



1  
00:00:04,870 --> 00:00:02,470  
good afternoon and welcome back to

2  
00:00:06,230 --> 00:00:04,880  
nasa's johnson space center this is our

3  
00:00:07,749 --> 00:00:06,240  
briefing following the mission

4  
00:00:10,629 --> 00:00:07,759  
management team meeting today this is

5  
00:00:12,150 --> 00:00:10,639  
flight day 15 of the sts-134 space

6  
00:00:14,150 --> 00:00:12,160  
shuttle mission to the international

7  
00:00:15,990 --> 00:00:14,160  
space station and to give us some

8  
00:00:18,310 --> 00:00:16,000  
comments from today's meeting we have

9  
00:00:20,710 --> 00:00:18,320  
the chairman of the mmt leroy kane who

10  
00:00:22,630 --> 00:00:20,720  
is also the deputy program manager for

11  
00:00:24,310 --> 00:00:22,640  
the space shuttle i'll turn it over to

12  
00:00:26,230 --> 00:00:24,320  
leroy for comments and then open it up

13  
00:00:27,910 --> 00:00:26,240

for questions

14

00:00:29,669 --> 00:00:27,920

thank you kylie good afternoon it's

15

00:00:32,310 --> 00:00:29,679

great to be here with you today

16

00:00:34,950 --> 00:00:32,320

we are as you know coming to the end of

17

00:00:37,350 --> 00:00:34,960

a spectacular mission here with endeavor

18

00:00:39,670 --> 00:00:37,360

the crew continues to perform excellent

19

00:00:40,709 --> 00:00:39,680

as well as the vehicle on orbit

20

00:00:44,470 --> 00:00:40,719

he

21

00:00:45,590 --> 00:00:44,480

yesterday we saw a magnificent

22

00:00:46,790 --> 00:00:45,600

display

23

00:00:50,549 --> 00:00:46,800

of

24

00:00:52,549 --> 00:00:50,559

executed the the undocking the

25

00:00:53,910 --> 00:00:52,559

separation the fly around

26

00:00:58,549 --> 00:00:53,920

the

27

00:01:00,630 --> 00:00:58,559

just got some spectacular views

28

00:01:02,950 --> 00:01:00,640

from both the orbiter as well as from

29

00:01:04,469 --> 00:01:02,960

the station looking back at the orbiter

30

00:01:07,350 --> 00:01:04,479

and so that was pretty exciting of

31

00:01:09,190 --> 00:01:07,360

course the the dto went very well and we

32

00:01:10,469 --> 00:01:09,200

we gathered a lot of good data

33

00:01:18,149 --> 00:01:10,479

the

34

00:01:20,310 --> 00:01:18,159

so we're flying alone now endeavors

35

00:01:22,710 --> 00:01:20,320

flying alone with the endeavor crew

36

00:01:24,950 --> 00:01:22,720

and preparing for uh for end to mission

37

00:01:27,270 --> 00:01:24,960

our normal landing and and

38

00:01:29,830 --> 00:01:27,280

and emission activities crews sleeping

39

00:01:32,149 --> 00:01:29,840

now and uh we just reviewed the status

40

00:01:34,390 --> 00:01:32,159

of the vehicle and the systems and and

41

00:01:36,710 --> 00:01:34,400

the plan forward the one thing we talked

42

00:01:37,910 --> 00:01:36,720

uh in a little bit of detail is the the

43

00:01:39,270 --> 00:01:37,920

entry plan

44

00:01:41,910 --> 00:01:39,280

the entry flight director gave the

45

00:01:44,469 --> 00:01:41,920

summary of of of his plan for entry and

46

00:01:46,149 --> 00:01:44,479

landing and so we reviewed that plan

47

00:01:48,870 --> 00:01:46,159

it's very good plan

48

00:01:51,429 --> 00:01:48,880

we have very good

49

00:01:53,590 --> 00:01:51,439

a very good chance to get landed at

50

00:01:55,190 --> 00:01:53,600

ksc on intermission day which is early

51  
00:01:57,190 --> 00:01:55,200  
early morning hours

52  
00:01:58,709 --> 00:01:57,200  
on on wednesday morning

53  
00:02:00,469 --> 00:01:58,719  
so we're looking very very much forward

54  
00:02:01,830 --> 00:02:00,479  
to that

55  
00:02:03,510 --> 00:02:01,840  
as i said the vehicle is performing

56  
00:02:05,670 --> 00:02:03,520  
outstanding we have no new significant

57  
00:02:07,350 --> 00:02:05,680  
anomalies to talk about

58  
00:02:09,910 --> 00:02:07,360  
the mission has gone

59  
00:02:11,990 --> 00:02:09,920  
gone very well we're happy

60  
00:02:15,190 --> 00:02:12,000  
that we were able to accomplish all the

61  
00:02:17,190 --> 00:02:15,200  
all the objectives in the docked mission

62  
00:02:19,030 --> 00:02:17,200  
i think our our space station friends

63  
00:02:19,990 --> 00:02:19,040

are very happy with the progress that we

64

00:02:20,869 --> 00:02:20,000

made

65

00:02:22,869 --> 00:02:20,879

and

66

00:02:23,670 --> 00:02:22,879

so we left them i think in in great

67

00:02:26,070 --> 00:02:23,680

shape

68

00:02:27,110 --> 00:02:26,080

and their crew in great spirits

69

00:02:29,510 --> 00:02:27,120

um

70

00:02:31,750 --> 00:02:29,520

so we're looking very much forward here

71

00:02:33,670 --> 00:02:31,760

to uh to the end of the mission our our

72

00:02:35,190 --> 00:02:33,680

biggest milestone remains obviously to

73

00:02:37,830 --> 00:02:35,200

get endeavour and the crew back on the

74

00:02:40,229 --> 00:02:37,840

ground early early morning on wednesday

75

00:02:41,750 --> 00:02:40,239

at kennedy space center so

76

00:02:43,030 --> 00:02:41,760

it's been a great mission

77

00:02:44,390 --> 00:02:43,040

it's good to be here with you today i'd

78

00:02:45,990 --> 00:02:44,400

be happy to answer any questions you

79

00:02:51,190 --> 00:02:46,000

have

80

00:02:54,550 --> 00:02:53,110

thank you i'm mark caro for aviation

81

00:02:56,229 --> 00:02:54,560

week

82

00:02:59,589 --> 00:02:56,239

do you have

83

00:03:02,710 --> 00:02:59,599

a nominal end of mission plus two days

84

00:03:05,830 --> 00:03:02,720

in your thinking or or less or more

85

00:03:07,990 --> 00:03:05,840

at this point and

86

00:03:09,830 --> 00:03:08,000

what are your limiting consumables on

87

00:03:11,589 --> 00:03:09,840

the orbiter and making further

88

00:03:12,710 --> 00:03:11,599

determinations

89

00:03:15,910 --> 00:03:12,720

okay mark

90

00:03:18,390 --> 00:03:15,920

we have we have a lot of capability

91

00:03:20,309 --> 00:03:18,400

we gave the space station as much oxygen

92

00:03:22,630 --> 00:03:20,319

as we as a station could take in its

93

00:03:24,070 --> 00:03:22,640

tanks in addition to repressurizing

94

00:03:26,070 --> 00:03:24,080

before we undocked

95

00:03:28,149 --> 00:03:26,080

and so we feel really good about the

96

00:03:29,350 --> 00:03:28,159

consumable status that we left the

97

00:03:30,229 --> 00:03:29,360

station in

98

00:03:31,990 --> 00:03:30,239

and

99

00:03:33,509 --> 00:03:32,000

again because we had some capability

100

00:03:35,350 --> 00:03:33,519

going into the mission

101  
00:03:38,070 --> 00:03:35,360  
um not knowing exactly how much power

102  
00:03:40,630 --> 00:03:38,080  
ams was going to use before we got her

103  
00:03:42,309 --> 00:03:40,640  
off the ship and onto the station

104  
00:03:44,789 --> 00:03:42,319  
as well as some other factors launching

105  
00:03:46,949 --> 00:03:44,799  
