



1  
00:01:50,799 --> 00:02:00,630  
good morning endeavor

2  
00:02:00,640 --> 00:02:11,830  
morning houston

3  
00:02:19,350 --> 00:02:13,990  
i think you stumped the crew we give up

4  
00:02:19,360 --> 00:02:26,390  
darth vader

5  
00:02:29,670 --> 00:02:27,830  
the flight director says it has a good

6  
00:02:33,910 --> 00:02:29,680  
beat it's easy to dance to he gives it

7  
00:02:47,830 --> 00:02:35,670  
well we liked it we just uh we just

8  
00:02:51,430 --> 00:02:49,270  
deborah houston

9  
00:02:59,430 --> 00:02:51,440  
we see everyone on the flight deck there

10  
00:03:08,550 --> 00:03:01,750  
time to get those combs and razors out

11  
00:03:08,560 --> 00:03:50,630  
yeah we clean up real good

12  
00:03:50,640 --> 00:04:01,270  
you're so ready to pick up fcs checkout

13  
00:04:01,280 --> 00:04:21,990

endeavor we're watching

14

00:04:22,000 --> 00:04:49,670

copy

15

00:04:56,790 --> 00:04:52,950

roger never here's my colleague

16

00:05:00,629 --> 00:04:59,030

hey everybody how you doing

17

00:05:02,070 --> 00:05:00,639

fine thanks you look like you're having

18

00:05:06,070 --> 00:05:02,080

a great time up there and you're doing a

19

00:05:10,469 --> 00:05:08,710

well thanks we're ready to come home too

20

00:05:11,510 --> 00:05:10,479

it's always hard to leave but uh you

21

00:05:13,270 --> 00:05:11,520

know how it is you look forward to

22

00:05:15,270 --> 00:05:13,280

coming back

23

00:05:16,550 --> 00:05:15,280

yes all good things must come to an end

24

00:05:17,909 --> 00:05:16,560

and i'm here to brief you a little bit

25

00:05:19,909 --> 00:05:17,919

about that

26

00:05:22,310 --> 00:05:19,919

uh what we've got is we've got some

27

00:05:23,350 --> 00:05:22,320

great weather for you both saturday and

28

00:05:25,830 --> 00:05:23,360

sunday

29

00:05:28,790 --> 00:05:25,840

at both landing sites

30

00:05:30,310 --> 00:05:28,800

we will be bringing up ksc only on

31

00:05:35,029 --> 00:05:30,320

saturday

32

00:05:39,270 --> 00:05:37,029

be setting up for a right-hand turn to

33

00:05:42,390 --> 00:05:39,280

runway 3-3 i'll go ahead and give you

34

00:05:45,430 --> 00:05:42,400

the weather at ksc for saturday

35

00:05:47,110 --> 00:05:45,440

looking at 3 000 scattered 7 plus miles

36

00:05:48,189 --> 00:05:47,120

visibility

37

00:05:51,350 --> 00:05:48,199

winds

38

00:05:53,590 --> 00:05:51,360

3-4-0-10 peak 18

39

00:05:55,350 --> 00:05:53,600

and we've got prevailing northerly winds

40

00:05:56,309 --> 00:05:55,360

for the entire south of the united

41

00:05:57,670 --> 00:05:56,319

states

42

00:06:04,469 --> 00:05:57,680

and it will be a little bit chilly when

43

00:06:09,110 --> 00:06:06,550

roger brian we're trying to uh deplete

44

00:06:12,230 --> 00:06:09,120

o2 tank four we'd like you to configure

45

00:06:14,710 --> 00:06:12,240

a single heater in o2 tank three so on

46

00:06:32,950 --> 00:06:14,720

r1 cryo o2

47

00:06:32,960 --> 00:06:37,749

houston are you ready for the event

48

00:06:42,390 --> 00:06:40,070

we're ready for the event

49

00:06:45,110 --> 00:06:42,400

kscpao this is houston please call

50

00:06:47,590 --> 00:06:45,120

endeavour for a voice check

51  
00:06:49,909 --> 00:06:47,600  
endeavor this is ksc pao how do you hear

52  
00:06:54,550 --> 00:06:52,710  
kscpao we're in your line

53  
00:06:56,070 --> 00:06:54,560  
all right thank you and do you have an

54  
00:06:59,830 --> 00:06:56,080  
