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00:00:00



Mission Control Center



00:00:00
00:00:00
00:00:00



1

00:00:01,650 --> 00:00:03,550

This is mission control in Houston,

2

00:00:03,550 --> 00:00:09,540

the Expedition 29 voyage aboard the International Space Station continued throughout

3

00:00:09,540 --> 00:00:14,890

this week with the crew enjoying a five day at a program that gets them

4

00:00:14,890 --> 00:00:19,360

to their 136th day in space aboard the complex.

5

00:00:19,360 --> 00:00:23,970

The team is been watched over by three teams of flight controllers

6

00:00:23,970 --> 00:00:28,860

that support activities aboard the International Space Station around-the-clock.

7

00:00:28,860 --> 00:00:34,260

The crew had a very busy week aboard the International Space Station.

8

00:00:34,260 --> 00:00:40,090

Beginning back on Monday, Mike Fossum oversaw some maintenance activities

9

00:00:40,090 --> 00:00:45,240

with the electrical systems aboard the station reconfiguring some of the electrical systems

10

00:00:45,240 --> 00:00:52,990

and replacing two of the switching boxes Remote Power Control Modules in the Destiny laboratory.

11

00:00:52,990 --> 00:00:55,920

Both of those have been successfully replaced.

12
00:00:55,920 --> 00:01:01,350
They are small boxes that required shutting down
some of the power tripping some breaker boxes

13
00:01:01,350 --> 00:01:04,030
on board, just as you would in your home

14
00:01:04,030 --> 00:01:08,460
to remove electrical power while
you're doing some electrical work,

15
00:01:08,460 --> 00:01:10,940
and that's exactly what he did.

16
00:01:10,940 --> 00:01:16,790
So he had performed that task and brought the
systems back up to working order with the help

17
00:01:16,790 --> 00:01:23,530
of the flight controllers here on
the ground earlier in the week.

18
00:01:23,530 --> 00:01:26,480
Crew members also wrapped up work

19
00:01:26,480 --> 00:01:32,550
with the Capillary Channel Flow
experiment aboard the station,

20
00:01:32,550 --> 00:01:37,910
and that experiment completed its runs
in the Microgravity Sciences Glovebox.

21
00:01:37,910 --> 00:01:43,610
The runs of the wedge shaped
channel of this experiment consisted

22

00:01:43,610 --> 00:02:03,780
of 270 different test points while
it was installed in that MSG.

23

00:02:03,780 --> 00:02:09,420
Also the crew members watched along
with flight control teams on the ground

24

00:02:09,420 --> 00:02:15,670
as the Russian flight control team on
Wednesday completed a partial reboost

25

00:02:15,670 --> 00:02:17,880
of the station's altitude.

26

00:02:17,880 --> 00:02:24,620
The station's altitude was raised
from about 239 to 241 statute miles.

27

00:02:24,620 --> 00:02:31,410
That reboost of the station is part one of two,
the second part upcoming this coming Wednesday,

28

00:02:31,410 --> 00:02:38,980
where the station's altitude will be boosted
once again another about three to four miles.

29

00:02:38,980 --> 00:02:42,010
All of that sets the stage for the undocking

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00:02:42,010 --> 00:02:46,250
of a Progress supply vehicle
that's at the station right now.

31

00:02:46,250 --> 00:02:51,840
That 42 Progress vehicle will leave
the station on Saturday, October 29th

32

00:02:51,840 --> 00:02:58,830
and a new Progress vehicle, the 45th Progress

vehicle, will launch on the 30th of October,

33

00:02:58,830 --> 00:03:01,870

arriving at the station on November 2nd.

34

00:03:01,870 --> 00:03:08,060

The phasing of the station is required to put it in the proper position for the launch pad

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00:03:08,060 --> 00:03:12,930

and also for the landing site for the three crew members that are aboard the station now

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00:03:12,930 --> 00:03:17,930

as they return home with their scheduled return home on November 21.

37

00:03:17,930 --> 00:03:22,680

Also the phasing and the reboost sets the stage for the launch and arrival

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00:03:22,680 --> 00:03:28,150

of the next three crew members to head toward the International Space Station,

39

00:03:28,150 --> 00:03:32,560

the Expedition 29 and Expedition 30 crew members.

40

00:03:35,790 --> 00:03:42,360

Crew commander of Mike Fossum also Wednesday, throughout his day of works, set aside some time

41

00:03:42,360 --> 00:03:46,260

to talk about his mission with two news organizations.

42

00:03:46,260 --> 00:03:53,910

He visited with Denise Chow with space.com, the space based website,

43

00:03:53,910 --> 00:03:57,450

and also with ABC Radio's Vic Ratner,

44

00:03:57,450 --> 00:04:01,760

talking about his mission aboard
the International Space Station

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00:04:01,760 --> 00:04:05,850

and his plan to return home.

46

00:04:05,850 --> 00:04:11,460

Thursday was focus of attention with Mike
Fossum in one module, the laboratory module,

47

00:04:11,460 --> 00:04:16,920

working with the Combustion Integrated
Rack, reconfiguring that rack

48

00:04:16,920 --> 00:04:23,860

for future flame type experiments.

49

00:04:23,860 --> 00:04:29,790

The Fluids and Combustion Facility accommodates
different challenges of working with fluids

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00:04:29,790 --> 00:04:33,240

and combustion processes in microgravity.

51

00:04:33,240 --> 00:04:39,540

The SEF actually occupies two power drags on the
ISS, one being the Combustion Integrated Rack,

52

00:04:39,540 --> 00:04:42,660

the other the Fluids Integrated Rack.

53

00:04:42,660 --> 00:04:47,360

So he spent a great deal of time working
with that with choreographed work

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00:04:47,360 --> 00:04:51,420

from the Marshall Spaceflight
Center in Huntsville, Alabama.

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00:04:51,420 --> 00:04:59,130

His colleague Satoshi Furukawa worked on
the Kibo laboratory Gradient Heating Furnace

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00:04:59,130 --> 00:05:01,510

in the Kobairo rack of that module.

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00:05:01,510 --> 00:05:07,170

A vacuum furnace that contains three heating
blocks that need periodic maintenance.

58

00:05:08,850 --> 00:05:16,150

Today, Friday, the crew wrapped up its week,
conducting additional inspections of that GHF,

59

00:05:16,150 --> 00:05:18,200

or that Gradient Heating Furnace.

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00:05:18,200 --> 00:05:28,700

The crew also worked with some other experiments
around the laboratory as stowage continued

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00:05:28,700 --> 00:05:33,950

for the departure of that 42 Progress vehicle.

62

00:05:35,470 --> 00:05:43,560

Mike Fossum also worked with the Water Recovery
System aboard the station and completed

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00:05:43,560 --> 00:05:49,060

that activity, and the crew will then
spend the weekend with some light duty,

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00:05:49,060 --> 00:05:54,310

before starting another full
week of activities on Monday.

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00:05:54,310 --> 00:05:58,960
So a busy week for the Expedition 29 crew.

66
00:05:58,960 --> 00:06:02,820
They'll start up again on Monday
with some light work over the weekend

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00:06:02,820 --> 00:06:06,240
and the flight control team will
continue to watch over station systems

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00:06:06,240 --> 00:06:09,380
as the station operates in excellent health.

69
00:06:09,380 --> 00:06:13,800
Have a good weekend everyone, we will be
back again on that Monday with another hour