



1
00:00:33,590 --> 00:00:16,710

thank you

2
00:00:39,270 --> 00:00:35,910

hey everybody

3
00:00:46,869 --> 00:00:41,350

okay so you're actually gonna have this

4
00:00:50,549 --> 00:00:49,190

okay so when we're talking to the crew

5
00:00:52,229 --> 00:00:50,559

every time you hit this button you're

6
00:00:54,470 --> 00:00:52,239

gonna hear what we call a plane it's

7
00:01:08,230 --> 00:00:54,480

gonna feel like a key

8
00:01:39,109 --> 00:01:10,230

okay

9
00:01:45,830 --> 00:01:41,030

station this is houston are you ready

10
00:01:51,190 --> 00:01:49,429

houston this is station we are ready

11
00:01:52,870 --> 00:01:51,200

marshall space flight center this is

12
00:01:57,510 --> 00:01:52,880

mission control houston please call

13
00:02:02,149 --> 00:01:59,590

and station this is jessica duckworth at

14

00:02:14,470 --> 00:02:02,159

marshall with vice president mike pence

15

00:02:18,550 --> 00:02:16,710

well thank you all very much it's uh

16

00:02:21,589 --> 00:02:18,560

it's great to be here at the nasa

17

00:02:22,710 --> 00:02:21,599

marshals flight center and

18

00:02:24,550 --> 00:02:22,720

it is a

19

00:02:26,229 --> 00:02:24,560

particular privilege for me to be able

20

00:02:28,309 --> 00:02:26,239

to address

21

00:02:30,229 --> 00:02:28,319

all three of you at the international

22

00:02:32,470 --> 00:02:30,239

space station

23

00:02:34,550 --> 00:02:32,480

i bring greetings this afternoon randy

24

00:02:36,630 --> 00:02:34,560

and mark and joe from

25

00:02:38,229 --> 00:02:36,640

president donald trump i just hung up

26

00:02:40,229 --> 00:02:38,239

the phone from him

27

00:02:42,630 --> 00:02:40,239

and he wanted me to convey his

28

00:02:45,030 --> 00:02:42,640

admiration and appreciation

29

00:02:51,589 --> 00:02:45,040

for your service and your courage and

30

00:02:55,030 --> 00:02:52,949

thank you sir welcome aboard the

31

00:02:56,949 --> 00:02:55,040

international space station

32

00:02:59,509 --> 00:02:56,959

well thanks so very much i know each of

33

00:03:01,270 --> 00:02:59,519

you served in the armed forces

34

00:03:03,990 --> 00:03:01,280

randy and joe were

35

00:03:05,750 --> 00:03:04,000

in the marine corps like my son and mark

36

00:03:07,350 --> 00:03:05,760

is in the army now you serve as american

37

00:03:08,790 --> 00:03:07,360

astronauts and

38

00:03:10,710 --> 00:03:08,800

i want you to know the president and i

39

00:03:11,990 --> 00:03:10,720

and every american sees each one of you

40

00:03:14,790 --> 00:03:12,000

as true

41

00:03:17,190 --> 00:03:14,800

trailblazers in a great american

42

00:03:19,350 --> 00:03:17,200

tradition you may not be aware but the

43

00:03:23,350 --> 00:03:19,360

president asked me to chair

44

00:03:25,030 --> 00:03:23,360

a restart of the national space council

45

00:03:26,229 --> 00:03:25,040

and i want to assure each one of you

46

00:03:29,509 --> 00:03:26,239

that

47

00:03:31,270 --> 00:03:29,519

the the national space council will

48

00:03:33,110 --> 00:03:31,280

be looking

49

00:03:36,309 --> 00:03:33,120

we're looking to build on the historic

50

00:03:38,630 --> 00:03:36,319

work that you're building on today

51
00:03:40,550 --> 00:03:38,640
and i can assure you that under

52
00:03:42,630 --> 00:03:40,560
president donald trump

53
00:03:43,589 --> 00:03:42,640
america is determined to

54
00:03:46,149 --> 00:03:43,599
lead

55
00:03:47,430 --> 00:03:46,159
