



1  
00:00:00,506 --> 00:00:13,866  
[ Music ]

2  
00:00:14,366 --> 00:00:16,656  
>> Good day from Mission  
Control Houston and welcome

3  
00:00:16,656 --> 00:00:17,826  
to Space Station Live.

4  
00:00:18,396 --> 00:00:19,406  
You're looking now inside

5  
00:00:19,406 --> 00:00:21,746  
of the International Space  
Station Flight Control Room,

6  
00:00:22,056 --> 00:00:24,606  
located at the Johnson Space  
Center in Houston, Texas.

7  
00:00:25,776 --> 00:00:28,636  
Inside the room right now,  
the Orbit 2 Team on console,

8  
00:00:29,026 --> 00:00:31,686  
taking a quick break while  
we wait for satellite Hanover

9  
00:00:31,756 --> 00:00:34,516  
to regain communication with  
the International Space Station;

10  
00:00:34,996 --> 00:00:36,096  
in the room a little bit later,

11  
00:00:36,096 --> 00:00:38,576  
you'll see they are  
being led today

12

00:00:38,576 --> 00:00:40,556  
by Flight Director  
Tomas Gonzalez-Torres

13

00:00:41,006 --> 00:00:43,126  
and at the Capcom position  
this morning will be

14

00:00:43,126 --> 00:00:43,786  
Mark [inaudible].

15

00:00:45,396 --> 00:00:48,096  
The crew onboard the  
International Space Station,

16

00:00:48,096 --> 00:00:52,466  
Expedition 38, led by  
Russian Cosmonaut Oleg Kotov;

17

00:00:53,146 --> 00:00:55,786  
you can see the six man  
International crew here;

18

00:00:56,626 --> 00:00:58,396  
three of which are on  
the left side there,

19

00:00:58,396 --> 00:01:01,196  
the three newer crewmembers  
to launch to the station.

20

00:01:01,196 --> 00:01:05,106  
They are Russian Mikhail Tyurin,  
NASA Astronaut Rick Mastracchio

21

00:01:05,106 --> 00:01:08,406  
and Japanese Astronaut  
Koichi Wakata and then

22

00:01:08,406 --> 00:01:11,266

on the right side we have  
Russian Cosmonaut Sergey

23

00:01:11,266 --> 00:01:14,026

Ryazansky, Commander Oleg  
Kotov there in the front

24

00:01:14,026 --> 00:01:14,986

and all the way on the right,

25

00:01:15,036 --> 00:01:17,036

another NASA Astronaut  
Mike Hopkins.

26

00:01:18,636 --> 00:01:20,176

Onboard the International  
Space Station,

27

00:01:20,176 --> 00:01:21,826

the crew starting  
off a busy week;

28

00:01:22,196 --> 00:01:26,176

Commander Oleg Kotov began  
his morning affixing a number

29

00:01:26,176 --> 00:01:29,646

of sensors to his body, as  
he begins a 24 hour series

30

00:01:30,066 --> 00:01:32,826

of recording using an  
electrocardiogram onboard the

31

00:01:32,826 --> 00:01:35,476

International Space Station;  
the astronaut serving

32

00:01:35,476 --> 00:01:37,866  
as test subjects  
for a wide array

33  
00:01:37,866 --> 00:01:41,486  
of biological experiments during  
their expedition spaceflights.

34  
00:01:41,896 --> 00:01:45,126  
He'll also be doing some  
scheduled routine maintenance

35  
00:01:45,126 --> 00:01:46,766  
throughout the Russian  
service module,

36  
00:01:47,046 --> 00:01:48,966  
also known as [inaudible]  
working on some

37  
00:01:48,966 --> 00:01:51,766  
of the ventilation systems  
and also the intercoms.

38  
00:01:52,816 --> 00:01:56,046  
Meanwhile, as fellow Russian  
Cosmonaut Sergey Ryazansky will

39  
00:01:56,046 --> 00:01:59,306  
be doing some plug-in checkouts  
throughout the entire Russian

40  
00:01:59,306 --> 00:02:03,056  
segment today, also doing some  
acoustic sound level testing,

41  
00:02:03,406 --> 00:02:07,196  
as they test the noise levels  
throughout various station

42

00:02:07,196 --> 00:02:09,896  
structures to make sure that  
they're at healthy levels

43  
00:02:09,896 --> 00:02:12,576  
for the crews onboard  
with all the equipment

44  
00:02:12,576 --> 00:02:16,486  
and other devices running pretty  
much nonstop up there for them.

45  
00:02:17,186 --> 00:02:21,076  
Meanwhile NASA Astronaut  
Mike Hopkins is operating the

46  
00:02:21,076 --> 00:02:23,406  
station's ultrasound  
system onboard today

47  
00:02:23,956 --> 00:02:27,116  
for an ongoing study  
known as Cardio Ox,

48  
00:02:27,426 --> 00:02:29,426  
he'll be doing the  
ultrasound scans

49  
00:02:29,426 --> 00:02:35,046  
on JAXA Astronaut Koichi  
Wakata; Cardio Ox looking

50  
00:02:35,046 --> 00:02:39,206  
to provide a better  
understanding for researchers

51  
00:02:39,206 --> 00:02:40,116  
down here on the ground

52  
00:02:40,116 --> 00:02:42,876

of any space related  
cardiovascular disease risk.

