1
00:00:08,390 --> 00:00:05,670
now the crew members have been working

2
00:00:09,270 --> 00:00:08,400
toward a planned spacewalk on sunday

3
00:00:12,310 --> 00:00:09,280
when

4
00:00:15,589 --> 00:00:12,320
wilmore and verts will lay 400 feet of

5
00:00:17,390 --> 00:00:15,599
cable out on the station truss and rig a

6
00:00:20,790 --> 00:00:17,400
pair of antenna for the

7
00:00:22,950 --> 00:00:20,800
c2v2 system that's common communications

8
00:00:25,189 --> 00:00:22,960
for visiting vehicles that's going to be

9
00:00:27,589 --> 00:00:25,199
used for rendezvous and navigation for

10
00:00:29,509 --> 00:00:27,599
american commercial crew vehicles and

11
00:00:32,069 --> 00:00:29,519
other visiting vehicles that will be

12
00:00:34,389 --> 00:00:32,079
arriving at the station to link up to

13
00:00:36,389 --> 00:00:34,399

the soon to be installed international

14
00:00:38,069 --> 00:00:36,399
docking adapters

15
00:00:39,910 --> 00:00:38,079
this morning the international space

16
00:00:42,470 --> 00:00:39,920
station's mission management team

17
00:00:44,549 --> 00:00:42,480
assessed the preparations for that eva

18
00:00:47,590 --> 00:00:44,559
including having a discussion

19
00:00:49,750 --> 00:00:47,600
about a small quantity of water that was

20
00:00:52,630 --> 00:00:49,760
found in terry wurtz's helmet at the

21
00:00:55,110 --> 00:00:52,640
conclusion of the spacewalk on wednesday

22
00:00:57,670 --> 00:00:55,120
and after all of those discussions the

23
00:01:00,549 --> 00:00:57,680
immt was a unanimous go for the

24
00:01:02,869 --> 00:01:00,559
spacewalk coming up on sunday morning

25
00:01:04,789 --> 00:01:02,879
now to bring us up to speed on all of

26
00:01:08,070 --> 00:01:04,799
these issues this morning we're joined

27
00:01:09,510 --> 00:01:08,080
by increment 42 lead eva officer alex

28
00:01:11,750 --> 00:01:09,520
canelacos

29
00:01:13,670 --> 00:01:11,760
let me get you to start by bringing us

30
00:01:15,510 --> 00:01:13,680
up to speed on the situation with

31
00:01:17,190 --> 00:01:15,520
terry's suit what did you see at the end

32
00:01:18,789 --> 00:01:17,200
of the spacewalk on wednesday all right

33
00:01:21,590 --> 00:01:18,799
well so wednesday we completed

34
00:01:23,990 --> 00:01:21,600
successfully eva 30 and at the end of

35
00:01:26,870 --> 00:01:24,000
the eva during repress

36
00:01:29,990 --> 00:01:26,880
of the airlock terry noticed some water

37
00:01:31,830 --> 00:01:30,000
in his helmet and at the end of the eva

38
00:01:33,830 --> 00:01:31,840

when we got him out out of the space

39
00:01:36,870 --> 00:01:33,840
suit he was able to quantify that water

40
00:01:37,830 --> 00:01:36,880
by pulling some of it into a syringe

41
00:01:40,069 --> 00:01:37,840
and

42
00:01:41,990 --> 00:01:40,079
he also commented that the back of his

43
00:01:42,870 --> 00:01:42,000
neck was a little wet and that his calm

44
00:01:45,350 --> 00:01:42,880
cap

45
00:01:46,870 --> 00:01:45,360
which is his ability makes his ability

46
00:01:48,870 --> 00:01:46,880
to talk and communicate to the ground

47
00:01:52,469 --> 00:01:48,880
and the other crew members it was also a

48
00:01:54,789 --> 00:01:52,479
little moist and um he reported

49
00:01:57,030 --> 00:01:54,799
about a quantity of 15 he estimates

50
00:01:59,910 --> 00:01:57,040
about 15 milliliters of water that's

51
00:02:02,230 --> 00:01:59,920
very small it's a very small amount and

