



1
00:00:26,790 --> 00:00:25,269
just like earlier we are going out live

2
00:00:28,470 --> 00:00:26,800
on massive television so they'll be able

3
00:00:30,710 --> 00:00:28,480
to hear anything you say first thing is

4
00:00:32,069 --> 00:00:30,720
this is mr vice president rick hentlane

5
00:00:33,590 --> 00:00:32,079
pleasure to meet you rick great to meet

6
00:00:35,270 --> 00:00:33,600
you too welcome to the international

7
00:00:37,910 --> 00:00:35,280
space station flight controller room

8
00:00:39,670 --> 00:00:37,920
yeah and so uh senator ted cruz this is

9
00:00:40,709 --> 00:00:39,680
our pleasure drawing how are you doing

10
00:00:42,470 --> 00:00:40,719
thank you very good to meet you so the

11
00:00:44,950 --> 00:00:42,480
way this works is rick has command and

12
00:00:46,790 --> 00:00:44,960
control of the flight control team

13
00:00:49,029 --> 00:00:46,800

all the operators here at the different

14

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

consoles are receiving telemetry data

15

00:00:52,709 --> 00:00:50,960

from the international space station are

16

00:00:54,709 --> 00:00:52,719

able to commands up to the international

17

00:00:57,270 --> 00:00:54,719

space station the building itself has

18

00:00:59,270 --> 00:00:57,280

the ability to support space station our

19

00:01:00,790 --> 00:00:59,280

exploration program down the hall our

20

00:01:02,869 --> 00:01:00,800

commercial partners and then is

21

00:01:04,630 --> 00:01:02,879

strategically designed for

22

00:01:06,070 --> 00:01:04,640

any programs that we want to do in the

23

00:01:07,990 --> 00:01:06,080

future and so

24

00:01:09,830 --> 00:01:08,000

these guys are super excited you can see

25

00:01:11,990 --> 00:01:09,840

up on our screens if we kind of start on

26

00:01:13,750 --> 00:01:12,000

the left hand side we've got what we

27

00:01:16,789 --> 00:01:13,760

call the on the bottom left our six-pack

28

00:01:18,550 --> 00:01:16,799

because there's six screens um we've got

29

00:01:19,749 --> 00:01:18,560

dragon up on the left-hand side

30

00:01:22,630 --> 00:01:19,759

obviously our crew in the middle we have

31

00:01:24,789 --> 00:01:22,640

three crew members on orbit today uh

32

00:01:26,870 --> 00:01:24,799

peggy whitson of course most folks are

33

00:01:29,270 --> 00:01:26,880

familiar with her she holds the american

34

00:01:31,190 --> 00:01:29,280

record from out of diamond's face

35

00:01:33,030 --> 00:01:31,200

um jack fisher um this is he's a

36

00:01:34,870 --> 00:01:33,040

first-time flyer on the left and then

37

00:01:36,789 --> 00:01:34,880

fyodor your chicken you can actually see

38

00:01:39,270 --> 00:01:36,799

a live shot of them moving to the right

39

00:01:40,469 --> 00:01:39,280

and that's the us lab and they

40

00:01:42,550 --> 00:01:40,479

stayed up a little late from the

41

00:01:46,069 --> 00:01:42,560

perspective of their day just so you

42

00:01:47,990 --> 00:01:46,079

guys could see um what they do on orbit

43

00:01:49,350 --> 00:01:48,000

uh we've also got obviously i mentioned

44

00:01:51,510 --> 00:01:49,360

command and control hub we have all of

45

00:01:53,590 --> 00:01:51,520

our international partners so up across

46

00:01:55,990 --> 00:01:53,600

the top um we've got the marshall space

47

00:01:57,910 --> 00:01:56,000

flight center far up on the left um next

48

00:01:59,510 --> 00:01:57,920

to them one of our commercial partners

49

00:02:01,749 --> 00:01:59,520

that's the spacex control room in

50

00:02:03,270 --> 00:02:01,759

hawthorne california and if you go all

51
00:02:05,109 --> 00:02:03,280
the way across to the right on the top

52
00:02:06,709 --> 00:02:05,119
that's actually the jackson control room

53
00:02:08,630 --> 00:02:06,719
obviously it's really

54
00:02:10,309 --> 00:02:08,640
late in jacks or early depending on how

55
00:02:12,550 --> 00:02:10,319
you look at it you can see one of their

56
00:02:14,949 --> 00:02:12,560
folks in there watching over the data

57
00:02:17,830 --> 00:02:14,959
for jaxa on the screen down here we've

58
00:02:19,270 --> 00:02:17,840
got a shot into the dragon um so we

59
00:02:22,630 --> 00:02:19,280
birthed the dragon just earlier this

60
00:02:23,910 --> 00:02:22,640
week early monday morning so crs11 you

61
00:02:27,110 --> 00:02:23,920
guys know that's maybe the first

62
00:02:29,910 --> 00:02:27,120
reflight of a dragon and so that's an

63
00:02:32,309 --> 00:02:29,920

exciting thing for us we also have

64

00:02:33,830 --> 00:02:32,319

oa7 so that's an orbital vehicle

65

00:02:35,910 --> 00:02:33,840

that's still on orbit it's left the

66

00:02:38,070 --> 00:02:35,920

space station but it will be re-entering

67

00:02:40,710 --> 00:02:38,080

it's currently doing some scientific

68

00:02:42,470 --> 00:02:40,720

experiments so there's a lot going on

69

00:02:43,990 --> 00:02:42,480

and i've talked a lot so i will pause

70

