



PORT

TO NOD2

STBD

To PMA2

1
00:00:16,630 --> 00:00:14,870
and there's never a dull moment on a

2
00:00:18,070 --> 00:00:16,640
shuttle flight and so uh jim and i are

3
00:00:20,790 --> 00:00:18,080
wearing our t-shirts this morning

4
00:00:23,269 --> 00:00:20,800
because we basically got up

5
00:00:25,670 --> 00:00:23,279
and had this procedure to fly and then

6
00:00:28,310 --> 00:00:25,680
we were going to exercise afterwards

7
00:00:31,189 --> 00:00:28,320
but you can see this procedure

8
00:00:31,990 --> 00:00:31,199
it had some fairly close clearances with

9
00:00:34,549 --> 00:00:32,000
the

10
00:00:36,229 --> 00:00:34,559
gem module but all of it could be viewed

11
00:00:46,630 --> 00:00:36,239
basically out of the commander's window

12
00:00:52,869 --> 00:00:49,350
and this is clay and me transforming

13
00:00:55,670 --> 00:00:52,879

another rock today and today we

14

00:00:56,950 --> 00:00:55,680

transferred two racks into the space

15

00:00:59,910 --> 00:00:56,960

station

16

00:01:03,830 --> 00:00:59,920

this is wall uh the earth observatory

17

00:01:05,910 --> 00:01:03,840

rack which goes into the u.s laboratory

18

00:01:09,830 --> 00:01:05,920

it enhances uh the earth observation

19

00:01:12,789 --> 00:01:09,840

capability a lot with our

20

00:01:15,190 --> 00:01:12,799

remote sensing capability and remote

21

00:01:17,429 --> 00:01:15,200

control of the walls

22

00:01:20,149 --> 00:01:17,439

the window and the camera and video

23

00:01:28,149 --> 00:01:24,230

as you see the rack is so big it just

24

00:01:30,950 --> 00:01:28,159

fits the heart so we have to very

25

00:01:31,830 --> 00:01:30,960

we have to be very careful we didn't hit

26

00:01:34,310 --> 00:01:31,840

any

27

00:01:38,390 --> 00:01:34,320

heart shield and structures

28

00:01:41,030 --> 00:01:38,400

so we moved very slow and steady

29

00:01:43,590 --> 00:01:41,040

and this is another teamwork uh two or

30

00:01:44,550 --> 00:01:43,600

three crew members uh

31

00:01:47,990 --> 00:01:44,560

worked

32

00:01:54,710 --> 00:01:48,000

together to transfer the wall frog and

33

00:01:58,550 --> 00:01:57,109

i was actually uh behind now waiting to

34

00:02:01,109 --> 00:01:58,560

get through the lab

35

00:02:03,350 --> 00:02:01,119

um when this was going on watching her

36

00:02:04,630 --> 00:02:03,360

do it now several of us have commented

37

00:02:07,270 --> 00:02:04,640

that uh

38

00:02:09,669 --> 00:02:07,280

naoko and soichi uh doing these transfer

39

00:02:11,990 --> 00:02:09,679

offs that they're uh

40

00:02:14,550 --> 00:02:12,000

like fish and water they they move so

41

00:02:15,830 --> 00:02:14,560

gracefully with these these huge racks

42

00:02:18,070 --> 00:02:15,840

that weigh

43

00:02:19,190 --> 00:02:18,080

you know hundreds of pounds so

44

00:02:20,790 --> 00:02:19,200

um

45

00:02:23,030 --> 00:02:20,800

it's one of those things where if you

46

00:02:25,110 --> 00:02:23,040

get get it moving in the wrong direction

47

00:02:27,830 --> 00:02:25,120

it's really hard to stop it and they've

48

00:02:29,270 --> 00:02:27,840

just done a great job serial number 1041

49

00:02:31,509 --> 00:02:29,280

cs02

50

00:02:43,670 --> 00:02:31,519

looks like it's got a low battery we

51
00:02:49,190 --> 00:02:45,910
it's been a long time waiting to fly on

52
00:02:51,750 --> 00:02:49,200
orbit so we were great we were very

53
00:02:56,070 --> 00:02:51,760
go to uh out the world work was done

54
00:02:58,550 --> 00:02:57,110
