



1  
00:00:05,390 --> 00:00:01,670  
it's great to be here to discuss the

2  
00:00:07,130 --> 00:00:05,400  
sts-132 launch countdown status before I

3  
00:00:09,049 --> 00:00:07,140  
get into that I just want to commend all

4  
00:00:10,970 --> 00:00:09,059  
the teams that support the space shuttle

5  
00:00:12,970 --> 00:00:10,980  
program here at Kennedy Space Center

6  
00:00:14,900 --> 00:00:12,980  
across the country and around the world

7  
00:00:16,760 --> 00:00:14,910  
you know these teams have done an

8  
00:00:19,220 --> 00:00:16,770  
outstanding job getting Atlantis the

9  
00:00:21,140 --> 00:00:19,230  
external tank our solid rocket boosters

10  
00:00:24,019 --> 00:00:21,150  
our payload and all our ground

11  
00:00:27,050 --> 00:00:24,029  
facilities ready to support the SGS 132

12  
00:00:29,060 --> 00:00:27,060  
launch in mission we've had a very clean

13  
00:00:30,640 --> 00:00:29,070

countdown so far and we're currently on

14

00:00:33,560 --> 00:00:30,650

schedule and we're not working any

15

00:00:35,420 --> 00:00:33,570

working any issues the clock is

16

00:00:37,970 --> 00:00:35,430

currently holding at t-minus 11 hours

17

00:00:41,030 --> 00:00:37,980

and that's a plan built in 13 hour and

18

00:00:43,490 --> 00:00:41,040

55 minute hold last night we completed

19

00:00:46,369 --> 00:00:43,500

the loading of our onboard cryogenic

20

00:00:49,729 --> 00:00:46,379

reactants for our fuel cells we

21

00:00:53,240 --> 00:00:49,739

currently have four days of lh2 and 11

22

00:00:54,709 --> 00:00:53,250

days of lo2 pad whole time there are

23

00:00:57,410 --> 00:00:54,719

several operations and work at the pad

24

00:00:59,389 --> 00:00:57,420

this morning teams are busy retracting

25

00:01:02,150 --> 00:00:59,399

access platforms and configuring the pad

26  
00:01:04,640 --> 00:01:02,160  
for launch the check out of our orbiter

27  
00:01:07,609 --> 00:01:04,650  
and ground communications network is

28  
00:01:09,320 --> 00:01:07,619  
planned for 1130 this morning at

29  
00:01:11,510 --> 00:01:09,330  
five-thirty p.m. the rotating service

30  
00:01:13,370 --> 00:01:11,520  
structure will be retracted and we'll

31  
00:01:16,760 --> 00:01:13,380  
continue doing our final closeouts for

32  
00:01:19,550 --> 00:01:16,770  
launch at 7pm will perform our assets

33  
00:01:20,960 --> 00:01:19,560  
which list and just before 10pm the

34  
00:01:23,270 --> 00:01:20,970  
countdown clock will resume counting at

35  
00:01:25,249 --> 00:01:23,280  
t minus 11 hours will then begin our

36  
00:01:27,350 --> 00:01:25,259  
final external tank loading preparations

37  
00:01:30,200 --> 00:01:27,360  
and start clearing the pad just before

38  
00:01:31,850 --> 00:01:30,210

midnight our shuttle managers will meet

39

00:01:34,730 --> 00:01:31,860

at four-fifteen a.m. tomorrow morning

40

00:01:36,190 --> 00:01:34,740

for our tanking weather briefing set up

41

00:01:38,569 --> 00:01:36,200

prior to our external tank load

42

00:01:40,249 --> 00:01:38,579

hopefully todd will give us some good

43

00:01:44,050 --> 00:01:40,259

news about the weather and we'll proceed

44

00:01:46,249 --> 00:01:44,060

with external tank loading at 455 a.m.

