



1
00:00:01,660 --> 00:00:03,760
This is Mission Control Houston.

2
00:00:03,760 --> 00:00:09,370
The Expedition 30 crew onboard the International Space Station splitting its time today between

3
00:00:09,370 --> 00:00:15,500
a variety of normal daily maintenance work as well as supporting the scientific research

4
00:00:15,500 --> 00:00:19,820
that is the main mission for the International Space Station.

5
00:00:19,820 --> 00:00:25,910
After the daily planning conference, Commander Dan Burbank installed a spare communications

6
00:00:25,910 --> 00:00:32,610
unit that will be used as a backup for communications for commercial cargo vehicles when they begin

7
00:00:32,610 --> 00:00:34,570
flying to the space station.

8
00:00:34,570 --> 00:00:40,170
The first demonstration flight of the Dragon spacecraft from Space Exploration Technologies

9
00:00:40,170 --> 00:00:45,539
Corporation does remain targeted for a flight to the station next month.

10
00:00:45,539 --> 00:00:51,460
Burbank also set up ultrasound hardware for a series of routine eye exams that were conducted

11
00:00:51,460 --> 00:00:57,309

by several crew members and then moved on to an annual maintenance task, changing out

12
00:00:57,309 --> 00:01:02,750
hydraulic components at the Waste Hygiene Compartment, the toilet in the US section

13
00:01:02,750 --> 00:01:04,519
the space station.

14
00:01:04,519 --> 00:01:09,970
Flight Engineers Anton Shkaplerov and Anatoly Ivanishin captured more video for the Russian

15
00:01:09,970 --> 00:01:11,250
science...

16
00:01:11,250 --> 00:01:18,070
Russian educational program "Science 2.0" and then worked together on a Russian investigation

17
00:01:18,070 --> 00:01:24,280
of the cardiovascular system while the crew members is working, in this case exercising

18
00:01:24,280 --> 00:01:26,330
on the stationary bicycle.

19
00:01:26,330 --> 00:01:31,520
They also spent time packing items in the Progress vehicle that's due to be undocked

20
00:01:31,520 --> 00:01:34,810
from the International Space Station in two weeks time.

21
00:01:34,810 --> 00:01:41,490
A big part of the day on Wednesday for Flight Engineer Oleg Kononenko was monitoring refilling

22
00:01:41,490 --> 00:01:46,071
the cooling loops in the environmental control system in the Russian segment of the space

23
00:01:46,071 --> 00:01:47,071
station.

24
00:01:47,071 --> 00:01:55,570
He also did maintenance work and gathered some microbial air samples for later analysis.

25
00:01:55,570 --> 00:02:01,060
European Space Agency astronaut Andre Kuipers spent the day, a good portion of the early

26
00:02:01,060 --> 00:02:07,520
part of his day, on the VO2max experiment, setting up the hardware and then exercising

27
00:02:07,520 --> 00:02:11,060
while his respiration was very closely monitored.

28
00:02:11,060 --> 00:02:17,510
This is part of a, of a research into gauging the levels of oxygen uptake in a crew member

29
00:02:17,510 --> 00:02:20,360
after they spend a lot of time on orbit.

30
00:02:20,360 --> 00:02:27,100
Kuipers also took part in the ultrasound eye exams and then worked on ESA's FOAM experiment

31
00:02:27,100 --> 00:02:33,480
which introduces the concept of foams to schoolchildren while they do the experiment on the ground

32
00:02:33,480 --> 00:02:37,880
that the astronaut's doing in space so they

can see how things are different when there's

33

00:02:37,880 --> 00:02:39,840

no gravity.

34

00:02:39,840 --> 00:02:45,320

Flight Engineer Don Pettit also did some maintenance work at the Waste Hygiene Compartment, replacing

35

00:02:45,320 --> 00:02:51,420

some of piping, and then worked activating the Nanoracks experiment, which processes

36

00:02:51,420 --> 00:02:55,700

material science samples in microgravity.

37

00:02:55,700 --> 00:03:01,120

On Thursday the crew members, more of the crew members will take part in the VO2max

38

00:03:01,120 --> 00:03:06,990

data takes while Burbank, Kuipers and Pettit will talk about their mission and what they