1
00:00:02,670 --> 00:00:04,700
This is Mission Control Houston.

2
00:00:04,700 --> 00:00:06,310
Welcome to today's ISS update.

3
00:00:06,310 --> 00:00:08,730
It is Thursday, June 14, 2012.

4
00:00:08,730 --> 00:00:11,400
This is a live view inside the
International Space Station's

5
00:00:11,400 --> 00:00:13,420
flight control room.

6
00:00:13,420 --> 00:00:16,510
The Expedition 31 crew is
busy onboard orbiting complex,

7
00:00:16,510 --> 00:00:20,220
which is presently about
245 miles above Africa.

8
00:00:20,220 --> 00:00:22,820
They're working today on
a series of experiments

9
00:00:22,820 --> 00:00:24,300
and some maintenance work.

10
00:00:24,300 --> 00:00:26,180
Oleg Kononenko who
is the commander

11
00:00:26,180 --> 00:00:29,430
of Expedition 31 is beginning
the process of packing

12
00:00:29,430 --> 00:00:32,290
up the Soyuz that
will soon bring he

13
00:00:32,290 --> 00:00:34,620
and Andre Kuipers
and Don Pettit home.

14
00:00:34,620 --> 00:00:38,420
He is packing up full of items
to come home with the crew.

15
00:00:38,420 --> 00:00:40,890
They are in their final days
aboard the International Space

16
00:00:40,890 --> 00:00:43,580
Station as they are
due to land on Sunday,

17
00:00:43,580 --> 00:00:47,310
July 1 at 3:15 AM central time

18
00:00:47,310 --> 00:00:50,090
in the southern landing
zone there in Kazakhstan.

19
00:00:50,090 --> 00:00:51,370
Of course we'll have
live coverage of all

20
00:00:51,370 --> 00:00:54,670
that here on NASA television.

21
00:00:54,670 --> 00:00:57,490
Additionally today Kononenko has
been doing some surface sampling

22
00:00:57,490 --> 00:00:58,700

inside the Russian segment.

23
00:00:58,700 --> 00:01:01,790
This is basically where
they take some swabs of some

24
00:01:01,790 --> 00:01:04,280
of the hard surfaces there
in the Russian segment

25
00:01:04,280 --> 00:01:06,350
of the orbiting complex
just to make sure

26
00:01:06,350 --> 00:01:08,200
that everything is neat and tidy

27
00:01:08,200 --> 00:01:12,010
and there's no bacteria
growing in certain sections.

28
00:01:12,010 --> 00:01:13,580
Gennady Padalka another member

29
00:01:13,580 --> 00:01:16,460
of Expedition 31 has been
doing some routine maintenance

30
00:01:16,460 --> 00:01:18,610
on the Elektron system.

31
00:01:18,610 --> 00:01:20,200
This is the Russian version

32
00:01:20,200 --> 00:01:22,510
of the oxygen generator
onboard the station.

33
00:01:22,510 --> 00:01:26,080

There's also one
inside the US segment.

34
00:01:26,080 --> 00:01:28,280
Sergei Raven has been
transferring oxygen

35
00:01:28,280 --> 00:01:31,070
from the Progress vehicle
that is currently attached

36
00:01:31,070 --> 00:01:32,550
to the International
Space Station.

37
00:01:32,550 --> 00:01:35,810
That Progress brought up two
and a half tons of supplies

38
00:01:35,810 --> 00:01:40,240
to the crew but it also
transfers over fuel and water

39
00:01:40,240 --> 00:01:42,620
and air to the space
station itself.

40
00:01:42,620 --> 00:01:45,410
There you see the Progress
47 docked with the Poisk,

41
00:01:45,410 --> 00:01:48,580
excuse me the Pirs docking
compartment on the bottom side

42
00:01:48,580 --> 00:01:49,990
of the International
Space Station.

43
00:01:49,990 --> 00:01:50,870

Poisk is up top.

44
00:01:50,870 --> 00:01:54,880
That is where the Soyuz 30 or
the TMA-04M is currently docked.

45
00:01:54,880 --> 00:01:57,170
That is the vehicle
that brought up Padalka

46
00:01:57,170 --> 00:01:59,500
and Sergei Revin and Joe Acaba.

