



1
00:00:05,349 --> 00:00:03,350
good day and welcome back to the johnson

2
00:00:07,110 --> 00:00:05,359
space center for today's mission status

3
00:00:08,549 --> 00:00:07,120
briefing on flight day six of

4
00:00:10,950 --> 00:00:08,559
discovery's final mission to the

5
00:00:13,190 --> 00:00:10,960
international space station a busy day

6
00:00:14,870 --> 00:00:13,200
in orbit and here on the ground and with

7
00:00:17,990 --> 00:00:14,880
us today to discuss all of those

8
00:00:21,910 --> 00:00:18,000
activities are david korth the iss orbit

9
00:00:23,910 --> 00:00:21,920
one flight director for sts-133 ulf5 and

10
00:00:25,750 --> 00:00:23,920
kenny todd the mission integration and

11
00:00:27,910 --> 00:00:25,760
operations manager for the international

12
00:00:30,230 --> 00:00:27,920
space station program and the chairman

13
00:00:31,910 --> 00:00:30,240

of the iss mission management team and

14

00:00:34,470 --> 00:00:31,920

we'll start off with david

15

00:00:36,470 --> 00:00:34,480

all right good day to everyone

16

00:00:39,750 --> 00:00:36,480

orbiter status everything's looking

17

00:00:43,030 --> 00:00:41,030

there's been a lot of discussion the

18

00:00:44,549 --> 00:00:43,040

last couple of days about

19

00:00:46,069 --> 00:00:44,559

can we add a date of the mission or not

20

00:00:48,389 --> 00:00:46,079

and the the management team decided

21

00:00:51,189 --> 00:00:48,399

yesterday that indeed we will be adding

22

00:00:54,150 --> 00:00:51,199

a day to the docked mission

23

00:00:56,229 --> 00:00:54,160

we're going to focus on pmm outfitting

24

00:00:58,709 --> 00:00:56,239

and i'm happy to say the pmm is now part

25

00:01:00,709 --> 00:00:58,719

of the international space station

26

00:01:01,910 --> 00:01:00,719

we were actually fortunate enough

27

00:01:03,990 --> 00:01:01,920

right around the time that we were

28

00:01:04,869 --> 00:01:04,000

bolting putting final final bolting in

29

00:01:07,270 --> 00:01:04,879

place

30

00:01:08,390 --> 00:01:07,280

we passed over a tour in italy this was

31

00:01:12,390 --> 00:01:08,400

kind of a

32

00:01:14,469 --> 00:01:12,400

poetic poetic justice for pmm

33

00:01:16,710 --> 00:01:14,479

right now on the the overall mission

34

00:01:20,710 --> 00:01:16,720

we're about 60 percent complete with the

35

00:01:22,630 --> 00:01:20,720

uh physical item transfer

36

00:01:24,149 --> 00:01:22,640

as far as the

37

00:01:26,630 --> 00:01:24,159

duration of the mission we're we're

38

00:01:28,710 --> 00:01:26,640

calling it a 12 plus 1 plus 2 mission at

39

00:01:31,429 --> 00:01:28,720

this point o2 limited

40

00:01:33,510 --> 00:01:31,439

we still have a lot more margin so uh

41

00:01:35,030 --> 00:01:33,520

folks are still discussing

42

00:01:37,510 --> 00:01:35,040

how we want to make use of that for the

43

00:01:39,590 --> 00:01:37,520

rest of the mission

44

00:01:41,270 --> 00:01:39,600

from today's timeline

45

00:01:43,109 --> 00:01:41,280

the uh

46

00:01:44,069 --> 00:01:43,119

as you probably know and i was fortunate

47

00:01:45,910 --> 00:01:44,079

enough the

48

00:01:47,510 --> 00:01:45,920

we all got supported the crew and

49

00:01:49,510 --> 00:01:47,520

getting ahead on the plan

50

00:01:51,030 --> 00:01:49,520

the pmm is installed and is part of the

51
00:01:53,030 --> 00:01:51,040
station

52
00:01:55,830 --> 00:01:53,040
the crew is working now on the initial

53
00:01:57,270 --> 00:01:55,840
vestibule outfitting and pressurization

54
00:01:58,310 --> 00:01:57,280
with the intent

55
00:01:59,190 --> 00:01:58,320
of

56
00:02:01,030 --> 00:01:59,200
the

57
00:02:03,910 --> 00:02:01,040
hatch opening in ingress

58
00:02:05,749 --> 00:02:03,920
later this evening houston time

59
00:02:08,469 --> 00:02:05,759
per the the nominal timeline if you will

60
00:02:10,150 --> 00:02:08,479
would have been about 5 58 pm but we're

61
00:02:12,229 --> 00:02:10,160
optimistic that will happen a little

62
00:02:13,270 --> 00:02:12,239
sooner

63
00:02:15,430 --> 00:02:13,280

we had

64

00:02:17,190 --> 00:02:15,440

great support today on orbit from a

65

00:02:19,110 --> 00:02:17,200

variety of people

66

00:02:21,030 --> 00:02:19,120

on the the arm

67

00:02:24,470 --> 00:02:21,040

mike barrett nicole stott

68

00:02:26,470 --> 00:02:24,480

using the ssrms to grapple the pmm and

69

00:02:28,070 --> 00:02:26,480

the payload bay bring it out bertha to

70

00:02:29,750 --> 00:02:28,080

iss

71

00:02:32,630 --> 00:02:29,760

katie and eric bowe

72

00:02:34,550 --> 00:02:32,640

working the cbm ops to

73

00:02:36,949 --> 00:02:34,560

get us through bolting

74

00:02:39,190 --> 00:02:36,959

our ground control team to take care of

75

00:02:39,990 --> 00:02:39,200

the final bolting and seal the interface

76

00:02:42,550 --> 00:02:40,000

up

77

00:02:43,830 --> 00:02:42,560

and then uh katie and mike barrett uh

78

00:02:46,150 --> 00:02:43,840

ungrappled the arm and put it in

79

00:02:49,750 --> 00:02:46,160

position for eva2 tomorrow

80

00:02:55,110 --> 00:02:51,190

in the background

81

00:02:56,869 --> 00:02:55,120

russian team is working hard on the uh

82

00:02:59,430 --> 00:02:56,879

the replacement of the vos duke system

83

00:03:02,390 --> 00:02:59,440

their co2 scrubbing system uh that seems

84

00:03:05,190 --> 00:03:02,400

to be going well on plan

85

00:03:07,190 --> 00:03:05,200

and uh as i mentioned uh tonight

86

00:03:09,750 --> 00:03:07,200

we'll be uh obviously getting ready for

87

00:03:13,990 --> 00:03:09,760

eva number two tomorrow

88

00:03:17,670 --> 00:03:14,000

campout begins at 7 33 pm local or

89

00:03:20,229 --> 00:03:17,680
gmt 60 day 0 1 hours 33 minutes

90

00:03:23,030 --> 00:03:20,239
as when we begin the o2

91

00:03:27,270 --> 00:03:23,040
10 2 pressurization

92

00:03:31,190 --> 00:03:27,280
hygiene break tomorrow 503 local am

93

00:03:33,750 --> 00:03:31,200
gmt 61 out 61 days 11 hours 3 minutes

94

00:03:37,670 --> 00:03:33,760
egress is targeted for

95

00:03:41,110 --> 00:03:37,680
9 23 a.m tomorrow local houston time

96

00:03:43,509 --> 00:03:41,120
a gmt of 61 days 15 hours 23 minutes

97

00:03:47,110 --> 00:03:43,519
with an ingress at 21 hours 43 minutes

98

00:03:48,789 --> 00:03:47,120
gmt around 3 43 p.m

99

00:03:50,390 --> 00:03:48,799
a number of different activities we have

100

00:03:52,949 --> 00:03:50,400
on the plan tomorrow

101
00:03:54,470 --> 00:03:52,959
for the eva we've accomplished all what

102
00:03:55,589 --> 00:03:54,480
we call the high high priority

103
00:03:57,429 --> 00:03:55,599
objectives

104
00:03:59,429 --> 00:03:57,439
one of the first things we'll do

105
00:04:01,670 --> 00:03:59,439
is on the eva is the

106
00:04:04,789 --> 00:04:01,680
ammonia venting from the the pump module

107
00:04:06,229 --> 00:04:04,799
that's on the esp-2

108
00:04:07,350 --> 00:04:06,239
and then we'll work off a number of

109
00:04:08,869 --> 00:04:07,360
other

110
00:04:10,630 --> 00:04:08,879
items

111
00:04:13,270 --> 00:04:10,640
in parallel with that we're going to

112
00:04:15,030 --> 00:04:13,280
begin the pmm unpacking

113
00:04:17,430 --> 00:04:15,040

and a couple of the main things we're

114

00:04:20,229 --> 00:04:17,440

trying to get to tomorrow is a data

115

00:04:23,110 --> 00:04:20,239

cable that we want to get out of the pmm

116

00:04:26,070 --> 00:04:23,120

to provide a data connection into the

117

00:04:29,110 --> 00:04:26,080

iss directly hardwired data connection

118

00:04:31,590 --> 00:04:29,120

to the htv which is on the node 2 zenith

119

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

and we've been operating with an rf link

120

00:04:35,350 --> 00:04:33,680

between htv and the us

121

00:04:37,270 --> 00:04:35,360

elements so we're we're looking forward

122

00:04:39,670 --> 00:04:37,280

to that hard line connection and of

123

00:04:42,710 --> 00:04:39,680

course the next thing is we'll be taking

124

00:04:44,790 --> 00:04:42,720

a lot of trash or packing trash a lot of

125

00:04:45,990 --> 00:04:44,800

items that came up in the pmm

126
00:04:48,310 --> 00:04:46,000
have a lot of

127
00:04:50,310 --> 00:04:48,320
packing material structure to protect it

128