and the

55
00:03:01,190 --> 00:02:58,560
entire crew actually getting the

56
00:03:04,550 --> 00:03:03,110
very well

57
00:03:06,710 --> 00:03:04,560
checking

58
00:03:08,790 --> 00:03:06,720
again this video may look sideways so

59
00:03:10,390 --> 00:03:08,800
but uh again uh like like we said

60
00:03:11,830 --> 00:03:10,400
yesterday there really is no up and down

61
00:03:14,390 --> 00:03:11,840
in space so

62
00:03:16,229 --> 00:03:14,400
uh i was turned one direction at

63
00:03:19,589 --> 00:03:16,239

orientation in the lab

64

00:03:21,030 --> 00:03:19,599

and soichi and noko were turned in in

65

00:03:23,190 --> 00:03:21,040

another direction and they're

66

00:03:24,390 --> 00:03:23,200

maneuvering this very large object into

67

00:03:26,789 --> 00:03:24,400

place uh

68

00:03:28,949 --> 00:03:26,799

and uh several uh other iss crew members

69

00:03:31,270 --> 00:03:28,959

have obviously been here on station and

70

00:03:33,589 --> 00:03:31,280

the lab window has been a very useful

71

00:03:36,390 --> 00:03:33,599

tool for doing earth observation

72

00:03:45,750 --> 00:03:36,400

and this rack will make it even more so

73

00:03:51,030 --> 00:03:48,390

and uh most of our day all of us were at

74

00:03:52,470 --> 00:03:51,040

some point doing transfer um

75

00:03:54,390 --> 00:03:52,480

which

76

00:03:56,470 --> 00:03:54,400

is a lot like moving and we talked a

77

00:03:58,149 --> 00:03:56,480

little bit about yesterday how it's um

78

00:04:00,470 --> 00:03:58,159

kind of like a game we have to move some

79

00:04:02,309 --> 00:04:00,480

things out of the station

80

00:04:05,190 --> 00:04:02,319

to make room for things coming out of

81

00:04:07,110 --> 00:04:05,200

the multi-purpose logistics module

82

00:04:08,710 --> 00:04:07,120

and today we are really putting that

83

00:04:10,550 --> 00:04:08,720

dance into play

84

00:04:14,229 --> 00:04:10,560

and when you go into the multi-purpose

85

00:04:16,789 --> 00:04:14,239

logistics module it is very empty and

86

00:04:18,069 --> 00:04:16,799

now we have the hard task of filling it

87

00:04:20,150 --> 00:04:18,079

back up

88

00:04:21,990 --> 00:04:20,160

so now we're going and finding a whole

89

00:04:23,909 --> 00:04:22,000

bunch of bags and trying to figure out

90

00:04:34,390 --> 00:04:23,919

where they go and as you can see that's

91

00:04:40,230 --> 00:04:36,790

and here's a zoom in on the wharf emblem

92

00:04:45,510 --> 00:04:43,189

well after daddy and i did the uh pdrs

93

00:04:48,550 --> 00:04:45,520

work got a chance to go over and work on

94

00:04:50,629 --> 00:04:48,560

the a red the advanced resistive

95

00:04:53,030 --> 00:04:50,639

exercise device you can see here doing

96

00:04:54,469 --> 00:04:53,040

squats it's really effective and it

97

00:04:59,030 --> 00:04:54,479

feels good to put some weight on the

98

00:05:03,430 --> 00:05:01,270

a-red's a great machine and here's jim

99

00:05:04,629 --> 00:05:03,440

racking the easter bar in the upper

100

00:05:06,710 --> 00:05:04,639

position and

101
00:05:08,950 --> 00:05:06,720
you can see where it just floats this is

102
00:05:10,790 --> 00:05:08,960
rick and the airlock preparing for our

103
00:05:12,950 --> 00:05:10,800
eva2 tomorrow

104
00:05:14,469 --> 00:05:12,960
he and clay spent a long time today

105
00:05:16,230 --> 00:05:14,479
preparing tools and getting the suits

106
00:05:17,749 --> 00:05:16,240
ready to go and checking out all the

107
