
JAXA

1
00:00:08,310 --> 00:00:01,829
station this is houston are you ready

2
00:00:08,320 --> 00:00:12,150
we're ready for the event houston

3
00:00:19,349 --> 00:00:15,030
wcsh tv this is mission control houston

4
00:00:25,750 --> 00:00:22,470
yes station this is wcsh tv do you hear

5
00:00:32,630 --> 00:00:28,150
loud and clear good morning to maine

6
00:00:32,640 --> 00:00:37,270
good morning gentlemen how are you

7
00:00:37,280 --> 00:00:42,549
we are talking with our afternoon

8
00:00:46,950 --> 00:00:44,709
i'm sorry you go ahead

9
00:00:49,270 --> 00:00:46,960
go ahead

10
00:01:00,630 --> 00:00:49,280
no we're doing great it's a privilege to

11
00:01:04,950 --> 00:01:02,709
you go ahead chris you you go ahead i'll

12
00:01:09,270 --> 00:01:04,960
be quiet

13
00:01:10,870 --> 00:01:09,280

i'm chris nasa astronaut chris cassidy

14
00:01:12,870 --> 00:01:10,880
here with my crewmate tom marshburn

15
00:01:15,190 --> 00:01:12,880
expedition 35 on the international space

16
00:01:16,710 --> 00:01:15,200
station and just really excited to be

17
00:01:17,749 --> 00:01:16,720
here and share a little bit about our

18
00:01:21,749 --> 00:01:17,759
day with

19
00:01:26,469 --> 00:01:23,910
well it's fantastic to have you and and

20
00:01:28,390 --> 00:01:26,479
chris as you remember i'm sure we spoke

21
00:01:30,710 --> 00:01:28,400
to you just a little bit before you

22
00:01:32,230 --> 00:01:30,720
blasted off and headed up to the space

23
00:01:34,789 --> 00:01:32,240
station and the first thing i want to

24
00:01:36,069 --> 00:01:34,799
ask you is is i i was unaware at that

25
00:01:38,310 --> 00:01:36,079
time that you were going to take the

26
00:01:39,670 --> 00:01:38,320
express route up to the space station i

27
00:01:41,670 --> 00:01:39,680
understand you got there a lot faster

28
00:01:43,429 --> 00:01:41,680
than as usual maybe you could talk a

29
00:01:47,429 --> 00:01:43,439
little bit about what you did to do that

30
00:01:51,910 --> 00:01:50,310
yeah that was interesting typically

31
00:01:53,190 --> 00:01:51,920
when we launched to the space station

32
00:01:55,109 --> 00:01:53,200
we'll we'll

33
00:01:57,590 --> 00:01:55,119
launch go to bed wake up have a whole

34
00:01:59,510 --> 00:01:57,600
day of maneuvers in between and on the

35
00:02:01,670 --> 00:01:59,520
third day we'll rendezvous to the space

36
00:02:03,429 --> 00:02:01,680
station however on our launch we did

37
00:02:05,510 --> 00:02:03,439
something a little bit different and we

38
00:02:08,070 --> 00:02:05,520

did the same day rendezvous which six

39
00:02:10,150 --> 00:02:08,080
hours after lifting off in kazakhstan we

40
00:02:12,070 --> 00:02:10,160
were docked here to the space station

41
00:02:14,070 --> 00:02:12,080
and essentially in the cockpit we did

42
00:02:15,589 --> 00:02:14,080
all the same tasks as we would do over

43
00:02:17,589 --> 00:02:15,599
that three-day period except it was a

44
00:02:19,589 --> 00:02:17,599
little bit more squished together

45
00:02:21,830 --> 00:02:19,599
it was really cool to be

46
00:02:23,350 --> 00:02:21,840
just walking on earth and then later on

47
00:02:27,030 --> 00:02:23,360
have my next meal on board the space

48
00:02:30,949 --> 00:02:29,190
i know it's kind of like flying from uh

49
00:02:32,150 --> 00:02:30,959
you know portland to los angeles or

50
00:02:33,750 --> 00:02:32,160
something it really didn't take all that

51
00:02:38,470 --> 00:02:33,760
long what was the reason behind trying

52
00:02:43,270 --> 00:02:40,710
well that's a great question you know um

53
00:02:45,589 --> 00:02:43,280
it allows us sometimes if we're doing uh

54
00:02:47,270 --> 00:02:45,599
uh carrying sensitive cargo that has

55
00:02:49,509 --> 00:02:47,280
temperature constraints or some type of

56
00:02:51,430 --> 00:02:49,519