opening statement you'd like to make for

55  
00:07:03,749 --> 00:07:01,510  
well first of all i'd like to say that

56  
00:07:05,990 --> 00:07:03,759  
the mission's been extremely successful

57  
00:07:07,430 --> 00:07:06,000  
to this point and the six crew members

58  
00:07:08,710 --> 00:07:07,440  
you're looking at right now couldn't be

59  
00:07:10,469 --> 00:07:08,720  
more happy

60  
00:07:13,189 --> 00:07:10,479  
to have been part of the team that

61  
00:07:14,950 --> 00:07:13,199  
pulled off this mission sts-72

62  
00:07:17,029 --> 00:07:14,960  
we believe that the

63  
00:07:18,790 --> 00:07:17,039

the mission itself is a testament to the

64

00:07:20,629 --> 00:07:18,800

the teamwork uh

65

00:07:23,110 --> 00:07:20,639

all across nasa and also the

66

00:07:24,390 --> 00:07:23,120

international cooperation between the uh

67

00:07:26,550 --> 00:07:24,400

national aeronautics and space

68

00:07:28,070 --> 00:07:26,560

administration and the japanese space

69

00:07:29,909 --> 00:07:28,080

agency

70

00:07:31,990 --> 00:07:29,919

so we're we're very happy to be part of

71

00:07:34,550 --> 00:07:32,000

that team things are going very well

72

00:07:36,710 --> 00:07:34,560

it's all uh has gone this well because

73

00:07:38,629 --> 00:07:36,720

of the great planning and the

74

00:07:40,710 --> 00:07:38,639

flexibility that's been demonstrated by

75

00:07:42,950 --> 00:07:40,720

everyone throughout so

76  
00:07:44,390 --> 00:07:42,960  
we're happy to accomplish the mission to

77  
00:07:46,629 --> 00:07:44,400  
this point and we're looking forward to

78  
00:07:47,830 --> 00:07:46,639  
coming home

79  
00:07:50,150 --> 00:07:47,840  
all right thank you endeavor and we'll

80  
00:07:51,510 --> 00:07:50,160  
proceed now with questions

81  
00:07:54,150 --> 00:07:51,520  
this is the philippine earth news for

82  
00:07:55,510 --> 00:07:54,160  
anybody who wants to take it uh what has

83  
00:07:57,270 --> 00:07:55,520  
the earth look like on this mission how

84  
00:07:58,469 --> 00:07:57,280  
much detail can you see what's the

85  
00:08:00,550 --> 00:07:58,479  
smallest thing you can see out the

86  
00:08:04,230 --> 00:08:00,560  
windows either from inside or outside

87  
00:08:07,990 --> 00:08:05,909  
one of the new guys in particular dan

88  
00:08:09,350 --> 00:08:08,000

barry i think has been pretty awestruck

89

00:08:14,550 --> 00:08:09,360

by the view of the earth i'll let him

90

00:08:17,749 --> 00:08:17,029

i really have been uh thunderstruck by

91

00:08:23,110 --> 00:08:17,759

the

92

00:08:25,510 --> 00:08:23,120

cabin and outside during an eva

93

00:08:26,790 --> 00:08:25,520

i was trying to find words to describe

94

00:08:29,110 --> 00:08:26,800

it the only thing

95

00:08:31,589 --> 00:08:29,120

i can compare it to is the the color of

96

00:08:34,469 --> 00:08:31,599

gemstone i mentioned in an earlier

97

00:08:36,469 --> 00:08:34,479

conference that while i was outside the

98

00:08:39,190 --> 00:08:36,479

blues range from midnight blue to

99

00:08:41,029 --> 00:08:39,200

turquoise the forest for emerald green

100

00:08:43,350 --> 00:08:41,039

the clouds were so bright they were hard

101  
00:08:44,790 --> 00:08:43,360  
to look at it has just been

102  
00:08:47,750 --> 00:08:44,800  
an amazing

103  
00:08:48,630 --> 00:08:47,760  
experience to be able to see the earth

104  
00:08:51,350 --> 00:08:48,640  
to see

105  
00:08:52,870 --> 00:08:51,360  
