



1
00:00:04,999 --> 00:00:02,659
hi my name is Greg Shama tov and I'm on

2
00:00:41,430 --> 00:00:05,009
the sts-134 crew and you're watching

3
00:00:41,440 --> 00:00:46,140
interpreter speaking of the car girl

4
00:00:52,490 --> 00:00:49,000
earnest tomorrow we really put out a

5
00:01:00,670 --> 00:00:55,620
and then we made it to orbit now

6
00:01:10,880 --> 00:01:04,320
the shadow me

7
00:01:10,890 --> 00:01:15,630
your Dominus man

8
00:01:23,990 --> 00:01:17,620
down

9
00:01:30,710 --> 00:01:28,520
you gotta focus

10
00:01:32,899 --> 00:01:30,720
good morning endeavor as long as played

11
00:01:35,359 --> 00:01:32,909
for the entire crew and was performed by

12
00:01:38,840 --> 00:01:35,369
max Q it was selected by the context and

13
00:01:40,999 --> 00:01:38,850

Mission Control we got clear the max Q

14

00:01:44,690 --> 00:01:41,009

guys up here they couldn't recognize the

15

00:01:46,670 --> 00:01:44,700

words so if you'd be great if you could

16

00:01:49,790 --> 00:01:46,680

send up the audio file you know we don't

17

00:01:52,100 --> 00:01:49,800

have the best speakers here it sounded

18

00:01:57,050 --> 00:01:52,110

kind of funny but we couldn't understand

19

00:01:59,389 --> 00:01:57,060

the whole thing on board the

20

00:02:01,820 --> 00:01:59,399

International Space Station looking from

21

00:02:06,249 --> 00:02:01,830

the top of the quest airlock down into

22

00:02:09,370 --> 00:02:06,259

the equipment lock section of the module

23

00:02:12,100 --> 00:02:09,380

looking at Greg chamot office he is

24

00:02:14,660 --> 00:02:12,110

being assisted into his extra vehicular

25

00:02:17,900 --> 00:02:14,670

Mobility unit by drew Feustel who's

26
00:02:20,930 --> 00:02:17,910
already conducted three spacewalks on

27
00:02:24,559 --> 00:02:20,940
the flight he has a total of six epa's

28
00:02:27,440 --> 00:02:24,569
for 42 hours and 18 minutes Greg

29
00:02:29,120 --> 00:02:27,450
Chamitoff heading out on the fourth

30
00:02:33,680 --> 00:02:29,130
spacewalk of this mission which will be

31
00:02:38,180 --> 00:02:33,690
his second he was part of the team of

32
00:02:40,550 --> 00:02:38,190
with foisted on EV a1 back on May

33
00:02:42,310 --> 00:02:40,560
twentieth it lasted six hours and 19

34
00:02:45,560 --> 00:02:42,320
minutes that was his first ever

35
00:02:49,580 --> 00:02:45,570
spacewalk he's heading out with Mike

36
00:02:53,390 --> 00:02:49,590
Fink on tonight's EV a that runs into

37
00:02:56,210 --> 00:02:53,400
Friday morning Mike Fink will be heading

38
00:03:00,259 --> 00:02:56,220

out for his ninth spacewalk his third of

39

00:03:07,589 --> 00:03:00,269

this mission he will be adding to his

40

00:03:13,000 --> 00:03:09,760

shuttle flight director Gary

41

00:03:15,010 --> 00:03:13,010

Locker calling on an internal loop to

42

00:03:17,680 --> 00:03:15,020

flight director Derek Hoffman down the

43

00:03:21,040 --> 00:03:17,690

hall giving him permission now to take

44

00:03:24,610 --> 00:03:21,050

over the orbiter boom sensor system

45

00:03:27,400 --> 00:03:24,620

giving the handoff permission for that

46

00:03:29,080 --> 00:03:27,410

boom to become a permanent component of

47

00:03:31,770 --> 00:03:29,090

the International Space Station and

48

00:03:48,190 --> 00:03:31,780

essentially effectively be renamed the

49

00:03:51,910 --> 00:03:48,200