on time and and things of that nature we

106  
00:03:48,869 --> 00:03:46,959  
have a lot of cryo

107  
00:03:50,789 --> 00:03:48,879  
capability a lot of the

108  
00:03:53,110 --> 00:03:50,799  
uh the cryogenics that we use to power

109  
00:03:55,270 --> 00:03:53,120  
the fuel cells for the for the power

110  
00:03:57,190 --> 00:03:55,280  
on the vehicle um so from that

111  
00:03:58,630 --> 00:03:57,200  
consumable standpoint we're

112  
00:04:00,949 --> 00:03:58,640  
we've got more capability than we

113  
00:04:02,390 --> 00:04:00,959

thought we would have it into mission

114

00:04:04,869 --> 00:04:02,400

in our other consumables we have our

115

00:04:05,750 --> 00:04:04,879

standard plus three capabilities so we

116

00:04:07,589 --> 00:04:05,760

have

117

00:04:08,789 --> 00:04:07,599

three days beyond our planned and

118

00:04:11,190 --> 00:04:08,799

emission day

119

00:04:12,710 --> 00:04:11,200

in all of our consumables to include the

120

00:04:15,429 --> 00:04:12,720

cryogenics

121

00:04:17,509 --> 00:04:15,439

and as is usual o2 is our limiting

122

00:04:18,949 --> 00:04:17,519

consumable where the cryogenic is

123

00:04:22,069 --> 00:04:18,959

concerned and so

124

00:04:23,590 --> 00:04:22,079

um we have a lot of capability um

125

00:04:25,510 --> 00:04:23,600

the the entry flight director will be

126

00:04:27,270 --> 00:04:25,520

over here i think tomorrow in all

127

00:04:29,350 --> 00:04:27,280

likelihood tomorrow sometime he'll he'll

128

00:04:31,990 --> 00:04:29,360

talk to you

129

00:04:34,550 --> 00:04:32,000

maybe it's late tonight i don't know

130

00:04:36,150 --> 00:04:34,560

okay so 4 a.m in the morning

131

00:04:37,749 --> 00:04:36,160

he'll be here to talk to you in detail

132

00:04:38,629 --> 00:04:37,759

about the entry plan and he can give you

133

00:04:42,790 --> 00:04:38,639

the

134

00:04:44,870 --> 00:04:42,800

in general we have an emission what we

135

00:04:47,590 --> 00:04:44,880

call intermission plus three capability

136

00:04:50,070 --> 00:04:47,600

is which is uh three full days of of

137

00:04:52,310 --> 00:04:50,080

capability uh to extend beyond our

138

00:04:54,629 --> 00:04:52,320

planned intermission day if we if we

139

00:04:57,189 --> 00:04:54,639

should need it now um

140

00:04:59,030 --> 00:04:57,199

the plan that we talked about today

141

00:05:00,629 --> 00:04:59,040

is one whereby

142

00:05:02,469 --> 00:05:00,639

in all likelihood we'll be able to land

143

00:05:04,870 --> 00:05:02,479

on intermission at least from a weather

144

00:05:06,710 --> 00:05:04,880

standpoint if everything else holds up

145

00:05:08,070 --> 00:05:06,720

but if we're not able to

146

00:05:10,150 --> 00:05:08,080

then um

147

00:05:11,909 --> 00:05:10,160

then we would in all likelihood call up

148

00:05:13,510 --> 00:05:11,919

edwards and and try to land on

149

00:05:14,629 --> 00:05:13,520

intermission plus one it's been a long

150

00:05:17,590 --> 00:05:14,639

mission

151

00:05:20,550 --> 00:05:17,600

and um and we do like to uh

152

00:05:22,230 --> 00:05:20,560

um to factor in all of the other uh

153

00:05:24,629 --> 00:05:22,240

things that we think about for for

154

00:05:26,550 --> 00:05:24,639

mission duration and so it's unlikely

155

00:05:28,150 --> 00:05:26,560

that we would use anything beyond eon

156

00:05:29,749 --> 00:05:28,160

plus one

157

00:05:33,110 --> 00:05:29,759

we have the capability we always have

158

00:05:35,590 --> 00:05:33,120

that option we'll assess things as we go

159

00:05:37,510 --> 00:05:35,600

but the plan right now would be to land

160

00:05:45,909 --> 00:05:37,520

if not on intermission than

161

00:05:49,350 --> 00:05:47,830

denise childhood space.com i was just

162

00:05:50,950 --> 00:05:49,360

wondering if you could sum up the

163

00:05:52,870 --> 00:05:50,960

performance of endeavor on its final

164

00:05:56,790 --> 00:05:52,880

flight throughout the whole mission

165

00:05:58,710 --> 00:05:56,800

uh performance has been outstanding and

166

00:06:00,390 --> 00:05:58,720

you know we have been very fortunate

167

00:06:01,830 --> 00:06:00,400

because of the hard work of the of the

168

00:06:03,350 --> 00:06:01,840

teams on the ground to prepare these

169

00:06:05,909 --> 00:06:03,360

vehicles

170

00:06:08,070 --> 00:06:05,919

i think you know when i think back to

171

00:06:09,430 --> 00:06:08,080

the last couple of years really of

172

00:06:11,189 --> 00:06:09,440

missions we've been

173

00:06:14,230 --> 00:06:11,199

we've been extremely fortunate with the

174

00:06:16,230 --> 00:06:14,240

performance of the vehicles on orbit

175

00:06:17,590 --> 00:06:16,240

and and certainly this has been no

176  
00:06:19,670 --> 00:06:17,600  
exception

177  
00:06:22,150 --> 00:06:19,680  
it's difficult to say

178  
00:06:24,629 --> 00:06:22,160  
whether this has been you know the very

179  
00:06:27,350 --> 00:06:24,639  
best performance of endeavor on orbit in

180  
00:06:29,350 --> 00:06:27,360  
terms of numbers of system anomalies and

181  
00:06:32,070 --> 00:06:29,360  
things of the like i don't know that i

182  
00:06:33,749 --> 00:06:32,080  
could say that but it's not because

183  
00:06:36,309 --> 00:06:33,759  
i it's not because it's not true it's

184  
00:06:38,230 --> 00:06:36,319  
because i just haven't sat down and put

185  
00:06:41,430 --> 00:06:38,240  
the mission side by side in that level

186  
00:06:43,189 --> 00:06:41,440  
of detail but certainly from a macro

187  
00:06:44,629 --> 00:06:43,199  
scale standpoint

188  
00:06:47,029 --> 00:06:44,639

the performance has been nothing short

189

00:06:48,950 --> 00:06:47,039

of just outstanding and of course we

190

00:06:52,230 --> 00:06:48,960

have some really important

191

00:06:53,670 --> 00:06:52,240

uh milestones remaining you know tonight

192

00:06:55,589 --> 00:06:53,680

when the crew gets up they'll do their

193

00:06:57,510 --> 00:06:55,599

normal end emission minus one activities

194

00:06:58,629 --> 00:06:57,520

which will include powering on a lot of

195

00:07:01,029 --> 00:06:58,639

the entry

196

00:07:03,110 --> 00:07:01,039

and landing systems to check them out

197

00:07:04,469 --> 00:07:03,120

and i'm quite sure they'll all work just

198

00:07:06,150 --> 00:07:04,479

fine

199

00:07:07,749 --> 00:07:06,160

but there's uh

200

00:07:10,790 --> 00:07:07,759

you know still some milestones ahead of

201

00:07:12,550 --> 00:07:10,800

us where we're um

202

00:07:14,870 --> 00:07:12,560

you know we've got to continue to stay

203

00:07:18,309 --> 00:07:14,880

focused and and continue to be able to

204

00:07:20,070 --> 00:07:18,319

to to deal with things as they come

205

00:07:22,150 --> 00:07:20,080

but the performance

206

