1
00:00:00,500 --> 00:00:04,800
[Music]

2
00:00:04,800 --> 00:00:06,830
>> It's Wednesday, June 19th.

3
00:00:06,830 --> 00:00:09,380
And the International Space
Station crew members are busy

4
00:00:09,380 --> 00:00:12,970
taking care of the systems
on board their vehicle,

5
00:00:12,970 --> 00:00:15,710
while also unloading a
new shipment of supplies

6
00:00:15,710 --> 00:00:19,010
and preparing for
next weeks space walk.

7
00:00:19,010 --> 00:00:20,820
Today, Commander
Pavel Vinogradov,

8
00:00:20,820 --> 00:00:24,410
and flight engineer Alexander
Misurkin kicked off the day

9
00:00:24,410 --> 00:00:26,370
installing a docking mechanism

10
00:00:26,370 --> 00:00:29,300
in the progress ship that's
now attached to the aft end

11
00:00:29,300 --> 00:00:31,330
of the pier's docking

compartment.

12
00:00:31,330 --> 00:00:34,050
That's in preparation
of the undocking

13
00:00:34,050 --> 00:00:37,960
of that progress ship
coming up in late July.

14
00:00:37,960 --> 00:00:40,820
Vinogradov moved on to
maintenance of the toilet

15
00:00:40,820 --> 00:00:44,500
in the Russian's Zvezda module
and spent the rest of his day

16
00:00:44,500 --> 00:00:47,240
in other routine
upkeep activities,

17
00:00:47,240 --> 00:00:49,380
plus of course his
daily exercise.

18
00:00:49,380 --> 00:00:52,000
All of the station crew
members spend a couple

19
00:00:52,000 --> 00:00:54,190
of hours each day working out.

20
00:00:54,190 --> 00:00:56,940
That's to maintain their
overall physical fitness,

21
00:00:56,940 --> 00:00:59,480
and to fight off the
weakening effects

22
00:00:59,480 --> 00:01:03,420
of their prolonged exposure
to the weightless environment.

23
00:01:03,420 --> 00:01:04,480
Misurkin, through his --

24
00:01:04,480 --> 00:01:08,290
the rest of his day moved
on to join his colleague,

25
00:01:08,290 --> 00:01:11,370
Fyodor Yurchikhin, for
some communications checks

26
00:01:11,370 --> 00:01:13,350
on the Orlan space suits

27
00:01:13,350 --> 00:01:17,150
that they'll be wearing during
Monday's Russian space walk.

28
00:01:17,150 --> 00:01:20,370
They spent the rest of their
day verifying the operation

29
00:01:20,370 --> 00:01:24,340
of other systems of that Orlan
suit -- those Orlan suits.

30
00:01:24,340 --> 00:01:28,650
Also studying the flight
procedures and installing tools,

31
00:01:28,650 --> 00:01:34,200
lights, and US helmet cameras
on their personal spacecraft.

32

00:01:34,200 --> 00:01:37,880
They'll be going out the door
next Monday, starting about 8:35

33
00:01:37,880 --> 00:01:39,810
in the morning Houston time.

34
00:01:39,810 --> 00:01:42,970
They're going to replace a
fluid control valve panel

35
00:01:42,970 --> 00:01:44,590
on the Xaria Module.

36
00:01:44,590 --> 00:01:48,190
And install clamps there
that will hold cables

37
00:01:48,190 --> 00:01:51,140
that will one day bring
power from the US section

38
00:01:51,140 --> 00:01:54,240
of the station to the new
Russian laboratory module,

39
00:01:54,240 --> 00:01:57,110
when it arrives later this year.

40
00:01:57,110 --> 00:01:59,660
During the space walk, the crew
members will also be removing

41
00:01:59,660 --> 00:02:01,350
and installing experiments

42
00:02:01,350 --> 00:02:04,130
on the outside of
the Zvezda Module.

43
00:02:04,130 --> 00:02:08,280
Monday's EVA will be the first
in Alexander Misurkin's career.

44
00:02:08,280 --> 00:02:12,550
It will be the 6th space
walk for Fyodor Yurchikhin.

45
00:02:12,550 --> 00:02:14,420
Flight engineers Luca Parmitano

46
00:02:14,420 --> 00:02:17,750
and Karen Nyberg joined their
Russian colleagues for the study

47
00:02:17,750 --> 00:02:20,080
of spacewalk flight
procedures this morning,

48
00:02:20,080 --> 00:02:22,710
after spending much of
their morning working

49
00:02:22,710 --> 00:02:24,990
with flight engineer
Chris Cassidy

50
00:02:24,990 --> 00:02:28,290
to unload the automated
transfer vehicle.

51
00:02:28,290 --> 00:02:32,020
The European Space Agency
provided vehicle delivered more

52
00:02:32,020 --> 00:02:33,820
than 7 tons of cargo

53
00:02:33,820 --> 00:02:37,290

to the station this
past Saturday afternoon.

54
00:02:37,290 --> 00:02:40,150
Along with breaks to
their daily exercise,

55
00:02:40,150 --> 00:02:43,180
the crew members spent their
morning unpacking the payload,

56
00:02:43,180 --> 00:02:46,570
which includes science
experiments and other hardware,

57
00:02:46,570 --> 00:02:49,160
as well as air and
water and propellant

58
00:02:49,160 --> 00:02:51,380
for the station's thrusters.

59
00:02:51,380 --> 00:02:53,710
In the afternoon,
Parmitano began a setup

60
00:02:53,710 --> 00:02:57,020
of experiment hardware that
was just delivered on the ATV.

61
00:02:57,020 --> 00:03:01,170
The European Space Agency
experiment called "Fundamental

62
00:03:01,170 --> 00:03:05,880
and Applied Studies of
Emotion Stability" or FASES,

63
00:03:05,880 --> 00:03:08,330
studies the characteristics

of emulsions,

64
00:03:08,330 --> 00:03:12,260
which is usually two liquids
that don't mix well together.

65
00:03:12,260 --> 00:03:15,500
They're looking at emulsions
in microgravity in order

66
00:03:15,500 --> 00:03:17,870
to model the dynamics
of the interaction

67
00:03:17,870 --> 00:03:20,450
of those two components
with the expectation

68
00:03:20,450 --> 00:03:22,450
that those models
can be transferred

69
00:03:22,450 --> 00:03:25,700
to industrial applications
on earth, as well as applied

70
00:03:25,700 --> 00:03:29,710
to materials that will be used
by future space travelers.

71
00:03:29,710 --> 00:03:33,160
Chris Cassidy and Karen Nyberg
also had time set aside today

72
00:03:33,160 --> 00:03:36,190
to talk with students at
the Kansas Cosmosphere

73
00:03:36,190 --> 00:03:38,370
about their mission and

what it's like to be

74
00:03:38,370 --> 00:03:41,170
on board the station,
using this opportunity

75
00:03:41,170 --> 00:03:45,190
to share this space flight with
a lot of folks on the ground

76
00:03:45,190 --> 00:03:46,450
who don't get to make the trip.

77
00:03:46,450 --> 00:03:49,560
The Expedition 36
crew members plan

78
00:03:49,560 --> 00:03:53,060
to spend more time unpacking
the ATV through the rest

79
00:03:53,060 --> 00:03:57,040
of this week, and completing the
space walk preparations before

80
00:03:57,040 --> 00:03:58,770
Monday's EVA.

81
00:03:58,770 --> 00:04:00,960
While also turning
more of their attention

82
00:04:00,960 --> 00:04:03,420
to the laboratory science
that's underway throughout this