



1  
00:00:07,510 --> 00:00:05,510  
kenny todd thank you for coming kenny

2  
00:00:09,509 --> 00:00:07,520  
todd is the iss

3  
00:00:11,589 --> 00:00:09,519  
mission operations integration manager

4  
00:00:13,589 --> 00:00:11,599  
long title but basically he's going to

5  
00:00:15,990 --> 00:00:13,599  
be here to share with us some of the

6  
00:00:18,070 --> 00:00:16,000  
upcoming things that we can anticipate

7  
00:00:20,870 --> 00:00:18,080  
lots of activity going on

8  
00:00:22,230 --> 00:00:20,880  
today the crew has been working on doing

9  
00:00:24,150 --> 00:00:22,240  
some troubleshoot

10  
00:00:27,589 --> 00:00:24,160  
work on one of the emu the extra

11  
00:00:29,750 --> 00:00:27,599  
vehicular mobility units spacesuits and

12  
00:00:30,630 --> 00:00:29,760  
also i'm gathering tools in preparation

13  
00:00:33,110 --> 00:00:30,640

for

14

00:00:35,190 --> 00:00:33,120

three upcoming spacewalks the first one

15

00:00:36,549 --> 00:00:35,200

beginning on february 20th what can you

16

00:00:39,350 --> 00:00:36,559

tell me about that

17

00:00:41,190 --> 00:00:39,360

sure um this uh this series of evas is

18

00:00:43,270 --> 00:00:41,200

really going to be focused on

19

00:00:45,190 --> 00:00:43,280

doing some cable ridings outside the

20

00:00:46,869 --> 00:00:45,200

space station getting ourselves in a

21

00:00:48,709 --> 00:00:46,879

position to be able to

22

00:00:50,869 --> 00:00:48,719

install some additional hardware later

23

00:00:52,229 --> 00:00:50,879

this year that will support our ability

24

00:00:54,310 --> 00:00:52,239

to to

25

00:00:55,350 --> 00:00:54,320

dock some of our commercial crew

26

00:00:57,590 --> 00:00:55,360

vehicles

27

00:00:59,510 --> 00:00:57,600

okay so and and we have seen a lot of

28

00:01:00,470 --> 00:00:59,520

that take place actually um all

29

00:01:02,389 --> 00:01:00,480

throughout this week they've been

30

00:01:04,630 --> 00:01:02,399

working on kind of a

31

00:01:06,469 --> 00:01:04,640

pre-cable routing before they actually

32

00:01:09,429 --> 00:01:06,479

do the cable routing outside the complex

33

00:01:10,230 --> 00:01:09,439

and i know um that is in in advance of

34

00:01:11,990 --> 00:01:10,240

uh

35

00:01:13,590 --> 00:01:12,000

the addition of the what we have been

36

00:01:16,469 --> 00:01:13,600

calling the idas the international

37

00:01:18,390 --> 00:01:16,479

docking adapters can you tell me about

38

00:01:19,590 --> 00:01:18,400

that and and what we anticipate for the

39

00:01:20,870 --> 00:01:19,600

commercial what that means for the

40

00:01:23,030 --> 00:01:20,880

commercial crew

41

00:01:25,910 --> 00:01:23,040

you bet well as a as a program we're

42

00:01:27,830 --> 00:01:25,920

we're very interested in helping to spur

43

00:01:29,830 --> 00:01:27,840

this commercial industry and

44

00:01:33,350 --> 00:01:29,840

in order to have these vehicles come to

45

00:01:35,830 --> 00:01:33,360

station we need a total of four ports uh

46

00:01:38,069 --> 00:01:35,840

two for uh for uh visiting vehicles that

47

00:01:40,230 --> 00:01:38,079

bring cargo and then we need to uh to

48

00:01:41,990 --> 00:01:40,240

have our commercial uh crew vehicles

49

00:01:43,990 --> 00:01:42,000

arrive to station and so we needed to

50

00:01:45,830 --> 00:01:44,000

make that happen by having a couple of

51  
00:01:48,149 --> 00:01:45,840  
adapters put on so we're going to do

52  
00:01:49,429 --> 00:01:48,159  
that on the front end of pma2

53  
