

EXPEDITION 31

JOE ACABA
Flight Engineer

J. ACABA
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1
00:00:01,340 --> 00:00:02,840
Good morning and welcome

2
00:00:02,840 --> 00:00:05,680
to today's International
Space Station update hour.

3
00:00:05,680 --> 00:00:08,580
You are joining us here
in the flight control room

4
00:00:08,580 --> 00:00:11,990
in Houston Texas where flight
controllers are monitoring all

5
00:00:11,990 --> 00:00:14,590
the systems onboard the
orbiting laboratory,

6
00:00:14,590 --> 00:00:18,700
as they control it orbiting
just about 250 miles

7
00:00:18,700 --> 00:00:23,180
over the Earth's surface.

8
00:00:23,180 --> 00:00:25,550
Right now the Orbit 2 team
is currently on console,

9
00:00:25,550 --> 00:00:29,070
and they are being led by Flight
Director Gary Horlocher there is

10
00:00:29,070 --> 00:00:32,930
the center, and at the capcom
console you can see astronaut

11
00:00:32,930 --> 00:00:36,960

Dan Tani, and joining him
throughout their hour will be

12

00:00:36,960 --> 00:00:39,300

fellow NASA astronaut

Cady Coleman.

13

00:00:39,300 --> 00:00:41,630

They will be serving

as the voice links

14

00:00:41,630 --> 00:00:44,020

between controllers

here on the ground

15

00:00:44,020 --> 00:00:46,050

and astronauts up in space.

16

00:00:46,050 --> 00:00:51,330

And those astronauts right now

are the crew of Expedition 31.

17

00:00:51,330 --> 00:00:53,660

Starting with our three

astronauts that have been

18

00:00:53,660 --> 00:00:57,810

on the station since last

December on the right,

19

00:00:57,810 --> 00:01:00,730

on the far right, NASA

astronaut Don Pettit,

20

00:01:00,730 --> 00:01:04,120

in the front row Expedition

31 Commander Oleg Kononenko

21

00:01:04,120 --> 00:01:05,990

from the Russian Space Agency,

22

00:01:05,990 --> 00:01:09,610
and to his left is European
Space Agency astronaut

23

00:01:09,610 --> 00:01:11,610
Andre Kuipers.

24

00:01:11,610 --> 00:01:16,040
Them to the left of him, are
our three station residents

25

00:01:16,040 --> 00:01:19,660
who do docked a few
weeks back on May 16,

26

00:01:19,660 --> 00:01:22,950
bringing the station back up
to a full six-man rotation,

27

00:01:22,950 --> 00:01:24,910
and those three starting

28

00:01:24,910 --> 00:01:27,740
on the far left is NASA
astronaut Joe Acaba,

29

00:01:27,740 --> 00:01:30,640
on his second spaceflight,
in the front row,

30

00:01:30,640 --> 00:01:34,470
veteran Russian cosmonaut
Gennady Padalka, on his fourth,

31

00:01:34,470 --> 00:01:37,230
and will be commanding
Expedition 32 following the

32

00:01:37,230 --> 00:01:40,490
departure of Pettit,
Konnonenko and Kuipers.

33
00:01:40,490 --> 00:01:43,800
And then finally in then
back-middle Sergei Revin,

34
00:01:43,800 --> 00:01:46,800
a third Russian cosmonaut
on his third flight.

35
00:01:46,800 --> 00:01:50,900
The crew began their day today
waking up about 1 a.m. CT.

36
00:01:50,900 --> 00:01:54,850
Getting involved right off the
bat in a number experiments

37
00:01:54,850 --> 00:01:56,940
over on the Russian side.

38
00:01:56,940 --> 00:02:00,130
Commander Konnonenko has been
replacing a few components the

39
00:02:00,130 --> 00:02:01,560
Russian toilet system today.

40
00:02:01,560 --> 00:02:04,070
He is also important
be participating

41
00:02:04,070 --> 00:02:06,690
in the Russian BAR
experiment which looks

42
00:02:06,690 --> 00:02:08,590
to develop thought

different methods

43

00:02:08,590 --> 00:02:13,770
for all detecting any rapid
depressurization station

44

00:02:13,770 --> 00:02:16,600
modules, will doing
some preparation work

45

00:02:16,600 --> 00:02:20,470
for his upcoming departure from
the International Space Station,

46

00:02:20,470 --> 00:02:26,020
when he undocks alongside
Kuipers and Pettit on July 1.

47

00:02:26,020 --> 00:02:28,080
Meanwhile, Gennady
Padalka has been steeped

48

00:02:28,080 --> 00:02:31,480
in experiment work today,
working with the Plasma Crystal,

49

00:02:31,480 --> 00:02:33,990
which is a study that
looks at the growth

50

00:02:33,990 --> 00:02:38,010
of different plasma dust
structures in zero gravity.

