



1
00:00:10,150 --> 00:00:03,189
station this is houston on space ground

2
00:00:14,310 --> 00:00:11,669
this is the international space station

3
00:00:16,310 --> 00:00:14,320
we are ready for the event

4
00:00:18,390 --> 00:00:16,320
hess tech conference this is mission

5
00:00:27,670 --> 00:00:18,400
control in houston please call the

6
00:00:32,229 --> 00:00:29,029
hello here

7
00:00:34,229 --> 00:00:32,239
this is congressman ruben inohosa from

8
00:00:39,830 --> 00:00:34,239
deep south texas

9
00:00:39,840 --> 00:00:45,190
how long do you hear me

10
00:00:51,430 --> 00:00:48,310
congress congressman hinojosa

11
00:00:53,510 --> 00:00:51,440
and his tech sir it's great to speak to

12
00:00:56,470 --> 00:00:53,520
you again i hear you

13
00:01:01,910 --> 00:00:58,869

let me tell you we are so proud

14

00:01:04,229 --> 00:01:01,920

that you are from mcallen texas and deep

15

00:01:11,109 --> 00:01:04,239

south texas and we're all rooting for

16

00:01:17,270 --> 00:01:13,350

thank you very much i've been to hashtag

17

00:01:22,550 --> 00:01:19,830

oh that is wonderful we started it ten

18

00:01:25,830 --> 00:01:23,910

we're supposed to start with the

19

00:01:28,310 --> 00:01:25,840

questions so let's get the students up

20

00:01:30,870 --> 00:01:28,320

here please

21

00:01:32,710 --> 00:01:30,880

my name is andrea and my question is

22

00:01:36,630 --> 00:01:32,720

what experiments are you currently

23

00:01:40,950 --> 00:01:38,950

hey andrea working on a lot of different

24

00:01:42,870 --> 00:01:40,960

experiments we have different furnace

25

00:01:45,270 --> 00:01:42,880

type experiments which are melting

26
00:01:47,749 --> 00:01:45,280
things and then growing the crystals and

27
00:01:49,830 --> 00:01:47,759
as they solidify without the forces of

28
00:01:52,630 --> 00:01:49,840
gravity we're doing plant growth

29
00:01:55,190 --> 00:01:52,640
experiments we're growing doing a

30
00:01:57,109 --> 00:01:55,200
combustion or fire kind of experiments

31
00:01:58,870 --> 00:01:57,119
and i'm a guinea pig in a number of

32
00:02:01,030 --> 00:01:58,880
different experiences about the effects

33
00:02:02,789 --> 00:02:01,040
of zero g and how to minimize the bone

34
00:02:11,110 --> 00:02:02,799
loss and muscle loss and things like

35
00:02:15,350 --> 00:02:13,350
hello my name is jacob and my question

36
00:02:20,949 --> 00:02:15,360
is what is the mission or goal for your

37
00:02:25,430 --> 00:02:22,949
hey jacob that's a great question well

38
00:02:27,350 --> 00:02:25,440

right now our job is to take care of the

39

00:02:29,350 --> 00:02:27,360

space station and you know keep it

40

00:02:31,670 --> 00:02:29,360

running and to conduct the different

41

00:02:34,790 --> 00:02:31,680

science experiments on board uh it's

42

00:02:36,949 --> 00:02:34,800

been a great a great challenge for me

43

00:02:39,430 --> 00:02:36,959

it's been the adventure of a lifetime to

44

00:02:41,270 --> 00:02:39,440

be here uh the first university that i

45

00:02:43,190 --> 00:02:41,280

attended was pan american university

46

00:02:45,750 --> 00:02:43,200

where you are right now as i started

47

00:02:47,670 --> 00:02:45,760

taking classes back there long ago and

48

00:02:49,430 --> 00:02:47,680

always while i was walking to the night

49

00:02:50,949 --> 00:02:49,440

classes at pan am i'd look up at the

50

00:02:52,790 --> 00:02:50,959

stars and dream about being up here

51
00:02:53,589 --> 00:02:52,800
someday and i can't believe i really am

52
00:02:56,309 --> 00:02:53,599
here

53
00:02:57,990 --> 00:02:56,319
uh but but it's mainly to keep the space

54
00:03:01,270 --> 00:02:58,000
station running to keep the crew working

55
00:03:03,110 --> 00:03:01,280
uh effectively and and and well together

56
00:03:03,990 --> 00:03:03,120
and to continue moving all of the

57
00:03:15,030 --> 00:03:04,000
science

58
00:03:19,910 --> 00:03:18,149
my name is allegra and my question is

59
00:03:25,830 --> 00:03:19,920
since you aren't using the shuttle

60
00:03:30,630 --> 00:03:28,630
hey that's a great question uh the the

61
00:03:32,630 --> 00:03:30,640
we saw the sp the last space shuttle

62
00:03:35,270 --> 00:03:32,640
come and go from the space station while

63
00:03:37,030 --> 00:03:35,280

i was here that was a an amazing thing

64

00:03:39,350 --> 00:03:37,040

it was a very emotional thing for me as

65

00:03:41,990 --> 00:03:39,360

the program lasted 30 years

66

00:03:43,990 --> 00:03:42,000

and was a incredibly successful

67

00:03:45,670 --> 00:03:44,000

right now for humans going back and

68

00:03:48,229 --> 00:03:45,680