deep freeze type sample that needs to

57
00:02:53,910 --> 00:02:51,440
get to the space station quickly it

58
00:02:56,070 --> 00:02:53,920
opens up opportunities for scientific uh

59
00:02:58,470 --> 00:02:56,080
exploration like that and also it's a

60
00:03:01,270 --> 00:02:58,480
little bit more comfortable for the crew

61
00:03:03,750 --> 00:03:01,280
in terms of that that one day inside the

62
00:03:06,710 --> 00:03:03,760
soyuz we do sort of a if if you do the

63
00:03:08,470 --> 00:03:06,720

normal rope uh rendezvous program

64
00:03:10,149 --> 00:03:08,480
there's a solar spin attitude that can

65
00:03:12,070 --> 00:03:10,159
be a little disorienting inside the

66
00:03:13,589 --> 00:03:12,080
cockpit and

67
00:03:15,509 --> 00:03:13,599
it's really nice to do your space

68
00:03:17,509 --> 00:03:15,519
adaptation here on the space station in

69
00:03:19,030 --> 00:03:17,519
a much larger volume so it's just kind

70
00:03:22,070 --> 00:03:19,040
of good all the way around to get here

71
00:03:25,830 --> 00:03:23,910
all right that makes sense to those of

72
00:03:27,430 --> 00:03:25,840
us back on earth

73
00:03:29,589 --> 00:03:27,440
dr marshburn i wanted to ask you you've

74
00:03:31,990 --> 00:03:29,599
been up there for some time now

75
00:03:33,910 --> 00:03:32,000
is is one of your many jobs to kind of

76
00:03:37,830 --> 00:03:33,920
help acclimate the new guy who's coming

77
00:03:41,030 --> 00:03:39,110
you know it's written on the schedule

78
00:03:43,509 --> 00:03:41,040
for that to be one of the jobs but with

79
00:03:45,509 --> 00:03:43,519
uh chris cassidy here uh it doesn't seem

80
00:03:47,509 --> 00:03:45,519
like he's needed it he's adapted right

81
00:03:49,430 --> 00:03:47,519
away and we've been fully functional it

82
00:03:50,949 --> 00:03:49,440
seems like from day one so

83
00:03:54,949 --> 00:03:50,959
it hasn't needed much

84
00:03:58,229 --> 00:03:56,390
we know a little bit about chris's

85
00:04:00,789 --> 00:03:58,239
history and how he came from york maine

86
00:04:02,710 --> 00:04:00,799
and and went uh through you know all the

87
00:04:04,550 --> 00:04:02,720
way to becoming an astronaut what was

88
00:04:08,550 --> 00:04:04,560

the what was your path to becoming an

89
00:04:12,949 --> 00:04:10,869
well like a lot of uh astronauts it

90
00:04:14,390 --> 00:04:12,959
started pretty early and i was in high

91
00:04:16,550 --> 00:04:14,400
school when i decided i wanted to work

92
00:04:18,789 --> 00:04:16,560
for nasa after reading about some

93
00:04:21,030 --> 00:04:18,799
satellites and robotic operations and

94
00:04:23,030 --> 00:04:21,040
the school library i never thought i'd

95
00:04:25,510 --> 00:04:23,040
get to be an astronaut but i followed

96
00:04:27,030 --> 00:04:25,520
the paths of a lot of career astronauts

97
00:04:29,590 --> 00:04:27,040
and copied them just because it was so

98
00:04:31,749 --> 00:04:29,600
much fun and offered so many offered so

99
00:04:33,510 --> 00:04:31,759
many opportunities in life and i ended

100
00:04:35,189 --> 00:04:33,520
up working at nasa and then applying and

101
00:04:38,870 --> 00:04:35,199
getting in so it was a long road but it

102
00:04:42,710 --> 00:04:41,110
i'm very curious about what what your

103
00:04:44,150 --> 00:04:42,720
day is like now i know you have lots of

104
00:04:45,830 --> 00:04:44,160
jobs you have to do while you're on the

105
00:04:47,990 --> 00:04:45,840
space station but do you wake up at the

106
00:04:54,230 --> 00:04:48,000
same time every day are you going on

107
00:04:57,670 --> 00:04:56,150
that's a that's a fun question to answer

108
00:05:00,150 --> 00:04:57,680
because there's mission control centers

109
00:05:02,150 --> 00:05:00,160
all around the world who are who are uh

110
00:05:03,990 --> 00:05:02,160
participating in our day so what time do

