



1  
00:01:10,240 --> 00:01:24,310  
return

2  
00:01:24,320 --> 00:02:00,789  
he brought my legs

3  
00:02:04,950 --> 00:02:03,190  
good morning colombia it's a time to

4  
00:02:07,030 --> 00:02:04,960  
return that spa's satellite to the

5  
00:02:16,470 --> 00:02:07,040  
customer and uh we're all set for the

6  
00:02:20,630 --> 00:02:18,630  
we look forward to doing that

7  
00:02:23,510 --> 00:02:20,640  
mark this is one of the most exciting

8  
00:02:26,070 --> 00:02:23,520  
ways to return something to its center

9  
00:02:32,630 --> 00:02:26,080  
and it's going to be a good day for us

10  
00:02:38,070 --> 00:02:34,710  
columbia houston we should be ready to

11  
00:02:40,309 --> 00:02:38,080  
tips up in about 10 minutes but we also

12  
00:02:42,710 --> 00:02:40,319  
have some things to say about weather

13  
00:02:47,990 --> 00:02:42,720

and landing options when you're ready to

14

00:02:53,110 --> 00:02:50,790

we're ready to copy that

15

00:02:56,630 --> 00:02:53,120

yes taco the the weather folks have been

16

00:02:59,270 --> 00:02:56,640

continuing to uh assess the weather for

17

00:03:01,030 --> 00:02:59,280

the next few days at the cape

18

00:03:04,149 --> 00:03:01,040

and it looks as though there's the

19

00:03:06,309 --> 00:03:04,159

possibility that uh on flight day 17

20

00:03:09,110 --> 00:03:06,319

which is currently

21

00:03:11,990 --> 00:03:09,120

your landing day and for a couple of

22

00:03:15,350 --> 00:03:12,000

days after that that the weather

23

00:03:17,589 --> 00:03:15,360

may have deteriorated at the cape the

24

00:03:19,430 --> 00:03:17,599

possibility of a low pressure trough

25

00:03:22,229 --> 00:03:19,440

developing north of florida and moving

26

00:03:24,070 --> 00:03:22,239

into the area for friday bringing some

27

00:03:27,350 --> 00:03:24,080

low cloud and rain

28

00:03:29,670 --> 00:03:27,360

and staying around for a couple of days

29

00:03:33,030 --> 00:03:29,680

meanwhile also on flight day 17 there's

30

00:03:36,390 --> 00:03:33,040

a possibility that the winds at edwards

31

00:03:37,670 --> 00:03:36,400

and northrop may be out of limit

32

00:03:39,990 --> 00:03:37,680

so the

33

00:03:42,869 --> 00:03:40,000

situation is that they're continuing to

34

00:03:45,350 --> 00:03:42,879

monitor the weather and the mmt will be

35

00:03:48,229 --> 00:03:45,360

meeting later on today

36

00:03:51,430 --> 00:03:48,239

to decide on whether or not to go back

37

00:03:54,229 --> 00:03:51,440

to the original plan which is to

38

00:03:56,869 --> 00:03:54,239

land on flight day 16

39

00:03:58,070 --> 00:03:56,879

when the weather forecast conditions are

40

00:04:00,630 --> 00:03:58,080

good

41

00:04:04,550 --> 00:04:00,640

the mmt will make that decision a couple

42

00:04:06,869 --> 00:04:04,560

of hours before your bedtime tonight

43

00:04:10,470 --> 00:04:06,879

meanwhile what we've done is we've done

44

00:04:12,949 --> 00:04:10,480

some replanning just in case and there

45

00:04:17,110 --> 00:04:12,959

are some replanting summary sheets

46

00:04:18,789 --> 00:04:17,120

included in your execute package

47

00:04:20,629 --> 00:04:18,799