45

00:01:49,249 --> 00:01:46,259

flight crew will arrive at the pad and

46

00:01:52,399 --> 00:01:49,259

begin begin their ingress to the vehicle

47

00:01:54,350 --> 00:01:52,409

at 11am our launch window for tomorrow

48

00:01:57,800 --> 00:01:54,360

is approximately 10 minutes in length

49

00:01:59,090 --> 00:01:57,810

and will open at two-fifteen p.m. and we

50

00:02:00,940 --> 00:01:59,100

typically target the middle of the

51  
00:02:05,330 --> 00:02:00,950  
window which correlates to just after

52  
00:02:07,819 --> 00:02:05,340  
220 p.m. as far as our mission goes it's

53  
00:02:10,190 --> 00:02:07,829  
a 12 12-day mission zero contingency

54  
00:02:12,320 --> 00:02:10,200  
days and to weather contingency days and

55  
00:02:13,580 --> 00:02:12,330  
our end of mission landing is planned

56  
00:02:17,900 --> 00:02:13,590  
for KSC

57  
00:02:20,630 --> 00:02:17,910  
844 am on Wednesday May 26th as far as

58  
00:02:22,309 --> 00:02:20,640  
our scrub turnaround plans go we have

59  
00:02:24,350 --> 00:02:22,319  
enough onboard fuel cell reactants to

60  
00:02:26,920 --> 00:02:24,360  
get for launch attempts in five days and

61  
00:02:31,039 --> 00:02:26,930  
that's using our standard 24 and 48 hour

62  
00:02:32,570 --> 00:02:31,049  
scrub turnaround opera options we do

63  
00:02:34,910 --> 00:02:32,580

have launched opportunities through May

64

00:02:36,410 --> 00:02:34,920

eighteenth and at that point run we run

65

00:02:38,600 --> 00:02:36,420

into a conflict with the range

66

00:02:40,490 --> 00:02:38,610

reconfiguration for the Delta for GPS

67

00:02:43,400 --> 00:02:40,500

launch that's scheduled for May

68

00:02:44,839 --> 00:02:43,410

twentieth to summarize the countdown is

69

00:02:47,089 --> 00:02:44,849

proceeding very well and we're not

70

00:02:48,800 --> 00:02:47,099

tracking any issues the hard work and

71

00:02:51,640 --> 00:02:48,810

dedication of everyone involved with

72

00:02:54,559 --> 00:02:51,650

sts-132 has gotten us to this point and

73

00:02:55,759 --> 00:02:54,569

all our systems are go to proceed with

74

00:02:57,770 --> 00:02:55,769

the work that remains in launch

75

00:02:59,660 --> 00:02:57,780

countdown and we're looking forward to a

76

00:03:04,220 --> 00:02:59,670

spectacular launch tomorrow afternoon at

77

00:03:05,780 --> 00:03:04,230

220 thanks Thank You Robbie ok good

78

00:03:08,690 --> 00:03:05,790

morning let's say i'll start with a

79

00:03:10,610 --> 00:03:08,700

quick status on the payloads and then we

80

00:03:13,369 --> 00:03:10,620

have a little bit of video that will run

81

00:03:17,710 --> 00:03:13,379

through let's see for the payloads this

82

00:03:21,680 --> 00:03:17,720

is actually one of the more enjoyable

83

00:03:23,930 --> 00:03:21,690

parts of the flow for us our payloads

84

00:03:26,720 --> 00:03:23,940

have been installed in the payload bay

85

00:03:30,580 --> 00:03:26,730

and are safely tucked away the payload

86

00:03:33,319 --> 00:03:30,590

bay doors were closed this past tuesday

87

00:03:36,949 --> 00:03:33,329

so the primary payloads the mrm one

88

00:03:39,440 --> 00:03:36,959

module the Russian module and the ICC

89

00:03:43,460 --> 00:03:39,450

carrier I've been in there with the

90

00:03:47,140 --> 00:03:43,470

doors closed we the only other activity

91

00:03:49,940 --> 00:03:47,150

that we have to go is the loading of the

92

00:03:52,809 --> 00:03:49,950

research the late stow experiments and

93

00:03:56,690 --> 00:03:52,819

our team is just about right now

94

00:04:00,159 --> 00:03:56,700

preparing to go and and take receipt of

95

00:04:04,280 --> 00:04:00,169

those late stow experiments from the

96

00:04:05,930 --> 00:04:04,290

research teams and then get those out to

97

00:04:07,849 --> 00:04:05,940

the pad and turn them over for

98

00:04:09,740 --> 00:04:07,859

installation into the crew compartment

99

00:04:14,809 --> 00:04:09,750

mid deck and those should be installed

100

00:04:16,789 --> 00:04:14,819

by later this afternoon so payloads

101  
00:04:18,379 --> 00:04:16,799  
we're not working any issues it's been a

102  
00:04:23,149 --> 00:04:18,389  
very

103  
00:04:24,770 --> 00:04:23,159  
good final flow at the pad we get to at

104  
00:04:26,480 --> 00:04:24,780  
this point now that the payload bay

105  
00:04:29,540 --> 00:04:26,490  
doors are closed kind of exhale and

106  
00:04:32,809 --> 00:04:29,550  
relax little and and watch the launch

107  
00:04:36,619 --> 00:04:32,819  
team do their thing and we look forward

108  
00:04:40,129 --> 00:04:36,629  
to tomorrow's launch and whether it's

109  
00:04:43,219 --> 00:04:40,139  
still looking good we're excited for our

110  
00:04:45,290 --> 00:04:43,229  
Russian partners who have been here that

111  
00:04:47,809 --> 00:04:45,300  
the inertia team have been here since

112  
00:04:51,080 --> 00:04:47,819  
December with their module getting it

113  
00:04:54,499 --> 00:04:51,090

ready to go and so we're excited for

114

00:04:58,129 --> 00:04:54,509

them that that were at here at the eve

115

00:05:00,260 --> 00:04:58,139

of launching their module to the station

116

00:05:03,379 --> 00:05:00,270

and it will be not only is it the first

117

00:05:05,089 --> 00:05:03,389

Russian module to be launched or flown

118

00:05:09,529 --> 00:05:05,099

to station on the shuttle it will be the

119

00:05:11,719 --> 00:05:09,539

last also so a first and a last so we're

120

00:05:13,999 --> 00:05:11,729

looking forward to that there's the

121

00:05:17,899 --> 00:05:14,009

mission itself is going to be very

122

00:05:20,649 --> 00:05:17,909

exciting there's a 3 e VA's activities

123

00:05:23,209 --> 00:05:20,659

as well as a lot of robotics operations

124

00:05:25,999 --> 00:05:23,219

including the installation of the mram

125

00:05:31,339 --> 00:05:26,009

one module on the station that's on

126

00:05:34,339 --> 00:05:31,349

flight day 5 so we you know sit back

127

00:05:36,679 --> 00:05:34,349

relax a little today get the payload

128

00:05:39,889 --> 00:05:36,689

experiments loaded and then be out here

129

00:05:43,839 --> 00:05:39,899

tomorrow for for the launch and then get

130

00:05:47,029 --> 00:05:43,849

to watch things as they unfold on orbit

131

00:05:48,409 --> 00:05:47,039

let's see that's it for status if we

132

00:05:53,869 --> 00:05:48,419

could I believe we've got a short video

133

00:05:55,490 --> 00:05:53,879

that I'll walk through okay this is a

134

00:05:57,769 --> 00:05:55,500

back in December out at the shuttle

135

00:06:03,079 --> 00:05:57,779

landing facility and that's the Antonov

136

00:06:06,290 --> 00:06:03,089

124 heavy-lift cargo aircraft bringing

137

00:06:09,320 --> 00:06:06,300

the mrm one module from Moscow here to

138

00:06:13,089 --> 00:06:09,330

the United States this was on December

139

00:06:15,800 --> 00:06:13,099

17th looking at the transportation

140

00:06:18,690 --> 00:06:15,810

container being offloaded gets

141

00:06:25,850 --> 00:06:22,860

to a flatbed and then from there was

142

00:06:29,220 --> 00:06:25,860

taken off center and over to astrotech

143

00:06:33,480 --> 00:06:29,230