once again not just in low earth orbit

56
00:03:50,149 --> 00:03:47,440
but once again

57
00:03:51,589 --> 00:03:50,159
leading the world in space exploration

58
00:03:53,509 --> 00:03:51,599
and we're just

59
00:03:55,110 --> 00:03:53,519
really honored to speak to three

60
00:03:56,470 --> 00:03:55,120
courageous americans who are such an

61
00:04:00,710 --> 00:03:56,480
essential part

62
00:04:04,789 --> 00:04:01,750
let me

63
00:04:06,630 --> 00:04:04,799

one of you uh

64

00:04:08,070 --> 00:04:06,640

mark and joe i understand you both just

65

00:04:12,550 --> 00:04:08,080

arrived

66

00:04:14,710 --> 00:04:12,560

in space about a week and a half ago can

67

00:04:17,349 --> 00:04:14,720

can you describe uh

68

00:04:23,670 --> 00:04:17,359

for an earth dweller like me what it's

69

00:04:26,390 --> 00:04:25,110

well especially at the beginning it

70

00:04:27,990 --> 00:04:26,400

feels a little bit like someone's

71

00:04:29,110 --> 00:04:28,000

holding you by your feet upside down for

72

00:04:30,390 --> 00:04:29,120

a while

73

00:04:32,390 --> 00:04:30,400

it can be a little uncomfortable but

74

00:04:36,550 --> 00:04:32,400

it's amazing how quickly human beings

75

00:04:41,110 --> 00:04:38,790

how about how about the rest of you any

76
00:04:42,469 --> 00:04:41,120
any impressions that you can interpret

77
00:04:44,150 --> 00:04:42,479
life in space

78
00:04:45,909 --> 00:04:44,160
to somebody like me that's just looked

79
00:04:50,629 --> 00:04:45,919
on my whole lifetime and admired people

80
00:04:55,270 --> 00:04:52,390
well let me just say

81
00:04:56,950 --> 00:04:55,280
it's a it's an awesome feeling it's a

82
00:04:59,110 --> 00:04:56,960
it's really an honor and a privilege to

83
00:05:01,430 --> 00:04:59,120
be up here to be serving our country and

84
00:05:02,950 --> 00:05:01,440
doing all this great research but i

85
00:05:04,790 --> 00:05:02,960
think all of us have the little kid in

86
00:05:06,629 --> 00:05:04,800
us so you know to be able to float

87
00:05:07,670 --> 00:05:06,639
around and just uh

88
00:05:10,150 --> 00:05:07,680

kind of just

89

00:05:11,830 --> 00:05:10,160

break free of all these uh these ties

90

00:05:13,749 --> 00:05:11,840

that we have on earth it's quite a

91

00:05:15,749 --> 00:05:13,759

remarkable feeling and you know

92

00:05:22,710 --> 00:05:15,759

hopefully someday more and more people

93

00:05:26,390 --> 00:05:24,790

thanks for the acrobatics behind you

94

00:05:28,310 --> 00:05:26,400

there i was that was actually very

95

00:05:29,270 --> 00:05:28,320

impressive um

96

00:05:34,629 --> 00:05:29,280

uh

97

00:05:37,189 --> 00:05:34,639

question at you um

98

00:05:39,270 --> 00:05:37,199

you know i'm gonna take a look here

99

00:05:40,790 --> 00:05:39,280

at the space launch system that that's

100

00:05:43,909 --> 00:05:40,800

going to carry your fellow astronauts

101
00:05:46,950 --> 00:05:43,919
into deep space can can you talk about

102
00:05:52,950 --> 00:05:46,960
how the work you're doing now

103
00:05:56,629 --> 00:05:54,390
oh mr vice president we can definitely

104
00:05:58,390 --> 00:05:56,639
say that uh if you get to see that uh

105
00:05:59,909 --> 00:05:58,400
engine firing today that'll be a sight

106
00:06:01,590 --> 00:05:59,919
to behold it'll be something you'll

107
00:06:03,749 --> 00:06:01,600
always remember and those engines are

108
00:06:07,270 --> 00:06:03,759
gonna power the rocket that takes you

109
