



Soyuz 28
(TMA-22)

Soyuz 29
(TMA-03M)

ATV-3
Progress 46

1

00:00:02,036 --> 00:00:04,166

Good morning this is Mission Control Houston.

2

00:00:04,166 --> 00:00:09,236

Welcome and thank you for joining us for today's edition of ISS Update this Wednesday, April 18.

3

00:00:09,776 --> 00:00:13,436

We're coming to you live from inside the International Space Station Flight Control Room

4

00:00:13,766 --> 00:00:16,656

where the team here has been monitoring the systems aboard the station

5

00:00:17,046 --> 00:00:20,606

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

6

00:00:21,456 --> 00:00:26,006

Leading the Orbit Two team here in the station flight control room today is Flight Director

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00:00:26,006 --> 00:00:30,736

Heather Rarick shown here in the right hand side of your screen and also Josh Matthew

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00:00:30,736 --> 00:00:38,176

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

9

00:00:38,456 --> 00:00:42,476

The six crew members aboard the station now include NASA astronaut and commander

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00:00:42,476 --> 00:00:46,536

of the complex Dan Burbank and flight engineers and cosmonauts Anton Shkaplerov

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00:00:46,886 --> 00:00:52,846
and Anatoly Ivanishin as well as NASA
astronaut Don Pettit, cosmonaut Oleg Kononenko

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00:00:52,846 --> 00:00:55,896
and European Space Agency
astronaut Andre Kuipers.

13
00:00:57,216 --> 00:01:00,096
Commander Burbank, Shkaplerov
and Ivanishin arrived

14
00:01:00,096 --> 00:01:02,486
at the orbiting complex mid-November last year.

15
00:01:03,076 --> 00:01:07,916
They will complete their 158th consecutive
day in space today with just a little more

16
00:01:07,916 --> 00:01:11,596
than a week left of their 5-1/2
month stay aboard the space station.

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00:01:12,456 --> 00:01:17,446
Meanwhile, Pettit, Kononenko and Kuipers
launched to the space station four months ago

18
00:01:17,446 --> 00:01:22,446
on December 21 arriving at the station two
days later and making up the complete crew

19
00:01:22,446 --> 00:01:25,486
of Expedition 30 that is now
aboard the space station.

20
00:01:26,556 --> 00:01:31,066
Today marks a hundred and 20 days in
space for Pettit, Kononenko and Kuipers.

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00:01:32,836 --> 00:01:35,776

The space station with its crew aboard is now flying

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00:01:36,346 --> 00:01:39,836

at an altitude of about 248 statute miles.

23

00:01:40,266 --> 00:01:43,516

The orbiting facility has just made an east,

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00:01:43,546 --> 00:01:47,956

is making an east-southeastern track headed toward a night pass across the deserts

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00:01:47,956 --> 00:01:54,206

of Kazakhstan which is also the landing side of the Soyuz TMA-22 that will be carrying Burbank,

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00:01:54,206 --> 00:01:58,946

Shkaplerov and Ivanishin back home next week on April 27.

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00:02:01,066 --> 00:02:05,526

On orbit the expedition crew members continue to work on a variety of science experiments,

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00:02:05,876 --> 00:02:10,156

perform maintenance to their home away from home and also prepare for several comings and goings

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00:02:10,156 --> 00:02:13,686

of various spacecraft to and from the International Space Station.

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00:02:15,166 --> 00:02:19,516

Today, station Commander Dan Burbank continues work he began earlier this morning to remove

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00:02:19,516 --> 00:02:23,216

and replace a hydrogen sensor of the Oxygen Generator System.

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00:02:23,666 --> 00:02:28,236

He will then take a short break from it to conduct some battery maintenance

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00:02:28,236 --> 00:02:31,676

to the onboard spacesuits that are used in a spacewalk outside the complex.

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00:02:32,446 --> 00:02:38,866

Also, Flight Engineers Don Pettit and Andre Kuipers are busy practicing for the capture

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00:02:38,866 --> 00:02:42,336

of the first commercial spacecraft known as Dragon to arrive

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00:02:42,336 --> 00:02:43,926

at the International Space Station.

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00:02:44,146 --> 00:02:49,606

The pair will perform three grapple practice sessions today using the station's Canadarm2

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00:02:49,606 --> 00:02:51,276

during the dry run.

