966

00:37:23,670 --> 00:37:21,440

there is that you know it's not actually

967

00:37:25,349 --> 00:37:23,680

the act of the event

968

00:37:27,670 --> 00:37:25,359

that is hard

969

00:37:28,870 --> 00:37:27,680

it's getting ready further

970

00:37:30,630 --> 00:37:28,880

and that's something i learned from

971

00:37:33,589 --> 00:37:30,640

bernard and other people who told me

972

00:37:35,589 --> 00:37:33,599

look you have to work hard now

973

00:37:36,950 --> 00:37:35,599

so that the actual space flight in the

974

00:37:38,390 --> 00:37:36,960

space walk

975

00:37:41,510 --> 00:37:38,400

is easy

976  
00:37:45,030 --> 00:37:41,520  
i mean physically it was not a big deal

977  
00:37:46,230 --> 00:37:45,040  
mentally i was exhausted afterwards

978  
00:37:53,829 --> 00:37:46,240  
but

979  
00:37:58,790 --> 00:37:55,990  
so we're going to open it up

980  
00:38:00,470 --> 00:37:58,800  
to our students

981  
00:38:01,910 --> 00:38:00,480  
hi

982  
00:38:03,910 --> 00:38:01,920  
hello

983  
00:38:06,950 --> 00:38:03,920  
what is your work like when you're not

984  
00:38:08,550 --> 00:38:06,960  
in space or training for a mission

985  
00:38:10,310 --> 00:38:08,560  
there's no average day some days i have

986  
00:38:12,390 --> 00:38:10,320  
a lot of meetings but you know some days

987  
00:38:14,230 --> 00:38:12,400  
i get to go and scuba dive or full

988  
00:38:16,310 --> 00:38:14,240

pressure dive at the

989

00:38:17,829 --> 00:38:16,320

the giant pool that we have six million

990

00:38:20,150 --> 00:38:17,839

gallons of water where we train for

991

00:38:22,150 --> 00:38:20,160

spacewalks or right on the other side of

992

00:38:24,390 --> 00:38:22,160

that facility there's an airport and we

993

00:38:27,910 --> 00:38:24,400

go fly our t-38 high performance

994

00:38:31,510 --> 00:38:29,589

one of the biggest things that we have

995

00:38:34,150 --> 00:38:31,520

to do is function

996

00:38:36,870 --> 00:38:34,160

very well as a team we go on expeditions

997

00:38:39,670 --> 00:38:36,880

where we we want to get people to push

998

00:38:41,589 --> 00:38:39,680

their push everyone's limits to see how

999

00:38:44,150 --> 00:38:41,599

you act when you're in this

1000

00:38:46,950 --> 00:38:44,160

heightened state of awareness we work

1001  
00:38:48,710 --> 00:38:46,960  
hard on leadership and teamwork and so

1002  
00:38:52,310 --> 00:38:48,720  
it involves really just spending time

1003  
00:38:56,069 --> 00:38:54,710  
my question today for you all is do you

1004  
00:39:01,670 --> 00:38:56,079  
think everyone should have the

1005  
00:39:08,950 --> 00:39:04,630  
that is a very good question

1006  
00:39:13,270 --> 00:39:10,710  
let me fill in the blank so

1007  
00:39:14,950 --> 00:39:13,280  
so uh i think everybody should have the

1008  
00:39:16,950 --> 00:39:14,960  
opportunity to go into space but

1009  
00:39:19,190 --> 00:39:16,960  
currently right now

1010  
00:39:22,230 --> 00:39:19,200  
it's not available for everybody to go

1011  
00:39:23,910 --> 00:39:22,240  
but we have now set the stage for anyone

1012  
00:39:24,950 --> 00:39:23,920  
that wants to go into space to go into

1013  
00:39:27,910 --> 00:39:24,960

space

1014

00:39:30,230 --> 00:39:27,920

we now have private interests in what's

1015

00:39:31,910 --> 00:39:30,240

happening in in low earth orbit

1016

00:39:34,470 --> 00:39:31,920

particularly in the international space

1017

00:39:35,910 --> 00:39:34,480

station has opened up all sorts of

1018

00:39:38,310 --> 00:39:35,920

possibilities

1019

00:39:39,990 --> 00:39:38,320

so all of you in this room this i'm just

1020

00:39:43,510 --> 00:39:40,000

looking at your age group

1021

00:39:44,630 --> 00:39:43,520

you have been born in a

1022

00:39:45,589 --> 00:39:44,640

world

1023

00:39:51,109 --> 00:39:45,599

where

1024

00:39:53,109 --> 00:39:51,119

7.