at the port for their final launch site

144

00:06:35,580 --> 00:06:33,490

preparations there you see technicians

145

00:06:38,310 --> 00:06:35,590

or as the Russians call them specialists

146

00:06:42,120 --> 00:06:38,320

loading cargo into the module and now

147

00:06:49,110 --> 00:06:42,130

they're preparing the module 2 for hatch

148

00:06:51,120 --> 00:06:49,120

closure it is launching 14 hundred

149

00:06:53,970 --> 00:06:51,130

kilograms or just over 3,000 pounds of

150

00:06:58,530 --> 00:06:53,980

us cargo inside the module now they are

151  
00:07:01,110 --> 00:06:58,540  
closing the hatch this is just days

152  
00:07:03,420 --> 00:07:01,120  
before bringing it back on center to the

153  
00:07:05,460 --> 00:07:03,430  
space station processing facility these

154  
00:07:07,050 --> 00:07:05,470  
red covers or protective covers that get

155  
00:07:10,220 --> 00:07:07,060  
removed just before going into our

156  
00:07:14,340 --> 00:07:10,230  
payload canister and now they are

157  
00:07:17,250 --> 00:07:14,350  
preparing it for shipment they're on air

158  
00:07:18,600 --> 00:07:17,260  
bearing casters right now taking it over

159  
00:07:23,610 --> 00:07:18,610  
to where it will be loaded into its

160  
00:07:29,340 --> 00:07:23,620  
shipping container these are actually

161  
00:07:33,330 --> 00:07:29,350  
astrotech technicians loading the module

162  
00:07:39,720 --> 00:07:33,340  
into the shipping container they set it

163  
00:07:42,660 --> 00:07:39,730

on this blue cradle and the container

164

00:07:44,760 --> 00:07:42,670

cover gets installed over the top

165

00:07:46,500 --> 00:07:44,770

now we're in the space station

166

00:07:48,420 --> 00:07:46,510

processing facility looking at the

167

00:07:50,850 --> 00:07:48,430

module being installed into the our

168

00:07:55,400 --> 00:07:50,860

payload canister you can see the red

169

00:07:59,520 --> 00:07:57,840

that's the one of the grapple fixtures

170

00:08:01,800 --> 00:07:59,530

that's the one the space station arm

171

00:08:05,430 --> 00:08:01,810

will take the handoff from the shuttles

172

00:08:09,690 --> 00:08:05,440

arm during the mating operations this is

173

00:08:11,820 --> 00:08:09,700

a the integrated cargo carrier two days

174

00:08:13,500 --> 00:08:11,830

later on April 7th being loaded into the

175

00:08:15,360 --> 00:08:13,510

payload canister you're looking at the

176

00:08:19,860 --> 00:08:15,370

six batteries that will be installed on

177

00:08:25,690 --> 00:08:19,870

the p6 and you say the cave and antenna

178

00:08:30,790 --> 00:08:28,330

now our payload canister is being

179

00:08:33,600 --> 00:08:30,800

rotated from horizontal to vertical just

180

00:08:37,259 --> 00:08:33,610

before going out to the pad

181

00:08:42,079 --> 00:08:37,269

so we take it rotate it to vertical and

182

00:08:48,380 --> 00:08:45,120

now it's vertical and ready for the trip

183

00:08:51,360 --> 00:08:48,390

to the pad and this is April fifteenth

184

00:08:53,850 --> 00:08:51,370

in the evening on the way out to the

185

00:08:59,819 --> 00:08:53,860

launch pad passing the VAB in the launch

186

00:09:01,560 --> 00:08:59,829

control center in the background now

187

00:09:03,509 --> 00:09:01,570

we're back in the space station

188

00:09:06,120 --> 00:09:03,519

processing facility downstairs and our

189

00:09:07,650 --> 00:09:06,130

offline laboratories as the some of the

190

00:09:09,990 --> 00:09:07,660

research teams are doing their final

191

00:09:12,389 --> 00:09:10,000

preparations of their experiments for

192

00:09:15,630 --> 00:09:12,399

this flight looking out there is

193

00:09:19,790 --> 00:09:15,640

actually sterilization of rice seeds be

194

00:09:23,250 --> 00:09:19,800

prepared for the jack says a feral eight

195

00:09:26,190 --> 00:09:23,260

experiment and in these uh these are

196

00:09:29,699 --> 00:09:26,200

some of the rice seeds that are will be

197

00:09:32,910 --> 00:09:29,709

flown up and this particular experiment

198

00:09:36,180 --> 00:09:32,920

is about fish scales and there's more

199

00:09:38,730 --> 00:09:36,190

information in the press kit but these

200

00:09:42,750 --> 00:09:38,740

are scales that are harvested from Gulf

201  
00:09:44,250 --> 00:09:42,760  
fish and we studying basically these are

202  
00:09:48,680 --> 00:09:44,260  
regenerate to scales and they'll be

203  
00:09:54,800 --> 00:09:48,690  
studying looking at bone loss and

204  
00:09:57,500 --> 00:09:54,810  
atrophy now we are back to this week

205  
00:10:04,259 --> 00:09:57,510  
earlier on the 11th with the final

206  
00:10:06,780 --> 00:10:04,269  
closing of the payload bay doors this is

207  
00:10:08,009 --> 00:10:06,790  
a for the payload team again this is at

208  
00:10:11,630 --> 00:10:08,019  
the moment where we kind of let out a

209  
00:10:21,449 --> 00:10:11,640  
big exhale and can relax a little and

210  
00:10:25,859 --> 00:10:23,819  
so the doors are closed and I'd like to

211  
00:10:28,919 --> 00:10:25,869  
echo what Jeremy said in complimenting

212  
00:10:33,290 --> 00:10:28,929  
the various teams in getting a shuttle

213  
00:10:36,329 --> 00:10:33,300

but the payloads ready for this flight

214

00:10:38,220 --> 00:10:36,339

was a challenging flow for the shuttle

215

00:10:41,009 --> 00:10:38,230

team you know right on the heels of

216

00:10:43,319 --> 00:10:41,019

sts-131 and getting the pad turned

217

00:10:46,350 --> 00:10:43,329

around and then the orbiter out there

218

00:10:50,189 --> 00:10:46,360

it's uh it's been a lot of activity here

219

00:10:51,749 --> 00:10:50,199

in the last 2-3 weeks but the orbiter

220

00:10:54,299 --> 00:10:51,759

team shuttle team has done a fantastic

221

00:10:57,480 --> 00:10:54,309

job and taking care of us as well

222

00:11:02,449 --> 00:10:57,490

getting our payloads installed and we're

223

00:11:07,710 --> 00:11:05,489

Todd good morning I do have some good

224

00:11:09,929 --> 00:11:07,720

weather as for good news as far as the

225

00:11:11,879 --> 00:11:09,939

weather is concerned we've had

226

00:11:13,530 --> 00:11:11,889

high-pressure overs for the past few

227

00:11:15,749 --> 00:11:13,540

days and that high pressure is stayed

228

00:11:17,609 --> 00:11:15,759

firm and now we're expecting that to

229

00:11:19,829 --> 00:11:17,619

stay over the top of Florida at least

230

00:11:22,410 --> 00:11:19,839

until sunday if we take a look at the

231

00:11:25,169 --> 00:11:22,420

satellite picture you can see virtually

232

00:11:27,090 --> 00:11:25,179

cloud-free skies over Florida and along

233

00:11:28,590 --> 00:11:27,100

the coast there are some low clouds out

234

00:11:30,840 --> 00:11:28,600

over the water and they are moving on

235

00:11:33,119 --> 00:11:30,850

shoulder and most of the nasty weather

236

00:11:34,859 --> 00:11:33,129

as well out to our north and west with

237

00:11:36,600 --> 00:11:34,869

that real strong high pressure system

238

00:11:38,519 --> 00:11:36,610

over the top of us it's going to remain

239

00:11:40,980 --> 00:11:38,529

well to our north and west throughout

240

00:11:43,980 --> 00:11:40,990

