



1
00:00:01,186 --> 00:00:01,666

Good morning.

2
00:00:01,666 --> 00:00:03,026

This is Mission Control Houston.

3
00:00:03,196 --> 00:00:07,156

Thank you for joining us for today's
ISS Update this Thursday, November 17.

4
00:00:08,416 --> 00:00:12,086

Aboard the orbiting complex
the Expedition 29 crew expanded

5
00:00:12,136 --> 00:00:14,156

from three crew members to six crew members.

6
00:00:14,586 --> 00:00:18,506

NASA astronaut Dan Burbank and
Russian cosmonauts Anton Shkaplerov

7
00:00:18,576 --> 00:00:22,876

and Anatoly Ivanishin docked
their Soyuz TMA-22 spacecraft

8
00:00:22,876 --> 00:00:25,706

to the Poisk mini-research
module late Tuesday night.

9
00:00:26,256 --> 00:00:30,126

Station Commander Mike Fossum and
Flight Engineers Satoshi Furukawa

10
00:00:30,126 --> 00:00:33,266

and Sergei Volkov welcomed their new crewmates

11
00:00:33,266 --> 00:00:35,816

after opening the hatches
early yesterday morning.

12

00:00:37,196 --> 00:00:40,256

After a welcoming ceremony
with mission officials

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00:00:40,256 --> 00:00:44,646

and family members the station residents
conducted the standard crew safety briefing.

14

00:00:45,026 --> 00:00:48,826

The new crew members have familiarized
themselves with the potential hazards,

15

00:00:48,826 --> 00:00:51,896

safety equipment locations and escape routes.

16

00:00:52,146 --> 00:00:55,076

The newly arrived trio has now
begun its fourth day in space

17

00:00:55,496 --> 00:00:58,166

and second day aboard the
International Space Station.

18

00:00:59,566 --> 00:01:04,156

While the new arrivals settle into their
new home, Fossum, Furukawa and Volkov are

19

00:01:04,156 --> 00:01:07,586

in their final stretch aboard the
orbiting complex before their departure

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00:01:07,586 --> 00:01:11,196

in the Soyuz TMA-02M spacecraft next week.

21

00:01:11,766 --> 00:01:16,416

Fossum, Furukawa and Volkov launched to the
orbiting complex aboard their Soyuz spacecraft

22

00:01:16,416 --> 00:01:20,456
as the Expedition 28 crew this summer on June 7.

23

00:01:20,796 --> 00:01:24,926
Today they will complete their
163rd consecutive day in space.

24

00:01:26,536 --> 00:01:31,836
Fossum, Furukawa and Volkov will undock from
the Rassvet mini-research module and land

25

00:01:31,836 --> 00:01:36,346
in Kazakhstan on November 21
at 8:21 p.m. Central time.

26

00:01:36,766 --> 00:01:39,916
Their undocking will start the Expedition 30.

27

00:01:41,246 --> 00:01:44,436
After adjusting sleep schedules
for the arrival of the new Soyuz

28

00:01:44,436 --> 00:01:48,486
and crew members the crew began its first
regular schedule as a six member crew today

29

00:01:48,526 --> 00:01:50,746
with a wake up at 1 a.m. Central time.

30

00:01:51,296 --> 00:01:55,696
A couple of hours after wake up the
Expedition crew participated in the first

31

00:01:55,696 --> 00:01:59,276
of two daily planning conferences with
ground controllers at Mission Control Centers

32

00:01:59,566 --> 00:02:03,666
around the world to review the day's
activities and plan for the next set of tasks.

33
00:02:03,666 --> 00:02:08,136
Commander Mike Fossum and Flight Engineer
Satoshi Furukawa will perform an hour

34
00:02:08,136 --> 00:02:11,056
of their two-hour scheduled daily exercise.

35
00:02:11,356 --> 00:02:16,006
Fossum will be performing strength training
with the Advanced Resistive Exercise Device

36
00:02:16,696 --> 00:02:20,716
after deconfiguring a joint orbital
communications adapter router

37
00:02:20,716 --> 00:02:23,296
to stow away as a spare onboard the station.

