



1
00:00:12,230 --> 00:00:09,910
the second umbilical now separating from

2
00:00:22,550 --> 00:00:12,240
the tower marking less than 15 seconds

3
00:00:28,310 --> 00:00:25,589
and liftoff the year in space starts now

4
00:00:38,950 --> 00:00:28,320
kelly kornyenko and padalka on their way

5
00:00:43,510 --> 00:00:40,549
getting good first stage performance the

6
00:00:45,029 --> 00:00:43,520
soyuz delivering about 930 000 pounds of

7
00:00:47,110 --> 00:00:45,039
thrust through its four strap-on

8
00:00:50,470 --> 00:00:47,120
boosters and single engines

9
00:00:54,869 --> 00:00:52,630
get in reports nominal operation the

10
00:00:57,350 --> 00:00:54,879
first stage measuring 68 feet in length

11
00:00:59,110 --> 00:00:57,360
and 24 feet in diameter burning liquid

12
00:01:03,029 --> 00:00:59,120
fuel for the first two minutes and six

13
00:01:06,469 --> 00:01:03,039

seconds into the flight regularly copy

14

00:01:12,630 --> 00:01:06,479

40 seconds into the flight stabilization

15

00:01:17,190 --> 00:01:14,789

continuing to get views from the cabin

16

00:01:19,429 --> 00:01:17,200

inside as you heard nasa astronaut reed

17

00:01:22,950 --> 00:01:19,439

wiseman a fairly smooth flight into

18

00:01:22,960 --> 00:01:27,590

60 seconds

19

00:01:31,510 --> 00:01:29,429

the crew looking good inside again

20

00:01:32,630 --> 00:01:31,520

padalka in the center corner on the top

21

00:01:34,630 --> 00:01:32,640

of your screen

22

00:01:39,590 --> 00:01:34,640

getting a look now at nasa astronaut

23

00:01:45,190 --> 00:01:42,710

giving a big thumbs up

24

00:01:47,030 --> 00:01:45,200

200 seconds into the flight the

25

00:01:49,749 --> 00:01:47,040

thrusters of the second stage are

26
00:02:33,190 --> 00:01:49,759
functioning nominally copy everything is

27
00:02:33,200 --> 00:02:41,830
that's a good sign for them

28
00:02:41,840 --> 00:03:00,229
2016

29
00:03:00,239 --> 00:03:05,830
all right

30
00:03:05,840 --> 00:03:35,750
is

31
00:03:35,760 --> 00:04:11,670
us

32
00:04:11,680 --> 00:04:53,990
i got something for you

33
00:04:54,000 --> 00:05:19,830
hey charlotte you want to be live

34
00:05:19,840 --> 00:05:45,350
give him a high five

35
00:05:45,360 --> 00:05:59,189
oh

36
00:06:47,430 --> 00:06:11,749
foreign

37
00:06:47,440 --> 00:07:19,909
what

38
00:07:19,919 --> 00:08:57,990

okay

39

00:08:58,000 --> 00:09:21,190

um

40

00:09:21,200 --> 00:09:37,030

every day

41

00:09:37,040 --> 00:10:11,430

three of you guys

42

00:10:11,440 --> 00:11:12,870

foreign

43

00:11:12,880 --> 00:12:08,150

one

44

00:12:11,750 --> 00:12:09,990

we're excited about the flight he and i

45

00:12:13,190 --> 00:12:11,760

actually had a long conversation last

46

00:12:14,870 --> 00:12:13,200

night and she says

47

00:12:16,949 --> 00:12:14,880

our intent is to be here whenever you

48

00:12:18,310 --> 00:12:16,959

need us

49

00:12:20,870 --> 00:12:18,320

you know

50

00:12:23,829 --> 00:12:20,880

you and scott the world is excited about

51
00:12:26,069 --> 00:12:23,839
your mission it's the beginning of a new

52
00:12:27,750 --> 00:12:26,079
phase of exploration between our two

53
00:12:30,150 --> 00:12:27,760
countries for one thing

54
00:12:32,230 --> 00:12:30,160
and uh takes us a little bit farther on

55
00:12:48,870 --> 00:12:32,240
the journey to mars so that's really

56
00:12:52,629 --> 00:12:50,710
it is great to see you

57
00:13:43,269 --> 00:12:52,639
enjoy space station and take good care

58
00:13:43,279 --> 00:14:27,189
this is

59
00:14:27,199 --> 00:14:33,910
oh

60
00:15:00,710 --> 00:14:54,550
foreign

61
00:15:00,720 --> 00:15:34,230
tonight

62
00:15:34,240 --> 00:15:41,350
what is it

63
00:16:15,509 --> 00:15:54,069

foreign

64

00:16:15,519 --> 00:16:43,030

oh

65

