
EXPEDITION 34
CHRIS HADFIELD
Flight Engineer

1
00:00:01,567 --> 00:00:03,969
Good morning from Mission
Control Houston and welcome

2
00:00:03,969 --> 00:00:06,939
to today's International
Space Station update.

3
00:00:06,939 --> 00:00:08,240
You're looking now inside

4
00:00:08,240 --> 00:00:10,276
of the International Space
Station flight control room

5
00:00:10,276 --> 00:00:12,878
at the Johnson Space
Center in Houston, Texas,

6
00:00:12,878 --> 00:00:15,314
looking down as the orbit
two team's monitoring all the

7
00:00:15,314 --> 00:00:18,951
systems flying on board
this orbiting laboratory.

8
00:00:18,951 --> 00:00:20,653
Today that team being led

9
00:00:20,653 --> 00:00:23,155
by flight director
Tomas Gonzales Torres.

10
00:00:23,155 --> 00:00:25,324
Joining him in the blue
there, Mark Reagan serving

11
00:00:25,324 --> 00:00:27,226

as the Capcom, who
will be talking

12
00:00:27,226 --> 00:00:29,095
to our astronauts
up in space today.

13
00:00:29,095 --> 00:00:34,066
And those astronauts the
crew of Expedition 34

14
00:00:34,066 --> 00:00:37,503
in their final week
as the crew of 34.

15
00:00:37,503 --> 00:00:40,539
They're being led by NASA
astronaut Kevin Ford there

16
00:00:40,539 --> 00:00:41,674
in the front row on the left.

17
00:00:41,674 --> 00:00:45,111
He's in his final days
Expedition 34 commander.

18
00:00:45,111 --> 00:00:47,947
Immediately behind him two
Russian cosmonauts Oleg

19
00:00:47,947 --> 00:00:50,316
Novitskiy and Evgeny Tarelkin.

20
00:00:50,316 --> 00:00:53,085
And then moving across we
have a third Russian cosmonaut

21
00:00:53,085 --> 00:00:54,587
Roman Romanenko.

22
00:00:54,587 --> 00:00:57,423
On the front row there
Canadian Chris Hadfield

23
00:00:57,423 --> 00:00:58,557
who will be taking command

24
00:00:58,557 --> 00:01:00,860
of the space station a
little bit later today.

25
00:01:00,860 --> 00:01:03,162
And all the way on the right
there another NASA astronaut

26
00:01:03,162 --> 00:01:05,364
Tom Marshburn.

27
00:01:06,432 --> 00:01:07,867
Busy day for the crew as three

28
00:01:07,867 --> 00:01:11,237
of our Expedition 34
astronauts begin to prep

29
00:01:11,237 --> 00:01:14,740
for their homecoming a
little bit later this week.

30
00:01:14,740 --> 00:01:16,842
These three Kevin
Ford, Oleg Novitskiy

31
00:01:16,842 --> 00:01:19,145
and Evgeny Tarelkin will be
departing the International

32
00:01:19,145 --> 00:01:23,282
Space Station tomorrow

night as they home

33
00:01:23,282 --> 00:01:27,720
in their Soyuz TMA-06M
spacecraft wrapping up 143 days

34
00:01:27,720 --> 00:01:30,256
in space, 141 days
onboard the station.

35
00:01:30,256 --> 00:01:32,525
You can see a quick
timeline of all those events.

36
00:01:32,525 --> 00:01:36,162
Tomorrow we'll be bringing you
live coverage here on NASA TV,

37
00:01:36,162 --> 00:01:37,463
kicking off with farewell

38
00:01:37,463 --> 00:01:40,566
and hatch closure in
the mid-afternoon.

39
00:01:40,566 --> 00:01:42,368
That final landing
coverage starting

40
00:01:42,368 --> 00:01:44,937
at about 9:45 PM central time,

41
00:01:44,937 --> 00:01:46,772
all setting up for
a planned landing

42
00:01:46,772 --> 00:01:51,343
of 10:57 PM in Kazakhstan.

43

00:01:51,343 --> 00:01:54,747
Meanwhile on board
Commander Kevin Ford is hard

44
00:01:54,747 --> 00:01:56,882
at work doing some
final departure work,

45
00:01:56,882 --> 00:01:58,551
getting his things in order.

46
00:01:58,551 --> 00:02:02,454
He'll also be transferring some
supplies and experiment samples

47
00:02:02,454 --> 00:02:04,757
into the Dragon spacecraft

48
00:02:04,757 --> 00:02:08,761
and doing a quick inspection
of the MELFI coldbox.

49
00:02:08,761 --> 00:02:10,963
MELFI's one of the freezers
onboard the station.

50
00:02:10,963 --> 00:02:13,132
The Minus Eighty degree
Laboratory [Freezer for ISS].

51
00:02:13,132 --> 00:02:15,701
It's used to store a
number of biological samples

52
00:02:15,701 --> 00:02:19,071
from the research experiments
that's being done on board.

53
00:02:19,071 --> 00:02:23,842
So that'll occupy most of

Commander Ford's day today.

54
00:02:23,842 --> 00:02:27,980
Moving on, Oleg Novitskiy
is in the final stages

55
00:02:27,980 --> 00:02:32,151
of some cardiovascular exercise
which he was participating

56
00:02:32,151 --> 00:02:34,587
in yesterday and is
continuing today.