forth to the space station we're using

69

00:03:49,750 --> 00:03:48,239

the russian soyuz spacecraft that's how

70

00:03:51,750 --> 00:03:49,760

i arrived here about three and a half

71

00:03:53,110 --> 00:03:51,760

months ago was on a on a russian

72

00:03:55,110 --> 00:03:53,120

spacecraft

73

00:03:56,869 --> 00:03:55,120

which was quite an adventure in its own

74

00:03:59,910 --> 00:03:56,879

way i grew up in the valley of course

75

00:04:01,429 --> 00:03:59,920

speaking some spanish uh and and as a

76

00:04:03,830 --> 00:04:01,439

kind of a second language or being

77

00:04:05,830 --> 00:04:03,840

exposed to it uh and so in order to do

78

00:04:07,350 --> 00:04:05,840

this i had to learn a lot of russian

79

00:04:09,990 --> 00:04:07,360

which was a very very different

80

00:04:11,670 --> 00:04:10,000

challenge for me but uh it was quite an

81

00:04:12,789 --> 00:04:11,680

adventure i flew two times on the space

82

00:04:15,350 --> 00:04:12,799

shuttle

83

00:04:17,749 --> 00:04:15,360

and so my third flight now came up here

84

00:04:20,550 --> 00:04:17,759

on the russian soyuz spacecraft the

85

00:04:22,469 --> 00:04:20,560

future is is changing rapidly though uh

86

00:04:24,550 --> 00:04:22,479

you know the the united states is

87

00:04:27,590 --> 00:04:24,560

working on several different ideas for

88

00:04:30,070 --> 00:04:27,600

human spacecraft uh you know in the next

89

00:04:33,749 --> 00:04:30,080

10 years or so we hope very much to see

90

00:04:35,510 --> 00:04:33,759

some of these coming uh coming to being

91

00:04:37,909 --> 00:04:35,520

at the same time we're using different

92

00:04:39,990 --> 00:04:37,919

cargo ships russian cargo ships european

93

00:04:41,670 --> 00:04:40,000

cargo ships japanese cargo ships and

94

00:04:43,990 --> 00:04:41,680

we're real close to launching the first

95

00:04:46,950 --> 00:04:44,000

american cargo ships probably in the

96

00:04:49,350 --> 00:04:46,960

next four to six months to to begin

97

00:04:57,590 --> 00:04:49,360

coming up to the space station too great

98

00:05:02,950 --> 00:05:00,790

my name is jackie and my question is

99

00:05:05,029 --> 00:05:02,960

with this being your longest mission in

100

00:05:10,310 --> 00:05:05,039

space how are you adjusted to

101

00:05:13,270 --> 00:05:12,550

hey jackie the great question

102

00:05:15,110 --> 00:05:13,280

the

103

00:05:16,469 --> 00:05:15,120

i thought after two weeks on a shuttle

104

00:05:18,790 --> 00:05:16,479

mission that i was adjusted to

105

00:05:20,950 --> 00:05:18,800

microgravity but i found here after one

106

00:05:22,469 --> 00:05:20,960

month and even two months i'm still

107

00:05:24,390 --> 00:05:22,479

continuing to learn and my body

108

00:05:26,070 --> 00:05:24,400

continues to adjust a little bit

109

00:05:27,909 --> 00:05:26,080

i feel like i'm very very much

110

00:05:29,430 --> 00:05:27,919

stabilized right now where things aren't

111

00:05:32,070 --> 00:05:29,440

changing but the fluid shift is the

112

00:05:34,550 --> 00:05:32,080

first thing your head gets full uh like

113

00:05:36,469 --> 00:05:34,560

you kind of like you have a cold or and

114

00:05:38,790 --> 00:05:36,479

and it's pressure in your head because

115

00:05:40,950 --> 00:05:38,800

your body has a lot of a lot of fluid in

116

00:05:43,590 --> 00:05:40,960

it that as a without the gravity pulling

117

00:05:44,629 --> 00:05:43,600

that fluid down to your lower torso and

118

00:05:46,310 --> 00:05:44,639

your legs

119

00:05:47,830 --> 00:05:46,320

it it kind of goes up here and makes

120

00:05:49,510 --> 00:05:47,840

your head feel really full and kind of

121

00:05:51,670 --> 00:05:49,520

gives you a headache so your body

122

00:05:53,670 --> 00:05:51,680

adjusts in those ways you learn how to

123

00:05:56,629 --> 00:05:53,680

move up here and that's really a cool

124

00:05:59,029 --> 00:05:56,639

thing uh to to really instead of kind of

125

00:06:01,590 --> 00:05:59,039

stumbling around and and bumping into

126

00:06:03,029 --> 00:06:01,600

things a whole lot you learn to move i

127

00:06:04,629 --> 00:06:03,039

think of it kind of like moving like a

128

00:06:06,390 --> 00:06:04,639

cat or maybe

129

00:06:07,670 --> 00:06:06,400

moving like spider-man through as you're

130

00:06:10,550 --> 00:06:07,680

you're going through and you're grabbing

131

00:06:13,110 --> 00:06:10,560

things and you're flying along uh and so

132

00:06:15,029 --> 00:06:13,120

those are part of the adaptation

133

00:06:16,309 --> 00:06:15,039