the count and even saturday and sunday

241

00:11:46,319 --> 00:11:43,990

if we would happen to need those days as

242

00:11:47,789 --> 00:11:46,329

far as the next 24 hours we're looking

243

00:11:49,799 --> 00:11:47,799

for that high pressure center to

244

00:11:50,970 --> 00:11:49,809

actually be to our north that's going to

245

00:11:53,429 --> 00:11:50,980

move some of those clouds that are

246

00:11:55,859 --> 00:11:53,439

offshore onshore so we'll see brief

247

00:11:58,049 --> 00:11:55,869

periods of partly cloudy skies easterly

248

00:12:00,809 --> 00:11:58,059

winds and overall pretty dry conditions

249

00:12:02,309 --> 00:12:00,819

as far as a tanking forecast tomorrow we

250

00:12:04,230 --> 00:12:02,319

will be looking at those scattered skies

251  
00:12:05,850 --> 00:12:04,240  
we may have a brief isolated shower

252  
00:12:08,249 --> 00:12:05,860  
right along the coast kind of move

253  
00:12:10,169 --> 00:12:08,259  
through but overall light easterly winds

254  
00:12:12,299 --> 00:12:10,179  
scattered skies and pretty dry

255  
00:12:15,419 --> 00:12:12,309  
conditions for tanking operations we're

256  
00:12:16,949 --> 00:12:15,429  
not looking at any constraints or any

257  
00:12:19,499 --> 00:12:16,959  
constraints to be violated by weather

258  
00:12:21,329 --> 00:12:19,509  
conditions at all as far as the launch

259  
00:12:23,879 --> 00:12:21,339  
for tomorrow afternoon we're looking for

260  
00:12:25,679 --> 00:12:23,889  
those scattered skies once again winds

261  
00:12:27,179 --> 00:12:25,689  
will be out of the east peaking at 18

262  
00:12:29,819 --> 00:12:27,189  
knots one thing I am a little concerned

263  
00:12:32,669 --> 00:12:29,829

with that I'm watching is if we get some

264

00:12:34,110 --> 00:12:32,679

additional low-level convergence we

265

00:12:34,620 --> 00:12:34,120

could see some of those areas of clouds

266

00:12:37,440 --> 00:12:34,630

before

267

00:12:39,390 --> 00:12:37,450

early large and the some larger low

268

00:12:41,490 --> 00:12:39,400

clouds kind of move into our area like

269

00:12:43,560 --> 00:12:41,500

yesterday afternoon we could see a low

270

00:12:45,930 --> 00:12:43,570

cloud ceiling so because of those low

271

00:12:48,060 --> 00:12:45,940

cloud ceilings i'm looking at a thirty

272

00:12:52,620 --> 00:12:48,070

percent chance of weather prohibiting

273

00:12:55,860 --> 00:12:52,630

launch here at KSC as far as SRB

274

00:12:57,990 --> 00:12:55,870

recovery operations the area is going to

275

00:12:59,640 --> 00:12:58,000

be looking pretty nice out there also

276

00:13:01,470 --> 00:12:59,650

scattered skies right underneath that

277

00:13:02,790 --> 00:13:01,480

high pressure system ones are going to

278

00:13:05,250 --> 00:13:02,800

be more out of the southeast rather

279

00:13:07,110 --> 00:13:05,260

light and see states only three to four

280

00:13:09,780 --> 00:13:07,120

feet so good weather conditions for that

281

00:13:12,540 --> 00:13:09,790

operation also as far as conus

282

00:13:14,420 --> 00:13:12,550

operations for abort landing site the

283

00:13:17,190 --> 00:13:14,430

spaceflight meteorology group is

284

00:13:19,470 --> 00:13:17,200

forecasting clear skies out at edwards

285

00:13:21,390 --> 00:13:19,480

and scattered skies out of white sands

286

00:13:24,210 --> 00:13:21,400

and winds will be out of the Southwest

287

00:13:27,800 --> 00:13:24,220

at both locations rather light as far as

288

00:13:31,230 --> 00:13:27,810

the overseas landing sites SMG is

289

00:13:34,200 --> 00:13:31,240

forecasting broken skies at 5000 feet at

290

00:13:37,350 --> 00:13:34,210

Zaragosa and a chance of showers within

291

00:13:39,810 --> 00:13:37,360

20 nautical miles and showers at hystrix

292

00:13:41,460 --> 00:13:39,820

also within 20 nautical miles however

293

00:13:43,770 --> 00:13:41,470

Marrone looking good with broken skies

294

00:13:45,870 --> 00:13:43,780

at 7,000 feet and light winds so we're

295

00:13:49,410 --> 00:13:45,880

only looking good for for tomorrow

296

00:13:50,790 --> 00:13:49,420

afternoon as far as a 24-hour slip

297

00:13:52,230 --> 00:13:50,800

forecast we're still looking for that

298

00:13:53,940 --> 00:13:52,240

high pressure system to bring in some

299

00:13:56,490 --> 00:13:53,950

low clouds into our area so scattered

300

00:13:58,170 --> 00:13:56,500

skies at 3,000 feet and we're also

301  
00:14:01,050 --> 00:13:58,180  
looking still looking at that same

302  
00:14:02,610 --> 00:14:01,060  
weather pattern so we could still see

303  
00:14:04,560 --> 00:14:02,620  
some larger areas of clouds moving

304  
00:14:05,730 --> 00:14:04,570  
giving us a brief ceiling and because of

305  
00:14:07,380 --> 00:14:05,740  
that the probability of weather

306  
00:14:10,230 --> 00:14:07,390  
prohibiting launch here at KSC is at

307  
00:14:12,860 --> 00:14:10,240  
thirty percent for that day also the

308  
00:14:15,780 --> 00:14:12,870  
conus sites are also looking good few

309  
00:14:18,060 --> 00:14:15,790  
25,000 feet and few clouds or add

310  
00:14:20,490 --> 00:14:18,070  
Edwards in the few clouds at the White

311  
00:14:21,840 --> 00:14:20,500  
Sands overall no problems with weather

312  
00:14:26,370 --> 00:14:21,850  
conditions at either one of those sites

313  
00:14:28,170 --> 00:14:26,380

as far as our towel sites overseas still

314

00:14:31,250 --> 00:14:28,180

looking for showers in the area at

315

00:14:33,450 --> 00:14:31,260

Zaragosa and a ceiling at 4,000 feet and

316

00:14:36,450 --> 00:14:33,460

we're also looking at winds

317

00:14:38,370 --> 00:14:36,460

strengthening up at histories however

318

00:14:41,280 --> 00:14:38,380

Marrone still looks good for Saturday

319

00:14:43,890 --> 00:14:41,290

operations in the event of a 48-hour

320

00:14:45,519 --> 00:14:43,900

slip we're going to see the upper level

321

00:14:49,210 --> 00:14:45,529

Ridge start to break down a little bit

322

00:14:50,710 --> 00:14:49,220

on Sunday and with that we'll see some

323

00:14:53,170 --> 00:14:50,720

more clouds coming in at the higher

324

00:14:55,119 --> 00:14:53,180

levels and we'll still see low level

325

00:14:56,499 --> 00:14:55,129

winds out of the East so with those two

326

00:14:59,920 --> 00:14:56,509

conditions we're looking for scattered

327

00:15:02,170 --> 00:14:59,930

skies at 3000 broken skies at 25,000 and

328

00:15:06,040 --> 00:15:02,180

overall pretty nice conditions on Sunday

329

00:15:07,299 --> 00:15:06,050

as far as the conus of Mort sites still

330

00:15:10,319 --> 00:15:07,309

looking for good conditions at both

331

00:15:13,749 --> 00:15:10,329

locations and as far as the oversee site

332

00:15:15,549 --> 00:15:13,759

Zaragoza and Marrone both look good we

333

00:15:17,499 --> 00:15:15,559

will still have some gusty surface winds

334

00:15:20,319 --> 00:15:17,509

at districts causing problems with the

335

00:15:22,119 --> 00:15:20,329

headwinds so overall we're looking at

336

00:15:24,309 --> 00:15:22,129

really good conditions for launch

337

00:15:26,319 --> 00:15:24,319

operations that high pressure system has

338