the stars that you can see when the

106  
00:08:56,070 --> 00:08:52,880  
flight deck is

107  
00:09:00,389 --> 00:08:56,080  
darkened and the sunrises and sunsets

108  
00:09:05,190 --> 00:09:02,630  
bill harwood with cbs news for winston

109  
00:09:07,190 --> 00:09:05,200  
scott i think or leroy ciao

110  
00:09:08,710 --> 00:09:07,200  
based on your assessment of the the

111  
00:09:10,790 --> 00:09:08,720  
performance of the suits the thermal

112  
00:09:12,470 --> 00:09:10,800  
characteristics the tools and all the

113  
00:09:13,910 --> 00:09:12,480

stuff you guys tested during your two

114

00:09:15,990 --> 00:09:13,920

evas

115

00:09:17,430 --> 00:09:16,000

how ready is nasa to go build station

116

00:09:19,670 --> 00:09:17,440

how much is left to do can you give us

117

00:09:22,949 --> 00:09:19,680

kind of a midterm report based on how

118

00:09:24,870 --> 00:09:22,959

everything went

119

00:09:27,030 --> 00:09:24,880

well uh from the suit standpoint i can

120

00:09:28,550 --> 00:09:27,040

tell uh tell you i'm very very pleased

121

00:09:31,670 --> 00:09:28,560

with the performance of the suit as i

122

00:09:35,030 --> 00:09:31,680

was standing on that olympus for uh 60

123

00:09:38,310 --> 00:09:35,040

minutes 30 or so were in the darkness i

124

00:09:39,990 --> 00:09:38,320

again felt very very comfortable

125

00:09:42,310 --> 00:09:40,000

obviously you can tell some thermal

126

00:09:44,070 --> 00:09:42,320

gradients my finger tips were a little

127

00:09:46,470 --> 00:09:44,080

warmer than the palms but that's to be

128

00:09:48,310 --> 00:09:46,480

expected and just as an example but

129

00:09:50,389 --> 00:09:48,320

overall i felt very good in the suit i

130

00:09:52,470 --> 00:09:50,399

could have continued to work in the suit

131

00:09:54,150 --> 00:09:52,480

regardless of the temperatures

132

00:09:56,470 --> 00:09:54,160

so i would say with we certainly have a

133

00:09:59,030 --> 00:09:56,480

good baseline for which we can

134

00:10:00,790 --> 00:09:59,040

uh going and do our work obviously you

135

00:10:02,389 --> 00:10:00,800

always want to look for improvements but

136

00:10:04,710 --> 00:10:02,399

i think we're to the point where we can

137

00:10:09,110 --> 00:10:04,720

take that suit airborne and begin to

138

00:10:13,910 --> 00:10:11,509

both both evas were cva development

139

00:10:16,550 --> 00:10:13,920

flight tests were extremely successful

140

00:10:18,150 --> 00:10:16,560

not only did we get three more people in

141

00:10:21,829 --> 00:10:18,160

our astronaut office experience in

142

00:10:23,990 --> 00:10:21,839

spacewalking we also proved on uh on eba

143

00:10:26,790 --> 00:10:24,000

one that the macro size hardware is

144

00:10:28,790 --> 00:10:26,800

going to work very well and on eba 2

145

00:10:30,230 --> 00:10:28,800

that more of the detail tools are also

146

00:10:32,310 --> 00:10:30,240

going to work very well we were

147

00:10:34,150 --> 00:10:32,320

surprised by a few small things that

148

00:10:35,829 --> 00:10:34,160

didn't work quite like we had expected

149

00:10:37,509 --> 00:10:35,839

we were also pleasantly surprised by

150

00:10:39,590 --> 00:10:37,519

some things that worked much better than

151  
00:10:41,030 --> 00:10:39,600  
we expected so it was a very successful

152  
00:10:42,310 --> 00:10:41,040  
flight test we learned a lot it's going

153  
00:10:44,630 --> 00:10:42,320  
