



1  
00:00:06,070 --> 00:00:03,669  
here's the morning of flight day seven

2  
00:00:07,349 --> 00:00:06,080  
and you can see uh jr is getting the uh

3  
00:00:09,589 --> 00:00:07,359  
eda

4  
00:00:11,830 --> 00:00:09,599  
repair information out of the printer i

5  
00:00:14,950 --> 00:00:11,840  
hopped on the bike during the post sleep

6  
00:00:16,310 --> 00:00:14,960  
time frame got a little exercise in

7  
00:00:17,750 --> 00:00:16,320  
it's good to do this and then you can

8  
00:00:19,670 --> 00:00:17,760  
get cleaned up and you're all set for

9  
00:00:21,830 --> 00:00:19,680  
the day brew is doing some

10  
00:00:23,349 --> 00:00:21,840  
routine maintenance activities in the

11  
00:00:24,710 --> 00:00:23,359  
wcs

12  
00:00:27,029 --> 00:00:24,720  
and of course you know we have to

13  
00:00:29,509 --> 00:00:27,039

maintain the entire shuttle and do what

14

00:00:31,349 --> 00:00:29,519

the scheduled

15

00:00:33,110 --> 00:00:31,359

activities are so he got that all taken

16

00:00:34,950 --> 00:00:33,120

care of dean he is managing some of the

17

00:00:36,870 --> 00:00:34,960

video tapes for photo tv you can see

18

00:00:38,950 --> 00:00:36,880

them floating uh it's a big

19

00:00:40,950 --> 00:00:38,960

organizational job and he's doing a

20

00:00:42,950 --> 00:00:40,960

great job at it

21

00:00:44,470 --> 00:00:42,960

i've had a lot of help checking things

22

00:00:46,310 --> 00:00:44,480

over backing me up on the paperwork

23

00:00:47,590 --> 00:00:46,320

here's uh bruce taking a look at the

24

00:00:50,229 --> 00:00:47,600

flight plan

25

00:00:52,229 --> 00:00:50,239

and uh pat is also probably at this time

26  
00:00:54,709 --> 00:00:52,239  
organizing all the messages and making

27  
00:00:56,830 --> 00:00:54,719  
sure everybody knows what they need to

28  
00:00:59,029 --> 00:00:56,840  
do to carry out the plan of the

29  
00:01:01,830 --> 00:00:59,039  
day okay the first thing that we did was

30  
00:01:04,229 --> 00:01:01,840  
the solar ray retract i did this with uh

31  
00:01:06,070 --> 00:01:04,239  
sunny williams here she's setting up the

32  
00:01:08,469 --> 00:01:06,080  
computer on the app flight deck she is

33  
00:01:11,030 --> 00:01:08,479  
the one sending the commands today to

34  
00:01:13,270 --> 00:01:11,040  
retract the solar array and then making

35  
00:01:14,469 --> 00:01:13,280  
the calls on the big loop to abort it

36  
00:01:17,429 --> 00:01:14,479  
i'm looking out the windows with the

37  
00:01:19,510 --> 00:01:17,439  
binoculars see we got a camera set up

38  
00:01:20,710 --> 00:01:19,520

and we're all communicating on several

39

00:01:23,350 --> 00:01:20,720

loops here to make sure this went

40

00:01:25,510 --> 00:01:23,360

smoothly when we uh uh paused for a

41

00:01:27,990 --> 00:01:25,520

moment i was able to snap some photos

42

00:01:31,030 --> 00:01:28,000

and we are able to uh downlink them to

43

00:01:33,429 --> 00:01:31,040

the ground using the computer setup that

44

00:01:35,030 --> 00:01:33,439

swaney has going

45

00:01:37,749 --> 00:01:35,040

here you'll see some of the emotion we

46

00:01:39,910 --> 00:01:37,759

retracted one bay at a time the first

47

00:01:41,749 --> 00:01:39,920

couple of attempts were very successful

48

00:01:43,749 --> 00:01:41,759

we had a good snapback which you may be

49

00:01:46,069 --> 00:01:43,759

able to see a whole wave kind of went up

50

00:01:48,550 --> 00:01:46,079

the arrays and popped everything loose

51  
00:01:51,510 --> 00:01:48,560  
and then we ran into a little uh hold up

52  
00:01:53,990 --> 00:01:51,520  
uh where we had a little wire guidewire

53  
00:01:55,590 --> 00:01:54,000  
sticking out that went slack and then it

54  
00:01:57,350 --> 00:01:55,600  
collected itself and we were able to

55  
00:01:59,030 --> 00:01:57,360  
attack just a little more we're

56  
00:02:00,230 --> 00:01:59,040  
expecting big things tomorrow during the

57  
00:02:01,350 --> 00:02:00,240  
eva

58  
00:02:04,069 --> 00:02:01,360  
here's uh

59  
00:02:07,190 --> 00:02:04,079  
uh clay and brew were backing us up over

60  
00:02:09,270 --> 00:02:07,200  
the rws with camera view support and

