



LUCA PARMITANO
EXPEDITION 36 FLIGHT ENGINEER

1
00:00:00,766 --> 00:00:05,037
[Music]

2
00:00:05,037 --> 00:00:08,841
>> It's Tuesday, July 23rd,
this day on orbit is filled

3
00:00:08,841 --> 00:00:11,744
with science, but also all done

4
00:00:11,744 --> 00:00:14,847
with an eye towards some dynamic
operations that are coming

5
00:00:14,847 --> 00:00:16,749
up later on this week.

6
00:00:16,749 --> 00:00:18,451
Commander Pavel Vinogradov

7
00:00:18,451 --> 00:00:21,387
and Flight Engineer Theodore
Yurchikhin, seen in the seated

8
00:00:21,387 --> 00:00:24,056
in this portrait,
started their day together

9
00:00:24,056 --> 00:00:27,259
with some refresher
training on the Toru system.

10
00:00:27,259 --> 00:00:31,230
That's the system that allows a
Cosmonaut in the Zvezda module

11
00:00:31,230 --> 00:00:33,265
to take over manual control

12

00:00:33,265 --> 00:00:36,068

of an approaching
progress cargo ship.

13

00:00:36,068 --> 00:00:39,572

This training is done routinely
in the advance of the arrival

14

00:00:39,572 --> 00:00:42,842

of a new load of supplies,
which happens to be targeted

15

00:00:42,842 --> 00:00:45,611

for launch from the Baikonur
Cosmodrome this Saturday

16

00:00:45,611 --> 00:00:48,380

afternoon, Houston
time, with arrival

17

00:00:48,380 --> 00:00:51,984

at the station's peers
docking compartment almost six

18

00:00:51,984 --> 00:00:53,352

hours later.

19

00:00:53,352 --> 00:00:55,688

There is another
progress vehicle.

20

00:00:55,688 --> 00:00:58,824

This one currently filled
with trash that is going

21

00:00:58,824 --> 00:01:03,129

to be vacating that docking port
this coming Thursday afternoon.

22

00:01:03,129 --> 00:01:06,632

Vinogradov and Yurchikhin
completed their first session

23

00:01:06,632 --> 00:01:10,636

of daily exercise following
their [inaudible] training,

24

00:01:10,636 --> 00:01:13,239

and after a lunch break,
Vinogradov spent most

25

00:01:13,239 --> 00:01:17,543

of the rest of his day finishing
packing 50 progress with items

26

00:01:17,543 --> 00:01:19,145

that are to be disposed of,

27

00:01:19,145 --> 00:01:23,649

as well as reinstalling the
cargo ship's docking mechanism.

28

00:01:23,649 --> 00:01:27,286

Yurchikhin will help him
with that reinstallation

29

00:01:27,286 --> 00:01:31,290

after his work with Alexander
Misurkin to shoot video

30

00:01:31,290 --> 00:01:33,592

for a Russian documentary.

31

00:01:33,592 --> 00:01:36,028

Flight Engineer Chris Cassidy,
focused his maintenance

32

00:01:36,028 --> 00:01:38,164

on science hardware today.

33

00:01:38,164 --> 00:01:41,867

Removing components from the
Marangoni experiment apparatus

34

00:01:41,867 --> 00:01:44,136

in the Kibo laboratory.

35

00:01:44,136 --> 00:01:47,973

That's an experiment into
the Marangoni convection,

36

00:01:47,973 --> 00:01:52,044

which is designed to learn about
heat transfer in microgravity.

37

00:01:52,044 --> 00:01:55,080

Cassidy also followed that
up, changing out a lamp

38

00:01:55,080 --> 00:01:57,950

in the fluid physics
experiment facility.

39

00:01:57,950 --> 00:02:00,920

And after his lunch, completed
some computer maintenance before

40

00:02:00,920 --> 00:02:03,889

moving on to his daily exercise.

41

00:02:03,889 --> 00:02:07,226

Flight Engineer Luca Parmitano's
plans second day of maintenance

42

00:02:07,226 --> 00:02:09,228

on the BioLab hardware,

43

00:02:09,228 --> 00:02:12,565

in advance of extended ground testing and commissioning

44

00:02:12,565 --> 00:02:15,334
of that facility,
was deferred as part

45

00:02:15,334 --> 00:02:16,769
of the brief safety stand

46

00:02:16,769 --> 00:02:19,805
down on non-standard
maintenance tasks.

47

00:02:19,805 --> 00:02:22,408
So he moved up his
scheduled routine inspection

48

00:02:22,408 --> 00:02:24,410
of portable fire extinguishers

49

00:02:24,410 --> 00:02:28,347
and breathing apparatus,
to his morning.

50

00:02:28,347 --> 00:02:31,250
Just before lunch,
Parmitano took time to speak

51

00:02:31,250 --> 00:02:34,587
with officials of the
European Space Industries,

52

00:02:34,587 --> 00:02:37,256
who were gathered at the
ALTEC Center in Italy

53

00:02:37,256 --> 00:02:39,658
about the progress
of his mission.

54

00:02:39,658 --> 00:02:42,928

Flight Engineer Karen Nyberg started her day with exercise,

55

00:02:42,928 --> 00:02:46,398

working out on the [inaudible], and then moved to a second day

56

00:02:46,398 --> 00:02:48,367

of operations with Robonaut.

57

00:02:48,367 --> 00:02:51,370

This time setting up for the afternoon's ground

58

00:02:51,370 --> 00:02:53,339

commanded operations.

59

00:02:53,339 --> 00:02:56,609

Robonaut is a test bed to improve the capabilities

60

00:02:56,609 --> 00:02:59,511

of robots on orbit to complete tasks

61

00:02:59,511 --> 00:03:02,481

and potentially assist human crew members

62

00:03:02,481 --> 00:03:04,717

with operations in the future.

63

00:03:04,717 --> 00:03:07,286

On Wednesday, the crew will continue their science

64

00:03:07,286 --> 00:03:10,756

operations, more operations
with Marangoni experiment,

65

00:03:10,756 --> 00:03:14,860

and the binary colloidal
Alloy Test, among others,

66

00:03:14,860 --> 00:03:17,796

along with regular daily
maintenance and plans

67

00:03:17,796 --> 00:03:21,033

to close the hatch on the
Russian cargo ship that's due

68

00:03:21,033 --> 00:03:23,736

to depart the station
on Thursday, thereby,

69

00:03:23,736 --> 00:03:27,239

opening up a spot for a
new progress vehicle that's