1
00:00:01,270 --> 00:00:03,310
Josesph Acaba's taken some time

2
00:00:03,310 --> 00:00:06,290
out to do some setup
work with the Robonaut.

3
00:00:06,290 --> 00:00:09,490
That's the autonomous robot
onboard International Space

4
00:00:09,490 --> 00:00:11,270
Station that's hopefully
going to be used

5
00:00:11,270 --> 00:00:15,330
for some housecleaning tasks and
some little more menial tasks

6
00:00:15,330 --> 00:00:17,600
around the International
Space Station

7
00:00:17,600 --> 00:00:21,150
that the astronauts will no
longer have to do themselves.

8
00:00:21,150 --> 00:00:23,860
He's setting up robot inside
the Destiny laboratory

9
00:00:23,860 --> 00:00:26,300
and sending it through
some control paces

10
00:00:26,300 --> 00:00:28,930
as it manipulates
a control board.

11

00:00:28,930 --> 00:00:30,850
He was also doing
some transfer work

12
00:00:30,850 --> 00:00:34,040
from the Japanese HTV cargo
vehicle currently docked

13
00:00:34,040 --> 00:00:35,770
to the International
Space Station.

14
00:00:35,770 --> 00:00:37,330
And then just a little
while he'll be joined

15
00:00:37,330 --> 00:00:41,340
by NASA astronaut Suni
Williams for a educational event

16
00:00:41,340 --> 00:00:43,980
with the JFK Library in Boston.

17
00:00:43,980 --> 00:00:48,510
Suni Williams another NASA
astronaut currently onboard the

18
00:00:48,510 --> 00:00:52,280
International Space Station
doing some EVA checkout

19
00:00:52,280 --> 00:00:55,080
procedure reviews for her
upcoming spacewalk this

20
00:00:55,080 --> 00:00:56,930
Thursday, August 30.

21
00:00:56,930 --> 00:00:59,480
She'll be stepping

outside with Japan,

22
00:00:59,480 --> 00:01:02,280
Japanese astronaut Aki Hoshide.

23
00:01:02,280 --> 00:01:04,350
So today she, the two
of them were checking

24
00:01:04,350 --> 00:01:06,910
out the SAFER devices
on their spacesuits.

25
00:01:06,910 --> 00:01:10,140
SAFER standing for the
Simplified Aid For EVA Rescue,

26
00:01:10,140 --> 00:01:14,430
a kind of mini jet packs these
astronauts wear should they

27
00:01:14,430 --> 00:01:17,990
in any way need to get back to
the International Space Station.

28
00:01:17,990 --> 00:01:20,350
As mentioned the two
will step outside

29
00:01:20,350 --> 00:01:23,680
of the Quest airlock a
little bit later this week

30
00:01:23,680 --> 00:01:26,800
for a 6 1/2 hour excursion
into space in order

31
00:01:26,800 --> 00:01:30,710
to replace a faulty power relay
unit on the station's truss,

32
00:01:30,710 --> 00:01:34,040
or the support structure, also
rigging up a few power cables

33
00:01:34,040 --> 00:01:36,180
for a future Russian
laboratory module

34
00:01:36,180 --> 00:01:40,480
and replacing the camera
the Canadarm2 robotic arm.

35
00:01:40,480 --> 00:01:44,000
Aside from getting
ahead on all these tasks

36
00:01:44,000 --> 00:01:47,790
for that upcoming EVA, Suni
Williams is also working today

37
00:01:47,790 --> 00:01:50,510
with the SLAMMD device
onboard station.

38
00:01:50,510 --> 00:01:53,630
Stands for the Space Linear
Acceleration Mass Measurement

39
00:01:53,630 --> 00:01:57,360
Device and is one of the only
ways onboard the International

40
00:01:57,360 --> 00:02:01,460
Space Station to accurately
measure a subject's mass

41
00:02:01,460 --> 00:02:05,320
of the crew members' body weight
since they don't have gravity

42
00:02:05,320 --> 00:02:07,330
to just press down
on them naturally.

43
00:02:07,330 --> 00:02:09,930
They use this device which
is a number of springs

44
00:02:09,930 --> 00:02:13,770
that generate a known force and
then calculate subject's mass

45
00:02:13,770 --> 00:02:15,880
from the resulting acceleration.

46
00:02:15,880 --> 00:02:21,940
Her EVA partner this Thursday
Aki Hoshide has also been doing

47
00:02:21,940 --> 00:02:24,240
some checkouts of that
SAFER device and going

48
00:02:24,240 --> 00:02:28,570
over the procedure reviews
for that EVA task list.

49
00:02:28,570 --> 00:02:31,370
He was also transferring
a few items from the HTV

50
00:02:31,370 --> 00:02:34,090
or the Japanese transfer
vehicle currently docked

51
00:02:34,090 --> 00:02:35,610
to the Earth-facing side

52

00:02:35,610 --> 00:02:39,570
of the Harmony node onboard the
International Space Station.