111
00:05:06,469 --> 00:05:04,000
we live by and the answer to that is

112
00:05:09,189 --> 00:05:06,479
greenwich mean time we wake up at around

113
00:05:11,270 --> 00:05:09,199

six o'clock uh greenwich mean time so

114
00:05:14,950 --> 00:05:11,280
basically we're we're one meal ahead of

115
00:05:16,550 --> 00:05:14,960
you in maine and uh and we'll go we'll

116
00:05:18,629 --> 00:05:16,560
have a morning tag up with the ground

117
00:05:19,830 --> 00:05:18,639
about 7 30 and then get right to work

118
00:05:21,350 --> 00:05:19,840
we're talking to you right now from the

119
00:05:23,350 --> 00:05:21,360
japanese module where there's quite a

120
00:05:24,870 --> 00:05:23,360
bit of scientific experiments that we'd

121
00:05:26,230 --> 00:05:24,880
participate in in fact this morning i

122
00:05:27,270 --> 00:05:26,240
was working right behind the camera

123
00:05:29,670 --> 00:05:27,280
earlier

124
00:05:32,070 --> 00:05:29,680
and uh and we'll do various things

125
00:05:34,230 --> 00:05:32,080
experiments maintenance and exercise to

126
00:05:35,909 --> 00:05:34,240
keep ourselves healthy

127
00:05:38,550 --> 00:05:35,919
and then wrap the day up with another

128
00:05:40,629 --> 00:05:38,560
conference with the ground around 7pm

129
00:05:42,390 --> 00:05:40,639
and then have a little bit of personal

130
00:05:44,469 --> 00:05:42,400
time to take care of things like eating

131
00:05:49,189 --> 00:05:44,479
and all the other human needs

132
00:05:54,710 --> 00:05:52,310
now that japanese module is that uh

133
00:05:57,270 --> 00:05:54,720
common size in terms of of the modules

134
00:05:59,510 --> 00:05:57,280
up there is that the most spacious or is

135
00:06:06,629 --> 00:05:59,520
there is there like a luxury module that

136
00:06:09,510 --> 00:06:07,830
well

137
00:06:11,110 --> 00:06:09,520
tom and i don't get we we're just

138
00:06:14,309 --> 00:06:11,120

government employees so we didn't we

139
00:06:16,550 --> 00:06:14,319
didn't pay for the uh the the xle model

140
00:06:21,350 --> 00:06:18,950
but no this the japanese module is very

141
00:06:22,870 --> 00:06:21,360
bright as you can see

142
00:06:25,350 --> 00:06:22,880
you can see it's very bright and large

143
00:06:27,189 --> 00:06:25,360
and spacious uh there the other modules

144
00:06:29,029 --> 00:06:27,199
are similar in size although i would say

145
00:06:30,870 --> 00:06:29,039
this is probably the feels the largest

146
00:06:33,430 --> 00:06:30,880
volume

147
00:06:35,590 --> 00:06:33,440
and the nice thing about the japanese

148
00:06:37,510 --> 00:06:35,600
module it has a closet upstairs so all

149
00:06:39,110 --> 00:06:37,520
of the clutter in the bags gets stored

150
00:06:41,189 --> 00:06:39,120
up above our heads right now and some of

151
00:06:42,950 --> 00:06:41,199
the other modules has the same amount of

152
00:06:44,629 --> 00:06:42,960
stuff just you it would you see it on

153
00:06:47,029 --> 00:06:44,639
the floor and tied down with with the

154
00:06:49,270 --> 00:06:47,039
cords but each module is unique in its

155
00:06:52,070 --> 00:06:49,280
own way and

156
00:06:53,990 --> 00:06:52,080
with the what it brings to either space

157
00:06:55,830 --> 00:06:54,000
station systems that keep takes to keep

158
00:06:58,309 --> 00:06:55,840
us running and keep all the system

159
00:06:59,830 --> 00:06:58,319
lights on so to speak or experiment so

160
00:07:02,150 --> 00:06:59,840
it's it's really fun to explore and get

161
00:07:05,350 --> 00:07:02,160
to get to know each uh each room so to

162
00:07:09,749 --> 00:07:07,990
now i can't see your feet in terms of

163
00:07:11,270 --> 00:07:09,759

how the camera is framed are you guys

164
00:07:13,430 --> 00:07:11,280
just kind of floating there right now

165
00:07:21,029 --> 00:07:13,440
are you tied down because you seem to be