1025

00:39:55,510 --> 00:39:53,119

i grew up and some of us here that are

1026  
00:39:56,790 --> 00:39:55,520  
on the older side grew up that was not

1027  
00:40:00,470 --> 00:39:56,800  
the case

1028  
00:40:03,589 --> 00:40:00,480  
so the possibilities are really endless

1029  
00:40:04,630 --> 00:40:03,599  
how many of you like to go to space

1030  
00:40:06,390 --> 00:40:04,640  
i love it

1031  
00:40:10,180 --> 00:40:06,400  
awesome excellent

1032  
00:40:14,470 --> 00:40:10,190  
do it you can do it

1033  
00:40:17,270 --> 00:40:14,480  
[Applause]

1034  
00:40:19,349 --> 00:40:17,280  
in space you're away from family and in

1035  
00:40:21,910 --> 00:40:19,359  
a new environment how are you physically

1036  
00:40:24,790 --> 00:40:21,920  
and emotionally affected how do you deal

1037  
00:40:26,309 --> 00:40:24,800  
with being homesick

1038  
00:40:28,470 --> 00:40:26,319

i haven't even been back on earth for a

1039

00:40:30,069 --> 00:40:28,480

year yet and that's just a sentence that

1040

00:40:31,750 --> 00:40:30,079

starts with i haven't been back on earth

1041

00:40:34,309 --> 00:40:31,760

it's pretty cool and

1042

00:40:36,150 --> 00:40:34,319

the the isolation is one piece i live in

1043

00:40:38,790 --> 00:40:36,160

this pressurized

1044

00:40:40,150 --> 00:40:38,800

can a big can in space because right on

1045

00:40:42,069 --> 00:40:40,160

the outside it's you know really hot or

1046

00:40:44,550 --> 00:40:42,079

really cold and there's no air right so

1047

00:40:47,030 --> 00:40:44,560

um the fact that you're isolated doesn't

1048

00:40:49,589 --> 00:40:47,040

mean that you have to be disconnected

1049

00:40:52,800 --> 00:40:49,599

and so the connection to your family is

1050

00:40:54,870 --> 00:40:52,810

something nasa takes very seriously

1051

00:40:57,750 --> 00:40:54,880

[Music]

