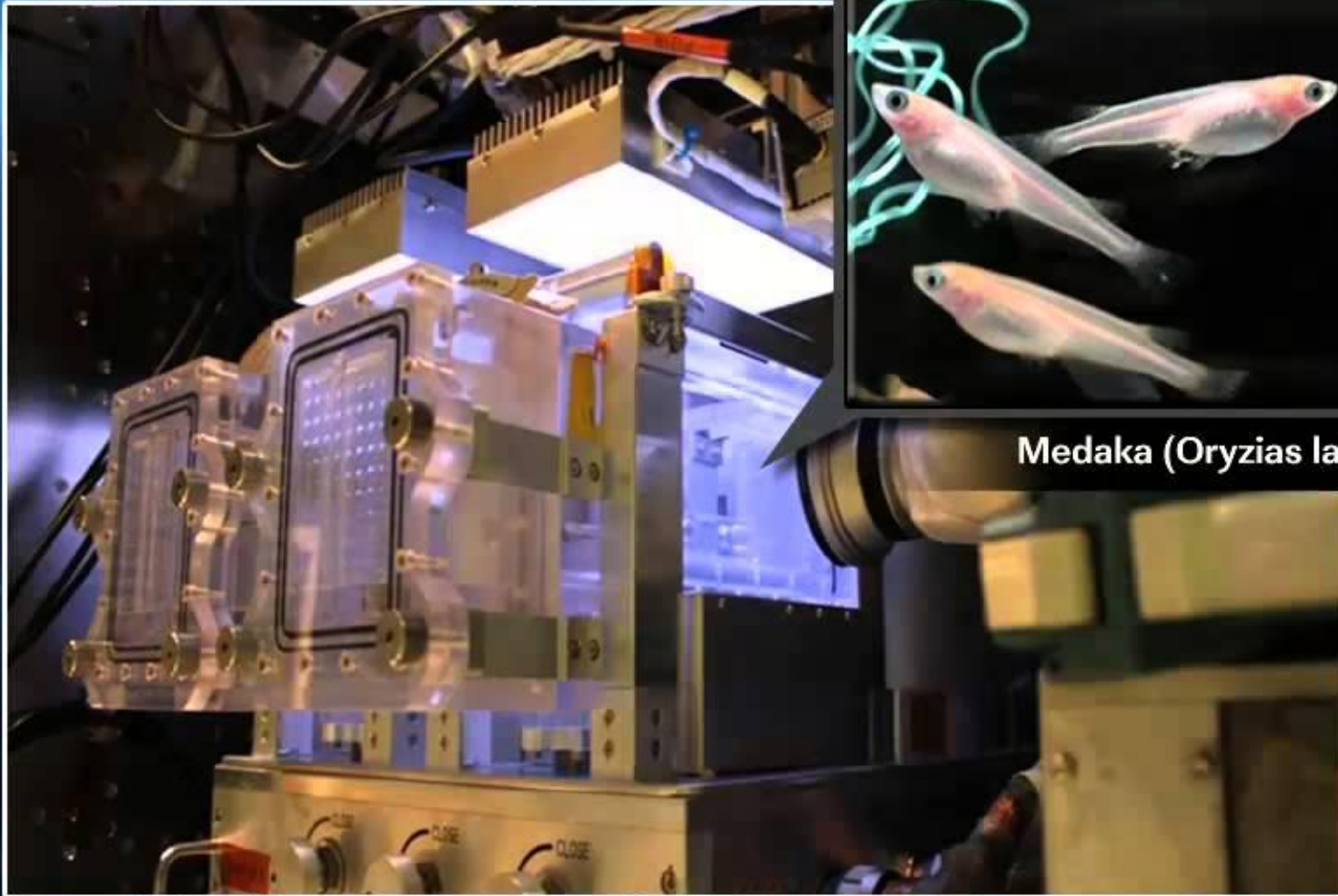


# Aquatic Habitat



Medaka (*Oryzias latipes*)

1  
00:00:01,126 --> 00:00:02,386  
This is Mission Control Houston.

2  
00:00:02,386 --> 00:00:04,016  
Welcome to today's ISS update.

3  
00:00:04,016 --> 00:00:06,756  
It is Thursday, October  
18, 2012.