166
00:07:24,790 --> 00:07:22,629
yeah just using our feet

167
00:07:28,309 --> 00:07:24,800
hooked up under handrails we kind of use

168
00:07:32,629 --> 00:07:30,950
interesting okay and and i mean aside

169
00:07:34,230 --> 00:07:32,639
from from the fact that you guys are

170
00:07:35,909 --> 00:07:34,240
scientists and you're doing serious work

171
00:07:40,870 --> 00:07:35,919
there it has to be fun to just kind of

172
00:07:45,029 --> 00:07:43,270
it's amazing i like to tell school kids

173
00:07:47,029 --> 00:07:45,039
when i when i'm back on earth giving a

174
00:07:48,869 --> 00:07:47,039
talk imagine in this gymnasium that

175
00:07:50,869 --> 00:07:48,879
we're sitting in oh instead of sitting

176
00:07:52,150 --> 00:07:50,879
in chairs everybody's floating around

177
00:07:54,869 --> 00:07:52,160
and if you want to go to the ceiling you

178
00:07:57,270 --> 00:07:54,879
just push off and that's what it's like

179
00:07:59,990 --> 00:07:57,280
we still think like we're on the ground

180
00:08:02,150 --> 00:08:00,000
just like normal and so

181
00:08:04,309 --> 00:08:02,160
it's just as interesting for us

182
00:08:06,309 --> 00:08:04,319
every single day to float through the

183
00:08:08,070 --> 00:08:06,319
module or to go from the floor to the

184
00:08:09,029 --> 00:08:08,080
ceiling and an interesting experiment i

185
00:08:11,749 --> 00:08:09,039
like to do

186
00:08:14,150 --> 00:08:11,759
in what is to tell myself that i'm now

187
00:08:16,710 --> 00:08:14,160
on the side and without moving my body

188
00:08:18,950 --> 00:08:16,720

to a body at all then tell myself okay

189
00:08:20,790 --> 00:08:18,960
now i'm sitting on the ceiling and once

190
00:08:22,710 --> 00:08:20,800
you get acclimated you can easily do

191
00:08:26,869 --> 00:08:22,720
that transformation in your head and

192
00:08:28,869 --> 00:08:26,879
it's it's really fun to do

193
00:08:31,510 --> 00:08:28,879
boy i imagine it is now i know we've

194
00:08:33,589 --> 00:08:31,520
seen some pictures of the earth

195
00:08:35,029 --> 00:08:33,599
taken from up in space

196
00:08:36,310 --> 00:08:35,039
is there a window close to you that you

197
00:08:39,029 --> 00:08:36,320
can just look right out and see the

198
00:08:41,190 --> 00:08:39,039
earth always or it does it depend on on

199
00:08:42,709 --> 00:08:41,200
where you are in terms of your uh

200
00:08:45,910 --> 00:08:42,719
your you know your place around the

201
00:08:48,949 --> 00:08:47,269
as a matter of fact there are two

202
00:08:50,230 --> 00:08:48,959
windows that are very nice behind us

203
00:08:51,030 --> 00:08:50,240
here in the gym

204
00:08:52,470 --> 00:08:51,040
and

205
00:08:53,910 --> 00:08:52,480
unfortunately it's nighttime right now

206
00:08:55,670 --> 00:08:53,920
we think we're over the pacific ocean

207
00:08:58,150 --> 00:08:55,680
somewhere and it's night we see uh

208
00:09:00,710 --> 00:08:58,160
nighttime 16 times a day here uh but

209
00:09:02,470 --> 00:09:00,720
there is a beautiful seven-windowed dome

210
00:09:04,550 --> 00:09:02,480
called the cupola and that's the most

211
00:09:06,230 --> 00:09:04,560
popular viewing area get at the big 360

212
00:09:08,310 --> 00:09:06,240
view of the earth which is when you have

213
00:09:09,990 --> 00:09:08,320

your head in there is above you so we're

214
00:09:11,910 --> 00:09:10,000
actually upside down looking at it but

215
00:09:13,670 --> 00:09:11,920
it's a beautiful place and it's

216
00:09:16,070 --> 00:09:13,680
magnetizing we just can't get away from

217
00:09:19,509 --> 00:09:17,910
boy i imagine it must be fascinating

218
00:09:21,350 --> 00:09:19,519
must be wonderful it's been wonderful

219
00:09:22,710 --> 00:09:21,360
talking to you both thank you so much

220
00:09:24,470 --> 00:09:22,720
for taking time out of your day i know

