



Soyuz 28  
(TMA-22)

ATV-3

Soyuz 29  
(TMA-03M)

Progress 46

1  
00:00:01,976 --> 00:00:03,656  
This is Mission Control, Houston.

2  
00:00:03,656 --> 00:00:05,456  
Welcome to today's ISS Update.

3  
00:00:05,456 --> 00:00:07,846  
It is Thursday, April 12, 2012.

4  
00:00:07,846 --> 00:00:11,816  
You're looking at a live view inside the  
International Space Station's flight control

5  
00:00:11,816 --> 00:00:13,146  
room here at the Johnson Space Center.

6  
00:00:13,656 --> 00:00:16,186  
This is the Orbit Two team  
here inside Mission Control.

7  
00:00:16,186 --> 00:00:18,866  
Today's flight director is Ed Van Cise.

8  
00:00:18,866 --> 00:00:21,256  
He is sitting there at the middle console.

9  
00:00:22,316 --> 00:00:24,786  
The Capcom today is Jeremy Hanson.

10  
00:00:24,786 --> 00:00:29,016  
The Expedition 30 crew on board the  
International Space Station has quite a busy day

11  
00:00:29,016 --> 00:00:32,606  
today as they have most days,  
working on research activity

12  
00:00:32,606 --> 00:00:34,376

and different types of maintenance work.

13  
00:00:36,396 --> 00:00:40,906  
This is a live view, commander of Expedition  
30 Dan Burbank on board the station.

14  
00:00:40,906 --> 00:00:45,646  
He's been removing and replacing a pump  
separator in the Waste and Hygiene Compartment.

15  
00:00:45,646 --> 00:00:47,706  
This is taking up the majority of his day.

16  
00:00:48,226 --> 00:00:53,446  
He also has one last session of training as  
part of his role as the crew medical officer.

17  
00:00:53,936 --> 00:00:57,596  
If you saw our interview yesterday with  
Dr. Ed Powers, one of the flight surgeons,

18  
00:00:57,596 --> 00:01:03,496  
he talked about how various crew members  
are trained to basically be onboard doctors

19  
00:01:03,496 --> 00:01:07,386  
since there is not always a medical  
doctor up there as part of the crew.

20  
00:01:07,386 --> 00:01:11,836  
So, even though Burbank is getting close to  
wrapping up his time on board the station,

21  
00:01:11,836 --> 00:01:16,656  
he will go through one more proficiency  
training session as part of his role as one

22  
00:01:16,656 --> 00:01:21,126  
of the medical officers on board,  
basically just making sure that he knows how

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00:01:21,126 --> 00:01:25,396

to use the various medications and  
medical equipment on board in case any

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00:01:25,396 --> 00:01:27,606

of that should ever become necessary.

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00:01:27,606 --> 00:01:34,296

He is also working with Andre Kuipers today to  
conduct another one of these eye ultrasounds.

26

00:01:34,526 --> 00:01:40,406

How the crew members' eyes react to being up in  
space for up to six months has become an area

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00:01:40,406 --> 00:01:42,346

of focus here over the last few months.

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00:01:42,736 --> 00:01:45,606

So they will conduct that  
ultrasound as they continue

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00:01:45,606 --> 00:01:48,736

to measure how their eyes are  
behaving out there in space.

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00:01:50,276 --> 00:01:55,236

Anton Shkaplerov is working in the Russian  
segment today on a Russian crystal experiment.

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00:01:55,646 --> 00:02:01,276

He is also packing up equipment that will  
come home aboard the Soyuz TMA-22 spacecraft

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00:02:01,276 --> 00:02:03,926

that will bring home Burbank,  
Shkaplerov himself,

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00:02:04,086 --> 00:02:07,216  
as well as Anatoly Ivanishin  
coming up here in about two weeks.

34  
00:02:08,716 --> 00:02:13,196  
Ivanishin himself is taking some surface  
samples from inside the Zarya module

35  
00:02:13,196 --> 00:02:15,216  
that is part of the Russian segment.

36  
00:02:15,636 --> 00:02:21,196  
They do this periodically, basically just taking  
some swabs of the walls and the floorboard

37  
00:02:21,196 --> 00:02:25,026  
and the ceiling and the other surfaces  
just to make sure that there's no bacteria

38  
00:02:25,026 --> 00:02:28,166  
or anything untoward growing in that area.

39  
00:02:29,466 --> 00:02:32,366  
He is also working on some  
crew departure preparations.

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00:02:32,366 --> 00:02:35,376  
Like we mentioned, he is part of  
the crew with Shkaplerov and Burbank

41  
00:02:35,816 --> 00:02:38,926  
that will be coming home coming up on April 27.

42  
00:02:38,976 --> 00:02:43,546  
Oleg Kononenko is also working  
in the Russian segment.

43  
00:02:43,546 --> 00:02:49,066  
He is working on some stowage of the materials  
that came up on board the Progress 46.

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00:02:49,526 --> 00:02:52,946

That particular cargo craft,  
which is one of the spacecrafts

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00:02:52,946 --> 00:02:57,036

that service the International  
Space Station, came up in January.

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00:02:57,036 --> 00:02:58,696

It is getting close to undocking.