00:07:23,749 --> 00:07:22,160

up till now in this mission for for the

207

00:07:24,790 --> 00:07:23,759

flying alone part as well as the dock

208

00:07:30,790 --> 00:07:24,800

part of the mission has just been

209

00:07:35,270 --> 00:07:33,350

hi robert palman with collectspace.com

210

00:07:38,390 --> 00:07:35,280

um realizing that a couple of days ago

211

00:07:41,110 --> 00:07:38,400

the mmt cleared endeavour's

212

00:07:43,029 --> 00:07:41,120

heat shield uh was there anything in the

213

00:07:44,390 --> 00:07:43,039

srb video or anything that you reviewed

214

00:07:47,270 --> 00:07:44,400

that's going to give you

215

00:07:49,589 --> 00:07:47,280

anything to look at before atlantis or

216

00:07:51,670 --> 00:07:49,599

in the in the pad flow

217

00:07:53,909 --> 00:07:51,680

up to atlantis launch that you need to

218

00:07:55,670 --> 00:07:53,919

review

219

00:07:57,589 --> 00:07:55,680

there is some data robert that we'll

220

00:07:59,589 --> 00:07:57,599

look at as a matter of course as we go

221

00:08:02,230 --> 00:07:59,599

through our post flight reviews we have

222

00:08:03,670 --> 00:08:02,240

a couple of areas where we've identified

223

00:08:05,350 --> 00:08:03,680

some things in video that we want to

224

00:08:07,350 --> 00:08:05,360

take a closer look at to identify

225

00:08:08,710 --> 00:08:07,360

exactly what is it when did it come off

226

00:08:10,469 --> 00:08:08,720

where did it come off of what what is

227

00:08:13,990 --> 00:08:10,479

the debris source is it an issue for the

228

00:08:16,469 --> 00:08:14,000

next tank was it specific to this et-122

229

00:08:19,270 --> 00:08:16,479

katrina tank kind of performance

230

00:08:21,670 --> 00:08:19,280

uh we got to look at all that and um and

231

00:08:23,830 --> 00:08:21,680

we're just in the in the early stages of

232

00:08:24,629 --> 00:08:23,840

doing that most of the team is

233

00:08:27,110 --> 00:08:24,639

um

234

00:08:28,950 --> 00:08:27,120

is focused of course uh on on the

235

00:08:30,950 --> 00:08:28,960

endeavor mission uh until we get her

236

00:08:32,630 --> 00:08:30,960

landed and then uh but we do have some

237

00:08:34,389 --> 00:08:32,640

folks off looking ahead

238

00:08:36,230 --> 00:08:34,399

um to include some of the propulsion

239

00:08:38,469 --> 00:08:36,240

elements and uh

240

00:08:40,389 --> 00:08:38,479

and so we'll have some review of all of

241

00:08:42,389 --> 00:08:40,399

that data frankly we'll have our normal

242

00:08:45,110 --> 00:08:42,399

review of all of that data in our normal

243

00:08:48,710 --> 00:08:45,120

post flight review activities

244

00:08:51,110 --> 00:08:48,720

and so i don't see anything

245

00:08:53,750 --> 00:08:51,120

that's poking out right now that gives

246

00:08:54,870 --> 00:08:53,760

me great concern in that regard

247

00:08:56,150 --> 00:08:54,880

but again

248

00:08:58,710 --> 00:08:56,160

you know it's usually not till we get

249

00:08:59,990 --> 00:08:58,720

the wheels on the ground and and and we

250

00:09:01,030 --> 00:09:00,000

really

251  
00:09:04,389 --> 00:09:01,040  
put more

252  
00:09:06,470 --> 00:09:04,399  
of our focus on the next mission

253  
00:09:08,630 --> 00:09:06,480  
before we can say with any

254  
00:09:09,990 --> 00:09:08,640  
uh with any great detail or confidence

255  
00:09:11,590 --> 00:09:10,000  
that uh

256  
00:09:12,870 --> 00:09:11,600  
you know that that all those reviews are

257  
00:09:15,750 --> 00:09:12,880  
complete so

258  
00:09:17,829 --> 00:09:15,760  
uh that's forward workforce

259  
00:09:23,030 --> 00:09:17,839  
okay any more questions here

260  
00:09:28,550 --> 00:09:26,070  
thanks mark caro for aviation week

261  
00:09:32,550 --> 00:09:28,560  
i wonder if if you might

262  
00:09:35,030 --> 00:09:32,560  
review some of the dates ahead for

263  
00:09:37,269 --> 00:09:35,040

135 milestones like the dates for the

264

00:09:39,430 --> 00:09:37,279

tanking test and the flight readiness

265

00:09:41,269 --> 00:09:39,440

reviews if you have them handy i don't

266

00:09:42,790 --> 00:09:41,279

know

267

00:09:47,829 --> 00:09:42,800

um

268

00:09:50,470 --> 00:09:47,839

we we have our no earlier than launch

269

00:09:51,990 --> 00:09:50,480

date that at least for planning purposes

270

00:09:53,990 --> 00:09:52,000

of july 8th

271

00:09:55,910 --> 00:09:54,000

and so we typically back up from that to

272

00:09:57,269 --> 00:09:55,920

set our our flight readiness review date

273

00:09:59,430 --> 00:09:57,279

which today

274

00:10:01,350 --> 00:09:59,440

is uh june 28th

275

00:10:04,550 --> 00:10:01,360

and a week prior to that we'll do our

276

00:10:06,550 --> 00:10:04,560

shuttle program flight readiness review

277

00:10:11,430 --> 00:10:06,560

in between there i believe we're doing

278

00:10:15,269 --> 00:10:12,949

and so

279

00:10:17,110 --> 00:10:15,279

we've got some some work to do between

280

00:10:20,069 --> 00:10:17,120

now and then obviously

281

00:10:21,430 --> 00:10:20,079

um there's also a um

282

00:10:23,509 --> 00:10:21,440

actually that's not right i think the

283

00:10:25,590 --> 00:10:23,519

23rd i better not give you those dates

284

00:10:27,269 --> 00:10:25,600

because i'm not 100 sure

285

00:10:29,670 --> 00:10:27,279

i was about to correct myself and say i

286

00:10:31,750 --> 00:10:29,680

think that the tc dt

287

00:10:33,430 --> 00:10:31,760

is the 15th and the tanki test is the

288

00:10:35,590 --> 00:10:33,440

23rd but

289

00:10:38,069 --> 00:10:35,600

for sure the fr is the 28th

290

00:10:40,389 --> 00:10:38,079

the the targeted launch date is july 8th

291

00:10:42,949 --> 00:10:40,399

we do have the tcdt and the tanking test

292

00:10:45,030 --> 00:10:42,959

and the post tanking test activities

293

00:10:47,110 --> 00:10:45,040

penciled in the timeline but most of the

294

00:10:48,470 --> 00:10:47,120

numbers i have jammed into my brain

295

00:10:50,150 --> 00:10:48,480

right now are associated with the

296

00:10:52,710 --> 00:10:50,160

mission that we have on orbit

297

00:10:55,350 --> 00:10:52,720

um but we we have those dates mark and

298

00:10:56,790 --> 00:10:55,360

we can get those to you

299

00:10:58,230 --> 00:10:56,800

we'll go to the questions on the phone

300

00:11:11,509 --> 00:10:58,240

bridge we'll start with genus and sari

301  
00:11:11,519 --> 00:11:19,269  
okay we'll try jim oberg next

302  
00:11:19,279 --> 00:11:26,069  
jim are you on the line

303  
00:11:28,949 --> 00:11:27,030  
go ahead

304  
00:11:30,630 --> 00:11:28,959  
i'm wondering if we have any uh mirror

305  
00:11:32,389 --> 00:11:30,640  
if you have any update from outside

306  
00:11:35,269 --> 00:11:32,399  
about the status of the

307  
00:11:37,590 --> 00:11:35,279  
