
CATO

1
00:00:01,836 --> 00:00:02,666
Good morning.

2
00:00:02,666 --> 00:00:04,056
This is Mission Control Houston.

3
00:00:04,246 --> 00:00:09,306
Welcome and thank you for joining us for today's
edition of ISS Update this Thursday, March 22.

4
00:00:09,696 --> 00:00:16,616
We are now coming to you live from inside the
International Space Station flight control room

5
00:00:16,616 --> 00:00:19,556
where the team here has been monitoring
the systems aboard the station

6
00:00:21,026 --> 00:00:24,386
and supporting the day's activities
of the Expedition 30 crew members.

7
00:00:24,886 --> 00:00:29,256
Leading the Orbit Two team here in the station
flight control room today is flight director

8
00:00:29,746 --> 00:00:33,486
Mike Lammers shown here in the right-hand
side of your screen in the white shirt

9
00:00:34,496 --> 00:00:39,426
with astronaut Dan Tani next to him in
the blue shirt who is serving as Capcom,

10
00:00:39,426 --> 00:00:41,556
relaying all ground messages up to the crew.

11
00:00:42,446 --> 00:00:44,246
Tani flew to the International Space Station

12
00:00:44,246 --> 00:00:49,556
for the first time aboard space shuttle
Endeavour STS-108 in December 2001 bringing

13
00:00:49,836 --> 00:00:52,336
with him the Expedition 4 crew to the station.

14
00:00:52,696 --> 00:00:56,456
On his second spaceflight Tani served
as Expedition 16 flight engineer

15
00:00:56,456 --> 00:01:00,916
and spent 120 days living and working
aboard the International Space Station.

16
00:01:01,376 --> 00:01:08,216
The six crew members aboard the station
now include NASA astronaut and commander

17
00:01:08,216 --> 00:01:12,726
of the complex Dan Burbank and flight
engineers and cosmonauts Anton Shkaplerov

18
00:01:13,066 --> 00:01:17,756
and Anatoly Ivanishin as well as NASA astronaut
Don Pettit shown here on the right-hand side

19
00:01:18,066 --> 00:01:23,556
with cosmonaut Oleg Kononenko and European
Space Agency astronaut Andre Kuipers.

20
00:01:26,976 --> 00:01:29,966
Commander Burbank, Shkaplerov
and Ivanishin arrived

21
00:01:29,966 --> 00:01:32,636
at the orbiting complex mid-November last year.

22

00:01:33,046 --> 00:01:37,876
They will complete their 130th consecutive
day in space today with a little more

23
00:01:37,876 --> 00:01:38,786
than a month remaining

24
00:01:38,786 --> 00:01:41,476
of their five-and-a-half-month
stay aboard the space station.

25
00:01:42,116 --> 00:01:46,966
Meanwhile [Pettit], Kononenko and Kuipers
launched to the space station three months ago

26
00:01:46,966 --> 00:01:51,656
on December 21 arriving at the station two
days later and making up the complete crew

27
00:01:51,656 --> 00:01:54,806
of the Expedition 30 that is
now on board the space station.

28
00:02:02,596 --> 00:02:05,536
The space station with its
crew aboard is now flying

29
00:02:05,536 --> 00:02:09,436
at an altitude of about 248 statute miles.

30
00:02:09,516 --> 00:02:13,726
The orbiting facility is making a
northeastern track on a night pass

31
00:02:13,726 --> 00:02:18,646
across the North Pacific Ocean
just passing over Australia.

32
00:02:24,296 --> 00:02:28,046
Today, station Commander Dan Burbank,

Flight Engineers Andre Kuipers

33
00:02:28,046 --> 00:02:32,166
and Don Pettit are working on more cleanup
of the Permanent Multipurpose Module,

34
00:02:32,166 --> 00:02:35,226
also known as Leonardo or the space closet.

35
00:02:35,606 --> 00:02:38,306
The crew members are relocating items in storage

36
00:02:38,306 --> 00:02:40,866
to their permanent spaces aboard
the International Space Station.

37
00:02:41,446 --> 00:02:46,316
Much of this cleanup is being done in
preparation of the soon-to-arrive cargo ship,

38
00:02:46,376 --> 00:02:52,336
the European Space Agency's Automated
Transfer Vehicle-3 or Edoardo Amaldi.

39
00:02:52,646 --> 00:02:57,926
Edoardo Amaldi with its seven-ton
load of supplies is scheduled

40
00:02:57,926 --> 00:03:02,816
to liftoff aboard the Ariane 5
rocket from Kourou, French Guiana,

41
00:03:02,816 --> 00:03:05,876
late this evening at 11:34 p.m. Central time

42
00:03:06,676 --> 00:03:09,336
and begin its five-and-half-day
journey to the space station.

43

00:03:13,746 --> 00:03:17,396
Flight Engineer Don Pettit will
wrap up his share of cleanup work

44
00:03:17,486 --> 00:03:21,246
to continue work he began earlier
this week to install software

45
00:03:21,246 --> 00:03:25,586
and reconfigure a laptop computer that
was associated with an EXPRESS rack.