00:04:52,710 --> 00:04:50,320
for its ascent loads so we're going to

129
00:04:54,870 --> 00:04:52,720
take that out throw it in htv

130
00:04:56,390 --> 00:04:54,880
and we're going to move the robonaut

131
00:04:59,030 --> 00:04:56,400
block we're going to take its packing

132
00:05:00,790 --> 00:04:59,040
foam off and you'll get this big large

133
00:05:01,670 --> 00:05:00,800
metal box

134
00:05:03,270 --> 00:05:01,680
that

135
00:05:05,350 --> 00:05:03,280
houses robonaut

136
00:05:08,830 --> 00:05:05,360
we'll be putting that in the lab for

137
00:05:10,390 --> 00:05:08,840
unpacking at a future date

138
00:05:12,310 --> 00:05:10,400

um

139

00:05:13,430 --> 00:05:12,320

beyond that i have mission is going

140

00:05:14,629 --> 00:05:13,440

really well

141

00:05:16,469 --> 00:05:14,639

like i mentioned we're ahead of the

142

00:05:18,629 --> 00:05:16,479

timeline again today

143

00:05:21,029 --> 00:05:18,639

we're looking forward to successful eva

144

00:05:23,670 --> 00:05:21,039

2 tomorrow and of course successful

145

00:05:25,510 --> 00:05:23,680

ingress this evening into the

146

00:05:27,110 --> 00:05:25,520

pmm

147

00:05:28,870 --> 00:05:27,120

that's that's really all i had at this

148

00:05:30,950 --> 00:05:28,880

time so

149

00:05:32,469 --> 00:05:30,960

if you want i can take questions now

150

00:05:34,790 --> 00:05:32,479

actually we'll go on to kenny first then

151

00:05:36,310 --> 00:05:34,800

we'll take questions here kenny okay

152

00:05:39,189 --> 00:05:36,320

well it's uh great to be here with you

153

00:05:41,029 --> 00:05:39,199

today we had the eva yesterday

154

00:05:42,710 --> 00:05:41,039

everything went really well they got us

155

00:05:44,469 --> 00:05:42,720

in a good position

156

00:05:47,590 --> 00:05:44,479

the ops team and the crew did to go do

157

00:05:49,510 --> 00:05:47,600

the pmm install this morning

158

00:05:52,230 --> 00:05:49,520

that all went very well congratulations

159

00:05:53,990 --> 00:05:52,240

to to both the crew and and the ops team

160

00:05:56,230 --> 00:05:54,000

uh look very much forward to getting

161

00:05:58,870 --> 00:05:56,240

into the pmm uh later this afternoon

162

00:06:01,990 --> 00:05:58,880

early this evening and get about the

163

00:06:03,990 --> 00:06:02,000

task of integrating that that new module

164

00:06:05,830 --> 00:06:04,000

into the living space onboard the space

165

00:06:07,749 --> 00:06:05,840

station

166

00:06:10,629 --> 00:06:07,759

then we turn the corner we go as dave

167

00:06:12,230 --> 00:06:10,639

said do the eba tomorrow we got a lot of

168

00:06:14,150 --> 00:06:12,240

what i would call kind of cats and dogs

169

00:06:16,070 --> 00:06:14,160

on that on that eba things that we've

170

00:06:18,309 --> 00:06:16,080

been tracking that we need to get done

171

00:06:20,469 --> 00:06:18,319

for some time so got a good opportunity

172

00:06:23,590 --> 00:06:20,479

to go get those tomorrow and so

173

00:06:25,749 --> 00:06:23,600

we we feel good about where we are there

174

00:06:28,150 --> 00:06:25,759

from a program perspective as most of

175

00:06:31,110 --> 00:06:28,160

you know we're in what i'd term kind of

176

00:06:33,189 --> 00:06:31,120

a detailed choreography right now of

177

00:06:34,550 --> 00:06:33,199

vehicles coming to and from the space

178

00:06:36,550 --> 00:06:34,560

station

179

00:06:39,909 --> 00:06:36,560

if you're keeping a scorecard we had the

180

00:06:41,590 --> 00:06:39,919

htv and get here at the end of january

181

00:06:43,430 --> 00:06:41,600

we had the atv

182

00:06:46,150 --> 00:06:43,440

show up last week and then this past

183

00:06:47,430 --> 00:06:46,160

weekend our our shuttle friends came for

184

00:06:49,510 --> 00:06:47,440

a visit

185

00:06:51,189 --> 00:06:49,520

we're very much happy to have all those

186

00:06:52,710 --> 00:06:51,199

vehicles

187

00:06:56,390 --> 00:06:52,720

when you look forward

188

00:06:58,790 --> 00:06:56,400

scott kelly and and his soyuz crew

189

00:07:00,950 --> 00:06:58,800

with with sasha and oleg they'll be

190

00:07:02,790 --> 00:07:00,960

returning here in a couple of weeks

191

00:07:04,550 --> 00:07:02,800

on the 16th of march

192

00:07:07,350 --> 00:07:04,560

and then towards the end of march we'll

193

00:07:08,230 --> 00:07:07,360

uh we'll let the htv

194

00:07:10,469 --> 00:07:08,240

go

195

00:07:12,469 --> 00:07:10,479

and then and then we'll look forward a

196

00:07:13,670 --> 00:07:12,479

couple of weeks after that to the ulf

197

00:07:14,950 --> 00:07:13,680

six mission

198

00:07:17,990 --> 00:07:14,960

so as you can see we're right in the

199

00:07:19,830 --> 00:07:18,000

middle of of what's again a pretty

200

00:07:21,510 --> 00:07:19,840

uh a pretty uh

201
00:07:23,749 --> 00:07:21,520
large number of vehicles coming to and

202
00:07:25,909 --> 00:07:23,759
from station and so we're spending a lot

203
00:07:28,469 --> 00:07:25,919
of time getting ready to receive those

204
00:07:31,110 --> 00:07:28,479
vehicles and get ready for them to part

205
00:07:34,150 --> 00:07:31,120
and uh and uh as david said we got a lot

206
00:07:36,950 --> 00:07:34,160
of work relative to configuring the pmm

207
00:07:38,790 --> 00:07:36,960
unpacking it uh getting it ready to

208
00:07:39,830 --> 00:07:38,800
receive additional cargo from around the

209
00:07:42,150 --> 00:07:39,840
station

210
00:07:44,230 --> 00:07:42,160
and and we want to make sure that as we

211
00:07:46,869 --> 00:07:44,240
go through that that we we don't

212
00:07:48,790 --> 00:07:46,879
compromise our ability to continue doing

213
00:07:51,430 --> 00:07:48,800

uh human research program type

214

00:07:53,350 --> 00:07:51,440

activities things that that you know

215

00:07:55,990 --> 00:07:53,360

were put on station to do

216

00:07:58,469 --> 00:07:56,000

and so uh with that in mind

217

00:07:59,270 --> 00:07:58,479

i went to the shuttle program yesterday

218

00:08:00,950 --> 00:07:59,280

and

219

00:08:03,029 --> 00:08:00,960

asked them to consider

220

00:08:05,589 --> 00:08:03,039

adding a plus one day for us

221

00:08:07,510 --> 00:08:05,599

again every time we have a shuttle visit

222

00:08:09,670 --> 00:08:07,520

if we can take advantage of the

223

00:08:12,790 --> 00:08:09,680

of the extra crew members

224

00:08:16,070 --> 00:08:12,800

we we certainly want to do that leroy

225

00:08:19,110 --> 00:08:16,080

and mmt considered that proposal and

226

00:08:21,990 --> 00:08:19,120

agreed to stay an extra day and so we're

227

00:08:24,309 --> 00:08:22,000

we're very happy to have them stay again

228

00:08:27,589 --> 00:08:24,319

with the focus being on trying to to get

229

00:08:29,589 --> 00:08:27,599

the pmm in a good configuration

230

00:08:31,670 --> 00:08:29,599

as quick as we can

231

00:08:34,070 --> 00:08:31,680

another task that we looked at

232

00:08:36,709 --> 00:08:34,080

for use in this plus one day is what

233

00:08:38,469 --> 00:08:36,719

what everybody refers to as this soyuz

234

00:08:40,870 --> 00:08:38,479

flyabout

235

00:08:44,949 --> 00:08:40,880

we we asked the partnership to

236

00:08:47,670 --> 00:08:44,959

uh consider this possibility uh we uh we

237

00:08:49,269 --> 00:08:47,680

started this a couple of weeks ago we we

238

00:08:51,110 --> 00:08:49,279

identified all the forward work through

239

00:08:53,990 --> 00:08:51,120

the different partners that they had to

240

00:08:55,750 --> 00:08:54,000

go do to assess their readiness from a

241

00:08:57,910 --> 00:08:55,760

partner standpoint

242

00:08:59,509 --> 00:08:57,920

retract that work through the the iss

243

00:09:00,310 --> 00:08:59,519

mission management team

244

00:09:03,750 --> 00:09:00,320

and

245

00:09:06,230 --> 00:09:03,760

due diligence

246

00:09:08,310 --> 00:09:06,240

going through their normal

247

00:09:11,190 --> 00:09:08,320

management processes that allow them to

248

00:09:11,910 --> 00:09:11,200

identify risk and and do what they can

249

00:09:14,949 --> 00:09:11,920

to

250

00:09:18,949 --> 00:09:14,959

them

251
00:09:20,550 --> 00:09:18,959
and so that process has been going on

252
00:09:24,070 --> 00:09:20,560
for the last