00:16:47,990 --> 00:16:45,269

mike stefferdini iss program manager

66

00:16:50,069 --> 00:16:48,000

mike a year in space underway for scott

67

00:16:52,230 --> 00:16:50,079

kelly and mikhail kornenko your reaction

68

00:16:54,629 --> 00:16:52,240

to the launch well as always the launch

69

00:16:56,470 --> 00:16:54,639

is fantastic to watch even with the

70

00:16:58,150 --> 00:16:56,480

cloud cover it makes the whole pad glow

71

00:17:00,389 --> 00:16:58,160

so at night time it's a spectacular

72

00:17:01,990 --> 00:17:00,399

sight but i think

73

00:17:04,870 --> 00:17:02,000

on the international space station we

74

00:17:07,270 --> 00:17:04,880

have been working for some time to do

75

00:17:09,029 --> 00:17:07,280

the necessary studies to to convince

76

00:17:11,110 --> 00:17:09,039

ourselves we know how to mitigate the

77

00:17:13,909 --> 00:17:11,120

deleterious effects of space

78

00:17:16,870 --> 00:17:13,919

and i think this is the most overt

79

00:17:18,230 --> 00:17:16,880

uh step that we've taken where everybody

80

00:17:19,829 --> 00:17:18,240

can kind of think about the fact this is

81

00:17:22,150 --> 00:17:19,839

a year in space we're kind of taking a

82

00:17:23,829 --> 00:17:22,160

step six months to a year and then a

83

00:17:25,750 --> 00:17:23,839

year to year and a half we're making our

84

00:17:27,829 --> 00:17:25,760

steps towards how long we have to be in

85

00:17:29,990 --> 00:17:27,839

space to go to mars and so

86

00:17:33,590 --> 00:17:30,000

of course this is a major step for us a

87

00:17:35,990 --> 00:17:33,600

major moment but it really highlights

88

00:17:37,510 --> 00:17:36,000

that space station is a necessary step

89

00:17:39,029 --> 00:17:37,520

towards exploration the first step

90

00:17:40,710 --> 00:17:39,039

towards exploration

91

00:17:42,470 --> 00:17:40,720

mike much has been made over the last

92

00:17:45,270 --> 00:17:42,480

weeks and months about

93

00:17:47,590 --> 00:17:45,280

kelly and kornenko how will they make it

94

00:17:49,750 --> 00:17:47,600

marathon versus a sprint but from a

95

00:17:52,150 --> 00:17:49,760

programmatic standpoint how do you as

96

00:17:54,230 --> 00:17:52,160

the program manager manage all of the

97

00:17:56,470 --> 00:17:54,240

traffic all of the science that they'll

98

00:17:58,630 --> 00:17:56,480

encounter over the next year well that

99

00:18:01,990 --> 00:17:58,640

is a challenge not only you're doing one

100

00:18:03,990 --> 00:18:02,000

year experiments on these two gentlemen

101
00:18:06,549 --> 00:18:04,000
but we also have our full suite of six

102
00:18:08,310 --> 00:18:06,559
months experiments going as well in

103
00:18:09,909 --> 00:18:08,320
addition to that for this particular

104
00:18:11,909 --> 00:18:09,919
period of time we're reconfiguring the

105
00:18:13,750 --> 00:18:11,919
international space station for docking

106
00:18:15,029 --> 00:18:13,760
of the commercial crew vehicles which is

107
00:18:17,510 --> 00:18:15,039
a major change we're moving some

108
00:18:21,110 --> 00:18:17,520
elements around adding docking ports uh

109
00:18:23,669 --> 00:18:21,120
and so it's uh it's a busy time the crew

110
00:18:25,430 --> 00:18:23,679
time is very constrained and so really

111
00:18:27,190 --> 00:18:25,440
the job of the program is to balance all

112
00:18:29,350 --> 00:18:27,200
those priorities while we continue to do

113
00:18:32,150 --> 00:18:29,360

the critical research we do and still

114

00:18:33,750 --> 00:18:32,160

get the the uh the reconfiguration done

115

00:18:35,590 --> 00:18:33,760

so it's it's a balancing act but it's

116

00:18:38,070 --> 00:18:35,600

one we're very familiar with

117

00:18:39,990 --> 00:18:38,080

