



1  
00:00:02,516 --> 00:00:03,306

Good morning.

2  
00:00:03,306 --> 00:00:04,716

This is Mission Control Houston.

3  
00:00:04,766 --> 00:00:07,866

Thank you for joining us for today's  
ISS Update this Monday, September 26.

4  
00:00:07,866 --> 00:00:13,286

We are coming to you now live inside the  
International Space Station Flight Control Room

5  
00:00:13,286 --> 00:00:15,526

of the Christopher C. Kraft  
Mission Control Center,

6  
00:00:15,806 --> 00:00:19,016

where the team here is monitoring  
the systems aboard the station

7  
00:00:19,016 --> 00:00:22,486

and supporting the day's activities  
of the Expedition 29 crew members.

8  
00:00:24,966 --> 00:00:27,786

Flight Director Scott Stover  
is leading the team here

9  
00:00:27,786 --> 00:00:33,766

in the Station Flight Control  
Room, seen here in the blue shirt.

10  
00:00:34,146 --> 00:00:37,486

On the right-hand side of your screen  
with Josh Matthew there next to him,

11  
00:00:37,486 --> 00:00:40,906

who is serving as CAPCOM, relaying  
all ground messages up to the crew.

12

00:00:43,046 --> 00:00:46,046

Aboard the orbiting complex,  
station Commander Mike Fossum

13

00:00:46,046 --> 00:00:47,996

and Flight Engineers Satoshi Furukawa

14

00:00:48,106 --> 00:00:52,526

and Sergei Volkov are kicking off their  
second week aboard the orbiting complex

15

00:00:52,526 --> 00:00:54,326

as the Expedition 29 crew.

16

00:00:55,766 --> 00:00:58,556

Commander Fossum, Volkov and Furukawa launched

17

00:00:58,556 --> 00:01:03,666

to the orbiting complex aboard their Soyuz  
spacecraft as the Expedition 28 crew this summer

18

00:01:03,666 --> 00:01:05,936

on June 7 and docked to the Rassvet module

19

00:01:05,936 --> 00:01:08,546

of the space station two days  
after their launch on June 9.

20

00:01:09,176 --> 00:01:13,176

Today they will complete their  
110th consecutive day in space

21

00:01:13,176 --> 00:01:16,836

without about two months left  
before they return to Earth on November 22.

22

00:01:18,646 --> 00:01:22,956

Meanwhile, astronaut Dan Burbank and cosmonauts Anton Shkaplerov

23

00:01:22,956 --> 00:01:27,056

and Anatoly Ivanishin are scheduled to join the crew of three their

24

00:01:27,056 --> 00:01:29,256

on the space station after their launch on November 14

25

00:01:29,256 --> 00:01:33,446

to make up the full crew and complete the mission of Expedition 29.

26

00:01:34,956 --> 00:01:38,956

The space station with its three crew members onboard are now flying

27

00:01:38,956 --> 00:01:43,526

at an altitude of about 238 statute miles.

28

00:01:44,676 --> 00:01:51,066

It has just made its way across the south Atlantic Ocean passing just under the tip

29

00:01:51,066 --> 00:01:57,086

of South Africa and Madagascar now taking a northeastern track over the Indian Ocean

30

00:01:57,086 --> 00:01:59,796

and eventually across west Australia.

31

00:02:01,676 --> 00:02:05,816

On orbit the expedition crew members continue to conduct research that takes advantage

32

00:02:05,816 --> 00:02:07,856

of their microgravity environment

to learn more

33

00:02:08,176 --> 00:02:11,636

about the human body, biology, physics and materials.

34

00:02:12,396 --> 00:02:17,016

The crew also continues the maintenance and upkeep of their home away from home.

35

00:02:17,256 --> 00:02:23,216

After the crew woke up at 1 a.m. Central time today, the Expedition crew participated

36

00:02:23,216 --> 00:02:26,306

in the first of two daily planning conferences with ground controllers

37

00:02:26,306 --> 00:02:29,696

at mission control centers around the world to review the day's activities

38

00:02:29,696 --> 00:02:32,066

and plan for the next set of tasks.

39

00:02:32,216 --> 00:02:36,056

The crew will participate in another daily planning conference just before entering its

40

00:02:36,056 --> 00:02:39,706

pre-sleep period a couple of hours after today's ISS Update hour.

41

00:02:40,346 --> 00:02:44,156

The crew is then scheduled to go to bed at 4:30 p.m. Central time.