00:02:46,790 --> 00:02:44,000

and see if you have any questions that's

71

00:02:48,949 --> 00:02:46,800

great so what what is uh what clock are

72

00:02:51,509 --> 00:02:48,959

they on if this is late

73

00:02:54,550 --> 00:02:51,519

for them yeah so they do gmt greenwich

74

00:02:56,550 --> 00:02:54,560

mean time um and so you can tell about

75

00:02:58,309 --> 00:02:56,560

three in the afternoon local is kind of

76

00:03:01,910 --> 00:02:58,319

when their day winds down which is

77

00:03:03,509 --> 00:03:01,920

almost now um and so our gmt clocks

78

00:03:06,710 --> 00:03:03,519

actually if you go over here

79

00:03:08,229 --> 00:03:06,720

up at the top top kind of right left in

80

00:03:09,430 --> 00:03:08,239

the middle and then you get gmt and then

81

00:03:11,110 --> 00:03:09,440

crew sleep is right below that so an

82

00:03:12,630 --> 00:03:11,120

hour and 54 minutes they go to sleep so

83

00:03:14,710 --> 00:03:12,640

this is kind of the time again we

84

00:03:17,670 --> 00:03:14,720

normally turn off cameras um but we left

85

00:03:19,750 --> 00:03:17,680

them on just for you guys today

86

00:03:23,110 --> 00:03:19,760

but you'll in mission control this man

87

00:03:25,270 --> 00:03:23,120

24 7. absolutely sir and so

88

00:03:26,710 --> 00:03:25,280

yes it's the job of the flight directors

89

00:03:28,070 --> 00:03:26,720

we have a team of flight directors and a

90

00:03:30,949 --> 00:03:28,080

team of controllers at the different

91

00:03:33,110 --> 00:03:30,959

consoles we do flex the consoles

92

00:03:34,550 --> 00:03:33,120

depending on time of day and activities

93

00:03:36,789 --> 00:03:34,560

for example if you do an eva you have

94

00:03:38,149 --> 00:03:36,799

folks in here that are responsible for

95

00:03:40,309 --> 00:03:38,159

you know the spacesuits and the

96

00:03:41,830 --> 00:03:40,319

spacewalk we don't do that every day so

97

00:03:43,750 --> 00:03:41,840

we do change it a little bit in terms of

98

00:03:45,350 --> 00:03:43,760

the actual numbers i'm trying to be

99

00:03:48,470 --> 00:03:45,360

efficient with our support

100

00:03:52,630 --> 00:03:48,480

how many evas will you have astronauts

101
00:03:54,470 --> 00:03:52,640
do in the course of a week or a month so

102
00:03:56,149 --> 00:03:54,480
we don't do them typically every week or

103
00:03:58,309 --> 00:03:56,159
every month we tend to think in about a

104
00:04:00,789 --> 00:03:58,319
year so last year there was on the order

105
00:04:02,309 --> 00:04:00,799
of about six if i remember correctly

106
00:04:04,710 --> 00:04:02,319
when we were assembling the space

107
00:04:06,550 --> 00:04:04,720
station um we did them during shuttle

108
00:04:07,750 --> 00:04:06,560
missions and you would have sort of a

109
00:04:10,869 --> 00:04:07,760
collection as you were putting the

110
00:04:12,470 --> 00:04:10,879
pieces together now a lot of what we do

111
00:04:14,229 --> 00:04:12,480
centers around preparing the space

112
00:04:15,910 --> 00:04:14,239
station and the ports for the next

113
00:04:17,909 --> 00:04:15,920

generation of vehicles the commercial

114

00:04:19,749 --> 00:04:17,919

vehicles and uh

115

00:04:23,350 --> 00:04:19,759

government vehicles yeah

116

00:04:25,590 --> 00:04:23,360

great you guys have questions

117

00:04:27,350 --> 00:04:25,600

yes sir we go ahead and take them up

118

00:04:29,430 --> 00:04:27,360

front all right we got a few festivities

119

00:04:30,629 --> 00:04:29,440

out there over the front festivities

120

00:04:33,189 --> 00:04:30,639

festivities

121

00:04:35,590 --> 00:04:33,199

you cannot come visit oh no we're we're

122

00:04:36,870 --> 00:04:35,600

happy to have you guys thank you so much

123

00:04:40,469 --> 00:04:36,880

it's very nice

124

00:05:02,660 --> 00:04:40,479

yeah so this is our capcom leslie capcom

125

00:05:02,670 --> 00:05:07,350

[Music]

126
00:05:11,830 --> 00:05:09,110
nice to meet you shortly so i think one

127
00:05:12,710 --> 00:05:11,840
word all right

128
00:05:14,550 --> 00:05:12,720
let's see

129
00:05:17,189 --> 00:05:14,560
so how long does it take to do it

130
00:05:18,629 --> 00:05:17,199
90 minutes 90 bucks yeah you can get an

131
00:05:19,909 --> 00:05:18,639
app by the way

132
00:05:21,749 --> 00:05:19,919
all right we're gonna head over to the

133
00:05:29,350 --> 00:05:21,759
front a little bit

134
00:05:41,880 --> 00:05:30,870
thanks for your work here

135
00:05:41,890 --> 00:05:47,029
[Music]

136
00:05:56,629 --> 00:05:49,020
like

137
00:05:56,639 --> 00:06:03,270
we coordinate all the tests

138
00:06:03,280 --> 00:06:18,469

[Music]

139

00:06:18,479 --> 00:06:23,909

and then we ate

140

00:06:23,919 --> 00:06:45,830

dan tommy

141

00:06:45,840 --> 00:07:16,230

yes

142

00:07:20,870 --> 00:07:17,990

thanks

143

00:07:22,780 --> 00:07:20,880

proud of you

144

00:07:23,909 --> 00:07:22,790

uh-oh

145

00:07:24,870 --> 00:07:23,919

[Music]