1052

00:41:02,230 --> 00:40:57,760

the video just doesn't do it justice

1053

00:41:07,670 --> 00:41:04,470

one of the most amazing things about his

1054

00:41:09,750 --> 00:41:07,680

mission was that stephanie organized

1055

00:41:11,750 --> 00:41:09,760

a zoom call for us

1056

00:41:14,069 --> 00:41:11,760

all of the black astronauts

1057

00:41:15,990 --> 00:41:14,079

to talk to victor that list while he

1058

00:41:18,950 --> 00:41:16,000

gave us a tour

1059

00:41:19,750 --> 00:41:18,960

through the space station on an ipad

1060

00:41:21,990 --> 00:41:19,760

and

1061

00:41:23,589 --> 00:41:22,000

he was in space at the same time that

1062

00:41:26,230 --> 00:41:23,599

you know we were coming with the

1063

00:41:27,589 --> 00:41:26,240

deliberations of george floyd and we had

1064

00:41:29,510 --> 00:41:27,599

all these things that we were thinking

1065

00:41:31,829 --> 00:41:29,520

about down here on the planet with covet

1066

00:41:34,710 --> 00:41:31,839

and but having this connection with our

1067

00:41:36,470 --> 00:41:34,720

brothers and family and people helped us

1068

00:41:38,309 --> 00:41:36,480

all get through things

1069

00:41:41,670 --> 00:41:38,319

what um boundaries did you have to

1070

00:41:43,990 --> 00:41:41,680

overcome becoming an astronaut and

1071

00:41:45,589 --> 00:41:44,000

what did you ever struggle in school at

1072

00:41:49,510 --> 00:41:45,599

any moment

1073

00:41:52,230 --> 00:41:49,520

i lost my hearing in a training accident

1074

00:41:53,750 --> 00:41:52,240

i was completely deaf and the

1075

00:41:55,349 --> 00:41:53,760

doctors told me that i would never find

1076

00:41:56,150 --> 00:41:55,359

space

1077

00:41:57,430 --> 00:41:56,160

and

1078

00:41:59,349 --> 00:41:57,440

i was

1079

00:42:00,790 --> 00:41:59,359

my hearing started to slowly come back

1080

00:42:03,109 --> 00:42:00,800

in my right ear

1081

00:42:04,950 --> 00:42:03,119

but only in the speaking frequencies

1082

00:42:06,950 --> 00:42:04,960

and they said you know you're medically

1083

00:42:08,870 --> 00:42:06,960

disqualified you won't fly

1084

00:42:10,550 --> 00:42:08,880

but i've always believed that if you

1085

00:42:12,630 --> 00:42:10,560

keep trying like the little injury they

1086

00:42:14,710 --> 00:42:12,640

could i think i can i think i can

1087

00:42:17,190 --> 00:42:14,720

your mind has a way i'm not a

1088

00:42:18,470 --> 00:42:17,200

neuroscientist with a mind your mind has

1089

00:42:19,270 --> 00:42:18,480

a way

1090

00:42:22,630 --> 00:42:19,280

of

1091

00:42:23,910 --> 00:42:22,640

fixing your body you know if you believe

1092

00:42:25,430 --> 00:42:23,920

in it enough

1093

00:42:28,550 --> 00:42:25,440

you know you need doctors you need other

1094

00:42:31,190 --> 00:42:28,560

people but you have a great stake in

1095

00:42:32,069 --> 00:42:31,200

helping repair yourself by the way that

1096

00:42:40,150 --> 00:42:32,079

you

1097

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

bernard i thought it would be good for

1098

00:42:47,190 --> 00:42:44,720

you to talk about you know having a

1099

00:42:49,270 --> 00:42:47,200

vision and thinking about where do you

1100

00:42:52,950 --> 00:42:49,280

want to go in life so when i did my

1101  
00:42:54,309 --> 00:42:52,960  
space walk i guess it was many years ago

1102  
00:42:55,589 --> 00:42:54,319  
it was the first time that an

1103  
00:42:57,510 --> 00:42:55,599  
african-american

1104  
00:42:58,550 --> 00:42:57,520  
had done a spacewalk it had been 30

1105  
00:43:00,790 --> 00:42:58,560  
years

1106  
00:43:03,510 --> 00:43:00,800  
since the first time that

1107  
00:43:05,750 --> 00:43:03,520  
we had done a space walk

1108  
00:43:08,069 --> 00:43:05,760  
dr harris tomorrow you're to become the

1109  
00:43:10,630 --> 00:43:08,079  
first african american to to walk in

1110  
00:43:13,750 --> 00:43:10,640  