so that we can

48

00:04:22,710 --> 00:04:20,639

proceed with the rendezvous today as

49

00:04:24,870 --> 00:04:22,720

planned with no change

50

00:04:27,350 --> 00:04:24,880

but then begin to

51  
00:04:29,350 --> 00:04:27,360  
take the necessary steps to be ready in

52  
00:04:33,590 --> 00:04:29,360  
case we do do

53  
00:04:38,790 --> 00:04:35,749  
so that we will be ready in case we have

54  
00:04:40,790 --> 00:04:38,800  
to do a flight day 16 landing so we

55  
00:04:42,870 --> 00:04:40,800  
welcome your feedback on those

56  
00:04:46,550 --> 00:04:42,880  
replanting pages

57  
00:04:51,110 --> 00:04:49,430  
to be hand over wait we copy all mark

58  
00:04:53,189 --> 00:04:51,120  
and uh

59  
00:04:55,670 --> 00:04:53,199  
let us think about it for a little bit

60  
00:04:57,270 --> 00:04:55,680  
and see what kind of impacts that would

61  
00:04:59,590 --> 00:04:57,280  
have to us

62  
00:05:03,670 --> 00:04:59,600  
and in oca notes i've already passed on

63  
00:05:06,550 --> 00:05:03,680

to the entry flight director as well as

64

00:05:08,830 --> 00:05:06,560

the chief of our office

65

00:05:12,070 --> 00:05:08,840

our thoughts

66

00:05:14,310 --> 00:05:12,080

about further extension days for weather

67

00:05:16,629 --> 00:05:14,320

after uh the nominal planned end of

68

00:05:25,270 --> 00:05:16,639

mission i.e day 17

69

00:05:25,280 --> 00:05:30,629

houston columbia

70

00:05:30,639 --> 00:05:34,310

all right taco

71

00:05:37,350 --> 00:05:36,150

mark you asked earlier this morning

72

00:05:39,670 --> 00:05:37,360

about

73

00:05:41,029 --> 00:05:39,680

true desires concerning the

74

00:05:43,670 --> 00:05:41,039

weather decision

75

00:05:45,350 --> 00:05:43,680

being made by the mmt uh tomorrow

76

00:05:47,430 --> 00:05:45,360

morning your time

77

00:05:49,909 --> 00:05:47,440

and uh we've got

78

00:05:57,189 --> 00:05:49,919

a synopsis of our

79

00:05:57,199 --> 00:06:01,110

go ahead taco we're ready

80

00:06:05,270 --> 00:06:03,029

and while i'm reading you this ramos

81

00:06:07,110 --> 00:06:05,280

gonna do block 3b if you're ready to

82

00:06:13,670 --> 00:06:07,120

watch that

83

00:06:17,749 --> 00:06:15,029

roger

84

00:06:20,550 --> 00:06:17,759

here's our input to the mmt

85

00:06:23,029 --> 00:06:20,560

we would prefer to proceed with the

86

00:06:24,710 --> 00:06:23,039

orderly conduct of

87

00:06:26,469 --> 00:06:24,720

the remaining events of this flight

88

00:06:28,710 --> 00:06:26,479

including the

89

00:06:31,749 --> 00:06:28,720

the documentation of hatch conditions

90

00:06:32,469 --> 00:06:31,759

that have been set up to us

91

00:06:38,150 --> 00:06:32,479

and

92

00:06:39,590 --> 00:06:38,160

we have the prio as you know

93

00:06:41,590 --> 00:06:39,600

we've got the food

94

00:06:43,590 --> 00:06:41,600

we've got fresh clothing

95

00:06:44,950 --> 00:06:43,600

and we have an excellent crew attitude

96

00:06:47,110 --> 00:06:44,960

for

97

00:06:49,350 --> 00:06:47,120

tackling any weather extension day or

98

00:06:51,590 --> 00:06:49,360

days that would occur

99

00:06:53,350 --> 00:06:51,600

after flight day 17.

