



1

00:00:00,836 --> 00:00:01,706

Commentator [Amiko Kauderer]: Good morning.

2

00:00:01,706 --> 00:00:03,066

This is Mission Control Houston.

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00:00:03,066 --> 00:00:07,396

Thank you for joining us for today's  
ISS Update this Tuesday, February 7.

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00:00:07,936 --> 00:00:11,916

We're now looking at a live view inside the  
International Space Station Flight Control Room

5

00:00:11,916 --> 00:00:15,956

where the Orbit 2 team, seen here, has been  
monitoring the systems aboard the station

6

00:00:16,326 --> 00:00:20,036

and supporting the day's activities  
of the Expedition 30 crew members.

7

00:00:20,976 --> 00:00:25,616

Also, here in the station flight control room  
today we have special guest astronaut Mike

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00:00:25,676 --> 00:00:29,506

Fossum joining us to talk about current  
station activities and share some

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00:00:29,506 --> 00:00:32,106

of his experiences aboard the complex.

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00:00:32,416 --> 00:00:36,386

Fossum served as the space station  
Expedition 29 commander and spent a total

11

00:00:36,386 --> 00:00:39,756

of 167 days aboard the orbiting facility.

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00:00:40,066 --> 00:00:40,846

Welcome Mike!

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00:00:40,846 --> 00:00:42,006

Thank you for joining us today.

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00:00:42,286 --> 00:00:43,636

Mike Fossum: Hey, you're welcome Amiko.

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00:00:43,766 --> 00:00:44,606

Glad to be here.

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00:00:45,566 --> 00:00:50,016

Amiko: Leading the team here in the station flight control room today is Flight Director Ron

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00:00:50,016 --> 00:00:54,886

Spencer, seen here on the right-hand side of your screen, with Robert Hanley there next

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00:00:54,886 --> 00:00:58,806

to him serving as Capcom relaying all ground messages up to the crew.

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00:00:58,946 --> 00:01:02,156

So Mike it was the undocking of your Soyuz vehicle

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00:01:02,156 --> 00:01:05,146

that signaled the start of this current Expedition 30.

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00:01:05,186 --> 00:01:07,016

Correct? Mike: That's right.

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00:01:07,186 --> 00:01:10,196

I spent a short bit of time with that part of the Expedition crew.

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00:01:10,196 --> 00:01:13,816

Really just a total of six days including the day they arrived and we left.

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00:01:14,386 --> 00:01:18,486

And that part of the crew was Dan Burbank, Anton Shkaplerov and Anatoly Ivanishin.

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00:01:18,976 --> 00:01:23,916

Amiko: So the six crew members currently aboard the station include NASA astronaut

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00:01:23,916 --> 00:01:26,816

and commander of the complex Dan Burbank and Flight Engineers

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00:01:26,816 --> 00:01:30,616

and cosmonauts Anton Shkaplerov, Anatoly Ivanishin,

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00:01:31,006 --> 00:01:35,186

as well as the NASA astronaut Don Pettit, cosmonaut Oleg Kononenko

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00:01:35,186 --> 00:01:38,536

and European Space Agency astronaut Andre Kuipers.

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00:01:39,686 --> 00:01:44,236

Mike: My short term crew mates Commander Burbank, Shkaplerov and Ivanishin launched

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00:01:44,306 --> 00:01:46,816

to the orbiting complex aboard their Soyuz spacecraft

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00:01:46,816 --> 00:01:49,536

as the Expedition 29 crew last November.

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00:01:50,246 --> 00:01:52,536

They docked to the Poisk module  
of the space station a few days

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00:01:52,536 --> 00:01:54,466

after their launch on November 16.

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00:01:55,206 --> 00:01:58,046

Burbank assumed command of  
the station when I handed

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00:01:58,046 --> 00:02:00,566

over to him only a few days after they arrived.

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00:02:00,566 --> 00:02:02,346

Amiko: Hey, thanks Mike.

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00:02:02,346 --> 00:02:07,676

And today he and his crew members complete  
their 87th consecutive day in space.

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00:02:07,726 --> 00:02:12,766

Meanwhile, Pettit, Kononenko and  
Kuipers launched aboard Soyuz TMA-03M

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00:02:12,766 --> 00:02:16,226

from the Baikonur Cosmodrome  
in Kazakhstan on December 21

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00:02:16,606 --> 00:02:21,156

when they began their two day chase on-orbit  
to catch up to the International Space Station.

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00:02:21,556 --> 00:02:25,986

With their Soyuz docked to the Rassvet module  
they will complete their 49th consecutive day

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00:02:25,986 --> 00:02:26,896

in space today.

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00:02:27,556 --> 00:02:31,036

The space station with its crew aboard is now flying

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00:02:31,036 --> 00:02:35,466

at an altitude of about 240 statute miles.

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00:02:37,666 --> 00:02:40,446

The orbiting facility is making a night pass

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00:02:40,446 --> 00:02:46,196

on an east-southeastern track coming now across the north Pacific Ocean.