space how significant a first for that

1111  
00:43:16,069 --> 00:43:13,760  
is you for for you is that personally

1112  
00:43:17,990 --> 00:43:16,079  
well brian you know uh for me it really

1113  
00:43:20,309 --> 00:43:18,000

is a personal achievement a great

1114

00:43:21,829 --> 00:43:20,319

personal achievement one that i look for

1115

00:43:23,349 --> 00:43:21,839

for a long time

1116

00:43:25,270 --> 00:43:23,359

and i think it's kind of ironic that

1117

00:43:27,190 --> 00:43:25,280

during this month uh this is black

1118

00:43:28,630 --> 00:43:27,200

history month that we're celebrating the

1119

00:43:30,390 --> 00:43:28,640

contributions that african americans

1120

00:43:33,349 --> 00:43:30,400

have made to this country i have an

1121

00:43:36,390 --> 00:43:33,359

opportunity to walk outside walk outside

1122

00:43:38,309 --> 00:43:36,400

in space that is an eba

1123

00:43:41,109 --> 00:43:38,319

it really i get emotional when i think

1124

00:43:43,430 --> 00:43:41,119

about it and i'd like to dedicate this

1125

00:43:46,150 --> 00:43:43,440

spacewalk my first spacewalk as an

1126  
00:43:48,150 --> 00:43:46,160  
african-american and as uh as an

1127  
00:43:54,630 --> 00:43:48,160  
african-american

1128  
00:43:58,230 --> 00:43:56,790  
and so of course i got the commencement

1129  
00:44:00,550 --> 00:43:58,240  
call from the president that was

1130  
00:44:02,710 --> 00:44:00,560  
president clinton and he said

1131  
00:44:04,390 --> 00:44:02,720  
you know dr harris congratulate i want

1132  
00:44:05,910 --> 00:44:04,400  
to congratulate you on you know being

1133  
00:44:06,950 --> 00:44:05,920  
the first african-american to walk in

1134  
00:44:09,589 --> 00:44:06,960  
space

1135  
00:44:11,109 --> 00:44:09,599  
and i remember preparing knowing that he

1136  
00:44:12,870 --> 00:44:11,119  
was going to call and say what the hell

1137  
00:44:14,069 --> 00:44:12,880  
am i going to say to the president

1138  
00:44:15,510 --> 00:44:14,079

because everybody's going to hear

1139

00:44:17,910 --> 00:44:15,520

mission control and the rest of the

1140

00:44:19,510 --> 00:44:17,920

world and so i said these words that

1141

00:44:21,829 --> 00:44:19,520

you've probably heard many times before

1142

00:44:23,430 --> 00:44:21,839

i said mr president thank you for the

1143

00:44:25,670 --> 00:44:23,440

honor of your call

1144

00:44:27,829 --> 00:44:25,680

uh but i have to tell you that i may be

1145

00:44:31,109 --> 00:44:27,839

the first but it will not be the last

1146

00:44:33,190 --> 00:44:31,119

amen yeah and listening to

1147

00:44:36,710 --> 00:44:33,200

bob kirby

1148

00:44:38,630 --> 00:44:36,720

now holding the record that was true so

1149

00:44:41,589 --> 00:44:38,640

what can i say to you that

1150

00:44:44,309 --> 00:44:41,599

will inspire you and and maybe uh this

1151  
00:44:45,270 --> 00:44:44,319  
statement i believe that there are

1152  
00:44:47,910 --> 00:44:45,280  
um

1153  
00:44:50,710 --> 00:44:47,920  
three things that i know about everybody

1154  
00:44:52,630 --> 00:44:50,720  
in this room three things

1155  
00:44:54,550 --> 00:44:52,640  
and if you here to these three things

1156  
00:44:58,150 --> 00:44:54,560  
you can accomplish whatever you want to

1157  
00:45:00,630 --> 00:44:58,160  
do in life those things three things

1158  
00:45:03,030 --> 00:45:00,640  
make it possible for you to do anything

1159  
00:45:04,470 --> 00:45:03,040  
the first thing that i believe

1160  
00:45:07,109 --> 00:45:04,480  
and believe in you

1161  
00:45:08,630 --> 00:45:07,119  
is that i believe that everyone is born

1162  
00:45:10,790 --> 00:45:08,640  
multi-potential

1163  
00:45:13,589 --> 00:45:10,800

with the ability to do anything that

1164

00:45:15,510 --> 00:45:13,599

they want to do in life anything

1165

00:45:17,750 --> 00:45:15,520

you have to figure out what that is you

