1
00:00:00,506 --> 00:00:14,946
[Music]

2
00:00:15,446 --> 00:00:19,166
>> It's Tuesday, November
19th, 2013 and welcome

3
00:00:19,226 --> 00:00:20,456
to Space Station Live.

4
00:00:21,076 --> 00:00:21,856
Looking down now

5
00:00:21,856 --> 00:00:24,166
at the International Space
Station flight control room

6
00:00:24,606 --> 00:00:26,626
located at the Johnson
Space Center at Houston,

7
00:00:26,626 --> 00:00:29,626
Texas at the Orbit 2
Team controlling systems

8
00:00:29,626 --> 00:00:31,286
on board the orbiting
laboratory.

9
00:00:31,926 --> 00:00:33,286
The team right now is being led

10
00:00:33,376 --> 00:00:35,876
by flight director Ed Van
Cise there on the right.

11
00:00:36,276 --> 00:00:38,276
Joining him at the cab
composition serving

12
00:00:38,276 --> 00:00:41,086
as communication link between
astronauts in space and those

13
00:00:41,086 --> 00:00:43,836
down here on the ground
is David Saint-Jacques.

14
00:00:44,286 --> 00:00:47,816
And those astronauts in
space right now are the crew

15
00:00:47,816 --> 00:00:53,156
of Expedition 38, a six man crew

16
00:00:53,266 --> 00:00:55,066
from countries all
across the globe.

17
00:00:55,596 --> 00:00:58,366
Starting across the back row
there is Russian cosmonaut,

18
00:00:58,366 --> 00:01:00,806
from the left Russian
cosmonaut Mikhail Tyurin,

19
00:01:01,476 --> 00:01:03,766
then NASA astronaut
Rick Mastracchio,

20
00:01:04,176 --> 00:01:06,166
Russian cosmonaut
Sergei Ryazansky

21
00:01:06,166 --> 00:01:08,626
and another NASA astronaut
Mike Hopkins all the way

22
00:01:08,626 --> 00:01:09,066
on the right.

23
00:01:09,516 --> 00:01:12,586
In the front row, on the left,
JAXA astronaut Koichi Wakata

24
00:01:13,066 --> 00:01:15,696
and on the right there,
current Space Station Commander

25
00:01:15,696 --> 00:01:16,706
Oleg Kotov.

26
00:01:18,576 --> 00:01:21,646
On board the station the
crew engaged in a variety

27
00:01:21,646 --> 00:01:25,406
of science experiments and
maintenance work today beginning

28
00:01:25,406 --> 00:01:27,886
with Expedition 38
Commander Oleg Kotov

29
00:01:28,336 --> 00:01:30,266
who earlier this
morning was working

30
00:01:30,266 --> 00:01:32,666
with two different Russian
experiments the first

31
00:01:32,666 --> 00:01:35,316
of which the Motocard
experiments which looks

32
00:01:35,316 --> 00:01:38,126

to study the nature of
locomotion disturbances

33
00:01:38,126 --> 00:01:39,476
in long-term space flights.

34
00:01:39,816 --> 00:01:42,276
The astronauts strapped
into the treadmill for this

35
00:01:42,276 --> 00:01:44,416
and are assisted by
another Russian on board.

36
00:01:45,046 --> 00:01:47,356
Aside from that Oleg
Kotov engaged

37
00:01:47,356 --> 00:01:51,206
in the Russian Seiner
experiment using imagery devices

38
00:01:51,206 --> 00:01:53,666
on board the International
Space Station to search

39
00:01:53,666 --> 00:01:57,646
for bio-productive areas
of the world's oceans both

40
00:01:57,646 --> 00:02:00,746
for scientific research and
for commercial fishing efforts.

41
00:02:02,076 --> 00:02:05,946
Meanwhile Russian cosmonaut
Sergei Ryazansky has been tasked

42
00:02:05,946 --> 00:02:07,146
with replacing an a number

43
00:02:07,146 --> 00:02:10,086
of fans throughout the
Russian segment today taking

44
00:02:10,086 --> 00:02:11,686
out older models
and replacing them

45
00:02:11,686 --> 00:02:14,486
with newer, low noise modules.

46
00:02:15,346 --> 00:02:18,506
Following that he'll be doing
some noise level measurements,

47
00:02:18,506 --> 00:02:20,826
some acoustic measurements
throughout the Russian segment

48
00:02:21,676 --> 00:02:23,776
to monitor for our
crew health settings.

49
00:02:24,286 --> 00:02:26,336
Aside from that he'll
also be working today

50
00:02:26,336 --> 00:02:29,536
in doing some crew medical
officer proficiency training.

51
00:02:29,906 --> 00:02:32,506
Each of the astronauts on
board getting some training

52
00:02:32,766 --> 00:02:36,076
in emergency medical
care for themselves

53
00:02:36,076 --> 00:02:37,316
and their crewmates on board.

54
00:02:38,936 --> 00:02:42,946
Meanwhile NASA astronaut Mike
Hopkins dedicated a good portion

55
00:02:42,946 --> 00:02:47,856
of his day today to some
leak tests on a space suit

56
00:02:47,856 --> 00:02:49,686
on board the International
Space Station.