soyuz back out pictures you got the uh

308  
00:11:39,509 --> 00:11:37,600  
shuttle pictures of the iss but we're

309  
00:11:42,150 --> 00:11:39,519  
still waiting for the soyuz pictures of

310  
00:11:44,710 --> 00:11:42,160  
the iss

311  
00:11:46,550 --> 00:11:44,720  
yeah jim uh we're all pretty excited to

312  
00:11:47,590 --> 00:11:46,560  
see him i hope we get to see him sooner

313  
00:11:49,670 --> 00:11:47,600

than later

314

00:11:52,470 --> 00:11:49,680

the last i heard was we should expect

315

00:11:55,190 --> 00:11:52,480

them uh not earlier than june sixth

316

00:11:57,670 --> 00:11:55,200

and um i suppose uh there's there's an

317

00:11:59,750 --> 00:11:57,680

outside chance we may get uh a sneak

318

00:12:01,269 --> 00:11:59,760

preview of them before that but uh but i

319

00:12:07,670 --> 00:12:01,279

don't have any better intelligence for

320

00:12:07,680 --> 00:12:11,430

do you have another

321

00:12:15,509 --> 00:12:13,750

irene klotz next

322

00:12:18,470 --> 00:12:15,519

hi um thanks very much can you hear me

323

00:12:23,430 --> 00:12:20,230

can you hear me all right go ahead

324

00:12:25,269 --> 00:12:23,440

oh thanks very much um leroy a year ago

325

00:12:27,269 --> 00:12:25,279

you know nasa was preparing to end the

326

00:12:29,910 --> 00:12:27,279

shuttle program after this mission if

327

00:12:31,910 --> 00:12:29,920

funding for 135 didn't come through and

328

00:12:33,590 --> 00:12:31,920

i know uh they're still landing ahead

329

00:12:35,670 --> 00:12:33,600

and you guys are still really deep in

330

00:12:37,110 --> 00:12:35,680

the day-to-day but i was wondering if

331

00:12:39,350 --> 00:12:37,120

you might be able to just take a step

332

00:12:40,870 --> 00:12:39,360

back for a minute and

333

00:12:43,110 --> 00:12:40,880

share any thoughts or feelings you might

334

00:12:46,310 --> 00:12:43,120

have about the imminent shutdown of this

335

00:12:49,350 --> 00:12:47,910

okay irene

336

00:12:50,829 --> 00:12:49,360

um

337

00:12:55,030 --> 00:12:50,839

you know the

338

00:12:57,750 --> 00:12:55,040

the it's interesting the dynamics of of

339

00:12:59,509 --> 00:12:57,760

things as as you come

340

00:13:01,430 --> 00:12:59,519

toward the end of in this case the

341

00:13:02,870 --> 00:13:01,440

shuttle program um

342

00:13:05,829 --> 00:13:02,880

we've been through a lot in the last few

343

00:13:08,470 --> 00:13:05,839

years that the planning i think has been

344

00:13:11,509 --> 00:13:08,480

has been outstanding the teams have the

345

00:13:13,910 --> 00:13:11,519

execution has been um i think our

346

00:13:15,750 --> 00:13:13,920

greatest achievement in terms of

347

00:13:17,590 --> 00:13:15,760

being able to actually

348

00:13:18,949 --> 00:13:17,600

uh follow through on the plans that we

349

00:13:21,509 --> 00:13:18,959

put forward and then you know because

350

00:13:23,990 --> 00:13:21,519

execution involves being able to

351

00:13:25,509 --> 00:13:24,000

to adjust to things when they come up

352

00:13:27,110 --> 00:13:25,519

things that you expect as well as things

353

00:13:28,790 --> 00:13:27,120

you don't expect and

354

00:13:31,190 --> 00:13:28,800

and you have to have some flexibility

355

00:13:32,310 --> 00:13:31,200

and you have to really stay within

356

00:13:33,829 --> 00:13:32,320

yourselves

357

00:13:35,190 --> 00:13:33,839

and your processes to be able to move

358

00:13:36,790 --> 00:13:35,200

forward and do it safely and i think

359

00:13:38,310 --> 00:13:36,800

we've done that i think you know we said

360

00:13:39,829 --> 00:13:38,320

a couple years ago

361

00:13:41,590 --> 00:13:39,839

certainly within the last year that you

362

00:13:43,750 --> 00:13:41,600

mentioned we've talked a lot about

363

00:13:46,389 --> 00:13:43,760

finishing strong and and we've been very

364

00:13:47,990 --> 00:13:46,399

determined as a team to do that and

365

00:13:49,590 --> 00:13:48,000

the last mission of discovery i think

366

00:13:51,670 --> 00:13:49,600

you saw that i think you're seeing it

367

00:13:53,750 --> 00:13:51,680

play out here with endeavor

368

00:13:56,069 --> 00:13:53,760

um i'm quite confident you'll see it uh

369

00:13:57,590 --> 00:13:56,079

when we go fly atlantis in july

370

00:13:59,670 --> 00:13:57,600

and i just couldn't be more proud of the

371

00:14:01,030 --> 00:13:59,680

team in terms of how they they've come

372

00:14:02,870 --> 00:14:01,040

through

373

00:14:03,590 --> 00:14:02,880

on plan

374

00:14:06,069 --> 00:14:03,600

and

375

00:14:08,550 --> 00:14:06,079

on plan being

376  
00:14:10,629 --> 00:14:08,560  
to finish strong the details always

377  
00:14:12,470 --> 00:14:10,639  
change and so

378  
00:14:14,949 --> 00:14:12,480  
the flexibility and

379  
00:14:16,870 --> 00:14:14,959  
and uh and resilience of the team is is

380  
00:14:18,230 --> 00:14:16,880  
i think what really stands out

381  
00:14:19,269 --> 00:14:18,240  
um

382  
00:14:21,430 --> 00:14:19,279  
you know

383  
00:14:23,430 --> 00:14:21,440  
with respect to shutdown and and talking

384  
00:14:24,550 --> 00:14:23,440  
about lasts and and all of that we've

385  
00:14:25,910 --> 00:14:24,560  
talked a great deal about all these

386  
00:14:29,189 --> 00:14:25,920  
things i think we've talked about those

387  
00:14:32,230 --> 00:14:29,199  
things and and and rightfully so um and

388  
00:14:33,590 --> 00:14:32,240

we've given uh the uh

389

00:14:35,110 --> 00:14:33,600

i think we've given the right level of

390

00:14:36,870 --> 00:14:35,120

detail and attention

391

00:14:39,430 --> 00:14:36,880

and and respect

392

00:14:41,430 --> 00:14:39,440

um and uh reverence to to the things

393

00:14:44,790 --> 00:14:41,440

that that we should as we go along and

394

00:14:46,710 --> 00:14:44,800

and and we have some very important um

395

00:14:47,509 --> 00:14:46,720

and historic milestones

396

00:14:50,069 --> 00:14:47,519

um

397

00:14:52,150 --> 00:14:50,079

what i would say about all that is

398

00:14:54,870 --> 00:14:52,160

is we're very much

399

00:14:55,750 --> 00:14:54,880

looking forward to some firsts

400

00:14:57,829 --> 00:14:55,760

and

401  
00:14:59,350 --> 00:14:57,839  
in other words

402  
00:15:00,870 --> 00:14:59,360  
we've known for a while that the last

403  
00:15:02,949 --> 00:15:00,880  
were coming

404  
00:15:05,110 --> 00:15:02,959  
we all understand that and and we're

405  
00:15:06,870 --> 00:15:05,120  
dealing with that and we're certainly

406  
00:15:09,030 --> 00:15:06,880  
executing and we're going to execute to

407  
00:15:09,829 --> 00:15:09,040  
the end

408  
00:15:12,069 --> 00:15:09,839  
but

409  
00:15:14,069 --> 00:15:12,079  
you know in my mind last also means

410  