1166

00:45:19,270 --> 00:45:17,760

have to discover that very early as as

1167

00:45:21,750 --> 00:45:19,280

we all did

1168

00:45:24,230 --> 00:45:21,760

number two i believe that each and every

1169

00:45:26,150 --> 00:45:24,240

one of you in this room

1170

00:45:28,230 --> 00:45:26,160

is multi-talented

1171

00:45:30,550 --> 00:45:28,240

but we have something called a brain

1172

00:45:32,870 --> 00:45:30,560

where we can learn additional talents

1173

00:45:35,030 --> 00:45:32,880

and that's what education is all about

1174

00:45:37,109 --> 00:45:35,040

so that's really important

1175

00:45:39,270 --> 00:45:37,119

right and the last thing that i that i

1176

00:45:41,990 --> 00:45:39,280

believe that's really important for

1177

00:45:44,470 --> 00:45:42,000

success in life and that is i believe

1178

00:45:47,589 --> 00:45:44,480

that each and every one of us were born

1179

00:45:50,550 --> 00:45:47,599

for a reason there is something that you

1180

00:45:52,710 --> 00:45:50,560

are supposed to do or some things that

1181

00:45:55,190 --> 00:45:52,720

you are supposed to do in this life

1182

00:45:58,309 --> 00:45:55,200

now all of those require what they

1183

00:45:59,349 --> 00:45:58,319

require an active person someone

1184

00:46:01,670 --> 00:45:59,359

thinking

1185

00:46:04,630 --> 00:46:01,680

you figuring out who you are where you

1186

00:46:06,230 --> 00:46:04,640

are what position setting goals dreaming

1187

00:46:09,430 --> 00:46:06,240

finding people to

1188

00:46:12,950 --> 00:46:09,440

to help you along finding mentors

1189

00:46:16,069 --> 00:46:12,960

and so it not only requires

1190

00:46:17,530 --> 00:46:16,079

inspiration but aspiration that comes

1191

00:46:31,109 --> 00:46:17,540

from you

1192

00:46:36,870 --> 00:46:33,270

so when i hear the words the color of

1193

00:46:40,230 --> 00:46:36,880

space it uh it brings to mind probably

1194

00:46:42,870 --> 00:46:40,240

like a box of crayons in that

1195

00:46:44,630 --> 00:46:42,880

you know it's it has every color of the

1196

00:46:47,670 --> 00:46:44,640

rainbow as they say

1197

00:46:49,750 --> 00:46:47,680

um and it's and it's very inclusive

1198

00:46:52,390 --> 00:46:49,760

and i think that's the way space should

1199

00:46:53,750 --> 00:46:52,400

be it hasn't necessarily been that way

1200

00:46:56,230 --> 00:46:53,760

in the past

1201  
00:46:57,829 --> 00:46:56,240  
uh but we are on a new trajectory and we

1202  
00:46:59,349 --> 00:46:57,839  
can change that

1203  
00:47:00,790 --> 00:46:59,359  
so when i hear the color of space the

1204  
00:47:02,710 --> 00:47:00,800  
first thing that comes to mind is a

1205  
00:47:05,670 --> 00:47:02,720  
standing joke between lela melvin and

1206  
00:47:07,270 --> 00:47:05,680  
myself uh about when he was going up on

1207  
00:47:09,190 --> 00:47:07,280  
his first flight and because we go down

1208  
00:47:10,870 --> 00:47:09,200  
the hall and i'd raise my fist and i go

1209  
00:47:11,670 --> 00:47:10,880  
keep space black leaving keep space

1210  
00:47:14,470 --> 00:47:11,680  
black

1211  
00:47:16,309 --> 00:47:14,480  
and and that went on between us and uh

1212  
00:47:18,710 --> 00:47:16,319  
and when i was in space i sent an email

1213  
00:47:20,230 --> 00:47:18,720

back to the system doing my best to

1214

00:47:21,270 --> 00:47:20,240

maintain the blackness of space for

1215

00:47:23,109 --> 00:47:21,280

everybody

1216

00:47:25,190 --> 00:47:23,119

you know the the color of space it's

1217

00:47:27,670 --> 00:47:25,200

interesting the theme of this this whole

1218

00:47:29,030 --> 00:47:27,680

celebration is is the color of space

1219

00:47:31,510 --> 00:47:29,040

space is black

1220

00:47:33,910 --> 00:47:31,520

uh it's it's it's except for where the

1221

00:47:36,230 --> 00:47:33,920

stars are it's the absence of light and

1222

00:47:38,390 --> 00:47:36,240