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00:02:51,856 --> 00:02:55,176

SpaceX's Dragon is set to launch from NASA's Kennedy Space Center

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00:02:55,176 --> 00:02:57,136

at the end of the month on April 30.

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00:02:58,746 --> 00:03:04,566

Meanwhile, Anton Shkaplerov and Oleg Kononenko are prepping the Progress 46 cargo craft

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00:03:04,566 --> 00:03:06,986

for its departure with final
closeout activities.

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00:03:07,486 --> 00:03:10,256

The hatches have been closed
and the pair are now working

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00:03:10,256 --> 00:03:13,996

on a leak pressure check of the hatches.

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00:03:14,566 --> 00:03:18,506

The cargo craft is set to
undock from the space station

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00:03:18,506 --> 00:03:21,946

at 6:04 a.m. Central time tomorrow morning.

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00:03:21,946 --> 00:03:26,486

We will bring you live coverage of the vehicles
undocking here on NASA Television starting

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00:03:26,486 --> 00:03:32,936

at 5:45 a.m. Earlier this morning station
Commander Dan Burbank spent some time testing

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00:03:32,936 --> 00:03:37,226

the quality of the water onboard the
station conducting a total iodine analysis

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00:03:37,226 --> 00:03:39,216

of onboard water samples.

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00:03:39,556 --> 00:03:42,236

He also performed a preventative
maintenance inspection

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00:03:42,236 --> 00:03:47,406

of emergency equipment including the fire
extinguishers and breathing apparatus

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00:03:47,456 --> 00:03:51,446

that would be used by crew members in an emergency event aboard the station.

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00:03:52,546 --> 00:03:57,626

Later he set up for and began what will be about 3-1/2 hours of work today to remove and replace

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00:03:57,676 --> 00:04:00,476

that hydrogen sensor of the Oxygen Generator System.

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00:04:01,696 --> 00:04:06,106

And also Flight Engineer Don Pettit is spending some time working with Robonaut,

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00:04:06,256 --> 00:04:10,176

the dexterous humanoid robot that is aboard the International Space Station.

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00:04:10,506 --> 00:04:14,976

He assembled the robot and powered it up for some work with it

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00:04:15,206 --> 00:04:17,246

that will be done during today's Update Hour.

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00:04:18,056 --> 00:04:23,226

Also Flight Engineer Andre Kuipers performed three separate re-breathing exercises as part

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00:04:23,226 --> 00:04:25,316

of an ongoing study known as CARD.

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00:04:25,736 --> 00:04:30,716

That experiment studies blood pressure decreases in the human body exposed to microgravity

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00:04:30,716 --> 00:04:33,946

for long periods of time as
that of the station resident.

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00:04:35,196 --> 00:04:39,126

Later today station Commander Burbank
will continue to wrap up his work swapping

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00:04:39,126 --> 00:04:44,016

out the hydrogen sensor of that Oxygen
Generator System and he'll participate

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00:04:44,016 --> 00:04:46,656

in a regular private psychological conference.

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00:04:46,716 --> 00:04:50,316

Meanwhile, Burbank's Soyuz crew
mates cosmonauts Anton Shkaplerov

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00:04:50,316 --> 00:04:55,536

and Anatoly Ivanishin will spend some time with
preparations for the trio's departure next week.

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00:04:56,106 --> 00:04:59,686

Burbank, Shkaplerov and Ivanishin who
launched from the Baikonur Cosmodrome

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00:04:59,686 --> 00:05:05,296

in Kazakhstan aboard their Soyuz TMA-22 last
November are wrapping up their final week

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00:05:05,296 --> 00:05:09,216

and days aboard the International
Space Station as they prepare

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00:05:09,216 --> 00:05:11,646

to return back to Earth on April 27.

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00:05:13,296 --> 00:05:17,386

At the day's end each crew member will
exercise to maintain his physical fitness

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00:05:17,386 --> 00:05:20,496

and help mitigate the negative effects
of microgravity on their bodies.

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00:05:21,056 --> 00:05:24,236

The Expedition 30 crew members
will do some evening prep work

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00:05:24,236 --> 00:05:26,196

for another busy day in space tomorrow.

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00:05:26,586 --> 00:05:30,406

They will then participate in their final daily
planning conference with ground controllers

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00:05:30,406 --> 00:05:32,556

around the world before entering
their pre-sleep period.