00:15:28,449 --> 00:15:26,329

been very friendly to us and bringing us

339

00:15:30,759 --> 00:15:28,459

real nice conditions for for the month

340

00:15:32,980 --> 00:15:30,769

of May and right now we're looking at a

341

00:15:35,860 --> 00:15:32,990

thirty percent chance of KSC violating

342

00:15:39,369 --> 00:15:35,870

weather constraints both friday saturday

343

00:15:40,960 --> 00:15:39,379

and even sunday kendriya thank you well

344

00:15:42,220 --> 00:15:40,970

now take questions when the microphone

345

00:15:43,929 --> 00:15:42,230

comes your way please state your name

346

00:15:45,670 --> 00:15:43,939

affiliation and to whom you're

347

00:15:49,179 --> 00:15:45,680

addressing your question I'll start with

348

00:15:51,850 --> 00:15:49,189

Chris um Chris Gebert with NASA Space

349

00:15:54,670 --> 00:15:51,860

Flight comm with one for Jeremy and one

350

00:15:56,470 --> 00:15:54,680

for Robbie for Jeremy what is the

351  
00:15:58,150 --> 00:15:56,480  
current a launch time tomorrow down to

352  
00:16:00,610 --> 00:15:58,160  
the second that you have for the latest

353  
00:16:04,150 --> 00:16:00,620  
opportunity right now I'm tracking 220

354  
00:16:05,439 --> 00:16:04,160  
and eight seconds and for Robbie I'm in

355  
00:16:07,420 --> 00:16:05,449  
terms of the latest to experiments that

356  
00:16:08,920 --> 00:16:07,430  
are going on today can you talk a little

357  
00:16:11,139 --> 00:16:08,930  
bit about what some of those are and

358  
00:16:12,670 --> 00:16:11,149  
what type of turnaround time you have on

359  
00:16:16,179 --> 00:16:12,680  
that should we find ourselves in a scrub

360  
00:16:19,780 --> 00:16:16,189  
turnaround situation sure let's see

361  
00:16:23,799 --> 00:16:19,790  
there's several of the experiments are

362  
00:16:25,809 --> 00:16:23,809  
jaksas sponsored experiments the one or

363  
00:16:31,139 --> 00:16:25,819

two actually that I mentioned during the

364

00:16:34,230 --> 00:16:31,149

video the fish scales and the feral 8

365

00:16:36,660 --> 00:16:34,240

experiment Fairlake tis is studying

366

00:16:39,429 --> 00:16:36,670

basically the effects of microgravity

367

00:16:41,710 --> 00:16:39,439

spaceflight on on the cellular wall

368

00:16:44,410 --> 00:16:41,720

structure of these in this case the rice

369

00:16:48,040 --> 00:16:44,420

seats but they also have a third the

370

00:16:52,689 --> 00:16:48,050

hydro tropi experiment that's looking at

371

00:16:56,050 --> 00:16:52,699

using a moisture gradient as a control

372

00:16:57,970 --> 00:16:56,060

mechanism for for plant growth on

373

00:17:02,130 --> 00:16:57,980

bit during the microgravity environment

374

00:17:06,640 --> 00:17:02,140

where you have a lack of gravity and

375

00:17:08,800 --> 00:17:06,650

generally plants them on earth their

376

00:17:10,990 --> 00:17:08,810

root structure grows towards gravity

377

00:17:12,100 --> 00:17:11,000

without that it kind of tends to go in

378

00:17:13,240 --> 00:17:12,110

all different directions and they're

379

00:17:16,600 --> 00:17:13,250

trying to control that so they're

380

00:17:19,780 --> 00:17:16,610

looking at using moisture gradient as a

381

00:17:21,670 --> 00:17:19,790

control mechanism for for that so in

382

00:17:23,230 --> 00:17:21,680

addition to the jacks experiments and

383

00:17:30,730 --> 00:17:23,240

all of those will be transferred over

384

00:17:35,110 --> 00:17:30,740

and uncontrollable there's a couple of

385

00:17:37,410 --> 00:17:35,120

National Lab Pathfinder experiments one

386

00:17:40,570 --> 00:17:37,420

is a cell's experiment just looking at

387

00:17:42,520 --> 00:17:40,580

replication of cells in the microgravity

388

00:17:45,010 --> 00:17:42,530

environment trying to improve techniques

389

00:17:48,040 --> 00:17:45,020

and the other is one of the series of

390

00:17:50,230 --> 00:17:48,050

the vaccine experiments looking at

391

00:17:53,140 --> 00:17:50,240

basically at pathogens and developing

392

00:17:55,240 --> 00:17:53,150

vaccines for various pathogens this is

393

00:17:58,000 --> 00:17:55,250

the ninth I believe in that series of

394

00:18:00,010 --> 00:17:58,010

experiments to be flown in addition it

395

00:18:01,930 --> 00:18:00,020

is that there's a several other there's

396

00:18:05,500 --> 00:18:01,940

a lot of science that's a that's going

397

00:18:06,790 --> 00:18:05,510

up and as well they were actually in

398

00:18:09,370 --> 00:18:06,800

addition to the ones we're taking up

399

00:18:12,010 --> 00:18:09,380

some of it stays some of it goes up and

400

00:18:13,780 --> 00:18:12,020

comes back a sortie flight and then

401

00:18:15,250 --> 00:18:13,790

there's also a lot of science that we're

402

00:18:18,820 --> 00:18:15,260

bringing home that's been up there and

403

00:18:21,790 --> 00:18:18,830

undergoing you know research experiments

404

00:18:26,370 --> 00:18:21,800

actually some of it since last November

405

00:18:28,630 --> 00:18:26,380

so so it's even though we don't have a

406

00:18:31,480 --> 00:18:28,640

one of the logistics modules that

407

00:18:33,250 --> 00:18:31,490

typically brings a lot of science with

408

00:18:36,820 --> 00:18:33,260

it there is a lot of science on this

409

00:18:39,010 --> 00:18:36,830

flight going up and coming back and I

410

00:18:41,130 --> 00:18:39,020

have more details I can provide you or

411

00:18:44,350 --> 00:18:41,140

there's more in the press kit as well

412

00:18:46,900 --> 00:18:44,360

Marcia I'm sorry I just wanted the the

413

00:18:48,640 --> 00:18:46,910

final launch T 0 what will come up with

414

00:18:50,710 --> 00:18:48,650

that at the t minus time in Holden and

415

00:18:53,740 --> 00:18:50,720

we'll get that out to everybody sorry

416

00:18:55,900 --> 00:18:53,750

Marcia Marcia Dunn Associated Press

417

00:18:58,000 --> 00:18:55,910

first for mr. Ashley do you have a

418

00:19:00,040 --> 00:18:58,010

number of Russians in town for the

419

00:19:06,040 --> 00:19:00,050

launched you know estimated how many are

420

00:19:08,480 --> 00:19:06,050

here well total i do not know I we've

421

00:19:11,990 --> 00:19:08,490

primarily been working with the anarchy

422

00:19:16,880 --> 00:19:12,000

team that was responsible for the mrm

423

00:19:19,460 --> 00:19:16,890

one module itself so about right now

424

00:19:22,340 --> 00:19:19,470

there's probably about 30 or so roughly

425

00:19:23,930 --> 00:19:22,350

of the inner ghia team this is much

426  
00:19:25,669 --> 00:19:23,940  
smaller than the numbers obviously when

427  
00:19:28,160 --> 00:19:25,679  
they were actively preparing their

428  
00:19:31,490 --> 00:19:28,170  
module but I don't have a good number in

429  
00:19:33,470 --> 00:19:31,500  
terms of other like Roscosmos Russian

430  
00:19:38,450 --> 00:19:33,480  
space agency visitors but I know that

431  
00:19:42,440 --> 00:19:38,460  
there will be you know another fairly

432  
00:19:44,540 --> 00:19:42,450  
large contingent of Ross cosmos visitors

433  
00:19:47,570 --> 00:19:44,550  
as well obviously for the launching of

434  
00:19:51,440 --> 00:19:47,580  
their module thank you and for mr.