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00:02:46,796 --> 00:02:52,156

The Expedition 30 continues to tend to a variety of science experiments that take advantage

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00:02:52,156 --> 00:02:56,256

of their microgravity environment, perform regular maintenance to their orbital home

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00:02:56,506 --> 00:03:00,346

and continue preparations for next week's spacewalk outside the complex.

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00:03:00,426 --> 00:03:04,256

So, Mike what's on tap today aboard the station?

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00:03:04,646 --> 00:03:05,066

Mike: Hey.

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00:03:05,066 --> 00:03:08,366

It's a typical busy day onboard the station with everybody kind

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00:03:08,366 --> 00:03:09,716

of working in different directions.

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00:03:10,196 --> 00:03:12,906

Station Commander Dan Burbank  
is setting up two cameras

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00:03:12,906 --> 00:03:16,396

for the upcoming Russian  
spacewalk set for February 16.

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00:03:16,966 --> 00:03:21,126

Dan is also transferring U.S.  
spacewalk tools to the Russian segment

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00:03:21,126 --> 00:03:22,946

that they will use during next week's spacewalk.

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00:03:24,316 --> 00:03:26,816

Meanwhile, Anatoly Ivanishin  
is transferring water

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00:03:26,816 --> 00:03:31,366

from the newly arrived Progress supply  
ship to a water tank aboard the station.

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00:03:32,086 --> 00:03:37,066

Andre Kuipers is retrieving biological  
samples provided for the SOLO study

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00:03:37,066 --> 00:03:42,236

from the Minus Eighty Degree Laboratory Freezer,  
or MELFI, to store it at room temperature.

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00:03:42,806 --> 00:03:46,496

Also, for the Sodium Loading  
in Microgravity study, or SOLO,

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00:03:46,966 --> 00:03:50,756

he'll log his daily high-salt  
diet as the study looks at fluid

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00:03:50,756 --> 00:03:53,036

and salt retention in the  
body during spaceflight.

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00:03:53,876 --> 00:03:58,336

Flight Engineer Don Pettit is setting  
up and performing fluid test runs

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00:03:58,366 --> 00:04:03,946

of the Capillary Flow experiments,  
shown here with the red fluid.

68

00:04:04,426 --> 00:04:08,136

He'll later spend some time taking  
down the hardware and stowing it away.

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00:04:08,466 --> 00:04:10,546

Amiko: Thanks Mike.

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00:04:10,676 --> 00:04:13,276

And earlier this morning aboard  
the International Space Station,

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00:04:13,276 --> 00:04:16,996

Commander Dan Burbank restowed items  
that were removed during maintenance work

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00:04:16,996 --> 00:04:19,706

to the Advanced Recycle Filter  
Tank Assembly yesterday.

73

00:04:20,216 --> 00:04:23,096

Burbank then removed and  
replaced a Urine Receptacle

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00:04:23,096 --> 00:04:25,196

of an onboard Waste and Hygiene Compartment.

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00:04:25,596 --> 00:04:30,366

He also conducted a nitrogen pressure check of three Minus Eighty Degree Laboratory Freezers

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00:04:30,366 --> 00:04:33,916  
that store biological and science samples that require refrigeration

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00:04:33,916 --> 00:04:36,156  
until they can be returned to Earth for analysis.

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00:04:37,046 --> 00:04:40,976  
Anton Shkaplerov and Oleg Kononenko worked together to activate

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00:04:40,976 --> 00:04:43,476  
and inspect the Russian Orlan spacesuits.

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00:04:43,536 --> 00:04:47,456  
They also conducted a checkout of the spacesuit interface unit of the two spacesuits

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00:04:47,456 --> 00:04:50,256  
in preparation for their spacewalk next week.

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00:04:51,086 --> 00:04:54,786  
Anatoly Ivanishin performed regular preventative maintenance

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00:04:54,786 --> 00:04:57,946  
to the service module's ventilation system and the SOZH

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00:04:57,946 --> 00:05:02,006  
which also the Russian life support system.

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00:05:02,006 --> 00:05:07,776  
Andre Kuipers conducted a VO2Max measurement as part of a study

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00:05:07,806 --> 00:05:12,306

that measures the aerobic capacity  
of a crew member while on orbit.

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00:05:12,746 --> 00:05:17,316

He also spent some time unpacking  
items from the Progress 46 supply ship.

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00:05:18,466 --> 00:05:23,006

Flight Engineer Don Pettit configured  
the bowling ball-sized satellites used

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00:05:23,006 --> 00:05:28,726

in the Synchronize, Position, Hold, Engage  
and Reorient Experiment that tests algorithms

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00:05:28,726 --> 00:05:32,426

for spacecraft performing autonomous  
rendezvous and docking maneuvers.

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00:05:33,466 --> 00:05:40,496

Later today, Commander Burbank will provide  
Shkaplerov and Kononenko a tutorial of the DOUG,

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00:05:40,496 --> 00:05:47,056

or Dynamic Onboard Ubiquitous Graphics, a visual  
simulation software used for spacewalk planning

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00:05:47,096 --> 00:05:50,536

and review of the station  
robotic arm operations.