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00:02:58,696 --> 00:03:00,636

It's going to undock coming up on April 19.

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00:03:00,636 --> 00:03:03,106

There is the current layout of the station

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00:03:03,106 --> 00:03:07,236

with the Progress 46 back there  
on the Pirs docking compartment.

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00:03:07,666 --> 00:03:10,496

It brought up about, a little bit  
less than three tons of supplies

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00:03:10,496 --> 00:03:11,976

for the crew back a few months ago.

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00:03:12,626 --> 00:03:15,726

There is quite a significant  
amount of activity that has

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00:03:15,726 --> 00:03:18,886

to be done using the station's  
Inventory Management System,

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00:03:19,476 --> 00:03:23,636

basically just taking the bar codes that come up

with the materials that come up on the Progress

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00:03:23,636 --> 00:03:28,056

and also the ATV-3 which you see there back in the back - the Automated Transfer Vehicle -

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00:03:29,236 --> 00:03:33,956

making sure that all those cargo items get stowed in the exact spot where they need to be

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00:03:33,956 --> 00:03:38,576

so that the crew may find them when the time comes to open up the packages

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00:03:38,576 --> 00:03:40,326

and use whatever material came up.

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00:03:40,326 --> 00:03:45,826

So he's going to be working on that today, as well as packing that Progress full of trash

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

and other items that the crew doesn't need anymore.

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00:03:49,546 --> 00:03:52,116

As we mentioned, the undocking coming up on April 19.

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00:03:52,116 --> 00:03:57,236

That will take place at 6:03 a.m. Central time, 7:03 a.m. Eastern time.

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00:03:57,656 --> 00:04:01,096

Of course we'll have video highlights of that coming up here on NASA TV on that day.

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00:04:01,626 --> 00:04:07,336

And finally Andre Kuipers and Don Pettit working today - as they have all week long -

65  
00:04:07,336 --> 00:04:09,826  
on training for the upcoming SpaceX mission.

66  
00:04:09,826 --> 00:04:10,836  
They started that on Monday.

67  
00:04:10,836 --> 00:04:15,556  
They started about two weeks worth of training  
activity using the Robotic Work Station

68  
00:04:15,556 --> 00:04:17,916  
that is inside the Destiny laboratory.

69  
00:04:18,406 --> 00:04:21,906  
There's actually two different  
Robotic Work Stations on board,

70  
00:04:21,906 --> 00:04:24,326  
one in Destiny and also down in the cupola.

71  
00:04:24,326 --> 00:04:28,966  
That's actually the one that they will be  
using coming up as the SpaceX Dragon heads

72  
00:04:28,966 --> 00:04:30,646  
up to the International Space Station.

73  
00:04:31,196 --> 00:04:35,756  
That launch time currently scheduled  
for 11:22 a.m. Central time,

74  
00:04:35,756 --> 00:04:39,766  
12:22 p.m. Eastern time coming up on April 30.

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00:04:39,766 --> 00:04:46,316  
It will take about two days for the Dragon to  
head up toward the International Space Station,

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00:04:46,316 --> 00:04:50,446

so on the third day of the mission -  
flight day three, which should be May 2 -

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00:04:51,166 --> 00:04:54,566

that Dragon will perform a fly under  
of the International Space Station

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00:04:54,566 --> 00:04:56,276

at about 2.5 kilometers.

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00:04:56,996 --> 00:05:01,356

The crew will be monitoring that; they will be  
sending a quick command down to Dragon for it

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00:05:01,356 --> 00:05:03,626

to turn on its strobe light, and then

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00:05:03,626 --> 00:05:07,386

if all goes well during all the different  
checkout activities, Dragon will perform a loop

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00:05:07,386 --> 00:05:11,096

of the station and set up for the next  
days' activities, which will be May 3.

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00:05:11,866 --> 00:05:17,146

That'll actually be the rendezvous and  
berthing if all checks out with Don Pettit

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00:05:17,146 --> 00:05:22,376

at the controls of the station's robotic  
arm and Andre Kuipers backing him up,

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00:05:22,376 --> 00:05:26,686

as those two oversee Dragon's  
rendezvous with the orbiting complex.

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00:05:26,686 --> 00:05:28,936

We also want to remind you that coming

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00:05:28,936 --> 00:05:32,366  
up on Monday the International  
Space Station Program is going

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00:05:32,366 --> 00:05:35,776  
to be having its Flight Readiness  
Review where it will be taking a look

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00:05:35,776 --> 00:05:38,356  
at the final plans for SpaceX's mission.

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00:05:38,806 --> 00:05:43,176  
This final test flight is part of NASA's  
Commercial Orbital Transportation Services.

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00:05:44,436 --> 00:05:47,706  
That Flight Readiness Review will take  
place here at the Johnson Space Center.

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00:05:47,706 --> 00:05:51,516  
Once it wraps up, we will have a  
preflight briefing here on NASA Television

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00:05:51,966 --> 00:05:53,866  
to take a look at the SpaceX mission.

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00:05:55,116 --> 00:05:58,516  
We cannot pinpoint the exact  
time of that briefing,

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00:05:58,516 --> 00:06:04,346  
but it'll most likely be mid-to-late afternoon,  
depending on when that FRR does wrap up,