ISS boom assembly need a lot of America

50

00:03:56,949 --> 00:03:51,920

there you go to jump out again it's dark

51
00:03:59,589 --> 00:03:56,959
out there yes it is touch is open and is

52
00:04:01,809 --> 00:03:59,599
it walked in place just in the emergency

53
00:04:07,390 --> 00:04:01,819
empty these clothes going to post deep

54
00:04:11,580 --> 00:04:07,400
breath keeping such a good work great

55
00:04:19,409 --> 00:04:11,590
yeah sit up explore the good tips true

56
00:04:24,250 --> 00:04:19,419
82 power to bat Susan battery power

57
00:04:32,279 --> 00:04:24,260
maybe three power to back district 1

58
00:04:43,450 --> 00:04:41,350
Easton TMT was for colon 1 530 can copy

59
00:04:48,500 --> 00:04:43,460
that we have to get my coat a character

60
00:05:00,770 --> 00:04:52,370
beautiful space settle there that's a

61
00:05:09,320 --> 00:05:00,780
beautiful endeavor really is a chip she

62
00:05:10,910 --> 00:05:09,330
looks like she belongs right and just

63
00:05:12,800 --> 00:05:10,920

you're just about a great view of

64

00:05:15,100 --> 00:05:12,810

looking along the trust structure of the

65

00:05:17,690 --> 00:05:15,110

International Space Station beautiful

66

00:05:20,090 --> 00:05:17,700

size comparison of the two astronauts

67

00:05:23,510 --> 00:05:20,100

performing today's space walk up above

68

00:05:26,540 --> 00:05:23,520

them awaiting them to assist with the

69

00:05:29,240 --> 00:05:26,550

installation on the s-1 trust the OBS s

70

00:05:42,710 --> 00:05:29,250

attached firmly at the center point to

71

00:05:44,840 --> 00:05:42,720

the station's robotic arm guys just like

72

00:05:47,710 --> 00:05:44,850

we talked last night test makes the GCA

73

00:05:51,830 --> 00:05:47,720

involves anybody to make a stop calls

74

00:05:54,170 --> 00:05:51,840

where you will call on ice pack you call

75

00:05:56,600 --> 00:05:54,180

starting we call our we call starting

76

00:06:00,320 --> 00:05:56,610

you call good will call most complete

77

00:06:03,710 --> 00:06:00,330

you call to see a complete the opiates a

78

00:06:06,050 --> 00:06:03,720

standoff use a very ultralight ninja

79

00:06:09,620 --> 00:06:06,060

graceful ballerina grip as we talked

80

00:06:11,750 --> 00:06:09,630

about and with a light touch all pack

81

00:06:13,100 --> 00:06:11,760

off straight with no Corrections and if

82

00:06:15,680 --> 00:06:13,110

I'm out of the envelope will stop and

83

00:06:17,150 --> 00:06:15,690

talk about it and finally for the

84

00:06:20,780 --> 00:06:17,160

clearances we've got really good video

85

00:06:22,280 --> 00:06:20,790

better than our all in simulation but

86

00:06:25,430 --> 00:06:22,290

once we lose it will hand it off

87

00:06:28,010 --> 00:06:25,440

positively rubber breaks for a PFR and

88

00:06:32,380 --> 00:06:28,020

then comparing gcas that's it hey

89

00:06:35,330 --> 00:06:32,390

question crappy all box copy all 482

90

00:06:37,370 --> 00:06:35,340

view from Greg Shama tops camera looking

91

00:06:40,190 --> 00:06:37,380

down at the tail of space shuttle

92

00:06:48,110 --> 00:06:40,200

Endeavour the International Space

93

00:06:51,310 --> 00:06:48,120

Station 215 miles above Australia of

94

00:06:55,100 --> 00:06:51,320

your linemen left my mind it looks a

95

00:06:58,280 --> 00:06:55,110

little bit Paul in other words i think i

96