and mike uh a significant time for the

118

00:18:41,270 --> 00:18:40,000

international space station

119

00:18:42,950 --> 00:18:41,280

these two guys are going to be flying

120

00:18:45,190 --> 00:18:42,960

over the 40th anniversary of apollo

121

00:18:47,590 --> 00:18:45,200

soyuz and the 15th anniversary of a

122

00:18:50,549 --> 00:18:47,600

permanent human occupancy on the station

123

00:18:52,630 --> 00:18:50,559

how significant is that for the program

124

00:18:54,710 --> 00:18:52,640

and the steps that lie ahead

125

00:18:56,630 --> 00:18:54,720

well when you think about apollo soyuz

126

00:18:58,950 --> 00:18:56,640

it really was the first step in our

127

00:19:01,510 --> 00:18:58,960

cooperation with our russian colleagues

128

00:19:04,070 --> 00:19:01,520

and which laid the foundation for

129

00:19:06,150 --> 00:19:04,080

cooperation amongst many partners so to

130

00:19:07,750 --> 00:19:06,160

me the 40th anniversary is important the

131

00:19:09,750 --> 00:19:07,760

15th anniversary is not only the

132

00:19:12,230 --> 00:19:09,760

anniversary of 15 years of human

133

00:19:15,669 --> 00:19:12,240

presence on iss but i think it

134

00:19:17,750 --> 00:19:15,679

punctuates the apollo soyuz first step

135

00:19:20,070 --> 00:19:17,760

and so i look at a sort of a step

136

00:19:22,789 --> 00:19:20,080

towards our final destination the idea

137

00:19:24,789 --> 00:19:22,799

that that went from apollo soyuz to the

138

00:19:26,310 --> 00:19:24,799

international space station today the

139

00:19:27,990 --> 00:19:26,320

international space station is really

140

00:19:30,789 --> 00:19:28,000

the first step in human exploration

141

00:19:33,430 --> 00:19:30,799

beyond low earth orbit and so we've got

142

00:19:35,350 --> 00:19:33,440

at least 15 more years of iss and then

143

00:19:37,029 --> 00:19:35,360

the whole

144

00:19:38,950 --> 00:19:37,039

international partnership a

145

00:19:40,870 --> 00:19:38,960

international partnership

146

00:19:43,350 --> 00:19:40,880

will start moving forward and this to me

147

00:19:45,510 --> 00:19:43,360

not only highlights our past and what

148

00:19:48,390 --> 00:19:45,520

we've done to date but it smiles

149

00:19:51,270 --> 00:19:48,400

brightly on our our future going beyond

150

00:19:54,870 --> 00:19:53,029

bill gerstenmaier nasa's associate

151

00:19:57,270 --> 00:19:54,880

administrator for human exploration

152

00:19:58,870 --> 00:19:57,280

operations bill um thunderous launch to

153

00:20:00,789 --> 00:19:58,880

begin a year in space your thoughts

154

00:20:02,149 --> 00:20:00,799

about uh the start of this marathon

155

00:20:04,870 --> 00:20:02,159

mission

156

00:20:07,270 --> 00:20:04,880

again just an amazing launch here but

157

00:20:09,110 --> 00:20:07,280

then when i think about the year ahead i

158

00:20:10,710 --> 00:20:09,120

think of it in a very different way you

159

00:20:12,549 --> 00:20:10,720

know we kind of got used to the six

160

00:20:14,390 --> 00:20:12,559

month periods but now to see this one

161

00:20:15,830 --> 00:20:14,400

year and to think about all the work

162

00:20:17,830 --> 00:20:15,840

that's gone into planning for the

163

00:20:20,230 --> 00:20:17,840

research the activities that the crew

164

00:20:21,990 --> 00:20:20,240

has planned on orbit is just exciting to

165

00:20:23,830 --> 00:20:22,000

to see that get kicked off and see the

166

00:20:25,909 --> 00:20:23,840

teams get to execute all these plans

167

00:20:28,230 --> 00:20:25,919

they put together

168

00:20:30,630 --> 00:20:28,240

what will be in your opinion the most

169

00:20:32,789 --> 00:20:30,640

challenging aspect of these two guys

170

00:20:34,710 --> 00:20:32,799

