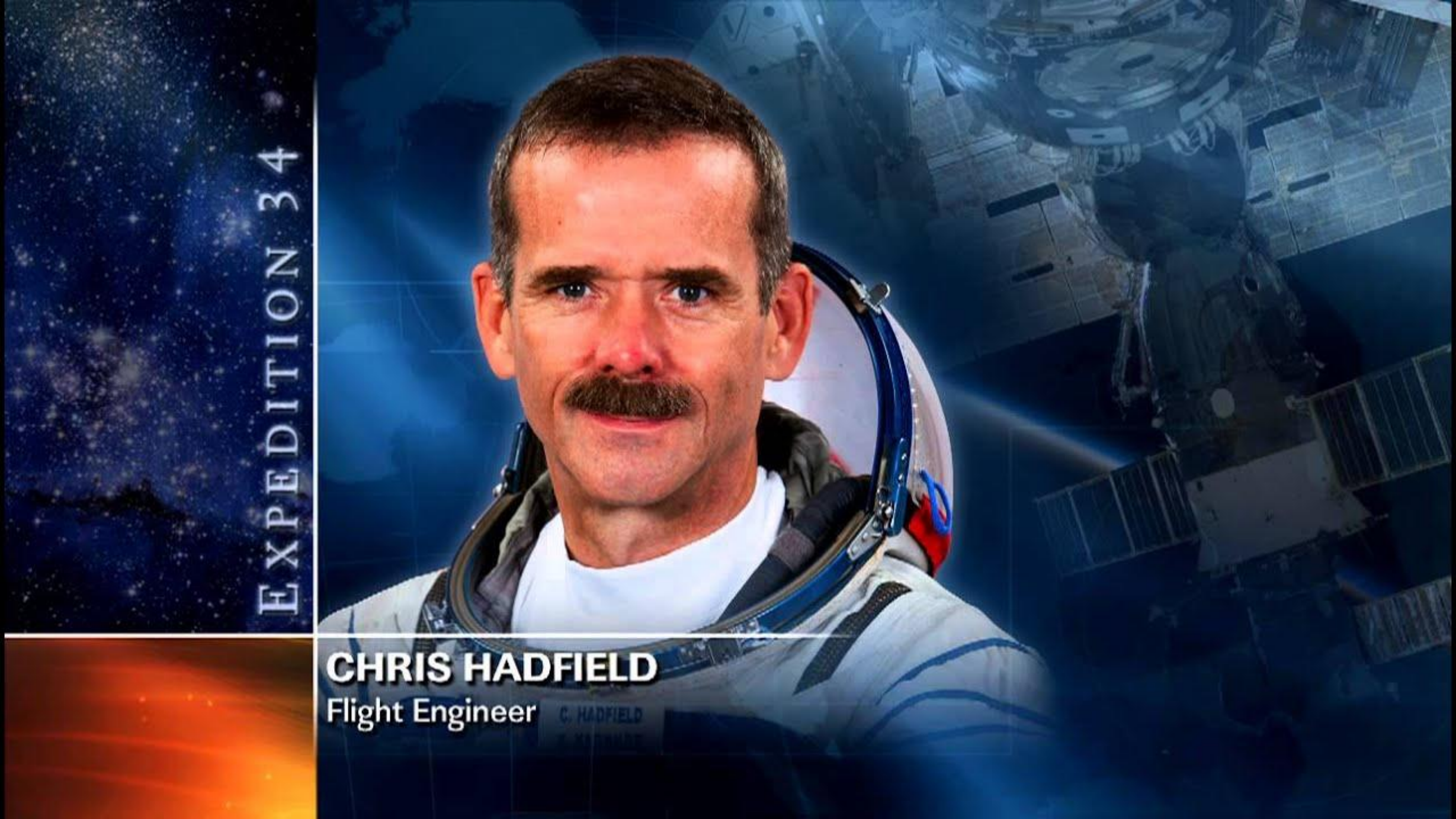
EXPEDITION 34
CHRIS HADFIELD
Flight Engineer
C. HADFIELD

1
00:00:00,036 --> 00:00:04,266
And good morning from Mission
Control Houston and welcome

2
00:00:04,266 --> 00:00:06,736
to today's International
Space Station Update.

3
00:00:07,216 --> 00:00:10,246
The crew of Expedition 34
hard at work at a full day

4
00:00:10,246 --> 00:00:13,286
of quite a bit of maintenance
and experiment work,

5
00:00:13,626 --> 00:00:15,146
starting off with
Commander Ford.

6
00:00:15,656 --> 00:00:18,426
He began his day doing
a glove exchange inside

7
00:00:18,426 --> 00:00:20,616
of the station's
BioLab Glovebox,

8
00:00:20,976 --> 00:00:23,556
just a routine replacement
of those gloves

9
00:00:23,556 --> 00:00:26,036
that keep the astronauts safe
while conducting experiments.

10
00:00:26,756 --> 00:00:29,636
Following that he started
getting some components ready

11
00:00:29,636 --> 00:00:33,716
for the annual removal and
replacement work on the Waste

12
00:00:33,716 --> 00:00:34,916
and Hygiene Compartment.

13
00:00:35,306 --> 00:00:38,316
He and Chris Hadfield will
be working extensively

14
00:00:38,316 --> 00:00:40,726
on that today removing some
of the urine components.

15
00:00:41,296 --> 00:00:43,416
Aside from that, Ford
is spending quite a bit

16
00:00:43,416 --> 00:00:46,806
of time right now over in the
Combustion Integrated Rack.

17
00:00:46,806 --> 00:00:50,306
He's replacing hardware
for the Multiuser Droplet

18
00:00:50,306 --> 00:00:51,606
Combustion Apparatus.