00:06:09,430 --> 00:06:07,280
know the spaceships like our orion um

110
00:06:11,670 --> 00:06:09,440
up to orbit with the people inside and

111
00:06:12,950 --> 00:06:11,680
you'll hear about em1 and em2 our test

112
00:06:15,430 --> 00:06:12,960
flights that are coming up here real

113
00:06:16,629 --> 00:06:15,440

soon um you know in spacecrafts just

114

00:06:17,990 --> 00:06:16,639

like this

115

00:06:20,870 --> 00:06:18,000

actually maybe a little larger than this

116

00:06:23,029 --> 00:06:20,880

one but uh you know an orion spacecraft

117

00:06:25,189 --> 00:06:23,039

built in the u.s you meant to go do deep

118

00:06:26,870 --> 00:06:25,199

exploration missions um

119

00:06:28,950 --> 00:06:26,880

and the work that we're doing is so that

120

00:06:31,189 --> 00:06:28,960

we can survive when we're in that going

121

00:06:32,790 --> 00:06:31,199

into deep space places you know how does

122

00:06:34,469 --> 00:06:32,800

radiation affect us up here well we're

123

00:06:36,790 --> 00:06:34,479

up here for six months at a time seeing

124

00:06:39,510 --> 00:06:36,800

how it affects us we're looking at

125

00:06:41,110 --> 00:06:39,520

nutrition muscles bones all these types

126
00:06:43,430 --> 00:06:41,120
of things that are really important that

127
00:06:45,110 --> 00:06:43,440
degrade while we're here in zero gravity

128
00:06:47,670 --> 00:06:45,120
just this afternoon we were working on

129
00:06:49,909 --> 00:06:47,680
the miniature exercise exercise device

130
00:06:51,510 --> 00:06:49,919
which was meant to fit into a capsule

131
00:06:53,270 --> 00:06:51,520
just like orion

132
00:06:55,350 --> 00:06:53,280
and so we can do exercise to maintain

133
00:06:57,350 --> 00:06:55,360
our health so when by the time we get to

134
00:06:59,270 --> 00:06:57,360
other heavenly bodies or whatever the

135
00:07:03,110 --> 00:06:59,280
exploration mission is we're fit and

136
00:07:07,110 --> 00:07:04,870
well i really appreciate that commander

137
00:07:09,029 --> 00:07:07,120
it's a great insight you all might be

138
00:07:10,629 --> 00:07:09,039

particularly proud with your background

139

00:07:12,309 --> 00:07:10,639

to know that today

140

00:07:13,990 --> 00:07:12,319

president trump signed a presidential

141

00:07:15,990 --> 00:07:14,000

memorandum directing the department of

142

00:07:17,029 --> 00:07:16,000

education to vote at least 200 million

143

00:07:19,350 --> 00:07:17,039

dollars

144

00:07:22,150 --> 00:07:19,360

a year to grant funds toward expanding

145

00:07:24,710 --> 00:07:22,160

access to high quality stem education

146

00:07:25,670 --> 00:07:24,720

and computer science education is

147

00:07:29,350 --> 00:07:25,680

and

148

00:07:30,790 --> 00:07:29,360

historically underserved

149

00:07:32,629 --> 00:07:30,800

groups i think the president is

150

00:07:35,029 --> 00:07:32,639

absolutely determined

151
00:07:36,790 --> 00:07:35,039
to make sure that education in america

152
00:07:40,390 --> 00:07:36,800
is laying a foundation

153
00:07:42,070 --> 00:07:40,400
uh in in mathematics and science

154
00:07:44,710 --> 00:07:42,080
and all the technical background that's

155
00:07:47,189 --> 00:07:44,720
going to make it possible for more

156
00:07:49,110 --> 00:07:47,199
more of our little boys and girls to

157
00:07:51,029 --> 00:07:49,120
reach for the stars and

158
00:07:54,230 --> 00:07:51,039
and maybe be able to live the dream that

159
00:07:55,430 --> 00:07:54,240
