
EXPEDITION 32
AKIHIKO HOSHIDE
Flight Engineer

1
00:00:02,790 --> 00:00:05,440
Good morning from Mission
Control Houston and welcome

2
00:00:05,440 --> 00:00:08,140
to today's International
Space Station update.

3
00:00:08,140 --> 00:00:10,640
You're joining us here inside
of the flight control room

4
00:00:10,640 --> 00:00:13,290
in Houston Texas where the
Orbit 2 team's currently

5
00:00:13,290 --> 00:00:14,830
on console monitoring all

6
00:00:14,830 --> 00:00:18,310
of the systems onboard the
orbiting complex The team being

7
00:00:18,310 --> 00:00:21,310
led today by flight director
Chris Edelin there on the right,

8
00:00:21,310 --> 00:00:24,230
and joining him at the
Capcom position communicating

9
00:00:24,230 --> 00:00:28,190
with our astronauts in
orbit is Jack Fischer.

10
00:00:28,190 --> 00:00:30,580
Those astronauts in orbit
right now are the crew

11

00:00:30,580 --> 00:00:35,100
of Expedition 32, comprised of
six members right now but only

12
00:00:35,100 --> 00:00:36,870
for about another week or so.

13
00:00:36,870 --> 00:00:39,590
Starting all the way on the left
there we have Japan Aerospace

14
00:00:39,590 --> 00:00:41,460
Exploration [Agency]
astronaut Aki Hoshide

15
00:00:41,460 --> 00:00:44,880
and then russian
cosmonaut Yuri Malenchenko,

16
00:00:44,880 --> 00:00:47,330
and then NASA astronaut
Suni Williams.

17
00:00:47,330 --> 00:00:50,670
And our three over there on the
right coming home just a little

18
00:00:50,670 --> 00:00:54,320
under a week from today
NASA astronaut Joe Acaba,

19
00:00:54,320 --> 00:00:57,400
and then Expedition 32
Commander Gennady Padalka

20
00:00:57,400 --> 00:01:00,530
and finally our third Russian
cosmonaut Sergei Revin.

21
00:01:00,530 --> 00:01:04,830

So a busy day on orbit today
for these crew members,

22
00:01:04,830 --> 00:01:07,960
engaging in a number
of get-ahead activities

23
00:01:07,960 --> 00:01:09,810
for that upcoming undocking.

24
00:01:09,810 --> 00:01:11,960
Starting with NASA
astronaut Joe Acaba

25
00:01:11,960 --> 00:01:14,810
who is doing some fit
checks on the entry suit

26
00:01:14,810 --> 00:01:15,990
that he will be wearing.

27
00:01:15,990 --> 00:01:19,140
He'll be doing those alongside
with Padalka and Revin

28
00:01:19,140 --> 00:01:22,900
as they continue to prep
their Soyuz TMA-04M vehicle

29
00:01:22,900 --> 00:01:26,490
for eventual undocking from
International Space Station

30
00:01:26,490 --> 00:01:29,890
and landing on again just
under a week from today,

31
00:01:29,890 --> 00:01:34,050
scheduled to take place at
9:54 pm central time this

32
00:01:34,050 --> 00:01:35,540
upcoming Sunday.

33
00:01:35,540 --> 00:01:37,230
Aside from that entry suit check

34
00:01:37,230 --> 00:01:40,940
out he'll be doing some items
stowage inside of the Soyuz.

35
00:01:40,940 --> 00:01:44,370
It does have a limited amount
of cargo space as it's able

36
00:01:44,370 --> 00:01:47,970
to return some items down
along with these astronauts.

37
00:01:47,970 --> 00:01:52,170
He'll also be reviewing some
robotic operation procedures

38
00:01:52,170 --> 00:01:55,070
for the upcoming HTV3 release.