221
00:09:26,630 --> 00:09:24,480
you have a lot going on

222
00:09:29,269 --> 00:09:26,640
again expedition 35 flight engineers

223
00:09:33,430 --> 00:09:29,279
chris cassidy from maine and dr tom

224
00:09:37,190 --> 00:09:35,190
thanks so much thanks so much have a

225
00:09:39,110 --> 00:09:37,200
great day and next week is maine space

226
00:09:45,590 --> 00:09:39,120
week so stay tuned for all you kids out

227
00:09:50,389 --> 00:09:47,750
station this is houston acr that

228
00:09:52,630 --> 00:09:50,399
concludes the wcsh tv portion of the

229
00:09:59,990 --> 00:09:52,640
event please stand by for a voice check

230
00:10:00,000 --> 00:10:05,829
hello hello you want me to talk

231
00:10:09,350 --> 00:10:07,990
hello is this uh tim welcome onboard the

232
00:10:12,710 --> 00:10:09,360
international space station oh we're

233
00:10:18,230 --> 00:10:15,110
yeah this is uh okay uh tim farley here

234
00:10:20,069 --> 00:10:18,240
from siriusxm uh by the way also a uh a

235
00:10:21,750 --> 00:10:20,079
bangor born fellow went to colby college

236
00:10:23,030 --> 00:10:21,760
so i have something in common with mr

237
00:10:26,470 --> 00:10:23,040
cassidy

238
00:10:31,110 --> 00:10:29,190

oh very good it's nice to talk to to a

239
00:10:32,550 --> 00:10:31,120
maynard today right

240
00:10:37,430 --> 00:10:32,560
they don't let you take whoopie pies in

241
00:10:37,440 --> 00:10:39,829
hey

242
00:10:43,430 --> 00:10:41,670
uh gentlemen first i wanted to ask a

243
00:10:45,750 --> 00:10:43,440
question first it's great to be able to

244
00:10:47,990 --> 00:10:45,760
speak to you here on siriusxm satellite

245
00:10:49,269 --> 00:10:48,000
radio going nationwide coast to coast

246
00:10:50,710 --> 00:10:49,279
can you give us a sense of where you are

247
00:10:54,790 --> 00:10:50,720
right now we're about noontime east

248
00:10:59,670 --> 00:10:57,030
right now the entire space station is we

249
00:11:02,470 --> 00:10:59,680
think in the southern pacific going 17

250
00:11:05,829 --> 00:11:02,480
500 miles an hour towards you uh heading

251
00:11:07,509 --> 00:11:05,839
for the united states and um we are in

252
00:11:10,949 --> 00:11:07,519
the forward part of the space station so

253
00:11:13,350 --> 00:11:10,959
we we are surrounded all around us by

254
00:11:14,949 --> 00:11:13,360
the vacuum of outer space except in one

255
00:11:17,030 --> 00:11:14,959
direction where the main axis of the

256
00:11:19,750 --> 00:11:17,040
space station is all right dr tom

257
00:11:22,310 --> 00:11:19,760
marshburn is on board as well as chris

258
00:11:23,829 --> 00:11:22,320
cassidy christopher cassidy commander uh

259
00:11:25,030 --> 00:11:23,839
dr marshburn i want to ask you about it

260
00:11:28,710 --> 00:11:25,040
first of all is this your first time

261
00:11:33,269 --> 00:11:31,509
uh nope i came up actually with chris

262
00:11:35,910 --> 00:11:33,279
cassidy here we flew together on the

263
00:11:37,670 --> 00:11:35,920

shuttle endeavor back in 2009 we came

264
00:11:39,509 --> 00:11:37,680
here to the space station that time

265
00:11:41,269 --> 00:11:39,519
though we did a lot of spacewalks we

266
00:11:42,949 --> 00:11:41,279
were involved in a construction mission

267
00:11:44,310 --> 00:11:42,959
to finish help finish the completion of

268
00:11:46,790 --> 00:11:44,320
this space station

269
00:11:48,389 --> 00:11:46,800
and maybe you could give us dr

270
00:11:49,509 --> 00:11:48,399
marshburn just a little rundown of what

271
00:11:53,110 --> 00:11:49,519
the mission is about that you're on

272
00:11:56,629 --> 00:11:54,790
well right now the station is complete

273
00:11:59,829 --> 00:11:56,639
it's a full up operating laboratory and

274
00:12:01,590 --> 00:11:59,839
our mission is to carry out uh

275
00:12:03,990 --> 00:12:01,600