00:05:19,110 --> 00:05:17,759
systems and

108
00:05:20,469 --> 00:05:19,120
making sure that

109
00:05:31,350 --> 00:05:20,479
all everything is ready to go for

110
00:05:37,430 --> 00:05:33,590
airlock houston space ground one the big

111
00:05:42,790 --> 00:05:39,909
this is a picture of the uh tool set up

112
00:05:44,150 --> 00:05:42,800
in the crew lock go ahead

113
00:05:45,830 --> 00:05:44,160

the international space station there's

114

00:05:47,990 --> 00:05:45,840

a battery this is some more electricity

115

00:05:49,909 --> 00:05:48,000

guys

116

00:05:51,510 --> 00:05:49,919

overhead five

117

00:05:57,830 --> 00:05:51,520

alpha

118

00:06:01,430 --> 00:05:58,950

module

119

00:06:03,909 --> 00:06:01,440

so while exercising

120

00:06:13,029 --> 00:06:03,919

we can enjoy the view of the earth with

121

00:06:16,070 --> 00:06:14,790

working out in space is actually a lot

122

00:06:18,230 --> 00:06:16,080

of fun

123

00:06:19,430 --> 00:06:18,240

we on the shuttle we have a cycle

124

00:06:21,510 --> 00:06:19,440

ergometer

125

00:06:22,710 --> 00:06:21,520

and we've been using that i guess i

126

00:06:24,070 --> 00:06:22,720

should probably talk about this i'm

127

00:06:26,950 --> 00:06:24,080

checking all the tools that are going to

128

00:06:28,710 --> 00:06:26,960

go outside tomorrow for the eva

129

00:07:19,350 --> 00:06:28,720

making sure that the guys have

130

00:07:39,430 --> 00:07:21,589

discovery houston on the big loop for

131

00:07:45,270 --> 00:07:42,550

and go ahead thank you

132

00:07:47,189 --> 00:07:45,280

daddy got a new question about uh eva we

133

00:07:50,150 --> 00:07:47,199

are good with uh

134

00:07:53,270 --> 00:07:50,160

uh brt into the circular handrail at the

135

00:07:56,629 --> 00:07:55,189

thanks aggie for such a quick response i

136

00:07:59,189 --> 00:07:56,639

really appreciate those guys checking it

137

00:08:00,869 --> 00:07:59,199

down and i'll let rick know that'll be a

138

00:08:03,270 --> 00:08:00,879

really tremendous help

139

00:08:05,270 --> 00:08:03,280

all right i think we're ready for eva2

140

00:08:06,869 --> 00:08:05,280

tomorrow

141

00:09:27,030 --> 00:08:06,879

absolutely we're looking forward to it

142

00:09:34,389 --> 00:09:30,470

you sensation on the big loop for

143

00:09:39,350 --> 00:09:34,399

vmc phc pfc

144

00:09:46,870 --> 00:09:42,150

no matter how much i screwed up um

145

00:09:50,389 --> 00:09:49,190

we think it has can you give a call and

146

00:09:51,190 --> 00:09:50,399

try and

147

00:09:55,030 --> 00:09:51,200

we'll

148

00:10:02,790 --> 00:09:58,389

on the protocol 4 right

149

00:10:02,800 --> 00:10:31,990

am i

150

00:10:32,000 --> 00:10:38,389

now it seems to be quiet

151
00:10:38,399 --> 00:12:02,710
we're checking

152
00:12:02,720 --> 00:12:41,910
they're ready to privatize

153
00:12:41,920 --> 00:12:57,190
this steve hart

154
00:13:00,870 --> 00:12:59,110
station houston space ground one for

155
00:13:02,949 --> 00:13:00,880
tracy we're still trying to troubleshoot

156
00:13:08,310 --> 00:13:02,959
your connection we're going to reconnect

157
00:13:08,320 --> 00:18:28,070
okay now thanks a lot

158
00:18:43,190 --> 00:18:31,190
station houston space to ground one for

159
00:18:48,630 --> 00:18:45,430
go ahead houston

160
00:18:51,190 --> 00:18:48,640
yeah clay uh we're showing 43 minutes on

161
00:18:53,029 --> 00:18:51,200
our timer when you hit 45 minutes on

162
00:18:57,110 --> 00:18:53,039
your counter we're ready for hatch