to feed right back into the space

154  
00:10:48,150 --> 00:10:44,640  
station and the space station program

155  
00:10:49,910 --> 00:10:48,160  
and we're ready to go build it

156  
00:10:52,389 --> 00:10:49,920  
peter galtery with the west kentucky

157  
00:10:53,350 --> 00:10:52,399  
news uh for any of the spacewalkers uh

158  
00:10:55,030 --> 00:10:53,360  
how

159  
00:10:57,590 --> 00:10:55,040  
valuable would it be if you guys could

160  
00:10:59,110 --> 00:10:57,600  
control the movement of the arm right

161  
00:11:00,710 --> 00:10:59,120  
when you're hanging at the end of it

162  
00:11:03,990 --> 00:11:00,720  
there instead of having someone

163  
00:11:08,310 --> 00:11:05,670

well i'll i'll answer one part of that

164

00:11:10,630 --> 00:11:08,320

then i'll hand off to brent jett who was

165

00:11:12,870 --> 00:11:10,640

the prime arm operator during our evas

166

00:11:15,030 --> 00:11:12,880

to answer the rest but uh from my

167

00:11:17,590 --> 00:11:15,040

perspective uh everything i asked brent

168

00:11:19,910 --> 00:11:17,600

to do he did perfectly in fact i think

169

00:11:21,910 --> 00:11:19,920

the three of us agree that pretty much

170

00:11:23,910 --> 00:11:21,920

uh he and koichi who was also operating

171

00:11:26,389 --> 00:11:23,920

the arm at times could read our minds

172

00:11:27,750 --> 00:11:26,399

and know exactly where we need to be and

173

00:11:30,230 --> 00:11:27,760

they had a good perspective out the

174

00:11:31,750 --> 00:11:30,240

window and with cameras as well

175

00:11:33,590 --> 00:11:31,760

you know position us exactly where we

176

00:11:35,030 --> 00:11:33,600

needed to be so i don't think it was

177

00:11:36,630 --> 00:11:35,040

that important i don't think it's

178

00:11:39,190 --> 00:11:36,640

important that we be able to control the

179

00:11:42,790 --> 00:11:39,200

arm ourselves but uh you know the

180

00:11:45,110 --> 00:11:42,800

coordination worked great

181

00:11:46,630 --> 00:11:45,120

from the arm operator's perspective i

182

00:11:48,870 --> 00:11:46,640

would say it would be very difficult to

183

00:11:50,949 --> 00:11:48,880

have an eba person controlling the arm

184

00:11:52,550 --> 00:11:50,959

with their limited field of view they're

185

00:11:53,829 --> 00:11:52,560

not able to see all the joints of the

186

00:11:55,990 --> 00:11:53,839

arm so

187

00:11:57,509 --> 00:11:56,000

the arm operator is responsible for

188

00:11:58,949 --> 00:11:57,519

maintaining clearance from any other

189

00:11:59,829 --> 00:11:58,959

orbiter structure we were working in

190

00:12:01,990 --> 00:11:59,839

some

191

00:12:03,910 --> 00:12:02,000

fairly tight areas up in the forward

192

00:12:05,190 --> 00:12:03,920

payload bay so i think the way we have

193

00:12:07,590 --> 00:12:05,200

it right now that

194

00:12:09,750 --> 00:12:07,600

is works really well the training we get

195

00:12:11,430 --> 00:12:09,760

excellent and i think we're able to

196

00:12:13,990 --> 00:12:11,440

accomplish the mission uh very

197

00:12:17,670 --> 00:12:16,230

this is phil chan again for leroy uh

198

00:12:19,829 --> 00:12:17,680

you've been usually a fairly laid-back

199

00:12:22,230 --> 00:12:19,839

person but i heard you go oh wow during

200

00:12:24,790 --> 00:12:22,240

one of the spacewalks and then about 15

201  
00:12:26,710 --> 00:12:24,800  
seconds later say okay back to work and

202  
00:12:28,069 --> 00:12:26,720  