spending a year together and doing all

171

00:20:36,470 --> 00:20:34,720

the work that lies ahead

172

00:20:38,950 --> 00:20:36,480

again i think if i just look at the

173

00:20:40,870 --> 00:20:38,960

activities there's just a tremendous

174

00:20:42,710 --> 00:20:40,880

amount of work planned for this year you

175

00:20:44,470 --> 00:20:42,720

know some of the investigations are very

176

00:20:46,310 --> 00:20:44,480

complicated where they're done partially

177

00:20:48,070 --> 00:20:46,320

on the u.s segment and they move over to

178

00:20:49,590 --> 00:20:48,080

the russian segment for a portion of the

179

00:20:51,909 --> 00:20:49,600

activities and then they come back to

180

00:20:54,070 --> 00:20:51,919

the u.s segment

181

00:20:55,430 --> 00:20:54,080

it's just uh amazing to see how much

182

00:20:57,590 --> 00:20:55,440

work they're going to have to do during

183

00:20:59,909 --> 00:20:57,600

this year expedition so i think the

184

00:21:01,510 --> 00:20:59,919

thing is we used to think about 180 days

185

00:21:03,590 --> 00:21:01,520

being a marathon and we had to really

186

00:21:05,510 --> 00:21:03,600

pace ourselves when i think about this

187

00:21:07,029 --> 00:21:05,520

year expedition we really need to pace

188

00:21:09,190 --> 00:21:07,039

ourselves and just make sure we're in it

189

00:21:10,870 --> 00:21:09,200

for the long haul and we can do things

190

00:21:12,630 --> 00:21:10,880

and move out at the right pace but

191

00:21:14,470 --> 00:21:12,640

tremendous number of investigations

192

00:21:16,310 --> 00:21:14,480

it'll be exciting to see them kind of

193

00:21:18,870 --> 00:21:16,320

get ticked off and to see the changes in

194

00:21:20,710 --> 00:21:18,880

the crew throughout the year

195

00:21:22,390 --> 00:21:20,720

nasa administrator charles bolden in

196

00:21:23,270 --> 00:21:22,400

baikonur uh sir

197

00:21:25,909 --> 00:21:23,280

the

198

00:21:27,590 --> 00:21:25,919

one-year mission embarking with great

199

00:21:29,350 --> 00:21:27,600

interest around the world

200

00:21:30,470 --> 00:21:29,360

an important mission and intriguing

201
00:21:33,350 --> 00:21:30,480

flight

202
00:21:35,590 --> 00:21:33,360

what is it that is inspirational and

203
00:21:37,110 --> 00:21:35,600

what is it that is so intriguing about

204
00:21:38,870 --> 00:21:37,120

an american and a russian flying

205
00:21:41,029 --> 00:21:38,880

together for a year in space

206
00:21:42,950 --> 00:21:41,039

i think anytime you get an american and

207
00:21:45,190 --> 00:21:42,960

a russian doing something

208
00:21:46,710 --> 00:21:45,200

to the successful extent that we have

209
00:21:48,470 --> 00:21:46,720

been doing now for more than 14 years

210
00:21:50,630 --> 00:21:48,480

with the international space station it

211
00:21:52,870 --> 00:21:50,640

should be big news it unfortunately is

212
00:21:54,549 --> 00:21:52,880

not the news it should be

213
00:21:56,470 --> 00:21:54,559

but the critical importance of this

214

00:21:59,350 --> 00:21:56,480

particular mission with scott and

215

00:22:01,510 --> 00:21:59,360

mikhail as a team it will be to show

216

00:22:03,590 --> 00:22:01,520

once again that when people come

217

00:22:05,270 --> 00:22:03,600

together with a common goal and a common

218

00:22:07,590 --> 00:22:05,280

objective and this time it's to gather

219

00:22:10,149 --> 00:22:07,600

more information about the human body to

220

00:22:12,789 --> 00:22:10,159

help us on our path to mars

221

00:22:14,710 --> 00:22:12,799

when that happens um there is no

222

00:22:16,230 --> 00:22:14,720

limitation to what we can accomplish so

223

00:22:18,710 --> 00:22:16,240

that's the lesson

224