100

00:06:55,909 --> 00:06:53,360

so

101  
00:06:57,270 --> 00:06:55,919  
if that's clear to you that's our input

102  
00:06:59,990 --> 00:06:57,280  
to the mmt

103  
00:07:03,029 --> 00:07:00,000  
yes copy taco a couple of things one is

104  
00:07:05,830 --> 00:07:03,039  
that it's possible the weather may

105  
00:07:07,830 --> 00:07:05,840  
stay out of limits for several days and

106  
00:07:09,510 --> 00:07:07,840  
that's something that has to be taken

107  
00:07:12,469 --> 00:07:09,520  
into consideration

108  
00:07:15,270 --> 00:07:12,479  
and secondly should we go for the flight

109  
00:07:17,029 --> 00:07:15,280  
day 16 landing

110  
00:07:19,670 --> 00:07:17,039  
we would like to have your feedback on

111  
00:07:22,790 --> 00:07:19,680  
what whether you consider the re-planned

112  
00:07:24,230 --> 00:07:22,800  
sheets feasible the re-planned timeline

113  
00:07:29,510 --> 00:07:24,240

timeline that we sent you up in the

114

00:07:32,550 --> 00:07:30,950

okay we've just had a quick look at that

115

00:07:34,150 --> 00:07:32,560

so far uh since we're getting into

116

00:07:36,469 --> 00:07:34,160

rendezvous checklist but we'll put some

117

00:07:38,629 --> 00:07:36,479

more brain cells on that uh in the next

118

00:08:40,949 --> 00:07:38,639

few minutes and let you know

119

00:08:47,269 --> 00:08:44,550

we have a good grapple on orpheus spas

120

00:08:50,230 --> 00:08:47,279

and columbia houston tammy a good uh

121

00:08:53,509 --> 00:08:50,240

capture of spas once again columbia

122

00:08:56,070 --> 00:08:53,519

great job rendezvousing and the prox ops

123

00:09:08,389 --> 00:08:56,080

to to get spas i guess we're back to a

124

00:09:14,150 --> 00:09:11,190

and columbia houston you do have a go

125

00:09:16,630 --> 00:09:14,160

for block 26 bravo disable rendezvous

126

00:09:21,990 --> 00:09:19,829

thanks houston we'll put that in work

127

00:09:25,110 --> 00:09:22,000

and houston we're ready to go to rgps

128

00:09:25,120 --> 00:10:46,389

copy

129

00:10:51,350 --> 00:10:48,630

and uh now with it back with a live

130

00:10:53,190 --> 00:10:51,360

picture of uh shuttle's robot arm

131

00:10:56,710 --> 00:10:53,200

attached firmly to the grapple fixture

132

00:10:59,110 --> 00:10:56,720

on the orpheus spa spacecraft

133

00:11:01,670 --> 00:10:59,120

the latching pins clearly visible on the

134

00:11:03,350 --> 00:11:01,680

right and left of the spacecraft and the

135

00:11:06,069 --> 00:11:03,360

keel latch

136

00:11:10,550 --> 00:11:08,069

just a suggestion but one thing that's

137

00:11:12,310 --> 00:11:10,560

possible is i could take out that yaw

138

00:11:15,190 --> 00:11:12,320

and get in a position intermediate

139

00:11:17,670 --> 00:11:15,200

between this one and the 3a position

140

00:11:18,949 --> 00:11:17,680

and stop part way and probably get a

141

00:11:29,670 --> 00:11:18,959

good look with the camera at the

142

00:11:29,680 --> 00:11:34,949

tammy we like that plan

143

00:11:34,959 --> 00:11:43,190

okay we'll put it in work

144

00:11:47,590 --> 00:11:45,670

the discussion uh ongoing between tammy

145

00:11:49,110 --> 00:11:47,600

jernigan operating the shuttle's robot

146

00:11:51,269 --> 00:11:49,120

arm and bill mcarthur here in mission

147

00:11:53,990 --> 00:11:51,279

control as regarding the

148

00:11:57,350 --> 00:11:54,000

latch indications on the telescope's

149

00:12:02,949 --> 00:11:59,990

during the final preps for the retrieval

150

00:12:04,710 --> 00:12:02,959

of the spacecraft the latch indications

151  
00:12:07,110 --> 00:12:04,720  
were not seen on the ground although the

152  
00:12:10,470 --> 00:12:07,120  
team thinks that the door is firmly

153  
00:12:13,030 --> 00:12:10,480  
latched there is a

154  
00:12:14,710 --> 00:12:13,040  
a flag that basically

155  
00:12:21,829 --> 00:12:14,720  
will dictate that that hatch is

156  
00:12:25,829 --> 00:12:23,750  
while the arm operations will continue

157  
00:12:29,430 --> 00:12:25,839  
for the next several hours with the

158  
00:12:32,150 --> 00:12:29,440  
orpheus spa spacecraft in support of the

159  
00:12:34,069 --> 00:12:32,160  
orbiter space vision system experiment

160  
00:12:35,750 --> 00:12:34,079  
which is designed to help the crew

161  
00:12:37,829 --> 00:12:35,760  
members provide

162  
00:12:46,870 --> 00:12:37,839  
for deactivation and stove for the

163  
00:13:03,190 --> 00:12:49,269

cabbie bell understand

164

00:13:03,200 --> 00:13:07,430

i'm checking on that story

165

00:13:14,790 --> 00:13:11,430

okay well i got you the final apd

166

00:13:27,030 --> 00:13:18,710

cpu 61.09

167

00:13:27,040 --> 00:13:32,790

and story you do have a go for tcscd act

168

00:13:32,800 --> 00:13:36,069

copy

169

00:13:39,430 --> 00:13:37,829

and again the crew will for the next

170

00:13:42,150 --> 00:13:39,440

several hours will be conducting the

171

00:13:44,870 --> 00:13:42,160

orbiter space vision system uh

172

00:13:46,829 --> 00:13:44,880

experiment with the orpheus spas on the

173

00:13:50,389 --> 00:13:46,839

end of the robot arm to

174

00:13:51,670 --> 00:13:50,399

help provide data and collect data on

175

00:13:53,030 --> 00:13:51,680

precise

176

00:13:56,550 --> 00:13:53,040

movements

177

00:13:58,470 --> 00:13:56,560

of the spacecraft

178

00:14:01,829 --> 00:13:58,480

in terms of determining relative

179

00:14:03,590 --> 00:14:01,839

position attitude and rate in using uh

180

00:14:05,829 --> 00:14:03,600

small dots that are located on the

181

00:14:08,150 --> 00:14:05,839

spacecraft

182

00:14:09,990 --> 00:14:08,160

and the orbiter's uh

183

00:14:11,829 --> 00:14:10,000

closed circuit television system with