1
00:00:01,556 --> 00:00:03,726
Good morning and welcome
to Mission Control Houston

2
00:00:03,726 --> 00:00:05,586
and the International
Space Station Update.

3
00:00:06,296 --> 00:00:10,366
Onboard the International Space
Station the six Expedition 32

4
00:00:10,366 --> 00:00:12,016
crew members are halfway
through their day.

5
00:00:13,366 --> 00:00:15,176
As they have this
entire week all members

6
00:00:15,176 --> 00:00:16,916
of the crew spent
time today preparing

7
00:00:17,236 --> 00:00:18,716
for one spacewalk or another.

8
00:00:18,846 --> 00:00:21,826
Of course the first in line is
the Russian spacewalk scheduled

9
00:00:21,896 --> 00:00:24,326
start at 9:40 a.m.
Central time on Monday.

10
00:00:24,876 --> 00:00:25,916
Commander Gennady Padalka

11
00:00:25,916 --> 00:00:28,286

and Flight Engineer Yuri
Malenchenko are going

12
00:00:28,286 --> 00:00:30,496
to be going out of the
Pirs docking compartment

13
00:00:30,496 --> 00:00:34,076
on the Russian side of the
station and spending 6-1/2 hours

14
00:00:34,076 --> 00:00:35,196
on a variety of tasks.

15
00:00:35,916 --> 00:00:40,906
Primary one is the relocation of
the Strela-2 crane from the Pirs

16
00:00:41,006 --> 00:00:44,346
to the Zarya module to get ready
for the replacement of the Pirs

17
00:00:44,346 --> 00:00:46,806
with the Russian multipurpose
laboratory module scheduled

18
00:00:46,806 --> 00:00:48,456
to come up to the
station next year.

19
00:00:49,526 --> 00:00:51,626
Padalka and Malenchenko
with help

20
00:00:51,626 --> 00:00:54,946
from Flight Engineer Sergei
Revin are spending their day

21
00:00:54,946 --> 00:00:57,236
making final preparations

for that spacewalk.

22
00:00:57,236 --> 00:01:00,446
They put on the Orlan Russian
spacesuits that they're going

23
00:01:00,446 --> 00:01:03,336
to be wearing on Monday
to perform a fit check.

24
00:01:03,546 --> 00:01:05,586
And Revin also went
for some checkouts

25
00:01:05,586 --> 00:01:07,486
of the communication channels
that they'll be using.

26
00:01:08,296 --> 00:01:10,496
Again that spacewalk
is scheduled to begin

27
00:01:10,496 --> 00:01:15,006
at 9:40 a.m. Central time on
Monday and NASA TV coverage

28
00:01:15,006 --> 00:01:18,406
of the event will start
at 9 a.m. On the U.S. side

29
00:01:18,406 --> 00:01:20,856
of the station, the spacewalk
is a bit further away.

30
00:01:21,016 --> 00:01:22,476
It's scheduled for August 30

31
00:01:22,546 --> 00:01:25,216
but preparations are
also well underway there.

32
00:01:25,546 --> 00:01:28,526
Flight Engineer Suni Williams
and Aki Hoshide are going

33
00:01:28,526 --> 00:01:29,996
to be performing that spacewalk

34
00:01:29,996 --> 00:01:31,676
which will also last
6-1/2 hours.

35
00:01:32,206 --> 00:01:34,116
And its primary task is
going to be the replacement

36
00:01:34,116 --> 00:01:35,986
of a main bus switching
unit that's expected

37
00:01:35,986 --> 00:01:37,096
to fail before too long.

38
00:01:37,836 --> 00:01:40,466
Williams and Hoshide
spending much

39
00:01:40,466 --> 00:01:42,996
of their afternoon reviewing
procedures for the excursion

40
00:01:42,996 --> 00:01:45,426
and Flight Engineer Joe
Acaba is joining in going

41
00:01:45,426 --> 00:01:48,076
over his duties choreographing
the spacewalk

42

00:01:48,076 --> 00:01:49,326
from inside the station.

43
00:01:49,536 --> 00:01:51,756
Crew is still managing
to squeeze in plenty

44
00:01:51,756 --> 00:01:53,856
of scientific work
today to though.

