1
00:00:03,220 --> 00:00:07,820
Good morning and welcome to today's
International Space Station update hour.

2
00:00:07,820 --> 00:00:12,760
You're joining us now inside of Mission Control
Houston, where the orbit two team is currently

3
00:00:12,760 --> 00:00:17,770
on console monitoring systems on
board the orbiting laboratory.

4
00:00:17,770 --> 00:00:23,670
They're being led today by flight director
Chris Edelen, seen there on your screen.

5
00:00:23,670 --> 00:00:30,090
And joining him just little later at
the Capcom console will be Rick Davis.

6
00:00:30,090 --> 00:00:35,660
Onboard the crew of Expedition 30 is enjoying an
off-duty day as they were involved in a flurry

7
00:00:35,660 --> 00:00:40,860
of activity over the weekend involving
the ATV-3 cargo resupply vehicle.

8
00:00:40,860 --> 00:00:45,900
Comprising that crew of Expedition 30
you can see on the left in the front row,

9
00:00:45,900 --> 00:00:50,140
Expedition 30 Commander and
NASA astronaut Dan Burbank.

10
00:00:50,140 --> 00:00:57,960
And behind him are his fellow 28 Soyuz crew
members Anton Shkaplerov and Anatoly Ivanishin.

11
00:00:57,960 --> 00:01:01,300
The right side we have the
crew of the 29th Soyuz.

12
00:01:01,300 --> 00:01:04,840
In the front row Russian
cosmonaut Oleg Kononenko.

13
00:01:04,840 --> 00:01:11,980
Behind him, European Space Agency astronaut
Andre Kuipers and NASA astronaut Don Pettit.

14
00:01:11,980 --> 00:01:16,230
As mentioned the crew today is
in an off-duty day with Burbank,

15
00:01:16,230 --> 00:01:21,240
Pettit and Kuipers only having their
scheduled exercise periods on today's timeline.

16
00:01:21,240 --> 00:01:25,090
The Russian crew members will be
doing a few maintenance activities

17
00:01:25,090 --> 00:01:30,050
on board the Russian segment, doing a remove
and replacement work for a failed separator

18
00:01:30,050 --> 00:01:35,130
in the Russian toilet system, and also
participating in the Bar experiment which looks

19
00:01:35,130 --> 00:01:39,520
to develop methods for detecting
depressurization in any

20
00:01:39,520 --> 00:01:42,480
of the modules onboard International
Space Station.

21
00:01:42,480 --> 00:01:49,820
This off-duty day today is due to the work
that was done over the weekend in order

22
00:01:49,820 --> 00:01:52,490
to connect a backup power channel

23
00:01:52,490 --> 00:02:00,880
to the European Space Agency's Edoardo Amaldi
Automated Transfer Vehicle or ATV-3 cargo ship.

24
00:02:00,880 --> 00:02:08,470
This was necessary after a power failure, the
primary channel of the system providing power

25
00:02:08,470 --> 00:02:12,250
to this ATV vehicle, the
Russian equipment control system

26
00:02:12,250 --> 00:02:20,170
or RECS failed late Thursday during air
scrubbing of the interior of the ATV.

27
00:02:20,170 --> 00:02:24,550
So all day Saturday, the
crew in order to prepare

28
00:02:24,550 --> 00:02:34,960
for a potential undocking were busy
removing cargo using a checklist on giving

29
00:02:34,960 --> 00:02:38,830
up their off-duty time on Saturday
to unload any of the critical cargo

30
00:02:38,830 --> 00:02:41,590
from ATV early on Saturday morning.

31
00:02:41,590 --> 00:02:47,290

They used a priority list in moving bags
of vital supplies such as clothing, food,

32
00:02:47,290 --> 00:02:51,240
spare parts and other crew
provisions from the European ship

33
00:02:51,240 --> 00:02:54,420
onto the International Space Station.

34
00:02:54,420 --> 00:03:00,820
And then while they did that, flight controllers
here in NASA's Mission Control Houston and also

35
00:03:00,820 --> 00:03:04,490
at the European Space Agency's
ATV control center in Toulouse,

36
00:03:04,490 --> 00:03:09,330
France and the Russian mission
control center outside Moscow worked

37
00:03:09,330 --> 00:03:13,130
to restore power to that RECS channel.

38
00:03:13,130 --> 00:03:20,470
And that was done successfully with all relays
closed at 12:03 p.m. central time on Saturday.

39
00:03:20,470 --> 00:03:27,130
And this will enable electricity to reach the
ATV-3, which automatically docked last Wednesday

40
00:03:27,130 --> 00:03:30,660
to the Russian Zvezda service module.

41
00:03:30,660 --> 00:03:36,350
This workaround was necessary as the
station is entering a time frame as of today

42
00:03:36,350 --> 00:03:41,580
in which the angle of the sun relative
to the station would've been insufficient

43
00:03:41,580 --> 00:03:44,950
to power the spacecraft from
its solar arrays alone.

44
00:03:44,950 --> 00:03:51,360
And then following all of these activities, a
planned reboost occurred on Saturday on schedule

45
00:03:51,360 --> 00:03:55,780
at 4:54 p.m. central time
which involved a 6-minute,

46
00:03:55,780 --> 00:04:01,280
51-second firing of the ATV's primary
thrusters raising the station's orbit

47
00:04:01,280 --> 00:04:03,440
by about two statute miles.

48
00:04:03,440 --> 00:04:07,880
So again, the crew will be
enjoying an off-duty day today

49
00:04:07,880 --> 00:04:10,760
and finishing up some other sleep shifting.