you all are dreaming today

160
00:08:00,469 --> 00:07:55,440
what advice

161
00:08:02,230 --> 00:08:00,479
people today how do they make it

162
00:08:07,749 --> 00:08:02,240
to the international space station and

163
00:08:12,390 --> 00:08:09,430

well i would start off by telling them

164

00:08:14,550 --> 00:08:12,400

all to uh to dream big it was all

165

00:08:16,869 --> 00:08:14,560

a dream of ours to someday be up here

166

00:08:17,909 --> 00:08:16,879

and without that dream we wouldn't be

167

00:08:19,749 --> 00:08:17,919

here so

168

00:08:21,589 --> 00:08:19,759

you know that's the first step and then

169

00:08:23,589 --> 00:08:21,599

i would tell them to work hard

170

00:08:25,189 --> 00:08:23,599

somebody once told me you know you don't

171

00:08:27,350 --> 00:08:25,199

have to be the smartest person in the

172

00:08:28,869 --> 00:08:27,360

room and you probably won't be but

173

00:08:31,350 --> 00:08:28,879

there's no reason why you can't work

174

00:08:33,110 --> 00:08:31,360

harder than everybody else so

175

00:08:35,029 --> 00:08:33,120

work as hard as you can

176

00:08:36,949 --> 00:08:35,039

but really you know what i think is most

177

00:08:37,829 --> 00:08:36,959

important is have fun with whatever you

178

00:08:40,230 --> 00:08:37,839

do

179

00:08:42,469 --> 00:08:40,240

we love our job of course we love being

180

00:08:44,870 --> 00:08:42,479

up here but the jobs we had before we

181

00:08:46,550 --> 00:08:44,880

arrived at nasa we all loved them so

182

00:08:47,509 --> 00:08:46,560

find a field that you're very passionate

183

00:08:49,110 --> 00:08:47,519

about

184

00:08:50,470 --> 00:08:49,120

and if you love it you're never going to

185

00:08:52,630 --> 00:08:50,480

have to work a day in your life it's

186

00:08:54,389 --> 00:08:52,640

just really really good so

187

00:08:55,750 --> 00:08:54,399

you know i would pass that along and let

188

00:09:00,870 --> 00:08:55,760

people know there's

189

00:09:04,870 --> 00:09:02,790

well thanks for that let me uh let me

190

00:09:06,550 --> 00:09:04,880

ask you a question in my in my role as

191

00:09:08,470 --> 00:09:06,560

chairman of the national space council

192

00:09:10,550 --> 00:09:08,480

and our council will be meeting

193

00:09:13,269 --> 00:09:10,560

uh for the first time

194

00:09:15,829 --> 00:09:13,279

in washington d.c in just a few short

195

00:09:20,230 --> 00:09:17,990

i'd love to know how do you believe your

196

00:09:23,269 --> 00:09:20,240

work on the international space station

197

00:09:29,590 --> 00:09:23,279

day in and day out advances american

198

00:09:33,910 --> 00:09:31,990

we just sent home a spacex dragon cargo

199

00:09:35,990 --> 00:09:33,920

vehicle that carried science that we

200

00:09:39,590 --> 00:09:36,000

were working on for a month up here one

201
00:09:42,230 --> 00:09:39,600
of them was growing up lung tissue

202
00:09:44,630 --> 00:09:42,240
lung tissue that's gonna allow them to

203
00:09:46,949 --> 00:09:44,640
ideally figure out you know cures for

204
00:09:50,389 --> 00:09:46,959
lung cancer so we one of our crewmates

205
00:09:51,750 --> 00:09:50,399
dubbed it the cancer-seeking missiles

206
00:09:53,829 --> 00:09:51,760
groundbreaking research like that up

207
00:09:56,790 --> 00:09:53,839
here on the international space station

208
00:09:59,430 --> 00:09:56,800
365 days a year 24 hours a day

209
00:10:01,190 --> 00:09:59,440
