SPACEWALKERS

Oleg Kononenko
Flight Engineer

Anton Shkaplerov
Flight Engineer

1
00:00:01,366 --> 00:00:02,706
This is Mission Control Houston.

2
00:00:02,706 --> 00:00:04,326
Welcome to today's ISS Update.

3
00:00:04,326 --> 00:00:07,166
It is Tuesday, February 14, 2012.

4
00:00:07,166 --> 00:00:10,966
You're looking at a live view inside the
International Space Station flight control room

5
00:00:10,966 --> 00:00:12,216
here at the Johnson Space Center.

6
00:00:12,856 --> 00:00:15,386
Today's flight director for
this team is Ed Van Cise.

7
00:00:15,386 --> 00:00:16,776
He is sitting there at the middle console.

8
00:00:17,826 --> 00:00:21,586
Joining beside him as Capcom is Kate
Reubens who is sitting there in the black

9
00:00:21,586 --> 00:00:25,856
and then Rob Hayhurst who is also sitting
beside Kate there on the far left.

10
00:00:25,856 --> 00:00:30,366
The Expedition 30 crew on board the station
today getting it ready for quite a bit

11
00:00:30,366 --> 00:00:35,186
of activity later on this afternoon and also
getting set up for Thursday's spacewalk.

12
00:00:36,586 --> 00:00:41,246
Don Pettit and Andre Kuipers have been working
on an experiment called Neurospat today.

13
00:00:41,246 --> 00:00:46,326
This takes a look at how the brain's signals
change and behave while the crew is up in space.

14
00:00:46,886 --> 00:00:52,976
It tests a few different things: perception,
attention, memorization, decision and action

15
00:00:52,976 --> 00:00:56,506
through different tasks, and
through that experiment scientists

16
00:00:56,506 --> 00:01:00,186
on the ground can take a look at how
the crew member's brain signals change

17
00:01:00,186 --> 00:01:03,816
and react while they live up there
in space for about six months.

18
00:01:04,986 --> 00:01:08,646
Pettit is also continuing to
unpack some of the items that came

19
00:01:08,646 --> 00:01:10,886
up on the Progress 45 cargo craft.

20
00:01:11,326 --> 00:01:13,896
That Progress 45 undocked
form the station back on Jan.

21
00:01:13,896 --> 00:01:17,506
23, but it delivered close
to three tons of supplies

22

00:01:17,506 --> 00:01:20,186
for the crew including some food and some fuel.

23
00:01:20,906 --> 00:01:24,756
So it takes some time after those cargo
craft arrive to get everything unpacked

24
00:01:24,756 --> 00:01:28,796
and set up in the proper spot
inside the station complex.

25
00:01:28,796 --> 00:01:30,966
So Don Pettit will take care
of some more of that today.

26
00:01:31,216 --> 00:01:35,796
Of course, the big news this week, Oleg
Kononenko and Anton Shkaplerov getting ready

27
00:01:35,796 --> 00:01:38,406
for their spacewalk coming up on Thursday.

28
00:01:39,036 --> 00:01:42,686
Earlier this morning they both climbed
inside their Russian Orlan spacesuits,

29
00:01:42,686 --> 00:01:46,746
the two different suits that they will wear on
Thursday, to check out the different systems

30
00:01:46,746 --> 00:01:48,356
and to make sure that everything is ready.

31
00:01:48,736 --> 00:01:51,606
Everything checked out as expected and okay,

32
00:01:52,046 --> 00:01:55,786
and the suits were declared ready
to go for Thursday's activities.

33
00:01:56,146 --> 00:02:00,966
We'll have live coverage beginning
Thursday morning at 7:45 a.m. Central time,

34
00:02:01,406 --> 00:02:06,046
that is 8:45 a.m. Eastern time, and then the
spacewalk will begin about 30 minutes later

35
00:02:06,266 --> 00:02:10,496
at 8:15 a.m. Central time,
9:15 a.m. Eastern time.

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00:02:10,496 --> 00:02:13,336
That spacewalk will last about six hours.

37
00:02:13,946 --> 00:02:18,836
Anatoly Ivanishin has been working inside the
Russian segment on the Matryoshka experiment.

38
00:02:19,446 --> 00:02:24,596
This is an ongoing examination of the
radiation environment inside the station.

39
00:02:24,596 --> 00:02:28,456
There's a mannequin that has different
dosimeters, different other sensors on it

40
00:02:28,926 --> 00:02:31,036
that detect the different radiation levels

41
00:02:31,036 --> 00:02:36,116
and also helps anticipate how the human
body absorbs those radiation levels

42
00:02:36,116 --> 00:02:37,086
up there in space.

43
00:02:37,486 --> 00:02:40,796
And then Dan Burbank just a few

minutes ago kicked off what will take

44
00:02:40,796 --> 00:02:42,196
up the remainder of his day.

45
00:02:42,196 --> 00:02:44,596
He is doing some checkout
activities on Robonaut.

46
00:02:44,596 --> 00:02:48,026
There you see a live view inside
the Destiny laboratory of the robot.

47
00:02:48,026 --> 00:02:50,386
Burbank's going to be checking on all

48
00:02:50,426 --> 00:02:53,546
of Robonaut's different joints,
moving some things around.

49
00:02:53,546 --> 00:02:56,646
He will also then do what is
called a force sensor checkout,

50
00:02:57,156 --> 00:03:00,446
where he will push the robot's
forearms in multiple directions.

51
00:03:00,876 --> 00:03:05,376
Of course, if you would like to follow
Robonaut, he is twittering from space,

52
00:03:05,376 --> 00:03:09,396
but you can log onto NASA.gov/station
to find out the latest information.

53
00:03:09,726 --> 00:03:15,186
But his Twitter account is AstroRobonaut,
so just go to twitter.com/AstroRobonaut

54
00:03:15,186 --> 00:03:18,256
to follow along as all these
activities take place today.

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00:03:19,386 --> 00:03:22,166
Finally, the crew has some Crew Earth
Observation opportunities today.

56
00:03:22,166 --> 00:03:25,786
This is a chance for them look down at
the planet below to take some pictures.

57
00:03:26,236 --> 00:03:28,726
Today's primary target is Mumbai, India.

58
00:03:29,446 --> 00:03:33,996
They'll be flying over that from
a southwest to northeasterly pass.

59
00:03:34,446 --> 00:03:39,166
There's what's called some aerosol, which
comprises smoke, dust and industrial pollutants,

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00:03:39,536 --> 00:03:42,986
above the city, and you can
actually see it from space.

61
00:03:42,986 --> 00:03:46,376
And due to the station's path -
the fact that they're going to be

62
00:03:46,376 --> 00:03:52,046
at what's called an oblique angle, so it's sort
of a to the side angle, get a side view of it,

63
00:03:52,416 --> 00:03:57,506
and also the underlying sea surface - this
presents an ideal chance for them to photograph

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00:03:57,846 --> 00:04:02,116
that aerosol cloud that is out there to
hopefully pick up some subtleties of it

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00:04:02,466 --> 00:04:04,646
and give scientists and researchers
on the ground an idea

66
00:04:04,646 --> 00:04:06,986
of the how that aerosol cloud is behaving.

67
00:04:08,366 --> 00:04:11,706
If you would like to take a look at some
of the pictures that the crew has gathered,