1
00:00:03,230 --> 00:00:08,450
Good day. This is Mission Control Houston,
where a team of flight controllers is watching

2
00:00:08,450 --> 00:00:13,650
over the systems aboard the International
Space Station as it orbits 240 miles

3
00:00:13,650 --> 00:00:17,240
above the north Pacific, heading for a crossing

4
00:00:17,240 --> 00:00:23,030
of the Pacific northwestern
coast in just a few minutes.

5
00:00:23,030 --> 00:00:26,950
All systems onboard the space
station are working very well.

6
00:00:26,950 --> 00:00:31,720
Yesterday the team completed a reboost
of the International Space Station,

7
00:00:31,720 --> 00:00:38,260
putting it at almost the right altitude
for the arrival of the next cargo ship.

8
00:00:38,260 --> 00:00:43,040
The Progress 45 spacecraft is scheduled
to launch from the Baikonur Cosmodrome

9
00:00:43,040 --> 00:00:48,670
in Kazakhstan at 5:11 a.m.
Central time on October 30.

10
00:00:48,670 --> 00:00:53,070
That'll be immediately after the
Progress 42 spacecraft undocks

11

00:00:53,070 --> 00:00:56,170
from the space station's
Pirs docking compartment,

12
00:00:56,170 --> 00:00:59,880
freeing up that port on Saturday October 29.

13
00:00:59,880 --> 00:01:05,020
The new Progress is scheduled to
dock to the Pirs docking compartment

14
00:01:05,020 --> 00:01:09,850
at 6:42 a.m. Central time on November 2.

15
00:01:09,850 --> 00:01:14,630
Onboard the International Space Station
Commander Mike Fossum of Expedition 29 along

16
00:01:14,630 --> 00:01:20,060
with Flight Engineers Satoshi Furukawa and
Sergei Volkov are conducting a day's worth

17
00:01:20,060 --> 00:01:26,660
of experiment activities and preparations for
the departure of that Progress spacecraft.

18
00:01:28,060 --> 00:01:32,920
They started their day about 1 a.m.
Central time, and have been working

19
00:01:32,920 --> 00:01:35,490
on a variety of different experiments.

20
00:01:35,490 --> 00:01:38,140
Furukawa working with some
educational activities

21
00:01:38,140 --> 00:01:43,670
in the Kibo laboratory module provided by
the Japan Aerospace Exploration Agency.

22
00:01:43,670 --> 00:01:48,470
And with the construction of
some Lego bricks which were part

23
00:01:48,470 --> 00:01:52,080
of an educational experiment sent up
to the International Space Station.

24
00:01:52,080 --> 00:01:56,390
Commander Mike Fossum has been working
with the Capillary Flow Experiment,

25
00:01:56,390 --> 00:02:00,840
which is a fluids physics experiment that
investigates how fluids move up surfaces

26
00:02:00,840 --> 00:02:06,420
in microgravity that could lead to future
improvements in tanks for spacecraft

27
00:02:06,420 --> 00:02:14,350
that use this property to get flow fuel to
their engines in the microgravity environment.

28
00:02:14,350 --> 00:02:20,400
The team onboard the space
station also has had some help

29
00:02:20,400 --> 00:02:27,820
from Mission Control taking some images of
Tropical Storm Ophelia over the Atlantic Ocean.

30
00:02:27,820 --> 00:02:31,140
Here's a video replay of that view of Ophelia.

31
00:02:31,140 --> 00:02:35,340
It's a category 3 storm now
at 150 miles per hour.

32
00:02:35,340 --> 00:02:38,980
It's moving north-northwest at
12 miles an hour to far east

33
00:02:38,980 --> 00:02:42,630
of the Bahamas, not threatening any land masses.

34
00:02:42,630 --> 00:02:47,880
This was one of the items in the Crew
Earth Observation targets for today.

35
00:02:47,880 --> 00:02:56,490
As it pulled away from the northern
Leeward Islands heading north-northwest

36
00:02:56,490 --> 00:02:59,560
out over the open waters of the Atlantic.

37
00:02:59,560 --> 00:03:05,060
Showing some pretty compact
circulation and becoming better organized

38
00:03:05,060 --> 00:03:09,260
and so a very good target for Earth
observations as the crew and the team here

39
00:03:09,260 --> 00:03:13,940
in Mission Control watch the eye of the
storm which we can see in this close-up

40
00:03:13,940 --> 00:03:16,630
which was recorded earlier today.

41
00:03:21,280 --> 00:03:25,990
The crew onboard the space station also
taking some pictures of the configurations

42
00:03:25,990 --> 00:03:30,830
of the different experiment racks onboard the

International Space Station in preparation

43
00:03:30,830 --> 00:03:36,670
for the arrival of the next members of the
Expedition 29 crew, which are scheduled

44
00:03:36,670 --> 00:03:48,540
to launch from the Baikonur Cosmodrome
in Kazakhstan on the 21st of November.

45
00:03:48,540 --> 00:03:53,880
That'll be...

46
00:03:53,880 --> 00:03:57,790
Correction, November 14.

47
00:03:57,790 --> 00:04:03,850
That'll be Dan Burbank from NASA, along
with Anton Shkaplerov and Anatoly Ivanishin

48
00:04:03,850 --> 00:04:07,260
from the Russian Federal Space Agency.

49
00:04:09,470 --> 00:04:15,320
They're schedule to dock with the International
Space Station in their Soyuz TMA-22 spacecraft

50
00:04:15,320 --> 00:04:18,750
at 11:45 p.m. Central time on November 15.

51
00:04:18,750 --> 00:04:24,680
And then it'll be the departing
crew of Volkov, Fossum and Furukawa

52
00:04:24,680 --> 00:04:29,520
who are leaving the space
station at 8:21 for a...

53
00:04:29,520 --> 00:04:35,040

on the 21st of November heading for a landing
in Kazakhstan at 8:21 p.m. Central time.

54
00:04:38,830 --> 00:04:44,020
Crew onboard the space station now conducting
some VHF communication checks with a couple

55
00:04:44,020 --> 00:04:48,850
of ground stations in the United States
as we are passing over these opportunities

56
00:04:48,850 --> 00:04:53,600
in preparation for possible emergency
communications in the event that we not be able

57
00:04:53,600 --> 00:04:56,370
to use our tracking and data
relay satellite system,

58
00:04:56,370 --> 00:05:00,880
which is the normal high-rate communication
system used by the space station

59
00:05:00,880 --> 00:05:03,490
for space to ground transmissions.

60
00:05:03,490 --> 00:05:07,580
Today in Mission Control Courtenay
McMillan is the flight director in charge

61
00:05:07,580 --> 00:05:09,880
of the activities of the team here.

62
00:05:09,880 --> 00:05:13,360
She's working closely with
Spacecraft Communicator Jay Marschke