
CATO

1
00:00:01,720 --> 00:00:03,670
Good morning and welcome
to Mission Control Houston

2
00:00:03,670 --> 00:00:07,110
and the International Space Station update.

3
00:00:07,110 --> 00:00:09,650
We're joining the International
Space Station flight control team

4
00:00:09,650 --> 00:00:13,440
in the space station flight control room here
at the mission control center in Houston,

5
00:00:13,440 --> 00:00:16,180
where the Orbit 2 team is
on console at this time,

6
00:00:16,180 --> 00:00:24,260
led again today by flight director Paul Dye
with astronaut Shannon Lucid in the Capcom seat.

7
00:00:24,260 --> 00:00:29,900
Space station's currently out of the range of
communication with the team here on the ground,

8
00:00:29,900 --> 00:00:35,580
so many of the team members are taking
advantage of a quick break during that time.

9
00:00:35,580 --> 00:00:37,770
But although we can't communicate

10
00:00:37,770 --> 00:00:40,060
with them right now onboard the
International Space Station,

11
00:00:40,060 --> 00:00:44,600

the Expedition30 crew has been
awake since midnight central time.

12
00:00:44,600 --> 00:00:49,950
They're now more than halfway through their day,
which is full experiment work and maintenance.

13
00:00:56,230 --> 00:01:01,240
US Commander Dan Burbank as well as
Russian Flight Engineers Anton Shkaplerov

14
00:01:01,240 --> 00:01:10,700
and Anatoly Ivanishin are currently orbiting
about 260 miles above the South Atlantic Ocean,

15
00:01:10,700 --> 00:01:15,130
just having passed the southernmost
portion of this orbit around the Earth,

16
00:01:15,130 --> 00:01:19,160
now heading southeast toward
the coast of Africa.

17
00:01:21,600 --> 00:01:24,830
Burbank, Shkaplerov and Ivanishin
launched to the station

18
00:01:24,830 --> 00:01:29,190
in their Russian Soyuz TMA-22
vehicle on November 13,

19
00:01:29,190 --> 00:01:31,960
and docked to the space station on November 15.

20
00:01:31,960 --> 00:01:36,550
So they're working on their 25th day in
space and their 23rd day on space station.

21
00:01:36,550 --> 00:01:41,420
They've been alone on station since the

Expedition 29 crew members left on November 21,

22
00:01:41,420 --> 00:01:47,160
but they'll soon be joined by three new
crewmates to replace those that left.

23
00:01:47,160 --> 00:01:53,050
Flight Engineers Don Pettit, Oleg
Kononenko and Andre Kuipers departed

24
00:01:53,050 --> 00:01:58,870
from the Gagarin Cosmonaut Training Center in
Star City, Russia near Moscow today to head

25
00:01:58,870 --> 00:02:04,140
to the Baikonur Cosmodrome in Kazakhstan,
where their Soyuz TMA-03M is being prepared

26
00:02:04,140 --> 00:02:07,240
for the December 21 launch the space station.

27
00:02:07,240 --> 00:02:14,000
Scheduled to go to the station and join Burbank,
Shkaplerov and Ivanishin on December 23.

28
00:02:14,000 --> 00:02:19,490
To get ready for that, the engines of
the station's Zvezda service module are

29
00:02:19,490 --> 00:02:25,340
to be fired tomorrow at 1:50 PM central time
to raise the station to the correct altitude

30
00:02:25,340 --> 00:02:28,730
to meet up with Soyuz on the 23rd.

31
00:02:28,730 --> 00:02:34,590
They'll be fired for one minute and 22 seconds
and raise the station's altitude by 2.8 miles

32
00:02:34,590 --> 00:02:36,960
at the perigee, or lowest point in its orbit.

33
00:02:36,960 --> 00:02:44,120
That's going to put the station
in a 259.9 x 231.5 mile orbit.

34
00:02:44,120 --> 00:02:51,130
Inside the station today Commander
Burbank has been working diligently

35
00:02:51,130 --> 00:02:53,600
with the Amine Swingbed prototype.

36
00:02:53,600 --> 00:02:55,120
He was scheduled spent a great deal of time

37
00:02:55,120 --> 00:02:58,170
on that today putting it
together and checking it out.

38
00:02:58,170 --> 00:03:02,020
That system's meant to test out in space
technology that could eventually be used

39
00:03:02,020 --> 00:03:08,790
to scrub carbon dioxide from the air
inside the new Orion multi crew vehicle.

40
00:03:08,790 --> 00:03:11,700
However it is a very complex piece of equipment,

41
00:03:11,700 --> 00:03:14,270
and Burbank ran into some
problems putting it together.

42
00:03:14,270 --> 00:03:16,720
Said it's actually been put
away for now while the team here

43
00:03:16,720 --> 00:03:20,570
on the ground considers what the
next steps in space should be.

44
00:03:20,570 --> 00:03:23,950
Meanwhile on the Russian side of the
station Flight Engineers Ivanishin

45
00:03:23,950 --> 00:03:29,290
and Shkaplerov each had a few experiments
and activities they were scheduled work on.

46
00:03:29,290 --> 00:03:34,820
Shkaplerov was going to be spending some time
today working with the Typology experiment,

47
00:03:34,820 --> 00:03:40,000
which looks at how living in space
affects astronauts' mental state,

48
00:03:40,000 --> 00:03:43,480
and also the Coulomb Crystal experiment.

49
00:03:45,300 --> 00:03:52,730
And Ivanishin meanwhile was scheduled to spend
some time unpacking the Progress 45 vehicle

50
00:03:52,730 --> 00:03:59,880
and the Soyuz that he and his crewmates arrived
on, and also working with the Seiner experiment,

51
00:03:59,880 --> 00:04:08,590
which is a test of information support
procedures that is used to gain data

52
00:04:08,590 --> 00:04:12,240
for the scientific community
and fishing operations performed

53
00:04:12,240 --> 00:04:18,510
at the state fish fishery committee
and ships in the world's oceans.