146

00:07:27,589 --> 00:07:24,880

just so

147

00:07:28,790 --> 00:07:27,599

we've been talking about this so it's

148

00:07:30,550 --> 00:07:28,800

your birthday i know if i get 10

149

00:07:32,870 --> 00:07:30,560

birthday cakes today this is a homemade

150

00:07:33,589 --> 00:07:32,880

cake i haven't got one yet

151

00:07:35,430 --> 00:07:33,599

no

152

00:07:37,270 --> 00:07:35,440

they don't this is a homemade cake i

153

00:07:38,710 --> 00:07:37,280

made especially for you by one of our

154

00:07:40,230 --> 00:07:38,720

former flight directors who works in

155

00:07:41,029 --> 00:07:40,240

flight operations

156

00:07:42,629 --> 00:07:41,039

and

157

00:07:45,189 --> 00:07:42,639

before we cut it though we've got a

158

00:07:48,150 --> 00:07:45,199

special presentation uh that mr sheimer

159

00:07:49,830 --> 00:07:48,160

would like to do so yeah sir uh we

160

00:07:51,510 --> 00:07:49,840

wanted to thank you so much for taking

161

00:07:53,270 --> 00:07:51,520

the time to come out here and uh and

162

00:07:54,629 --> 00:07:53,280

meet our new astronauts and and some of

163

00:07:56,830 --> 00:07:54,639

our old our

164

00:07:59,029 --> 00:07:56,840

older spy bad more

165

00:08:01,589 --> 00:07:59,039

experienced current astronaut current

166

00:08:02,790 --> 00:08:01,599

current and more experienced astronauts

167

00:08:04,390 --> 00:08:02,800

and we want to give you a little a

168

00:08:06,950 --> 00:08:04,400

reminder of

169

00:08:08,550 --> 00:08:06,960

the americans uh working in space every

170

00:08:09,589 --> 00:08:08,560

day so as you know we got three up there

171

00:08:11,749 --> 00:08:09,599

today in fact

172

00:08:13,270 --> 00:08:11,759

we just had two return last week

173

00:08:15,589 --> 00:08:13,280

we hope in the end of july to have three

174

00:08:17,270 --> 00:08:15,599

more astronauts go up and live and work

175

00:08:18,629 --> 00:08:17,280

on the space station so we'd like to

176
00:08:20,150 --> 00:08:18,639
have you

177
00:08:21,909 --> 00:08:20,160
give this to you a model of the

178
00:08:23,350 --> 00:08:21,919
international space station

179
00:08:25,510 --> 00:08:23,360
i don't know if someone's told you

180
00:08:27,270 --> 00:08:25,520
exactly how big it is but it's about the

181
00:08:29,189 --> 00:08:27,280
size of a football field so from goal

182
00:08:31,189 --> 00:08:29,199
post to goal post and from sideline to

183
00:08:34,790 --> 00:08:31,199
sideline weighs close to a million

184
00:08:35,670 --> 00:08:34,800
pounds and travels 17 500 miles an hour

185
00:08:38,310 --> 00:08:35,680
so

186
00:08:39,990 --> 00:08:38,320
it's a it's a big vehicle and and

187
00:08:41,750 --> 00:08:40,000
and we're really proud of the research

188
00:08:43,670 --> 00:08:41,760

and and the people who work on board

189

00:08:45,430 --> 00:08:43,680

thank you so much thank you i'll cherish

190

00:08:46,790 --> 00:08:45,440

that that'll be in the uh

191

