

SPACEWALKERS



Sunita Williams

EV1



Akihiko Hoshide

EV2

1
00:00:00,806 --> 00:00:03,096
Good morning from
the PAO console here

2
00:00:03,096 --> 00:00:04,296
in Mission Control Houston

3
00:00:04,296 --> 00:00:06,356
for today's International
Space Station Update.

4
00:00:06,746 --> 00:00:08,186
Right now the Orbit Two team is

5
00:00:08,186 --> 00:00:10,696
on console monitoring all
the systems onboard this

6
00:00:10,696 --> 00:00:11,646
orbiting laboratory.

7
00:00:12,376 --> 00:00:15,326
Today's team is being led by
Flight Director Mike Lammers.

8
00:00:15,416 --> 00:00:18,756
At the CAPCOM position
is Jeremy Hanson serving

9
00:00:18,756 --> 00:00:20,946
as the communication link
between controllers here

10
00:00:20,946 --> 00:00:23,406
on the ground and the
astronauts up in space.

11
00:00:24,006 --> 00:00:25,986
And those astronauts

right now are the crew

12

00:00:25,986 --> 00:00:29,626
of Expedition 32 being
led by Russian cosmonaut

13

00:00:29,626 --> 00:00:32,086
and veteran space flier
Gennady Padalka currently

14

00:00:32,086 --> 00:00:33,326
on his fourth spaceflight.

15

00:00:33,366 --> 00:00:36,336
And then starting on the left,
we'll go across the back row

16

00:00:36,336 --> 00:00:38,856
with Japanese astronaut
Aki Hoshide.

17

00:00:39,606 --> 00:00:44,046
Then joining him on the front
row there is a Russian cosmonaut

18

00:00:44,046 --> 00:00:46,296
Yuri Malenchenko on
his fifth flight,

19

00:00:46,296 --> 00:00:49,006
another veteran space flier
from the Russian Space Agency.

20

00:00:49,516 --> 00:00:52,206
Moving across the back row,
NASA astronaut Suni Williams

21

00:00:52,206 --> 00:00:55,326
on her second long-duration
spaceflight and then right next

22

00:00:55,326 --> 00:00:57,736

to her another NASA
astronaut Joe Acaba,

23

00:00:57,736 --> 00:01:00,036

a veteran of one previous
space shuttle mission.

24

00:01:00,526 --> 00:01:02,446

And then finally all the
way on the right there,

25

00:01:02,766 --> 00:01:05,646

is our third Russian cosmonaut
Sergei Revin, a rookie flyer

26

00:01:05,896 --> 00:01:08,656

on his first flight onboard the
International Space Station.

27

00:01:09,626 --> 00:01:12,006

So the crew quite busy today.

28

00:01:12,006 --> 00:01:14,036

They all just finished

29

00:01:14,036 --> 00:01:17,996

up reviewing some
emergency procedures just

30

00:01:18,106 --> 00:01:20,006

in case there's an
ammonia release inside

31

00:01:20,006 --> 00:01:21,156

of the station's atmosphere.

32

00:01:21,156 --> 00:01:23,206

They walked through
their emergency handbooks

33

00:01:23,206 --> 00:01:26,086

and conferred with teams on
the ground the different steps

34

00:01:26,086 --> 00:01:29,256

that they would have to take
should such a situation arise.

35

00:01:30,336 --> 00:01:32,656

That was all completed
successfully and the crewmates,

36

00:01:32,826 --> 00:01:33,886

the crew members were led

37

00:01:33,886 --> 00:01:36,446

by Expedition 32
Commander Gennady Padalka

38

00:01:36,966 --> 00:01:39,526

who also today was
reviewing some procedures

39

00:01:39,526 --> 00:01:41,046

for his upcoming spacewalk

40

00:01:41,096 --> 00:01:44,346

which will be occurring
on Monday, August 20.

41

00:01:44,846 --> 00:01:48,766

This will be the 31st
Russian spacewalk or EVA,

42

00:01:48,766 --> 00:01:50,446

extravehicular activity,

43

00:01:50,446 --> 00:01:52,636

in support of the
International Space Station.

44

00:01:53,336 --> 00:01:55,166

He'll be stepping outside

45

00:01:55,166 --> 00:01:57,446

with fellow Russian
cosmonaut Yuri Malenchenko

46

00:01:57,446 --> 00:02:00,666

and relocating the
Strela-2 telescoping boom

47

00:02:00,666 --> 00:02:03,466

from the Pirs docking
compartment to the Zarya module

48

00:02:03,826 --> 00:02:07,056

in preparation for the
future undocking of Pirs

49

00:02:07,376 --> 00:02:10,226

which will pave the way for
the new Russian multipurpose

50

00:02:10,226 --> 00:02:14,786

laboratory module just a little
bit later in 2013 or 2014.

51

00:02:15,076 --> 00:02:17,446

So again, spacewalkers
Gennady Padalka

52

00:02:17,446 --> 00:02:21,096

and Yuri Malenchenko reviewing
those procedures today.

53

00:02:22,516 --> 00:02:25,836

Our third Russian cosmonaut
Sergei Revin is auditing some

54

00:02:26,146 --> 00:02:28,586

supplies of spare
lighting equipment inside

55

00:02:28,586 --> 00:02:29,506

of the Russian segment.

56

00:02:29,506 --> 00:02:32,196

He spent some time yesterday
replacing a few lights

57

00:02:32,546 --> 00:02:34,566

on the Zvezda and
Rassvet modules

58

00:02:34,566 --> 00:02:35,806

on the Russian side
of the house.