this is over africa during daytime not

203  
00:12:29,670 --> 00:12:28,079  
towards the terminator and just

204  
00:12:33,190 --> 00:12:29,680  
wondering what you saw and what was so

205  
00:12:36,949 --> 00:12:34,710  
i believe the moment you're talking

206  
00:12:39,590 --> 00:12:36,959  
about i was looking at an excellent view

207  
00:12:41,750 --> 00:12:39,600  
of australia it was an oblique shot of

208  
00:12:43,910 --> 00:12:41,760  
uh australia is very clear and sharks

209  
00:12:45,750 --> 00:12:43,920  
bay was very very clearly in view i

210  
00:12:49,190 --> 00:12:45,760  
think that's the moment when i when i

211  
00:12:53,990 --> 00:12:52,150  
bill harwood for commander duffy i think

212  
00:12:55,750 --> 00:12:54,000  
obviously 10 years aft 10 years of

213  
00:12:57,750 --> 00:12:55,760

progress here after 51l and looking

214

00:12:59,190 --> 00:12:57,760

ahead to the future we stand ready to

215

00:13:01,110 --> 00:12:59,200

transition over to a single prime

216

00:13:02,710 --> 00:13:01,120

contract i know there's some concern

217

00:13:04,230 --> 00:13:02,720

that as that transition takes place a

218

00:13:07,430 --> 00:13:04,240

lot of the safety issues that were put

219

00:13:08,710 --> 00:13:07,440

in after 51l may be eroded to some

220

00:13:09,829 --> 00:13:08,720

extent because of budget cuts or

221

00:13:11,590 --> 00:13:09,839

whatever what are your thoughts about

222

00:13:13,590 --> 00:13:11,600

that are you concerned

223

00:13:14,949 --> 00:13:13,600

as that transition approaches on how

224

00:13:19,430 --> 00:13:14,959

safety gets maintained and how you

225

00:13:24,949 --> 00:13:21,910

now bill we know that the process of

226

00:13:26,069 --> 00:13:24,959

change which is ongoing um you know it

227

00:13:27,990 --> 00:13:26,079

will occur

228

00:13:29,910 --> 00:13:28,000

uh we have every confidence however that

229

00:13:31,670 --> 00:13:29,920

we're not going to forget the lessons

230

00:13:33,509 --> 00:13:31,680

that we have learned we will bring

231

00:13:36,150 --> 00:13:33,519

forward with us

232

00:13:38,870 --> 00:13:36,160

all of the procedures and the process

233

00:13:41,110 --> 00:13:38,880

changes that we made after 511 to ensure

234

00:13:42,790 --> 00:13:41,120

that they continue to fly safely so we

235

00:13:45,110 --> 00:13:42,800

don't think we're going to lose anything

236

00:13:46,629 --> 00:13:45,120

in the process you know we do have to

237

00:13:48,470 --> 00:13:46,639

live within the budget constraints that

238

00:13:50,310 --> 00:13:48,480

we're faced with we think we can do it

239

00:13:51,189 --> 00:13:50,320

safely we think we can get the job done

240

00:13:53,910 --> 00:13:51,199

and we're looking forward to the

241

00:13:55,990 --> 00:13:53,920

challenge of doing it

242

00:13:59,110 --> 00:13:56,000

pete altery with the west kentucky news

243

00:14:00,470 --> 00:13:59,120

uh this is for anyone who saw that delta

244

00:14:02,150 --> 00:14:00,480

launch

245

00:14:04,790 --> 00:14:02,160

when you guys passed over were you able

246

00:14:06,710 --> 00:14:04,800

to actually see the uh the rocket itself

247

00:14:08,949 --> 00:14:06,720

or was it just the the contrail and the

248

00:14:10,310 --> 00:14:08,959

cloud that you saw and can you explain a

249

00:14:12,389 --> 00:14:10,320

little bit more about that cloud how

250

00:14:14,310 --> 00:14:12,399

high was it that it appeared to you i