42

00:02:50,076 --> 00:02:54,966

During today's ISS Update hour Commander Mike Fossum will perform a camera checkout

43  
00:02:54,966 --> 00:03:00,366  
of an ongoing Binary Colloidal Alloy experiment  
that looks at crystal growth suspended in liquid

44  
00:03:00,366 --> 00:03:04,286  
for improvements in manufacturing products.

45  
00:03:04,736 --> 00:03:08,936  
He also will continue this morning's stowage  
relocation from the Human Research Facility.

46  
00:03:10,466 --> 00:03:15,256  
Flight Engineer Satoshi Furukawa will  
be participating in an hour-long workout

47  
00:03:15,256 --> 00:03:17,096  
on the station's stationary bicycle.

48  
00:03:18,196 --> 00:03:22,476  
Meanwhile, Flight Engineer Sergei Volkov  
will take oceanic photos and video

49  
00:03:22,476 --> 00:03:25,406  
as the station makes a pass  
across the southeastern Pacific

50  
00:03:25,816 --> 00:03:28,056  
as part of an ocean observations study.

51  
00:03:28,446 --> 00:03:33,236  
He also will then replace a gas  
analyzer carbon dioxide filter unit

52  
00:03:33,486 --> 00:03:37,646  
and perform routine daily servicing of  
the onboard Russian life support systems.

53  
00:03:37,786 --> 00:03:42,816

After this morning's regular station inspection,

54  
00:03:42,816 --> 00:03:46,976  
breakfast and the daily planning conference  
Commander Fossum had begun some prep work

55  
00:03:47,056 --> 00:03:49,476  
to relocate stowage in the  
Human Research Facility.

56  
00:03:49,846 --> 00:03:54,366  
He also participated in a human body research  
experiment that involved taking a reading

57  
00:03:54,366 --> 00:03:57,806  
of his V02MAX that measures aerobic capacity.

58  
00:03:59,206 --> 00:04:03,856  
Volkov had cleaned the screen of an air  
heater fan in the crew's docked Soyuz vehicle,

59  
00:04:03,856 --> 00:04:08,036  
performed some preventative maintenance  
to the service module ventilation system

60  
00:04:08,036 --> 00:04:10,256  
and also swapped out a desk filter cartridge.

61  
00:04:10,746 --> 00:04:15,346  
While Volkov tended to the Russian Plants  
experiment that observes the growth of wheat

62  
00:04:15,346 --> 00:04:20,126  
in space, Furukawa maintained a  
Japanese experiment known as Marangoni.

63  
00:04:21,036 --> 00:04:25,806  
That studies flow patterns of how fluids move  
and how heat is transferred in microgravity.

64  
00:04:26,556 --> 00:04:32,666  
He also set up the Lego's Bricks Educational Study that involved a series of toy Lego kits

65  
00:04:32,666 --> 00:04:37,096  
that are assembled on orbit and used to demonstrate scientific concepts to students.

66  
00:04:37,596 --> 00:04:42,386  
Furukawa also began a scrub of the onboard U.S. spacesuits cooling loops.

67  
00:04:44,446 --> 00:04:46,766  
Later today, Commander Fossum will close

68  
00:04:46,766 --> 00:04:50,916  
out the V02MAX operations he had performed earlier this morning.

69  
00:04:51,266 --> 00:04:54,496  
He will also complete his daily two hour workout

70  
00:04:54,586 --> 00:04:59,146  
with the strength training using the advanced resistive exercise device.

71  
00:05:00,546 --> 00:05:05,596  
Fossum will swap out a battery of the Binary Colloidal Alloy experiment before the evening

72  
00:05:05,596 --> 00:05:07,146  
work prep, dinner and sleep.

73  
00:05:08,356 --> 00:05:12,936  
Meanwhile, Sergei Volkov will provide an update on the station's inventory management system,

74  
00:05:13,306 --> 00:05:17,166  
exercise and also refill the water

tank of the Russian Plants experiment.

75

00:05:18,146 --> 00:05:22,606

And Satoshi Furukawa will terminate the extravehicular mobile unit cooling loop scrub

76

00:05:22,606 --> 00:05:27,976

that he had activated today as maintenance on the onboard U.S. spacesuits.

77

00:05:28,526 --> 00:05:33,566

Meanwhile, back on Earth the second half of the Expedition 29 crew, astronaut Dan Burbank,

78

00:05:33,566 --> 00:05:37,996

Anton Shkaplerov and Anatoly Ivanishin, who are scheduled to launch from Baikonur

79

00:05:37,996 --> 00:05:40,206

in Kazakhstan in less than two months on Nov.

80

00:05:40,206 --> 00:05:42,906

14, have begun their final flow of preparation