the inability to know where you're going

1223

00:47:40,549 --> 00:47:38,400

and the people that i consider to be the

1224

00:47:43,030 --> 00:47:40,559

best qualified to get there are people

1225

00:47:45,670 --> 00:47:43,040

who look like me who in spite of all

1226  
00:47:47,109 --> 00:47:45,680  
adversity um in spite of knowing whether

1227  
00:47:50,150 --> 00:47:47,119  
they're going to live or die or make it

1228  
00:47:57,990 --> 00:47:50,160  
to the next day persist in being

1229  
00:48:03,750 --> 00:48:01,270  
i know that you have taken away

1230  
00:48:06,950 --> 00:48:03,760  
many many many life lessons from these

1231  
00:48:08,870 --> 00:48:06,960  
wonderful heroes

1232  
00:48:11,270 --> 00:48:08,880  
i want to thank our panelists i want to

1233  
00:48:13,349 --> 00:48:11,280  
thank the audience for being here and

1234  
00:48:19,589 --> 00:48:13,359  
being a part of this very historic

1235  
00:48:23,109 --> 00:48:21,190  
my takeaway from this experience is

1236  
00:48:25,510 --> 00:48:23,119  
don't just assume what you can do but

1237  
00:48:27,829 --> 00:48:25,520  
take that step to see that you can do it

1238  
00:48:29,270 --> 00:48:27,839

because a lot of times we think oh i

1239

00:48:31,190 --> 00:48:29,280

can't do this or we take from our

1240

00:48:32,710 --> 00:48:31,200

experience or what people say or our

1241

00:48:34,390 --> 00:48:32,720

surroundings and we're like well i can't

1242

00:48:36,710 --> 00:48:34,400

do this because of what i said or where

1243

00:48:38,390 --> 00:48:36,720

i'm from

1244

00:48:39,910 --> 00:48:38,400

when i was in the gift gift shop i was

1245

00:48:41,430 --> 00:48:39,920

looking at all you know the national

1246

00:48:43,910 --> 00:48:41,440

shirts and it was just one shirt that

1247

00:48:46,069 --> 00:48:43,920

said failure is not an option and i said

1248

00:48:47,750 --> 00:48:46,079

i need that because i need to believe

1249

00:48:49,829 --> 00:48:47,760

that for myself right now

1250

00:48:51,109 --> 00:48:49,839

and so your friends and family do they

1251

00:48:53,190 --> 00:48:51,119

know that you're here

1252

00:48:56,549 --> 00:48:53,200

my parents actually don't know

1253

00:48:58,069 --> 00:48:56,559

but they will know when to get back home

1254

00:49:00,230 --> 00:48:58,079

to come and meet astronauts that was

1255

00:49:03,270 --> 00:49:00,240

like the most exciting thing ever it was

1256

00:49:05,510 --> 00:49:03,280

really inspiring like i have so many

1257

00:49:07,109 --> 00:49:05,520

feelings just because

1258

00:49:09,829 --> 00:49:07,119

like one you owe me an astronaut every

1259

00:49:11,829 --> 00:49:09,839

day during the conversation

1260

00:49:14,230 --> 00:49:11,839

it's kind of crazy because

1261

00:49:16,870 --> 00:49:14,240

i'm very interested in uh things like

1262

00:49:19,430 --> 00:49:16,880

quantum mechanics apparent relativity

1263

00:49:20,630 --> 00:49:19,440

so i know this encourages me to

1264

00:49:22,710 --> 00:49:20,640

keep going i'm going to keep watching

1265

00:49:23,990 --> 00:49:22,720

people learning they're just like us

1266

00:49:26,230 --> 00:49:24,000

like

1267

00:49:27,589 --> 00:49:26,240

i was expecting my nurse was on me when

1268

00:49:29,349 --> 00:49:27,599

i was when i first walked in the room i

1269

00:49:31,109 --> 00:49:29,359

was like

1270

00:49:33,270 --> 00:49:31,119

from their stories i could tell they

1271

00:49:34,230 --> 00:49:33,280

went through the same some some trauma

1272

00:49:35,990 --> 00:49:34,240

or something

1273

00:49:37,750 --> 00:49:36,000

we all went through the senior thing and

1274

00:49:39,190 --> 00:49:37,760

that that just opened up like a level in

1275

00:49:40,630 --> 00:49:39,200

my mind where i'm like

1276

00:49:42,950 --> 00:49:40,640

okay

1277

00:49:56,930 --> 00:49:42,960

time described time the time to pick up