251  
00:14:20,470 --> 00:14:14,320  
know i saw some of the video but if you

252  
00:14:25,590 --> 00:14:22,949  
i can i can tell you what we saw we were

253  
00:14:27,990 --> 00:14:25,600  
looking out the uh the commander's

254  
00:14:29,509 --> 00:14:28,000  
window sort of to the left of the flight

255  
00:14:31,990 --> 00:14:29,519  
deck and saw

256  
00:14:33,590 --> 00:14:32,000  
an oblong ball of light sitting up above

257  
00:14:34,629 --> 00:14:33,600  
the atmosphere

258  
00:14:36,389 --> 00:14:34,639  
it was

259  
00:14:39,269 --> 00:14:36,399  
too large to be a star it almost looked

260  
00:14:41,430 --> 00:14:39,279  
like the moon rising and as we watched

261  
00:14:43,030 --> 00:14:41,440  
it it became brighter

262  
00:14:46,150 --> 00:14:43,040  
and then started to stretch out into a

263  
00:14:46,949 --> 00:14:46,160

line and since houston had alerted us

264

00:14:49,110 --> 00:14:46,959

that

265

00:14:51,110 --> 00:14:49,120

delta rocket was going to be launched

266

00:14:53,189 --> 00:14:51,120

and we knew the location we were looking

267

00:14:55,350 --> 00:14:53,199

was right toward florida

268

00:14:57,509 --> 00:14:55,360

we surmised that it was in fact the

269

00:15:00,150 --> 00:14:57,519

death of launch continued to watch it it

270

00:15:02,790 --> 00:15:00,160

stretched out into a long linear uh

271

00:15:03,910 --> 00:15:02,800

white line which then faded into red and

272

00:15:07,030 --> 00:15:03,920

then finally

273

00:15:13,430 --> 00:15:07,040

speckled red and then as the sun rose

274

00:15:17,189 --> 00:15:15,030

this is mike drago of the associated

275

00:15:18,310 --> 00:15:17,199

press for commander duffy

276

00:15:19,829 --> 00:15:18,320

what are your thoughts on the night

277

00:15:22,069 --> 00:15:19,839

landing and could you tell us some of

278

00:15:23,910 --> 00:15:22,079

the the piloting the different piloting

279

00:15:28,230 --> 00:15:23,920

challenges that you face on a night or

280

00:15:31,189 --> 00:15:29,590

well i'm looking forward to the night

281

00:15:32,389 --> 00:15:31,199

landing it's something that we've

282

00:15:33,990 --> 00:15:32,399

trained for

283

00:15:35,269 --> 00:15:34,000

brent and i have been training now for

284

00:15:36,310 --> 00:15:35,279

the you know the better part of a year

285

00:15:38,829 --> 00:15:36,320

to do that

286

00:15:41,189 --> 00:15:38,839

we've flown hundreds of approaches at

287

00:15:43,030 --> 00:15:41,199

night don't think that it'll be all that

288

00:15:45,030 --> 00:15:43,040

different from uh from a day landing to

289

00:15:45,670 --> 00:15:45,040

tell you the truth that some people that

290

00:15:47,189 --> 00:15:45,680

have

291

00:15:48,389 --> 00:15:47,199

made night landings before tell me that

292

00:15:49,590 --> 00:15:48,399

it's actually a little bit easier just

293

00:15:52,310 --> 00:15:49,600

because you don't have all the other

294

00:15:55,030 --> 00:15:52,320

things in your visual

295

00:15:56,949 --> 00:15:55,040

current range uh to distract you at all

296

00:15:58,550 --> 00:15:56,959

and all you have is the lit runway in

297

00:16:00,790 --> 00:15:58,560

the center line and the light sliding up

298

00:16:02,069 --> 00:16:00,800

the touchdown zone so very excited about

299

00:16:03,189 --> 00:16:02,079

doing it i've been training for it for a

300

00:16:04,550 --> 00:16:03,199

long time

301  