39
00:01:55,070 --> 00:01:57,830
He'll be doing that
alongside of Aki Hoshide,

40
00:01:57,830 --> 00:02:00,190
and he'll also be
getting involved

41
00:02:00,190 --> 00:02:01,840
in some medical experiments
today working

42
00:02:01,840 --> 00:02:04,180

on the Integrated
Cardiovascular.

43
00:02:04,180 --> 00:02:07,550
He'll be setting up some
monitors on his own body

44
00:02:07,550 --> 00:02:10,500
as Integrated Cardiovascular
looks to track

45
00:02:10,500 --> 00:02:13,770
and monitor any cardiac
atrophy or the weakening

46
00:02:13,770 --> 00:02:16,270
of the heart muscle
inside of these astronauts

47
00:02:16,270 --> 00:02:18,580
as they're exposed to that
microgravity environment

48
00:02:18,580 --> 00:02:20,860
of space for long
durations of time.

49
00:02:20,860 --> 00:02:24,350
Moving on our second NASA
astronaut Suni Williams is doing

50
00:02:24,350 --> 00:02:28,470
some medical experiments of
her own as she upon waking

51
00:02:28,470 --> 00:02:32,580
up this morning took a number
of samples of blood and urine

52
00:02:32,580 --> 00:02:34,910

for storage in their
human research facility.

53
00:02:34,910 --> 00:02:37,360
She'll be storing those
inside of the MELFI

54
00:02:37,360 --> 00:02:40,430
or Minus Eighty Degree
Laboratory Freezer for ISS.

55
00:02:40,430 --> 00:02:43,800
It's a cryogenic freezer
onboard the station used

56
00:02:43,800 --> 00:02:44,730
for storing a number

57
00:02:44,730 --> 00:02:48,250
of different biological
and human samples.

58
00:02:48,250 --> 00:02:51,180
She'll also be working
with the VO2MAX experiment,

59
00:02:51,180 --> 00:02:55,380
which is very similar to ones,
a very similar experiment

60
00:02:55,380 --> 00:02:58,780
down here on Earth and it
looks to document any changes

61
00:02:58,780 --> 00:03:02,180
in the maximum oxygen uptake
for these crew members.

62
00:03:02,180 --> 00:03:05,300
Another ongoing medical

experimenter a they're exposed

63
00:03:05,300 --> 00:03:08,310
to microgravity for
long durations of time.

64
00:03:08,310 --> 00:03:09,650
She'll also be taking some time

65
00:03:09,650 --> 00:03:12,150
out for some maintenance work
inspecting the Treadmill 2

66
00:03:12,150 --> 00:03:18,320
hardware, one of the multiple
workout devices onboard the

67
00:03:18,320 --> 00:03:20,350
International Space Station.

68
00:03:20,350 --> 00:03:24,350
Aki Hoshide again reviewing
those robotic operations

69
00:03:24,350 --> 00:03:27,390
procedures as they prepare

70
00:03:27,390 --> 00:03:32,280
to release the HTV3 vehicle
a little bit later this week

71
00:03:32,280 --> 00:03:33,390
on Wednesday.

72
00:03:33,390 --> 00:03:37,280
That coming up on NASA
TV like all major events.

73
00:03:37,280 --> 00:03:39,710

We'll have unberthing
coverage beginning

74
00:03:39,710 --> 00:03:43,920
at 5:30 am Central time -- all
these time will be in Central --

75
00:03:43,920 --> 00:03:46,400
with the actual unberthing
from the station

76
00:03:46,400 --> 00:03:49,530
as its currently attached
to the Earth-facing side

77
00:03:49,530 --> 00:03:51,000
of the Harmony module.

78
00:03:51,000 --> 00:03:55,360
That unberthing happening at
5:55 am and then we'll cut away

79
00:03:55,360 --> 00:03:58,580
for a while and then come
back on the air at 10:30 am

80
00:03:58,580 --> 00:04:01,230
for release coverage
with eventual release

81
00:04:01,230 --> 00:04:05,300
from the robotic arm of that
unmanned cargo craft taking

82
00:04:05,300 --> 00:04:07,990
place at 10:50 am Central Time.