45
00:01:54,096 --> 00:01:57,926
Flight Engineer Joe Acaba,
again the day working

46
00:01:57,926 --> 00:02:02,066
on the BCAT experiment, that's
Binary Colloidal Alloy Test,

47
00:02:02,066 --> 00:02:05,036
which is studying nanoscale
particles dispersed in liquids.

48
00:02:05,146 --> 00:02:07,736
Those are the colloidal
suspensions

49
00:02:08,396 --> 00:02:12,416
and they're often used in
paints, electronic polishing,

50
00:02:13,496 --> 00:02:15,286
compounds and food products.

51
00:02:16,006 --> 00:02:20,096
Acaba then moved from that onto
the Advanced Colloids Experiment

52
00:02:20,096 --> 00:02:22,546
which takes advantage of the

space station's environment

53
00:02:22,546 --> 00:02:25,726
to study flow characteristics,
evolution and ordering effects

54
00:02:25,726 --> 00:02:27,546
in colloidal materials
in microgravity.

55
00:02:28,656 --> 00:02:31,646
And he also spent some
time changing out a cable

56
00:02:31,646 --> 00:02:34,146
on the Fluid Integrated Rack
that provided white light

57
00:02:34,146 --> 00:02:35,476
to the facilities microscope.

58
00:02:35,906 --> 00:02:37,796
Williams and Hoshide
were both scheduled

59
00:02:37,796 --> 00:02:38,806
to spend some more time

60
00:02:38,806 --> 00:02:41,586
on the Integrated Cardiovascular
experiment which looks

61
00:02:41,586 --> 00:02:43,876
at how astronauts' hearts change

62
00:02:43,876 --> 00:02:45,736
after spending long
times in microgravity.

63

00:02:46,396 --> 00:02:49,036
And in addition, Williams
performed some troubleshooting

64
00:02:49,036 --> 00:02:50,336
on the ISSAC experiment,

65
00:02:50,336 --> 00:02:54,376
that's the International Space
Station Agricultural Camera,

66
00:02:55,086 --> 00:02:58,136
which is used to take images
in visible and infrared light

67
00:02:58,136 --> 00:03:01,286
of crops, grasslands
and forest primarily

68
00:03:01,286 --> 00:03:03,386
in the northern Great
Plains region of the U.S.,

69
00:03:03,826 --> 00:03:06,516
and then also more generally to
study dynamic Earth processes

70
00:03:06,516 --> 00:03:09,896
around the world such as melting
glaciers, ecosystem responses

71
00:03:09,896 --> 00:03:14,256
to seasonal changes and human
impacts and natural disasters.

72
00:03:15,446 --> 00:03:18,776
Once Williams had
the laptop back up

73
00:03:18,776 --> 00:03:22,256

and running the team here on the
ground was able to get it set

74
00:03:22,256 --> 00:03:25,046
up to photograph areas in
Russia and Argentina today.

75
00:03:25,766 --> 00:03:28,696
And Hoshide also took part
in the Circadian Rhythms

76
00:03:28,696 --> 00:03:30,686
and Pro K dietary study.

77
00:03:31,136 --> 00:03:34,156
The former looks at how
living through 16 sunrises

78
00:03:34,156 --> 00:03:36,746
and sunsets a day
affects astronauts

79
00:03:36,746 --> 00:03:38,786
and the latter studies
whether diet can be used

80
00:03:38,786 --> 00:03:40,626
to counter bone loss
in microgravity.

81
00:03:41,226 --> 00:03:43,076
In addition to all this,
on the Russian side

82
00:03:43,076 --> 00:03:45,436
of the station Sergei Revin
also found time to work

83
00:03:45,436 --> 00:03:47,206
on the SEINER experiment

which works

84
00:03:47,206 --> 00:03:50,176
to identify current
bio-productive areas

85
00:03:50,176 --> 00:03:51,086
in the world's ocean.

86
00:03:51,266 --> 00:03:53,326
It's been a busy
day and a busy week

87
00:03:53,326 --> 00:03:55,286
for the crew onboard
International Space Station