253
00:09:26,310 --> 00:09:24,080
week to two weeks um this morning at

254
00:09:28,870 --> 00:09:26,320
this this morning's uh station mission

255
00:09:31,430 --> 00:09:28,880
management team meeting we had uh we had

256
00:09:33,110 --> 00:09:31,440
a plan to go do a go no-go uh to go do

257
00:09:36,470 --> 00:09:33,120
that soyuz flyabout

258
00:09:38,070 --> 00:09:36,480
um our uh our russian colleagues

259
00:09:40,870 --> 00:09:38,080
were first out of the shoot this morning

260
00:09:42,550 --> 00:09:40,880
and after doing their own due diligence

261
00:09:44,790 --> 00:09:42,560
and using their own independent

262
00:09:46,790 --> 00:09:44,800
processes within within

263
00:09:48,790 --> 00:09:46,800

the russian side of the house

264

00:09:51,350 --> 00:09:48,800

they have determined that

265

00:09:53,190 --> 00:09:51,360

that with 24 soyuz which is the vehicle

266

00:09:55,910 --> 00:09:53,200

we were going to use to do this this fly

267

00:09:58,710 --> 00:09:55,920

around that they are not in a position

268

00:09:59,750 --> 00:09:58,720

to to recommend doing that that fly

269

00:10:02,630 --> 00:09:59,760

about

270

00:10:05,110 --> 00:10:02,640

and uh their primary basis for was was

271

00:10:06,630 --> 00:10:05,120

because this particular vehicle is what

272

00:10:09,269 --> 00:10:06,640

they consider to be a new vehicle that's

273

00:10:12,069 --> 00:10:09,279

what we call a series 700 vehicle

274

00:10:14,630 --> 00:10:12,079

and so this is it's made in flight

275

00:10:16,310 --> 00:10:14,640

they had a flight program set aside for

276

00:10:19,350 --> 00:10:16,320

that particular vehicle which had it

277

00:10:21,990 --> 00:10:19,360

come into station serving its uh six

278

00:10:24,550 --> 00:10:22,000

month term there and then returning

279

00:10:26,230 --> 00:10:24,560

and uh and so

280

00:10:28,310 --> 00:10:26,240

basically with uh

281

00:10:30,310 --> 00:10:28,320

with when we asked them to take a look

282

00:10:31,750 --> 00:10:30,320

at this request

283

00:10:34,310 --> 00:10:31,760

and the amount of time they had to look

284

00:10:36,470 --> 00:10:34,320

at it uh and and the fact that they

285

00:10:38,470 --> 00:10:36,480

didn't have before this vehicle was

286

00:10:39,910 --> 00:10:38,480

launched an opportunity to go work this

287

00:10:42,310 --> 00:10:39,920

maneuver through their normal

288

00:10:44,870 --> 00:10:42,320

development and test uh planning uh

289

00:10:47,190 --> 00:10:44,880

given that it's again a new vehicle

290

00:10:48,870 --> 00:10:47,200

they came back to us and said they'd

291

00:10:50,710 --> 00:10:48,880

recommend not doing it

292

00:10:53,190 --> 00:10:50,720

and from a mission management team

293

00:10:55,110 --> 00:10:53,200

perspective um we knew all along that

294

00:10:56,630 --> 00:10:55,120

that you know was critical for all

295

00:10:59,350 --> 00:10:56,640

partners to be able to

296

00:11:01,110 --> 00:10:59,360

to to go through their own processes and

297

00:11:03,269 --> 00:11:01,120

to get comfortable with doing this

298

00:11:05,670 --> 00:11:03,279

activity and and when we got that

299

00:11:07,590 --> 00:11:05,680

feedback from the russians this morning

300

00:11:10,389 --> 00:11:07,600

it wasn't necessarily what we we were

301
00:11:12,389 --> 00:11:10,399
hoping to get back but at the same point

302
00:11:14,470 --> 00:11:12,399
you know i applaud the russians

303
00:11:15,509 --> 00:11:14,480
for doing the right thing uh you know

304
00:11:18,550 --> 00:11:15,519
not

305
00:11:21,350 --> 00:11:18,560
disregarding their own processes but

306
00:11:23,110 --> 00:11:21,360
instead uh making sure that uh that they

307
00:11:25,910 --> 00:11:23,120
do their due diligence the way they

308
00:11:28,550 --> 00:11:25,920
should and uh and and bringing that back

309
00:11:30,470 --> 00:11:28,560
to the partnership and so i accepted

310
00:11:32,949 --> 00:11:30,480
their recommendation

311
00:11:35,590 --> 00:11:32,959
i opened that up for comments to the

312
00:11:37,910 --> 00:11:35,600
entire mission management team and and

313
00:11:39,750 --> 00:11:37,920

it was unanimous there were no no

314

00:11:41,269 --> 00:11:39,760
dissenting opinions to the russian

315

00:11:44,310 --> 00:11:41,279
recommendation

316

00:11:45,829 --> 00:11:44,320
we all placed a great amount of faith in

317

00:11:48,710 --> 00:11:45,839
the system that the russians have to go

318

00:11:51,430 --> 00:11:48,720
make this decision on their side and so

319

00:11:54,069 --> 00:11:51,440
as a as a mission management team i

320

00:11:55,829 --> 00:11:54,079
i ask that we cease all further

321

00:11:58,389 --> 00:11:55,839
activities with regard to discussions

322

00:12:00,230 --> 00:11:58,399
about a fly about

323

00:12:01,670 --> 00:12:00,240
i think in in some ways it's allowed the

324

00:12:03,670 --> 00:12:01,680
team now to get on with the rest of the

325

00:12:05,030 --> 00:12:03,680
mission uh everything we can take off

326

00:12:07,269 --> 00:12:05,040

their plate is a good thing it allows

327

00:12:09,190 --> 00:12:07,279

them to stay focused on on trying to get

328

00:12:10,870 --> 00:12:09,200

the things done that we need to do

329

00:12:13,030 --> 00:12:10,880

that we had laid out for this mission

330

00:12:15,269 --> 00:12:13,040

for for the last couple of years

331

00:12:17,350 --> 00:12:15,279

and uh and i'm happy to say i feel good

332

00:12:18,550 --> 00:12:17,360

about where we're at right now and and i

333

00:12:21,670 --> 00:12:18,560

think it was a good decision this

334

00:12:23,590 --> 00:12:21,680

morning and uh and i look forward to a

335

00:12:25,829 --> 00:12:23,600

good successful conclusion to this

336

00:12:28,069 --> 00:12:25,839

doctor mission with the shuttle guys and

337

00:12:29,030 --> 00:12:28,079

and we'll we'll be ready to go do these

338

00:12:30,550 --> 00:12:29,040

next

339

00:12:31,670 --> 00:12:30,560

vehicle operations that i mentioned

340

00:12:33,269 --> 00:12:31,680

earlier

341

00:12:34,389 --> 00:12:33,279

and that's all i have unless you have

342

00:12:35,990 --> 00:12:34,399

any questions

343

00:12:37,509 --> 00:12:36,000

okay thanks kenny uh we'll take

344

00:12:39,350 --> 00:12:37,519

questions here in houston we also have

345

00:12:41,750 --> 00:12:39,360

reporters at the kennedy space center

346

00:12:43,910 --> 00:12:41,760

and on our phone bridge so we'll start

347

00:12:46,550 --> 00:12:43,920

here in the back with mark

348

00:12:48,790 --> 00:12:46,560

oh thank you uh mark caro for aviation

349

00:12:51,030 --> 00:12:48,800

week and space technology and i had a

350

00:12:52,790 --> 00:12:51,040

couple questions for uh

351

00:12:55,030 --> 00:12:52,800

for ken todd

352

00:12:58,230 --> 00:12:55,040

can can you offer us sort of any new

353

00:13:00,870 --> 00:12:58,240

context on how the proposal for the

354

00:13:03,190 --> 00:13:00,880

for the fly about in the picture uh came

355

00:13:05,750 --> 00:13:03,200

about whether it was a proposal just

356

00:13:08,629 --> 00:13:05,760

from nasa or from three of the

357

00:13:09,430 --> 00:13:08,639

four of the major partners

358

00:13:11,430 --> 00:13:09,440

and

359

00:13:14,150 --> 00:13:11,440

would you foresee any occasion where

360

00:13:16,310 --> 00:13:14,160

this might be possible to do again

361

00:13:17,990 --> 00:13:16,320

where you have worked with the other

362

00:13:19,269 --> 00:13:18,000

part i know the shuttle

363

00:13:21,030 --> 00:13:19,279

probably

364

00:13:23,030 --> 00:13:21,040

you know has a couple more occasions to

365

00:13:25,430 --> 00:13:23,040

come to the station i just

366

00:13:27,269 --> 00:13:25,440

wonder if this is uh

367

00:13:29,509 --> 00:13:27,279

gone or whether it might work into a

368

00:13:31,190 --> 00:13:29,519

future flight plan thank you

369

00:13:33,829 --> 00:13:31,200

okay

370

00:13:35,509 --> 00:13:33,839

let's see so how it came about well i

371

00:13:38,069 --> 00:13:35,519

will tell you as a

372

00:13:40,150 --> 00:13:38,079

as an immt chairman we were asked to go

373

00:13:41,750 --> 00:13:40,160

look at it um

374

00:13:44,069 --> 00:13:41,760