00:01:51,190 --> 00:01:49,439  
which is on the

54  
00:01:52,789 --> 00:01:51,200  
pressurized mating adapter on the front

55  
00:01:54,710 --> 00:01:52,799  
end of station if you will

56  
00:01:55,990 --> 00:01:54,720  
and then and then later in the year

57  
00:01:57,749 --> 00:01:56,000  
we're going to

58  
00:02:00,069 --> 00:01:57,759  
move pressurized mating adapter number

59  
00:02:03,270 --> 00:02:00,079  
three from its current home on node 3

60  
00:02:04,870 --> 00:02:03,280  
over to node 2 the zenith location and

61  
00:02:06,389 --> 00:02:04,880  
that's where later in the year we're

62  
00:02:09,190 --> 00:02:06,399  
going to install these these

63  
00:02:10,630 --> 00:02:09,200

international docking adapters and so

64

00:02:12,070 --> 00:02:10,640

these evas are really about putting

65

00:02:14,869 --> 00:02:12,080

ourselves in a position to be able to

66

00:02:16,790 --> 00:02:14,879

talk to those adapters uh power them uh

67

00:02:18,470 --> 00:02:16,800

when that when we get there and there's

68

00:02:19,589 --> 00:02:18,480

a significant amount of

69

00:02:21,589 --> 00:02:19,599

cabling that we're gonna have to do

70

00:02:23,510 --> 00:02:21,599

inside the space station as well so

71

00:02:25,190 --> 00:02:23,520

while we do these evas in and around

72

00:02:27,910 --> 00:02:25,200

these evas we'll also be doing a lot of

73

00:02:30,390 --> 00:02:27,920

wiring inside the station right well

74

00:02:32,309 --> 00:02:30,400

2015 we've already kicked off and it is

75

00:02:34,229 --> 00:02:32,319

a big year for nasa and also a big year

76

00:02:38,070 --> 00:02:34,239

for the international space station we

77

00:02:39,589 --> 00:02:38,080

are now only a month away from uh well

78

00:02:41,990 --> 00:02:39,599

next month we have the launch of the

79

00:02:43,670 --> 00:02:42,000

first one year of uh crew

80

00:02:44,869 --> 00:02:43,680

and uh that mission can you tell me some

81

00:02:47,670 --> 00:02:44,879

about that

82

00:02:49,670 --> 00:02:47,680

you bet um again just as we're we're

83

00:02:52,070 --> 00:02:49,680

tasked with uh helping to commercialize

84

00:02:53,509 --> 00:02:52,080

low earth orbit another thing that we

85

00:02:55,830 --> 00:02:53,519

have to do is we have to help prepare

86

00:02:57,910 --> 00:02:55,840

ourselves to to go for uh for longer

87

00:03:00,470 --> 00:02:57,920

duration flights so that we can go go

88

00:03:01,990 --> 00:03:00,480

other places in our solar system and and

89

00:03:03,670 --> 00:03:02,000

and part of that is really understanding

90

00:03:05,270 --> 00:03:03,680

what it means to live in space for a

91

00:03:07,750 --> 00:03:05,280

long time so

92

00:03:09,270 --> 00:03:07,760

so having scott and macau

93

00:03:10,949 --> 00:03:09,280

fly to the station lived there for a

94

00:03:12,790 --> 00:03:10,959

year

95

00:03:15,350 --> 00:03:12,800

allows us an opportunity to watch them

96

00:03:16,869 --> 00:03:15,360

obviously having having

97

00:03:19,030 --> 00:03:16,879

scott's brother mark here on the ground

98

00:03:21,589 --> 00:03:19,040

as a baseline subject will allow us to

99

00:03:24,070 --> 00:03:21,599

really get a better handle on on the

100

00:03:25,830 --> 00:03:24,080

physiology and how things change in

101  
00:03:27,750 --> 00:03:25,840  
space during that period so it's going

102  
00:03:29,430 --> 00:03:27,760  
to be a a great opportunity for us to

103  
00:03:31,350 --> 00:03:29,440  
learn about about long duration space

104  