is what keeps american leadership in in

210
00:10:03,030 --> 00:10:01,200
space

211
00:10:04,550 --> 00:10:03,040
the fact that there are companies that

212
00:10:05,990 --> 00:10:04,560
are building cargo vehicles coming to

213
00:10:08,069 --> 00:10:06,000

our space station the fact that those

214

00:10:09,269 --> 00:10:08,079

same companies and new ones are building

215

00:10:11,269 --> 00:10:09,279

crude vehicles they're going to come to

216

00:10:13,990 --> 00:10:11,279

our space station that's how we maintain

217

00:10:15,350 --> 00:10:14,000

our leadership but most of all the place

218

00:10:16,630 --> 00:10:15,360

that you sit and the mission control

219

00:10:18,310 --> 00:10:16,640

that we talked to in houston and all

220

00:10:20,710 --> 00:10:18,320

these other nasa centers it's the work

221

00:10:22,630 --> 00:10:20,720

we do every day continuing to live and

222

00:10:24,550 --> 00:10:22,640

work in space and dealing with the

223

00:10:26,550 --> 00:10:24,560

challenges of not only the daily

224

00:10:28,949 --> 00:10:26,560

operations but the longevity of the

225

00:10:31,829 --> 00:10:28,959

operations we're going into six decades

226

00:10:33,269 --> 00:10:31,839

of space in america it's the daily stuff

227

00:10:34,790 --> 00:10:33,279

that we do and the challenges we keep

228

00:10:37,430 --> 00:10:34,800

putting in front of ourselves that

229

00:10:39,430 --> 00:10:37,440

maintain our leadership in space

230

00:10:41,110 --> 00:10:39,440

well that's a great answer commander i

231

00:10:42,389 --> 00:10:41,120

really appreciate that we look forward

232

00:10:47,750 --> 00:10:42,399

to

233

00:10:49,750 --> 00:10:47,760

develop policies in a broad range of

234

00:10:50,790 --> 00:10:49,760

areas to support american leadership in

235

00:10:53,509 --> 00:10:50,800

space

236

00:10:55,430 --> 00:10:53,519

and well with that with that before you

237

00:10:56,790 --> 00:10:55,440

sail away let me just say again thank

238

00:10:59,829 --> 00:10:56,800

you so much

239

00:11:01,509 --> 00:10:59,839

for your service to the country

240

00:11:03,509 --> 00:11:01,519

i know i speak on behalf of the

241

00:11:04,630 --> 00:11:03,519

president and every american when i say

242

00:11:06,949 --> 00:11:04,640

that

243

00:11:08,550 --> 00:11:06,959

literally and figuratively we all look

244

00:11:10,389 --> 00:11:08,560

up to you

245

00:11:12,550 --> 00:11:10,399

and we are grateful

246

00:11:15,350 --> 00:11:12,560

for your courage and your determination

247

00:11:17,910 --> 00:11:15,360

and and the contribution that you make

248

00:11:19,829 --> 00:11:17,920

to american leadership in space so uh

249

00:11:22,069 --> 00:11:19,839

god bless you and keep you

250

00:11:23,910 --> 00:11:22,079

and i uh i'd like to invite all three of

251

00:11:26,230 --> 00:11:23,920

you to the white house

252

00:11:28,550 --> 00:11:26,240

uh and uh i got a look at where you work

253

00:11:29,910 --> 00:11:28,560

i'd love to walk you around where we

254

00:11:31,910 --> 00:11:29,920

work and have a chance to shake your

255

00:11:34,470 --> 00:11:31,920

hand and thank you after your long

256

00:11:40,230 --> 00:11:34,480

journey brings you home so uh

257

00:11:42,949 --> 00:11:42,069

thank you very much mr vice president

258

00:11:44,710 --> 00:11:42,959

thank you for joining us on the

259

00:11:46,870 --> 00:11:44,720

international space station and thank

260