00:07:00,350 --> 00:06:58,290

need about 20 or 30 centimeters later on

97

00:07:01,470 --> 00:07:00,360

my fat i can't tell if that's whole or

98

00:07:09,810 --> 00:07:01,480

just pure

99

00:07:11,700 --> 00:07:09,820

up and down okay RCS got the belief also

100

00:07:13,830 --> 00:07:11,710

fair oh my god every should come closer

101
00:07:17,220 --> 00:07:13,840
before we try to fix up your yes i agree

102
00:07:21,570 --> 00:07:17,230
i need i need at least 40 centimeters

103
00:07:26,100 --> 00:07:21,580
maybe 35 ok so fox let's go 20

104
00:07:28,160 --> 00:07:26,110
centimeters station after i just

105
00:07:31,560 --> 00:07:28,170
reminding ox put any force on the boom

106
00:07:37,340 --> 00:07:31,570
damn i champ it's a great view from mike

107
00:07:41,520 --> 00:07:37,350
fink's helmet cam with the latching

108
00:07:45,360 --> 00:07:41,530
device on the station's truss structure

109
00:07:48,330 --> 00:07:45,370
with the pin or the bracket on the OBS s

110
00:07:50,520 --> 00:07:48,340
itself okay both you have a red l

111
00:07:52,200 --> 00:07:50,530
understand so let me know if you're

112
00:07:56,850 --> 00:07:52,210
ready and then we'll give box like go

113
00:08:00,060 --> 00:07:56,860

for release in OBS us so back off and

114

00:08:03,630 --> 00:08:00,070

I'm really agen she's ready db2 is ready

115

00:08:08,130 --> 00:08:03,640

with ninja ballerina grip so they each

116

00:08:13,320 --> 00:08:08,140

have a grasp of the orbiter boom sensor

117

00:08:18,500 --> 00:08:13,330

system the next step will be to actually

118

00:08:21,030 --> 00:08:18,510

release the grapple pin with the

119

00:08:23,190 --> 00:08:21,040

releasing the station's robotic arm that

120

00:08:33,990 --> 00:08:23,200

you see grappled to the midpoint of that

121

00:08:38,540 --> 00:08:34,000

boom okay guys here we go on my mark are

122

00:08:53,500 --> 00:08:38,550

you still ready get ready easy to ready

123

00:09:01,060 --> 00:08:56,800

r ich auf diesem study it's very

124

00:09:13,780 --> 00:09:01,070

straight tip work guys you hold it I'm

125

00:09:16,810 --> 00:09:13,790

very still that's good copy I brought a

126
00:09:19,090 --> 00:09:16,820
false continue okay we've got the open

127
00:09:22,960 --> 00:09:19,100
guys were backing off now hold steady

128
00:09:25,990 --> 00:09:22,970
holding steady what is ready this is the

129
00:09:29,260 --> 00:09:26,000
view from Greg Chema tops hands up close

130
00:09:31,120 --> 00:09:29,270
and personal with the end effector of

131
00:09:34,780 --> 00:09:31,130
the station's robotic arm as it backs

132
00:09:39,160 --> 00:09:34,790
off of the grapple fixture pin oh she

133
00:09:45,750 --> 00:09:39,170
looks perfect perfect perfect clear the

134
00:09:52,270 --> 00:09:48,640
very nice that's why box mislead arm

135
00:09:54,340 --> 00:09:52,280
operator Bob man ok here's the drill

136
00:09:59,560 --> 00:09:54,350
real quick cash you're gonna go for soft

137
00:10:01,660 --> 00:09:59,570
capture and then lock the S bed and I'm

138
00:10:04,030 --> 00:10:01,670

not gonna stop capture Julie's death I'd

139

00:10:06,040 --> 00:10:04,040

safer so I'm going to keep it close in

140

00:10:09,460 --> 00:10:06,050

somewhat in my this camera view is

141

00:10:11,320 --> 00:10:09,470

looking on the end of the station's

142

00:10:13,060 --> 00:10:11,330

robot arm looking down at grant Greg