00:03:33,270 --> 00:03:31,360  
flight okay and so and you mentioned so

105  
00:03:35,350 --> 00:03:33,280  
again the crew the one-year crew is uh

106  
00:03:37,509 --> 00:03:35,360  
nasa astronaut scott kelly and then the

107  
00:03:40,070 --> 00:03:37,519  
uh his uh crewmate who will also be

108  
00:03:42,630 --> 00:03:40,080  
doing the one-year mission is uh

109  
00:03:44,789 --> 00:03:42,640  
cosmonaut mikhail kononenko and you

110  
00:03:46,949 --> 00:03:44,799  
mentioned scott and mark and so mark is

111  
00:03:48,470 --> 00:03:46,959  
a previous astronaut so and mark and

112  
00:03:50,949 --> 00:03:48,480  
scott are brothers but also twin

113  
00:03:53,350 --> 00:03:50,959

brothers so that um science

114

00:03:55,110 --> 00:03:53,360

research um will be very interesting you

115

00:03:57,509 --> 00:03:55,120

know it's a very unique opportunity i

116

00:04:00,470 --> 00:03:57,519

think that we have here for us to be

117

00:04:01,830 --> 00:04:00,480

able to do that it is and i think

118

00:04:03,670 --> 00:04:01,840

again

119

00:04:05,030 --> 00:04:03,680

trying to understand what it takes to to

120

00:04:07,030 --> 00:04:05,040

live outside

121

00:04:08,710 --> 00:04:07,040

you know our planet and our atmosphere

122

00:04:11,830 --> 00:04:08,720

this is just an incredible opportunity

123

00:04:13,589 --> 00:04:11,840

to do that and while understanding what

124

00:04:15,429 --> 00:04:13,599

changes and and somebody on the ground

125

00:04:17,670 --> 00:04:15,439

that has almost the exact dna and the

126

00:04:20,789 --> 00:04:17,680

ability to be able to to record those

127

00:04:22,550 --> 00:04:20,799

changes is really uh fascinating and the

128

00:04:24,790 --> 00:04:22,560

significance of this launch or this

129

00:04:25,749 --> 00:04:24,800

mission is that because we know what

130

00:04:27,350 --> 00:04:25,759

goes on

131

00:04:29,189 --> 00:04:27,360

between months one and month six we've

132

00:04:31,590 --> 00:04:29,199

we've been doing this for a long time

133

00:04:33,670 --> 00:04:31,600

now which we'll also talk about but um

134

00:04:35,030 --> 00:04:33,680

six to 12 we don't have that information

135

00:04:36,469 --> 00:04:35,040

and so this is going to be a great way

136

00:04:38,950 --> 00:04:36,479

to be able to gather some of that data

137

00:04:41,189 --> 00:04:38,960

as well you bet and just looking at the

138

00:04:43,590 --> 00:04:41,199

the different experiments of a different

139

00:04:45,510 --> 00:04:43,600

fluid physics and and just the the

140

00:04:46,790 --> 00:04:45,520

things to do to check psychology of the

141

00:04:48,390 --> 00:04:46,800

crew all of the different things that

142

00:04:50,230 --> 00:04:48,400

we're going to do are

143

00:04:52,870 --> 00:04:50,240

are really honing in on what happens in

144

00:04:54,629 --> 00:04:52,880

that six to 12 month period and then so

145

00:04:57,350 --> 00:04:54,639

again it's going to be great data and

146

00:04:59,189 --> 00:04:57,360

and it's a it's a good opportunity for

147

00:05:00,950 --> 00:04:59,199

for all partners out there who are

148

00:05:02,790 --> 00:05:00,960

thinking about long-duration space

149

00:05:05,670 --> 00:05:02,800

flight in their future

150

00:05:07,110 --> 00:05:05,680

so let's talk about cargo we have a lot

151  
00:05:09,189 --> 00:05:07,120  
of activity there as well right

152  
00:05:11,189 --> 00:05:09,199  
currently we have the dragon cargo craft

153  
00:05:14,550 --> 00:05:11,199  
that is going to be departing from the