57
00:02:50,036 --> 00:02:53,386
The one that he was focusing
on today has been the subject

58
00:02:53,386 --> 00:02:56,376
of a variety of tests and repair
work over the past few months.

59
00:02:56,766 --> 00:03:03,156
It was worn by ESA
astronaut Luca Parmitano

60
00:03:03,156 --> 00:03:05,736
who recently departed from the
International Space Station

61
00:03:06,026 --> 00:03:09,676
during a July 16 spacewalk
back over the summer.

62
00:03:09,676 --> 00:03:11,276
The suit developed a water leak

63
00:03:11,806 --> 00:03:14,966

and over the past few months
astronauts on board and teams

64
00:03:14,966 --> 00:03:18,506
on the ground have worked
through to figure out the source

65
00:03:18,506 --> 00:03:22,476
of the leak and conduct a
variety of repairs and analysis

66
00:03:22,476 --> 00:03:26,086
on the suit and today is
one of the final steps

67
00:03:26,786 --> 00:03:29,856
in certifying the suit
for eventual reuse

68
00:03:29,856 --> 00:03:32,756
on board the International Space
Station returning it to service

69
00:03:33,096 --> 00:03:35,796
to so Hopkins powering
up the suit and setting

70
00:03:36,166 --> 00:03:38,676
through a number of
different leak checks

71
00:03:38,676 --> 00:03:42,586
and other tests again,
all to certify

72
00:03:42,586 --> 00:03:44,726
that the problem has gone away

73
00:03:44,726 --> 00:03:48,786
and the suit will soon be

able to return to service.

74
00:03:50,016 --> 00:03:53,916
Aside from that suit work
today Hopkins on task

75
00:03:53,916 --> 00:03:57,306
to take some photos of
the micro-satellites

76
00:03:57,306 --> 00:03:58,896
that were deployed
earlier this morning,

77
00:03:59,346 --> 00:04:00,966
also doing some maintenance work

78
00:04:00,966 --> 00:04:05,076
on the station's life support
systems, pressurizing an O2 tank

79
00:04:05,076 --> 00:04:08,056
on board and also doing some
quick routine maintenance

80
00:04:08,056 --> 00:04:10,136
on the water recovery
management system.

81
00:04:11,776 --> 00:04:14,826
Also on board Russian cosmonaut
Mikhail Tyurin doing some

82
00:04:14,826 --> 00:04:17,736
preventive maintenance himself
on the ventilation systems

83
00:04:18,316 --> 00:04:20,276
in Russian Zvezda
Service Module.

84
00:04:20,686 --> 00:04:24,036
He'll also be doing a quick
on orbit hearing assessment.

85
00:04:24,316 --> 00:04:27,006
The astronauts constantly
tracking various aspects

86
00:04:27,006 --> 00:04:29,706
of their health, including
hearing throughout their long

87
00:04:29,706 --> 00:04:30,866
duration in space flights.

88
00:04:31,956 --> 00:04:35,606
NASA astronaut Rick Mastracchio
right off the bat this morning

89
00:04:35,816 --> 00:04:39,916
engaged in the
microbio-experiment which looks

90
00:04:39,916 --> 00:04:42,426
to investigate the impact
that space travel has

91
00:04:42,856 --> 00:04:45,946
on both the human immune
system and also what's known

92
00:04:45,946 --> 00:04:49,306
as the individual microbiome
which is the collection

93
00:04:49,306 --> 00:04:52,796
of microbes that
naturally live on and inside

94
00:04:52,796 --> 00:04:55,086
of the human body
at any given time.

95
00:04:55,896 --> 00:04:58,826
Mastracchio also took some time
out to speak with reporters

96
00:04:58,826 --> 00:05:00,056
for a public affairs event

97
00:05:00,056 --> 00:05:01,846
on board the International
Space Station

98
00:05:02,246 --> 00:05:06,076
and also is continuing some
work that he was doing yesterday

99
00:05:06,076 --> 00:05:09,156
with some of the spacewalking
tools on board the station,

100
00:05:09,596 --> 00:05:12,876
installing a torque
analyzer kit on what's known

101
00:05:12,876 --> 00:05:15,336
as the pistol grip
tool or the drill

102
00:05:15,336 --> 00:05:17,496
that astronauts use
during spacewalks

103
00:05:17,636 --> 00:05:21,266
to manipulate a number of
devices on the outside portion

104

00:05:21,266 --> 00:05:24,156
of station, so he'll be
doing some data gathers using

105
00:05:24,156 --> 00:05:24,736
that tool.

106
00:05:26,176 --> 00:05:30,286
Then the final astronaut on
board from JAXA Koichi Wakata,

107
00:05:30,286 --> 00:05:34,396
the Japanese member of the crew
earlier this morning was working

108
00:05:34,896 --> 00:05:38,196
to deploy a number of
satellites from the JEM airlock.

109
00:05:38,756 --> 00:05:42,046
The satellite's part of the
small satellite orbital deployer

110
00:05:42,046 --> 00:05:43,036
and you can see them shooting

111
00:05:43,036 --> 00:05:47,336
out there using the exposed
facility and the robotic arm

112
00:05:47,336 --> 00:05:49,196
on the outer portion of JEM.

113
00:05:49,606 --> 00:05:50,936
We'll be hearing
a little bit more