part of it too is just learning how to

134

00:06:17,990 --> 00:06:16,319

work up here

135

00:06:19,749 --> 00:06:18,000

working with stuff is actually hard

136

00:06:21,749 --> 00:06:19,759

because things don't stay on a workbench

137

00:06:23,110 --> 00:06:21,759

like they do at home you start to take

138

00:06:25,189 --> 00:06:23,120

something apart

139

00:06:27,110 --> 00:06:25,199

here you've got to tack down each piece

140

00:06:29,029 --> 00:06:27,120

as you're working on it each tool where

141

00:06:30,790 --> 00:06:29,039

you're not using it you have to

142

00:06:33,350 --> 00:06:30,800

make sure it's tacked down or it's in a

143

00:06:35,350 --> 00:06:33,360

bag or secured with velcro because when

144

00:06:37,990 --> 00:06:35,360

you lose stuff up here it doesn't fall

145

00:06:40,070 --> 00:06:38,000

to your feet it can fall to the ceiling

146

00:06:42,469 --> 00:06:40,080

or the walls and it can bounce and just

147

00:06:44,070 --> 00:06:42,479

keep going and so that takes a lot of

148

00:06:44,950 --> 00:06:44,080

getting used to is controlling your

149

00:06:47,270 --> 00:06:44,960

stuff

150

00:06:49,189 --> 00:06:47,280

and learning how to how to find it when

151

00:06:57,110 --> 00:06:49,199

you do lose it happens all the time

152

00:07:05,510 --> 00:06:59,830

my name is marissa and my question is

153

00:07:09,110 --> 00:07:07,430

hey marisa that's a good question let me

154

00:07:10,629 --> 00:07:09,120

see if i can demonstrate that a little

155

00:07:12,629 --> 00:07:10,639

bit without going completely out of

156

00:07:17,270 --> 00:07:12,639

control here it feels kind of like

157

00:07:21,110 --> 00:07:19,430

yeah there we go where you're moving and

158

00:07:23,189 --> 00:07:21,120

you're floating

159

00:07:25,189 --> 00:07:23,199

and you're not touching anything

160

00:07:27,350 --> 00:07:25,199

you can get stuck too because you can't

161

00:07:28,870 --> 00:07:27,360

swim in this in the air you can't swim

162

00:07:30,230 --> 00:07:28,880

you really need to hold on to things and

163

00:07:31,830 --> 00:07:30,240

so now i'm going to go out of control

164

00:07:41,589 --> 00:07:31,840

while i try to get my feet back down on

165

00:07:46,710 --> 00:07:44,469

my name is maya and my question is when

166

00:07:52,230 --> 00:07:46,720

you get back from space does your body

167

00:07:56,309 --> 00:07:55,270

oh yes maya it sure does up here because

168

00:07:59,350 --> 00:07:56,319

we're in

169

00:08:01,189 --> 00:07:59,360

in zero gravity our spines stretch the

170

00:08:04,309 --> 00:08:01,199

little discs between the bones in our

171

00:08:06,230 --> 00:08:04,319

back stretch some they get relaxed and

172

00:08:08,070 --> 00:08:06,240

so i've grown up about an inch to an

173

00:08:09,909 --> 00:08:08,080

inch and a half up here unfortunately

174

00:08:13,270 --> 00:08:09,919

when i get back to the ground i'm going

175

00:08:14,869 --> 00:08:13,280

to scrunch back down and and and that'll

176

00:08:16,390 --> 00:08:14,879

be part of the adjustment part of the

177

00:08:17,909 --> 00:08:16,400

adjustments learning how to walk again

178

00:08:20,070 --> 00:08:17,919

because right now i use my feet but i

179

00:08:21,990 --> 00:08:20,080

use them in a different way i have them

180

00:08:24,150 --> 00:08:22,000

hooked underneath handrails and i'm

181

00:08:26,469 --> 00:08:24,160

holding on with it with my toes kind of

182

00:08:27,430 --> 00:08:26,479

hooked underneath things you have to you

183

00:08:29,510 --> 00:08:27,440

know but

184

00:08:31,430 --> 00:08:29,520

and uh there's there's a lot of those

185

00:08:33,430 --> 00:08:31,440

things and uh

186

00:08:35,909 --> 00:08:33,440

and i talked about that fluid shift when

187

00:08:37,589 --> 00:08:35,919

you come to space and the fluid that

188

00:08:39,750 --> 00:08:37,599

that's no longer being held down in your

189

00:08:40,709 --> 00:08:39,760

legs and stuff comes back you know comes

190

00:08:41,509 --> 00:08:40,719

up

191

00:08:44,470 --> 00:08:41,519

uh

192

00:08:46,470 --> 00:08:44,480

in in zero or back in gravity again it's

193

00:08:49,750 --> 00:08:46,480

pulling your blood and and and other

194

00:08:51,750 --> 00:08:49,760

fluids down and so you have to rehydrate

195

00:08:53,990 --> 00:08:51,760

drink all you know a lot more fluid to

196

00:08:55,750 --> 00:08:54,000

get your body back up to a normal place

197

00:08:57,910 --> 00:08:55,760

so the adjustment

198

00:08:59,430 --> 00:08:57,920

for most people you get a lot of change

199