52
00:02:05,109 --> 00:02:02,240
our suits are known to um

53
00:02:07,109 --> 00:02:05,119
during repress um basically when you

54
00:02:10,150 --> 00:02:07,119
connect to the umbilical you have a lot

55
00:02:12,390 --> 00:02:10,160
of cold air that's going past the

56
00:02:14,790 --> 00:02:12,400
cooling system of the suit and this

57
00:02:17,350 --> 00:02:14,800
air will often condense and as we

58
00:02:21,110 --> 00:02:17,360
repress we have high density gas that's

59
00:02:23,910 --> 00:02:21,120
flowing past this condensed water now

60
00:02:25,589 --> 00:02:23,920
that can often uh move the water over

61
00:02:28,070 --> 00:02:25,599
the crew member's helmet

62
00:02:30,710 --> 00:02:28,080
and we have actually a speck of that

63
00:02:33,270 --> 00:02:30,720

it's about 50 about 57 milliliters is

64
00:02:35,030 --> 00:02:33,280
what we expect um to be pushed up up to

65
00:02:36,470 --> 00:02:35,040
57 milliliters you're saying that that

66
00:02:37,910 --> 00:02:36,480
you expect

67
00:02:40,390 --> 00:02:37,920
there's a specification there's there's

68
00:02:42,710 --> 00:02:40,400
that amount yes and and it doesn't

69
00:02:45,030 --> 00:02:42,720
always happen it often depends on how

70
00:02:47,430 --> 00:02:45,040
how cool the crew members emu his space

71
00:02:49,670 --> 00:02:47,440
suit is um and so i kind of feel just

72
00:02:53,670 --> 00:02:49,680
kind of for for reference here this is

73
00:02:55,270 --> 00:02:53,680
this is about 57 milliliters of water um

74
00:02:57,110 --> 00:02:55,280
in in this uh

75
00:02:59,270 --> 00:02:57,120
water bottle healer and you can see like

76
00:03:02,229 --> 00:02:59,280
if i turn it to the side you can see how

77
00:03:03,750 --> 00:03:02,239
it flattens out like he saw on his visor

78
00:03:05,750 --> 00:03:03,760
it flattens out and it can look really

79
00:03:06,710 --> 00:03:05,760
big but it's it's less than a golf ball

80
00:03:08,550 --> 00:03:06,720
size

81
00:03:09,670 --> 00:03:08,560
of water and so

82
00:03:11,990 --> 00:03:09,680
you're saying that this is something

83
00:03:13,830 --> 00:03:12,000
that you expect you've uh that was the

84
00:03:16,309 --> 00:03:13,840
area that you begin to investigate

85
00:03:18,470 --> 00:03:16,319
correct so um this this spacesuit is

86
00:03:20,550 --> 00:03:18,480
actually known to have what we call

87
00:03:22,630 --> 00:03:20,560
carryover water that's what we call this

88
00:03:25,110 --> 00:03:22,640

this type of um

89
00:03:27,350 --> 00:03:25,120
occurrence and we've had seven other

90
00:03:30,390 --> 00:03:27,360
occurrences of this carryover on the

91
00:03:31,430 --> 00:03:30,400
spacesuit um and so yes it isn't is a

92
00:03:33,990 --> 00:03:31,440
known

93
00:03:36,070 --> 00:03:34,000
we call it basically a feature of the

94
00:03:38,949 --> 00:03:36,080
the emu the space suit

95
00:03:41,350 --> 00:03:38,959
um it's not a danger to the crew members

96
00:03:43,990 --> 00:03:41,360
at a quantity that small that's correct

97
00:03:45,589 --> 00:03:44,000
so um going back to my water bot bottle

98
00:03:48,470 --> 00:03:45,599
here um

99
00:03:50,949 --> 00:03:48,480
you know eva 22 and 23 when uh at the

100
00:03:53,509 --> 00:03:50,959
end of eba 23 when luca had the water in

101
00:03:55,270 --> 00:03:53,519
his helmet it was twice the amount of

102
00:03:56,949 --> 00:03:55,280
water that can fit into this water

103
00:03:58,470 --> 00:03:56,959