53

00:02:43,316 --> 00:02:47,316

The study looking to identify  
of the potential indicators

54

00:02:47,316 --> 00:02:49,926

of increased health  
risks both during

55

00:02:49,926 --> 00:02:51,906

and after the long  
duration spaceflight

56

00:02:52,026 --> 00:02:53,636

for all of these astronauts.

57

00:02:54,206 --> 00:02:56,826

Hopkins also today  
working on the waste

58

00:02:56,826 --> 00:03:01,016

and hygiene compartment; he  
was replacing an air filter.

59

00:03:01,116 --> 00:03:03,056

You can see a quick  
look at that here.

60

00:03:03,436 --> 00:03:05,716

The air filter had been  
passed its lifetime

61

00:03:05,716 --> 00:03:08,686

so he was doing a quick  
removal and replacement work

62

00:03:08,686 --> 00:03:12,506

on that today and then towards

the end of his day today,

63

00:03:12,506 --> 00:03:14,126  
he'll be doing some leak checks

64

00:03:14,126 --> 00:03:16,566  
on the Japanese experiment  
module's airlock,

65

00:03:16,966 --> 00:03:19,726  
following a depressurization  
by flight controllers

66

00:03:19,726 --> 00:03:22,536  
and Japan Scuba Flight  
Control Center;

67

00:03:23,896 --> 00:03:27,626  
that airlock being depressurized  
in [inaudible] in advance

68

00:03:27,626 --> 00:03:29,626  
of tomorrow's deployment  
of three

69

00:03:29,626 --> 00:03:32,726  
of the four cube sat  
nano-satellites onboard the

70

00:03:32,726 --> 00:03:35,386  
International Space Station;  
again, all that taking

71

00:03:35,386 --> 00:03:37,236  
out of the Japanese  
experiment module.

72

00:03:38,596 --> 00:03:42,706  
Third Russian Cosmonaut Mikhail  
Tyurin doing some software

73

00:03:42,706 --> 00:03:45,286  
upgrades on various Russian  
segment computers today,

74

00:03:45,726 --> 00:03:48,386  
also doing a checkout  
of the [inaudible]

75

00:03:48,386 --> 00:03:49,936  
and relocation simulator.

76

00:03:50,246 --> 00:03:53,906  
The [inaudible] teleoperator  
control module panel you can see

77

00:03:53,906 --> 00:03:57,846  
there used for manual  
control of visiting vehicles

78

00:03:57,846 --> 00:04:01,426  
like the Progress, giving the  
cosmonauts onboard the ability

79

00:04:01,426 --> 00:04:05,356  
to intervene and take manual  
control should their automated

80

00:04:05,356 --> 00:04:08,536  
course system get any  
hiccups or fail for any reason

81

00:04:08,946 --> 00:04:12,986  
so Tyurin doing a checkout of  
the simulator located onboard,

82

00:04:13,136 --> 00:04:16,216  
giving the cosmonauts the  
ability to hone their skills

83

00:04:16,216 --> 00:04:18,816

and prepare for any  
visiting vehicles.

84

00:04:19,366 --> 00:04:23,106

Meanwhile NASA Astronaut Rick  
Mastracchio right upon waking

85

00:04:23,106 --> 00:04:26,266

up today, took a few saliva  
samples and stored them inside

86

00:04:26,266 --> 00:04:29,146

of [inaudible] the minus 80  
degree laboratory freezer,

87

00:04:29,146 --> 00:04:30,086

onboard the station.

88

00:04:30,696 --> 00:04:33,816

He'll also be working  
with some of the EVA

89

00:04:33,816 --> 00:04:37,576

or spacewalking tools today  
installing a torque analyzer kit

90

00:04:37,846 --> 00:04:40,966

on what's known as the pistol  
grip tool, kind of the drill

91

00:04:40,966 --> 00:04:43,516

that the astronauts  
use their spacewalks.

92

00:04:43,856 --> 00:04:46,656

He'll be installing that  
analyzer kit which is able

93

00:04:46,656 --> 00:04:48,876  
to gather data for  
further analysis

94

00:04:48,876 --> 00:04:49,896  
down here on the ground.

95

00:04:51,206 --> 00:04:55,466  
The final Expedition 38  
crewmember Koichi Wakata, again,

96

00:04:55,466 --> 00:04:59,106  
served as a subject for  
that Cardio Ox scan earlier

97

00:04:59,106 --> 00:04:59,786  
this morning.

98

00:05:00,216 --> 00:05:05,146  
The scan being conducted  
by Mike Hopkins;

99

00:05:05,146 --> 00:05:08,146  
you can see Wakata inside of  
the Destiny Laboratory here,

100

00:05:08,876 --> 00:05:11,736  
setting up for that  
scan earlier today.

101

00:05:12,276 --> 00:05:15,366  
He'll also be setting up and  
performing a few checkouts

102

00:05:15,366 --> 00:05:18,356  
on a new 4KHD camera  
that's been flown

103

00:05:18,356 --> 00:05:19,776  
to the International

Space Station;

104

00:05:20,156 --> 00:05:23,126

it will be used throughout

Wakata's time onboard and beyond

105

00:05:23,476 --> 00:05:26,306

to record super high  
resolution earth views

106

00:05:26,566 --> 00:05:28,606

and also various  
celestial scenes

107

00:05:28,726 --> 00:05:32,086

for the Japanese Aerospace  
Exploration Agency,

108

00:05:32,516 --> 00:05:35,296

among those including  
the [inaudible] Transit,