00:09:01,430 --> 00:08:59,440

that where you're used to being back

200

00:09:02,550 --> 00:09:01,440

home in the first few days three four

201
00:09:04,310 --> 00:09:02,560
five days

202
00:09:05,829 --> 00:09:04,320
but it really takes about a month or two

203
00:09:08,550 --> 00:09:05,839
months before you're feeling close to

204
00:09:12,630 --> 00:09:08,560
normal

205
00:09:17,750 --> 00:09:16,230
my name is veronica and my question is

206
00:09:19,430 --> 00:09:17,760
what is the difference in

207
00:09:22,150 --> 00:09:19,440
responsibilities

208
00:09:32,310 --> 00:09:22,160
of a flight commander versus a flight

209
00:09:36,150 --> 00:09:34,230
as we're all you know crew members up

210
00:09:39,110 --> 00:09:36,160
here and we have our different assigned

211
00:09:41,670 --> 00:09:39,120
responsibilities as as the commander

212
00:09:43,030 --> 00:09:41,680
then i'm i'm the guy kind of in charge

213
00:09:44,790 --> 00:09:43,040

now we're all working for mission

214

00:09:47,910 --> 00:09:44,800

control and really mission control

215

00:09:50,550 --> 00:09:47,920

centers all over the globe in houston in

216

00:09:52,150 --> 00:09:50,560

moscow huntsville alabama

217

00:09:53,030 --> 00:09:52,160

in japan

218

00:09:55,590 --> 00:09:53,040

uh

219

00:09:56,470 --> 00:09:55,600

and so there's and in germany we have we

220

00:09:58,389 --> 00:09:56,480

have

221

00:10:00,230 --> 00:09:58,399

control centers all over the world and

222

00:10:02,550 --> 00:10:00,240

we're working for those different flight

223

00:10:04,790 --> 00:10:02,560

directors and and and directors in those

224

00:10:06,790 --> 00:10:04,800

control centers but up here we need one

225

00:10:09,910 --> 00:10:06,800

person that's in charge and for this

226

00:10:12,310 --> 00:10:09,920

period of time you know that's me and so

227

00:10:14,790 --> 00:10:12,320

mostly we work things together and we

228

00:10:16,870 --> 00:10:14,800

just decide what we're going to do and

229

00:10:18,630 --> 00:10:16,880

you know it's it's

230

00:10:20,069 --> 00:10:18,640

so that's kind of it though in a

231

00:10:27,829 --> 00:10:20,079

nutshell is somebody's got to be in

232

00:10:36,470 --> 00:10:30,550

my name is jason and my question is what

233

00:10:41,750 --> 00:10:39,190

hey jason i think that two things i miss

234

00:10:44,870 --> 00:10:41,760

the most is i i'd really love a good

235

00:10:48,550 --> 00:10:44,880

pizza right now with a big thick chewy

236

00:10:50,470 --> 00:10:48,560

cheesy uh crust on it uh that would

237

00:10:53,509 --> 00:10:50,480

taste really good because our foods are

238

00:10:55,269 --> 00:10:53,519

rehydrated foods or foods and foil packs

239

00:10:57,430 --> 00:10:55,279

and stuff so we have bread but it's kind

240

00:10:59,910 --> 00:10:57,440

of packaged to say you know shelf life

241

00:11:01,829 --> 00:10:59,920

about about a year or two

242

00:11:03,590 --> 00:11:01,839

and things like that

243

00:11:05,350 --> 00:11:03,600

the other thing that i really miss the

244

00:11:07,110 --> 00:11:05,360

most is a big

245

00:11:10,389 --> 00:11:07,120

a big

246

00:11:13,190 --> 00:11:10,399

mug of just hot black coffee

247

00:11:15,509 --> 00:11:13,200

instead we have coffee and little foil

248

00:11:17,670 --> 00:11:15,519

pouches you know kind of like this one

249

00:11:19,350 --> 00:11:17,680

right here and it's just not the same as

250

00:11:21,990 --> 00:11:19,360

sitting sitting down in the morning with

251
00:11:23,670 --> 00:11:22,000
my cup of coffee and my newspaper to get

252
00:11:26,150 --> 00:11:23,680
ready for the day instead i sit down

253
00:11:28,230 --> 00:11:26,160
with a bag of coffee and my computer

254
00:11:30,550 --> 00:11:28,240
screen to read the the morning messages

255
00:11:32,389 --> 00:11:30,560
before starting work so i i look forward

256
00:11:36,470 --> 00:11:32,399
to pizza and a cup of coffee not

257
00:11:36,480 --> 00:11:40,710
thank you

258
00:11:42,389 --> 00:11:41,670
my

259
00:11:44,389 --> 00:11:42,399
okay

260
00:11:46,389 --> 00:11:44,399
my name is matthew my name is matthew

261
00:11:53,750 --> 00:11:46,399
and my question is do you lose or gain

262
00:11:53,760 --> 00:11:58,389
now matthew broke

263
00:12:02,790 --> 00:12:00,230

fluid shift i talked about once your

264

00:12:03,829 --> 00:12:02,800

body adjusts to the zero gravity it

265

00:12:05,750 --> 00:12:03,839

finds out

266

00:12:08,069 --> 00:12:05,760

you don't need as much blood volume and

267

00:12:09,910 --> 00:12:08,079

so you're you will lose some of that

268