154  
00:05:16,710 --> 00:05:14,560  
space station on february 10 next week

155  
00:05:18,790 --> 00:05:16,720  
tuesday and then we also have the

156  
00:05:20,790 --> 00:05:18,800  
automated transfer vehicle that will be

157  
00:05:22,230 --> 00:05:20,800  
departing uh the very

158  
00:05:25,110 --> 00:05:22,240  
what within four days after that on

159  
00:05:27,990 --> 00:05:25,120  
february 14th so tell me some about the

160  
00:05:29,189 --> 00:05:28,000  
cargo ops that we have going on sure

161  
00:05:30,710 --> 00:05:29,199  
february is going to be a very

162  
00:05:32,469 --> 00:05:30,720  
challenging month for us in general

163  
00:05:34,070 --> 00:05:32,479

you've got vehicles coming and going as

164

00:05:36,230 --> 00:05:34,080

you said spacex is going to we're going

165

00:05:37,909 --> 00:05:36,240

to at this point at this point plan to

166

00:05:40,629 --> 00:05:37,919

unbear them on the 10th

167

00:05:42,950 --> 00:05:40,639

atv coming coming off the station on the

168

00:05:44,870 --> 00:05:42,960

14th shortly after that our russian

169

00:05:46,950 --> 00:05:44,880

friends are going to going to launch a

170

00:05:49,909 --> 00:05:46,960

progress vehicle to the same port where

171

00:05:52,310 --> 00:05:49,919

atv is it will be vacating on the 14th

172

00:05:54,230 --> 00:05:52,320

and and then and then through ebas right

173

00:05:56,550 --> 00:05:54,240

after that but yeah a lot of cargo ops

174

00:05:58,710 --> 00:05:56,560

right now a lot of research um once we

175

00:06:02,150 --> 00:05:58,720

get through this group of cargo vehicles

176

00:06:04,469 --> 00:06:02,160

uh we'll see spacex again in in april um

177

00:06:06,629 --> 00:06:04,479

and uh and a lot of a lot of human

178

00:06:08,469 --> 00:06:06,639

research on that particular flight and

179

00:06:09,749 --> 00:06:08,479

then then coming later in the summer is

180

00:06:11,590 --> 00:06:09,759

when we're going to start to see some of

181

00:06:12,790 --> 00:06:11,600

these things that it really is going to

182

00:06:14,150 --> 00:06:12,800

going to look like a little bit of a

183

00:06:15,590 --> 00:06:14,160

reassembly of station where you have

184

00:06:17,029 --> 00:06:15,600

some new hardware showing up and we're

185

00:06:18,950 --> 00:06:17,039

going to have to be doing some module

186

00:06:20,390 --> 00:06:18,960

movements and things like that so so

187

00:06:21,830 --> 00:06:20,400

that's uh that's kind of what our future

188

00:06:24,710 --> 00:06:21,840

is going to look like over the next six

189

00:06:26,710 --> 00:06:24,720

to seven months it looks busy

190

00:06:28,070 --> 00:06:26,720

it's going to be very busy but it's uh

191

00:06:29,990 --> 00:06:28,080

it's uh

192

00:06:31,909 --> 00:06:30,000

again that's that's part of why we do

193

00:06:33,430 --> 00:06:31,919

this job is because you know we're

194

00:06:35,350 --> 00:06:33,440

seeking to discover

195

00:06:37,670 --> 00:06:35,360

and and we're learning as much about how

196

00:06:38,790 --> 00:06:37,680

to get commercial uh you know vehicles

197

00:06:40,230 --> 00:06:38,800

on station

198

00:06:41,670 --> 00:06:40,240

as much as we are you know trying to

199

00:06:43,749 --> 00:06:41,680

figure out how to get get out of low

200

00:06:45,430 --> 00:06:43,759

earth orbit with our crews and so

201  
00:06:47,189 --> 00:06:45,440  
it's a great opportunity for station

202  
00:06:48,790 --> 00:06:47,199  
there's a lot going on but but the

203  