many experience we have over 130

276
00:12:05,670 --> 00:12:04,000
experiments just right now going on uh

277
00:12:07,269 --> 00:12:05,680
during our increment so our job is to be

278
00:12:10,629 --> 00:12:07,279
the eyes in the hands of all the

279
00:12:12,949 --> 00:12:10,639
scientists around the world uh to help

280
00:12:14,790 --> 00:12:12,959
their experiments come to completion we

281
00:12:16,470 --> 00:12:14,800
resupply the experiments we fix them if

282
00:12:17,990 --> 00:12:16,480
they break and also involved into

283
00:12:20,069 --> 00:12:18,000
maintaining the space station to keep it

284
00:12:22,389 --> 00:12:20,079
running

285
00:12:25,350 --> 00:12:22,399
uh chris cassidy again commander who is

286
00:12:26,949 --> 00:12:25,360
on board first navy seal ever to i guess

287
00:12:28,870 --> 00:12:26,959
serve as an astronaut in space it must

288
00:12:30,230 --> 00:12:28,880

be different i can imagine the terrain

289
00:12:31,750 --> 00:12:30,240
the territory when you get into a place

290
00:12:33,110 --> 00:12:31,760
like afghanistan where you serve one

291
00:12:34,389 --> 00:12:33,120
thing then outer space something

292
00:12:36,710 --> 00:12:34,399
different give us a sense of what it's

293
00:12:38,150 --> 00:12:36,720
like being in space with alone just with

294
00:12:41,670 --> 00:12:38,160
a few guys when you're that far from

295
00:12:45,590 --> 00:12:43,910
well as as with most things in life what

296
00:12:47,190 --> 00:12:45,600
really uh what really makes things

297
00:12:50,069 --> 00:12:47,200
special is the people that you share it

298
00:12:53,030 --> 00:12:50,079
with and i'm really really privileged to

299
00:12:55,190 --> 00:12:53,040
have fantastic crewmates tom and and

300
00:12:57,590 --> 00:12:55,200
chris hadfield our canadian commander

301
00:12:59,190 --> 00:12:57,600
and our three russian cosmonauts and

302
00:13:00,550 --> 00:12:59,200
that's really what makes it special just

303
00:13:03,990 --> 00:13:00,560
like when i was in the middle in the

304
00:13:06,550 --> 00:13:04,000
navy and deploying to crazy places um

305
00:13:08,629 --> 00:13:06,560
what what it made that time really

306
00:13:10,150 --> 00:13:08,639
memorable for me is my platoon mates and

307
00:13:12,069 --> 00:13:10,160
and uh and folks that i served in

308
00:13:14,310 --> 00:13:12,079
military with so it's very much similar

309
00:13:15,910 --> 00:13:14,320
here and just for the record uh there

310
00:13:17,430 --> 00:13:15,920
was one other seal who was the first

311
00:13:19,110 --> 00:13:17,440
commander of the space station bill

312
00:13:21,430 --> 00:13:19,120
shepard and i i'm the second one to

313
00:13:23,829 --> 00:13:21,440

follow in his footsteps so it's a real

314
00:13:25,350 --> 00:13:23,839
uh privilege to be in that company with

315
00:13:27,110 --> 00:13:25,360
him all right well i appreciate your

316
00:13:28,470 --> 00:13:27,120
correction on that one uh i was i was

317
00:13:29,910 --> 00:13:28,480
noting and i'm reading and maybe you

318
00:13:31,990 --> 00:13:29,920
guys can fill me in on this whoever

319
00:13:33,430 --> 00:13:32,000
wants to take the question but i i saw a

320
00:13:34,949 --> 00:13:33,440
story about an antenna that had a

321
00:13:36,550 --> 00:13:34,959
problem to deploy

322
00:13:39,030 --> 00:13:36,560
and it might make

323
00:13:40,870 --> 00:13:39,040
some uh some docking difficult with the

324
00:13:44,310 --> 00:13:40,880
space station is that an up-to-date

325
00:13:47,350 --> 00:13:45,910
yep that's the story as we've got it

326
00:13:48,949 --> 00:13:47,360
it's called the progress vehicle it's

327
00:13:51,110 --> 00:13:48,959
cargo doesn't have people in it but it

328
00:13:52,470 --> 00:13:51,120
has some important supplies in it but

329
00:13:54,389 --> 00:13:52,480