certainly to me it came through the

375

00:13:46,069 --> 00:13:44,079

through the nasa channels

376

00:13:47,990 --> 00:13:46,079

as we began discussing this with the

377

00:13:50,069 --> 00:13:48,000

partnership i will tell you there was

378

00:13:52,550 --> 00:13:50,079

broad support

379

00:13:54,949 --> 00:13:52,560

our russian colleagues

380

00:13:55,990 --> 00:13:54,959

worked very hard over the last couple of

381

00:13:57,430 --> 00:13:56,000

weeks to

382

00:13:59,829 --> 00:13:57,440

to build a plan

383

00:14:00,629 --> 00:13:59,839

and to work it within their own system

384

00:14:06,310 --> 00:14:00,639

to

385

00:14:07,910 --> 00:14:06,320

everybody was comfortable in the russian

386

00:14:09,990 --> 00:14:07,920

segment world

387

00:14:11,590 --> 00:14:10,000

the europeans again very supportive our

388

00:14:14,949 --> 00:14:11,600

jackson colleagues very supportive as

389

00:14:18,470 --> 00:14:14,959

well as our canadian partners so

390

00:14:20,069 --> 00:14:18,480

again i think across the board um i

391

00:14:21,829 --> 00:14:20,079

don't know exactly

392

00:14:23,750 --> 00:14:21,839

where it came from how it came to us but

393

00:14:25,030 --> 00:14:23,760

i can tell you this and the discussions

394

00:14:26,629 --> 00:14:25,040

that we had

395

00:14:28,949 --> 00:14:26,639

with the entire partnership there was

396

00:14:31,189 --> 00:14:28,959

very broad support for doing this

397

00:14:32,550 --> 00:14:31,199

i think in general the community

398

00:14:34,069 --> 00:14:32,560

community thought this was a really

399

00:14:35,670 --> 00:14:34,079

great thing to go do if we could go do

400

00:14:40,550 --> 00:14:35,680

it

401
00:14:41,430 --> 00:14:40,560
uh the cory choreography i talked about

402
00:14:43,430 --> 00:14:41,440
earlier

403
00:14:45,910 --> 00:14:43,440
if you look at ulf6

404
00:14:48,150 --> 00:14:45,920
clearly the htv will be gone by that

405
00:14:50,069 --> 00:14:48,160
time and so

406
00:14:52,310 --> 00:14:50,079
i think where we're at today if you look

407
00:14:53,990 --> 00:14:52,320
at the flight program and the way it's

408
00:14:55,110 --> 00:14:54,000
if it plays out the way it's laid out

409
00:14:56,710 --> 00:14:55,120
today

410
00:14:58,629 --> 00:14:56,720
we won't have

411
00:14:59,670 --> 00:14:58,639
the uh the same number of visiting

412
00:15:03,590 --> 00:14:59,680
vehicles

413
00:15:05,030 --> 00:15:03,600

and and so whether that uh again um

414

00:15:06,870 --> 00:15:05,040

we would want to take advantage of that

415

00:15:08,949 --> 00:15:06,880

is something we'll have to go to go look

416

00:15:11,350 --> 00:15:08,959

at uh to be perfectly frank we didn't

417

00:15:14,150 --> 00:15:11,360

know we would be here when we we put the

418

00:15:15,670 --> 00:15:14,160

shuttle plan in place you know uh

419

00:15:17,030 --> 00:15:15,680

a year or so ago you know we didn't

420

00:15:20,150 --> 00:15:17,040

realize that we weren't going to fly in

421

00:15:22,150 --> 00:15:20,160

november and we'd end up in february so

422

00:15:24,470 --> 00:15:22,160

how that looks going forward you know

423

00:15:25,829 --> 00:15:24,480

you never say never but i would tell you

424

00:15:27,269 --> 00:15:25,839

right now the way we have the flight

425

00:15:29,590 --> 00:15:27,279

program laid out

426

00:15:30,550 --> 00:15:29,600

this is a this is a unique opportunity

427

00:15:34,629 --> 00:15:30,560

that

428

00:15:36,550 --> 00:15:34,639

shuttle mission

429

00:15:40,069 --> 00:15:36,560

bill

430

00:15:41,590 --> 00:15:40,079

i just want to make sure i understand

431

00:15:42,710 --> 00:15:41,600

with the htv there i mean my

432

00:15:44,629 --> 00:15:42,720

understanding if you're coming off the

433

00:15:46,550 --> 00:15:44,639

poisk module and stuff that

434

00:15:48,310 --> 00:15:46,560

htv provided some shielding i guess from

435

00:15:49,670 --> 00:15:48,320

plumbing and you couldn't use another

436

00:15:52,310 --> 00:15:49,680

soyuz for that i mean that was the only

437

00:15:55,350 --> 00:15:52,320

one that was available was this was the

438

00:15:57,189 --> 00:15:55,360

o m vehicle yeah see that the issue that

439

00:15:59,670 --> 00:15:57,199

we have the only other place we have the

440

00:16:01,110 --> 00:15:59,680

soyuz right now is down on the fgb

441

00:16:03,990 --> 00:16:01,120

nader side

442

00:16:05,990 --> 00:16:04,000

and uh the issue that we had um

443

00:16:08,470 --> 00:16:06,000

with that is there's a a

444

00:16:10,150 --> 00:16:08,480

cone that we try to protect uh leaving

445

00:16:11,269 --> 00:16:10,160

the fgb nader

446

00:16:13,430 --> 00:16:11,279

in fact

447

00:16:15,189 --> 00:16:13,440

when we depart any port we have an

448

00:16:16,710 --> 00:16:15,199

understanding of what the what the worst

449

00:16:18,550 --> 00:16:16,720

case dispersions might be with the

450

00:16:20,470 --> 00:16:18,560

departure and and try to make sure that

451
00:16:23,189 --> 00:16:20,480
we have good clearance and with the

452
00:16:24,790 --> 00:16:23,199
shuttle uh docked um

453
00:16:27,030 --> 00:16:24,800
to the pma2

454
00:16:29,269 --> 00:16:27,040
the tail actually protrudes into that

455
00:16:32,710 --> 00:16:29,279
cone that we like to protect so in

456
00:16:33,990 --> 00:16:32,720
general we don't want to compromise uh

457
00:16:36,389 --> 00:16:34,000
and i would tell you at this point we

458
00:16:39,110 --> 00:16:36,399
don't want to compromise on on that that

459
00:16:41,189 --> 00:16:39,120
cone and as those clearances and so so

460
00:16:43,990 --> 00:16:41,199
we don't really look at fgb nader as a

461
00:16:46,550 --> 00:16:44,000
as an option at this point um that is a

462
00:16:47,910 --> 00:16:46,560
series 200 vehicle that's there

463
00:16:50,310 --> 00:16:47,920

uh the other thing that we have to

464

00:16:52,230 --> 00:16:50,320

consider is that that's the uh that's

465

00:16:54,550 --> 00:16:52,240

the newest vehicle vehicle that that's

466

00:16:57,110 --> 00:16:54,560

arrived to station with that crew

467

00:16:58,310 --> 00:16:57,120

and so uh you know again uh part of the

468

00:16:59,990 --> 00:16:58,320

job

469

00:17:01,910 --> 00:17:00,000

that we have to go do is we have to look

470

00:17:03,749 --> 00:17:01,920

at all the what-ifs and what if you

471

00:17:05,909 --> 00:17:03,759

undocked this guy and couldn't get him

472

00:17:07,429 --> 00:17:05,919

back then you you know then

473

00:17:11,029 --> 00:17:07,439

you know you brought your your newest

474

00:17:12,630 --> 00:17:11,039

crew home and so again that that all

475

00:17:14,150 --> 00:17:12,640

weighs into it but i would tell you the

476

00:17:16,549 --> 00:17:14,160

primary reason we won't do anything with

477

00:17:18,470 --> 00:17:16,559

an fgb nader location is because of

478

00:17:19,829 --> 00:17:18,480

because of the clearance issue just a

479

00:17:21,750 --> 00:17:19,839

quick follow then but the only reason

480

00:17:24,549 --> 00:17:21,760

that the o m vehicle could be used is

481

00:17:26,390 --> 00:17:24,559

because htv is on harmony zenith and

482

00:17:28,230 --> 00:17:26,400

that provided you the same effect i

483

00:17:29,830 --> 00:17:28,240

guess going up i would i would tell you

484

00:17:32,549 --> 00:17:29,840

right now in the configuration that

485

00:17:34,870 --> 00:17:32,559

we're in with htv on the xena and the

486

00:17:37,990 --> 00:17:34,880

shuttle where it's at it provides good

487

00:17:39,270 --> 00:17:38,000

blockage for the for the windows and so

488

00:17:40,549 --> 00:17:39,280

um

489

00:17:42,470 --> 00:17:40,559

again that

490

00:17:43,590 --> 00:17:42,480

if the opportunity were ever arise or we

491

00:17:46,310 --> 00:17:43,600

were to make a decision that we wanted

492

00:17:48,630 --> 00:17:46,320

to go attempt this again and htv wasn't

493

00:17:50,549 --> 00:17:48,640

there again what we've got today is a

494

00:17:52,230 --> 00:17:50,559

point analysis we'll basically have to

495

00:17:53,909 --> 00:17:52,240

go start over with the configuration and

496

00:17:55,830 --> 00:17:53,919

try to understand what it would mean to

497

