1
00:00:01,250 --> 00:00:04,450
Good morning and welcome
to this Tuesday's edition

2
00:00:04,450 --> 00:00:08,390
of NASA's International Space
Station update hour.

3
00:00:08,390 --> 00:00:13,370
You are getting a look now inside of the
flight control room here in Houston, Texas,

4
00:00:13,370 --> 00:00:15,000
where the Orbit 2 Team is currently

5
00:00:15,000 --> 00:00:19,150
on console monitoring systems
onboard the orbiting laboratory.

6
00:00:19,150 --> 00:00:24,650
That team today is being led by Flight Director
Ron Spencer there on the center of your screen,

7
00:00:24,650 --> 00:00:29,020
and a little bit above him is capcom
Dan Tani, serving as the voice link

8
00:00:29,020 --> 00:00:34,290
between controllers here on the
ground and astronauts in space.

9
00:00:34,290 --> 00:00:39,830
Those astronauts up there right
now are the crew of Expedition 30.

10
00:00:39,830 --> 00:00:43,800
They are being led by NASA
astronaut Dan Burbank.

11

00:00:43,800 --> 00:00:52,020
You see the crew here.

12
00:00:52,020 --> 00:00:58,360
There in the front row left is Expedition
30 Commander and NASA astronaut Dan Burbank,

13
00:00:58,360 --> 00:01:02,830
also in the front row right is
Russian cosmonaut Oleg Kononenko.

14
00:01:02,830 --> 00:01:08,030
Going across the back row starting with the
left are Russian cosmonauts Anton Shkaplerov

15
00:01:08,030 --> 00:01:13,300
and Anatoly Ivanishin, and then European
Space Agency astronaut Andre Kuipers,

16
00:01:13,300 --> 00:01:17,260
and then finally NASA astronaut Don Pettit.

17
00:01:17,260 --> 00:01:22,610
The crew awoke this morning at about midnight
Central Time, beginning a busy day filled

18
00:01:22,610 --> 00:01:25,300
with a lot more maintenance work.

19
00:01:25,300 --> 00:01:31,810
Commander Burbank started his day off working on
the Water Recovery System, removing a gas build

20
00:01:31,810 --> 00:01:36,160
up that had filled the contingency
water container before moving

21
00:01:36,160 --> 00:01:42,130
on to troubleshoot the ISSAC, or the
International Space Station Agricultural Camera,

22
00:01:42,130 --> 00:01:45,290
which had a laptop activation failure.

23
00:01:45,290 --> 00:01:50,160
He is then spending the latter part of his
day on some of those activities right now,

24
00:01:50,160 --> 00:01:55,320
working on the Capillary Flow Experiment,
continuing some of the work he did yesterday.

25
00:01:55,320 --> 00:02:02,030
That is a fluid physics experiment that looks
at modeling the dynamic nature of fluids

26
00:02:02,030 --> 00:02:07,230
in microgravity and how to control those
through the use of capillary forces.

27
00:02:08,700 --> 00:02:12,340
Russian cosmonaut Anton Shkaplerov,
right as he woke up today,

28
00:02:12,340 --> 00:02:17,030
took some body mass muscle size measurements,
as part of a Russian experiment that looks

29
00:02:17,030 --> 00:02:22,770
to document the changes in the astronauts bodies
due to the microgravity environment exposure

30
00:02:22,770 --> 00:02:26,080
of these long-duration spaceflights.

31
00:02:26,080 --> 00:02:29,800
He then went on to do an
equipment audit of all their photo

32

00:02:29,800 --> 00:02:33,090
and video tools available on board the station.

33
00:02:33,090 --> 00:02:39,260
His fellow Russian cosmonaut Anatoly
Ivanishin took some time out to do a "life

34
00:02:39,260 --> 00:02:44,240
on the station" photo and video
event for Russian use later on,

35
00:02:44,240 --> 00:02:50,080
before moving on to some routine coolant
maintenance on the Russian segment.

36
00:02:50,080 --> 00:02:57,130
The third Russian cosmonaut Oleg Kononenko is
working on the Pneumocard experiment today,

37
00:02:57,130 --> 00:03:01,370
which is the integrated study
of how the cardiovascular system

38
00:03:01,370 --> 00:03:06,110
in the crew members adapts during
long duration microgravity missions.

39
00:03:06,110 --> 00:03:11,210
He is also doing an audit of the station's
medical kits and doing a swap out of one

40
00:03:11,210 --> 00:03:15,540
of the food warmers that the astronauts use.

41
00:03:15,540 --> 00:03:19,640
European Space Agency astronaut Andre
Kuipers is doing some more work today

42
00:03:19,640 --> 00:03:25,900
with the VO2max system which helps to

evaluate the astronauts maximal oxygen uptake

43
00:03:25,900 --> 00:03:28,500
and their respiratory performance both before,

44
00:03:28,500 --> 00:03:32,490
during and after their long-duration
space missions.

45
00:03:32,490 --> 00:03:37,430
He will be doing some more routine
cleanings of the U.S. segment later on today.

46
00:03:37,430 --> 00:03:44,910
The final Expedition 30 crew member Don Pettit,
took a lot of his time today to clean out some

47
00:03:44,910 --> 00:03:50,510
of the deck crew quarters, focusing on the
intake and exhaust ducts inside of each

48
00:03:50,510 --> 00:03:55,780
of the small cabin-like structures, and then
working on their fan and air flow sensors.

49
00:03:55,780 --> 00:04:02,200
Over the last few hours, he's been taken
some samples from the Water Recovery System,

50
00:04:02,200 --> 00:04:07,410
specifically focusing on the
Water Processing Assembly.

51
00:04:07,410 --> 00:04:12,760
With all of these activities scheduled, the
crew will be undergoing another very busy day,