00:22:20,789 --> 00:22:18,720

of this crew in this mission

225

00:22:23,350 --> 00:22:20,799

the soyuz crew patch

226

00:22:25,750 --> 00:22:23,360

for the crew shows marathon runners

227

00:22:29,110 --> 00:22:25,760

so not only for the crew itself but for

228

00:22:31,590 --> 00:22:29,120

the entire nasa and roscosmos family

229

00:22:33,990 --> 00:22:31,600

working together how grueling is this

230

00:22:36,070 --> 00:22:34,000

going to be to sustain

231

00:22:39,430 --> 00:22:36,080

the capabilities for a year to make this

232

00:22:42,549 --> 00:22:39,440

a successful mission well this is it's

233

00:22:44,070 --> 00:22:42,559

the marathon is is a superb example or a

234

00:22:45,830 --> 00:22:44,080

superb description

235

00:22:47,590 --> 00:22:45,840

of this flight because that's exactly

236

00:22:49,909 --> 00:22:47,600

what the mission to mars is it's not a

237

00:22:53,110 --> 00:22:49,919

sprint uh it is unlike anything we've

238

00:22:55,270 --> 00:22:53,120

done before a lot of us have been

239

00:22:57,110 --> 00:22:55,280

not worrying but but thinking for quite

240

00:22:59,510 --> 00:22:57,120

some time about what are the what are

241

00:23:01,029 --> 00:22:59,520

the the human challenges of a mission

242

00:23:03,350 --> 00:23:01,039

like this and one of the ones that we've

243

00:23:06,310 --> 00:23:03,360

spent very little time doing anything

244

00:23:07,590 --> 00:23:06,320

with is what's the psychological impact

245

00:23:10,310 --> 00:23:07,600

this will be the first time that we've

246

00:23:12,950 --> 00:23:10,320

had an american stay on orbit for a year

247

00:23:14,549 --> 00:23:12,960

uh may not sound like a lot uh to some

248

00:23:16,870 --> 00:23:14,559

people but let me tell you as a person

249

00:23:18,710 --> 00:23:16,880

who who did nothing but camping trips

250

00:23:21,190 --> 00:23:18,720

during my time in shuttle

251

00:23:23,510 --> 00:23:21,200

this is significant and to move from six

252

00:23:25,110 --> 00:23:23,520

months to one year we're going to see

253

00:23:26,870 --> 00:23:25,120

all kinds of things that are going to

254

00:23:28,630 --> 00:23:26,880

help us understand what the challenges

255

00:23:30,470 --> 00:23:28,640

are going to be for our crews as they

256

00:23:31,909 --> 00:23:30,480

venture off to mars so and people should

257

00:23:33,830 --> 00:23:31,919

not lose sight of that fact the

258

00:23:35,270 --> 00:23:33,840

international space station is our

259

00:23:36,710 --> 00:23:35,280

critical toe hole to the rest of the

260

00:23:39,110 --> 00:23:36,720

solar system

261

00:23:41,430 --> 00:23:39,120

it is in fact our stepping stone

262

00:23:43,430 --> 00:23:41,440

to deep space exploration for humans and

263

00:23:45,669 --> 00:23:43,440

it's the only facility that we have

264

00:23:47,590 --> 00:23:45,679

right now that gets us away from earth

265

00:23:49,909 --> 00:23:47,600

gets us into an environment where we can

266

00:23:51,590 --> 00:23:49,919

really see what the human body

267

00:23:53,110 --> 00:23:51,600

undergoes in the microgravity

268

00:23:55,909 --> 00:23:53,120

environment of space

269

00:23:57,590 --> 00:23:55,919

where we can see what semi-isolation is

270

00:23:59,669 --> 00:23:57,600

like on the human

271

00:24:01,830 --> 00:23:59,679

for long periods of time and a year is a

272

00:24:05,510 --> 00:24:01,840

long period of time so it's a very

273

00:24:06,789 --> 00:24:05,520

important mission for us

274

00:24:08,710 --> 00:24:06,799

mark kelly

275

00:24:10,710 --> 00:24:08,720

contrary to public belief this really is

276

00:24:11,830 --> 00:24:10,720

mark kelly not scott kelly without the

277

00:24:13,430 --> 00:24:11,840

