1
00:00:01,534 --> 00:00:03,469
This is mission control
Houston, we want to welcome you

2
00:00:03,469 --> 00:00:04,870
to today's ISS update.

3
00:00:04,870 --> 00:00:07,573
It is Wednesday,
October 17, 2012.

4
00:00:07,573 --> 00:00:10,342
This is a live view inside the
space station flight control

5
00:00:10,342 --> 00:00:12,711
room here at the
Johnson Space Center.

6
00:00:12,711 --> 00:00:14,547
Onboard the orbiting
complex the crew

7
00:00:14,547 --> 00:00:17,216
of Expedition 33 is
busy working on a number

8
00:00:17,216 --> 00:00:18,584
of different science experiments

9
00:00:18,584 --> 00:00:20,786
and also some routine
maintenance.

10
00:00:20,786 --> 00:00:23,155
They're also working inside
the Quest airlock today.

11
00:00:23,155 --> 00:00:24,723

There you see Suni
Williams, there on the right

12
00:00:24,723 --> 00:00:27,493
who is the commander of
Expedition 33 as well

13
00:00:27,493 --> 00:00:29,795
as Aki Hoshide who
is a flight engineer.

14
00:00:29,795 --> 00:00:32,598
On board there inside Quest
getting their spacesuits ready

15
00:00:32,598 --> 00:00:35,234
for an upcoming spacewalk
that will take place

16
00:00:35,234 --> 00:00:37,236
over the next couple of
weeks at the end of October,

17
00:00:37,236 --> 00:00:39,105
early part of November.

18
00:00:39,105 --> 00:00:42,541
The crew is going to be
going outside to take a look

19
00:00:42,541 --> 00:00:46,846
at the P6 radiator that is out
there on the far left-hand side

20
00:00:46,846 --> 00:00:48,614
of the station out there
near the solar arrays.

21
00:00:48,614 --> 00:00:50,983
There are radiators out

there that circulate ammonia

22
00:00:50,983 --> 00:00:53,252
through them to keep
all the electronics

23
00:00:53,252 --> 00:00:55,888
and all the equipment onboard
the space station cool.

24
00:00:55,888 --> 00:00:58,324
There is a leak on one of
those radiators out there

25
00:00:58,324 --> 00:01:01,627
that the crew will be going out
there to address and to mitigate

26
00:01:01,627 --> 00:01:04,563
and to install some jumpers
to take care of that.

27
00:01:04,563 --> 00:01:07,433
The exact the timing of the
spacewalk will be approved

28
00:01:07,433 --> 00:01:09,401
by the space station
program here shortly

29
00:01:09,401 --> 00:01:11,203
and then we'll know
exactly what day

30
00:01:11,203 --> 00:01:13,272
and what time we are
targeting for the spacewalk.

31
00:01:13,272 --> 00:01:15,474
But in between now and then the

crew is already reviewing the

32
00:01:15,474 --> 00:01:17,910
procedures onboard
for that spacewalk

33
00:01:17,910 --> 00:01:21,147
and also getting their equipment
ready to go to step outside.

34
00:01:21,147 --> 00:01:23,149
This'll be the seventh
spacewalk for Suni Williams.

35
00:01:23,149 --> 00:01:25,317
It'll be the third
for Aki Hoshide.

36
00:01:25,317 --> 00:01:28,521
These two no strangers to
going outside conducting these

37
00:01:28,521 --> 00:01:31,657
spacewalks during their time
on board the space station.

38
00:01:31,657 --> 00:01:34,293
In addition to this Suni
Williams today has some

39
00:01:34,293 --> 00:01:36,529
activities inside the
Destiny laboratory.

40
00:01:36,529 --> 00:01:40,032
She's going to be calibrating
one of the oxygen sensors

41
00:01:40,032 --> 00:01:42,001
on what's called the

compound specific analyzer.

42
00:01:42,001 --> 00:01:43,869
This is a tool which
is used on board

43
00:01:43,869 --> 00:01:47,206
to analyze the environment
inside, to make sure

44
00:01:47,206 --> 00:01:50,910
that there's no compounds that
are not expected to be there,

45
00:01:50,910 --> 00:01:53,345
just make sure that everything
onboard the space station is

46
00:01:53,345 --> 00:01:57,883
acceptable and is a good living
environment for the crew.

47
00:01:57,883 --> 00:01:59,418
She's going to be
transferring some water

48
00:01:59,418 --> 00:02:01,921
from some water containers
into a water storage tank.

49
00:02:01,921 --> 00:02:04,390
She's also going to be
deactivating some mixing tubes

50
00:02:04,390 --> 00:02:05,724
that came up as part

51
00:02:05,724 --> 00:02:08,027
of the Nanoracks
module nine experiment.