00:15:15,189 --> 00:15:14,079  
first if if you're doing the last of

411  
00:15:18,150 --> 00:15:15,199  
something you're getting ready to do the

412  
00:15:20,949 --> 00:15:18,160  
first of something else and and i think

413  
00:15:24,230 --> 00:15:20,959

it's really important for us to

414

00:15:25,509 --> 00:15:24,240

to um to transition here um

415

00:15:30,069 --> 00:15:25,519

to

416

00:15:31,430 --> 00:15:30,079

is really um

417

00:15:33,350 --> 00:15:31,440

what a lot of folks are looking forward

418

00:15:35,430 --> 00:15:33,360

to and getting excited about there's

419

00:15:37,030 --> 00:15:35,440

opportunity um

420

00:15:38,629 --> 00:15:37,040

there's uh

421

00:15:41,110 --> 00:15:38,639

possibility

422

00:15:44,150 --> 00:15:41,120

um there's change

423

00:15:48,230 --> 00:15:44,160

and and those things are for every bit

424

00:15:50,310 --> 00:15:48,240

as as as scary and uncertain and

425

00:15:51,590 --> 00:15:50,320

um you know perhaps

426  
00:15:52,790 --> 00:15:51,600  
you know people head into those things

427  
00:15:54,230 --> 00:15:52,800  
with a little bit of trepidation for

428  
00:15:56,230 --> 00:15:54,240  
every bit as much as they are those

429  
00:15:57,990 --> 00:15:56,240  
things they're exciting

430  
00:15:59,749 --> 00:15:58,000  
and so

431  
00:16:02,790 --> 00:15:59,759  
that's what i'm beginning to think about

432  
00:16:05,430 --> 00:16:02,800  
irene when i think of of last is is more

433  
00:16:07,910 --> 00:16:05,440  
about first and about new and about

434  
00:16:10,550 --> 00:16:07,920  
moving forward and about what can we do

435  
00:16:12,389 --> 00:16:10,560  
next and about you know

436  
00:16:13,670 --> 00:16:12,399  
while we're recognizing what we've done

437  
00:16:16,310 --> 00:16:13,680  
with the shuttle

438  
00:16:18,629 --> 00:16:16,320

and and certainly it's it's more than

439

00:16:20,629 --> 00:16:18,639

than uh you know we could talk about for

440

00:16:22,870 --> 00:16:20,639

hours and hours and hours and and we

441

00:16:23,749 --> 00:16:22,880

should continue to do that and i know we

442

00:16:25,910 --> 00:16:23,759

will

443

00:16:28,069 --> 00:16:25,920

and we've chronicled those things and we

444

00:16:29,910 --> 00:16:28,079

should continue to do that and we will

445

00:16:32,150 --> 00:16:29,920

finish strong we'll finish this mission

446

00:16:36,470 --> 00:16:32,160

strong we'll finish the atlantis mission

447

00:16:38,389 --> 00:16:36,480

strong and as a program we will finish

448

00:16:40,470 --> 00:16:38,399

very strong i'm confident of that we've

449

00:16:42,790 --> 00:16:40,480

said that before

450

00:16:45,030 --> 00:16:42,800

and as we go forward

451  
00:16:46,150 --> 00:16:45,040  
we're going to we're going to transition

452  
00:16:47,829 --> 00:16:46,160  
here

453  
00:16:49,590 --> 00:16:47,839  
from last to first

454  
00:16:51,030 --> 00:16:49,600  
and and i think that's important for

455  
00:16:54,069 --> 00:16:51,040  
people to think about it that way and i

456  
00:16:56,790 --> 00:16:54,079  
think it's important for us to start to

457  
00:16:59,670 --> 00:16:56,800  
to have that in our dialogue because

458  
00:17:02,150 --> 00:16:59,680  
um that is where the excitement is

459  
00:17:03,749 --> 00:17:02,160  
generated from and and that is what i

460  
00:17:05,909 --> 00:17:03,759  
know i'm thinking about and and the

461  
00:17:07,909 --> 00:17:05,919  
folks that i that i work with day in and

462  
00:17:11,270 --> 00:17:07,919  
day out are are excited to look forward

463  
00:17:13,350 --> 00:17:11,280

so that's where i'm putting my emphasis

464

00:17:15,350 --> 00:17:13,360

thanks library for the thoughtful answer

465

00:17:17,909 --> 00:17:15,360

um the other question i had was just on

466

00:17:18,789 --> 00:17:17,919

4135 is there anything that you know of

467

00:17:21,110 --> 00:17:18,799

now

468

00:17:23,510 --> 00:17:21,120

that is going to be added or has been

469

00:17:28,309 --> 00:17:23,520

requested to be added to the manifest

470

00:17:29,750 --> 00:17:28,319

following the 134 mission thanks

471

00:17:31,350 --> 00:17:29,760

well there have been a couple things

472

00:17:32,870 --> 00:17:31,360

come up

473

00:17:34,870 --> 00:17:32,880

as during the course of this docked

474

00:17:36,310 --> 00:17:34,880

mission irene and and those are the only

475

00:17:38,070 --> 00:17:36,320

things that we've talked about that are

476

00:17:39,590 --> 00:17:38,080

new that i'm aware of

477

00:17:41,190 --> 00:17:39,600

and so once we get the wheels on the

478

00:17:42,549 --> 00:17:41,200

ground here and we pull our heads up and

479

00:17:45,430 --> 00:17:42,559

we get into the flight readiness review

480

00:17:47,190 --> 00:17:45,440

process for 135 for atlantis

481

00:17:50,390 --> 00:17:47,200

we'll review in more detail and there

482

00:17:52,390 --> 00:17:50,400

may be a few things here and there

483

00:17:54,549 --> 00:17:52,400

that were perhaps going to be

484

00:17:55,830 --> 00:17:54,559

manifested or de-manifested

485

00:17:58,070 --> 00:17:55,840

two things from this mission from the

486

00:18:00,549 --> 00:17:58,080

dock phase we talked about one is uh is

487

00:18:02,230 --> 00:18:00,559

a one of the uh one of the bags of water

488

00:18:04,630 --> 00:18:02,240

one of the cwc's

489

00:18:07,190 --> 00:18:04,640

and so there's a there's a plan in work

490

00:18:10,150 --> 00:18:07,200

to try and bring back uh another one on

491

00:18:12,470 --> 00:18:10,160

the in the mplm on 135. another one is a

492

00:18:14,230 --> 00:18:12,480

grapple fixture that that we're leaving

493

00:18:15,909 --> 00:18:14,240

behind here and we may we may end up

494

00:18:19,510 --> 00:18:15,919

bringing it back in the

495

00:18:22,230 --> 00:18:19,520

in the mplm as well on sts-135 so

496

00:18:23,669 --> 00:18:22,240

those are two notable items and then uh

497

00:18:25,350 --> 00:18:23,679

there will always be other puts and

498

00:18:26,870 --> 00:18:25,360

takes to the manifest between now and

499

00:18:28,870 --> 00:18:26,880

the next

500

00:18:30,310 --> 00:18:28,880

week or two where the mplm is concerned

501  
00:18:33,590 --> 00:18:30,320  
and then maybe a little bit beyond that

502  
00:18:40,710 --> 00:18:35,830  
thank you okay next on the line is bill

503  
00:18:40,720 --> 00:18:44,950  
bill are you still there

504  
00:18:44,960 --> 00:18:48,789  
we'll try james dean please

505  
00:18:52,470 --> 00:18:51,029  
thanks very much james dean from florida

506  
00:18:53,909 --> 00:18:52,480  
today i have a few questions first just

507  
00:18:55,909 --> 00:18:53,919  
a quick one leroy on the weather you

508  
00:18:57,350 --> 00:18:55,919  
sound pretty confident about getting