mustache

278

00:24:16,310 --> 00:24:13,440

mark

279

00:24:18,630 --> 00:24:16,320

your brother scott embarks on

280

00:24:21,269 --> 00:24:18,640

a mission like no other astronaut for

281

00:24:22,950 --> 00:24:21,279

the united states has ever embarked on

282

00:24:24,950 --> 00:24:22,960

what do you think

283

00:24:27,110 --> 00:24:24,960

his state of mind is as he begins the

284

00:24:29,990 --> 00:24:27,120

flight and

285

00:24:31,909 --> 00:24:30,000

why is he the right guy for this job

286

00:24:33,590 --> 00:24:31,919

you know i at the press conference the

287

00:24:35,830 --> 00:24:33,600

other day with all the crew members my

288

00:24:37,029 --> 00:24:35,840

brothers you know the the crew the prime

289

00:24:38,789 --> 00:24:37,039

crew and the backup crew i thought

290

00:24:40,470 --> 00:24:38,799

gennady padalka said something

291

00:24:42,230 --> 00:24:40,480

interesting and he said when he's in

292

00:24:43,830 --> 00:24:42,240

space he wants to be home and he was at

293

00:24:45,590 --> 00:24:43,840

when he's at home he wants to be in

294

00:24:48,149 --> 00:24:45,600

space and i talked to my brother a

295

00:24:50,149 --> 00:24:48,159

little bit about that afterwards and you

296

00:24:51,990 --> 00:24:50,159

know that's kind of the situation he

297

00:24:53,909 --> 00:24:52,000

feels he will fall into i mean right now

298

00:24:56,470 --> 00:24:53,919

he's really excited about this flight he

299

00:24:58,230 --> 00:24:56,480

does realize that a year is a pretty

300

00:24:59,990 --> 00:24:58,240

substantial commitment it's twice as

301
00:25:01,430 --> 00:25:00,000
long as what he's his other long

302
00:25:03,590 --> 00:25:01,440
duration flight

303
00:25:05,909 --> 00:25:03,600
but you know this is a marathon and not

304
00:25:08,149 --> 00:25:05,919
a sprint but i imagine at some point

305
00:25:09,990 --> 00:25:08,159
during the flight he's gonna he's gonna

306
00:25:11,510 --> 00:25:10,000
think about coming home and you know he

307
00:25:14,070 --> 00:25:11,520
doesn't know when that if that's gonna

308
00:25:15,750 --> 00:25:14,080
be at four months or eight months or you

309
00:25:17,029 --> 00:25:15,760
know he can make it all the way to the

310
00:25:18,950 --> 00:25:17,039
end without

311
00:25:20,710 --> 00:25:18,960
you know that that long longing for

312
00:25:22,070 --> 00:25:20,720
getting back

313
00:25:23,510 --> 00:25:22,080

nobody knows him better than you

314

00:25:25,990 --> 00:25:23,520

obviously

315

00:25:28,549 --> 00:25:26,000

your military guys

316

00:25:31,269 --> 00:25:28,559

so you're used to long stays away from

317

00:25:34,070 --> 00:25:31,279

home obviously this has got to help but

318

00:25:35,830 --> 00:25:34,080

this is a particularly uh significant

319

00:25:37,669 --> 00:25:35,840

flight in terms of

320

00:25:39,590 --> 00:25:37,679

what it's going the toll it could take

321

00:25:41,269 --> 00:25:39,600

psychologically as well as physically

322

00:25:43,190 --> 00:25:41,279

how do you think he's going to respond

323

00:25:45,830 --> 00:25:43,200

to that you know not only you know being

324

00:25:47,990 --> 00:25:45,840

away from home for a long time and i

325

00:25:49,029 --> 00:25:48,000

you know there's an aspect of that that

326

00:25:50,950 --> 00:25:49,039

makes him

327

00:25:53,269 --> 00:25:50,960

somewhat suitable for this but i think

328

00:25:54,470 --> 00:25:53,279

it's also focusing on a mission and an

329

00:25:56,230 --> 00:25:54,480

objective

330

00:25:58,789 --> 00:25:56,240

and understanding that there are things

331

00:26:00,789 --> 00:25:58,799

more important than you as an individual

332

00:26:02,390 --> 00:26:00,799

