



1
00:00:01,640 --> 00:00:06,330
Good morning and welcome to today's
International Space Station update hour.

2
00:00:06,330 --> 00:00:10,490
You are joining us here in the International
Space Station flight control room

3
00:00:10,490 --> 00:00:12,140
where the Orbit 2 team is currently

4
00:00:12,140 --> 00:00:16,960
on console monitoring all the systems
onboard the orbiting laboratory.

5
00:00:16,960 --> 00:00:21,470
That team today's being led by Flight
Director Ron Spencer, there on the right,

6
00:00:21,470 --> 00:00:26,420
and joining him at the capcom position, serving
as the voice link between controllers here

7
00:00:26,420 --> 00:00:30,650
on the ground and astronauts
up in space, is Anna Fisher.

8
00:00:30,650 --> 00:00:37,160
And those astronauts up in space
right now are the Expedition 30 crew.

9
00:00:37,160 --> 00:00:38,270
You can see them here.

10
00:00:38,270 --> 00:00:42,980
They're being led by NASA astronaut Dan
Burbank, there in the front left of your screen.

11
00:00:42,980 --> 00:00:47,310

Behind him, are Russian cosmonauts
Anton Shkaplerov and Anatoly Ivanishin,

12
00:00:47,310 --> 00:00:52,960
and moving further across the back row, you have
European Space Agency astronaut Andre Kuipers

13
00:00:52,960 --> 00:00:56,030
and NASA astronaut Don Pettit
all the way on the end there.

14
00:00:56,030 --> 00:01:00,350
And finally in the front right,
Russian cosmonaut Oleg Kononenko.

15
00:01:00,350 --> 00:01:06,400
The crew started their day waking
up about 1 a.m. Central time today,

16
00:01:06,400 --> 00:01:11,560
and went right into a number of science
experiments and maintenance activities

17
00:01:11,560 --> 00:01:14,770
to consume all the hours their day today.

18
00:01:14,770 --> 00:01:17,660
Commander Burbank, a little bit earlier today,

19
00:01:17,660 --> 00:01:21,760
was gathering up some hardware reviewing
procedures for some maintenance work he is going

20
00:01:21,760 --> 00:01:26,300
to be doing tomorrow on one of
the Amine Swingbed payloads.

21
00:01:26,300 --> 00:01:29,690
It's an investigation on board
the station to help determine

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00:01:29,690 --> 00:01:34,300

if a vacuum regenerated aiming system
can effectively remove carbon dioxide

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00:01:34,300 --> 00:01:40,750

from the atmosphere, and then this is typically
a device used on short duration space missions,

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00:01:40,750 --> 00:01:44,480

so this is just the payload to
try and test that viability.

25

00:01:44,480 --> 00:01:47,920

And currently right now onboard the
station, Commander Burbank is working

26

00:01:47,920 --> 00:01:52,690

with the Combustion Integrated Rack,
you can see him, here is a live view,

27

00:01:52,690 --> 00:01:57,570

he is going be replacing the fluids and
combustion facility displaying control module.

28

00:01:57,570 --> 00:02:01,700

This will be an activity that
will take quite a few hours today.

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00:02:01,700 --> 00:02:07,880

That Combustion Integrated Rack includes such
items as an optics bench, a combustion chamber,

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00:02:07,880 --> 00:02:12,880

fuel and oxidizer control and then
a number different cameras inside,

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00:02:12,880 --> 00:02:18,240

all used to perform combustion
experiments in microgravity.

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00:02:18,240 --> 00:02:22,680

Moving on, Russian cosmonaut
Anton Shkaplerov was working

33

00:02:22,680 --> 00:02:26,440

with the Russian BAR experiment
alongside Anatoly Ivanishin,

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00:02:26,440 --> 00:02:31,010

that is a Russian investigation
that helps to develop new procedures

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00:02:31,010 --> 00:02:36,370

for detecting any depressurization
throughout the out the station's modules.

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00:02:36,370 --> 00:02:41,120

He also just got done finishing
recording a few messages for events

37

00:02:41,120 --> 00:02:45,450

across Russia alongside Anatoly
Ivanishin and Oleg Kononenko.

38

00:02:45,450 --> 00:02:50,870

A little bit later today, Shkaplerov will
work on the orthostatic stability test,

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00:02:50,870 --> 00:02:54,820

which looks to study the distribution
of fluids throughout his body,

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00:02:54,820 --> 00:02:59,540

and if it is having any detrimental
effects on the astronauts health.

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00:02:59,540 --> 00:03:04,900

Again, Anatoly Ivanishin worked alongside
with Shkaplerov on the BAR experiment,

42

00:03:04,900 --> 00:03:09,610

and his day is going to fairly mirror
Shkaplerov today, where he is also going

43

00:03:09,610 --> 00:03:14,370

to be doing his own orthostatic stability
test, and also just got done participating

44

00:03:14,370 --> 00:03:17,860

in that Russian public affairs
event, recording a few messages

45

00:03:17,860 --> 00:03:21,770

for Russian audiences down the ground.

46

00:03:21,770 --> 00:03:26,320

The third Russian cosmonaut, Oleg Kononenko,
was doing some cargo transfer activities

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00:03:26,320 --> 00:03:31,050

with the Russian resupply ship, the Progress
46 vehicle, currently docked to the station,

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00:03:31,050 --> 00:03:34,120

and will also be doing a few exercise activities

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00:03:34,120 --> 00:03:39,750

and his own orthostatic stability
test a little bit later today.

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00:03:39,750 --> 00:03:45,310

European Space Agency astronaut Andre Kuipers
is doing some cargo operations of his own,

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00:03:45,310 --> 00:03:49,270

but with the ATV-3, or the
Edoardo Amaldi cargo vehicle,

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00:03:49,270 --> 00:03:54,080
a European Space Agency automated
resupply vehicle that has been docked

53
00:03:54,080 --> 00:03:58,210
to the station almost two weeks
now, after docking back on March 28.

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00:03:58,210 --> 00:04:01,610
You can see there on the
very back of this photo,

55
00:04:01,610 --> 00:04:05,800
docked to the aft port of Zvezda service module.

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00:04:05,800 --> 00:04:10,070
And along with those cargo activities,
he is also going to be working

57
00:04:10,070 --> 00:04:15,730
with the Fluid Physics Experiment Facility,
just replacing a few brackets and cover plates

58
00:04:15,730 --> 00:04:20,780
and things like that, in order to keep
the facility in place and protected.

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00:04:20,780 --> 00:04:26,060
And then our final Expedition 30 crew
member, Don Pettit, immediately upon waking

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00:04:26,060 --> 00:04:30,170
up this morning at about 1 a.m.
Central time, started collecting urine

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00:04:30,170 --> 00:04:32,770
and blood samples for the
Human Research Facility.

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00:04:32,770 --> 00:04:35,070

These is astronauts serving as kind

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00:04:35,070 --> 00:04:38,900
of test subjects themselves during
these long-duration spaceflights.

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00:04:38,900 --> 00:04:42,600
And he then stored all those
samples of the MELFI freezer,

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00:04:42,600 --> 00:04:46,470
MELFI standing for Minus Eighty
Degree Laboratory Freezer,

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00:04:46,470 --> 00:04:51,740
and that's used onboard the station to store all
the biological samples of these astronauts take

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00:04:51,740 --> 00:04:54,070
for eventual transport down here at the ground.

68

00:04:54,070 --> 00:04:59,300
He will also be configuring the station
super sensitive high-definition camera,