59

00:02:36,146 --> 00:02:38,956

He will also be doing some
routine maintenance activities

60

00:02:38,956 --> 00:02:42,256

on different life, Russian life
support systems pending a few

61

00:02:42,256 --> 00:02:45,546

ground recommendations on
which exactly he'll be working

62

00:02:45,546 --> 00:02:48,106

on whether it's the
oxygen generation system

63

00:02:48,446 --> 00:02:51,106

in the Russian segment or also
be doing some more routine

64

00:02:51,106 --> 00:02:52,276
toilet replacement work.

65

00:02:52,276 --> 00:02:55,946
Moving on to our
USOS crew members,

66

00:02:55,946 --> 00:02:59,286
Joe Acaba spent a good portion
of his day today working

67

00:02:59,286 --> 00:03:00,976
in the Combustion
Integrated Rack.

68

00:03:01,316 --> 00:03:02,926
He's been replacing
some hardware

69

00:03:02,926 --> 00:03:05,706
in the Multiuser Droplet
Combustion Apparatus.

70

00:03:06,176 --> 00:03:08,836
That Combustion Integrated
Rack includes a number

71

00:03:08,836 --> 00:03:12,156
of different components like a
combustion chamber and also fuel

72

00:03:12,156 --> 00:03:14,836
and oxidizer controls and
five different cameras

73

00:03:15,126 --> 00:03:17,376
for performing combustion

experiments safely

74

00:03:17,376 --> 00:03:18,366
in microgravity.

75

00:03:19,346 --> 00:03:23,386
His fellow NASA astronaut Suni
Williams is doing some work

76

00:03:23,386 --> 00:03:26,696
on the Extravehicular Mobility
Unit, or the spacesuits,

77

00:03:26,696 --> 00:03:29,946
that our U.S. astronauts wear
during their own spacewalks

78

00:03:30,356 --> 00:03:34,446
in preparation for her
upcoming EVA, or spacewalk,

79

00:03:34,446 --> 00:03:36,156
outside of the station alongside

80

00:03:36,156 --> 00:03:38,826
with Japanese astronaut
Aki Hoshide.

81

00:03:39,236 --> 00:03:42,326
That's scheduled to take
place on July, or August 30.

82

00:03:42,956 --> 00:03:45,636
And that will see the two
astronaut's step outside

83

00:03:45,636 --> 00:03:49,026
to replace a failing
main bus switching unit

84

00:03:49,026 --> 00:03:50,936

which is a vital portion

85

00:03:50,936 --> 00:03:55,466

of the station's electrical
power system working to act

86

00:03:55,466 --> 00:03:57,656

as a distribution hub
to route the power

87

00:03:57,656 --> 00:03:59,146

to the different
station systems.

88

00:03:59,766 --> 00:04:03,946

It first showed indications of a
failure back in October of 2011.

89

00:04:04,306 --> 00:04:07,646

So they'll be stepping outside
to get on the station's truss,

90

00:04:07,646 --> 00:04:10,016

which is basically the
backbone portion of the station,

91

00:04:10,356 --> 00:04:12,606

and replace that
failing switching unit.

92

00:04:12,926 --> 00:04:16,856

Then if time permits they'll
also be rerouting some cables

93

00:04:16,856 --> 00:04:20,346

for that upcoming Russian
multipurpose laboratory module

94

00:04:20,346 --> 00:04:23,876

in the future and maybe
installing a few debris

95

00:04:23,876 --> 00:04:25,036

and thermal covers as well

96

00:04:25,036 --> 00:04:26,896

on the Pressurized
Mating Adapter-2.

97

00:04:28,536 --> 00:04:34,266

And her fellow spacewalker Aki
Hoshide today not doing any EVA

98

00:04:34,266 --> 00:04:37,546

preps just yet, but he was
taking some water samples

99

00:04:37,546 --> 00:04:40,156

from the Environmental
Health System inside

100

00:04:40,156 --> 00:04:42,686

of the station's Water
Recovery System, specifically

101

00:04:42,686 --> 00:04:45,546

from the Total Organic
Carbon Analyzer which looks

102

00:04:45,546 --> 00:04:47,636

to analyze the level of carbon

103

00:04:47,636 --> 00:04:49,066

in the astronaut's
drinking water.

104

00:04:49,066 --> 00:04:52,866

It's constantly monitored for

different potential contaminants

105

00:04:52,866 --> 00:04:54,046
and other things of the like.

106

00:04:54,536 --> 00:04:59,506
And other than that he'll also
be stowing some unnecessary

107

00:04:59,506 --> 00:05:02,566
hardware from the airlock
actually in preparation

108

00:05:02,566 --> 00:05:04,646
for the upcoming EVA procedure.

109

00:05:05,346 --> 00:05:07,556
Aside from all these
crew activities today,

110

00:05:07,746 --> 00:05:09,806
controllers down on the
ground continuing some

111

00:05:09,806 --> 00:05:12,206
of the robotic work that's
been taking place this week.

112

00:05:12,796 --> 00:05:16,396
They were using the Special
Purpose Dexterous Manipulator,

113

00:05:16,396 --> 00:05:19,346
or Dextre, today to transfer
the Space Communications

114

00:05:19,346 --> 00:05:23,336
and Navigation, or SCAN, payload
off of the external pallet

115

00:05:23,376 --> 00:05:26,876

which was unloaded from
the HTV-3 vehicle yesterday

116

00:05:26,876 --> 00:05:27,576

and they are transferring

117

00:05:27,576 --> 00:05:29,946

that to the External
Logistics Carrier-3

118

00:05:30,566 --> 00:05:33,406

and a little bit later today
will perform a space test

119

00:05:33,436 --> 00:05:37,146

program payload survey
and then stow Dextre back