1
00:00:01,030 --> 00:00:02,050
Good day and welcome.

2
00:00:02,050 --> 00:00:05,630
This is the International Space Station Flight
Control Room at the Johnson Space Center

3
00:00:05,630 --> 00:00:09,890
in Houston with the Expedition 29
update for Wednesday, October 26.

4
00:00:09,890 --> 00:00:14,290
Flight Director Jerry Jason is leading
today's Orbit 2 flight controllers,

5
00:00:14,290 --> 00:00:19,070
and serving as spacecraft communicator
and capcom is astronaut Anna Fisher.

6
00:00:19,070 --> 00:00:22,380
Mission managers met this morning to
discuss the status of the mission.

7
00:00:22,380 --> 00:00:25,020
The Russian Space Agency
managers reported that the packing

8
00:00:25,020 --> 00:00:27,800
of the Progress 42 vehicle is near completion.

9
00:00:27,800 --> 00:00:32,890
The purging of Progress 42's prop is
complete and the final burn in a series

10
00:00:32,890 --> 00:00:36,390
of current reboost maneuvers was
conducted successfully this morning

11
00:00:36,390 --> 00:00:39,310

at 7:52 a.m. Central time.

12
00:00:39,310 --> 00:00:44,570
That reboost burn of the Zvezda Service module
engines lasted about one minute, 54 seconds

13
00:00:44,570 --> 00:00:51,160
and raised the station's altitude by 2.7 miles
at the apogee, and 1.6 miles at the perigee.

14
00:00:51,160 --> 00:00:59,440
The station is now flying at an
altitude of 251.3 x 233.2 statute miles.

15
00:00:59,440 --> 00:01:02,810
This puts the station at the correct
altitude for the upcoming launch and docking

16
00:01:02,810 --> 00:01:08,590
of the Progress 45 cargo ship, next month's
launch and docking of the Expedition 30 crew,

17
00:01:08,590 --> 00:01:13,540
and just six days after that, the
landing of the Expedition 29 crew.

18
00:01:13,540 --> 00:01:16,740
The three Expedition 29 crew
members, Commander Mike Fossum

19
00:01:16,740 --> 00:01:21,300
and Flight Engineers Satoshi Furukawa and Sergei
Volkov, are continuing with the preparations

20
00:01:21,300 --> 00:01:28,160
for the arrival of the Expedition 29/30
crew, continuing to pack the station.

21
00:01:28,160 --> 00:01:31,170
With the departure of the Progress

42, the station will be ready

22
00:01:31,170 --> 00:01:33,850
for the arrival of that Progress 45 vehicle.

23
00:01:33,850 --> 00:01:41,320
That vehicle will launch at 5:11 a.m.
Sunday, that's 4:11 p.m. Baikonur time.

24
00:01:41,320 --> 00:01:46,970
Progress 45 is filled with 2.8 tons of
food, fuel and supplies for the station,

25
00:01:46,970 --> 00:01:56,240
including 1,653 pounds of propellant, 110
pounds of oxygen and air, 926 pounds of water

26
00:01:56,240 --> 00:02:02,280
and 3,108 pounds of spare parts,
experiment hardware and other supplies.

27
00:02:02,280 --> 00:02:07,190
Progress 45 has been mated to its Soyuz
booster and is ready to roll to its launch pad

28
00:02:07,190 --> 00:02:12,100
at the Baikonur Cosmodrome in
Kazakhstan on Friday just before sunrise.

29
00:02:12,100 --> 00:02:16,180
It will be docking to the Pirs
docking compartment on the station.

30
00:02:16,180 --> 00:02:21,300
That is scheduled for Wednesday,
November 2 at 6:40 a.m. Central time.

31
00:02:21,300 --> 00:02:26,740
With the arrival of Progress 45, Fossum,
Furukawa and Volkov begin serious preparations

32
00:02:26,740 --> 00:02:29,930
for the arrival of three new crew members.

33
00:02:29,930 --> 00:02:33,700
When the remainder of that
Expedition 29 crew arrive.

34
00:02:33,700 --> 00:02:39,370
That includes Anton Shkaplerov, Anatoly
Ivanishin and U.S. astronaut Dan Burbank.

35
00:02:39,370 --> 00:02:43,820
They are set to launch on
November 13 on that Soyuz 28,

36
00:02:43,820 --> 00:02:46,470
docking with the station on November 15.