00:17:58,549 --> 00:17:55,840

try to do it in a even a slightly

498

00:18:00,870 --> 00:17:58,559

different configuration

499

00:18:05,430 --> 00:18:00,880

other questions

500

00:18:09,029 --> 00:18:06,870

yeah thanks pete spots uh with the

501
00:18:11,190 --> 00:18:09,039
christian science monitor um

502
00:18:14,070 --> 00:18:11,200
uh one of the as we've been hearing

503
00:18:16,390 --> 00:18:14,080
about this uh throughout the week one of

504
00:18:18,470 --> 00:18:16,400
the rationales was a gathering of

505
00:18:21,029 --> 00:18:18,480
engineering data doesn't that

506
00:18:23,110 --> 00:18:21,039
is is that rationale

507
00:18:25,350 --> 00:18:23,120
strong enough to you know suggest taking

508
00:18:26,830 --> 00:18:25,360
another crack at this um you know in a

509
00:18:30,549 --> 00:18:26,840
future time or

510
00:18:32,789 --> 00:18:30,559
um is it the alignment of the vehicles

511
00:18:33,990 --> 00:18:32,799
on top of that that sort of made this

512
00:18:35,110 --> 00:18:34,000
the prime

513
00:18:37,270 --> 00:18:35,120

um

514

00:18:39,430 --> 00:18:37,280

you know the prime opportunity to do it

515

00:18:41,110 --> 00:18:39,440

well again i think there was multiple

516

00:18:43,350 --> 00:18:41,120

reasons why this was

517

00:18:45,510 --> 00:18:43,360

was going to be a good thing to go do

518

00:18:47,270 --> 00:18:45,520

clearly photo documentation

519

00:18:49,029 --> 00:18:47,280

whether it be used for engineering data

520

00:18:51,110 --> 00:18:49,039

or whether it be used for

521

00:18:54,390 --> 00:18:51,120

you know the the photograph for the ages

522

00:18:56,549 --> 00:18:54,400

is is is it doesn't

523

00:19:00,150 --> 00:18:56,559

you know still the configuration is what

524

00:19:02,150 --> 00:19:00,160

it is as far as um the use of soyuz in

525

00:19:05,029 --> 00:19:02,160

the future to help with uh capturing

526
00:19:06,630 --> 00:19:05,039
engineering related data and and doing

527
00:19:08,390 --> 00:19:06,640
fly around and

528
00:19:10,470 --> 00:19:08,400
i will tell you we every time we do one

529
00:19:11,750 --> 00:19:10,480
of these things we learn a lot not just

530
00:19:14,070 --> 00:19:11,760
about the vehicles but about our

531
00:19:17,270 --> 00:19:14,080
processes that we use to go do these

532
00:19:18,549 --> 00:19:17,280
kinds of activities and so um

533
00:19:20,310 --> 00:19:18,559
though we're not doing the fly about

534
00:19:21,669 --> 00:19:20,320
here i would tell you we we gotta get a

535
00:19:23,270 --> 00:19:21,679
lot of good data

536
00:19:24,390 --> 00:19:23,280
both about our ability to go do this

537
00:19:25,430 --> 00:19:24,400
kind of

538
00:19:27,190 --> 00:19:25,440

function

539

00:19:28,950 --> 00:19:27,200

not just on the russian side but but

540

00:19:30,470 --> 00:19:28,960

what it would take on our side to go do

541

00:19:32,070 --> 00:19:30,480

it and and with the rest of the

542

00:19:35,430 --> 00:19:32,080

partnership so

543

00:19:37,510 --> 00:19:35,440

again i i don't see it as a wasted time

544

00:19:39,590 --> 00:19:37,520

wasted effort and and

545

00:19:41,270 --> 00:19:39,600

if we ever needed to go do something

546

00:19:43,110 --> 00:19:41,280

with the soil using and capture some

547

00:19:44,470 --> 00:19:43,120

additional engineering data related to

548

00:19:46,549 --> 00:19:44,480

something that may be going on on

549

00:19:47,909 --> 00:19:46,559

outside the vehicle

550

00:19:49,750 --> 00:19:47,919

you know we'll have to assess that at

551
00:19:53,909 --> 00:19:49,760
that time

552
00:19:57,830 --> 00:19:55,909
denise ciao it's space.com a question

553
00:19:59,190 --> 00:19:57,840
for kenneth um you mentioned that this

554
00:20:01,029 --> 00:19:59,200
is a unique opportunity that you have

555
00:20:02,230 --> 00:20:01,039
here and that given the layout of the

556
00:20:04,390 --> 00:20:02,240
flight plan

557
00:20:05,750 --> 00:20:04,400
moving forward it probably won't

558
00:20:07,190 --> 00:20:05,760
match up where you have all the visiting

559
00:20:08,470 --> 00:20:07,200
vehicles here at the same time and i

560
00:20:09,750 --> 00:20:08,480
know from an operational and risk

561
00:20:11,510 --> 00:20:09,760
standpoint it

562
00:20:12,789 --> 00:20:11,520
makes sense to to accept the decision

563
00:20:14,070 --> 00:20:12,799

but i just wonder if you could comment

564

00:20:15,750 --> 00:20:14,080

on maybe your disappointment or the

565

00:20:17,510 --> 00:20:15,760

disappointment of other of the flight

566

00:20:19,270 --> 00:20:17,520

control members

567

00:20:21,909 --> 00:20:19,280

okay sure um

568

00:20:23,750 --> 00:20:21,919

you know this is uh this is very much a

569

00:20:25,830 --> 00:20:23,760

a a can-do

570

00:20:27,430 --> 00:20:25,840

team and i'm not talking about the nasa

571

00:20:29,190 --> 00:20:27,440

team i'm not talking about the ops team

572

00:20:32,230 --> 00:20:29,200

i'm talking about the entire

573

00:20:34,549 --> 00:20:32,240

partnership if you look at

574

00:20:37,750 --> 00:20:34,559

the last 10 11 years that we've been

575

00:20:38,870 --> 00:20:37,760

operating on orbit um this uh

576

00:20:41,669 --> 00:20:38,880

this team

577

00:20:43,190 --> 00:20:41,679

you know thrives on challenges and

578

00:20:44,789 --> 00:20:43,200

this was something that again we were

579

00:20:47,029 --> 00:20:44,799

asked to go take a look at it was

580

00:20:49,669 --> 00:20:47,039

relatively late it was different than

581

00:20:52,390 --> 00:20:49,679

than what our nominal plan was and uh

582

00:20:54,310 --> 00:20:52,400

and the first reaction is uh how we

583

00:20:55,669 --> 00:20:54,320

gonna do this and then everybody steps

584

00:20:57,430 --> 00:20:55,679

back they take a breath and the next

585

00:21:00,470 --> 00:20:57,440

thing you know here come the options and

586

00:21:02,230 --> 00:21:00,480

here come the thoughts and and so uh

587

00:21:04,470 --> 00:21:02,240

you know people start knocking down the

588

00:21:06,870 --> 00:21:04,480

walls and figure out how to how to make

589

00:21:09,830 --> 00:21:06,880

things happen and again we do that all

590

00:21:11,750 --> 00:21:09,840

in the context of our of our uh our risk

591

00:21:13,270 --> 00:21:11,760

management processes that help make sure

592

00:21:16,149 --> 00:21:13,280

that that we're asking all the right

593

00:21:17,909 --> 00:21:16,159

questions and so i think

594

00:21:20,230 --> 00:21:17,919

even on the russian side you know this

595

00:21:21,909 --> 00:21:20,240

is not necessarily uh what they wanted

596

00:21:24,149 --> 00:21:21,919

the outcome to be

597

00:21:26,070 --> 00:21:24,159

and so is there disappointment sure i

598

00:21:28,630 --> 00:21:26,080

think so i think that

599

00:21:30,390 --> 00:21:28,640

this was going to be something that that

600

00:21:31,990 --> 00:21:30,400

a lot of us were were looking to pull

601
00:21:33,510 --> 00:21:32,000
off but just because

602
00:21:35,190 --> 00:21:33,520
again it would have been something

603
00:21:36,710 --> 00:21:35,200
really really good for

604
00:21:39,029 --> 00:21:36,720
for for the program it would have been

605
00:21:41,350 --> 00:21:39,039
good for a lot of people to uh to have

606
00:21:42,870 --> 00:21:41,360
this this image and and this

607
00:21:43,990 --> 00:21:42,880
this available so

608
00:21:45,909 --> 00:21:44,000
yeah there's there's a little bit of

609
00:21:47,909 --> 00:21:45,919
disappointment but like i told the team

610
00:21:50,470 --> 00:21:47,919
at the mmt this morning you know we have

611
00:21:52,149 --> 00:21:50,480
to respect the fact that that

612
00:21:53,510 --> 00:21:52,159
uh you know it's the right thing to go

613
00:21:55,669 --> 00:21:53,520

do and ask the hard questions and

614

00:21:58,390 --> 00:21:55,679

sometimes the the hard questions bring

615

00:21:59,990 --> 00:21:58,400

about answers that that you know may not

616

00:22:02,149 --> 00:22:00,000

be what everybody wants but it may be

617

00:22:04,789 --> 00:22:02,159

the right thing to go do and and again i

618

00:22:06,710 --> 00:22:04,799

had absolute 100 consensus in the room

619

00:22:11,029 --> 00:22:06,720

there

620

