

U.S. Spacewalk 87



1
00:00:04,670 --> 00:00:01,370

[Music]

2
00:00:08,810 --> 00:00:04,680

this video is for the Isis rollout Solar

3
00:00:11,810 --> 00:00:08,820

Ray or irosa 1A install Eva Steve Bowen

4
00:00:13,669 --> 00:00:11,820

ev1 with the red stripes egresses and

5
00:00:15,650 --> 00:00:13,679

receives a crew lock bag and puts it on

6
00:00:18,189 --> 00:00:15,660

his body restraint tether

7
00:00:20,570 --> 00:00:18,199

ev2 with white stripes Woody hoberg

8
00:00:22,550 --> 00:00:20,580

egresses with acrylic bag on his body

9
00:00:24,230 --> 00:00:22,560

restraint tether and closes the thermal

10
00:00:26,630 --> 00:00:24,240

cover

11
00:00:29,089 --> 00:00:26,640

ev1 translates up the forward face of

12
00:00:31,189 --> 00:00:29,099

the truss and goes starboard he stops to

13
00:00:33,770 --> 00:00:31,199

configure safety to others

14

00:00:35,990 --> 00:00:33,780

ev2 follows a similar translation path

15

00:00:38,030 --> 00:00:36,000

and goes to the port crew equipment

16

00:00:40,310 --> 00:00:38,040

translation Aid card to temporarily

17

00:00:43,490 --> 00:00:40,320

stose bag and retrieve an articulating

18

00:00:46,130 --> 00:00:43,500

portable foot restraint meanwhile ev1

19

00:00:48,650 --> 00:00:46,140

translates to the irosa carrier stows

20

00:00:49,729 --> 00:00:48,660

his bag and retrieves his pistol grip

21

00:00:52,549 --> 00:00:49,739

tool

22

00:00:54,529 --> 00:00:52,559

ev1 begins preparing irosa for removal

23

00:00:57,229 --> 00:00:54,539

from the carrier first releasing a

24

00:01:00,590 --> 00:00:57,239

restraint bolt on the upper eye Rosa

25

00:01:02,209 --> 00:01:00,600

ev2 relocates the foot restraint and

26

00:01:03,650 --> 00:01:02,219

installs it on the Space Station's

27

00:01:06,830 --> 00:01:03,660

robotic arm

28

00:01:08,690 --> 00:01:06,840

ev2 ingresses the foot restraint and

29

00:01:10,670 --> 00:01:08,700

then the arm will move them away from

30

00:01:13,370 --> 00:01:10,680

the Truss

31

00:01:15,710 --> 00:01:13,380

ev1 translates to the lower Rosa and

32

00:01:18,710 --> 00:01:15,720

releases its first restraint bulb he

33

00:01:20,990 --> 00:01:18,720

releases both anti-rotation devices back

34

00:01:22,860 --> 00:01:21,000

on the upper eye Rosa and then we'll

35

00:01:30,710 --> 00:01:22,870

Stow them in the crew lock bag

36

00:01:34,609 --> 00:01:30,720

[Music]

37

00:01:37,490 --> 00:01:34,619

on the robotic arm ev2 is flown over to

38

00:01:40,069 --> 00:01:37,500

access two sets of bolts on the boom end

39

00:01:42,590 --> 00:01:40,079

of the upper irosa

40

00:01:44,990 --> 00:01:42,600

the first two bolts will allow the boom

41

00:01:46,670 --> 00:01:45,000

deployment system rollers to be moved

42

00:01:51,490 --> 00:01:46,680

into place to help with the array

43

00:01:57,230 --> 00:01:54,830

the second two bolts will release two of

44

00:01:59,450 --> 00:01:57,240

four mechanisms that hold the Arosa in

45

00:02:01,910 --> 00:01:59,460

its rolled up configuration

46

00:02:04,490 --> 00:02:01,920

ev1 partially releases the upper eye

47

00:02:06,770 --> 00:02:04,500

roses restraint fold and installs the

48

00:02:09,290 --> 00:02:06,780

first of two handling AIDS called scoops

49

00:02:10,669 --> 00:02:09,300

and prep for removing a Rosa from the

50

00:02:13,369 --> 00:02:10,679

carrier

51
00:02:15,770 --> 00:02:13,379
the arm flies ev2 over to the hinge end

52
00:02:17,690 --> 00:02:15,780
of the upper eye Rosa and both crew

53
00:02:20,630 --> 00:02:17,700
members work to release the final bolt

54
00:02:23,390 --> 00:02:20,640
holding it to the carrier eb1 installs a

55
00:02:27,600 --> 00:02:23,400
second scoop an ev2 lifts the eye Rosa

56
00:02:27,610 --> 00:02:33,250
[Music]

57
00:02:39,350 --> 00:02:36,170
after several Maneuvers on the robotic

58
00:02:42,229 --> 00:02:39,360
arm ev2 will arrive at the 1A mod kit

59
00:02:44,270 --> 00:02:42,239
work site during these Maneuvers ev1

60
00:02:46,729 --> 00:02:44,280
will pick up the temporarily stowed bag

61
00:02:49,309 --> 00:02:46,739
from the port cart and reconfigure both

62
00:02:51,990 --> 00:02:49,319
Cruise safety toddlers on his way to

63
00:02:57,850 --> 00:02:52,000

meet ev2 at the mod kit

64

00:03:00,290 --> 00:02:57,860

[Music]

