EXPEDITION 30

DAN BURBANK
Commander

1
00:00:01,410 --> 00:00:05,810
Good morning and welcome to today's
International Space Station update.

2
00:00:05,810 --> 00:00:11,620
Getting a look now inside the flight control
room here at the Johnson Space Center in Texas.

3
00:00:11,620 --> 00:00:13,860
As controllers here on the ground continue

4
00:00:13,860 --> 00:00:18,170
to monitor systems aboard the
International Space Station.

5
00:00:18,170 --> 00:00:22,760
Leading the Orbit 2 Team currently on
console is Flight Director Ron Spencer.

6
00:00:22,760 --> 00:00:28,260
There on the right of your screen and to
his right is capcom Anna Fisher serving

7
00:00:28,260 --> 00:00:33,340
as the ground link between controllers here
and astronauts currently on board the station.

8
00:00:33,340 --> 00:00:43,150
The orbiting complex is currently at
an altitude of about 233 statute miles

9
00:00:43,150 --> 00:00:49,100
over Mexico heading south-easterly and
will move out past the western coast

10
00:00:49,100 --> 00:00:53,760
of South America before moving
out over the southern Atlantic.

11

00:00:53,760 --> 00:00:58,370
Currently on board the crew of Expedition
30 is hard at work on another day full

12
00:00:58,370 --> 00:01:00,120
of experiments and maintenance work.

13
00:01:00,120 --> 00:01:07,090
They are led by NASA astronaut Dan
Burbank, veteran of two shuttle missions,

14
00:01:07,090 --> 00:01:10,360
including the STS-106 mission back in 2000

15
00:01:10,360 --> 00:01:14,170
which prepared the station
for its first permanent crew.

16
00:01:14,170 --> 00:01:17,790
Joining him are Russian cosmonauts
Anton Shkaplerov, there on your left,

17
00:01:17,790 --> 00:01:22,550
who is on his first spaceflight, and
another Russian cosmonaut Anatoly Ivanishin,

18
00:01:22,550 --> 00:01:26,080
also his first spaceflight.

19
00:01:26,080 --> 00:01:33,100
They will be joined later in December by
the remainder of the Expedition 30 crew.

20
00:01:33,100 --> 00:01:39,460
Which is comprised of NASA astronaut Don
Pettit, Russian cosmonaut Oleg Kononenko

21
00:01:39,460 --> 00:01:42,470
and European astronaut Andre Kuipers.

22
00:01:42,470 --> 00:01:49,020
The crew awoke today at about
midnight time central

23
00:01:49,020 --> 00:01:52,170
and did some morning prep work before
their daily planning conference

24
00:01:52,170 --> 00:01:57,040
where they discussed the day's items
with controllers around the world.

25
00:01:57,040 --> 00:02:02,390
The crew is also doing an
emergency egress drill today.

26
00:02:02,390 --> 00:02:06,040
This drill will assist them with the
familiarization with the location

27
00:02:06,040 --> 00:02:12,440
of different emergency equipment, including the
hatches and passageways on board the complex

28
00:02:12,440 --> 00:02:17,450
and will familiarize them
with the evacuation route.

29
00:02:17,450 --> 00:02:22,710
Commander Burbank started his day with the
Reaction Self-Test, that is done to study

30
00:02:22,710 --> 00:02:29,100
if any sleep deprivation is effecting his
performance on board the station and is part

31
00:02:29,100 --> 00:02:31,850
of an ongoing research experiment.

32

00:02:31,850 --> 00:02:38,990
He is also doing some work with the Integrated
Cardiovascular Ambulatory Monitoring System,

33
00:02:38,990 --> 00:02:42,570
getting that set-up and then
affixing it to his chest,

34
00:02:42,570 --> 00:02:47,480
and then this experiment will determine how much
cardio atrophy occurs during his spaceflight

35
00:02:47,480 --> 00:02:49,090
and how fast it develops.

36
00:02:49,090 --> 00:02:51,510
This is due to that microgravity environment

37
00:02:51,510 --> 00:02:55,760
that they astronauts are subject
to during their expeditions.

38
00:02:55,760 --> 00:03:00,290
Later, he did some monthly
inspection work on the Treadmill 2,

39
00:03:00,290 --> 00:03:02,290
prior to exercising on that treadmill.