00:12:19,030 --> 00:12:09,920

some of that liquid so most of us lose

269

00:12:22,710 --> 00:12:20,629

my name is chris

270

00:12:29,110 --> 00:12:22,720

and my question is what inspired you to

271

00:12:29,120 --> 00:12:33,509

i'm sorry can you say that again

272

00:12:33,519 --> 00:12:38,710

what inspired you to become an astronaut

273

00:12:43,030 --> 00:12:41,509

oh you you bet now i understand uh you

274

00:12:44,870 --> 00:12:43,040

know for me it was kind of a natural

275

00:12:46,710 --> 00:12:44,880

progression of things i grew up in the

276

00:12:48,230 --> 00:12:46,720

early days of the space program i was

277

00:12:50,310 --> 00:12:48,240

actually born two months after the

278

00:12:52,389 --> 00:12:50,320

sputnik satellite was the first man-made

279

00:12:54,949 --> 00:12:52,399

object you know in orbit around the

280

00:12:57,670 --> 00:12:54,959

earth and so i grew up when when going

281

00:12:59,030 --> 00:12:57,680

to space was was an amazing thing and

282

00:13:01,269 --> 00:12:59,040

watching the

283

00:13:04,069 --> 00:13:01,279

the the missions that led up to us

284

00:13:06,310 --> 00:13:04,079

landing on the moon i remember vividly

285

00:13:08,310 --> 00:13:06,320

and i i just like every other just

286

00:13:10,069 --> 00:13:08,320

red-blooded kid in the world i said man

287

00:13:11,910 --> 00:13:10,079

i want to do that someday

288

00:13:13,750 --> 00:13:11,920

and growing up in mcallen you know in

289

00:13:16,230 --> 00:13:13,760

the valley i thought that was the

290

00:13:17,670 --> 00:13:16,240

furthest thing from from possible that

291

00:13:19,990 --> 00:13:17,680

you could even

292

00:13:22,230 --> 00:13:20,000

even dream of that there's no way such a

293

00:13:24,470 --> 00:13:22,240

thing could happen but you know what

294

00:13:26,710 --> 00:13:24,480

that's not true it's really not true i

295

00:13:28,550 --> 00:13:26,720

never gave i somehow part of me didn't

296

00:13:30,389 --> 00:13:28,560

believe the dream but part of me never

297

00:13:32,629 --> 00:13:30,399

completely gave up with it

298

00:13:34,470 --> 00:13:32,639

and so when i was in school

299

00:13:36,389 --> 00:13:34,480

you know i tried to do my best and i

300

00:13:38,150 --> 00:13:36,399

wasn't always the top of my class i was

301

00:13:40,629 --> 00:13:38,160

pretty rarely the top of my class but i

302

00:13:42,470 --> 00:13:40,639

was working hard and dreaming and using

303

00:13:44,629 --> 00:13:42,480

that dream to give me a direction and a

304

00:13:47,030 --> 00:13:44,639

motivation to stay in school and keep

305

00:13:49,910 --> 00:13:47,040

working hard and i knew you know one one

306

00:13:51,750 --> 00:13:49,920

day that that education and the hard

307

00:14:00,790 --> 00:13:51,760

work was going to pay off and i'm really

308

00:14:06,230 --> 00:14:03,910

my name is ashley and my question is

309

00:14:11,590 --> 00:14:06,240

what do you do for entertainment on the

310

00:14:15,350 --> 00:14:13,750

oh that's an easy one that what we do

311

00:14:16,790 --> 00:14:15,360

for entertainment up here when we have

312

00:14:19,110 --> 00:14:16,800

some free time

313

00:14:21,670 --> 00:14:19,120

is look out the windows there's always

314

00:14:22,629 --> 00:14:21,680

something amazing to see our planet is

315

00:14:24,949 --> 00:14:22,639

just

316

00:14:26,069 --> 00:14:24,959

incredibly beautiful as it rotates

317

00:14:27,910 --> 00:14:26,079

beneath us

318

00:14:29,829 --> 00:14:27,920

looking out the window we're we're going

319

00:14:32,310 --> 00:14:29,839

about five miles a second and so we

320

00:14:34,150 --> 00:14:32,320

cover a lot of ground very quickly but

321

00:14:35,990 --> 00:14:34,160

it's always amazing to see what the

322

00:14:37,509 --> 00:14:36,000

world looks like what texas looks like

323

00:14:39,670 --> 00:14:37,519

what the valley looks like going

324

00:14:41,509 --> 00:14:39,680

overhead as we're

325

00:14:44,069 --> 00:14:41,519

you know ripping down the you know up

326
00:14:45,670 --> 00:14:44,079
the gulf coast across the country across

327
00:14:47,829 --> 00:14:45,680
the globe

328
00:14:49,509 --> 00:14:47,839
looking down on the planet without all

329
00:14:51,110 --> 00:14:49,519
those colored lines that we draw and

330
00:14:52,870 --> 00:14:51,120
call borders

331
00:14:55,030 --> 00:14:52,880
looking at the planet at night and

332
00:14:57,509 --> 00:14:55,040
seeing the cities where people are and

333
00:14:59,590 --> 00:14:57,519
the lights are on and it's astonishing

334
00:15:01,990 --> 00:14:59,600