00:16:07,110 --> 00:16:04,560  
and i don't think it's going to be

302  
00:16:08,550 --> 00:16:07,120  
particularly difficult

303  
00:16:11,350 --> 00:16:08,560  
and this is a question to commander

304  
00:16:14,230 --> 00:16:11,360  
duffy from michael doden of nhk

305  
00:16:15,990 --> 00:16:14,240  
um sds 72 has an international mission

306  
00:16:18,069 --> 00:16:16,000  
with koichi on board as mission

307  
00:16:19,990 --> 00:16:18,079  
specialist how would you evaluate his

308  
00:16:21,990 --> 00:16:20,000  
asset as mission specialist and the

309  
00:16:35,350 --> 00:16:22,000  
difference in nationality culture and

310  
00:16:38,790 --> 00:16:36,470  
yeah

311  
00:16:41,430 --> 00:16:38,800  
actually koichi is uh is one of the crew

312  
00:16:43,189 --> 00:16:41,440  
and he's fit in very well uh here and we

313  
00:16:45,590 --> 00:16:43,199

haven't noticed that there are any

314

00:16:47,269 --> 00:16:45,600

cultural uh differences uh when there

315

00:16:49,590 --> 00:16:47,279

are some things that we can talk about

316

00:16:51,590 --> 00:16:49,600

where americans do things different than

317

00:16:54,069 --> 00:16:51,600

the japanese people we enjoy actually

318

00:16:56,069 --> 00:16:54,079

having the opportunity to compare

319

00:17:00,150 --> 00:16:56,079

the two outlooks and the two ways that

320

00:17:01,430 --> 00:17:00,160

people would would view the same thing

321

00:17:02,949 --> 00:17:01,440

throughout the training however and

322

00:17:05,189 --> 00:17:02,959

certainly not in the flight has that

323

00:17:07,429 --> 00:17:05,199

caused any problem whatsoever

324

00:17:08,949 --> 00:17:07,439

and i don't think i i think as long as

325

00:17:10,390 --> 00:17:08,959

we have people that are that like to get

326

00:17:11,909 --> 00:17:10,400

along with each other and have a common

327

00:17:13,429 --> 00:17:11,919

goal and work together

328

00:17:23,669 --> 00:17:13,439

that cultural differences won't be a

329

00:17:27,669 --> 00:17:25,909

okay brian on r2u uh could you

330

00:17:29,029 --> 00:17:27,679

characterize any uh

331

00:17:30,789 --> 00:17:29,039

hydrazine you see coming out of the

332

00:17:32,470 --> 00:17:30,799

thruster we'd like to get an idea if

333

00:17:36,710 --> 00:17:32,480

it's visible at all we can't see

334

00:17:36,720 --> 00:17:54,390

okay

335

00:17:57,909 --> 00:17:56,470

yeah before the we started the crew

336

00:18:00,630 --> 00:17:57,919

conference

337

00:18:02,710 --> 00:18:00,640

dan took a look at it and he said that

338

00:18:03,590 --> 00:18:02,720

the leak was substantially less than

339

00:18:05,590 --> 00:18:03,600

that

340

00:18:06,950 --> 00:18:05,600

which we had seen earlier and right now

341

00:18:08,470 --> 00:18:06,960

under the lighting conditions that we

342

00:18:10,230 --> 00:18:08,480

have out right now which is you know

343

00:18:15,750 --> 00:18:10,240

bright sunlight we can't see anything

344

00:18:19,190 --> 00:18:17,190

roger brian our temperature trends

345

00:18:22,390 --> 00:18:19,200

indicate that it's been decreasing it's

346

00:18:24,310 --> 00:18:22,400

probably minute uh in quantity now so

347

00:18:26,710 --> 00:18:24,320

very little oxidizer

348

00:18:29,110 --> 00:18:26,720

should be escaping we had a concern that

349

00:18:31,110 --> 00:18:29,120

some smart ice particle

350

00:18:32,150 --> 00:18:31,120

ice particles might be in the way of the

351

