1
00:00:01,506 --> 00:00:03,036
This is Mission Control Houston.

2
00:00:03,506 --> 00:00:09,406
The work week on orbit for the International
Space Station's Expedition 30 crew began right

3
00:00:09,406 --> 00:00:12,066
after their Tuesday morning wakeup call.

4
00:00:12,656 --> 00:00:17,416
All of the crew members started the day
taking either body mass measurements

5
00:00:17,516 --> 00:00:19,396
or calf volume measurements.

6
00:00:19,986 --> 00:00:24,026
That data that they gather in
those measurements is for on-orbit,

7
00:00:24,136 --> 00:00:30,696
on-going research into how a person's body
responds to spending an extended period of time

8
00:00:31,036 --> 00:00:34,556
in the absence of gravity,
as a person will have to do

9
00:00:34,716 --> 00:00:38,396
for the deep space exploration
missions of the future.

10
00:00:39,296 --> 00:00:43,536
Each of the astronauts and
cosmonauts on the crew also had one

11
00:00:43,536 --> 00:00:47,146
of their two physical workouts

before lunch today.

12
00:00:47,856 --> 00:00:53,596
Those exercise sessions are designed to help
the crew members combat the bone and muscle loss

13
00:00:54,026 --> 00:00:57,476
that comes as a result of a
long-duration trip into space.

14
00:00:58,376 --> 00:01:05,146
A lot of time was spent on some power
reconfigurations today following a lab power

15
00:01:05,146 --> 00:01:12,396
router reconfiguration yesterday along with a
re-ordering of the Command and Control computers

16
00:01:12,766 --> 00:01:17,346
that was done to prepare for
today's hardware reconfiguration.

17
00:01:17,786 --> 00:01:21,956
That took place behind a rack
in the Destiny laboratory.

18
00:01:22,416 --> 00:01:27,826
Commander Dan Burbank rotated
the MELFI freezer rack and went

19
00:01:27,826 --> 00:01:33,116
to work removing a Secondary Power
Distribution Assembly jumper.

20
00:01:33,866 --> 00:01:39,866
That power jumper was installed last year in
order to permit Mission Control in Houston

21
00:01:39,866 --> 00:01:47,826
to maintain control of the station if -

that is if - a Main Bus Switching Unit

22
00:01:47,826 --> 00:01:51,826
on the station failed while
the station was de-crewed.

23
00:01:52,376 --> 00:01:56,606
Of course the station was never
de-crewed and the MBSU never failed.

24
00:01:57,066 --> 00:02:01,476
Now that they have a full
crew of six back on board,

25
00:02:01,816 --> 00:02:04,316
that jumper installation
was no longer necessary.

26
00:02:04,316 --> 00:02:08,956
Of course, the work required the
removal of power from that jumper,

27
00:02:09,306 --> 00:02:13,476
and that meant that Burbank's
work was very closely coordinated

28
00:02:13,776 --> 00:02:19,236
with the Mission Control Center in Houston as
they worked through a list of power-downs ahead

29
00:02:19,236 --> 00:02:24,516
of that jumper removal and then to repower
the systems once the on-orbit configuration

30
00:02:24,516 --> 00:02:25,166
was updated.

31
00:02:27,636 --> 00:02:31,866
On Tuesday morning, the three Russian crew
members - Flight Engineers Anton Shkaplerov,

32
00:02:32,206 --> 00:02:37,386
Anatoly Ivanishin and Oleg
Kononenko - did another video shoot

33
00:02:37,386 --> 00:02:41,016
for a Russian educational science TV program.

34
00:02:41,616 --> 00:02:47,106
The crew members then spent their afternoon
working on either Russian systems maintenance

35
00:02:47,546 --> 00:02:52,186
or on packing items in the Progress
supply ship that is due to be undocked

36
00:02:52,186 --> 00:02:54,636
from the International Space
Station in two weeks.

37
00:02:55,046 --> 00:03:02,706
It will be loaded up with as much
no-longer-needed material as is possible

38
00:03:02,706 --> 00:03:06,006
and will serve as a garbage ship to dispose

39
00:03:06,006 --> 00:03:09,396
of that material during its
destructive re-entry into the atmosphere.

40
00:03:10,666 --> 00:03:14,346
Flight Engineer Andre Kuipers
spent part of the day taking part

41
00:03:14,566 --> 00:03:17,606
in a European Space Agency public affairs event.

42
00:03:18,096 --> 00:03:23,456

He had a conversation with The Netherlands'
Prime Minister Mark Van Rutte as well

43
00:03:23,456 --> 00:03:27,486
as students at Delft University
in the city of Delft.

44
00:03:28,626 --> 00:03:34,766
The Dutch astronaut also then set up
hardware for the VO2Max experiment.

45
00:03:35,306 --> 00:03:40,516
That's an experiment that will measure
a crew member's aerobic capacity.

46
00:03:41,166 --> 00:03:46,116
The measurements might lead to changes in
the exercise regimen for the crew members

47
00:03:46,456 --> 00:03:50,206
if their aerobic capacity is
seen to have been diminished.

48
00:03:51,036 --> 00:03:56,926
Kuipers also joined Flight Engineer Don Pettit
for more time spent in what's called "handover"

49
00:03:57,496 --> 00:04:01,186
for new crew members to familiarize
themselves with the station.

50
00:04:01,816 --> 00:04:07,906
They also conducted the first of a series
of periodic health exams, taking turns -

51
00:04:07,996 --> 00:04:12,726
one as the medical officer, the other
as the subject and then reversing roles.

52
00:04:13,396 --> 00:04:16,786

Pettit also spent part of his
morning loading new software

53
00:04:16,836 --> 00:04:23,956
on to the Express Rack number 1 laptop computer,
which is the computer that logs experiment data

54
00:04:23,956 --> 00:04:26,536
from experiments done at Express Rack 1.

55
00:04:27,206 --> 00:04:31,906
On Wednesday, the crew will continue
to pack up the Progress vehicle.

56
00:04:32,386 --> 00:04:36,926
They will conduct the VO2Max experiment runs.

57
00:04:37,306 --> 00:04:42,476
They also have plans for a
lengthy annual maintenance task -

58
00:04:42,666 --> 00:04:46,956
they will be doing the yearly maintenance
on the Waste Hygiene Compartment,