143

00:10:15,040 --> 00:10:13,070

chamot off you can see where he was

144

00:10:25,380 --> 00:10:15,050

located in relation to the midpoint of

145

00:10:30,990 --> 00:10:27,930

I've got a soft soft rock salt captions

146

00:10:33,180 --> 00:10:31,000

well can I see it in the envelope so

147

00:10:36,090 --> 00:10:33,190

that's good news you can continue please

148

00:10:38,910 --> 00:10:36,100

yep go ahead Chas and rotate your knob

149

00:10:40,200 --> 00:10:38,920

to close and lock the knob check the

150

00:10:41,790 --> 00:10:40,210

indicators on the right read from the

151
00:10:45,450 --> 00:10:41,800
black region I'm getting all day /

152
00:10:53,210 --> 00:10:45,460
fortitude off after its lock your

153
00:11:01,860 --> 00:10:58,770
Houston endeavour go ahead and ever in

154
00:11:04,830 --> 00:11:01,870
behalf of the sts-134 crew and the

155
00:11:08,400 --> 00:11:04,840
expedition 27 crew space station

156
00:11:15,450 --> 00:11:08,410
assembly is complete Houston copies

157
00:11:17,820 --> 00:11:15,460
thank you thanks buddy step and looking

158
00:11:19,800 --> 00:11:17,830
down the room it looks really good like

159
00:11:30,680 --> 00:11:19,810
Mark said congratulations on station

160
00:11:33,210 --> 00:11:30,690
complete simpleton see the laser focus

161
00:11:35,640 --> 00:11:33,220
this is the power and data grapple

162
00:11:37,530 --> 00:11:35,650
fixture that the two crew members are

163
00:11:40,560 --> 00:11:37,540

working with that will be installed on

164

00:11:44,600 --> 00:11:40,570

the end of the orbiter boom sensor

165

00:11:51,000 --> 00:11:44,610

system which is now an ISS boom assembly

166

00:11:53,070 --> 00:11:51,010

the electrical grapple fixture will be

167

00:11:55,890 --> 00:11:53,080

removed from the end of that boom there

168

00:11:59,730 --> 00:11:55,900

are six bolts that have to be freed to

169

00:12:03,780 --> 00:11:59,740

remove it at electrical and data grapple

170

00:12:05,790 --> 00:12:03,790

fixture will either be placed in

171

00:12:07,590 --> 00:12:05,800

endeavours payload Bay for return trip

172

00:12:10,860 --> 00:12:07,600

home or brought inside at the end of the

173

00:12:14,280 --> 00:12:10,870

VA to save a little bit of time in its

174

00:12:16,230 --> 00:12:14,290

place with this PDGF or power and data

175

00:12:19,790 --> 00:12:16,240

grapple fixture will be installed

176

00:12:27,590 --> 00:12:19,800

because it's compatible with the

177

00:12:35,559 --> 00:12:30,410

the two crew members now are headed back

178

00:12:38,420 --> 00:12:35,569

in inboard to begin the swap of the

179

00:12:41,600 --> 00:12:38,430

electrical flight grapple fixture for

180

00:12:43,220 --> 00:12:41,610

the power and data grapple fixture that

181

00:12:47,059 --> 00:12:43,230

they've been working with for the last

182

00:12:50,449 --> 00:12:47,069

several minutes so they're headed back

183

00:12:52,400 --> 00:12:50,459

down the truss structure inboard toward

184

00:12:55,189 --> 00:12:52,410

the center and then out toward the s-1

185

00:12:58,150 --> 00:12:55,199

struck a structure trust structure where

186

00:13:06,780 --> 00:12:58,160

the orbiter boom sensor system now the

187

00:13:18,220 --> 00:13:14,920

bichos on six they say that's a plan

188

00:13:20,019 --> 00:13:18,230

setting drew okay copy all the bolts