40
00:03:02,290 --> 00:03:06,410
The astronauts getting in about
two hours of exercise in each day,

41
00:03:06,410 --> 00:03:09,650
again to combat the effects of
that microgravity environment.

42
00:03:09,650 --> 00:03:19,230
Later he will do some water testing on the
Water Processing Assembly, taking some samples

43
00:03:19,230 --> 00:03:24,460
from the Total Organic Carbon
Analyzer sample hose,

44
00:03:24,460 --> 00:03:26,580
testing for any particulates inside the water

45
00:03:26,580 --> 00:03:31,490
that could become potentially hazardous
if they are allowed to build up.

46
00:03:31,490 --> 00:03:38,030
Then doing some power work on the Japanese
external segment's remote control arm.

47
00:03:38,030 --> 00:03:42,430
That is in anticipation of next
week's ground control demonstration.

48
00:03:42,430 --> 00:03:48,590
And then just a few minutes ago Dan Burbank
participated in a public affairs event

49
00:03:48,590 --> 00:03:53,050
with Bay News 9 in Florida, answering
some questions and talking with a reporter

50
00:03:53,050 --> 00:03:57,670
about the future of spaceflight and his
activities currently on board the station.

51
00:03:57,670 --> 00:04:03,740
And later on in the day he will get
some more work in on the ARED device,

52
00:04:03,740 --> 00:04:10,600
followed by a journals entry, which is part of
an experiment designed to see how isolation,

53
00:04:10,600 --> 00:04:15,340
confinement and the other stressors of
spaceflight can effect crew health and morale.

54
00:04:15,340 --> 00:04:22,720
His crewmate Anton Shkaplerov ended his
24-hour electrocardiogram experiment

55
00:04:22,720 --> 00:04:23,920
that he began yesterday.

56
00:04:23,920 --> 00:04:27,440
Studying the heart functions over a day's time.

57
00:04:27,440 --> 00:04:32,940
He then did an on-orbit hearing assessment
followed by the Pneumocard experiment,

58
00:04:32,940 --> 00:04:34,680
which helps to understand the mechanisms

59
00:04:34,680 --> 00:04:38,560
of adapting the cardiorespiratory
system to spaceflight conditions.

60
00:04:38,560 --> 00:04:44,480
He then got some exercise on the TVIS
treadmill, followed by some maintenance

61
00:04:44,480 --> 00:04:48,940
to the Russian coolant system and
then some cargo transfer activities

62
00:04:48,940 --> 00:04:51,000
from the 45 Progress vehicle.

63
00:04:51,000 --> 00:04:54,670
That is the cargo vehicle
that resupplied the station.

64
00:04:54,670 --> 00:05:00,900
And then following that he did some update work
on the station's inventory management system,

65
00:05:00,900 --> 00:05:04,270
and then closing out his day
will be some more exercise.

66
00:05:04,270 --> 00:05:10,930
And the third member of the Expedition 30
crew currently on orbit, Anatoly Ivanishin,

67
00:05:10,930 --> 00:05:16,020
becan his day with some leak checks
on one of the Russian coolant systems.

68
00:05:16,020 --> 00:05:20,490
And then started up his own his
24-hour electrocardiogram experiment.

69
00:05:20,490 --> 00:05:28,270
He then moved on to do some preventative
maintenance inside the Zvezda module,

70
00:05:28,270 --> 00:05:31,960
also known as the Russian service module,

71
00:05:31,960 --> 00:05:38,280
before doing some exercise activities
and an on-orbit hearing test.

72
00:05:39,650 --> 00:05:44,920
He then moved on to work on the Interactions
experiment, which are weekly questionnaires

73
00:05:44,920 --> 00:05:50,660
that help to identify and define important
interpersonal factors which may impact the crew

74
00:05:50,660 --> 00:05:55,480
and ground support personnel
during these ISS expeditions.

75
00:05:55,480 --> 00:05:58,760
The crew will end their day with the
second daily planning conference,

76
00:05:58,760 --> 00:06:03,100
going over the day's activites and any
get-ahead work they need to do before tomorrow,

77
00:06:03,100 --> 00:06:06,470
before moving into pre-sleep,
where they do some wrap-up work.