00:18:33,909 --> 00:18:32,160

sla

352

00:18:35,590 --> 00:18:33,919

experiment and

353

00:18:37,590 --> 00:18:35,600

be a concern for the cockpit but we

354

00:18:39,190 --> 00:18:37,600

don't think that's a problem now so as

355

00:18:40,549 --> 00:18:39,200

soon as the water problem is cleared up

356

00:18:44,870 --> 00:18:40,559

downstairs we're going to maneuver and

357

00:18:48,310 --> 00:18:46,470

yeah i agree with you wholeheartedly

358

00:18:50,230 --> 00:18:48,320

that sounds like a great idea and where

359

00:18:52,390 --> 00:18:50,240

uh right now we've got a couple of

360

00:18:53,830 --> 00:18:52,400

extensions and uh some dry wipes down

361

00:18:56,070 --> 00:18:53,840

there where we're trying to swap it up

362

00:19:58,390 --> 00:18:56,080

we'll let you know very quickly thank

363

00:20:02,070 --> 00:19:59,750

deborah houston

364

00:20:05,190 --> 00:20:02,080

orbit one shift is turning it over to

365

00:20:06,789 --> 00:20:05,200

the falcon team with rob and story

366

00:20:08,470 --> 00:20:06,799

we think you'll have smooth sailing into

367

00:20:10,390 --> 00:20:08,480

florida on saturday morning so this will

368

00:20:12,470 --> 00:20:10,400

be our last

369

00:20:14,230 --> 00:20:12,480

shift with you it has been an immense

370

00:20:16,390 --> 00:20:14,240

pleasure for orbit one

371

00:20:18,470 --> 00:20:16,400

and brian says that we've used up about

372

00:20:19,909 --> 00:20:18,480

all the plans we had taken along on this

373

00:20:21,669 --> 00:20:19,919

flight if you have any left over you can

374

00:20:24,070 --> 00:20:21,679

stow those we're on the nominal timeline

375

00:20:25,669 --> 00:20:24,080

for entry great job congratulations and

376

00:20:31,270 --> 00:20:25,679

we'll see you back at ellington from all

377

00:20:31,280 --> 00:20:33,590

thanks

378

00:20:36,710 --> 00:20:35,750

we'd tom to congratulate brian on uh

379

00:20:38,549 --> 00:20:36,720

what a

380

00:20:40,630 --> 00:20:38,559

terrific first mission he's had as a

381

00:20:42,630 --> 00:20:40,640

lead flight director and

382

00:20:44,789 --> 00:20:42,640

all those plans that he had in his book

383

00:20:47,669 --> 00:20:44,799

we put most of them to use it's a good

384

00:20:50,070 --> 00:20:47,679

thing he thought ahead as much as he had

385

00:20:51,510 --> 00:20:50,080

and he got a lot of help from from you

386

00:20:53,350 --> 00:20:51,520

and from everybody else in the room and

387

00:20:54,310 --> 00:20:53,360

all the all the folks in the back rooms

388

00:20:56,310 --> 00:20:54,320

and

389

00:20:58,470 --> 00:20:56,320

we sure appreciate everything

390

00:21:00,870 --> 00:20:58,480

that you all did for us it's been an

391

00:21:02,870 --> 00:21:00,880

unbelievable mission and i can't wait to

392

00:21:06,310 --> 00:21:02,880

see you guys back home and we can talk a

393

00:21:06,320 --> 00:21:10,149

we'll do that over a beer thanks

394

00:21:10,159 --> 00:21:14,870

you got a deal we'll even buy it for you

395

00:21:14,880 --> 00:22:05,430

i wrote that down

396

00:22:05,440 --> 00:22:24,710

endeavor for sla

397

00:22:30,950 --> 00:22:28,549

we'd like an sla disable page 6-4 please

398

00:22:33,430 --> 00:22:30,960

winston

399

00:22:34,870 --> 00:22:33,440

okay and an evening story a good morning

400

00:22:36,470 --> 00:22:34,880

story believe it or not i was waiting on

401

00:22:38,950 --> 00:22:36,480

your call i've got that procedure in my