189

00:13:24,310 --> 00:13:20,029

you're looking for bravo five o'clock

190

00:13:41,110 --> 00:13:24,320

one big uns cloth battle five clockwise

191

00:13:49,490 --> 00:13:43,910

dad this is 22-foot pal seeing right

192

00:14:01,460 --> 00:13:49,500

here a second him back yep you're pretty

193

00:14:07,280 --> 00:14:01,470

pretty well break Axl both for turns on

194

00:14:08,810 --> 00:14:07,290

one she had a 45 but they know let me

195

00:14:14,090 --> 00:14:08,820

touch it sugar again to make it let

196

00:14:22,910 --> 00:14:14,100

alone I'll bring forth then I touch the

197

00:14:25,820 --> 00:14:22,920

hot sugar so often this view looking

198

00:14:29,210 --> 00:14:25,830

through mike fink's helmet camera as he

199

00:14:32,480 --> 00:14:29,220

assists Greg shamit off with driving the

200

00:14:34,400 --> 00:14:32,490

bolts on the power and data grapple

201

00:14:36,620 --> 00:14:34,410

fixture the replacement for the

202

00:14:41,270 --> 00:14:36,630

electrical flight grapple fixture on the

203

00:14:55,850 --> 00:14:41,280

end of what is now a station component

204

00:15:04,520 --> 00:14:55,860

the ISS boom assembly the video was

205

00:15:07,870 --> 00:15:04,530

further so so uh 1 meter understand you

206

00:15:38,450 --> 00:15:07,880

want to go one major stations Venus

207

00:15:42,330 --> 00:15:40,890

we've just reached the four hour and

208

00:15:43,950 --> 00:15:42,340

forty seven minute mark in today's

209

00:15:47,160 --> 00:15:43,960

spacewalk which officially marks the

210

00:15:48,540 --> 00:15:47,170

1000 hours spent out in the vacuum of

211

00:15:50,730 --> 00:15:48,550

space building and maintaining the

212

00:15:51,750 --> 00:15:50,740

International Space Station it's often

213

00:15:53,910 --> 00:15:51,760

been called one of the greatest

214

00:15:56,010 --> 00:15:53,920

engineering achievements of mankind and

215

00:15:57,180 --> 00:15:56,020

when its assembly was just beginning was

216

00:15:58,200 --> 00:15:57,190

known that it would take more space

217

00:16:01,530 --> 00:15:58,210

walks than anything we've done before

218

00:16:02,970 --> 00:16:01,540

and it certainly has total us time spent

219

00:16:06,600 --> 00:16:02,980

spacewalking for other programs and

220

00:16:10,020 --> 00:16:06,610

projects is a 528 hours and 46 minutes

221

00:16:11,940 --> 00:16:10,030

and again we've just surpassed the 1000

222

00:16:14,190 --> 00:16:11,950

hour spent space walking to build the

223

00:16:16,740 --> 00:16:14,200

International Space Station days is the

224

00:16:18,570 --> 00:16:16,750

115 59th International Space Station

225

00:16:24,990 --> 00:16:18,580

spacewalk and the less that will be

226

00:16:33,750 --> 00:16:25,000

conducted by a space shuttle crew hit

227

00:16:36,780 --> 00:16:33,760

the plate station 8 or 30 times when you

228

00:16:40,740 --> 00:16:36,790

live isolated and you have the client

229

00:16:58,020 --> 00:16:40,750

I've got the credit okay who's hard to

230

00:17:13,280 --> 00:17:02,890

we completely if you uh some more and

231

00:17:24,170 --> 00:17:19,600

complete right disposition tickle please

232

00:17:31,330 --> 00:17:24,180

copy a complete for now in mode watch

233

00:17:38,030 --> 00:17:34,010

yeah back to go through the phone I

234

00:17:42,950 --> 00:17:38,040

could be to give it my WTF looks fully