you know we can we can really only

330
00:13:56,949 --> 00:13:54,399
barely do this space flight thing it's

331
00:13:58,870 --> 00:13:56,959
complicated uh these things happen and

332
00:14:00,790 --> 00:13:58,880
we've got backup plans

333
00:14:02,150 --> 00:14:00,800
in case it can't actually physically

334
00:14:04,629 --> 00:14:02,160
dock to the space station because of

335
00:14:06,550 --> 00:14:04,639
this antenna problem but we know in

336
00:14:08,710 --> 00:14:06,560
moscow they're working hard to fix it

337
00:14:10,710 --> 00:14:08,720
and we know the back back up plan is in

338
00:14:12,870 --> 00:14:10,720

work so we're just waiting to see what

339
00:14:14,949 --> 00:14:12,880
happens and hope the hardware cooperates

340
00:14:19,430 --> 00:14:14,959
and the backup plan i understand is a

341
00:14:23,430 --> 00:14:21,110
uh as far as we've heard that's right

342
00:14:24,870 --> 00:14:23,440
that's one of the backup plans yes yeah

343
00:14:29,269 --> 00:14:24,880
either either one of you ever done any

344
00:14:33,030 --> 00:14:31,189
well as a matter of fact uh we'll both

345
00:14:34,790 --> 00:14:33,040
answer that one uh we've done two

346
00:14:37,430 --> 00:14:34,800
together on our shuttle flight and we've

347
00:14:38,790 --> 00:14:37,440
each done three so uh it's it's a

348
00:14:40,949 --> 00:14:38,800
wonderful thing it's one of the

349
00:14:43,350 --> 00:14:40,959
pinnacles of flying in space i'll let

350
00:14:44,870 --> 00:14:43,360
chris tell you a little bit about it

351
00:14:46,550 --> 00:14:44,880
you know it's one it's one thing to be

352
00:14:48,230 --> 00:14:46,560
looking out the window it's amazing we

353
00:14:49,670 --> 00:14:48,240
have this room called the cupola here on

354
00:14:51,829 --> 00:14:49,680
the space station with windows all

355
00:14:53,430 --> 00:14:51,839
around it's one thing to be looking from

356
00:14:56,069 --> 00:14:53,440
inside the vehicle but when you open

357
00:14:58,629 --> 00:14:56,079
that hatch and step outside and the only

358
00:15:00,870 --> 00:14:58,639
thing between you and uh the amazing

359
00:15:03,350 --> 00:15:00,880
earth below you is your bubble of a

360
00:15:05,350 --> 00:15:03,360
helmet it really gets your attention and

361
00:15:06,870 --> 00:15:05,360
you and you appreciate where you are and

362
00:15:08,870 --> 00:15:06,880
how fast you're moving and that those

363
00:15:10,470 --> 00:15:08,880

first few seconds you hold on to the

364
00:15:11,590 --> 00:15:10,480
handrail say okay i'm not going to fall

365
00:15:13,189 --> 00:15:11,600
i'm not going to fall and then you kind

366
00:15:14,790 --> 00:15:13,199
of get used to it and before you know it

367
00:15:16,550 --> 00:15:14,800
it feels just like our training in the

368
00:15:18,150 --> 00:15:16,560
pools we have a really really great

369
00:15:20,870 --> 00:15:18,160
place to train in the in the pool there

370
00:15:22,550 --> 00:15:20,880
in houston so uh it's it's it's amazing

371
00:15:24,629 --> 00:15:22,560
doing a spacewalk though it's incredible

372
00:15:26,069 --> 00:15:24,639
you actually feel the speed i mean

373
00:15:27,910 --> 00:15:26,079
there's no resistance there's no air

374
00:15:29,509 --> 00:15:27,920
there's nothing to carry sound i mean

375
00:15:33,990 --> 00:15:29,519
give us a sense of what that is like

376
00:15:38,150 --> 00:15:35,910
on your body you fee you don't feel

377
00:15:39,110 --> 00:15:38,160
anything it's it's all with your eyes

378
00:15:41,910 --> 00:15:39,120
and

379
00:15:43,829 --> 00:15:41,920
as you see there we're going 17 500

380
00:15:45,910 --> 00:15:43,839
miles an hour five miles a second which

381
00:15:47,749 --> 00:15:45,920
is really fast and you see that in the

382
00:15:50,310 --> 00:15:47,759
motion of the clouds and the earth below

383