00:11:48,470 --> 00:11:46,880

you most of all for your support of our

261

00:11:50,069 --> 00:11:48,480

exploration and i think the national

262

00:11:51,269 --> 00:11:50,079

space council is going to do great work

263

00:11:53,509 --> 00:11:51,279

here in the future we look forward to

264

00:11:54,829 --> 00:11:53,519

seeing it thank you good evening from

265

00:11:59,269 --> 00:11:54,839

the international space

266

00:12:04,949 --> 00:12:01,190

station this is houston acr that

267

00:12:08,230 --> 00:12:06,710

and thank you president and all the

268

00:12:09,910 --> 00:12:08,240

participants at the marshall space

269

00:12:11,509 --> 00:12:09,920

flight center station we are now

270

00:12:27,990 --> 00:12:11,519

resuming operational audio

271

00:12:30,790 --> 00:12:29,750

so for example today we had a pretty

272

00:12:33,590 --> 00:12:30,800

busy day

273

00:12:35,829 --> 00:12:33,600

uh so we did an exercise demonstration

274

00:12:37,509 --> 00:12:35,839

that's going to help uh us for a running

275

00:12:39,910 --> 00:12:37,519

so it's one of our exploration

276

00:12:41,509 --> 00:12:39,920

initiatives we also did work on a

277

00:12:43,509 --> 00:12:41,519

combustion experiment upgrading our

278

00:12:45,430 --> 00:12:43,519

combustion racking station

279

00:12:47,990 --> 00:12:45,440

for both of those activities now we

280

00:12:49,350 --> 00:12:48,000

enable the pd to talk from their home

281

00:12:50,710 --> 00:12:49,360

um

282

00:12:52,710 --> 00:12:50,720

for instance

283

00:12:53,990 --> 00:12:52,720

johnson to talk to the crew on the space

284

00:12:55,590 --> 00:12:54,000

station

285

00:12:57,430 --> 00:12:55,600

both of those activities like for

286

00:12:59,350 --> 00:12:57,440

instance the

287

00:13:01,670 --> 00:12:59,360

combustion research

288

00:13:04,949 --> 00:13:01,680

not only writing fires in space but also

289

00:13:06,470 --> 00:13:04,959

developing better meanings for space

290

00:13:09,829 --> 00:13:06,480

and then the third one we're going to

291

00:13:12,230 --> 00:13:09,839

talk about today we did a mushroom uh

292

00:13:15,990 --> 00:13:12,240

joint experiment um that is related to

293

00:13:17,509 --> 00:13:16,000

stem so uh the cosmonaut sasha he set up

294

00:13:18,550 --> 00:13:17,519

a camera in the

295

00:13:20,069 --> 00:13:18,560

window

296

00:13:21,590 --> 00:13:20,079

and middle school students from around

297

00:13:24,150 --> 00:13:21,600

the world are going to get to take

298

00:13:25,509 --> 00:13:24,160

photos they get to get to go online

299

00:13:27,030 --> 00:13:25,519

choose what photo they want to take and

300

00:13:28,710 --> 00:13:27,040

then they can build up

301

00:13:30,230 --> 00:13:28,720

their school their class

302

00:13:31,990 --> 00:13:30,240

and build a lesson plan around that

303

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

photo is that right

304

00:13:35,350 --> 00:13:34,240

that's great so that's just today yeah

305

00:13:37,190 --> 00:13:35,360

that's great every day we're doing

306

00:13:38,230 --> 00:13:37,200

things like that so where are they on

307

00:13:42,389 --> 00:13:38,240

the globe

308

00:13:43,670 --> 00:13:42,399

here they're flying over the south where

309

00:13:45,509 --> 00:13:43,680

are they actually physically it's

310

00:13:53,189 --> 00:13:45,519

actually pacific yeah

311

00:13:53,199 --> 00:14:10,629

yeah great good thank you