



1

00:00:02,490 --> 00:00:07,450

Good morning and welcome to today's  
International Space Station update hour.

2

00:00:07,450 --> 00:00:10,810

You are joining us here at the International  
Space Station flight control room

3

00:00:10,810 --> 00:00:14,790

at the Johnson Space Center in Houston  
Texas where the Orbit 2 Team is currently

4

00:00:14,790 --> 00:00:18,980

on console monitoring all the systems  
onboard the orbiting laboratory.

5

00:00:18,980 --> 00:00:23,370

That team being led today by Flight  
Director Chris Edeland, there in the middle

6

00:00:23,370 --> 00:00:28,400

of your screen, and joining him in the  
upper left portion is Capcom Dan Tani,

7

00:00:28,400 --> 00:00:31,410

-serving as the communication link  
between all the controllers here

8

00:00:31,410 --> 00:00:35,090

on the ground and the astronauts up in space.

9

00:00:35,090 --> 00:00:40,180

Those astronauts right now are the  
current three-man crew of Expedition 31,

10

00:00:40,180 --> 00:00:42,920

just kicking-off their first  
full week since the departure

11

00:00:42,920 --> 00:00:45,290  
of their previous Expedition 30 crewmates.

12  
00:00:45,290 --> 00:00:50,550  
Starting on the left, you have NASA astronaut  
Don Pettit, one of our flight engineers.

13  
00:00:50,550 --> 00:00:55,410  
In the middle, Russian cosmonaut and  
Expedition 31 Commander Oleg Kononenko.

14  
00:00:55,410 --> 00:01:00,330  
On the right, European Space  
Agency astronaut Andre Kuipers.

15  
00:01:00,330 --> 00:01:05,690  
The three have been on board the station  
since December, and will remain there

16  
00:01:05,690 --> 00:01:11,320  
for the next couple months, as again, they are  
beginning Expedition 31 on board the station.

17  
00:01:11,320 --> 00:01:16,480  
Some of the activities for them today,  
starting off with Commander Kononenko,

18  
00:01:16,480 --> 00:01:19,130  
who is spending much of his  
time unloading some items

19  
00:01:19,130 --> 00:01:24,390  
from that Russian resupply ship the  
Progress 47 craft, which is docked to Pirs,

20  
00:01:24,390 --> 00:01:31,140  
on the Earth-facing side of the Russian  
Zvezda service module since April 22.

21  
00:01:31,140 --> 00:01:34,740

He will be unloading some cargo items  
man updating the station's inventory

22

00:01:34,740 --> 00:01:37,310  
management system.

23

00:01:37,310 --> 00:01:41,730  
Moving on, Andre Kuipers is going to be doing  
some cargo unloading activities of his own,

24

00:01:41,730 --> 00:01:47,600  
but the from the European Space Agency's  
cargo craft the ATV-3, or Edoardo Amaldi.

25

00:01:47,600 --> 00:01:51,970  
He will be spending a good time, a good  
portion of his time today doing that,

26

00:01:51,970 --> 00:01:54,430  
and then also later moving later on to working

27

00:01:54,430 --> 00:01:58,700  
with the Integrated Cardiovascular  
Monitoring Experiment.

28

00:01:58,700 --> 00:02:03,610  
This is a U.S. experiment that  
looks to study heart atrophy,

29

00:02:03,610 --> 00:02:07,820  
or the weakening of the cardiac muscles  
inside the human body as they are exposed

30

00:02:07,820 --> 00:02:14,650  
to the microgravity environment of space over  
the long duration of their expedition flights.

31

00:02:14,650 --> 00:02:19,980  
Then our NASA astronaut Don Pettit, will be  
conducting some more vision tests today working

32

00:02:19,980 --> 00:02:24,140

with Robonaut, the station's  
robotic guest currently onboard.

33

00:02:24,140 --> 00:02:28,700

They will be using it, setting up a task  
for it while robotics controllers down here

34

00:02:28,700 --> 00:02:33,610

on the ground look through Robonaut's eyes  
and move him through a few more exercises,

35

00:02:33,610 --> 00:02:36,920

testing out his hands and  
also his visual acuity.

36

00:02:36,920 --> 00:02:40,630

You can see Robonaut here with Don  
Pettit in the background there,

37

00:02:40,630 --> 00:02:42,900

set up in the Destiny laboratory.

38

00:02:42,900 --> 00:02:48,720

And then aside from that Robonaut  
work today, Don Pettit is also working

39

00:02:48,720 --> 00:02:56,020

on replacing the Bio lab, or the Biological  
Experiment Laboratory in the Columbus module,

40

00:02:56,020 --> 00:03:00,070

working on changing out one  
incubators inside of it.

41

00:03:00,070 --> 00:03:05,080

The Bio Lab is used to onboard the station  
perform different space biology experiments

42

00:03:05,080 --> 00:03:09,170  
on microorganisms among cells  
in different tissue cultures,

43

00:03:09,170 --> 00:03:12,350  
and also small plants and invertebrates.

44

00:03:12,350 --> 00:03:16,470  
And this is just one of the many  
experiments onboard station looking

45

00:03:16,470 --> 00:03:20,020  
to get a better understanding  
of the effects of microgravity

46

00:03:20,020 --> 00:03:24,450  
and also space radiation  
on biological organisms.

47

00:03:25,550 --> 00:03:30,230  
Aside from all this activity today on  
board the station, again were currently

48

00:03:30,230 --> 00:03:35,330  
in the three-man crew since the undocking last  
week of Expedition 30 Commander Dan Burbank

49

00:03:35,330 --> 00:03:40,350  
and fellow Russian cosmonauts Anton  
Shkaplerov and Anatoly Ivanishin.

50

00:03:40,350 --> 00:03:43,410  
We will be in this three crew rotation.

51

00:03:43,410 --> 00:03:48,510  
As you can see here that their Soyuz  
Descent craft landing in Kazakhstan.

52

00:03:48,510 --> 00:03:54,250

That happened early Friday morning Central time, last week.

53  
00:03:54,250 --> 00:04:00,380  
The three had been on board the station since mid-November and their landing brought a close

54  
00:04:00,380 --> 00:04:05,300  
to Expedition 30 and the beginning of Expedition 31.

55  
00:04:05,300 --> 00:04:09,670  
The three remaining crew members of Expedition 31 will launch about two weeks from now.

56  
00:04:09,670 --> 00:04:17,120  
That will be Russian cosmonaut Gennady Padalka and Sergei Revin and NASA astronaut José Acaba.

57  
00:04:17,120 --> 00:04:19,560  
You can see them here.

58  
00:04:22,890 --> 00:04:26,750  
So some of the of vehicle traffic that was going on over the weekend,

59  
00:04:26,750 --> 00:04:31,860  
the previous Progress craft, the Progress 46, which undocked from the station more

60  
00:04:31,860 --> 00:04:37,360  
than a week ago was de-orbited on Saturday, after doing a series of engineering tests.

61  
00:04:37,360 --> 00:04:40,740  
And that Progress spacecraft, unlike the Soyuz, did not land,

62  
00:04:40,740 --> 00:04:45,460  
it was burned up in the Earth's atmosphere

as planned over the Pacific Ocean loaded