to go across the united states and

335
00:15:03,509 --> 00:15:02,000
europe and and and you know the

336
00:15:05,189 --> 00:15:03,519
different parts of the world and see

337
00:15:07,110 --> 00:15:05,199
what they look like at night because

338
00:15:09,189 --> 00:15:07,120

it's very very different and then

339

00:15:11,350 --> 00:15:09,199

there's the stars and i love looking at

340

00:15:13,670 --> 00:15:11,360

the stars i've loved that since i was a

341

00:15:15,590 --> 00:15:13,680

a kid as a boy scout in the valley going

342

00:15:17,269 --> 00:15:15,600

camping and going out into the

343

00:15:19,590 --> 00:15:17,279

you know out away from the city lights

344

00:15:21,829 --> 00:15:19,600

and looking up at the night sky and here

345

00:15:23,990 --> 00:15:21,839

it's really really amazing because the

346

00:15:26,550 --> 00:15:24,000

stars are steady with uh without the

347

00:15:28,389 --> 00:15:26,560

twinkle that is caused by our atmosphere

348

00:15:30,389 --> 00:15:28,399

and so there it's always amazing to look

349

00:15:32,870 --> 00:15:30,399

out the windows and that entertains us

350

00:15:39,110 --> 00:15:32,880

for hours on end if if we only had hours

351

00:15:44,310 --> 00:15:42,470

hello my name is jesus

352

00:15:46,790 --> 00:15:44,320

and how how does being on the

353

00:15:49,030 --> 00:15:46,800

international space station change your

354

00:15:53,590 --> 00:15:49,040

view about the earth and the

355

00:15:58,150 --> 00:15:55,590

oh that's a that's a profound question

356

00:15:59,910 --> 00:15:58,160

there i think you know for me it's like

357

00:16:02,230 --> 00:15:59,920

i mentioned before you really get a

358

00:16:04,150 --> 00:16:02,240

sense that the the earth is one place

359

00:16:05,590 --> 00:16:04,160

you know when when we're on the ground

360

00:16:07,509 --> 00:16:05,600

and we're watching the news and we're

361

00:16:10,389 --> 00:16:07,519

going about our business in our little

362

00:16:12,790 --> 00:16:10,399

corners uh you know of this globe we

363

00:16:15,030 --> 00:16:12,800

think of it all very locally

364

00:16:17,030 --> 00:16:15,040

and and that's that's appropriate up

365

00:16:20,069 --> 00:16:17,040

here though when you can go across

366

00:16:22,949 --> 00:16:20,079

countries in in seconds

367

00:16:23,749 --> 00:16:22,959

uh maybe not seconds but certainly in in

368

00:16:25,430 --> 00:16:23,759

well

369

00:16:27,269 --> 00:16:25,440

you know go across countries very

370

00:16:30,150 --> 00:16:27,279

quickly and go

371

00:16:32,389 --> 00:16:30,160

go across continents in minutes

372

00:16:33,590 --> 00:16:32,399

you really get a sense that we are on

373

00:16:36,550 --> 00:16:33,600

you know one

374

00:16:39,910 --> 00:16:36,560

in one place in spaceship earth you know

375

00:16:41,590 --> 00:16:39,920

is a finite place it's a small place and

376

00:16:44,150 --> 00:16:41,600

you know in some places it's a crowded

377

00:16:45,670 --> 00:16:44,160

place and you kind of wish that we could

378

00:16:48,710 --> 00:16:45,680

all just

379

00:16:50,870 --> 00:16:48,720

live and work here uh together in a in a

380

00:16:53,509 --> 00:16:50,880

friendlier way in a more cooperative way

381

00:16:56,389 --> 00:16:53,519

because it is one one world one planet

382

00:16:57,829 --> 00:16:56,399

you know one atmosphere uh the the

383

00:17:00,230 --> 00:16:57,839

oceans

384

00:17:01,829 --> 00:17:00,240

are all joined together and so we share

385

00:17:03,910 --> 00:17:01,839

so much and

386

00:17:05,189 --> 00:17:03,920

and i think we need to learn how to take

387

00:17:08,630 --> 00:17:05,199

care of that together and be good

388

00:17:10,150 --> 00:17:08,640

stewards of this this gift that we have

389

00:17:12,949 --> 00:17:10,160

that i think that's probably just an

390

00:17:14,390 --> 00:17:12,959

awareness of those kind of things is is

391

00:17:20,949 --> 00:17:14,400

the biggest to me

392

00:17:27,270 --> 00:17:23,750

my name is diego and my question is

393

00:17:29,750 --> 00:17:27,280

having logged over 1 000 hours and 34

394

00:17:36,789 --> 00:17:29,760

different aircrafts which aircraft was

395

00:17:43,350 --> 00:17:39,350

hey derego i think my favorite without a

396

00:17:45,270 --> 00:17:43,360

doubt is the the f-16 military air force

397

00:17:46,710 --> 00:17:45,280

aircraft i spent a lot of years working

398

00:17:49,190 --> 00:17:46,720

on that airplane

399

00:17:51,110 --> 00:17:49,200

helping develop it as a flight test

400

00:17:53,590 --> 00:17:51,120