435  
00:19:52,640 --> 00:19:51,450  
Graber would you anticipate trying if

436  
00:19:54,740 --> 00:19:52,650  
all things are we going you don't get

437  
00:19:56,960 --> 00:19:54,750  
off tomorrow would you probably just due

438  
00:19:59,210 --> 00:19:56,970

to stand down and do two more could you

439

00:20:02,780 --> 00:19:59,220

conceive doing three in a row or what's

440

00:20:05,090 --> 00:20:02,790

your going in ideas again the launch

441

00:20:08,810 --> 00:20:05,100

director has that prerogative to look at

442

00:20:10,640 --> 00:20:08,820

the day of launch conditions if we were

443

00:20:14,750 --> 00:20:10,650

to have that 24-hour scrub turn around

444

00:20:16,580 --> 00:20:14,760

and we had to go into another scrub we

445

00:20:18,110 --> 00:20:16,590

would talk about it there are several

446

00:20:20,480 --> 00:20:18,120

factors that that play into that

447

00:20:23,540 --> 00:20:20,490

decision but we're going to do the smart

448

00:20:26,000 --> 00:20:23,550

thing we'll look at the the crew rest

449

00:20:28,490 --> 00:20:26,010

for the the folks on console will look

450

00:20:30,080 --> 00:20:28,500

at all those different factors and make

451  
00:20:32,240 --> 00:20:30,090  
an assessment and then decide from that

452  
00:20:34,220 --> 00:20:32,250  
point on but our our baseline plan would

453  
00:20:38,510 --> 00:20:34,230  
be to do a 24-hour scrub turnaround

454  
00:20:40,780 --> 00:20:38,520  
followed by a 48-hour turnaround Robert

455  
00:20:43,520 --> 00:20:40,790  
hi Robert Pearlman with collectspace.com

456  
00:20:45,560 --> 00:20:43,530  
with a question for Robbie in regards to

457  
00:20:48,560 --> 00:20:45,570  
this being the first and I guess last

458  
00:20:51,740 --> 00:20:48,570  
Russian module can you explain why it

459  
00:20:54,440 --> 00:20:51,750  
differs from the parotta docking module

460  
00:20:56,270 --> 00:20:54,450  
that was launched in 1985 to mirror that

461  
00:21:01,340 --> 00:20:56,280  
was also anarchy a built on the shuttle

462  
00:21:04,130 --> 00:21:01,350  
thanks well that of course was a another

463  
00:21:07,520 --> 00:21:04,140

Russian module but and but that one as

464

00:21:09,260 --> 00:21:07,530

you mentioned I was destined for the MIR

465

00:21:10,669 --> 00:21:09,270

space station so when I say the first

466

00:21:12,850 --> 00:21:10,679

and the last I meant the first and the

467

00:21:16,710 --> 00:21:12,860

last lost on the shuttle to the

468

00:21:21,750 --> 00:21:19,649

clara clara moskowitz with space calm

469

00:21:24,120 --> 00:21:21,760

and this is also for mr. Ashley you

470

00:21:26,490 --> 00:21:24,130

mentioned the 14 hundred kilograms of us

471

00:21:28,980 --> 00:21:26,500

cargo could you just give a little bit

472

00:21:31,740 --> 00:21:28,990

more idea of what that cargo is sure

473

00:21:34,830 --> 00:21:31,750

it's a it's a mixed bag so to speak but

474

00:21:39,350 --> 00:21:34,840

there's a lot of it is crew provisions

475

00:21:44,899 --> 00:21:39,360

food other crew supplies there there are

476  
00:21:51,240 --> 00:21:48,120  
some replacement parts for some of the

477  
00:21:57,480 --> 00:21:51,250  
components on orbit including the sabaki

478  
00:22:03,930 --> 00:21:57,490  
a that was launched on sts-131 there's

479  
00:22:08,010 --> 00:22:03,940  
some spares for it and there's you know

480  
00:22:09,480 --> 00:22:08,020  
lithium hydroxide oxygen canisters it's

481  
00:22:11,370 --> 00:22:09,490  
a it's a mixed bag there's there's

482  
00:22:15,380 --> 00:22:11,380  
several laptop computers that are going

483  
00:22:21,960 --> 00:22:15,390  
up i can give you further details

484  
00:22:23,909 --> 00:22:21,970  
afterwards ken for Robbie pretty much to

485  
00:22:25,950 --> 00:22:23,919  
follow up on that question Mike Moses

486  
00:22:28,080 --> 00:22:25,960  
said that this module was pretty pretty

487  
00:22:31,289 --> 00:22:28,090  
packed are these can you describe that

488  
00:22:34,140 --> 00:22:31,299

how how packed it isn't and and are

489

00:22:35,730 --> 00:22:34,150

these components on the inside the

490

00:22:41,159 --> 00:22:35,740

shuttle bags and are there any science

491

00:22:43,080 --> 00:22:41,169

experiments also on mrm one okay so the

492

00:22:46,680 --> 00:22:43,090

first part of that as far as how packed

493

00:22:48,090 --> 00:22:46,690

it is very tightly packed you know one

494

00:22:51,480 --> 00:22:48,100

of the things they will have to do but

495

00:22:54,899 --> 00:22:51,490

is is before they're able to use the

496

00:22:56,520 --> 00:22:54,909

module for its primary mission is to

497

00:22:58,350 --> 00:22:56,530

unload all of the cargo there's not

498

00:23:00,330 --> 00:22:58,360

enough room to work in there with the

499

00:23:03,419 --> 00:23:00,340

bags installed so there are bags

500

00:23:05,520 --> 00:23:03,429

installed on around either side port and

501  
00:23:09,270 --> 00:23:05,530  
starboard as well as down book called

502  
00:23:13,289 --> 00:23:09,280  
the center aisle so it is it's very

503  
00:23:16,140 --> 00:23:13,299  
tightly packed in the module and as far

504  
00:23:20,130 --> 00:23:16,150  
as experiments flying on it there's

505  
00:23:21,659 --> 00:23:20,140  
there's no like experiment samples or

506  
00:23:24,299 --> 00:23:21,669  
anything but there is some experiment

507  
00:23:25,889 --> 00:23:24,309  
hardware that is being taken up inside

508  
00:23:28,649 --> 00:23:25,899  
the module to support some of the

509  
00:23:30,600 --> 00:23:28,659  
experiments that are that are up there

510  
00:23:32,250 --> 00:23:30,610  
now as well as some of this

511  
00:23:34,049 --> 00:23:32,260  
boarding hardware for the National Lab

512  
00:23:38,010 --> 00:23:34,059  
pathfinders that are flying up on this

513  
00:23:43,080 --> 00:23:38,020

mission did I get all parts of your

514

00:23:44,940 --> 00:23:43,090

question or sure James thanks James Dean

515

00:23:46,169 --> 00:23:44,950

floor today for either Jeremy Robbie

516

00:23:47,549 --> 00:23:46,179

just wonder if you could comment on the