47
00:01:59,500 --> 00:02:02,630
There is the Soyuz
29 or the TMA-03M.

48
00:02:02,630 --> 00:02:05,170
That is the vehicle we mentioned
earlier this morning that going

49
00:02:05,170 --> 00:02:07,880
to be bringing home Kononenko,
Padalka, excuse me, Kononenko,

50
00:02:07,880 --> 00:02:10,420
Kuipers and Pettit coming
up in a couple of weeks.

51
00:02:10,420 --> 00:02:13,110
And then back there in
the back is the ATV-3,

52
00:02:13,110 --> 00:02:16,440
the European Automated Transfer
Vehicle that came up back

53
00:02:16,440 --> 00:02:18,610
in March that is
currently stocked full

54
00:02:18,610 --> 00:02:21,660
of supplies the crew
continues to unload

55
00:02:21,660 --> 00:02:23,180
and pack it full of trash.

56
00:02:23,180 --> 00:02:25,970
That ATV is going to be burning
up in the Earth's atmosphere

57
00:02:25,970 --> 00:02:28,630
at the end of the summer.

58
00:02:28,630 --> 00:02:30,990
Joe Acaba has been
updating software on one

59
00:02:30,990 --> 00:02:32,550
of the station's
laptop computers.

60
00:02:32,550 --> 00:02:35,420
He is also been working
on the Glacier experiment.

61
00:02:35,420 --> 00:02:38,980
This is an onboard freezer that
keeps samples and other items

62
00:02:38,980 --> 00:02:42,360
that the crew needs to
store at low temperatures.

63
00:02:42,360 --> 00:02:44,530
He's also been working
on the BASS experiment.

64

00:02:44,530 --> 00:02:47,460
This stands for Burning
And Suppression of Solids.

65
00:02:47,460 --> 00:02:51,390
The crew has been working on
this for the last several days.

66
00:02:51,390 --> 00:02:52,640
BASS is an interesting
experiment.

67
00:02:52,640 --> 00:02:55,030
It takes a look at how
flames burn in space.

68
00:02:55,030 --> 00:02:56,510
They act a little
bit differently

69
00:02:56,510 --> 00:02:58,600
up there with no gravity.

70
00:02:58,600 --> 00:03:02,230
The accepted approach for
putting out fires here

71
00:03:02,230 --> 00:03:05,020
on Earth is to aim the
extinguisher or suppressant

72
00:03:05,020 --> 00:03:07,440
at the base of the flame
which that is really

73
00:03:07,440 --> 00:03:08,450
where the flame is born.

74
00:03:08,450 --> 00:03:10,030
It's where it's most stable.

75
00:03:10,030 --> 00:03:14,200
But of course up in space it
acts a little bit differently.

76
00:03:14,200 --> 00:03:17,780
So this takes a look at
that and will be important

77
00:03:17,780 --> 00:03:21,040
to future space flight in terms
of dealing with fires onboard.

78
00:03:21,040 --> 00:03:23,220
Andre Kuipers has been
inspecting the water

79
00:03:23,220 --> 00:03:25,870
on off valves that are in
the Columbus laboratory.

80
00:03:25,870 --> 00:03:27,320
He is also reviewing procedures

81
00:03:27,320 --> 00:03:30,110
for software updates
on Express rack four.

82
00:03:30,110 --> 00:03:34,100
And there as the
Nile River comes

83
00:03:34,100 --> 00:03:35,860
into view the crew continues

84
00:03:35,860 --> 00:03:38,210
to work including Don Pettit
who's been taking samples

85

00:03:38,210 --> 00:03:40,670
from the Fluid Physics
Experiment Facility.

86
00:03:40,670 --> 00:03:42,450
This is inside the
Kibo laboratory.

87
00:03:42,450 --> 00:03:47,060
That particular rack came
up on STS-123 and is one

88
00:03:47,060 --> 00:03:49,280
of the core experiment
components inside the

89
00:03:49,280 --> 00:03:51,890
Japanese laboratory.

90
00:03:51,890 --> 00:03:54,390
The crew also has some Earth
observation opportunities today

91
00:03:54,390 --> 00:03:58,240
including Argentina,
Burundi as well as Singapore.

92
00:03:58,240 --> 00:03:59,520
Of course if you
want to take a look