19
00:00:52,206 --> 00:00:56,196
It's one of the combustion
facilities onboard the station

20
00:00:56,196 --> 00:00:59,976
for performing different
controlled explosion

21
00:01:00,016 --> 00:01:03,946

and fire burning and suppression
of solids experiments

22
00:01:03,946 --> 00:01:06,646
in a controlled environment
taking advantage

23
00:01:06,646 --> 00:01:07,826
of that microgravity.

24
00:01:08,096 --> 00:01:11,316
Moving on, our Russian cosmonaut
Oleg Novitskiy is performing the

25
00:01:11,316 --> 00:01:15,026
Russian Bar experiment
which is an ongoing look

26
00:01:15,026 --> 00:01:17,336
into the selection and
testing of different methods

27
00:01:17,856 --> 00:01:20,946
for tracking any potential
depressurization onboard the

28
00:01:20,946 --> 00:01:22,086
International Space Station.

29
00:01:22,756 --> 00:01:24,796
He was joined in that by
fellow Russian cosmonaut

30
00:01:24,796 --> 00:01:25,696
Evgeny Tarelkin.

31
00:01:26,256 --> 00:01:29,146
Aside from that, doing some
maintenance ops onboard the

32
00:01:29,146 --> 00:01:32,716
station removing and replacing
one of the overlay panels inside

33
00:01:32,716 --> 00:01:34,166
of the Russian service module.

34
00:01:35,706 --> 00:01:40,116
Meanwhile, Evgeny Tarelkin again
is giving Oleg Novitskiy a hand

35
00:01:40,116 --> 00:01:42,996
with that Bar experiment
looking for different means

36
00:01:42,996 --> 00:01:46,436
of depressurization
and also lending a hand

37
00:01:46,436 --> 00:01:48,146
in replacing that overly panel.

38
00:01:48,646 --> 00:01:50,416
He was also taking some photos

39
00:01:50,416 --> 00:01:54,626
of the ongoing Plasma Crystal
experiment which is a study

40
00:01:54,626 --> 00:01:56,846
of growth of plasma
dust structures inside

41
00:01:56,846 --> 00:01:57,756
of zero gravity.

42
00:01:58,566 --> 00:02:00,286
That experiment was being run

43
00:02:00,286 --> 00:02:03,156
by our third Russian
cosmonaut Roman Romanenko.

44
00:02:03,796 --> 00:02:06,396
Again, that Plasma Crystal
a fairly complex look

45
00:02:06,396 --> 00:02:09,186
at studying the behavior
of particle clouds

46
00:02:09,186 --> 00:02:12,676
and also the structure of
different plasma dust crystals.

47
00:02:13,296 --> 00:02:15,476
Aside from that plasma
crystal experiment,

48
00:02:15,506 --> 00:02:17,516
Romanenko is working inside

49
00:02:17,516 --> 00:02:19,996
of the 49 Progress
vehicle today removing some

50
00:02:19,996 --> 00:02:21,126
of the cargo loaded on.

51
00:02:21,126 --> 00:02:23,246
He also transferred some trash

52
00:02:23,246 --> 00:02:24,996
and disposal items
back in as well.

53
00:02:26,366 --> 00:02:30,876
Moving on, Canadian astronaut

Chris Hadfield is spending quite

54
00:02:30,876 --> 00:02:32,726
a bit of time today
over in that water,

55
00:02:33,016 --> 00:02:34,436
Waste and Hygiene Compartment.

56
00:02:35,006 --> 00:02:38,596
They're doing an
annual overhaul of all

57
00:02:38,596 --> 00:02:40,076
of the urine components inside.

58
00:02:40,636 --> 00:02:43,626
He'll be replacing the urine
valve block and also a number

59
00:02:43,626 --> 00:02:45,506
of the urine lines
and pressure sensors

60
00:02:45,506 --> 00:02:50,626
and also the WHC's flush water
tank empty pressure sensor.

61
00:02:51,316 --> 00:02:53,596
Aside from that WHC
work he was working

62
00:02:53,596 --> 00:02:56,386
with the Reversible Figures
experiment which looks

63
00:02:56,386 --> 00:02:58,126
to investigate whether
the perception

64
00:02:58,126 --> 00:03:01,496
of different figures is affected
while these astronauts are

65
00:03:01,496 --> 00:03:03,056
in that microgravity
environment.

66
00:03:03,446 --> 00:03:07,496
And our final astronaut onboard
the station NASA crew member Tom

67
00:03:07,496 --> 00:03:09,976
Marshburn was continuing
some work he did yesterday

68
00:03:09,976 --> 00:03:11,946
with the Environmental
Health System setting

69
00:03:11,946 --> 00:03:13,596
up some acoustic dosimeters.

70
00:03:14,036 --> 00:03:17,286
This looks to track and study
the sound loads throughout the

71
00:03:17,286 --> 00:03:20,396
station to make sure that it's
all within acceptable ranges

72
00:03:20,396 --> 00:03:21,786
for these astronauts onboard.

73
00:03:22,416 --> 00:03:23,716
Then finally he'll be working

74
00:03:23,716 --> 00:03:25,886
with the Capillary

Flow experiment today.

75
00:03:26,316 --> 00:03:28,116
It's a fluid physics
experiment looking

76
00:03:28,116 --> 00:03:30,626
to investigate how
various fluids move

77
00:03:30,626 --> 00:03:32,326
up surfaces in microgravity.

78
00:03:32,856 --> 00:03:36,676
The results hoping to eventually
improve current computer models

79
00:03:36,676 --> 00:03:39,526
that are used by designers
down here on the ground

80
00:03:39,896 --> 00:03:42,686
as they continue to develop
low gravity fluid systems.

81
00:03:43,026 --> 00:03:45,926
It could potentially improve
the fluid transfer systems