235

00:17:44,390 --> 00:17:42,960

fitted here they look yeah good view of

236

00:17:46,130 --> 00:17:44,400

the power and data grapple fixture no

237

00:17:48,380 --> 00:17:46,140

installed on what was the orbit room

238

00:17:51,070 --> 00:17:48,390

sensor system and now will be known as

239

00:17:52,730 --> 00:17:51,080

the enhanced with this edition

240

00:17:59,690 --> 00:17:52,740

International Space Station boom

241

00:18:01,940 --> 00:17:59,700

assembly thank you think you've got the

242

00:18:11,960 --> 00:18:01,950

bag cleaned up is that true yes when I

243

00:18:14,270 --> 00:18:11,970

was that meeting it open for e to the

244

00:18:17,090 --> 00:18:14,280

power data grapple fixture here you can

245

00:18:20,270 --> 00:18:17,100

also make out the boom itself extending

246

00:18:22,010 --> 00:18:20,280

to shamt otha left up towards the

247

00:18:25,010 --> 00:18:22,020

corner of the screen that's been

248

00:18:27,650 --> 00:18:25,020

installed on two stands that were left

249

00:18:29,960 --> 00:18:27,660

over from the STS 123 mission when the

250

00:18:31,940 --> 00:18:29,970

boom was temporarily stored there in

251
00:18:34,340 --> 00:18:31,950
preparation for sts 124 when the boom

252
00:18:36,350 --> 00:18:34,350
couldn't fit in the shuttles cargo bay

253
00:18:37,700 --> 00:18:36,360
because it was carrying up the Kibo

254
00:18:48,860 --> 00:18:37,710
laboratory which is a station four

255
00:18:58,450 --> 00:18:48,870
largest laboratory before they move

256
00:19:04,060 --> 00:19:01,730
you here as well coming here right there

257
00:19:08,360 --> 00:19:04,070
the Destiny laboratory directly below

258
00:19:11,360 --> 00:19:08,370
Shama tov connected to the harmony

259
00:19:13,730 --> 00:19:11,370
module which connects the Destiny to the

260
00:19:16,280 --> 00:19:13,740
japanese and european labs kibo and

261
00:19:22,070 --> 00:19:16,290
columbus and beyond that space shuttle

262
00:19:23,060 --> 00:19:22,080
Endeavour everybody that's good dad

263
00:19:30,799 --> 00:19:23,070

thanks

264

00:19:37,100 --> 00:19:30,809

a microphone on the corner all right

265

00:19:39,680 --> 00:19:37,110

great yeah so drew in funny in this

266

00:19:41,690 --> 00:19:39,690

recipe I'm ready to go and it's just

267

00:19:43,580 --> 00:19:41,700

about ready to he's going to get us a

268

00:19:48,769 --> 00:19:43,590

great shot of our beautiful space

269

00:19:51,590 --> 00:19:48,779

station using copy fix you have you

270

00:19:58,369 --> 00:19:51,600

searched further who I head on in to the

271

00:20:01,100 --> 00:19:58,379

airlock and call it a day one last photo

272

00:20:03,950 --> 00:20:01,110

before the space walkers come in for the

273

00:20:06,019 --> 00:20:03,960

day mission specialist Greg Shama tops

274

00:20:07,879 --> 00:20:06,029

going to use the camera that he already

275

00:20:10,060 --> 00:20:07,889

had out to get a photo of the

276

00:20:13,999 --> 00:20:10,070

International Space Station know that it

277

00:20:16,490 --> 00:20:14,009

is complete and as this is the last

278

00:20:19,509 --> 00:20:16,500

spacewalk for a space shuttle crew this

279

00:20:21,830 --> 00:20:19,519

is a good time to document the

280

00:20:24,289 --> 00:20:21,840

accomplishments of more than 1,000 hours

281

00:20:32,330 --> 00:20:24,299