00:22:14,310 --> 00:22:13,510

hi robert perlman with collectspace.com

621

00:22:17,350 --> 00:22:14,320

um

622

00:22:20,070 --> 00:22:17,360

you mentioned uh well this was a a late

623

00:22:22,149 --> 00:22:20,080

decision uh or late idea to come forward

624

00:22:24,310 --> 00:22:22,159

for the fly about um

625

00:22:26,549 --> 00:22:24,320

and not to play what if but if there had

626
00:22:29,350 --> 00:22:26,559
been more time if this had been proposed

627
00:22:30,870 --> 00:22:29,360
well before discovery launched

628
00:22:32,230 --> 00:22:30,880
do you believe that the partners would

629
00:22:33,909 --> 00:22:32,240
have been able to come become

630
00:22:34,789 --> 00:22:33,919
comfortable with the idea or was it

631
00:22:37,430 --> 00:22:34,799
simply

632
00:22:38,950 --> 00:22:37,440
it was it not a timing issue

633
00:22:41,029 --> 00:22:38,960
i would tell you it's only a timing

634
00:22:43,029 --> 00:22:41,039
issue in that

635
00:22:44,230 --> 00:22:43,039
that we didn't

636
00:22:46,470 --> 00:22:44,240
we didn't get a chance to talk about

637
00:22:49,190 --> 00:22:46,480
this before that soyuz launched uh had

638
00:22:50,710 --> 00:22:49,200

it made a difference in the in the um in

639

00:22:52,630 --> 00:22:50,720

the roscosmos

640

00:22:54,630 --> 00:22:52,640

position potentially if they would have

641

00:22:56,070 --> 00:22:54,640

had a chance to know this was out there

642

00:22:58,149 --> 00:22:56,080

and that we had this potential to do

643

00:22:59,990 --> 00:22:58,159

this uh you know through their own

644

00:23:02,230 --> 00:23:00,000

engineering test programs and their

645

00:23:04,149 --> 00:23:02,240

their their train and fly type mentality

646

00:23:06,230 --> 00:23:04,159

similar to ours you know they may have

647

00:23:07,510 --> 00:23:06,240

gotten to the point where uh you know

648

00:23:09,590 --> 00:23:07,520

they would have felt more comfortable

649

00:23:11,350 --> 00:23:09,600

with this vehicle doing this but i i

650

00:23:13,990 --> 00:23:11,360

would tell you at this point uh you know

651

00:23:15,510 --> 00:23:14,000

it's a new vehicle um they're

652

00:23:16,950 --> 00:23:15,520

they're just like we are in that they

653

00:23:19,830 --> 00:23:16,960

want to be very guarded with the way

654

00:23:22,230 --> 00:23:19,840

they do things and and we we we test our

655

00:23:23,990 --> 00:23:22,240

stuff before we fly it we we we test it

656

00:23:26,789 --> 00:23:24,000

in a way that that we intend to use it

657

00:23:28,390 --> 00:23:26,799

on orbit and in this instance we were

658

00:23:30,470 --> 00:23:28,400

as a partnership talking about doing

659

00:23:32,070 --> 00:23:30,480

something that they hadn't hadn't tested

660

00:23:33,750 --> 00:23:32,080

and done before so

661

00:23:36,870 --> 00:23:33,760

i would tell you that

662

00:23:38,390 --> 00:23:36,880

it wasn't just um you know a week

663

00:23:40,230 --> 00:23:38,400

kind of thing i think we were probably

664

00:23:41,110 --> 00:23:40,240

talking about a much longer period than

665

00:23:45,029 --> 00:23:41,120

that

666

00:23:46,549 --> 00:23:45,039

this and and quite frankly uh we

667

00:23:48,230 --> 00:23:46,559

wouldn't have had that discussion back

668

00:23:50,630 --> 00:23:48,240

then because we didn't know exactly

669

00:23:52,710 --> 00:23:50,640

where the shuttle was going to end up we

670

00:23:54,950 --> 00:23:52,720

again had a window of opportunity here

671

00:23:58,549 --> 00:23:54,960

that was created with with the shuttle

672

00:24:01,110 --> 00:23:58,559

ending up in february so um again

673

00:24:04,950 --> 00:24:01,120

it is what it is and and uh

674

00:24:06,710 --> 00:24:04,960

and we'll we move forward from here

675

00:24:11,830 --> 00:24:06,720

okay let's go down to the kennedy space

676
00:24:15,110 --> 00:24:13,990
um hello marcia dunn of the associated

677
00:24:17,110 --> 00:24:15,120
press

678
00:24:18,789 --> 00:24:17,120
one fly around question and then one

679
00:24:21,430 --> 00:24:18,799
non-related

680
00:24:23,830 --> 00:24:21,440
for mr todd was it the fly around

681
00:24:26,070 --> 00:24:23,840
portion itself that was the

682
00:24:28,630 --> 00:24:26,080
concern of the russian engineers or was

683
00:24:30,310 --> 00:24:28,640
it the re-docking part of it i'm just

684
00:24:32,870 --> 00:24:30,320
wondering what was what was their

685
00:24:35,110 --> 00:24:32,880
concerned area of

686
00:24:37,669 --> 00:24:35,120
area about this whole thing

687
00:24:39,909 --> 00:24:37,679
sure marcia i don't think

688
00:24:42,230 --> 00:24:39,919

again at least the the level of detail

689

00:24:45,029 --> 00:24:42,240

that was given to me wasn't broken down

690

00:24:46,870 --> 00:24:45,039

by the profile that this particular part

691

00:24:49,590 --> 00:24:46,880

of the profile is what was giving them

692

00:24:52,390 --> 00:24:49,600

fits i think in general uh it's just

693

00:24:53,990 --> 00:24:52,400

this this idea that that you know we

694

00:24:55,190 --> 00:24:54,000

we're going to go

695

00:24:56,630 --> 00:24:55,200

build a vehicle there's what we're going

696

00:24:59,510 --> 00:24:56,640

to ask it to do we're going to go train

697

00:25:01,590 --> 00:24:59,520

our crews to go do this and and and with

698

00:25:04,310 --> 00:25:01,600

this first vehicle there's just some

699

00:25:06,549 --> 00:25:04,320

level of of discomfort and straying too

700

00:25:09,029 --> 00:25:06,559

far from the plan uh that they already

701
00:25:11,669 --> 00:25:09,039
had in place and and not having uh the

702
00:25:13,990 --> 00:25:11,679
right amount of time uh with the vehicle

703
00:25:17,029 --> 00:25:14,000
to go to go get comfortable and and with

704
00:25:18,789 --> 00:25:17,039
the crew as well so uh again i think i

705
00:25:21,430 --> 00:25:18,799
think that uh what we're dealing with

706
00:25:23,750 --> 00:25:21,440
here is just it's an it's a new vehicle

707
00:25:26,070 --> 00:25:23,760
it's got it's got new systems on it and

708
00:25:28,070 --> 00:25:26,080
and so there's some level of of comfort

709
00:25:29,830 --> 00:25:28,080
that they need to gain before

710
00:25:31,669 --> 00:25:29,840
they're going to be willing to entertain

711
00:25:35,669 --> 00:25:31,679
these kinds of of

712
00:25:40,470 --> 00:25:38,630
all right thank you and and for um for

713
00:25:42,789 --> 00:25:40,480

mr uh korth

714

00:25:44,710 --> 00:25:42,799

uh when they enter leonardo later today

715

00:25:46,390 --> 00:25:44,720

will they have the usual protective gear

716

00:25:48,310 --> 00:25:46,400

goggles um

717

00:25:50,070 --> 00:25:48,320

face masks that sort of thing

718

00:25:52,149 --> 00:25:50,080

yeah that's that's part of our standard

719

00:25:54,070 --> 00:25:52,159

protocol for entering any

720

00:25:55,590 --> 00:25:54,080

any new vehicle the first time it shows

721

00:25:58,070 --> 00:25:55,600

up and and

722

00:26:01,510 --> 00:25:58,080

even though leonardo as it was formerly

723

00:26:03,190 --> 00:26:01,520

called pmm formally known as leonardo

724

00:26:04,630 --> 00:26:03,200

has a history i think it's like seven

725

00:26:07,430 --> 00:26:04,640

times we've we've flown it on the

726

00:26:10,310 --> 00:26:07,440

orbiter uh it's been reconfigured

727

00:26:11,909 --> 00:26:10,320

uh got new mmod micrometeoroid

728

00:26:14,149 --> 00:26:11,919

protection other things we've done to it

729

00:26:15,909 --> 00:26:14,159

so for all intents and purposes it is a

730

00:26:18,870 --> 00:26:15,919

new vehicle so we'll treat it the same

731

00:26:22,070 --> 00:26:20,390

okay i think that's it down at the

732

00:26:24,390 --> 00:26:22,080

kennedy space center we have reporters

733

00:26:27,430 --> 00:26:24,400

on the phone bridge and first up on the

734

00:26:29,269 --> 00:26:27,440

phone bridge is irene klotz

735

00:26:30,630 --> 00:26:29,279

thanks very much i have a couple

736

00:26:33,269 --> 00:26:30,640

questions um

737

00:26:35,269 --> 00:26:33,279

the first is with the addition of pmm

738

00:26:37,029 --> 00:26:35,279

and not including the shuttle's mass

739

00:26:40,549 --> 00:26:37,039

what's the current mass of the space

740