engineer and then working in the program

401

00:17:56,390 --> 00:17:53,600

office and uh you know it's it's a it's

402

00:17:58,710 --> 00:17:56,400

a very high performance airplane

403

00:18:01,029 --> 00:17:58,720

very good at what it does and i've got a

404

00:18:02,630 --> 00:18:01,039

lot of my own fingerprints on the the

405

00:18:06,630 --> 00:18:02,640

design and the capabilities in that

406

00:18:13,350 --> 00:18:06,640

airplane so i gotta say i love the f-16

407

00:18:18,150 --> 00:18:16,230

hi my name is noah and my question is

408

00:18:22,230 --> 00:18:18,160

how and where do you sleep on the space

409

00:18:25,669 --> 00:18:23,669

hey norah that's a good practical

410

00:18:28,230 --> 00:18:25,679

question we actually

411

00:18:30,710 --> 00:18:28,240

we we sleep in sleeping bags because you

412

00:18:32,310 --> 00:18:30,720

know we don't really have beds and beds

413

00:18:34,230 --> 00:18:32,320

wouldn't make much sense because most of

414

00:18:35,909 --> 00:18:34,240

your bed is as big frames to hold

415

00:18:37,750 --> 00:18:35,919

mattresses and spring cushions and

416

00:18:38,549 --> 00:18:37,760

things like that which we don't need up

417

00:18:40,710 --> 00:18:38,559

here

418

00:18:42,230 --> 00:18:40,720

and sleeping bags we have plenty of room

419

00:18:43,990 --> 00:18:42,240

for sleeping bags because they don't

420

00:18:45,270 --> 00:18:44,000

have to go on the floor like you might

421

00:18:47,110 --> 00:18:45,280

use them at your house when you have

422

00:18:49,830 --> 00:18:47,120

friends over we can put them on the

423

00:18:51,270 --> 00:18:49,840

walls or the ceiling just as easily just

424

00:18:52,310 --> 00:18:51,280

as easily as we can put them on the

425

00:18:54,789 --> 00:18:52,320

floors

426

00:18:56,470 --> 00:18:54,799

each of us has a little a little we call

427

00:19:00,070 --> 00:18:56,480

them crew quarters it's really kind of

428

00:19:01,830 --> 00:19:00,080

like a crew closet uh that's it's about

429

00:19:04,230 --> 00:19:01,840

the size just a little bigger maybe than

430

00:19:06,870 --> 00:19:04,240

an old uh old phone booth

431

00:19:09,190 --> 00:19:06,880

and that's where our sleeping bag is

432

00:19:11,029 --> 00:19:09,200

located and some of our personal stuff

433

00:19:13,190 --> 00:19:11,039

and a little computer so i can go in

434

00:19:14,710 --> 00:19:13,200

there and i can do email and there's

435

00:19:16,630 --> 00:19:14,720

actually a phone hookup through my

436

00:19:18,950 --> 00:19:16,640

computer so i can call my wife and my

437

00:19:20,310 --> 00:19:18,960

kids so that's it's kind of a like i

438

00:19:21,669 --> 00:19:20,320

said it's about the size of a broom

439

00:19:22,950 --> 00:19:21,679

closet you might have close to your

440

00:19:26,070 --> 00:19:22,960

kitchen

441

00:19:31,590 --> 00:19:28,870

last question

442

00:19:34,390 --> 00:19:31,600

hi my name is fernando and my question

443

00:19:41,270 --> 00:19:34,400

is if you weren't an astronaut what job

444

00:19:45,190 --> 00:19:43,430

wow now that's a really interesting

445

00:19:46,950 --> 00:19:45,200

question i've done a lot of different

446

00:19:49,909 --> 00:19:46,960

things i had a lot of different

447

00:19:51,990 --> 00:19:49,919

part-time jobs summer jobs school jobs

448

00:19:55,270 --> 00:19:52,000

when i was growing up i think probably

449

00:19:56,870 --> 00:19:55,280

one of the hardest jobs that i've done

450

00:19:59,750 --> 00:19:56,880

of course i was in the military i did

451
00:20:01,430 --> 00:19:59,760
flight tests and i loved the flight test

452
00:20:03,029 --> 00:20:01,440
business working as a flight test

453
00:20:05,590 --> 00:20:03,039
engineer

454
00:20:07,350 --> 00:20:05,600
and very challenging very

455
00:20:09,029 --> 00:20:07,360
very rewarding work

456
00:20:10,789 --> 00:20:09,039
to being in the military to serve in our

457
00:20:12,549 --> 00:20:10,799
country in that way

458
00:20:14,070 --> 00:20:12,559
for me another one too that i enjoyed

459
00:20:16,390 --> 00:20:14,080
for a period of time

460
00:20:18,789 --> 00:20:16,400
was was teaching and i could see

461
00:20:20,870 --> 00:20:18,799
teaching someday i actually worked as a

462
00:20:24,549 --> 00:20:20,880
substitute high school teacher

463
00:20:26,310 --> 00:20:24,559

for four to five months in between being

464

00:20:28,950 --> 00:20:26,320

on active duty in the air force and

465

00:20:30,789 --> 00:20:28,960

starting work at nasa and that was uh

466

00:20:32,950 --> 00:20:30,799

that was such an amazing thing to be in