509  
00:18:58,950 --> 00:18:57,360  
down on eom

510  
00:19:00,390 --> 00:18:58,960  
um i just wonder is that because the the

511  
00:19:02,070 --> 00:19:00,400  
crosswinds that we're now seeing as a

512  
00:19:07,110 --> 00:19:02,080  
violation are

513  
00:19:11,270 --> 00:19:09,430

well the yeah james the the

514

00:19:14,390 --> 00:19:11,280

the weather briefing today was uh was

515

00:19:15,669 --> 00:19:14,400

pretty good um and and

516

00:19:17,350 --> 00:19:15,679

again the entry flight director will

517

00:19:19,270 --> 00:19:17,360

give you all the details associated

518

00:19:23,110 --> 00:19:19,280

around that my takeaway from the weather

519

00:19:24,789 --> 00:19:23,120

briefing was that um there the uh the

520

00:19:26,710 --> 00:19:24,799

feature that's setting up

521

00:19:28,070 --> 00:19:26,720

pretty much in in the next 24 hours here

522

00:19:29,510 --> 00:19:28,080

is one that's going to cause the winds

523

00:19:32,710 --> 00:19:29,520

to be out of the east and it's and

524

00:19:34,789 --> 00:19:32,720

they're going to be blowing a little bit

525

00:19:36,150 --> 00:19:34,799

but in all likelihood probably if

526

00:19:37,990 --> 00:19:36,160

they're around our limits they're not

527

00:19:39,990 --> 00:19:38,000

going to be really above them or much

528

00:19:40,789 --> 00:19:40,000

above them

529

00:19:43,990 --> 00:19:40,799

and

530

00:19:45,830 --> 00:19:44,000

know the second opportunity looks like

531

00:19:46,870 --> 00:19:45,840

it might be a little bit better so

532

00:19:49,190 --> 00:19:46,880

um

533

00:19:51,029 --> 00:19:49,200

primarily my confidence

534

00:19:52,549 --> 00:19:51,039

in in the intermission weather at this

535

00:19:54,470 --> 00:19:52,559

point is it's night time it's usually

536

00:19:56,710 --> 00:19:54,480

not that windy at night even when a

537

00:19:59,110 --> 00:19:56,720

feature like this sets up a lot of times

538

00:20:00,710 --> 00:19:59,120

we're able to

539

00:20:02,070 --> 00:20:00,720

if not the first opportunity the second

540

00:20:03,190 --> 00:20:02,080

opportunity when things die down a

541

00:20:05,110 --> 00:20:03,200

little bit

542

00:20:07,350 --> 00:20:05,120

we're able to make it work out and and

543

00:20:09,430 --> 00:20:07,360

if not that's perfectly fine it's in the

544

00:20:10,710 --> 00:20:09,440

mission day we do our best to try to get

545

00:20:13,110 --> 00:20:10,720

into ksc

546

00:20:15,590 --> 00:20:13,120

um there's no reason to to push things

547

00:20:17,830 --> 00:20:15,600

and and and i know that uh

548

00:20:19,350 --> 00:20:17,840

that the team will look at at uh

549

00:20:22,470 --> 00:20:19,360

possibly going around to the next day

550

00:20:24,549 --> 00:20:22,480

depending on on what cards were dealt so

551

00:20:26,549 --> 00:20:24,559

but overall as far as weather forecasts

552

00:20:28,789 --> 00:20:26,559

go it's pretty good

553

00:20:30,950 --> 00:20:28,799

and it's a good time of day slash night

554

00:20:33,430 --> 00:20:30,960

i guess very very early in the morning

555

00:20:35,590 --> 00:20:33,440

in florida generally a good time to to

556

00:20:37,190 --> 00:20:35,600

try to get in in terms of

557

00:20:39,029 --> 00:20:37,200

of weather so it looks pretty good

558

00:20:40,789 --> 00:20:39,039

overall

559

00:20:42,470 --> 00:20:40,799

thanks and so if it does work out i

560

00:20:45,830 --> 00:20:42,480

assume that that you'll be there and

561

00:20:48,149 --> 00:20:45,840

just wondered um if you could comment on

562

00:20:51,110 --> 00:20:48,159

kind of that special coincidence i guess

563

00:20:53,590 --> 00:20:51,120

of atlantis rolling out at the same time

564

00:20:55,510 --> 00:20:53,600

and um

565

00:20:57,110 --> 00:20:55,520

following up on irene's question you

566

00:20:59,110 --> 00:20:57,120

know what do you think that'll what do

567

00:21:01,350 --> 00:20:59,120

you think the tenor of the space center

568

00:21:03,669 --> 00:21:01,360

will be uh as that's all unfolding will

569

00:21:07,110 --> 00:21:03,679

it be a happier sad

570

00:21:10,549 --> 00:21:08,789

well let's see first of all yeah it was

571

00:21:13,029 --> 00:21:10,559

really nice of

572

00:21:14,870 --> 00:21:13,039

of our ksc team members to to schedule

573

00:21:17,029 --> 00:21:14,880

things so that we could

574

00:21:18,630 --> 00:21:17,039

we could be uh we could be there at the

575

00:21:21,029 --> 00:21:18,640

same time as uh

576

00:21:22,630 --> 00:21:21,039

as atlantis rollout so for anybody that

577

00:21:24,789 --> 00:21:22,640

can be there in the evening before

578

00:21:26,070 --> 00:21:24,799

landing uh before endeavors landing on

579

00:21:28,870 --> 00:21:26,080

wednesday morning

580

00:21:31,430 --> 00:21:28,880

you'll be able to uh to witness uh

581

00:21:33,190 --> 00:21:31,440

roll out to the launch pad of atlantis

582

00:21:35,350 --> 00:21:33,200

weather permitting which again we have a

583

00:21:37,750 --> 00:21:35,360

good forecast it sounds like it will be

584

00:21:39,990 --> 00:21:37,760

a good night for a rollout as well so

585

00:21:41,669 --> 00:21:40,000

we very much appreciate that um and of

586

00:21:43,029 --> 00:21:41,679

course i'm i'm kidding a little bit

587

00:21:44,149 --> 00:21:43,039

because the schedule is not driven

588

00:21:45,990 --> 00:21:44,159

doesn't have anything to do with my

589

00:21:48,390 --> 00:21:46,000

schedule and or anybody else's for that

590

00:21:50,710 --> 00:21:48,400

matter we go when we're ready obviously

591

00:21:53,110 --> 00:21:50,720

um but that'll be nice it'll be exciting

592

00:21:54,950 --> 00:21:53,120

it'll be an opportunity for the team to

593

00:21:59,350 --> 00:21:54,960

uh to see two

594

00:22:00,870 --> 00:21:59,360

large uh you know vehicle milestones one

595

00:22:02,230 --> 00:22:00,880

obviously with getting atlantis out to

596

00:22:04,310 --> 00:22:02,240

the launch pad and then and then

597

00:22:06,390 --> 00:22:04,320

following that up just a few short hours

598

00:22:08,470 --> 00:22:06,400

later with hopefully uh landing on the

599

00:22:10,549 --> 00:22:08,480

first opportunity at kc

600

00:22:12,789 --> 00:22:10,559

of endeavour so

601  
00:22:15,110 --> 00:22:12,799  
i you know the tenor will be excitement

602  
00:22:16,789 --> 00:22:15,120  
james um folks get really excited about

603  
00:22:19,430 --> 00:22:16,799  
these things as well they should they

604  
00:22:20,950 --> 00:22:19,440  
work really hard to get to this point on

605  
00:22:22,630 --> 00:22:20,960  
any one of these

606  
00:22:25,029 --> 00:22:22,640  
you know in the case of atlantis to get

607  
00:22:27,350 --> 00:22:25,039  
to this point in the flow of atlantis