57
00:02:34,587 --> 00:02:38,490
It's just all part of an
ongoing Russian experiment

58
00:02:38,490 --> 00:02:42,294
as they continue to track how
these astronauts bodies adapt,

59
00:02:42,294 --> 00:02:45,064
are changed during
long-duration spaceflights.

60
00:02:45,064 --> 00:02:48,000
He'll also be on the hook to
stow a number of items inside

61
00:02:48,000 --> 00:02:52,605
of their Soyuz craft as it does
have some downmass capability.

62
00:02:52,605 --> 00:02:55,441
They'll be returning
in again that TMA-06M

63
00:02:55,441 --> 00:02:58,077
which you can see docked

to the space facing side

64
00:02:58,077 --> 00:03:01,247
of the station, currently
docked to Poisk.

65
00:03:01,247 --> 00:03:04,817
Again he'll be packing up a few
items in there in preparation

66
00:03:04,817 --> 00:03:07,353
for that homecoming tomorrow.

67
00:03:07,353 --> 00:03:10,122
Meanwhile our third Soyuz crew
member who'll be returning

68
00:03:10,122 --> 00:03:13,259
Evgeny Tarelkin is
collecting a number of air

69
00:03:13,259 --> 00:03:16,262
and microbial samples throughout
the Russian segment today.

70
00:03:16,262 --> 00:03:18,764
He'll be inside of the
Zvezda service module

71
00:03:18,764 --> 00:03:22,301
and also Zarya checking the
air for any traces of ammonia

72
00:03:22,301 --> 00:03:23,802
and Freon and also
the CO2 levels.

73
00:03:23,802 --> 00:03:28,107
And he'll also be doing that
same cardiovascular exercise

74
00:03:28,107 --> 00:03:31,310
that Novitskiy's
participating in as well.

75
00:03:31,310 --> 00:03:34,813
The third Russian cosmonaut
Roman Romanenko was inside

76
00:03:34,813 --> 00:03:37,416
of the Rassvet module
this morning,

77
00:03:37,416 --> 00:03:39,752
also known as the Mini
Research Module-1.

78
00:03:39,752 --> 00:03:42,221
He's changing out some
of the smoke detectors.

79
00:03:42,221 --> 00:03:45,557
Also just a little while
ago got some time inside

80
00:03:45,557 --> 00:03:47,393
of the Kibo module
to participate

81
00:03:47,393 --> 00:03:49,461
in a Russian public
affairs event speaking

82
00:03:49,461 --> 00:03:52,398
with reporters on the ground.

83
00:03:52,398 --> 00:03:56,235
Meanwhile a man with fairly
big day today, Chris Hadfield,

84
00:03:56,235 --> 00:03:58,937
scheduled to become the
first Canadian commander

85
00:03:58,937 --> 00:04:00,839
of the International
Space Station a little bit

86
00:04:00,839 --> 00:04:02,207
later today.

87
00:04:02,207 --> 00:04:04,910
Commander Kevin Ford our current
Expedition 34 commander will

88
00:04:04,910 --> 00:04:10,049
formally hand over the baton,
if you will, to Chris Hadfield,

89
00:04:10,049 --> 00:04:13,218
beginning his command of the
International Space Station

90
00:04:13,218 --> 00:04:16,221
which he will remain
for Expedition 35.

91
00:04:16,221 --> 00:04:17,556
You can catch that change

92
00:04:17,556 --> 00:04:21,226
of command ceremony later
this afternoon here on NASA TV

93
00:04:21,226 --> 00:04:25,097
at 4:10 pm central
time, 5:10 pm eastern.

94
00:04:25,097 --> 00:04:27,333

Asides from that change

95
00:04:27,333 --> 00:04:30,836
of command ceremony Chris
Hadfield will be working

96
00:04:30,836 --> 00:04:32,638
on upgrading the software

97
00:04:32,638 --> 00:04:36,041
which controls the Window
Observational Research Facility

98
00:04:36,041 --> 00:04:39,244
on one of the many camera
systems onboard the station used

99
00:04:39,244 --> 00:04:40,846
for Earth observations.

100
00:04:40,846 --> 00:04:42,781
He's also on the hook
to do some cargo work

101
00:04:42,781 --> 00:04:46,018
with that Dragon vehicle.

102
00:04:46,018 --> 00:04:51,090
Our final Expedition 34 crew
member Tom Marshburn spending

103
00:04:51,090 --> 00:04:55,127
most of his day today working on
the Capillary Flow Experiment.

104
00:04:55,127 --> 00:04:56,195
You can see it here.

105
00:04:56,195 --> 00:05:00,599

The Capillary Flow
Experiment is a suite

106
00:05:00,599 --> 00:05:03,369
of various fluid
physics experiments.

107
00:05:03,369 --> 00:05:07,339
It focuses on how fluids move
up surfaces in microgravity

108
00:05:07,339 --> 00:05:09,708
as the microgravity environment

109
00:05:09,708 --> 00:05:12,578
of the International
Space Station affects many

110
00:05:12,578 --> 00:05:14,313
of the properties of liquids.

111
00:05:14,313 --> 00:05:17,049
All these results gathered
from this task hope

112
00:05:17,049 --> 00:05:20,119
to improve the current
computer models that are used

113
00:05:20,119 --> 00:05:22,287
by the designers down
here on the ground

114
00:05:22,287 --> 00:05:26,425
as they develop low gravity
and microgravity fluid systems,

115
00:05:26,425 --> 00:05:30,329
could potentially have some
impacts on improving the systems

116
00:05:30,329 --> 00:05:32,631
for fuel transfers
and also water