83
00:04:07,990 --> 00:04:09,770
You see the station complex here

84
00:04:09,770 --> 00:04:12,320
with that HTV 3 all the
way in the left there.

85
00:04:12,320 --> 00:04:16,670
It's currently one of three
current unmanned robotic craft

86
00:04:16,670 --> 00:04:21,450
that are used to resupply the
International Space Station.

87
00:04:21,450 --> 00:04:25,000
So Aki going through and
reviewing the procedures

88
00:04:25,000 --> 00:04:29,050
for that today also packing and
stowing some items on to the HTV

89
00:04:29,050 --> 00:04:32,720
as well as assisting two of our
astronauts in moving some items

90
00:04:32,720 --> 00:04:38,190
over the Soyuz for its undocking
a little bit later on Sunday.

91
00:04:38,190 --> 00:04:42,640
Then our Expedition 32 Commander
Gennady Padalka doing a descent

92
00:04:42,640 --> 00:04:47,030
simulation and consulting
a return equipment list,

93
00:04:47,030 --> 00:04:49,170
doing some stowage
checkouts, and he'll be joined

94
00:04:49,170 --> 00:04:52,300
in that simulation by Sergei
Revin who will be riding

95
00:04:52,300 --> 00:04:56,280
in that Soyuz craft with him
down to the steppe of Kazakhstan

96
00:04:56,280 --> 00:05:00,070
as they return to Earth
coming up on Sunday.

97
00:05:00,070 --> 00:05:02,400
And aside from that
he'll be involved

98
00:05:02,400 --> 00:05:07,400
in a fairly complex physics
study onboard the International

99
00:05:07,400 --> 00:05:08,010
Space Station.

100
00:05:08,010 --> 00:05:11,960
The Kulonovskiy Kristall
which looks to study methods

101
00:05:11,960 --> 00:05:13,510
of different control dynamics

102
00:05:13,510 --> 00:05:15,420
and specialized crystal
structures

103
00:05:15,420 --> 00:05:17,820
as they're manipulated
with magnetic fields

104
00:05:17,820 --> 00:05:19,970

under microgravity conditions.

105
00:05:19,970 --> 00:05:23,370
Our Soyuz landing crew seen
here, Joe Acaba, Gennady Padalka

106
00:05:23,370 --> 00:05:26,530
and Sergei Revin, have been
onboard the International Space

107
00:05:26,530 --> 00:05:28,600
Station since May 16,

108
00:05:28,600 --> 00:05:33,050
and following their undocking
Expedition 32 will formally

109
00:05:33,050 --> 00:05:35,490
and Expedition 33 will begin

110
00:05:35,490 --> 00:05:39,070
with Suni Williams
taking over command.

111
00:05:39,070 --> 00:05:42,460
So our second Russian cosmonaut
onboard the station Sergei Revin

112
00:05:42,460 --> 00:05:45,760
will also be coming home was
doing those descent simulations

113
00:05:45,760 --> 00:05:49,720
alongside Padalka and also
photographing a microorganism

114
00:05:49,720 --> 00:05:52,170
experiment on board the
station that'll be coming back

115
00:05:52,170 --> 00:05:54,850
down with them on
that Soyuz vehicle.

116
00:05:54,850 --> 00:05:57,770
And then our final Russian
cosmonaut, Yuri Malenchenko,

117
00:05:57,770 --> 00:05:59,860
who will remain on
board to become one

118
00:05:59,860 --> 00:06:02,510
of our Expedition
33 flight engineers,

119
00:06:02,510 --> 00:06:05,970
is doing some TV checkouts
alongside of Russian personnel

120
00:06:05,970 --> 00:06:08,210
and getting signals from
Russian ground sites

121
00:06:08,210 --> 00:06:09,870
and installing some video gear,