

EXPEDITION 32



**JOE ACABA**  
Flight Engineer

1  
00:00:01,656 --> 00:00:03,376  
This is Mission Control,  
Houston.

2  
00:00:03,866 --> 00:00:07,296  
The International Space Station  
crew now has supply ships

3  
00:00:07,296 --> 00:00:11,106  
from three different nations  
at their doors and are syncing

4  
00:00:11,106 --> 00:00:14,276  
up their sleep shifts as they  
get ready to open the hatches

5  
00:00:14,276 --> 00:00:15,716  
on a new load of supplies.

6  
00:00:16,486 --> 00:00:21,296  
A new Russian cargo vehicle,  
the 48th Progress cargo ship,

7  
00:00:21,656 --> 00:00:24,736  
arrived at the space station's  
Pirs docking compartment

8  
00:00:24,736 --> 00:00:28,276  
Wednesday night, just six  
hours after its launch

9  
00:00:28,276 --> 00:00:30,346  
from the Baikonur  
Cosmodrome in Kazakhstan.

10  
00:00:30,346 --> 00:00:34,066  
It was the first ever same-day  
rendezvous flight profile.

11

00:00:34,586 --> 00:00:36,946

It's being tested  
for a potential use

12

00:00:36,946 --> 00:00:38,626

on future Soyuz missions.

13

00:00:39,186 --> 00:00:41,576

The Russian crew  
members and the American

14

00:00:41,576 --> 00:00:45,916

and Japanese trio have been  
on different sleep shifts

15

00:00:45,916 --> 00:00:48,786

since yesterday in order  
to support the arrival

16

00:00:48,786 --> 00:00:51,296

of the Progress vehicle  
on Wednesday evening.

17

00:00:51,836 --> 00:00:54,916

Flight Engineers Joe  
Acaba, Suni Williams

18

00:00:55,036 --> 00:00:58,266

and Aki Hoshide have been awake

19

00:00:58,266 --> 00:01:01,686

since 2:30 a.m. Houston  
time on Wednesday.

20

00:01:03,206 --> 00:01:07,726

Acaba and Williams had their  
morning exercise sessions while

21

00:01:07,886 --> 00:01:11,776

Hoshide set up equipment

for the VO2Max experiment,

22

00:01:12,186 --> 00:01:16,406

and then conducted exercise while having his oxygen uptake

23

00:01:16,406 --> 00:01:20,626

measured in order to try to find out how it differs for a person

24

00:01:20,626 --> 00:01:22,886

on orbit as opposed to a person on Earth.

25

00:01:23,936 --> 00:01:28,326

Hoshide also had his weekly tag up with the management

26

00:01:28,326 --> 00:01:30,866

of the Japan Aerospace Exploration Agency

27

00:01:31,316 --> 00:01:32,656

and conducted maintenance

28

00:01:32,656 --> 00:01:35,006

on the space station's Waste Hygiene Compartment.

29

00:01:35,496 --> 00:01:38,996

Acaba filled out his morning with station maintenance,

30

00:01:39,126 --> 00:01:41,656

and then work with a vascular experiment

31

00:01:42,066 --> 00:01:44,186

which is a Canadian experiment looking

32

00:01:44,186 --> 00:01:47,416  
into the mechanisms  
responsible for changes

33

00:01:47,416 --> 00:01:50,426  
in a person's blood pressure,  
particularly those changes

34

00:01:50,426 --> 00:01:53,536  
that can occur in people  
on Earth as they age.

35

00:01:54,076 --> 00:01:57,546  
Acaba spent time during his  
afternoon joining Hoshide

36

00:01:58,056 --> 00:02:01,186  
on deploying Portable  
Breathing Apparati

37

00:02:01,426 --> 00:02:02,956  
around the space station.

38

00:02:03,656 --> 00:02:07,616  
For Suni Williams, her morning  
science work was with the BCAT,

39

00:02:07,866 --> 00:02:11,776  
a physical sciences  
experiment into critical points

40

00:02:11,776 --> 00:02:13,926  
of binary colloidal alloys.

41

00:02:14,436 --> 00:02:17,356  
The results of that could  
lead to prolonged shelflife

42

00:02:17,356 --> 00:02:20,526  
of everyday products  
and long-term could lead

43

00:02:20,526 --> 00:02:24,186  
to development of new materials  
for electronics and medicine.

44

00:02:24,926 --> 00:02:27,626  
Williams had time  
in her afternoon

45

00:02:27,626 --> 00:02:29,296  
for treadmill exercise,

46

00:02:29,726 --> 00:02:32,606  
conducted today wearing  
a special set of markers

47

00:02:32,776 --> 00:02:35,366  
that help biomechanical  
engineers see

48

00:02:35,366 --> 00:02:37,386  
that the exercise is  
being done properly

49

00:02:37,646 --> 00:02:39,446  
so that crew members  
get the most

50

00:02:39,446 --> 00:02:40,696  
out of the work that they do.

51

00:02:41,426 --> 00:02:45,006  
Space station Commander Gennady  
Padalka and Flight Engineers

52

00:02:45,006 --> 00:02:47,996  
and Sergei Revin and Yuri

Malenchenko had a late

53

00:02:48,036 --> 00:02:48,826  
wake-up call.

54

00:02:48,916 --> 00:02:51,496  
It didn't come until  
eight o'clock Houston time

55

00:02:51,496 --> 00:02:52,296  
Wednesday morning.

56

00:02:52,786 --> 00:02:55,896  
They're to begin making  
leak checks of the interface

57

00:02:55,936 --> 00:02:59,306  
between the Progress vehicle and  
the Pirs docking compartment.

58

00:02:59,896 --> 00:03:03,966  
Padalka and Malenchenko will  
work on opening the several sets

59

00:03:03,966 --> 00:03:06,036  
of hatches between  
the two modules

60

00:03:06,376 --> 00:03:09,906  
at about noon Central time,  
while Revin will be in charge

61

00:03:09,906 --> 00:03:13,106  
of the air sampling as  
those hatches are open.

62

00:03:13,366 --> 00:03:16,146  
He'll also be seeing to other  
Russian systems maintenance

63

00:03:16,146 --> 00:03:17,056  
on board the station.

64

00:03:17,896 --> 00:03:21,046  
All six crew members due to  
be back on the same schedule

65

00:03:21,046 --> 00:03:24,666  
for the Thursday afternoon  
planning conference as well

66

00:03:24,666 --> 00:03:27,486  
as the weekly tag up with  
NASA Astronaut Office.

67

00:03:28,046 --> 00:03:31,546  
They all will be looking ahead  
to the schedule for Friday,

68

00:03:31,666 --> 00:03:34,976  
which includes unloading  
of the Progress vehicle.

69

00:03:35,456 --> 00:03:40,326  
Plus Acaba and Hoshide,  
they'll be training

70

00:03:40,326 --> 00:03:45,616  
for robotic arm operations when  
they will be using the Canadarm2

71

00:03:45,916 --> 00:03:48,546  
as well as the Japanese  
robotic arm

72

00:03:48,866 --> 00:03:52,606  
to remove an unpressurized  
cargo pallet

73

00:03:52,876 --> 00:03:55,876  
from the H-II Transfer  
Vehicle and move it

74

00:03:55,986 --> 00:03:58,526  
onto the Kibo Exposed Facility.