



KAREN NYBERG
EXPEDITION 36 FLIGHT ENGINEER

1
00:00:00,766 --> 00:00:04,003
[Music]

2
00:00:04,003 --> 00:00:05,938
>> Good morning, this is
Mission Control Houston.

3
00:00:05,938 --> 00:00:08,407
Welcome and thank you for
joining us for today's edition

4
00:00:08,407 --> 00:00:12,344
of Space Station Live
this Thursday, June 13.

5
00:00:12,344 --> 00:00:14,647
After enjoying an off
duty day yesterday,

6
00:00:14,647 --> 00:00:17,516
the Expedition 36 Crew is
back at work for a busy day

7
00:00:17,516 --> 00:00:20,953
of science research,
maintenance and preparation

8
00:00:20,953 --> 00:00:22,855
of the upcoming vehicle docking

9
00:00:22,855 --> 00:00:24,990
of the automated
transfer vehicle four

10
00:00:24,990 --> 00:00:26,725
and also an upcoming spacewalk

11
00:00:26,725 --> 00:00:29,962
that will take place

outside the orbiting complex.

12

00:00:29,962 --> 00:00:32,665
Commander [inaudible] spends
more time today working

13

00:00:32,665 --> 00:00:34,967
with a study known as
plasma crystal that looks

14

00:00:34,967 --> 00:00:36,769
at a matter called dusty plasma

15

00:00:36,769 --> 00:00:38,904
which contains particles
big enough to be seen

16

00:00:38,904 --> 00:00:41,373
and also tracked
with video cameras.

17

00:00:41,373 --> 00:00:43,542
The plasma structure is created,

18

00:00:43,542 --> 00:00:46,545
some that have never been
seen before on earth,

19

00:00:46,545 --> 00:00:48,814
will help scientists
test their ideas

20

00:00:48,814 --> 00:00:52,751
about conventional solids whose
atoms are too small to watch.

21

00:00:52,751 --> 00:00:54,887
Meanwhile, flight
engineers Alexander Mazurkin

22

00:00:54,887 --> 00:00:57,590
and Luca Parmitano participate

23

00:00:57,590 --> 00:00:59,191
in another training
session today

24

00:00:59,191 --> 00:01:01,494
to practice the rendezvous
procedures

25

00:01:01,494 --> 00:01:03,929
and abort scenarios
should that be required

26

00:01:03,929 --> 00:01:05,598
for the Albert Einstein,

27

00:01:05,598 --> 00:01:08,834
the automated transfer
vehicle four cargo craft,

28

00:01:08,834 --> 00:01:12,037
that is now closing in on the
space station for a docking,

29

00:01:12,037 --> 00:01:14,640
scheduled to take
place here on Saturday

30

00:01:14,640 --> 00:01:17,209
at 8:46 a.m. Central Time.

31

00:01:17,209 --> 00:01:18,611
We'll be bringing
you live coverage

32

00:01:18,611 --> 00:01:21,080
of the vehicle's docking here

on NASA Television beginning

33

00:01:21,080 --> 00:01:23,549
at 7 a.m. Central Time.

34

00:01:23,549 --> 00:01:26,051
Cassidy will spend some time
this afternoon transferring

35

00:01:26,051 --> 00:01:28,053
tools that will be used
in the upcoming spacewalk

36

00:01:28,053 --> 00:01:33,659
in preparation of the planned
June 24 excursion will begin

37

00:01:33,659 --> 00:01:36,629
outside the pier's
docking compartment.

38

00:01:36,629 --> 00:01:40,699
During the six hour excursion,
the two spacewalkers, Mazurkin

39

00:01:40,699 --> 00:01:44,370
and [inaudible] will replace a
fluid flow valve on [inaudible],

40

00:01:44,370 --> 00:01:48,474
and they'll also be deploying
in a retrieve experiments

41

00:01:48,474 --> 00:01:50,776
from the Russian segment modules

42

00:01:50,776 --> 00:01:53,078
and also string some power
cables along the [inaudible]

43

00:01:53,078 --> 00:01:54,880
for the eventual arrival

44

00:01:54,880 --> 00:01:57,783
of the new multipurpose
laboratory module

45

00:01:57,783 --> 00:01:59,818
that is scheduled to launch
at the end of the year

46

00:01:59,818 --> 00:02:03,088
on a Russian proton rocket.

47

00:02:03,088 --> 00:02:06,625
Meanwhile, Flight Engineer Karen
Nyberg is conducting a monthly

48

00:02:06,625 --> 00:02:08,827
inspection of the
onboard treadmill;

49

00:02:08,827 --> 00:02:10,262
she's also busy working today

50

00:02:10,262 --> 00:02:12,398
with a fluids physics
experiment,

51

00:02:12,398 --> 00:02:14,833
known as capillary
flow experiment.

52

00:02:14,833 --> 00:02:18,103
This study observes the behavior
of fluids in microgravity;

53

00:02:18,103 --> 00:02:20,773
results from this research

could improve the design

54

00:02:20,773 --> 00:02:23,108
of fluid transfer systems
on future spacecrafts

55

00:02:23,108 --> 00:02:25,277
such as fuel and water tanks.

56

00:02:25,277 --> 00:02:27,346
And later today, robotic
ground controllers here

57

00:02:27,346 --> 00:02:31,350
at Mission Control Houston will
maneuver the special purpose

58

00:02:31,350 --> 00:02:35,654
dexterous manipulator into
the position to grapple a pair

59

00:02:35,654 --> 00:02:41,794
of cargo transport containers or
CTCs, those are 814 pound bends

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00:02:41,794 --> 00:02:45,631
that can hold up to 34 different
spare parts and key hardware

61

00:02:45,631 --> 00:02:49,268
that are called orbital
replacement units, ORUs.

62

00:02:49,268 --> 00:02:52,638
The -- one of those CTCs
will be unbolted and moved

63

00:02:52,638 --> 00:02:55,674
from the external logistics
carrier on the [inaudible]

64

00:02:55,674 --> 00:02:59,645

of the station to the
external stowage platform

65

00:02:59,645 --> 00:03:03,249

that is near the quest airlock
and another will be moved

66

00:03:03,249 --> 00:03:04,450

from its parking space

67

00:03:04,450 --> 00:03:07,786

on the Dexter's enhanced
orbital replacement unit,