52
00:02:08,027 --> 00:02:11,030
This is a student
experiment that flew last week

53
00:02:11,030 --> 00:02:13,799
on board the SpaceX
Dragon spacecraft

54
00:02:13,799 --> 00:02:15,701
and the crew is taking
care of that.

55
00:02:15,701 --> 00:02:18,003
And of course those results will
be returned to Earth at the end

56
00:02:18,003 --> 00:02:21,273
of the mission for the
students to analyze.

57
00:02:21,273 --> 00:02:24,443
Aki Hoshide is taking some
samples inside the Japanese

58
00:02:24,443 --> 00:02:26,412
laboratory, the Kibo laboratory,

59
00:02:26,412 --> 00:02:27,913
of different microbes
around there.

60
00:02:27,913 --> 00:02:29,081
We talked about this yesterday.

61
00:02:29,081 --> 00:02:32,218
It's part of a microbial
detection experiment

62

00:02:32,218 --> 00:02:33,752
and activity.

63
00:02:33,752 --> 00:02:36,488
Throughout their time aboard the
space station the crews take a

64
00:02:36,488 --> 00:02:38,257
lot of samples of
the water, of the air

65
00:02:38,257 --> 00:02:41,393
and also the surfaces just
make sure there's no bacteria

66
00:02:41,393 --> 00:02:44,597
or fungus growing there
that's not to be expected.

67
00:02:44,597 --> 00:02:45,898
This does two things.

68
00:02:45,898 --> 00:02:49,001
It makes sure that the space
station is clean as can be

69
00:02:49,001 --> 00:02:52,204
for the crew but it
also gathers data

70
00:02:52,204 --> 00:02:55,574
to study how these things grow
inside the space environment

71
00:02:55,574 --> 00:02:58,477
of the surfaces there, which is
going to be incredibly important

72
00:02:58,477 --> 00:03:01,614
as we venture on longer journeys

past the International Space

73
00:03:01,614 --> 00:03:05,451
Station to destinations like
an asteroid or on to Mars.

74
00:03:05,451 --> 00:03:07,653
Yuri Malenchenko also working
in the Russian segment.

75
00:03:07,653 --> 00:03:10,556
He's working on a couple
different Earth Observatory

76
00:03:10,556 --> 00:03:13,492
experiments back in that
part of the station.

77
00:03:13,492 --> 00:03:16,462
One's called Albedo that
takes a look at what amounts

78
00:03:16,462 --> 00:03:17,763
to the whiteness of the Earth.

79
00:03:17,763 --> 00:03:20,366
It's basically the
reflective light

80
00:03:20,366 --> 00:03:21,667
that comes off of
the planet below.

81
00:03:21,667 --> 00:03:24,837
He's going to be using a
camera to take images of that.

82
00:03:24,837 --> 00:03:26,805
He's also working on
something called Relaxation

83
00:03:26,805 --> 00:03:27,973
which is not what
it sounds like.

84
00:03:27,973 --> 00:03:29,108
This actually takes a look

85
00:03:29,108 --> 00:03:31,977
at how plasma discharges
affect the upper reaches

86
00:03:31,977 --> 00:03:33,078
of Earth's atmosphere.

87
00:03:33,078 --> 00:03:36,282
He'll be using a camera
on that one as well.

88
00:03:36,282 --> 00:03:39,118
Down at the Baikonur Cosmodrome
the three remaining crew members

89
00:03:39,118 --> 00:03:41,487
of Expedition 33 that'll
be joining the current ones

90
00:03:41,487 --> 00:03:42,554
on board.

91
00:03:42,554 --> 00:03:44,456
Oleg Novitskiy, Evgeny Tarelkin,

92
00:03:44,456 --> 00:03:47,159
and Kevin Ford are
undergoing final training

93
00:03:47,159 --> 00:03:50,262
and final procedures as they get

ready for their upcoming launch

94
00:03:50,262 --> 00:03:52,865
which will take place
October 23rd.

95
00:03:52,865 --> 00:03:57,770
That launch time is scheduled
for 5:51 AM central time.

96
00:03:57,770 --> 00:04:00,739
Again October 23
5:51 AM central time.

97
00:04:00,739 --> 00:04:02,775
Of course we'll have
live coverage here

98
00:04:02,775 --> 00:04:04,877
on NASA television of that.

99
00:04:04,877 --> 00:04:07,446
They'll be docking two
days later on October 25

100
00:04:07,446 --> 00:04:12,451
at 7:35 PM central time
8:35 AM Eastern time.

101
00:04:12,451 --> 00:04:14,553
Again docking on October 25

102
00:04:14,553 --> 00:04:18,490
at 7:35 AM central time
8:35 AM Eastern time.

103
00:04:18,490 --> 00:04:19,558
Of course we'll have
live coverage

104
00:04:19,558 --> 00:04:21,460
on NASA TV of that as well.

105
00:04:21,460 --> 00:04:22,761
Our coverage will originate