



1  
00:00:01,416 --> 00:00:03,276

Good morning and welcome  
to Mission Control Houston

2  
00:00:03,276 --> 00:00:05,196

and the International Space Station Update.

3  
00:00:05,676 --> 00:00:08,166

We're joining the International  
Space Station flight control team

4  
00:00:08,486 --> 00:00:11,676

and the Space Station Flight Control Room  
here at the Mission Control Center in Houston

5  
00:00:12,126 --> 00:00:15,456

where the Orbit Two Team is on console  
at this time and they're led again today

6  
00:00:15,456 --> 00:00:20,126

by Flight Director Paul Dye working  
with Josh Matthews in the Capcom seat.

7  
00:00:21,186 --> 00:00:24,816

Onboard the International Space Station,  
the Expedition 30 crew has been awake

8  
00:00:24,876 --> 00:00:28,286

since Midnight Central time and they are  
now more than halfway through their day.

9  
00:00:29,206 --> 00:00:33,906

U.S. Commander Dan Burbank as well as  
Russian Flight Engineers Anton Shkaplerov

10  
00:00:34,616 --> 00:00:41,626

and Anatoly Ivanishin are orbiting 234 miles  
above the Pacific Ocean heading southeast

11

00:00:41,626 --> 00:00:45,066

into the daylight portion of  
this orbit around the Earth.

12

00:00:45,326 --> 00:00:51,586

Burbank, Shkaplerov and Ivanishin launched to  
the station in the Russian Soyuz TMA-22 vehicle

13

00:00:51,696 --> 00:00:56,366

on November 13 and docked to the  
space station on November 15.

14

00:00:56,366 --> 00:01:00,436

So they're working on their 26th day in space  
and their 24th day at the space station.

15

00:01:00,986 --> 00:01:06,996

They've been alone at the station since the  
Expedition 29 crew members left on November 21.

16

00:01:07,556 --> 00:01:12,676

They'll soon be joined by three new  
crew members to replace those that left.

17

00:01:14,016 --> 00:01:18,286

Flight Engineers Don Pettit, Oleg  
Kononenko and Andre Kuipers departed

18

00:01:18,286 --> 00:01:22,456

from the Gagarin Cosmonaut Training Center  
in Star City, Russia near Moscow yesterday

19

00:01:22,966 --> 00:01:25,436

and are now at the Baikonur  
Cosmodrome in Kazakhstan,

20

00:01:26,236 --> 00:01:32,646

where there Soyuz TMA-03M is being prepared for  
their December 21 launch to the space station.

21

00:01:32,646 --> 00:01:35,036

This is a photo here of their arrival.

22

00:01:35,036 --> 00:01:39,436

They were greeted by Russian officials and again now are getting ready for their Dec.

23

00:01:39,436 --> 00:01:40,906

21 launch.

24

00:01:41,216 --> 00:01:44,676

Then they'll be docking to the station and joining Burbank,

25

00:01:44,676 --> 00:01:47,346

Shkaplerov and Ivanishin on December 23.

26

00:01:48,086 --> 00:01:53,736

To get ready for the arrival, engines on the station's Zvezda service module are going

27

00:01:53,736 --> 00:01:57,806

to be fired later today at 1:50 p.m.

Central time to raise the station

28

00:01:57,806 --> 00:02:02,676

to the correct attitude, or altitude, to meet up with the Soyuz on the 23rd.

29

00:02:03,006 --> 00:02:09,656

They'll fire for 1 minute and 22 seconds and raise the station's altitude by 2.8 miles

30

00:02:09,656 --> 00:02:12,266

at its perigee, or the lowest point of its orbit.

31

00:02:12,706 --> 00:02:18,576

That's going to put the station in a 259.9 by 231.5 mile orbit.

32  
00:02:18,916 --> 00:02:23,776  
Inside the station today, the crew has been working on a variety of science experiments.

33  
00:02:23,896 --> 00:02:28,936  
Commander Burbank spent some time today, again, with the Combustion Integrated Rack

34  
00:02:28,936 --> 00:02:35,206  
which is used for microgravity research on droplet, solid fuel or gaseous fuel combustion.

35  
00:02:35,826 --> 00:02:38,416  
He also did some troubleshooting with the ISSAC experiment.

36  
00:02:38,676 --> 00:02:42,436  
That's the International Space Station Agricultural Camera which is used

37  
00:02:42,436 --> 00:02:45,736  
to study melting glaciers, ecosystem responses to seasonal changes

38  
00:02:46,186 --> 00:02:48,306  
and human impacts as well as natural disasters.

39  
00:02:48,696 --> 00:02:53,626  
And a little later this hour at 10:35 a.m. Central time, Burbank is going to take some time

40  
00:02:53,626 --> 00:02:55,976  
out of his schedule to talk with 5th and 6th grade students

41  
00:02:56,316 --> 00:03:00,876  
at Westchester Intermediate School in Chesterton, Indiana.