53
00:02:39,570 --> 00:02:42,060
You can see the station's
array here.

54
00:02:42,060 --> 00:02:44,320
Quite a few visiting
vehicles currently attached,

55
00:02:44,320 --> 00:02:49,830
two Soyuz crew crafts, and then
three unmanned cargo craft,

56
00:02:49,830 --> 00:02:53,280
the HTV all the way on the left
there the most recent addition

57
00:02:53,280 --> 00:02:55,060
to the International
Space Station.

58
00:02:55,060 --> 00:02:58,000
Also the Progress 48 is
the Russian unmanned craft.

59
00:02:58,000 --> 00:02:59,200
All the way on the aft end

60
00:02:59,200 --> 00:03:04,040
of the station is the
European ATV-3 vehicle.

61
00:03:04,040 --> 00:03:06,540
Moving onto our Russian
cosmonauts' activities

62
00:03:06,540 --> 00:03:10,500

for the day, Commander Padalka
was doing a biological study

63
00:03:10,500 --> 00:03:13,110
looking at the veins in
the lower limbs and the

64
00:03:13,110 --> 00:03:15,890
which the legs not used much
onboard the International

65
00:03:15,890 --> 00:03:16,540
Space Station.

66
00:03:16,540 --> 00:03:19,790
These astronauts serve as
guinea pigs for a number

67
00:03:19,790 --> 00:03:22,670
of different science experiments
that consistently track

68
00:03:22,670 --> 00:03:26,190
and monitor the progression
of any weakening

69
00:03:26,190 --> 00:03:28,970
of not only bone
density and muscle loss

70
00:03:28,970 --> 00:03:32,430
but also the function and
structure of the veins,

71
00:03:32,430 --> 00:03:34,130
so he'll be taking
a look at those

72
00:03:34,130 --> 00:03:36,060
and doing some routine

replacement work

73
00:03:36,060 --> 00:03:39,380
on the Russian Elektron
oxygen generation system

74
00:03:39,380 --> 00:03:41,510
over the Russian segment.

75
00:03:41,510 --> 00:03:44,440
Meanwhile, Sergei Raven
unloading a couple of items

76
00:03:44,440 --> 00:03:46,800
from the Russian
resupply craft, the 48P,

77
00:03:46,800 --> 00:03:49,840
and updating the station's
inventory management system.

78
00:03:49,840 --> 00:03:53,490
Also doing the Russian
Pneumocard experiment

79
00:03:53,490 --> 00:03:56,320
which looks to study
the adaptation

80
00:03:56,320 --> 00:03:57,720
of the cardiovascular system

81
00:03:57,720 --> 00:04:00,550
of these crew members while
their exposed to microgravity

82
00:04:00,550 --> 00:04:02,730
for long durations of time.

83

00:04:02,730 --> 00:04:04,480
So assisting Revin in some

84
00:04:04,480 --> 00:04:07,720
of that 48 Progress cargo
unloading activities will be the

85
00:04:07,720 --> 00:04:10,370
third Russian cosmonaut
Yuri Malenchenko.

86
00:04:10,370 --> 00:04:12,470
He'll be again unloading
some items

87
00:04:12,470 --> 00:04:14,240
from that unmanned cargo craft.

88
00:04:14,240 --> 00:04:16,640
He'll also be transferring
some wastewater from one

89
00:04:16,640 --> 00:04:18,480
of the station's recycle tanks

90
00:04:18,480 --> 00:04:22,160
into the ATV's empty
water delivery system.

91
00:04:22,160 --> 00:04:25,760
That ATV, which docked late
March, is forecasted to undock

92
00:04:25,760 --> 00:04:30,200
and burn up in the Earth's
atmosphere later on September.

93
00:04:30,200 --> 00:04:34,470
Astronauts on board the station
have gotten quite a few passes

94
00:04:34,470 --> 00:04:37,510
of Tropical Storm Isaac
over the past couple of days

95
00:04:37,510 --> 00:04:41,080
as it's strengthened
and moved into the Gulf.

96
00:04:41,080 --> 00:04:44,360
Right now Isaac expected to
make landfall late Tuesday

97
00:04:44,360 --> 00:04:49,000
or early Wednesday this week,
eventually strengthening

98
00:04:49,000 --> 00:04:55,780
into a hurricane, expected to
impact the eastern Louisiana,

99
00:04:55,780 --> 00:04:57,880
Mississippi, Alabama area.

100
00:04:57,880 --> 00:05:00,500
Currently in the Gulf
of Mexico trending

101
00:05:00,500 --> 00:05:03,020
on a northwesterly track.

102
00:05:03,020 --> 00:05:05,990
This video taken
earlier over the weekend.

103
00:05:05,990 --> 00:05:09,820
So be looking forward to some
more passes a little bit later

104

00:05:09,820 --> 00:05:13,380
this afternoon and also
tomorrow as the storm continues

105
00:05:13,380 --> 00:05:14,350
to strengthen and form