Expedition 29/ Soyuz 28 (TMA-22) Launch Crew

Anatoly Ivanishin

Expedition 29
Flight Engineer

Anton Shkaplerov

Exp. 29 Flt. Engineer
Soyuz Commander

Dan Burbank

Expedition 29
Flight Engineer

1
00:00:01,406 --> 00:00:05,246
This is the International Space
Station update for Tuesday, October 25.

2
00:00:05,246 --> 00:00:08,136
The three Expedition 29 crew
members will continue

3
00:00:08,136 --> 00:00:13,906
to pack the station's Progress 42 vehicle with
trash today, readying it to undock on Saturday

4
00:00:13,906 --> 00:00:20,546
at 4:04 a.m. Central time with its
deorbit burn at 7:11 Central time a.m.

5
00:00:20,936 --> 00:00:23,926
With the departure of that vehicle the
station will be ready for the arrival

6
00:00:23,926 --> 00:00:28,436
of the Progress 45, which will launch on
Sunday bringing supplies to the station.

7
00:00:28,996 --> 00:00:32,196
Progress 45 is filled with 2.8 tons of food,

8
00:00:32,196 --> 00:00:40,296
fuel and supplies for the station crew including
1,653 pounds of propellant, 110 pounds of oxygen

9
00:00:40,296 --> 00:00:46,186
and air, 926 pounds of water
and 3,108 pounds of spare parts,

10
00:00:46,446 --> 00:00:48,486
experiment hardware and other supplies.

11
00:00:49,186 --> 00:00:54,296

Progress 45 will roll to its launch pad
at the Baikonur Cosmodrome in Kazakhstan

12
00:00:54,296 --> 00:00:58,326
on Friday just before sunrise
with launch set for Sunday,

13
00:00:58,776 --> 00:01:04,886
scheduled at 5:11 a.m. Central
time and 4:11 p.m. Baikonur time.

14
00:01:05,236 --> 00:01:08,786
Docking to the station's Pirs docking
compartment, it's scheduled to arrive

15
00:01:08,786 --> 00:01:13,356
on Wednesday, November 2
at 6:40 a.m. Central time.

16
00:01:13,786 --> 00:01:18,836
Be sure to check NASA TV's schedule
for coverage of the Progress 45 launch

17
00:01:18,836 --> 00:01:21,276
and the undocking of Progress 42.

18
00:01:21,996 --> 00:01:25,636
With the arrival of that Progress
45 vehicle, Commander Mike Fossum

19
00:01:25,636 --> 00:01:31,156
and his crew members Satoshi Furukawa and Sergei
Volkov will begin preparations for the arrival

20
00:01:31,156 --> 00:01:34,186
of three new crew members on November 16.

21
00:01:34,796 --> 00:01:37,306
That is the remainder of the Expedition 29 crew.

22
00:01:37,716 --> 00:01:43,316
Anton Shkaplerov, Anatoly Ivanishin
and U.S. astronaut and future commander

23
00:01:43,316 --> 00:01:48,826
of the space station Dan Burbank are
set to launch on November 13 on Soyuz 28

24
00:01:49,076 --> 00:01:51,686
with docking to the station on November 15.

25
00:01:52,616 --> 00:01:56,106
Those three new crew members will have
only a few days to prepare for the handover

26
00:01:56,496 --> 00:01:59,746
of that International Space
Station because Fossum,

27
00:01:59,746 --> 00:02:02,946
Furukawa and Volkov will
return to Earth on November 22.

28
00:02:03,006 --> 00:02:06,806
At that point, Burbank will
take command of the station,

29
00:02:07,736 --> 00:02:12,026
and the crew also becomes the
Expedition 30 crew and will work

30
00:02:12,026 --> 00:02:14,226
as a three-person crew for 36 days.

31
00:02:14,676 --> 00:02:20,356
The remainder of the Expedition 30 crew with
NASA's Don Pettit, Russia's Oleg Kononenko

32
00:02:20,866 --> 00:02:26,796

and Europe's Andre Kuipers will launch to
the station aboard the Soyuz 29 spacecraft on

33
00:02:26,796 --> 00:02:30,926
or about December 26 and will dock
to the station two days later.

34
00:02:31,496 --> 00:02:34,606
In other activities today on board
the International Space Station,

35
00:02:34,606 --> 00:02:38,856
the crew is continuing to work some of
the more than 100 experiments that are

36
00:02:38,856 --> 00:02:43,116
on board the station and will be loading
updated software into their computers.

37
00:02:43,656 --> 00:02:46,026
This morning they interviewed
with CNN and MSNBC,

38
00:02:46,026 --> 00:02:49,306
and we'll have that later
for you in today's broadcast.

39
00:02:49,306 --> 00:02:54,726
And the crew is also taking some time to
capture photos of the [city] of Moroni which is

40
00:02:54,726 --> 00:02:58,216
on the island of Grand Comore in
the Indian Ocean and the cities

41
00:02:58,216 --> 00:03:01,406
of Asmara, Riyadh and Mexico City.

42
00:03:01,406 --> 00:03:06,646
Furukawa is also checking out the CEVIS isolator

today, one of the station's exercise machines,

43
00:03:07,076 --> 00:03:09,486
making sure that it is stable
for tomorrow's reboost.

44
00:03:10,026 --> 00:03:14,316
That reboost of the International Space
Station is set for 7:52 a.m. Central,

45
00:03:14,676 --> 00:03:18,616
and it is the final burn in a series of
reboost maneuvers to place the station

46
00:03:18,616 --> 00:03:22,706
at the correct altitude for the upcoming
launch and docking of the Progress 45

47
00:03:22,706 --> 00:03:27,786
and the Expedition 30 crew's
arrival on the Soyuz TMA-22.

48
00:03:28,146 --> 00:03:33,386
That reboost will be one minute and 54 seconds
of firing of the Zvezda service module's engines

49
00:03:33,776 --> 00:03:36,656
and will raise the station's
altitude about 2.7 miles

50
00:03:36,656 --> 00:03:39,676
at the apogee and 1.6 miles at the perigee.

51
00:03:40,466 --> 00:03:45,436
Today Fossum continues to work on the
Binary Colloidal Alloy experiment.

52
00:03:45,826 --> 00:03:47,566
That's called the BCAT test.

53
00:03:47,566 --> 00:03:48,906
It's the BCAT-6.

54
00:03:49,526 --> 00:03:53,346
Yesterday the crew received kudos from the
principal investigators at the University

55
00:03:53,346 --> 00:03:56,456
of Pennsylvania for all of the work
they've done on the BCAT experiments.

56
00:03:57,236 --> 00:04:01,826
The BCAT experiments actually started on
the MIR space station back in the 90s.

57
00:04:02,366 --> 00:04:06,226
BCAT experiments lay the foundation for
nano-technology and nano-mechanical systems

58
00:04:06,226 --> 00:04:08,836
in space and have attracted
attention in the fields

59
00:04:08,836 --> 00:04:11,266
of ceramics, composites and optical fibers.

60
00:04:11,266 --> 00:04:19,316
Fossum is continuing to work on that first
segment of the BCAT-6 and is continuing to work

61
00:04:19,316 --> 00:04:21,246
on a number of other experiments today.

62
00:04:21,726 --> 00:04:26,596
Wrapping up our International Space Station
update, for more information be sure to check

63
00:04:26,596 --> 00:04:32,516
out the space station site on [www] dot NASA

dot gov forward slash station and follow us