65

00:03:06,380 --> 00:03:00,300

both crew will then work to install

66

00:03:12,649 --> 00:03:09,430

[Music]

67

00:03:14,570 --> 00:03:12,659

the crew will release the scoops and ev2

68

00:03:16,790 --> 00:03:14,580

will move into position to release the

69

00:03:17,890 --> 00:03:16,800

final bolt holding iroza in its folded

70

00:03:20,809 --> 00:03:17,900

position

71

00:03:23,030 --> 00:03:20,819

once released ev1 will hold our Rosa

72

00:03:26,030 --> 00:03:23,040

closed while ev2 egresses his foot

73

00:03:27,890 --> 00:03:26,040

restraint and gets into position

74

00:03:29,930 --> 00:03:27,900

both crew will then work together to

75

00:03:32,210 --> 00:03:29,940

unfold iroza and secure the right side

76

00:03:35,630 --> 00:03:32,220

onto the mounting bracket

77

00:03:37,550 --> 00:03:35,640

once secured ev2 will drive two hinge

78

00:03:39,110 --> 00:03:37,560

bolts that hold iroza in the unfolded

79

00:03:42,170 --> 00:03:39,120

position

80

00:03:44,449 --> 00:03:42,180

ev2 will then move away from my Rosa to

81

00:03:47,509 --> 00:03:44,459

reconfigure her safety tether on the arm

82

00:03:54,190 --> 00:03:47,519

ev1 Works to drive 8 bolts to fully

83

00:03:59,330 --> 00:03:57,229

both crew will then work to electrically

84

00:04:01,970 --> 00:03:59,340

connect the new iroza to the ISS power

85

00:04:04,670 --> 00:04:01,980

system they'll first attach four

86

00:04:07,009 --> 00:04:04,680

connectors to a Rosa then both will move

87

00:04:09,350 --> 00:04:07,019

to either side of the Legacy array to

88

00:04:11,449 --> 00:04:09,360

disconnect the old array and connect a

89

00:04:13,670 --> 00:04:11,459

white cable this will allow power to

90

00:04:15,830 --> 00:04:13,680

flow from both the new irosa and the

91

00:04:16,259 --> 00:04:15,840

Legacy array to the space station power

92

00:04:24,249 --> 00:04:16,269

system

93

00:04:29,450 --> 00:04:27,110

at this point ev1 moves into a

94

00:04:31,490 --> 00:04:29,460

deployment viewing position and ev2 will

95

00:04:33,790 --> 00:04:31,500

release the final two bolts restraining

96

00:04:36,710 --> 00:04:33,800

irosa in the undeployed position

97

00:04:37,850 --> 00:04:36,720

iroza will deploy over the next 6 to 10

98

00:04:40,969 --> 00:04:37,860

minutes

99

00:04:43,249 --> 00:04:40,979

during deployment ev1 translates back to

100

00:04:44,990 --> 00:04:43,259

diversa carrier to reconfigure the

101
00:04:45,990 --> 00:04:45,000
carrier beams that previously held the

102
00:04:47,450 --> 00:04:46,000
upper irosa

103
00:04:49,730 --> 00:04:47,460
[Music]

104
00:04:52,010 --> 00:04:49,740
these beams need to be rotated out of

105
00:04:56,390 --> 00:04:52,020
the way to allow access to the lower

106
00:05:01,129 --> 00:04:59,270
once deployment is complete ev2 will

107
00:05:03,530 --> 00:05:01,139
release two bolts that allow the erosa

108
00:05:06,370 --> 00:05:03,540
blankets to become tensioned

109
00:05:09,409 --> 00:05:06,380
ev2 then cleans up the mod kit worksite

110
00:05:11,450 --> 00:05:09,419
retrieving his crew lock bag and head to

111
00:05:15,530 --> 00:05:11,460
the carrier to help ev1 with the carrier

112
00:05:19,070 --> 00:05:17,330
the crew members work together to

113
00:05:19,790 --> 00:05:19,080

release the bolts holding the beams in

114

00:05:21,770 --> 00:05:19,800

place

115

00:05:25,610 --> 00:05:21,780

then they will rotate the beams out of

116

00:05:28,550 --> 00:05:25,620

the way and secure them back down

117

00:05:36,129 --> 00:05:28,560

this is the last task in the first Eva

118

00:05:41,450 --> 00:05:38,570

both crew will clean up the work site

119

00:05:44,150 --> 00:05:41,460

and translate back to the airlock they

120

00:05:46,850 --> 00:05:44,160

will clean up their tethers on the way

121

00:05:49,850 --> 00:05:46,860

they will then work to Ingress and begin

122

00:05:55,030 --> 00:05:49,860

repressing the airlock this will finish

123

00:05:55,040 --> 00:06:00,850

[Music]