61  
00:02:22,309 --> 00:02:09,280  
then also sending backup abort commands

62  
00:02:25,910 --> 00:02:24,390  
hey this is clay anderson and here jr's

63  
00:02:27,670 --> 00:02:25,920

getting ready to set up for the eva that

64

00:02:29,910 --> 00:02:27,680

they're going to do tomorrow they had to

65

00:02:31,190 --> 00:02:29,920

prepare a lot of special type of items

66

00:02:33,270 --> 00:02:31,200

that they want to take out with them to

67

00:02:35,350 --> 00:02:33,280

allow them to do the repair to the

68

00:02:36,949 --> 00:02:35,360

insulation on the ohms pod

69

00:02:39,990 --> 00:02:36,959

and that's what j.r is doing right here

70

00:02:44,790 --> 00:02:40,000

is setting up his tools for tomorrow

71

00:02:48,710 --> 00:02:46,790

this is sunny williams she's doing a

72

00:02:51,430 --> 00:02:48,720

little bit of work to help for the eva

73

00:02:52,869 --> 00:02:51,440

as well by doing some battery recharging

74

00:02:54,550 --> 00:02:52,879

every time we go out with the suits we

75

00:02:56,790 --> 00:02:54,560

have to bring them back in and then

76  
00:02:58,229 --> 00:02:56,800  
recharge the batteries for use later and

77  
00:03:00,309 --> 00:02:58,239  
here i'm in a

78  
00:03:02,790 --> 00:03:00,319  
tool flurry with uh stuff getting ready

79  
00:03:04,550 --> 00:03:02,800  
for our oxygen generation system

80  
00:03:07,110 --> 00:03:04,560  
and what that's going to do is provide

81  
00:03:09,110 --> 00:03:07,120  
o2 for the station on the us side and

82  
00:03:10,949 --> 00:03:09,120  
we're going to have to vent the hydrogen

83  
00:03:12,630 --> 00:03:10,959  
overboard that we create so one of the

84  
00:03:14,390 --> 00:03:12,640  
things i'm doing is opening up the line

85  
00:03:17,110 --> 00:03:14,400  
to test it for pressure

86  
00:03:18,949 --> 00:03:17,120  
such that when jrr goes outside and

87  
00:03:22,869 --> 00:03:18,959  
opens up the valve on the outside of the

88  
00:03:26,710 --> 00:03:24,789

okay this is blue and in preparation for

89

00:03:28,789 --> 00:03:26,720

tomorrow's eva uh

90

00:03:30,789 --> 00:03:28,799

danny's gonna be uh flying on the uh

91

00:03:32,710 --> 00:03:30,799

space shuttle robotic arm that

92

00:03:34,789 --> 00:03:32,720

deceives steve swanson myself will be uh

93

00:03:37,350 --> 00:03:34,799

operating uh in preparation for that uh

94

00:03:40,070 --> 00:03:37,360

both swiney and myself uh reviewed on

95

00:03:41,910 --> 00:03:40,080

our doug display the exact uh trajectory

96

00:03:43,670 --> 00:03:41,920

of the space shuttle robotic we'll be

97

00:03:44,789 --> 00:03:43,680

taking as we pick up danny and uh bring

98

00:03:47,910 --> 00:03:44,799

them back to the own spot for the

99

00:03:51,030 --> 00:03:48,949

and

100

00:03:52,949 --> 00:03:51,040

here i am uh fighting with some those

101  
00:03:55,350 --> 00:03:52,959  
tools again trying to get the

102  
00:03:57,670 --> 00:03:55,360  
valves all the connections hooked up so

103  
00:03:58,949 --> 00:03:57,680  
that we could open the line and check

104  
00:04:01,110 --> 00:03:58,959  
the pressure and make sure that there

105  
00:04:03,750 --> 00:04:01,120  
were no leaks fortunately for us we were

106  
00:04:05,509 --> 00:04:03,760  
successful and the part that goes from

107  
00:04:19,270 --> 00:04:05,519  
the inside of the station the outside is

108  
00:04:23,510 --> 00:04:21,509  
the day before a spacewalk is just about

109  
00:04:25,430 --> 00:04:23,520  
as busy as the spacewalk itself there's

110  
00:04:27,670 --> 00:04:25,440  
a lot of effort that goes into preparing

111  
00:04:29,590 --> 00:04:27,680  
the suits because we have two spacewalk

112  
00:04:31,990 --> 00:04:29,600  
teams we had to take the suits out from

113  
00:04:35,030 --> 00:04:32,000

the previous team and put the ones in

114

00:04:37,270 --> 00:04:35,040

for uh jr and danny's walk tomorrow

115

00:04:39,990 --> 00:04:37,280

uh more preparation with jr preparing

116

00:04:42,150 --> 00:04:40,000

tools the tools he's is using that he's

117

00:04:45,510 --> 00:04:42,160

modified is actually

118

00:04:47,110 --> 00:04:45,520

