



1
00:00:01,490 --> 00:00:04,940
Welcome to today's International
Space Station update.

2
00:00:04,940 --> 00:00:08,300
You're joining us here in the International
Space Station flight control room

3
00:00:08,300 --> 00:00:12,650
in Houston Texas where the Orbit 2 team
is currently on console monitoring each

4
00:00:12,650 --> 00:00:16,400
of their respective systems
on board the orbiting outpost.

5
00:00:16,400 --> 00:00:18,930
They're monitoring the systems
on board for the crew

6
00:00:18,930 --> 00:00:21,930
of Expedition 31 who's currently
up there in space.

7
00:00:21,930 --> 00:00:25,770
Starting on the left we have
NASA astronaut Don Pettit.

8
00:00:25,770 --> 00:00:31,030
And in the middle Expedition 31 Commander
Oleg Kononenko from the Russian Space Agency.

9
00:00:31,030 --> 00:00:36,480
And on the right we have European Space Agency
astronaut Andre Kuipers also a flight engineer

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00:00:36,480 --> 00:00:38,780
on this Expedition crew.

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00:00:38,780 --> 00:00:45,090

The three have been onboard since late December and are coming to the latter part

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00:00:45,090 --> 00:00:48,450

of their first week as the full Expedition 31 crew.

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00:00:48,450 --> 00:00:53,440

Starting off with Commander Kononenko, his activities for the day include quite a bit

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00:00:53,440 --> 00:00:56,880

of replacement and repair work over in the Russian segment.

15

00:00:56,880 --> 00:01:01,670

He started with some upgrades on a number of the laptop systems that control a lot

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00:01:01,670 --> 00:01:07,990

of the different functions on those Russian modules, moving through three

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00:01:07,990 --> 00:01:12,260

of the main Russian laptops and giving them some software upgrades.

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00:01:12,260 --> 00:01:16,660

He's also continuing some work that he did yesterday on the Russian toilet system,

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00:01:16,660 --> 00:01:19,040

removing and replacing a few filter parts in that

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00:01:19,040 --> 00:01:22,400

to ensure that's still operating at peak efficiency.

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00:01:22,400 --> 00:01:27,770

He'll also be doing some cargo transfer work with the 47 Progress vehicle

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00:01:27,770 --> 00:01:31,440

which has been docked to the station for some time now delivering supplies

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00:01:31,440 --> 00:01:36,750

to these Expedition crews and also doing some work on the Elektron system which works

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00:01:36,750 --> 00:01:41,870

to generate oxygen for the astronauts to breathe on board the station.

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00:01:41,870 --> 00:01:47,260

Moving on we have Andre Kuipers who's involved in quite a few biomedical experiments today,

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00:01:47,260 --> 00:01:52,910

setting up the Ultrasound two hardware which is an actual ultrasound system similar

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00:01:52,910 --> 00:01:54,640

to those you can find down here on the ground.

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00:01:54,640 --> 00:01:57,020

The astronauts can use for a number

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00:01:57,020 --> 00:02:01,150

of biomedical experiments using their bodies as the test subjects.

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00:02:01,150 --> 00:02:06,040

Today he's working with the Integrated Cardiovascular doing an ultrasound

31

00:02:06,040 --> 00:02:12,320

on himself focusing on the heart muscle and any

of the atrophy it may go through when exposed

32

00:02:12,320 --> 00:02:16,080

to the microgravity environment
for a long period of time.

33

00:02:16,080 --> 00:02:21,560

He was also taking some ultrasound images
of his veins throughout his arms and legs

34

00:02:21,560 --> 00:02:27,330

for the vessel imaging experiment study which
looks to evaluate the changes in thickness

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00:02:27,330 --> 00:02:29,090

and compliance of the blood vessels

36

00:02:29,090 --> 00:02:34,080

in these astronauts again during those
long-duration spaceflights during

37

00:02:34,080 --> 00:02:37,950

and after long-term exposure to microgravity.

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00:02:37,950 --> 00:02:44,480

He's also teaming up with Don Pettit today
for some work removing the air selector valve

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00:02:44,480 --> 00:02:49,580

on the Carbon Dioxide Removal Assembly, which
is one of the systems onboard the station

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00:02:49,580 --> 00:02:56,250

that looks to scrub carbon dioxide from the air
as the astronauts exhale their oxygen it turns

41

00:02:56,250 --> 00:03:01,190

into carbon dioxide and left unchecked
could create a pretty unsuitable atmosphere

42
00:03:01,190 --> 00:03:06,220
for the astronauts in a short amount of
time so he and Don Pettit were working today

43
00:03:06,220 --> 00:03:10,830
to do a few maintenance activities
on this and keep it working.

44
00:03:10,830 --> 00:03:17,230
Speaking of Don Pettit he was also involved in
doing an Integrated Cardiovascular scan earlier

45
00:03:17,230 --> 00:03:18,890
with that Ultrasound two hardware.

46
00:03:18,890 --> 00:03:24,040
He was also working on the Integrated
Immune study doing a health survey.

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00:03:24,040 --> 00:03:29,740
Integrated Immune looks to explain any immune
deficiency that arise in the astronauts again

48
00:03:29,740 --> 00:03:32,230
from that microgravity environment.

49
00:03:32,230 --> 00:03:37,560
He is also all working on the
Carbon Dioxide Removal Assembly.