37
00:02:46,470 --> 00:02:50,170
Fossum, Furukawa and Volkov will
then return to Earth on November 22

38
00:02:50,170 --> 00:02:55,750
and Burbank will take command of the station
initiating the beginning of Expedition 30.

39
00:02:55,750 --> 00:03:00,100
The three-person crew will work together
for 36 days as they await the arrival

40
00:03:00,100 --> 00:03:03,320
of the remainder of that Expedition 30 crew.

41
00:03:03,320 --> 00:03:08,560
NASA's Don Pettit, Russia's Oleg Kononenko
and Europe's Andre Kuipers will launch

42
00:03:08,560 --> 00:03:13,800

to the station aboard the Soyuz 29
spacecraft on or about December 26.

43
00:03:13,800 --> 00:03:18,810
In other activities today aboard that the space
station, the Expedition 29 crew is involved

44
00:03:18,810 --> 00:03:23,250
in biomedical experiments and routine
maintenance of that Waste and Hygiene System.

45
00:03:23,250 --> 00:03:25,160
They worked on that some yesterday.

46
00:03:25,160 --> 00:03:27,760
Fossum today will perform the Sprint experiment.

47
00:03:27,760 --> 00:03:30,760
That is one of more than one hundred
experiments on board the space station.

48
00:03:30,760 --> 00:03:38,440
Sprint is a resistance aerobic training study
that evaluates the use of high intensity

49
00:03:38,440 --> 00:03:42,170
and low volume exercise training
to minimize the loss of muscle,

50
00:03:42,170 --> 00:03:44,310
bone and cardiovascular function.

51
00:03:44,310 --> 00:03:49,910
The principal investigator of that experiment
is the Universities Space Research Association

52
00:03:49,910 --> 00:03:53,480
in Houston, along with co-investigators
Ball State University

53
00:03:53,480 --> 00:03:57,000
in Indiana and Wyle Corporation in Houston.

54
00:03:57,000 --> 00:04:01,390
Investigators hope to prove that alternating
days of high-intensity interval training

55
00:04:01,390 --> 00:04:04,030
with days of continuous aerobic exercises,

56
00:04:04,030 --> 00:04:08,020
is more effective than the
predominantly continuous aerobic exercise,

57
00:04:08,020 --> 00:04:10,630
which is the current standard
care on board the station

58
00:04:10,630 --> 00:04:14,220
for the maintenance of cardiovascular function.

59
00:04:14,220 --> 00:04:17,590
Since yesterday's update, there
has been three crew events.

60
00:04:17,590 --> 00:04:21,840
One that includes Furukawa
with the Japanese Space Agency.

61
00:04:21,840 --> 00:04:25,300
One with Dusty Hill, vocalist
and bassist of ZZ Top.

62
00:04:25,300 --> 00:04:31,850
And one with the entire crew,
including the Russian crew Volkov

63
00:04:31,850 --> 00:04:34,410
with the International Space Olympiad.

64
00:04:34,410 --> 00:04:39,850
The crew also has an opportunity today to
capture photographs of Victoria, Seychelles,

65
00:04:39,850 --> 00:04:44,310
the Ubinas Volcano in Peru, the
Chihuahua and Big Bend Deserts

66
00:04:44,310 --> 00:04:47,660
of Texas and Mexico and Hurricane Rina.

67
00:04:47,660 --> 00:04:53,800
The space station will be passing directly over
Hurricane Rina today at 2:18 p.m. Central time.

68
00:04:53,800 --> 00:04:59,940
NASA will begin televising that pass at 2:15
p.m. as the station begins its approach.

69
00:04:59,940 --> 00:05:04,350
Rina currently is a category two
hurricane that is expected to intensify

70
00:05:04,350 --> 00:05:07,970
and be a category three by
the time station passes over.

71
00:05:07,970 --> 00:05:13,980
Rina threatens Cozumel, Cancun and the rest
of Mexico's Yucatan peninsula and is expected

72
00:05:13,980 --> 00:05:19,930
to hit Cozumel today, and then begin
moving over the Caribbean coast.

73
00:05:21,350 --> 00:05:26,130
Other interest of today is that 3 p.m. Central
time there will be a prelaunch news conference

74
00:05:26,130 --> 00:05:32,150
of the Delta 2 launch Friday with the NPP
satellite, and that will be broadcast on NASA TV