467

00:20:34,230 --> 00:20:32,960

a classroom like your teachers are all

468

00:20:36,549 --> 00:20:34,240

the time and they're some of the just

469

00:20:38,070 --> 00:20:36,559

bravest hardest working people there are

470

00:20:40,070 --> 00:20:38,080

but i've been in those shoes just a

471

00:20:42,070 --> 00:20:40,080

little bit not not like they are where

472

00:20:43,990 --> 00:20:42,080

they're really responsible for for you

473

00:20:46,789 --> 00:20:44,000

and your learning all year long but it

474

00:20:49,270 --> 00:20:46,799

gave me a real appreciation for teaching

475

00:20:51,350 --> 00:20:49,280

my wife is a teacher now too and i know

476
00:20:53,830 --> 00:20:51,360
how hard that that she works but i know

477
00:20:55,990 --> 00:20:53,840
how rewarding it is to see the the

478
00:20:58,149 --> 00:20:56,000
students that are that are coming to

479
00:20:59,669 --> 00:20:58,159
life and are waking up and are enjoying

480
00:21:01,510 --> 00:20:59,679
what they're learning and are excited

481
00:21:03,669 --> 00:21:01,520
about it because that's what that's why

482
00:21:05,830 --> 00:21:03,679
teachers teach they teach because they

483
00:21:07,270 --> 00:21:05,840
love it and they love working with you

484
00:21:09,830 --> 00:21:07,280
and seeing you

485
00:21:12,310 --> 00:21:09,840
understand and come let the pieces start

486
00:21:14,870 --> 00:21:12,320
fitting together in your head and

487
00:21:16,630 --> 00:21:14,880
as you start to understand this stuff

488
00:21:19,350 --> 00:21:16,640

and that and the reason that's so

489

00:21:21,430 --> 00:21:19,360

rewarding is because it they know

490

00:21:23,510 --> 00:21:21,440

that that's preparing you for your

491

00:21:25,590 --> 00:21:23,520

tomorrow it's giving you the skills that

492

00:21:27,350 --> 00:21:25,600

you need to pursue your dreams whatever

493

00:21:29,270 --> 00:21:27,360

they might be whether it's to take my

494

00:21:31,750 --> 00:21:29,280

place up here in a few years

495

00:21:34,710 --> 00:21:31,760

or to be a teacher yourself or any kind

496

00:21:36,870 --> 00:21:34,720

of businessman or engineer or scientist

497

00:21:39,430 --> 00:21:36,880

that those what you learn in the

498

00:21:41,990 --> 00:21:39,440

classroom is building your foundation

499

00:21:43,510 --> 00:21:42,000

for your future to follow whatever your

500

00:21:45,669 --> 00:21:43,520

dreams might be

501
00:21:47,190 --> 00:21:45,679
and that's why teachers love it so much

502
00:21:49,909 --> 00:21:47,200
that's why they keep doing what they're

503
00:21:51,750 --> 00:21:49,919
doing and i think maybe teaching in some

504
00:21:56,149 --> 00:21:51,760
way thanks for the question it was a

505
00:21:59,750 --> 00:21:57,270
commander

506
00:22:02,149 --> 00:21:59,760
these five glass students have a message

507
00:22:04,149 --> 00:22:02,159
for you representing a thousand five

508
00:22:07,110 --> 00:22:04,159
hundred other boys and girls here in the

509
00:22:10,470 --> 00:22:07,120
rio grande valley

510
00:22:19,909 --> 00:22:12,710
goodbye and thank you for visiting with

511
00:22:24,549 --> 00:22:21,909
congressman hinojosa thank you very much

512
00:22:27,190 --> 00:22:24,559
sir your your support for hestech is

513
00:22:29,430 --> 00:22:27,200

amazing you're bringing a lot of ideas

514

00:22:31,830 --> 00:22:29,440

and energy into the valley into the

515

00:22:34,230 --> 00:22:31,840

lives of these students who are going to

516

00:22:36,390 --> 00:22:34,240

be changed by this in so many ways and

517

00:22:39,590 --> 00:22:36,400

our future depends on them we give it to

518

00:22:42,310 --> 00:22:39,600

them and to their energy to their skills

519

00:22:44,390 --> 00:22:42,320

and and ideas to lead us into the future

520

00:22:46,070 --> 00:22:44,400

thank you very much congressman and to

521

00:22:47,510 --> 00:22:46,080

all the students at hestech and all the

522

00:22:48,390 --> 00:22:47,520

teachers and supporters that make it

523

00:22:50,789 --> 00:22:48,400

happen

524

00:22:53,190 --> 00:22:50,799

thank you very much you guys enjoy the

525

00:22:54,870 --> 00:22:53,200

enjoy the day make the best out of it

526

00:22:59,750 --> 00:22:54,880

this is mike fossum on the international

527

00:23:05,830 --> 00:23:02,310

station this is houston acr

528

00:23:07,990 --> 00:23:05,840

thank you that concludes the event

529

00:23:10,470 --> 00:23:08,000

that's that conference congressman

530

00:23:11,430 --> 00:23:10,480

inohosa and the university of texas pan

531

00:23:13,590 --> 00:23:11,440

american