00:06:50,629 --> 00:06:48,800  
team's up to the challenge and looking

204  
00:06:52,629 --> 00:06:50,639  
forward to it yeah lots of challenges

205  
00:06:54,469 --> 00:06:52,639  
and but lots of great work also and and

206  
00:06:57,830 --> 00:06:54,479  
has been going on for quite a while as i

207  
00:06:59,830 --> 00:06:57,840  
mentioned so what we also will be um

208  
00:07:01,110 --> 00:06:59,840  
be able to uh partake in is the

209  
00:07:04,230 --> 00:07:01,120  
anniversary

210  
00:07:06,629 --> 00:07:04,240  
of the expedition 1 the very first

211  
00:07:08,550 --> 00:07:06,639  
mission where human presence was their

212  
00:07:11,189 --> 00:07:08,560  
award the international space station

213  
00:07:13,909 --> 00:07:11,199

there were three crew members and that

214

00:07:16,230 --> 00:07:13,919

was back on november of 2000 so this

215

00:07:17,749 --> 00:07:16,240

year we'll have 15 years of consistent

216

00:07:19,670 --> 00:07:17,759

human presence can you tell me something

217

00:07:21,830 --> 00:07:19,680

about that sure i mean it's a it's

218

00:07:23,749 --> 00:07:21,840

pretty amazing when you think about the

219

00:07:25,430 --> 00:07:23,759

the amount of time and how fast it's

220

00:07:27,029 --> 00:07:25,440

gone when you kind of live in these six

221

00:07:29,430 --> 00:07:27,039

month increments like a lot of us do

222

00:07:30,790 --> 00:07:29,440

around here but uh but just thinking

223

00:07:33,990 --> 00:07:30,800

back to uh

224

00:07:35,589 --> 00:07:34,000

when shep and and sergey uh uh flew that

225

00:07:37,350 --> 00:07:35,599

flight you know we we all knew it was

226

00:07:39,350 --> 00:07:37,360

something special um

227

00:07:41,990 --> 00:07:39,360

that uh we weren't sure what the future

228

00:07:43,510 --> 00:07:42,000

held um but uh just getting them up

229

00:07:45,270 --> 00:07:43,520

there in that time frame it was a goal

230

00:07:46,710 --> 00:07:45,280

that a lot of us had for a very long

231

00:07:48,390 --> 00:07:46,720

time

232

00:07:50,230 --> 00:07:48,400

through all the design

233

00:07:53,029 --> 00:07:50,240

phase part of station and to be at that

234

00:07:54,790 --> 00:07:53,039

point where we could we could actually

235

00:07:56,790 --> 00:07:54,800

fly a crew to station but but more

236

00:07:58,710 --> 00:07:56,800

importantly keep them there and to be

237

00:08:01,670 --> 00:07:58,720

able to to do that and see where we've

238

00:08:04,150 --> 00:08:01,680

come 15 years later is uh is a there's a

239

00:08:05,510 --> 00:08:04,160

lot of us are very proud and uh still at

240

00:08:07,270 --> 00:08:05,520

the end of the day we have to continue

241

00:08:09,830 --> 00:08:07,280

to be vigilant in the things that we do

242

00:08:11,670 --> 00:08:09,840

but uh but uh yeah there's it's been a

243

00:08:13,350 --> 00:08:11,680

great 15 years

244

00:08:15,189 --> 00:08:13,360

wonderful and it's a great

245

00:08:17,589 --> 00:08:15,199

accomplishment and so you and your teams

246

00:08:19,350 --> 00:08:17,599

and everyone here have a lot to be proud

247

00:08:21,110 --> 00:08:19,360

of and they should be so

248

00:08:22,390 --> 00:08:21,120

very good thank you very much it's a the

249

00:08:24,150 --> 00:08:22,400

team here between the ops and

250

00:08:26,710 --> 00:08:24,160

engineering community and all the safety

251

00:08:28,629 --> 00:08:26,720

folks who help keep us thinking the

252

00:08:30,629 --> 00:08:28,639

correct ways you know it's an integrated