so he certainly has that mindset that's

333

00:26:03,830 --> 00:26:02,400

why he's doing this why that's why he's

334

00:26:06,070 --> 00:26:03,840

volunteered for

335

00:26:08,390 --> 00:26:06,080

you know some science stuff that maybe

336

00:26:09,669 --> 00:26:08,400

everybody would not have volunteered for

337

00:26:10,470 --> 00:26:09,679

not that all that stuff is going to be

338

00:26:12,310 --> 00:26:10,480

done

339

00:26:14,149 --> 00:26:12,320

during this mission but you know he's in

340

00:26:16,630 --> 00:26:14,159

this he's committed to it

341

00:26:19,510 --> 00:26:16,640

and you know we expect that it's going

342

00:26:21,830 --> 00:26:19,520

to return some pretty significant

343

00:26:24,470 --> 00:26:21,840

advances in how we understand human

344

00:26:26,630 --> 00:26:24,480

physiology and space flight

345

00:26:28,870 --> 00:26:26,640

and you're part of that the twin study

346

00:26:30,870 --> 00:26:28,880

if you will uh much has been made about

347

00:26:32,310 --> 00:26:30,880

this what do you expect uh will be

348

00:26:33,990 --> 00:26:32,320

expected of you

349

00:26:35,669 --> 00:26:34,000

in terms of a ground-based subject if

350

00:26:37,669 --> 00:26:35,679

you will to compare to your identical

351

00:26:39,830 --> 00:26:37,679

twin brother well i've already started

352

00:26:42,230 --> 00:26:39,840

started doing some of this you know the

353

00:26:45,029 --> 00:26:42,240

my the expectations that are on me and

354

00:26:46,630 --> 00:26:45,039

uh even last year i'd gone you know i

355

00:26:49,430 --> 00:26:46,640

made my first trip to houston i made

356

00:26:51,350 --> 00:26:49,440

another one here in 2015. i'll do others

357

00:26:54,630 --> 00:26:51,360

while he is in space and then after he

358

00:26:56,149 --> 00:26:54,640

gets back and what nasa does for me i i

359

00:26:59,190 --> 00:26:56,159

just give them a lot of data you know

360

00:27:02,789 --> 00:26:59,200

whether it's an mri or an ultrasound or

361

00:27:05,430 --> 00:27:02,799

20 tubes of blood or some other form of

362

00:27:07,830 --> 00:27:05,440

sample without going into detail

363

00:27:09,669 --> 00:27:07,840

so i provide the data there's about 10

364

00:27:11,269 --> 00:27:09,679

different studies from a bunch of

365

00:27:13,190 --> 00:27:11,279

different universities so you know this

366

00:27:15,909 --> 00:27:13,200

is pretty serious research when you have

367

00:27:18,310 --> 00:27:15,919

harvard medical school involved stanford

368

00:27:20,870 --> 00:27:18,320

university of pennsylvania johns hopkins

369

00:27:22,630 --> 00:27:20,880

and others so i just i just provide the

370

00:27:23,750 --> 00:27:22,640

data and they tell me where i need to be

371

00:27:26,070 --> 00:27:23,760

and when

372

00:27:29,590 --> 00:27:26,080

finally mark the key to a successful

373

00:27:31,350 --> 00:27:29,600

flight pacing being stoic

374

00:27:32,870 --> 00:27:31,360

what are the qualities that will make

375

00:27:35,190 --> 00:27:32,880

this a successful flight for your

376

00:27:37,510 --> 00:27:35,200

brother yeah i think approaching this as

377

00:27:39,669 --> 00:27:37,520

a marathon and not a sprint

378

00:27:41,430 --> 00:27:39,679

uh you know he is certainly committed to

379

00:27:42,870 --> 00:27:41,440

the mission of nasa

380

00:27:45,269 --> 00:27:42,880

you know the mission of our space

381

00:27:47,430 --> 00:27:45,279

program this specific extra long

382

00:27:49,909 --> 00:27:47,440

duration mission so commitment is really

383

00:27:51,830 --> 00:27:49,919

important you know hard work but you

384

00:27:52,950 --> 00:27:51,840

know understanding that it's not forever

385

00:27:55,350 --> 00:27:52,960

it's a year