



1  
00:00:01,860 --> 00:00:03,420  
Good morning and welcome

2  
00:00:03,420 --> 00:00:06,040  
to today's International  
Space Station update.

3  
00:00:06,040 --> 00:00:08,380  
You're joining us here inside  
of the flight control room

4  
00:00:08,380 --> 00:00:11,200  
in Houston Texas where the  
Orbit 2 team is currently

5  
00:00:11,200 --> 00:00:13,720  
on console monitoring all  
the systems onboard the

6  
00:00:13,720 --> 00:00:15,870  
orbiting laboratory.

7  
00:00:15,870 --> 00:00:19,150  
They're being led today by  
flight director Ed Van Cise,

8  
00:00:19,150 --> 00:00:21,070  
shown there in the red  
shirt, and joining him

9  
00:00:21,070 --> 00:00:25,130  
at the Capcom position is NASA  
astronaut Sandy Magnus serving

10  
00:00:25,130 --> 00:00:27,780  
as the communication link  
between teams here on the ground

11  
00:00:27,780 --> 00:00:30,530

in Houston and the  
astronauts up in space.

12

00:00:30,530 --> 00:00:33,480

And those astronauts  
right now are the crew

13

00:00:33,480 --> 00:00:35,820

of Expedition 32 being led

14

00:00:35,820 --> 00:00:38,880

by veteran Russian  
cosmonaut Gennady Padalka

15

00:00:38,880 --> 00:00:41,320

in the front row  
on the right there.

16

00:00:41,320 --> 00:00:43,610

Joining him also starting

17

00:00:43,610 --> 00:00:46,560

on the left is Japan Aerospace  
Exploration [Agency] astronaut

18

00:00:46,560 --> 00:00:47,280

Aki Hoshide.

19

00:00:47,280 --> 00:00:50,810

There in the front Russian  
cosmonaut Yuri Malenchenko

20

00:00:50,810 --> 00:00:54,420

and then moving along across  
the right NASA astronaut Suni

21

00:00:54,420 --> 00:00:57,200

Williams, another NASA  
astronaut Joe Acaba,

22

00:00:57,200 --> 00:00:59,850

all the way in the back right  
there is our third Russian

23

00:00:59,850 --> 00:01:01,720

cosmonaut Sergei Revin.

24

00:01:01,720 --> 00:01:04,620

Major tasks onboard the  
station including quite a bit

25

00:01:04,620 --> 00:01:06,170

of robotic activity.

26

00:01:06,170 --> 00:01:10,050

Ground teams today used space  
station's robotic manipulator

27

00:01:10,050 --> 00:01:13,170

arm to extract the  
exposed pallet

28

00:01:13,170 --> 00:01:16,090

out of the Japanese HTV vehicle.

29

00:01:16,090 --> 00:01:19,640

HTV being a unmanned  
cargo craft which docked

30

00:01:19,640 --> 00:01:21,630

with the International Space  
Station just a little bit

31

00:01:21,630 --> 00:01:25,970

over a week ago on  
July 27 carrying a haul

32

00:01:25,970 --> 00:01:28,310

of both pressurized

and unpressurized cargo

33

00:01:28,310 --> 00:01:30,210  
to the International  
Space Station.

34

00:01:30,210 --> 00:01:31,500  
This external pallet coming

35

00:01:31,500 --> 00:01:35,640  
out of the unpressurized  
system being taken out by teams

36

00:01:35,640 --> 00:01:38,260  
on the ground with the station  
robotic arm and handed off

37

00:01:38,260 --> 00:01:42,090  
to the Japanese experiment  
module remote manipulator system

38

00:01:42,090 --> 00:01:44,210  
or the JEM RMS.

39

00:01:44,210 --> 00:01:47,980  
And following this handoff  
astronauts Aki Hoshide

40

00:01:47,980 --> 00:01:51,280  
and Joe Acaba then grappled and  
installed the external pallet

41

00:01:51,280 --> 00:01:53,700  
on the JEM exposed facility.

42

00:01:53,700 --> 00:01:55,830  
Exposed pallet on  
the outboard portion

43

00:01:55,830 --> 00:01:57,450  
of the Japanese experiment  
module

44  
00:01:57,450 --> 00:02:00,660  
which allows different payloads  
to be exposed to the vacuum

45  
00:02:00,660 --> 00:02:03,780  
and radiation environment  
of deep space.

46  
00:02:03,780 --> 00:02:05,510  
Aside from that work going

47  
00:02:05,510 --> 00:02:08,310  
on throughout the day today  
Joe Acaba is also working

48  
00:02:08,310 --> 00:02:12,790  
with the Binary Colloidal  
Alloy Test also known as BCAT

49  
00:02:12,790 --> 00:02:14,160  
which is an experiment  
that looks

50  
00:02:14,160 --> 00:02:17,980  
to study particles known as  
colloids as they're suspended

51  
00:02:17,980 --> 00:02:22,610  
in different plasmas to help  
offer a few more insights

52  
00:02:22,610 --> 00:02:25,120  
into basic particle  
physics taking advantage

53  
00:02:25,120 --> 00:02:27,440

of that microgravity environment  
onboard the International

54

00:02:27,440 --> 00:02:28,950  
Space Station.