38
00:02:23,856 --> 00:02:26,886
Furukawa will workout using
the onboard treadmill.

39
00:02:27,466 --> 00:02:32,356
Flight Engineer Sergei Volkov will
participate in a private medical conference

40
00:02:32,356 --> 00:02:34,016
and exercise at the bottom of the hour.

41
00:02:35,866 --> 00:02:39,456
Meanwhile, the new Expedition
29 crewmates Dan Burbank

42
00:02:39,666 --> 00:02:44,246
and Anton Shkaplerov will familiarize
themselves with the exercise equipment onboard.

43
00:02:44,646 --> 00:02:49,306

The on-orbit gym is equipped with a stationary bicycle, a treadmill

44

00:02:49,356 --> 00:02:53,326

and the advanced exercise device that simulates weight lifting here on Earth.

45

00:02:54,596 --> 00:02:57,136

Also, Anatoly Ivanishin will be tending

46

00:02:57,136 --> 00:03:00,806

to a Russian cell cultivation experiment known as Cascade.

47

00:03:01,516 --> 00:03:05,976

Earlier this morning, Commander Fossum led a crew handover review with his crewmates.

48

00:03:05,976 --> 00:03:09,476

As part of its handover, the crew reviewed emergency roles

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00:03:09,476 --> 00:03:12,246

and responsibilities aboard the International Space Station.

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00:03:12,946 --> 00:03:17,656

Fossum then changed out a tank of the onboard Water Recovery System and also checked

51

00:03:17,656 --> 00:03:22,496

on a couple of science experiments of the Commercial Generic Bioprocessing Apparatus

52

00:03:22,496 --> 00:03:24,826

and also the Binary Colloidal Alloy Test.

53

00:03:25,406 --> 00:03:29,346

Before today's update hour Fossum tended to the Combustion Integrated Rack,

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00:03:29,696 --> 00:03:32,176

a facility that houses hardware capable

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00:03:32,176 --> 00:03:35,426

of performing combustion
experiments there in microgravity.

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00:03:36,106 --> 00:03:43,026

Flight Engineer Dan Burbank, shown here in this
view, performed his first Reaction self-test

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00:03:43,066 --> 00:03:45,826

that measures fatigue resulting
from the disruption

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00:03:45,826 --> 00:03:49,036

of the circadian rhythm while
living and working in space.

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00:03:49,746 --> 00:03:53,406

He had also participated in his
first private medical conference

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00:03:53,406 --> 00:03:56,706

and an Inventory Management System
and stowage conference there

61

00:03:56,706 --> 00:04:01,576

with Mike Fossum who is also shown in this view.

62

00:04:01,666 --> 00:04:03,736

Flight Engineer Sergei Volkov documented

63

00:04:03,736 --> 00:04:09,746

with photos an ongoing Russian science
experiment known as Bioemulsion that aims

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00:04:09,746 --> 00:04:13,956

to provide efficient, ecologically safe production of bacterial,

65

00:04:13,956 --> 00:04:16,756

fermental and medicinal preparations.

66

00:04:17,236 --> 00:04:21,796

He also had relocated hardware that was used earlier in another science experiment

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00:04:21,796 --> 00:04:25,426

that was known as Plasmida that examines the microgravity effect

68

00:04:25,426 --> 00:04:28,266

on the rate of transfer on Plasmid DNA.

69

00:04:29,826 --> 00:04:34,246

Volkov also tended to the cell cultivation experiment, as well as an experiment

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00:04:34,246 --> 00:04:36,226

that looks at the growth of wheat in space.

71

00:04:38,696 --> 00:04:43,326

Meanwhile, Burbank, Shkaplerov and Ivanishin studied the emergency roles and responsibilities

72

00:04:43,386 --> 00:04:46,086

of the International Space Station and spent some time adjusting

73

00:04:46,086 --> 00:04:47,546

to their new environment in space.

74

00:04:50,126 --> 00:04:53,276

While the three new crew members will continue to settle in their new home,

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00:04:53,606 --> 00:04:57,206
work with their station veteran crewmates
in additional handovers and adjust

76

00:04:57,256 --> 00:04:59,406
to their microgravity living space.