517

00:23:50,299 --> 00:23:47,559

significance of this flight not just

518

00:23:51,870 --> 00:23:50,309

from an Atlantis perspective but on the

519

00:23:55,140 --> 00:23:51,880

capability that you're going to be

520

00:23:58,440 --> 00:23:55,150

adding to space station with a only a

521

00:24:01,130 --> 00:23:58,450

few more flights before you can call the

522

00:24:04,520 --> 00:24:01,140

US segment at least assembly complete

523

00:24:07,020 --> 00:24:04,530

start with Atlantis and then I'll sure

524

00:24:11,000 --> 00:24:07,030

you know every every space shuttle

525

00:24:13,200 --> 00:24:11,010

flight is is an amazing feat there's a

526  
00:24:16,230 --> 00:24:13,210  
huge number of people that are involved

527  
00:24:19,740 --> 00:24:16,240  
and put a whole lot of hard work and

528  
00:24:22,409 --> 00:24:19,750  
heart and and effort into it so each one

529  
00:24:24,900 --> 00:24:22,419  
of these is an amazing feat and and we

530  
00:24:29,100 --> 00:24:24,910  
you know care about each one exactly the

531  
00:24:31,710 --> 00:24:29,110  
same and you know we're we're happy to

532  
00:24:35,820 --> 00:24:31,720  
have Atlantis be ready to go and the

533  
00:24:38,730 --> 00:24:35,830  
teams are all ready to go and as far as

534  
00:24:40,500 --> 00:24:38,740  
significance for the payloads and what

535  
00:24:42,330 --> 00:24:40,510  
that will bring to the station was the

536  
00:24:45,930 --> 00:24:42,340  
primary payload the primary objective is

537  
00:24:48,840 --> 00:24:45,940  
the launching of the mrm one and it it's

538  
00:24:52,100 --> 00:24:48,850

a it's a mini research module so after

539

00:24:56,539 --> 00:24:52,110

all of the cargo that's inside is

540

00:24:59,850 --> 00:24:56,549

removed they they will transfer some

541

00:25:02,750 --> 00:24:59,860

experiment racks workstations into it

542

00:25:05,760 --> 00:25:02,760

and so they will be able to perform

543

00:25:12,330 --> 00:25:05,770

science in these own work stations as

544

00:25:15,960 --> 00:25:12,340

well is the module once docked to the

545

00:25:19,860 --> 00:25:15,970

station is docked to the zaria or FGB

546

00:25:22,320 --> 00:25:19,870

module so it'll be taking a permanent

547

00:25:26,010 --> 00:25:22,330

residence there on that docking port and

548

00:25:29,760 --> 00:25:26,020

but it will be its Afton will also serve

549

00:25:32,850 --> 00:25:29,770

as a replacement or the fourth docking

550

00:25:35,100 --> 00:25:32,860

port on the Russian segment so future so

551  
00:25:38,010 --> 00:25:35,110  
use in progress vehicles will be able to

552  
00:25:42,060 --> 00:25:38,020  
dock there as one of the four Russian

553  
00:25:44,010 --> 00:25:42,070  
segment ports and then also I haven't

554  
00:25:47,040 --> 00:25:44,020  
talked a whole lot about it but kind of

555  
00:25:49,530 --> 00:25:47,050  
writing up piggyback on the mrm one are

556  
00:25:52,620 --> 00:25:49,540  
several of the outfitting components for

557  
00:25:56,310 --> 00:25:52,630  
a later Russian module the multi-purpose

558  
00:25:59,600 --> 00:25:56,320  
laboratory module MLM which i believe is

559  
00:26:03,330 --> 00:25:59,610  
it's got to be launched in the fall of

560  
00:26:05,760 --> 00:26:03,340  
2012 although don't hold me to that but

561  
00:26:07,500 --> 00:26:05,770  
there's the equipment airlock that's

562  
00:26:10,560 --> 00:26:07,510  
prominently featured there on the back

563  
00:26:13,350 --> 00:26:10,570

of the mrm one so this airlock will be

564

00:26:16,830 --> 00:26:13,360

used for transferring equipment from

565

00:26:19,520 --> 00:26:16,840

inside out it also has the radiator

566

00:26:25,590 --> 00:26:19,530

which will be used for cooling of the

567

00:26:28,560 --> 00:26:25,600

MLM module and there's a spare elbow for

568

00:26:32,070 --> 00:26:28,570

the European orissa robotic arm that is

569

00:26:36,210 --> 00:26:32,080

also mounted and going up so that that

570

00:26:41,190 --> 00:26:36,220

will like I said it's a spare but so if

571

00:26:45,570 --> 00:26:41,200

needed it will be used for the ISA robot

572

00:26:49,830 --> 00:26:45,580

arm in in doing the transfer of these

573

00:26:51,900 --> 00:26:49,840

items from the mrm one over to the MLM

574

00:26:55,260 --> 00:26:51,910

once it arrives as well as you know

575

00:26:57,630 --> 00:26:55,270

future robotic activities and then there

576

00:27:01,020 --> 00:26:57,640

is a portable workstation for crew

577

00:27:03,120 --> 00:27:01,030

member EBA who that's it's flown on the

578

00:27:08,780 --> 00:27:03,130

exterior and will be available for

579

00:27:15,300 --> 00:27:12,840

thanks and for todd just wondered if you

580

00:27:16,650 --> 00:27:15,310

know with this possible low cloud cover

581

00:27:18,150 --> 00:27:16,660

that could get developers that's

582

00:27:20,880 --> 00:27:18,160

something you're likely to see coming

583

00:27:22,680 --> 00:27:20,890

well before launch time or is it

584

00:27:23,820 --> 00:27:22,690

something that you know what happened

585

00:27:25,650 --> 00:27:23,830

kind of quickly and you just have to

586

00:27:27,660 --> 00:27:25,660

kind of get lucky in that 10-minute

587

00:27:29,070 --> 00:27:27,670

window for the most part we're going to

588

00:27:31,560 --> 00:27:29,080

be able to see those clouds coming

589

00:27:33,480 --> 00:27:31,570

they're going to be out off offshore and

590

00:27:35,310 --> 00:27:33,490

we'll be watching on satellite and we'll

591

00:27:37,140 --> 00:27:35,320

have observers station in different

592

00:27:38,940 --> 00:27:37,150

different areas watching for the clouds

593

00:27:40,770 --> 00:27:38,950

to come in so we'll be able to see on

594

00:27:42,630 --> 00:27:40,780

satellite those move in and verify it

595

00:27:44,310 --> 00:27:42,640

they're moving in with our ground

596

00:27:45,330 --> 00:27:44,320

observations will be able to see them

597

00:27:47,550 --> 00:27:45,340

tomorrow morning soon as we get that

598

00:27:48,810 --> 00:27:47,560

visible satellite picture we'll start to