51

00:02:38,010 --> 00:02:41,610
He is also working with the
Konstanta experiment which one

52

00:02:41,610 --> 00:02:43,880
of the biological

research projects

53

00:02:43,880 --> 00:02:45,850

over on the Russian
side which looks

54

00:02:45,850 --> 00:02:50,240

to study spaceflight factors
like radiation in zero gravity

55

00:02:50,240 --> 00:02:53,410

and effect that they have
five different enzymes.

56

00:02:53,410 --> 00:02:56,800

Our third Russian cosmonaut
Sergei Revin was taking photos

57

00:02:56,800 --> 00:02:59,620

for that Plasma Crystal
experiment, and also working

58

00:02:59,620 --> 00:03:02,060

on that BAR experiment
alongside Kononenko.

59

00:03:02,060 --> 00:03:04,110

He has also been
involved in setting

60

00:03:04,110 --> 00:03:06,030

up the Russian Matryoshka
experiment,

61

00:03:06,030 --> 00:03:08,600

named after the nested dolls

62

00:03:08,600 --> 00:03:10,680

that are fairly famous
from Russia.

63

00:03:10,680 --> 00:03:13,180

It's a radiation research
project that looks

64

00:03:13,180 --> 00:03:15,140

to study the different doses

65

00:03:15,140 --> 00:03:18,070

that the astronauts
bodies are subjected

66

00:03:18,070 --> 00:03:20,850

to during their long-duration
spaceflights.

67

00:03:20,850 --> 00:03:23,180

Over on the U.S. segment,

68

00:03:23,180 --> 00:03:26,760

NASA astronaut Joe Acaba has
been reviewing some procedures

69

00:03:26,760 --> 00:03:29,610

for his upcoming
in-flight maintenance task

70

00:03:29,610 --> 00:03:31,750

of the thermal control system.

71

00:03:31,750 --> 00:03:35,070

Also doing some preparation work
inside the Japanese Experiment

72

00:03:35,070 --> 00:03:38,700

Module setting up the fluid
system servicers fluid control

73

00:03:38,700 --> 00:03:42,530

pump assembly, that is in
advance of a coolant refill

74

00:03:42,530 --> 00:03:44,700

that he will be doing
later this week.

75

00:03:44,700 --> 00:03:47,020

And throughout the hour
today, he will be working

76

00:03:47,020 --> 00:03:49,970

on the BASS experiment, and we
will be getting plenty of video

77

00:03:49,970 --> 00:03:53,350

down as he works with payload
controllers in Cleveland.

78

00:03:53,350 --> 00:03:55,370

BASS standing for
Burning and Suppression

79

00:03:55,370 --> 00:03:59,020

of Solids its an investigation
examines the burning

80

00:03:59,020 --> 00:04:01,740

and extinction characteristics
of a wide variety

81

00:04:01,740 --> 00:04:04,740

of fuel samples in microgravity.

82

00:04:04,740 --> 00:04:08,210

Meanwhile European astronaut
Andre Kuipers is doing quite a

83

00:04:08,210 --> 00:04:10,310

few ultrasound scans today.

84

00:04:10,310 --> 00:04:12,340

Working with the
Integrated Cardiovascular

85

00:04:12,340 --> 00:04:15,420

which he will be doing
some ultrasound scans

86

00:04:15,420 --> 00:04:19,140

of the heart muscle on both
himself and Don Pettit.

87

00:04:19,140 --> 00:04:21,740

Also, working with the Vessel
Imaging experiment which looks

88

00:04:21,740 --> 00:04:24,730

to study the different
properties

89

00:04:24,730 --> 00:04:27,740

of blood vessel walls
inside the astronaut

90

00:04:27,740 --> 00:04:29,890

and how they change over time.

91

00:04:29,890 --> 00:04:33,440

He also participated in a
public affairs event with ESA

92

00:04:33,440 --> 00:04:36,080

and Euronews on the ground.

93

00:04:36,080 --> 00:04:39,510

And our final Expedition
31 crew member,

94

00:04:39,510 --> 00:04:41,880

NASA astronaut Dan
Pettit, has been working

95

00:04:41,880 --> 00:04:45,950

on the station's Environmental
Health System, doing a removal

96

00:04:45,950 --> 00:04:48,260

and replacement of the TOCA .

97

00:04:48,260 --> 00:04:52,270

He will also be packing
up a few items for return

98

00:04:52,270 --> 00:04:55,650

on their Soyuz craft,
coming up in July.

99

00:04:55,650 --> 00:04:56,870

As mentioned, he was working

100

00:04:56,870 --> 00:04:58,510

with that Integrated
Cardiovascular,

101

00:04:58,510 --> 00:05:02,380

doing some ultrasound scans
alongside Andre Kuipers.

102

00:05:02,380 --> 00:05:06,400

They will wrap up their day with
a daily planning conference,