00:08:48,230 --> 00:08:46,800

it'll be in the west wing of the white

192

00:08:52,000 --> 00:08:48,240

house before uh

193

00:09:02,710 --> 00:09:01,190

[Applause]

194

00:09:03,910 --> 00:09:02,720

all right so one more one more thing and

195

00:09:06,389 --> 00:09:03,920

then we're back to touring we're gonna

196

00:09:08,949 --> 00:09:06,399

come quick we gotta cut the cake well

197

00:09:10,310 --> 00:09:08,959

i just wanna be very clear on this

198

00:09:12,949 --> 00:09:10,320

when i was leaving this morning i told

199

00:09:14,310 --> 00:09:12,959

my wife i wanted a birthday cake

200

00:09:16,680 --> 00:09:14,320

and she said

201
00:09:18,230 --> 00:09:16,690
how about we go with a birthday cupcake

202
00:09:20,230 --> 00:09:18,240
[Music]

203
00:09:23,430 --> 00:09:20,240
well and i'm going to tell her this is a

204
00:09:23,440 --> 00:09:26,070
is that all right

205
00:09:29,590 --> 00:09:28,070
so good and everybody we're gonna spread

206
00:09:32,230 --> 00:09:29,600
this oh yeah we're gonna we're gonna eat

207
00:09:39,190 --> 00:09:35,090
great thank you very much

208
00:09:40,389 --> 00:09:39,200
[Applause]

209
00:09:42,470 --> 00:09:40,399
all right folks one more round of

210
00:09:54,470 --> 00:09:42,480
applause happy birthday to mr vice

211
00:09:57,750 --> 00:09:55,910
thank you all thanks for your work

212
00:09:58,710 --> 00:09:57,760
america's proud of you and it's a real

213
00:10:00,630 --> 00:09:58,720

honor

214

00:10:15,590 --> 00:10:00,640

for me to be here at mission control so

215

00:10:15,600 --> 00:10:21,350

we're gonna

216

00:10:21,360 --> 00:10:50,949

thank you

217

00:10:50,959 --> 00:11:06,949

i think

218

00:11:11,670 --> 00:11:08,870

this is mission control houston vice

219

00:11:12,550 --> 00:11:11,680

president pence and his entourage now

220

00:11:14,790 --> 00:11:12,560

has

221

00:11:16,230 --> 00:11:14,800

left mission control here in houston the

222

00:11:17,430 --> 00:11:16,240

international space station flight

223

00:11:19,829 --> 00:11:17,440

control room

224

00:11:20,870 --> 00:11:19,839

following uh his remarks earlier in the

225

00:11:23,430 --> 00:11:20,880

day

226

00:11:25,670 --> 00:11:23,440

at the introduction of the 2017 class of

227

00:11:28,069 --> 00:11:25,680

astronaut candidates in nearby building

228

00:11:30,790 --> 00:11:28,079

9. so a new class of astronaut

229

00:11:32,710 --> 00:11:30,800

candidates uh having been secured

230

00:11:34,870 --> 00:11:32,720

and the crew on board the international

231

00:11:36,790 --> 00:11:34,880

space station uh having wrapped up its

232

00:11:39,110 --> 00:11:36,800

work for the day vice president pence

233

00:11:40,710 --> 00:11:39,120

having completed his visit to the

234

00:11:42,710 --> 00:11:40,720

international space station flight

235

00:11:44,870 --> 00:11:42,720

control room here at the johnson space

236

00:11:47,269 --> 00:11:44,880

center with that we'll wrap up this