00:26:44,230 --> 00:26:42,630

somewhere around nine hundred thousand

741

00:26:47,750 --> 00:26:44,240

pounds i believe that's the number i

742

00:26:52,630 --> 00:26:49,830

um thank you and uh the other the other

743

00:26:55,110 --> 00:26:52,640

thing uh concerning the fly about

744

00:26:57,750 --> 00:26:55,120

although the picture won't be the same

745

00:27:00,149 --> 00:26:57,760

is can't you get what engineering data

746

00:27:04,870 --> 00:27:00,159

you need during the shuttles fly around

747

00:27:07,430 --> 00:27:06,149

is your question are we still going to

748

00:27:09,350 --> 00:27:07,440

do the fly around with the shuttle and

749

00:27:12,230 --> 00:27:09,360

get some engineering data there oh

750

00:27:13,350 --> 00:27:12,240

certainly absolutely uh we we're going

751
00:27:15,510 --> 00:27:13,360
to

752
00:27:17,430 --> 00:27:15,520
still at least get get get the data we

753
00:27:19,669 --> 00:27:17,440
would normally capture with uh with a

754
00:27:21,350 --> 00:27:19,679
shuttle fly around and go do the normal

755
00:27:24,549 --> 00:27:21,360
post flight analysis that we would do

756
00:27:27,510 --> 00:27:24,559
with that imagery you bet

757
00:27:29,830 --> 00:27:27,520
thanks and i had one other one the um

758
00:27:32,630 --> 00:27:29,840
although this brings to

759
00:27:34,470 --> 00:27:32,640
the end the uss uh

760
00:27:36,070 --> 00:27:34,480
pressurized modules for station i

761
00:27:38,230 --> 00:27:36,080
believe there's still

762
00:27:40,789 --> 00:27:38,240
one or two more coming from russia do

763
00:27:42,950 --> 00:27:40,799

you either of you have any updates on

764

00:27:45,750 --> 00:27:42,960

what um what might still be coming for a

765

00:27:49,190 --> 00:27:46,789

well uh

766

00:27:50,870 --> 00:27:49,200

there there's the mlm that's still still

767

00:27:53,669 --> 00:27:50,880

in the queue our russian partners are

768

00:27:55,669 --> 00:27:53,679

working on it uh irena that's that's

769

00:27:57,510 --> 00:27:55,679

that's the only one that i know of that

770

00:27:59,190 --> 00:27:57,520

that uh they're currently active in

771

00:28:00,789 --> 00:27:59,200

working on and there may be others i

772

00:28:01,830 --> 00:28:00,799

just don't have that information with me

773

00:28:04,070 --> 00:28:01,840

here and

774

00:28:05,590 --> 00:28:04,080

and and potential launch dates and all

775

00:28:07,350 --> 00:28:05,600

that we can we can certainly try to get

776

00:28:08,549 --> 00:28:07,360

that to you though

777

00:28:10,789 --> 00:28:08,559

thank you

778

00:28:12,950 --> 00:28:10,799

okay next up on the phone bridge james

779

00:28:16,549 --> 00:28:12,960

dean

780

00:28:18,470 --> 00:28:16,559

uh thank you rob james in florida today

781

00:28:20,710 --> 00:28:18,480

mr todd i wonder you've been referring

782

00:28:23,110 --> 00:28:20,720

to the soyuz as a new vehicle could you

783

00:28:26,070 --> 00:28:23,120

discuss at all what is new and different

784

00:28:27,990 --> 00:28:26,080

about this particular soyuz and are you

785

00:28:29,990 --> 00:28:28,000

surprised that that

786

00:28:31,430 --> 00:28:30,000

concern wasn't raised much earlier in

787

00:28:33,110 --> 00:28:31,440

the process it seemed like it really

788

00:28:36,230 --> 00:28:33,120

came down to

789

00:28:38,070 --> 00:28:36,240

last day before all of a sudden that was

790

00:28:39,430 --> 00:28:38,080

the reason for

791

00:28:40,710 --> 00:28:39,440

down

792

00:28:42,789 --> 00:28:40,720

james

793

00:28:44,870 --> 00:28:42,799

i will tell you that that there's some

794

00:28:46,230 --> 00:28:44,880

new avionics systems there's new

795

00:28:48,630 --> 00:28:46,240

computers

796

00:28:50,549 --> 00:28:48,640

associated with this particular series

797

00:28:52,389 --> 00:28:50,559

700 vehicle

798

00:28:53,669 --> 00:28:52,399

as far as

799

00:28:55,990 --> 00:28:53,679

as what

800

00:28:57,350 --> 00:28:56,000

what this means to us as we work through

801
00:28:58,870 --> 00:28:57,360
the process

802
00:29:00,230 --> 00:28:58,880
i would tell you in my initial

803
00:29:01,510 --> 00:29:00,240
discussions with the russians they

804
00:29:03,510 --> 00:29:01,520
brought this up

805
00:29:06,389 --> 00:29:03,520
this this was not new information there

806
00:29:10,070 --> 00:29:06,399
was no surprise to anybody in the entire

807
00:29:12,149 --> 00:29:10,080
partnership um that the russians were

808
00:29:14,310 --> 00:29:12,159
were having these types of discussions

809
00:29:16,310 --> 00:29:14,320
um again

810
00:29:18,230 --> 00:29:16,320
every every day you're working in low

811
00:29:21,110 --> 00:29:18,240
earth orbit is an exercise and risk

812
00:29:23,029 --> 00:29:21,120
management is it is by nature what we do

813
00:29:25,269 --> 00:29:23,039

and so um

814

00:29:27,830 --> 00:29:25,279

no matter what task is in front of us

815

00:29:29,510 --> 00:29:27,840

we're always asking the what ifs and and

816

00:29:31,350 --> 00:29:29,520

and so there's no doubt in my mind that

817

00:29:33,269 --> 00:29:31,360

the russians as soon as we brought this

818

00:29:35,510 --> 00:29:33,279

up again started their own uh

819

00:29:36,630 --> 00:29:35,520

discussions internally and and going

820

00:29:39,750 --> 00:29:36,640

through their own risk management

821

00:29:41,269 --> 00:29:39,760

process to try to understand uh what uh

822

00:29:42,950 --> 00:29:41,279

what level of comfort they could get

823

00:29:44,710 --> 00:29:42,960

with this and they were very open with

824

00:29:47,190 --> 00:29:44,720

us about this

825

00:29:49,750 --> 00:29:47,200

and and we had discussions

826
00:29:50,549 --> 00:29:49,760
to that regard but but

827
00:29:51,430 --> 00:29:50,559
we

828
00:29:53,430 --> 00:29:51,440
uh

829
00:29:55,990 --> 00:29:53,440
the rest of the partnership

830
00:29:58,070 --> 00:29:56,000
really needed to let them conclude their

831
00:29:59,430 --> 00:29:58,080
part of the process that that needed to

832
00:30:00,310 --> 00:29:59,440
happen

833
00:30:02,230 --> 00:30:00,320
and

834
00:30:04,710 --> 00:30:02,240
you know it is their vehicle it's uh it

835
00:30:07,669 --> 00:30:04,720
was been their commander uh performing

836
00:30:08,870 --> 00:30:07,679
the function and so uh from from the

837
00:30:11,190 --> 00:30:08,880
standpoint of

838
00:30:13,269 --> 00:30:11,200

of it being a surprise it absolutely was

839

00:30:14,870 --> 00:30:13,279

not a surprise uh they needed to go do

840

00:30:16,789 --> 00:30:14,880

their their own internal process and

841

00:30:19,190 --> 00:30:16,799

that just took some amount of time and

842

00:30:21,350 --> 00:30:19,200

and we just got that conclusion uh this

843

00:30:24,149 --> 00:30:21,360

morning

844

00:30:25,669 --> 00:30:24,159

okay thanks and um i wondered if if you

845

00:30:28,149 --> 00:30:25,679

might be able just to elaborate a little

846

00:30:30,149 --> 00:30:28,159

bit more on how that plus one day will

847

00:30:31,110 --> 00:30:30,159

be used since it seems like transfer is

848

00:30:33,909 --> 00:30:31,120

um

849

00:30:34,870 --> 00:30:33,919

is well on its way and out of schedule

850

00:30:36,389 --> 00:30:34,880

um

851

00:30:39,190 --> 00:30:36,399

and uh

852

00:30:41,669 --> 00:30:39,200

finally also if there's any of the uh

853

00:30:44,549 --> 00:30:41,679

eva cats and dogs that you could

854

00:30:46,549 --> 00:30:44,559

uh specify or or highlight uh uh

855

00:30:48,389 --> 00:30:46,559

occurring tomorrow that are um you know

856

00:30:50,789 --> 00:30:48,399

important activities but but just sort

857

00:30:53,669 --> 00:30:50,799

of uh

858

00:30:55,190 --> 00:30:53,679

activities that they'll be performing

859

00:30:57,590 --> 00:30:55,200

i can say

860

00:31:00,470 --> 00:30:57,600

the prime use right now of this this

861

00:31:02,630 --> 00:31:00,480

extra day is going to be outfitting

862

00:31:04,389 --> 00:31:02,640

of the the new pmm

863

00:31:06,710 --> 00:31:04,399

the current timeline that we had going

864

00:31:08,950 --> 00:31:06,720

into the mission really barely got us

865

00:31:11,750 --> 00:31:08,960

into the pmm i've got a couple of big

866

00:31:14,070 --> 00:31:11,760