55

00:02:28,950 --> 00:02:30,230  
Acaba's partner in all

56

00:02:30,230 --> 00:02:35,440  
that robotic activity earlier  
today Aki Hoshide is getting

57

00:02:35,440 --> 00:02:37,400  
involved in a Japan Aerospace

58

00:02:37,400 --> 00:02:40,340  
and Exploration Agency  
biological experiment,

59

00:02:40,340 --> 00:02:43,680  
starting up some measurements  
for Biorhythms which looks

60

00:02:43,680 --> 00:02:47,040  
to examine the effect of  
long-term microgravity exposure

61

00:02:47,040 --> 00:02:49,030  
on automatic cardiac functions

62

00:02:49,030 --> 00:02:52,110  
and uses 24-hour  
electrocardiogram

63

00:02:52,110 --> 00:02:54,820  
on these ISS crew members.

64

00:02:54,820 --> 00:02:59,740

The third USOS crew member Suni Williams has been setting up

65

00:02:59,740 --> 00:03:01,820

and charging a couple of batteries

66

00:03:01,820 --> 00:03:03,280

for different power tools.

67

00:03:03,280 --> 00:03:04,840

They're Makita batteries

68

00:03:04,840 --> 00:03:08,080

for some upcoming Integrated Cardiovascular monitoring she'll

69

00:03:08,080 --> 00:03:09,510

be doing throughout the week.

70

00:03:09,510 --> 00:03:13,280

Integrated Cardiovascular a US study similar

71

00:03:13,280 --> 00:03:16,360

to that Biorhythms JAXA experiment

72

00:03:16,360 --> 00:03:20,480

that Aki Hoshide's working which looks to study the atrophy

73

00:03:20,480 --> 00:03:22,730

or the weakening of the heart muscle during

74

00:03:22,730 --> 00:03:24,710

long-duration spaceflight.

75

00:03:24,710 --> 00:03:28,040

She'll also be working to  
set up a modification kit,

76

00:03:28,040 --> 00:03:31,860

installing that on the  
station's recycling tank.

77

00:03:31,860 --> 00:03:34,200

Meanwhile our three Russian  
cosmonauts starting off

78

00:03:34,200 --> 00:03:37,610

with commander Gennady  
Padalka who's inside

79

00:03:37,610 --> 00:03:39,170

of the Russian service module

80

00:03:39,170 --> 00:03:43,280

or Zvezda installing  
the Kurs-P antenna,

81

00:03:43,280 --> 00:03:45,750

the passive manual  
antenna switch.

82

00:03:45,750 --> 00:03:49,990

The Kurs-P is the receiving end  
of that automated docking system

83

00:03:49,990 --> 00:03:52,350

which controls the  
Progress spacecraft

84

00:03:52,350 --> 00:03:55,830

on their final approach to the  
International Space Station.

85

00:03:55,830 --> 00:03:57,610

Aside from setting  
that switch today,

86

00:03:57,610 --> 00:04:00,010

he'll be doing some  
cargo transfer

87

00:04:00,010 --> 00:04:01,730

from the 48 Progress vehicle

88

00:04:01,730 --> 00:04:04,610

which docked just a  
little over week ago.

89

00:04:04,610 --> 00:04:08,380

He'll also be updating the  
station's inventory management

90

00:04:08,380 --> 00:04:11,090

system along with Yuri  
Malenchenko who was going

91

00:04:11,090 --> 00:04:13,930

to be giving him a hand  
with that cargo transfer

92

00:04:13,930 --> 00:04:15,980

from the 48 Progress vehicle.

93

00:04:15,980 --> 00:04:18,070

And he will also be doing  
some leak checks on ATV,

94

00:04:18,070 --> 00:04:21,120

which is the third unmanned  
cargo craft currently docked

95

00:04:21,120 --> 00:04:22,200

to the station.

96

00:04:22,200 --> 00:04:24,630

Quite a bit of visiting  
vehicles interacting

97

00:04:24,630 --> 00:04:26,800

with this station  
complex right now.

98

00:04:26,800 --> 00:04:30,560

ATV 3 all the way the back  
there on the aft end of Zvezda.

99

00:04:30,560 --> 00:04:31,740

It's been attached

100

00:04:31,740 --> 00:04:33,670

to the station the  
longest out of the three.

101

00:04:33,670 --> 00:04:36,150

The three unmanned craft  
ATV, Progress and HTV.

102

00:04:36,150 --> 00:04:40,040

Also he'll be doing a couple  
of leak checks on that

103

00:04:40,040 --> 00:04:42,980

with its undocking  
scheduled in the near future.

104

00:04:42,980 --> 00:04:46,090

Then our third and final Russian  
cosmonaut Sergei Revin is going

105

00:04:46,090 --> 00:04:47,800

be doing some routine  
replacements

106

00:04:47,800 --> 00:04:49,330  
on the Russian toilet system

107

00:04:49,330 --> 00:04:51,130  
and also replacing  
a few lights inside