46
00:03:26,016 --> 00:03:27,756
These EXPRESS racks are housed

47
00:03:27,756 --> 00:03:30,946
in a refrigerator-sized container
that acts as an exterior shell.

48
00:03:31,286 --> 00:03:35,606
They enable quick, simple integration
of up to 10 experiment payloads.

49
00:03:36,456 --> 00:03:41,856
And Andre Kuipers will then take
a break from the cleanup activity

50
00:03:41,856 --> 00:03:44,416
to perform some maintenance
to the Water Recovery System.

51
00:03:44,826 --> 00:03:47,686
The system converts urine,
sweat and condensation

52
00:03:47,686 --> 00:03:50,236
into safe drinkable water
for the crew's consumption.

53
00:03:51,686 --> 00:03:57,156

Earlier this morning aboard the
International Space Station,

54
00:03:57,156 --> 00:04:00,976
Commander Burbank kicked off his day
with two hours of daily regular exercise.

55
00:04:01,346 --> 00:04:10,676
He participated in an inventory management
stowage conference and set up for several hours

56
00:04:10,896 --> 00:04:13,966
of transferring items from that
Permanent Multipurpose Module.

57
00:04:18,416 --> 00:04:21,876
Flight Engineer Don Pettit did some
preparation work for the configuration

58
00:04:21,876 --> 00:04:27,546
to the EXPRESS rack laptop computer, and
Andre Kuipers spent a significant amount

59
00:04:27,546 --> 00:04:34,126
of time early this morning collecting
personal data as part of the CARD experiment

60
00:04:34,286 --> 00:04:38,736
that studies blood pressure decreases in
the human body exposed to microgravity

61
00:04:39,106 --> 00:04:41,516
for long periods of time, as
that of a station resident.

62
00:04:42,086 --> 00:04:49,766
Kuipers then also tended to another science
experiment known as VIABLE or the eValuatIon

63
00:04:49,766 --> 00:04:54,016

And monitoring of microBiofiLms insidE
the International Space Station.

64
00:04:54,386 --> 00:05:00,056
That study looks at the development of
microbiofilm development on space materials.

65
00:05:00,146 --> 00:05:05,616
Results from this study may lead to solutions
to improve the environmental quality of manned,

66
00:05:05,616 --> 00:05:11,176
confined habitats in space, but also specific
bases and modules on Earth where humans have

67
00:05:11,416 --> 00:05:19,506
to stay for a long term,
particularly for scientific purposes.

68
00:05:19,986 --> 00:05:24,326
Meanwhile on the Russian side of the house,
Anatoly Ivanishin had spent a couple of hours

69
00:05:24,326 --> 00:05:27,956
with activities for the Pneumocard
experiment that studies the adaptation

70
00:05:27,956 --> 00:05:32,336
of the cardiovascular system of crew members
during a long-duration microgravity mission.

71
00:05:32,826 --> 00:05:38,766
Cosmonaut Oleg Kononenko had snapped images
of the Earth for the Uragan, or Hurricane,

72
00:05:38,836 --> 00:05:42,866
experiment that studies Earth's natural
resources by monitoring catastrophes.

73
00:05:43,336 --> 00:05:49,846

A little after today's ISS Update
hour, Commander Burbank will work

74
00:05:49,946 --> 00:05:52,846
in the Japanese Pressurized
Module to measure resistance

75
00:05:52,846 --> 00:05:57,186
of image processing unit power
connector and fuse to identify

76
00:05:57,186 --> 00:06:00,076
where a shorted circuit is in the power line.

77
00:06:00,816 --> 00:06:06,026
And at the end of today, each crew member will
have exercise to maintain his physical fitness

78
00:06:06,426 --> 00:06:09,986
and help mitigate the negative effects
of microgravity on their bodies.

79
00:06:10,836 --> 00:06:14,906
The Expedition 30 crew members
will do some evening prep work

80
00:06:14,996 --> 00:06:16,776
for another busy day in space tomorrow.

81
00:06:16,836 --> 00:06:21,316
They will then participate in their final daily
planning conference with ground controllers

82
00:06:21,316 --> 00:06:24,006
around the world before entering
their pre-sleep period.

83
00:06:25,206 --> 00:06:29,396
Meanwhile back on Earth in Kourou, French
Guiana, preparations remain on track

84
00:06:29,396 --> 00:06:33,306
for the launch of the European
Space Agency's Edoardo Amaldi,

85
00:06:33,306 --> 00:06:35,876
the Automated Transfer Vehicle-3 cargo craft.

86
00:06:36,186 --> 00:06:41,386
Again, that launch is scheduled to take
place tonight at 11:34 p.m. Central time.

87
00:06:41,596 --> 00:06:46,006
Launch coverage will begin here on
NASA Television at 11 p.m. tonight.

88
00:06:47,226 --> 00:06:50,866
The crew is scheduled to go to bed at
3:30 p.m. Central time and is scheduled

89
00:06:50,866 --> 00:06:52,476
to be asleep at the time of launch.

90
00:06:53,216 --> 00:06:56,546
However, Mission Control Houston
will be uplinking the video