1
00:00:01,410 --> 00:00:05,180
Good morning and welcome to today's International Space Station update hour.

2
00:00:05,180 --> 00:00:09,570
Getting a look now inside the flight control room here in Houston Texas, as the Orbit 2

3
00:00:09,570 --> 00:00:13,719
team of personnel monitor systems on board the orbiting laboratory.

4
00:00:13,719 --> 00:00:21,010
They’re being led today by flight director Brian Smith, and seated to his right is Capcom

5
00:00:21,010 --> 00:00:24,780
serving as the communication link between the astronauts up in space and controllers

6
00:00:24,780 --> 00:00:29,720
on the ground here, and that is CJ Sturckow.

7
00:00:29,720 --> 00:00:34,590
Currently on board, the crew of Expedition 30 is hard at work on a number of biomedical

8
00:00:34,590 --> 00:00:36,649
experiments and maintenance work today.

9
00:00:36,649 --> 00:00:42,450
And they’re being led by Commander Dan Burbank, a NASA astronaut, at front left of your screen

10
00:00:42,450 --> 00:00:43,820
there.

11
00:00:43,820 --> 00:00:48,520
And standing behind him are Russian cosmonauts

Anton Shkaplerov and Anatoly Ivanishin.

12
00:00:48,520 --> 00:00:54,760
The three crewmates to the right recently
joined the space station just in late December,

13
00:00:54,760 --> 00:01:01,030
and they are, starting on the left, European
Space Agency astronaut Andre Kuipers, Oleg

14
00:01:01,030 --> 00:01:06,000
Kononenko in the middle from the Russian space
agency and NASA astronaut Don Pettit all the

15
00:01:06,000 --> 00:01:10,830
way over there on the right.

16
00:01:10,830 --> 00:01:18,660
So Commander Burbank, the Expedition 30 commander,
started his day, and his major tasks for the

17
00:01:18,660 --> 00:01:26,780
day is continuing the EPIC software upgrades,
EPIC standing for Enhanced Processor and Integrated

18
00:01:26,780 --> 00:01:28,150
Communications.

19
00:01:28,150 --> 00:01:34,540
This is a major computer hardware overhaul
that’s been going on onboard the station,

20
00:01:34,540 --> 00:01:40,470
improving its processing capabilities and
reliability.

21
00:01:40,470 --> 00:01:46,750
And then Commander Burbank today is working
with the CUCU, which stands for the COTS UHF

22
00:01:46,750 --> 00:01:48,630
Communications Unit.

23
00:01:48,630 --> 00:01:52,890
That will be responsible for communicating
with the upcoming commercial vehicles as they

24
00:01:52,890 --> 00:01:54,810
visit the International Space Station.

25
00:01:54,810 --> 00:02:00,150
He’s doing a software update by loading
the onboard computers with some updated firmware.

26
00:02:00,150 --> 00:02:05,490
That’s taking up a good portion of his day.

27
00:02:05,490 --> 00:02:09,369
Along with that, Commander Burbank took some
time out to talk with reporters on the ground

28
00:02:09,369 --> 00:02:10,899
in a media event.

29
00:02:10,899 --> 00:02:14,780
He did that alongside with Andre Kuipers and
Don Pettit.

30
00:02:14,780 --> 00:02:20,080
And that took place about an hour ago.

31
00:02:20,080 --> 00:02:24,000
Anton Shkaplerov, the Russian cosmonaut, is
spending most of his day doing some maintenance

32
00:02:24,000 --> 00:02:29,690
in the Zarya module, also known as the Functional
Cargo Block, doing some filter change outs

33
00:02:29,690 --> 00:02:33,320
on some dust collectors and cleaning some
ventilation screens.

34
00:02:33,320 --> 00:02:39,510
He’s also participating in the BAR experiment,
which is a Russian research method that looks

35
00:02:39,510 --> 00:02:45,620
at the selection and testing of detections
and the means for depressurization of modules

36
00:02:45,620 --> 00:02:49,880
onboard the International Space Station.

37
00:02:49,880 --> 00:02:54,970
Alongside him Anatoly Ivanishin is also working
on that BAR experiment and also spent a good

38
00:02:54,970 --> 00:03:00,100
portion of his day working in the Zarya module,
cleaning some grids on some fans, and also

39
00:03:00,100 --> 00:03:03,350
working on the gas liquid heat exchanger.

40
00:03:03,350 --> 00:03:08,790
He also did some maintenance work on the Elektron,
which is the Russian oxygen generation system

41
00:03:08,790 --> 00:03:11,630
on the Russian segment of the space station.

42
00:03:11,630 --> 00:03:18,069
The third Russian cosmonaut, Oleg Kononenko,
started his day and spent much of his time

43
00:03:18,069 --> 00:03:22,569
working on the Plasma Crystal 3 experiment,

starting that up and executing it.

44
00:03:22,569 --> 00:03:29,990
And that is a very complex study of wave propagation
and dispersion in a dust plasma in microgravity

45
00:03:29,990 --> 00:03:31,180
environments.

46
00:03:31,180 --> 00:03:37,790
He’s also doing some stowage work with the
Progress 45 vehicle and prepping it for its

47
00:03:37,790 --> 00:03:41,960
eventual undocking three weeks from now.

48
00:03:41,960 --> 00:03:48,040
European astronaut Andre Kuipers finished
up his Neurospat equipment storage, and transferred

49
00:03:48,040 --> 00:03:53,209
the data from that which was taken yesterday,
and is spending much of his time today setting

50
00:03:53,209 --> 00:04:00,890
up and running the Integrated Cardiovascular
Ambulatory Monitoring System, which is a biomedical

51
00:04:00,890 --> 00:04:06,220
experiment though looks at cardiac atrophy
and other heart related functions in the astronauts

52
00:04:06,220 --> 00:04:08,920
on board the space station.

53
00:04:08,920 --> 00:04:13,170
Rounding out the crew, Don Pettit began his
day immediately after wake up, collecting

54

00:04:13,170 --> 00:04:18,070
some more human research samples and storing
them in the MELFI, which is the Minus Eighty

55
00:04:18,070 --> 00:04:24,980
Degree Laboratory Freezer, and also doing
some familiarization work with Vessel Imaging,

56
00:04:24,980 --> 00:04:29,750
which is an experiment that looks at the central
and peripheral blood vessel wall properties,

57
00:04:29,750 --> 00:04:35,500
which is another biomedical experiment that
focuses on how the body changes over the course

58
00:04:35,500 --> 00:04:37,840
of long-duration spaceflight.

59
00:04:37,840 --> 00:04:42,910
The crew will end their day today with a daily
planning conference, talking to controllers