608  
00:22:29,270 --> 00:22:27,360  
obviously this is huge because it's uh

609  
00:22:30,310 --> 00:22:29,280  
you know the final rollout of of

610  
00:22:32,070 --> 00:22:30,320  
atlantis

611  
00:22:34,070 --> 00:22:32,080  
to the launch pad and and a lot of

612  
00:22:35,110 --> 00:22:34,080  
excitement around that

613  
00:22:37,270 --> 00:22:35,120

um

614

00:22:40,549 --> 00:22:37,280

you know sadness i people deal with

615

00:22:42,950 --> 00:22:40,559

these things in their own ways and so

616

00:22:43,909 --> 00:22:42,960

i would expect overwhelmingly though the

617

00:22:45,590 --> 00:22:43,919

the air

618

00:22:46,789 --> 00:22:45,600

and the and the

619

00:22:49,029 --> 00:22:46,799

overall

620

00:22:51,750 --> 00:22:49,039

um you know tenor of the thing to be a

621

00:22:53,350 --> 00:22:51,760

lot of a lot of excitement

622

00:22:55,669 --> 00:22:53,360

and and again

623

00:22:57,830 --> 00:22:55,679

folks realizing that uh what we're doing

624

00:22:59,190 --> 00:22:57,840

here is really important it's been it's

625

00:23:01,590 --> 00:22:59,200

been um

626

00:23:03,990 --> 00:23:01,600

in some ways it's it's been historically

627

00:23:05,110 --> 00:23:04,000

it will it will be very important in

628

00:23:06,149 --> 00:23:05,120

many ways

629

00:23:07,029 --> 00:23:06,159

um

630

00:23:08,549 --> 00:23:07,039

but

631

00:23:10,630 --> 00:23:08,559

at the same time really looking forward

632

00:23:12,470 --> 00:23:10,640

to what what we're about

633

00:23:14,870 --> 00:23:12,480

as an agency and what we're about as a

634

00:23:16,710 --> 00:23:14,880

nation in terms of moving forward and

635

00:23:17,750 --> 00:23:16,720

and having a lot of excitement and and

636

00:23:19,510 --> 00:23:17,760

uh

637

00:23:22,310 --> 00:23:19,520

um

638

00:23:25,590 --> 00:23:22,320

about that and and being able to to look

639

00:23:27,590 --> 00:23:25,600

forward to to what's next

640

00:23:29,029 --> 00:23:27,600

thanks very much and then lastly i just

641

00:23:31,590 --> 00:23:29,039

want to ask you um

642

00:23:34,230 --> 00:23:31,600

you discussed how endeavor has left the

643

00:23:37,750 --> 00:23:34,240

station and in very good shape and just

644

00:23:41,190 --> 00:23:37,760

wondered if he could look ahead again to

645

00:23:43,350 --> 00:23:41,200

135 and and just sort of explain how

646

00:23:45,190 --> 00:23:43,360

that mission picks up from where

647

00:23:46,390 --> 00:23:45,200

endeavour left off

648

00:23:48,789 --> 00:23:46,400

in terms of

649

00:23:51,669 --> 00:23:48,799

you know patients long-term uh

650

00:23:52,549 --> 00:23:51,679

sustainability and operation

651  
00:23:54,710 --> 00:23:52,559  
sure

652  
00:23:58,310 --> 00:23:54,720  
the um you know we

653  
00:24:00,549 --> 00:23:58,320  
we put kind of the final uh assembly

654  
00:24:02,630 --> 00:24:00,559  
pieces if you will um

655  
00:24:04,470 --> 00:24:02,640  
the large pieces on the station at least

656  
00:24:05,669 --> 00:24:04,480  
from a shuttle station assembly

657  
00:24:10,149 --> 00:24:05,679  
standpoint

658  
00:24:12,470 --> 00:24:10,159  
uh with uh with ams and the elc-3

659  
00:24:14,149 --> 00:24:12,480  
and then we even gave station our our

660  
00:24:16,870 --> 00:24:14,159  
orbiter our

661  
00:24:19,029 --> 00:24:16,880  
our boom system sensor system

662  
00:24:21,510 --> 00:24:19,039  
and so we won't be leaving any other

663  
00:24:23,669 --> 00:24:21,520

large pieces behind when when we uh when

664

00:24:25,590 --> 00:24:23,679

we come up with atlantis obviously we

665

00:24:26,390 --> 00:24:25,600

have the mplm and the associated cargo

666

00:24:28,870 --> 00:24:26,400

in it

667

00:24:30,549 --> 00:24:28,880

that uh we'll haul up and unload and

668

00:24:32,149 --> 00:24:30,559

then we'll we'll repack it with some

669

00:24:35,029 --> 00:24:32,159

things we're going to bring home it'll

670

00:24:36,710 --> 00:24:35,039

be very much a logistics kind of mission

671

00:24:38,710 --> 00:24:36,720

uh the last opportunity for the shuttle

672

00:24:40,470 --> 00:24:38,720

to do that for the space station

673

00:24:42,149 --> 00:24:40,480

and so the missions are different in

674

00:24:43,430 --> 00:24:42,159

that regard

675

00:24:45,750 --> 00:24:43,440

neither one is more important than the

676

00:24:47,430 --> 00:24:45,760

other in my opinion they're both very

677

00:24:48,950 --> 00:24:47,440

important this one was really important

678

00:24:51,590 --> 00:24:48,960

for the station for us to be able to get

679

00:24:53,190 --> 00:24:51,600

here and accomplish this mission

680

00:24:55,990 --> 00:24:53,200

and obviously we've completed the dock

681

00:24:56,789 --> 00:24:56,000

phase of it and again as i said we have

682

00:24:58,789 --> 00:24:56,799

you know

683

00:25:00,870 --> 00:24:58,799

as we look forward i keep reminding you

684

00:25:03,350 --> 00:25:00,880

as well as everyone else that

685

00:25:04,630 --> 00:25:03,360

you know our most significant most

686

00:25:07,269 --> 00:25:04,640

important milestone remains for

687

00:25:09,190 --> 00:25:07,279

endeavors mission here on orbit

688

00:25:11,029 --> 00:25:09,200

and uh and so we look forward to that

689

00:25:13,190 --> 00:25:11,039

wednesday morning but as it relates to

690

00:25:14,870 --> 00:25:13,200

135 in the atlantis mission it will be

691

00:25:18,070 --> 00:25:14,880

very important for station as well i

692

00:25:19,990 --> 00:25:18,080

think i i probably cannot

693

00:25:21,590 --> 00:25:20,000

characterize the importance as well as

694

00:25:23,350 --> 00:25:21,600

some of my friends in the space station

695

00:25:25,269 --> 00:25:23,360

program can do for you when they come

696

00:25:29,110 --> 00:25:25,279

over and talk to you

697

00:25:30,870 --> 00:25:29,120

but it is primarily logistics james uh

698

00:25:33,110 --> 00:25:30,880

and and um

699

00:25:35,190 --> 00:25:33,120

a lot of times folks uh hear that and

700

00:25:36,230 --> 00:25:35,200

they think okay it's just you know

701  
00:25:38,390 --> 00:25:36,240  
um

702  
00:25:40,710 --> 00:25:38,400  
band-aids and food and whatever else and

703  
00:25:43,269 --> 00:25:40,720  
it's really not it's more than that and

704  
00:25:44,789 --> 00:25:43,279  
and and it is extremely important for

705  
00:25:46,310 --> 00:25:44,799  
station and for the viability station

706  
00:25:48,230 --> 00:25:46,320  
for the next calendar year is what i

707  
00:25:49,510 --> 00:25:48,240  
would say

708  
00:25:51,590 --> 00:25:49,520  
thanks a lot

709  
00:25:53,430 --> 00:25:51,600  
okay we'll try it back on the line is

710  
00:25:55,190 --> 00:25:53,440  
gina on there

711  
00:25:56,870 --> 00:25:55,200  
yes i'm on the line