a surgeon stapler and he has prepared it

119

00:04:49,590 --> 00:04:47,120

so that it's got a tether on it and can

120

00:04:51,909 --> 00:04:49,600

be used outside

121

00:04:53,670 --> 00:04:51,919

we do some photo documentation of those

122

00:05:03,110 --> 00:04:53,680

to send back to the ground to make sure

123

00:05:06,230 --> 00:05:04,870

with a lot of the preparation done on

124

00:05:08,469 --> 00:05:06,240

the ground and a review of the

125

00:05:10,550 --> 00:05:08,479

procedures it was time to tag up with

126

00:05:12,710 --> 00:05:10,560

the ground this was a chance for us to

127

00:05:16,150 --> 00:05:12,720

interface with team four that has really

128

00:05:18,710 --> 00:05:16,160

worked tyler tirelessly preparing uh for

129

00:05:20,150 --> 00:05:18,720

this unexpected task of repairing the

130

00:05:21,990 --> 00:05:20,160

ohms pod

131

00:05:23,830 --> 00:05:22,000

that involves everyone from flight

132

00:05:25,270 --> 00:05:23,840

director down to someone in each

133

00:05:28,070 --> 00:05:25,280

discipline

134

00:05:30,310 --> 00:05:28,080

they run the procedures

135

00:05:31,909 --> 00:05:30,320

and prepare the procedures if necessary

136

00:05:34,629 --> 00:05:31,919

get in the mbl

137

00:05:36,710 --> 00:05:34,639

and once we were able to

138

00:05:38,390 --> 00:05:36,720

hear their words on it review the

139

00:05:43,430 --> 00:05:38,400

procedures again we felt like we were

140

00:05:46,629 --> 00:05:45,110

they actually sent up some videos that

141

00:05:48,469 --> 00:05:46,639

we could watch of them doing the work

142

00:05:50,310 --> 00:05:48,479

down there which were helpful only so

143

00:05:51,590 --> 00:05:50,320

much can be described as words and with

144

00:05:53,830 --> 00:05:51,600

pictures and

145

00:05:56,070 --> 00:05:53,840

the videos that they sent up helped as

146

00:06:03,590 --> 00:05:56,080

danny then began to

147

00:06:07,670 --> 00:06:05,189

once we had all the instruction from the

148

00:06:09,510 --> 00:06:07,680

ground we got a team together that would

149

00:06:11,430 --> 00:06:09,520

be doing all the work on orbit that

150

00:06:12,790 --> 00:06:11,440

includes the space walkers

151

00:06:14,550 --> 00:06:12,800

myself who will be reading the

152

00:06:16,390 --> 00:06:14,560

procedures and then our two robotics

153

00:06:19,270 --> 00:06:16,400

operators lee archambault and steve

154

00:06:21,029 --> 00:06:19,280

swanson just to make sure that we

155

00:06:22,469 --> 00:06:21,039

knew each other's role and exactly what

156

00:06:24,710 --> 00:06:22,479

we were going to do this isn't one that

157

00:06:25,670 --> 00:06:24,720

we were able to practice on the ground

158

00:06:27,590 --> 00:06:25,680

and yet

159

00:06:29,749 --> 00:06:27,600

a combination of

160

00:06:31,990 --> 00:06:29,759

the work that was done by team four in

161

00:06:34,710 --> 00:06:32,000

the time we spent today here for example

162

00:06:36,309 --> 00:06:34,720

is danny practicing the staplers

163

00:06:38,230 --> 00:06:36,319

using the stapler

164

00:06:40,629 --> 00:06:38,240

to put together

165

00:06:42,629 --> 00:06:40,639

two pieces of foam that represented the

166

00:06:45,110 --> 00:06:42,639

tile this is the first time he'd ever

167

00:06:47,270 --> 00:06:45,120

had a chance to even hold this thing and

168

00:06:55,270 --> 00:06:47,280

really did a great job we're hoping that

169

00:07:01,589 --> 00:06:58,950

yes there's a sds target that was taken

170

00:07:09,749 --> 00:07:01,599

off the station in the first eva

171

00:07:13,589 --> 00:07:11,749

besides using the stapler

172

00:07:14,950 --> 00:07:13,599

there's also a series of pins that are

173

00:07:19,029 --> 00:07:14,960

going to be used

174

00:07:21,670 --> 00:07:19,039

to secure the blanket against the tile

175

00:07:23,189 --> 00:07:21,680

just to ensure that as the aircraft goes

176

00:07:25,430 --> 00:07:23,199

through

177

00:07:37,510 --> 00:07:25,440

the airflow as we return to earth that

178

00:07:40,550 --> 00:07:38,950

and with that it was the end of our day

179

00:07:41,749 --> 00:07:40,560

they're suddenly saying goodbye and