



1  
00:00:00,046 --> 00:00:03,436  
Good morning and welcome to  
the Mission Control, Houston

2  
00:00:03,436 --> 00:00:06,026  
and the International  
Space Station Update.

3  
00:00:06,026 --> 00:00:08,296  
We're joining the International  
Space Station flight control

4  
00:00:08,296 --> 00:00:10,286  
team in the space station  
flight control room here

5  
00:00:10,286 --> 00:00:11,716  
at the Mission Control  
Center in Houston,

6  
00:00:11,946 --> 00:00:14,446  
where the orbit two team  
is on console at this time.

7  
00:00:14,906 --> 00:00:17,246  
They're led today by  
flight director Paul Dye

8  
00:00:17,496 --> 00:00:21,186  
with Jack Fischer  
in the Capcom seat.

9  
00:00:21,186 --> 00:00:23,166  
On board the International  
Space Station,

10  
00:00:23,276 --> 00:00:26,786  
the Expedition 31 crew has been  
awake since 1 a.m. Central time

11

00:00:26,786 --> 00:00:28,806

and are now more than  
halfway through their day.

12

00:00:29,016 --> 00:00:32,606

After a whirlwind of activity  
surrounding last week's SpaceX

13

00:00:32,606 --> 00:00:34,836

undocking - and before  
that the arrival

14

00:00:34,836 --> 00:00:38,506

of both the SpaceX vehicle  
and the Soyuz TMA-04M -

15

00:00:38,986 --> 00:00:40,646

activities are finally  
getting back to normal,

16

00:00:40,706 --> 00:00:43,676

for a little while anyway,  
for the six man crew

17

00:00:43,676 --> 00:00:47,986

on board the space station who  
are currently orbiting 249 miles

18

00:00:47,986 --> 00:00:49,496

above the North Pacific Ocean,

19

00:00:49,686 --> 00:00:54,546

heading south towards  
the tip of South America.

20

00:00:54,606 --> 00:00:57,196

The crew includes  
Commander Oleg Kononenko

21

00:00:57,326 --> 00:01:00,396  
and U.S. Flight Engineers  
Don Pettit and Joe Acaba,

22  
00:01:00,916 --> 00:01:03,286  
as well as European Flight  
Engineer Andre Kuipers

23  
00:01:03,796 --> 00:01:06,196  
and Russian Flight  
Engineers Gennady Padalka

24  
00:01:06,196 --> 00:01:07,356  
and Sergei Revin.

25  
00:01:09,836 --> 00:01:12,106  
Kononenko, Kuipers  
and Pettit have been

26  
00:01:12,106 --> 00:01:14,016  
at the space station  
since December.

27  
00:01:14,016 --> 00:01:15,496  
They launched into space on Dec.

28  
00:01:15,496 --> 00:01:17,916  
21 and docked on the 23rd.

29  
00:01:18,536 --> 00:01:23,346  
Now with 166 days in space  
and 164 at the space station,

30  
00:01:23,686 --> 00:01:25,246  
they're coming up on the  
end of their sojourn.

31  
00:01:25,246 --> 00:01:27,796  
They're scheduled now to  
return to Earth on July 1.

32

00:01:27,856 --> 00:01:33,866

Their crewmates Acaba, Padalka and Revin only just arrived

33

00:01:33,866 --> 00:01:35,616

and will be staying behind when they leave.

34

00:01:36,256 --> 00:01:39,586

They launched from Baikonur on May 14 and arrived

35

00:01:39,586 --> 00:01:44,016

at the space station on May 16, so they're currently at 20 days

36

00:01:44,016 --> 00:01:46,066

in space, 18 at the space station.

37

00:01:47,136 --> 00:01:50,126

They won't be alone for long, however, after Kononenko,

38

00:01:50,126 --> 00:01:51,096

Kuipers and Pettit leave.

39

00:01:51,096 --> 00:01:54,256

They're going to be joined in a couple of weeks after that

40

00:01:54,406 --> 00:01:58,236

by what will by then be the rest of the Expedition 32 crew.

41

00:01:58,656 --> 00:02:03,146

That's Suni Williams, Yuri Malenchenko and Aki Hoshide.

42

00:02:04,106 --> 00:02:07,006

Those three are scheduled to launch from Baikonur on July 15.

43

00:02:08,066 --> 00:02:11,876

Preparations for all of these activities are ongoing both here

44

00:02:11,876 --> 00:02:13,356

on the ground and in space.