of spacewalking time spent building the

282

00:20:37,879 --> 00:20:32,340

International Space Station at least is

283

00:20:46,090 --> 00:20:37,889

you off off off ucf Hafer we do looks

284

00:20:51,230 --> 00:20:46,100

great thank you okay gonna give you a

285

00:21:04,149 --> 00:20:51,240

phone if you hear your social double

286

00:21:07,249 --> 00:21:04,159

complete I can hopefully SSR bottle for

287

00:21:10,909 --> 00:21:07,259

almost on here what they feel one of the

288

00:21:14,389 --> 00:21:10,919

things she works the last part of a

289

00:21:17,869 --> 00:21:14,399

shuttle endeavour if also the flower

290

00:21:22,180 --> 00:21:17,879

things off of off 12 a fellow crew

291

00:21:25,360 --> 00:21:22,190

members and for all patient assembly

292

00:21:28,249 --> 00:21:25,370

benefiting what a father is here the

293

00:21:30,590 --> 00:21:28,259

devil was the first shuttle you can

294

00:21:33,889 --> 00:21:30,600

construct of the station and something

295

00:21:35,779 --> 00:21:33,899

else is here for the long haul mission

296

00:21:41,840 --> 00:21:35,789

is lost

297

00:21:43,849 --> 00:21:41,850

assembly and the CVL we passed both

298

00:21:48,289 --> 00:21:43,859

together for 50 / hours and hours of

299

00:21:51,889 --> 00:21:48,299

spacewalks is part of a station assembly

300

00:21:54,769 --> 00:21:51,899

like all the armor here to share this on

301

00:21:56,299 --> 00:21:54,779

Facebook and of course with all the

302

00:21:58,430 --> 00:21:56,309

folks foot on the ground thousands of

303

00:22:00,560 --> 00:21:58,440

people who all filled us looking in the

304

00:22:03,409 --> 00:22:00,570

shuttle mission program will flow the

305

00:22:06,460 --> 00:22:03,419

air on the source of giant cell space

306

00:22:10,519 --> 00:22:06,470

station a pinnacle of human achievement

307

00:22:12,739 --> 00:22:10,529

and all international cooperation 12

308

00:22:14,899 --> 00:22:12,749

years the building and 15 countries and

309

00:22:16,509 --> 00:22:14,909

all it's the farthest on the thigh and

310

00:22:18,759 --> 00:22:16,519

hopefully the doorstep to our future

311

00:22:26,960 --> 00:22:18,769

different graduations everybody on

312

00:22:33,589 --> 00:22:26,970

public oh please what do you think a

313

00:22:44,269 --> 00:22:33,599

kiss oh thank you all right time to go

314

00:22:45,979 --> 00:22:44,279

home safe there we go you can see both

315

00:22:49,070 --> 00:22:45,989

spacewalkers here making their way back

316

00:22:51,200 --> 00:22:49,080

to the quest airlock on the bottom of

317

00:22:54,589 --> 00:22:51,210

the screen in the all-white spacesuit

318

00:22:57,169 --> 00:22:54,599

Mike Fincke making his way hand over

319

00:23:00,320 --> 00:22:57,179

hand down the space station's truss and

320

00:23:01,940 --> 00:23:00,330

you can get a look at where mission

321

00:23:04,729 --> 00:23:01,950

specialist Greg shama top was taking his

322

00:23:06,080 --> 00:23:04,739

photos from he's on the Express

323

00:23:10,580 --> 00:23:06,090

logistics carrier climbing down from

324

00:23:13,729 --> 00:23:10,590

that to the truss it was at the top of

325

00:23:15,019 --> 00:23:13,739

that stowage platform for the photos

326

00:23:19,009 --> 00:23:15,029

that he just took of the International

327

00:23:22,700 --> 00:23:19,019

Space Station nice job on the cuff