bottle the entire bottle the entire

104
00:04:01,110 --> 00:03:58,480
bottle so you can see that this this

105
00:04:03,110 --> 00:04:01,120
amount is almost um you know

106
00:04:05,830 --> 00:04:03,120
an order of magnitude less than than

107
00:04:07,509 --> 00:04:05,840
what luca um saw so and and this is

108
00:04:10,710 --> 00:04:07,519
something you've seen before

109
00:04:12,710 --> 00:04:10,720
and it factors expected to happen uh not

110
00:04:14,789 --> 00:04:12,720
necessarily expected every time but

111
00:04:16,789 --> 00:04:14,799
we've seen it it's a known it's a known

112
00:04:18,550 --> 00:04:16,799
feature of our emu's and you know that's

113
00:04:20,310 --> 00:04:18,560

why we monitor a lot of the parameters

114
00:04:22,469 --> 00:04:20,320
on the ground the data that we receive

115
00:04:24,629 --> 00:04:22,479
from the emu and we're continually

116
00:04:27,030 --> 00:04:24,639
getting data and we're watching that to

117
00:04:29,270 --> 00:04:27,040
see if if we're having any occurrences

118
00:04:30,870 --> 00:04:29,280
of this situation or or the situation

119
00:04:32,629 --> 00:04:30,880
that luca had and they're they're very

120
00:04:33,909 --> 00:04:32,639
different um

121
00:04:36,870 --> 00:04:33,919
occurrences

122
00:04:39,110 --> 00:04:36,880
so is everything else all set to go on

123
00:04:41,510 --> 00:04:39,120
sunday too so as you mentioned today the

124
00:04:43,430 --> 00:04:41,520
crew is working a lot in preparations

125
00:04:44,310 --> 00:04:43,440
for their eva on sunday and that will be

126
00:04:46,870 --> 00:04:44,320
eva

127
00:04:48,629 --> 00:04:46,880
31 and they'll be deploying the c2v2

128
00:04:50,230 --> 00:04:48,639
communication system

129
00:04:52,550 --> 00:04:50,240
they've been working on their tool

130
00:04:54,390 --> 00:04:52,560
config and tool config takes several

131
00:04:56,230 --> 00:04:54,400
hours to basically configure all the

132
00:04:59,110 --> 00:04:56,240
tools and hardware that they'll be

133
00:05:00,710 --> 00:04:59,120
taking out the door and from rats or

134
00:05:02,629 --> 00:05:00,720
tethers to

135
00:05:04,070 --> 00:05:02,639
the actual antennas that they will be

136
00:05:06,310 --> 00:05:04,080
taking out the door that's what they're

137
00:05:08,150 --> 00:05:06,320
they're preparing today and in addition

138
00:05:09,990 --> 00:05:08,160

to that they have lots of procedure

139
00:05:11,510 --> 00:05:10,000
review and also they need to get their

140
00:05:13,670 --> 00:05:11,520
suits ready to go out the door one more

141
00:05:15,590 --> 00:05:13,680
time so they in fact they had they moved

142
00:05:16,950 --> 00:05:15,600
some tasks off of the schedule for today

143
00:05:18,710 --> 00:05:16,960
in order to give them more time to get

144
00:05:21,270 --> 00:05:18,720
ready that's correct so we i mean these

145
00:05:23,270 --> 00:05:21,280
evas this is a series of three evas it's

146
00:05:24,950 --> 00:05:23,280
the most that we've ever done in a row

147
00:05:26,950 --> 00:05:24,960
since space shuttle and so they're

148
00:05:28,390 --> 00:05:26,960
complicated evas

149
00:05:30,310 --> 00:05:28,400
and we want to make sure that the crew

150
00:05:32,230 --> 00:05:30,320
has is prepared for them and has plenty

151
00:05:34,390 --> 00:05:32,240
of time to get ready for them great alex

152
00:05:36,390 --> 00:05:34,400
thanks for bringing us up to speed on