45

00:02:14,036 --> 00:02:16,616

Williams, Malenchenko and Hoshide are currently

46

00:02:16,616 --> 00:02:19,546

at the Gagarin Cosmonaut Training Center in Star City,

47

00:02:19,546 --> 00:02:22,456

Russia, and today they took part in a suited simulation.

48

00:02:24,676 --> 00:02:26,766

Meanwhile on board the space station,

49

00:02:27,396 --> 00:02:29,556

Pettit and Acaba are going

50

00:02:29,556 --> 00:02:31,586

to be spending an hour together later today

51

00:02:31,586 --> 00:02:33,436

for handover activities in preparation

52

00:02:33,936 --> 00:02:35,596

for Pettit's departure.

53

00:02:37,166 --> 00:02:39,746

Meanwhile, work goes  
on in space as well.

54

00:02:39,956 --> 00:02:41,516

Today the crew has  
a mix of science

55

00:02:41,516 --> 00:02:43,526

and maintenance activities  
on their agenda.

56

00:02:44,166 --> 00:02:46,166

Don Pettit is performing  
his final session

57

00:02:46,166 --> 00:02:49,466

of the VO2 Max experiment,  
which documents changes

58

00:02:49,466 --> 00:02:53,636

in the crew member's maximum  
oxygen uptake while they're

59

00:02:53,636 --> 00:02:56,966

in space, and he's also  
changing out filters in three

60

00:02:56,966 --> 00:02:58,466

of the four crew  
quarter compartments

61

00:02:58,466 --> 00:03:00,066

on the U.S. side of  
the space station.

62

00:03:02,106 --> 00:03:05,286

Joe Acaba has spent much of his

morning in the Quest airlock.

63

00:03:05,286 --> 00:03:08,646

You can see video of his  
work there earlier today,

64

00:03:09,096 --> 00:03:10,846

performing some regular  
maintenance

65

00:03:10,846 --> 00:03:13,306

of the U.S. spacesuits'  
cooling water loops,

66

00:03:13,546 --> 00:03:16,576

and then later today, he'll  
be going over procedures

67

00:03:16,576 --> 00:03:18,116

for the BASS experiment.

68

00:03:18,166 --> 00:03:20,876

That's an acronym for Burning  
And Suppression of Solids,

69

00:03:21,356 --> 00:03:25,826

a study of whether materials  
burn as well in microgravity

70

00:03:25,826 --> 00:03:27,086

as they do in normal gravity.

71

00:03:28,616 --> 00:03:30,216

Andre Kuipers has been working

72

00:03:30,216 --> 00:03:33,576

in the Japanese Kibo  
laboratory with the Ryutai rack.

73

00:03:33,786 --> 00:03:36,906

"Ryutai" means "fluid"

in Japanese,

74

00:03:37,346 --> 00:03:38,646

and the equipment is used

75

00:03:38,646 --> 00:03:41,226

for fluid physics

experiments among other things.

76

00:03:41,486 --> 00:03:43,676

You can see him working

with that rack

77

00:03:43,676 --> 00:03:46,446

in this video also recorded

from earlier this morning.

78

00:03:46,446 --> 00:03:50,756

He's got it tilted out of

the, basically the wall

79

00:03:50,756 --> 00:03:51,746

of the space station there.

80

00:03:53,046 --> 00:03:56,766

Its image processing unit power

supply had a short circuit

81

00:03:56,766 --> 00:03:59,806

in January, so Kuipers was

removing the unit today

82

00:03:59,806 --> 00:04:00,656

and Pettit is going

83

00:04:00,656 --> 00:04:03,236

to be replacing the power

supply in it tomorrow.

84

00:04:04,226 --> 00:04:06,416

And finally on the Russian  
side of the space station,

85

00:04:06,416 --> 00:04:08,616

cosmonauts were also  
participating in a couple

86

00:04:08,616 --> 00:04:09,806

of science experiments.

87

00:04:09,996 --> 00:04:11,686

Gennady Padalka was  
scheduled to work

88

00:04:11,686 --> 00:04:14,956

on both the Kulonovskiy  
Kristall experiment,

89

00:04:14,956 --> 00:04:17,026

which studies the  
effect of microgravity

90

00:04:17,026 --> 00:04:20,206

on charged particles  
in a magnetic field,

91

00:04:20,776 --> 00:04:22,616

and the Constant  
experiment which looks

92

00:04:22,616 --> 00:04:24,856

at how spaceflight  
influences fermentation.

93

00:04:25,496 --> 00:04:27,126

That's what's been  
going on in space today,