328

00:23:24,769 --> 00:23:22,710

around here Mike thanks buddy and that

329

00:23:37,270 --> 00:23:24,779

good work yourself today congratulations

330

00:23:51,580 --> 00:23:37,280

on this second and I'm not

331

00:23:56,740 --> 00:23:51,590

whatever sounds good yeah exactly into

332

00:24:02,080 --> 00:23:56,750

another that's okay can pause there and

333

00:24:09,940 --> 00:24:02,090

i'm almost at the air lock and open the

334

00:24:12,310 --> 00:24:09,950

hatch thermal cover and then you'll be

335

00:24:16,840 --> 00:24:12,320

right waist to the deroulard earrings

336

00:24:19,080 --> 00:24:16,850

gender happy I'll report back but bags

337

00:24:25,810 --> 00:24:19,090

going to have to get in in there as well

338

00:24:31,050 --> 00:24:25,820

understood you hear from mission

339

00:24:38,410 --> 00:24:36,010

shuttle in the station past 217 miles

340

00:24:45,130 --> 00:24:38,420

above Chad heading towards the border of

341

00:24:48,730 --> 00:24:45,140

Sudan happy thermal cover at thermal

342

00:24:51,760 --> 00:24:48,740

cover is open and I'm sticking my head

343

00:24:56,380 --> 00:24:51,770

inside and this is my right ways

344

00:24:59,470 --> 00:24:56,390

together right way stutters shared our

345

00:25:02,200 --> 00:24:59,480

internal earrings hey Rach second i'm

346

00:25:08,710 --> 00:25:02,210

getting go to da extender they go into

347

00:25:14,680 --> 00:25:08,720

the d-ring offenders as you can get your

348

00:25:17,530 --> 00:25:14,690

left waist tether ready a more left we

349

00:25:46,700 --> 00:25:17,540

fed early voting on info helps fill in

350

00:26:03,539 --> 00:25:51,690

come here excellent welcome and i'm

351
00:26:16,049 --> 00:26:03,549
getting inside 50 out of your way good

352
00:26:41,759 --> 00:26:16,059
job come on now I'm gonna dead rotate

353
00:26:44,340 --> 00:26:41,769
the other way mission specialist Greg

354
00:26:47,190 --> 00:26:44,350
shanna top now in the quest airlock with

355
00:26:48,840 --> 00:26:47,200
Mike Bank the last space shuttle crew

356
00:26:51,509 --> 00:26:48,850
member to conduct a spacewalk male back

357
00:26:54,600 --> 00:26:51,519
inside the airlock different better

358
00:26:56,100 --> 00:26:54,610
pieces of velcro and tens be sure you

359
00:26:57,330 --> 00:26:56,110
know once you release that Rhett you

360
00:26:59,700 --> 00:26:57,340
don't want to get near that thermal

361
00:27:01,560 --> 00:26:59,710
cover it will pop back open on you even

362
00:27:03,629 --> 00:27:01,570
if you look at it what honey yeah so

363
00:27:11,600 --> 00:27:03,639

keep your tether packs everything clear

364

00:27:14,519 --> 00:27:11,610

that bike is gonna close the hair upon

365

00:27:20,430 --> 00:27:14,529

the filiform safety is the shuttle

366

00:27:21,889 --> 00:27:20,440

program yeah in order to say

367

00:27:24,870 --> 00:27:21,899

congratulations to the shuttle program

368

00:27:29,580 --> 00:27:24,880

for all the wonderful successes we've

369

00:27:34,529 --> 00:27:29,590

had a 30-something years and privileged

370

00:27:38,070 --> 00:27:34,539

it endeavours both being the last base

371

00:27:40,320 --> 00:27:38,080

walk by a space shuttle crews invent so

372

00:27:43,259 --> 00:27:40,330

congratulations to their EBA development

373

00:27:44,879 --> 00:27:43,269

genes that come a long way from being