00:15:51,829 --> 00:15:50,320
you but if you're focusing just on uh a

384
00:15:53,189 --> 00:15:51,839
piece of metal for instance right in

385
00:15:55,590 --> 00:15:53,199
front of you with it you're doing your

386
00:15:58,389 --> 00:15:55,600
work on the space walk with

387
00:15:59,350 --> 00:15:58,399
you can't sense any motion other than

388
00:16:00,710 --> 00:15:59,360

the little

389
00:16:03,350 --> 00:16:00,720
moving around that you're doing trying

390
00:16:04,949 --> 00:16:03,360
to keep yourself stable but in terms of

391
00:16:06,790 --> 00:16:04,959
with respect to the earth it's only when

392
00:16:08,710 --> 00:16:06,800
your eyes glance down there do you get a

393
00:16:10,069 --> 00:16:08,720
sense of how fast you're moving once

394
00:16:11,670 --> 00:16:10,079
again we're talking to dr thomas

395
00:16:13,350 --> 00:16:11,680
marshburn he's one of the astronauts on

396
00:16:15,269 --> 00:16:13,360
board the international space station as

397
00:16:17,509 --> 00:16:15,279
is commander christopher cassidy they're

398
00:16:19,350 --> 00:16:17,519
joining us here on potus as we are live

399
00:16:21,189 --> 00:16:19,360
and i started gentlemen with the in the

400
00:16:23,350 --> 00:16:21,199
beginning with the where are you and i

401
00:16:24,550 --> 00:16:23,360
wonder is there a way for you to know if

402
00:16:25,910 --> 00:16:24,560
people are going to be able to see you i

403
00:16:27,269 --> 00:16:25,920
know it was about a month and a half two

404
00:16:29,269 --> 00:16:27,279
months ago i was able to actually go in

405
00:16:30,949 --> 00:16:29,279
my backyard one night and see

406
00:16:34,829 --> 00:16:30,959
the space station is is one of those

407
00:16:39,910 --> 00:16:37,910
soon you know there's uh there are apps

408
00:16:42,389 --> 00:16:39,920
applications and uh

409
00:16:44,949 --> 00:16:42,399
many websites you can go to the nasa.gov

410
00:16:46,710 --> 00:16:44,959
website and they'll give you the exact

411
00:16:48,550 --> 00:16:46,720
time and the azimuth that is the angle

412
00:16:51,030 --> 00:16:48,560
above the horizon that the space station

413
00:16:52,790 --> 00:16:51,040

shows up in anyone's particular area so

414
00:16:54,550 --> 00:16:52,800
lots of viewing opportunities you know

415
00:16:56,150 --> 00:16:54,560
the earth precess is under our orbit so

416
00:16:57,430 --> 00:16:56,160
it's not every orbit that we come over

417
00:16:59,030 --> 00:16:57,440
every spot

418
00:17:01,509 --> 00:16:59,040
but should be plenty of viewing

419
00:17:04,390 --> 00:17:01,519
opportunities for any one of these many

420
00:17:06,069 --> 00:17:04,400
software applications you can look at

421
00:17:07,350 --> 00:17:06,079
well i know you're very busy and i know

422
00:17:09,270 --> 00:17:07,360
you've been doing a lot of talking to a

423
00:17:10,549 --> 00:17:09,280
lot of people today and i wish i was as

424
00:17:11,669 --> 00:17:10,559
smart about this mission as a lot of

425
00:17:13,189 --> 00:17:11,679
other reporters i don't cover it

426
00:17:15,189 --> 00:17:13,199
regularly but it's always fascinating to

427
00:17:17,189 --> 00:17:15,199
talk to people who do what you do

428
00:17:18,870 --> 00:17:17,199
and i know that it's been a change in

429
00:17:20,230 --> 00:17:18,880
the in the way that the space program is

430
00:17:22,069 --> 00:17:20,240
but still i know a lot of americans

431
00:17:23,590 --> 00:17:22,079
watch and listen and know and think of

432
00:17:25,350 --> 00:17:23,600
you guys as heroes in space and we just

433
00:17:27,189 --> 00:17:25,360
want to pass that along thank you very

434
00:17:30,870 --> 00:17:27,199
much for joining us and god speed on on

435
00:17:34,150 --> 00:17:32,789
we appreciate that tim very much it was

436
00:17:35,190 --> 00:17:34,160
really enjoyable talking to you thank