712  
00:25:58,950 --> 00:25:56,880  
um leroy

713  
00:26:00,950 --> 00:25:58,960

you talked about the importance of 135

714

00:26:03,830 --> 00:26:00,960

as a logistics mission people described

715

00:26:06,870 --> 00:26:03,840

as kind of a u-haul truck going up and a

716

00:26:09,110 --> 00:26:06,880

recycling truck coming back um how do

717

00:26:12,870 --> 00:26:09,120

you sell this to people who say boy

718

00:26:16,310 --> 00:26:14,390

um

719

00:26:17,909 --> 00:26:16,320

you know

720

00:26:20,230 --> 00:26:17,919

there's nothing boring about a space

721

00:26:22,149 --> 00:26:20,240

shuttle mission so i that's where my

722

00:26:23,750 --> 00:26:22,159

where my difficulty begins in terms of

723

00:26:26,789 --> 00:26:23,760

having the discussion around those kind

724

00:26:29,430 --> 00:26:28,470

if you

725

00:26:31,990 --> 00:26:29,440

you know

726  
00:26:34,070 --> 00:26:32,000  
to to be around the shuttle system and

727  
00:26:35,669 --> 00:26:34,080  
to be around a shuttle launch and to be

728  
00:26:37,190 --> 00:26:35,679  
around

729  
00:26:38,950 --> 00:26:37,200  
you know a docking with the space

730  
00:26:42,390 --> 00:26:38,960  
station

731  
00:26:44,549 --> 00:26:42,400  
activities

732  
00:26:47,269 --> 00:26:44,559  
and what the crew does on board and what

733  
00:26:49,110 --> 00:26:47,279  
their crew day is involved and what's

734  
00:26:50,950 --> 00:26:49,120  
involved in their crew day

735  
00:26:53,590 --> 00:26:50,960  
to be around that and to be around and

736  
00:26:55,909 --> 00:26:53,600  
undock and a fly around and a deorbit in

737  
00:26:57,669 --> 00:26:55,919  
a landing and a roll out and

738  
00:27:00,630 --> 00:26:57,679

i don't know how you can be around that

739

00:27:04,070 --> 00:27:00,640

or have awareness of that or or have an

740

00:27:05,669 --> 00:27:04,080

understanding of what's really going on

741

00:27:08,230 --> 00:27:05,679

and be bored

742

00:27:11,029 --> 00:27:08,240

so i suppose it's possible for that to

743

00:27:13,190 --> 00:27:11,039

be a boring thing um and i think if you

744

00:27:14,549 --> 00:27:13,200

just talk about

745

00:27:15,430 --> 00:27:14,559

the mission in terms of we're going to

746

00:27:17,190 --> 00:27:15,440

launch a shuttle it's going to be a

747

00:27:18,870 --> 00:27:17,200

logistic mission and that's the end of

748

00:27:22,630 --> 00:27:18,880

it then maybe that would be boring for

749

00:27:24,470 --> 00:27:22,640

some people but i would talk about

750

00:27:26,549 --> 00:27:24,480

what it really means to to get a shuttle

751  
00:27:29,190 --> 00:27:26,559  
on orbit to begin with

752  
00:27:31,750 --> 00:27:29,200  
which is no small feat as you well know

753  
00:27:34,470 --> 00:27:31,760  
and and try to get folks to

754  
00:27:36,710 --> 00:27:34,480  
remind folks of an appreciation of

755  
00:27:37,909 --> 00:27:36,720  
of what it is we're dealing with here in

756  
00:27:39,909 --> 00:27:37,919  
terms of

757  
00:27:42,230 --> 00:27:39,919  
of getting to low earth orbit it's not

758  
00:27:44,870 --> 00:27:42,240  
easy to do

759  
00:27:46,149 --> 00:27:44,880  
we're a little bit

760  
00:27:48,070 --> 00:27:46,159  
we have a little bit of a challenge

761  
00:27:50,070 --> 00:27:48,080  
sometimes in terms of explaining things

762  
00:27:51,669 --> 00:27:50,080  
because sometimes the shuttle missions

763  
00:27:56,070 --> 00:27:51,679

kind of look easy

764

00:27:57,830 --> 00:27:56,080

i admit that that that seems true

765

00:27:58,870 --> 00:27:57,840

it couldn't be further from the truth

766

00:28:00,389 --> 00:27:58,880

however

767

00:28:02,630 --> 00:28:00,399

and and

768

00:28:04,789 --> 00:28:02,640

so i would talk about the complexities

769

00:28:05,669 --> 00:28:04,799

in general of a shuttle station docked

770

00:28:07,430 --> 00:28:05,679

mission

771

00:28:09,669 --> 00:28:07,440

and and regardless of what you're

772

00:28:10,470 --> 00:28:09,679

carrying up or bringing home

773

00:28:13,669 --> 00:28:10,480

um

774

00:28:16,310 --> 00:28:13,679

it's a it's uh it's pretty fascinating

775

00:28:17,669 --> 00:28:16,320

to be able to to accomplish it in on any

776  
00:28:20,149 --> 00:28:17,679  
mission

777  
00:28:22,310 --> 00:28:20,159  
those primary objectives of launching

778  
00:28:26,389 --> 00:28:22,320  
docking

779  
00:28:29,830 --> 00:28:26,399  
and landing those are pretty

780  
00:28:36,389 --> 00:28:29,840  
pretty huge significant

781  
00:28:36,399 --> 00:28:42,789  
okay we'll try bill harwood again too

782  
00:28:47,269 --> 00:28:44,789  
let's not be on the line any follow-ups

783  
00:28:53,269 --> 00:28:50,230  
we do have uh some programming notes

784  
00:28:55,750 --> 00:28:53,279  
uh we are having a technical

785  
00:28:57,029 --> 00:28:55,760  
difficulty with the editing of the

786  
00:28:59,269 --> 00:28:57,039  
flight day highlight so that hasn't

787  
00:29:00,870 --> 00:28:59,279  
aired on nasa television yet

788  
00:29:02,389 --> 00:29:00,880

we'll get that at the top of the hour

789

00:29:03,510 --> 00:29:02,399

during the crew sleep period as soon as

790

00:29:05,190 --> 00:29:03,520

we can

791

00:29:07,510 --> 00:29:05,200

the crew is scheduled to awaken just

792

00:29:10,950 --> 00:29:07,520

before 6 pm central time this evening at

793

00:29:12,710 --> 00:29:10,960

5 56 pm and that is the first of two

794

00:29:14,310 --> 00:29:12,720

original songs that will be played for

795

00:29:17,110 --> 00:29:14,320

the cruise wake up during the mission as

796

00:29:18,950 --> 00:29:17,120

part of the song contest the second

797

00:29:21,430 --> 00:29:18,960

place winner will be played tonight for

798

00:29:22,549 --> 00:29:21,440

that wake up and then the preparation

799

00:29:24,549 --> 00:29:22,559

for the

800

00:29:26,710 --> 00:29:24,559

spatial endeavors return to earth

801  
00:29:28,630 --> 00:29:26,720  
including also a break for the crew

802  
00:29:30,470 --> 00:29:28,640  
members to have interviews with network

803  
00:29:33,190 --> 00:29:30,480  
news representatives which will be at

804  
00:29:35,830 --> 00:29:33,200  
806 pm central time this evening

805  
00:29:38,870 --> 00:29:35,840  
and taking time to pay tribute to

806  
00:29:40,789 --> 00:29:38,880  
endeavor that will be at 11 26 p.m and

807  
00:29:42,950 --> 00:29:40,799  
as mentioned the next mission status

808  
00:29:45,110 --> 00:29:42,960  
briefing will be at 4 00 a.m central

809  
00:29:47,190 --> 00:29:45,120  
time tuesday morning with

810  
00:29:49,430 --> 00:29:47,200  
the entry flight director tony saccacci

811  
00:29:51,510 --> 00:29:49,440  
as after his shift with preparing

812  
00:29:52,870 --> 00:29:51,520  
endeavor for its return to home