items out with the the intent

867

00:31:15,590 --> 00:31:14,080

of gathering as much packing foam and

868

00:31:17,350 --> 00:31:15,600

packing structure to throw away in the

869

00:31:19,350 --> 00:31:17,360

htv that's that's a big program

870

00:31:20,950 --> 00:31:19,360

objective you know we got a lot of good

871

00:31:23,350 --> 00:31:20,960

stuff out htv

872

00:31:26,070 --> 00:31:23,360

um and the other objective of htv was to

873

00:31:28,710 --> 00:31:26,080

bring home a lot of the uh packing trash

874

00:31:29,990 --> 00:31:28,720

and that uh we expected to come up in on

875

00:31:32,230 --> 00:31:30,000

this mission

876

00:31:34,389 --> 00:31:32,240

so adding a day

877

00:31:36,789 --> 00:31:34,399

the equipment that's brought up in pmm

878

00:31:38,389 --> 00:31:36,799

there is a tremendous amount of things

879

00:31:41,509 --> 00:31:38,399

it's packed to the gills

880

00:31:42,630 --> 00:31:41,519

and there are many many many manned crew

881

00:31:43,509 --> 00:31:42,640

hours

882

00:31:45,350 --> 00:31:43,519

of

883

00:31:48,789 --> 00:31:45,360

packing resto

884

00:31:50,630 --> 00:31:48,799

and reorganization so adding a day and

885

00:31:52,230 --> 00:31:50,640

having more folks to

886

00:31:54,710 --> 00:31:52,240

help with that task

887

00:31:56,070 --> 00:31:54,720

tremendously helps out the the station

888

00:31:58,389 --> 00:31:56,080

and the stage

889

00:32:01,350 --> 00:31:58,399

process so we're going to intend to use

890

00:32:05,509 --> 00:32:01,360

it to help out put a dent in the

891

00:32:11,149 --> 00:32:09,029

okay next up charles atkinson

892

00:32:12,830 --> 00:32:11,159

yes good evening charles zankinson with

893

00:32:15,830 --> 00:32:12,840

spacelaunchnews.com and

894

00:32:17,430 --> 00:32:15,840

examiner.com mr todd i'm interested if

895

00:32:19,590 --> 00:32:17,440

you could talk a little bit about russia

896

00:32:22,310 --> 00:32:19,600

is going to keep three cosmonauts on

897

00:32:25,350 --> 00:32:22,320

board going into 2012 at least

898

00:32:27,909 --> 00:32:25,360

while the u.s has two americans and

899

00:32:31,269 --> 00:32:27,919

there's going to be jaxa in esa vying

900

00:32:36,149 --> 00:32:34,789

as far as an international community um

901
00:32:40,230 --> 00:32:36,159

what is the

902
00:32:44,630 --> 00:32:40,240

seeing one of their astronauts staying

903
00:32:49,750 --> 00:32:47,430

well uh clearly uh certainly they have a

904
00:32:51,110 --> 00:32:49,760

lot of interest i mean this this is

905
00:32:52,549 --> 00:32:51,120

again it's an international space

906
00:32:54,149 --> 00:32:52,559

station uh

907
00:32:55,990 --> 00:32:54,159

with the with a crew of six so they

908
00:32:57,830 --> 00:32:56,000

definitely

909
00:33:00,149 --> 00:32:57,840

are wanting their astronauts on board

910
00:33:02,070 --> 00:33:00,159

they have utilization

911
00:33:05,269 --> 00:33:02,080

objectives for the space station and and

912
00:33:08,070 --> 00:33:05,279

certainly um it's a it's a great source

913
00:33:11,669 --> 00:33:08,080

of pride uh for for them if they can

914

00:33:14,149 --> 00:33:11,679

have one of their uh one of their um

915

00:33:16,789 --> 00:33:14,159

civilians aboard and so uh

916

00:33:19,029 --> 00:33:16,799

you know clearly they would like to

917

00:33:19,750 --> 00:33:19,039

like to to be a board and doing science

918

00:33:22,389 --> 00:33:19,760

uh

919

00:33:23,669 --> 00:33:22,399

for their for their nation so so there's

920

00:33:25,590 --> 00:33:23,679

a great interest in doing that and

921

00:33:27,590 --> 00:33:25,600

that's uh something that we have to

922

00:33:29,590 --> 00:33:27,600

balance as a partnership

923

00:33:30,950 --> 00:33:29,600

going forward

924

00:33:33,029 --> 00:33:30,960

but does it uh

925

00:33:35,830 --> 00:33:33,039

does it seem to you that russia may have

926

00:33:39,669 --> 00:33:35,840

a more of a controlling stance here

927

00:33:44,950 --> 00:33:41,669

well clearly again it's a it's a russian

928

00:33:48,549 --> 00:33:44,960

segment in a and a usos segment and

929

00:33:51,590 --> 00:33:48,559

those agreements to uh to split the

930

00:33:53,830 --> 00:33:51,600

the crew crew assignments uh that's been

931

00:33:56,549 --> 00:33:53,840

in place for for a very long time if

932

00:33:58,549 --> 00:33:56,559

there's any any thoughts about about

933

00:34:00,389 --> 00:33:58,559

changing that again that's that's going

934

00:34:03,990 --> 00:34:00,399

to be discussions it'll be held at a

935

00:34:15,270 --> 00:34:07,110

okay thank you and last on the phone

936

00:34:15,280 --> 00:34:18,230

is jim still there

937

00:34:21,750 --> 00:34:20,230

okay we don't hear him so we'll go back

938

00:34:25,270 --> 00:34:21,760

to the kennedy space center i believe

939

00:34:29,669 --> 00:34:27,190

uh yes one follow-up for anyone on the

940

00:34:32,470 --> 00:34:29,679

panel i'm wondering um do you have the

941

00:34:34,389 --> 00:34:32,480

latest percentage for completion of the

942

00:34:37,750 --> 00:34:34,399

space station both interior

943

00:34:41,669 --> 00:34:40,310

i do not marcia i can get that for you i

944

00:34:43,510 --> 00:34:41,679

meant to get that before i came over

945

00:34:45,030 --> 00:34:43,520

here and i just didn't get it so but i

946

00:34:49,190 --> 00:34:45,040

will i will run that down for you and

947

00:34:51,909 --> 00:34:50,389

okay

948

00:34:53,829 --> 00:34:51,919

i think we're back here now for any

949

00:34:57,589 --> 00:34:53,839

follow-ups

950

00:35:00,230 --> 00:34:57,599

couple of programming notes uh we're on

951
00:35:01,990 --> 00:35:00,240
rev e of the mission television schedule

952
00:35:03,109 --> 00:35:02,000
that will be updated as developments

953
00:35:04,710 --> 00:35:03,119
warrant throughout the rest of the

954
00:35:06,470 --> 00:35:04,720
mission the current

955
00:35:08,069 --> 00:35:06,480
mission tv schedule reflects the

956
00:35:10,710 --> 00:35:08,079
extended mission

957
00:35:12,790 --> 00:35:10,720
a series of hometown media interviews

958
00:35:15,190 --> 00:35:12,800
will be seen on nasa television with a

959
00:35:17,670 --> 00:35:15,200
variety of crew members at 3 23 pm

960
00:35:21,030 --> 00:35:17,680
central time today that'll be with king

961
00:35:23,829 --> 00:35:21,040
tv in seattle ktrk tv here in houston

962
00:35:25,670 --> 00:35:23,839
and como tv in seattle the crew's

963
00:35:27,589 --> 00:35:25,680

initial entry into the permanent

964

00:35:29,430 --> 00:35:27,599

multipurpose module as you heard will be

965

00:35:31,910 --> 00:35:29,440

later this afternoon planned just before

966

00:35:34,150 --> 00:35:31,920

6 pm central time today perhaps a bit

967

00:35:37,030 --> 00:35:34,160

earlier than that and the crew sleep

968

00:35:38,950 --> 00:35:37,040

period begins at 8 23 pm central time

969

00:35:41,030 --> 00:35:38,960

this evening just before the first

970

00:35:43,270 --> 00:35:41,040

airing of our flight day highlights at 9

971

00:35:45,430 --> 00:35:43,280

00 pm central time those highlights to

972

00:35:47,589 --> 00:35:45,440

be replayed every hour on the hour

973

00:35:50,069 --> 00:35:47,599

throughout the course of the night

974

00:35:51,750 --> 00:35:50,079

the iss orbit 3 flight director chris

975

00:35:53,910 --> 00:35:51,760

edelen will provide his update on

976

00:35:56,790 --> 00:35:53,920

planning activities from console early

977

00:35:59,190 --> 00:35:56,800

wednesday morning at 2 40 a.m central

978

00:36:01,109 --> 00:35:59,200

time and the wake-up call for the crew

979

00:36:03,270 --> 00:36:01,119

to begin flight day seven and

980

00:36:06,310 --> 00:36:03,280

preparations for the second spacewalk of

981

00:36:08,790 --> 00:36:06,320

the flight is set for 4 23 a.m central

982

00:36:10,470 --> 00:36:08,800

time tomorrow morning

983

00:36:12,150 --> 00:36:10,480

you can follow all the activities on

984

00:36:17,030 --> 00:36:12,160

both the shuttle and the station side of

985

00:36:18,470 --> 00:36:17,040

the house on our website at www.nasa.gov

986

00:36:20,310 --> 00:36:18,480

with that we'll call it a briefing and