599

00:27:52,620 --> 00:27:48,820

see those clouds and see where they're

600

00:27:55,960 --> 00:27:52,630

at Irene

601  
00:27:58,780 --> 00:27:55,970  
I'm Irene Klotz with Reuters I'm on the

602  
00:28:01,290 --> 00:27:58,790  
clouds is that a towel issue or is that

603  
00:28:05,950 --> 00:28:01,300  
also for visibility for range safety

604  
00:28:09,580 --> 00:28:05,960  
that's a range safety issue the range is

605  
00:28:11,320 --> 00:28:09,590  
required to be able to see the vehicle

606  
00:28:13,330 --> 00:28:11,330  
take off and also go through the clouds

607  
00:28:14,680 --> 00:28:13,340  
and come out the top of the clouds so

608  
00:28:19,480 --> 00:28:14,690  
that's why we have those range safety

609  
00:28:24,790 --> 00:28:19,490  
requirements and over here in the front

610  
00:28:27,640 --> 00:28:24,800  
row please Peter I would suddenly BAM in

611  
00:28:29,440 --> 00:28:27,650  
Australia question for mr. Graber on the

612  
00:28:32,020 --> 00:28:29,450  
last mission discovery there was a

613  
00:28:34,200 --> 00:28:32,030

fairly large piece of tile liberated

614

00:28:36,580 --> 00:28:34,210

from the tail section and I just

615

00:28:39,070 --> 00:28:36,590

wondered if there was a reason for that

616

00:28:42,430 --> 00:28:39,080

was at a debris strike or a value of the

617

00:28:46,240 --> 00:28:42,440

attachment and if there's any actions is

618

00:28:48,250 --> 00:28:46,250

following that well for Atlantis we've

619

00:28:51,130 --> 00:28:48,260

gone and inspected all of those similar

620

00:28:52,690 --> 00:28:51,140

tiles and feel that there we've done

621

00:28:54,299 --> 00:28:52,700

everything we can to look at those and

622

00:28:56,380 --> 00:28:54,309

understand that they're in good shape

623

00:28:58,780 --> 00:28:56,390

there are no issues with those tiles

624

00:29:02,410 --> 00:28:58,790

whatsoever they're continuing to look at

625

00:29:05,650 --> 00:29:02,420

the discoveries tiles and under try and

626  
00:29:07,150 --> 00:29:05,660  
understand exactly what happened there

627  
00:29:09,610 --> 00:29:07,160  
have been the right folks have gotten

628  
00:29:11,770 --> 00:29:09,620  
together several teams have been put

629  
00:29:13,180 --> 00:29:11,780  
together to go look at that they've

630  
00:29:16,180 --> 00:29:13,190  
looked at it from many different angles

631  
00:29:18,640 --> 00:29:16,190  
and some of that data is still in work

632  
00:29:22,210 --> 00:29:18,650  
but there's there's no issue with

633  
00:29:27,070 --> 00:29:22,220  
Atlantis's tiles and atlantis is ready

634  
00:29:29,590 --> 00:29:27,080  
to go and a question for mr. actually um

635  
00:29:31,570 --> 00:29:29,600  
I believe there was a issue a little

636  
00:29:34,390 --> 00:29:31,580  
while ago identified on the mrm one a

637  
00:29:37,419 --> 00:29:34,400  
module where some paint was flaking off

638  
00:29:40,450 --> 00:29:37,429

was that resolved an issue something

639

00:29:43,540 --> 00:29:40,460

done need you address that yes it has

640

00:29:45,310 --> 00:29:43,550

been resolved and it's it's the thermal

641

00:29:47,110 --> 00:29:45,320

protective coating on the radiator and

642

00:29:51,940 --> 00:29:47,120

that there were some flakes that were

643

00:29:54,220 --> 00:29:51,950

found liberated after we transferred out

644

00:29:55,930 --> 00:29:54,230

to the launch pad rotated a vertical and

645

00:29:58,180 --> 00:29:55,940

got out to the launch pad and during our

646

00:30:01,750 --> 00:29:58,190

transfer operations some of these flakes

647

00:30:03,310 --> 00:30:01,760

were noted of course you know pulled

648

00:30:06,010 --> 00:30:03,320

together the technical communities both

649

00:30:08,110 --> 00:30:06,020

on the Russian side and and our side too

650

00:30:10,270 --> 00:30:08,120

talk about it this coding is very

651  
00:30:12,880 --> 00:30:10,280  
similar almost identical to the thermal

652  
00:30:15,130 --> 00:30:12,890  
coding that we use on our us-built

653  
00:30:18,960 --> 00:30:15,140  
radiators so we're very familiar with

654  
00:30:22,300 --> 00:30:18,970  
the material properties of it and

655  
00:30:26,220 --> 00:30:22,310  
basically in summary the assessment was

656  
00:30:29,890 --> 00:30:26,230  
that you know this was this liberation

657  
00:30:32,500 --> 00:30:29,900  
was an in local very small percentage of

658  
00:30:33,940 --> 00:30:32,510  
the area less than point two percent of

659  
00:30:35,770 --> 00:30:33,950  
where it was being liberated from it

660  
00:30:37,720 --> 00:30:35,780  
it's coming from an area that had

661  
00:30:40,690 --> 00:30:37,730  
undergone some repair or touch-up work

662  
00:30:46,270 --> 00:30:40,700  
at the Astro tech facility and it's a

663  
00:30:50,380 --> 00:30:46,280

very dismiss it it's very difficult to

664

00:30:52,870 --> 00:30:50,390

do repairs and so that's you know the

665

00:30:55,360 --> 00:30:52,880

thoughts there where that you know it

666

00:30:58,480 --> 00:30:55,370

just had become d bonded in this small

667

00:31:00,580 --> 00:30:58,490

repair area but the overall assessment

668

00:31:05,640 --> 00:31:00,590

is that it's a it's not an issue from a

669

00:31:15,070 --> 00:31:09,310

delaminated material had been has been

670

00:31:18,370 --> 00:31:15,080

removed so it's all ready to go no

671

00:31:20,530 --> 00:31:18,380

further questions that will conclude the

672

00:31:22,570 --> 00:31:20,540

L minus 1 countdown status briefing as

673

00:31:24,220 --> 00:31:22,580

Jeremy mentioned the rotating service

674

00:31:25,900 --> 00:31:24,230

structure will be moved away from space

675

00:31:27,850 --> 00:31:25,910

shuttle Atlantis tonight at five-thirty

676

00:31:29,920 --> 00:31:27,860

p.m. eastern time that will be shown on

677

00:31:32,350 --> 00:31:29,930

NASA television please join us tomorrow

678

00:31:35,380 --> 00:31:32,360

morning for live launch coverage that

679

00:31:37,480 --> 00:31:35,390

will begin at 4 45 a.m. with taking

680

00:31:42,040 --> 00:31:37,490

commentary for more information on the