4  
00:00:06,756 --> 00:00:09,206  
This is a live view inside the  
Space Station Flight Control

5  
00:00:09,206 --> 00:00:12,016  
Room here at the Johnson Space  
Center. The Orbit Two team is

6  
00:00:12,016 --> 00:00:14,316  
currently on console  
under the direction

7  
00:00:14,316 --> 00:00:15,676  
of Flight Director Bob Dempsey.

8  
00:00:16,346 --> 00:00:18,486  
His team is working with  
the Expedition 33 crew

9  
00:00:18,486 --> 00:00:20,256  
on board the International  
Space Station.

10  
00:00:20,256 --> 00:00:22,176  
They've had a very busy  
morning and are continuing

11  
00:00:22,176 --> 00:00:24,456  
to have a busy day as

they work on a variety

12

00:00:24,456 --> 00:00:25,926  
of different experiments

13

00:00:25,926 --> 00:00:27,616  
and also some routine  
maintenance work.

14

00:00:28,116 --> 00:00:30,326  
Sun Williams there on  
the far left hand side.

15

00:00:30,326 --> 00:00:32,366  
She is the commander  
of Expedition 33.

16

00:00:32,966 --> 00:00:36,306  
She's been replacing and  
refilling a recycle tank

17

00:00:36,306 --> 00:00:38,076  
that is part of the  
environmental system

18

00:00:38,076 --> 00:00:40,406  
on board the space  
station itself.

19

00:00:40,596 --> 00:00:43,446  
She also reconnected  
a laptop computer

20

00:00:43,446 --> 00:00:44,976  
that has been reloaded  
here recently

21

00:00:44,976 --> 00:00:46,976  
and getting it plugged back  
into the station's network.

22

00:00:47,776 --> 00:00:50,076

She's also repairing what's called a turbine flow meter.

23

00:00:50,196 --> 00:00:52,356

That is part of the Exercise Kinetics experiment.

24

00:00:52,356 --> 00:00:54,086

This is part of one of the experiments on board

25

00:00:54,086 --> 00:00:55,476

that takes a look at the human body

26

00:00:55,476 --> 00:00:57,766

and how it reacts to being up in space.

27

00:00:58,736 --> 00:01:01,806

And also spending the day replacing some cabin filters

28

00:01:01,806 --> 00:01:03,866

just like much what you would do here on Earth,

29

00:01:03,866 --> 00:01:05,646

replacing the filters inside your house.

30

00:01:06,156 --> 00:01:07,126

They have to do that as well

31

00:01:07,126 --> 00:01:10,176

up on board the space station itself both

32

00:01:10,176 --> 00:01:12,336

for their environment and  
the equipment on board.

33

00:01:13,146 --> 00:01:17,676

She's got a training session  
today for how to respond

34

00:01:17,676 --> 00:01:19,726

to a possible ammonia  
contamination.

35

00:01:19,726 --> 00:01:21,256

This is just part  
of a safety review

36

00:01:21,766 --> 00:01:23,616

that she is doing  
along with Aki Hoshide.

37

00:01:23,616 --> 00:01:25,696

These two crew members  
are getting ready

38

00:01:25,696 --> 00:01:29,326

to conduct a spacewalk the early  
part of next month in November,

39

00:01:29,666 --> 00:01:31,286

the first week of November.

40

00:01:31,736 --> 00:01:34,176

The exact date will be approved  
by the Space Station Program.

41

00:01:34,176 --> 00:01:36,466

But these two crew members  
are going to be going outside

42

00:01:36,466 --> 00:01:39,256  
to address an ammonia  
leak that is been seen

43

00:01:39,776 --> 00:01:42,636  
out on the port side  
radiator, the P6 radiator,

44

00:01:42,636 --> 00:01:43,756  
that's out there on the far side

45

00:01:43,756 --> 00:01:45,926  
of the station's  
truss structure.

46

00:01:46,556 --> 00:01:48,936  
But they've been this week going  
through different procedures

47

00:01:48,936 --> 00:01:51,686  
and reviewing the items  
that they're going

48

00:01:51,686 --> 00:01:52,466  
to have to take care of.

49

00:01:52,466 --> 00:01:54,376  
They've been getting their tools

50

00:01:54,376 --> 00:01:56,966  
and their spacesuits ready  
inside the Quest airlock.

51

00:01:57,436 --> 00:01:59,796  
And then of course once  
the program itself,

52

00:01:59,796 --> 00:02:02,316  
the Space Station  
Program, approves the date

53

00:02:02,316 --> 00:02:04,336  
for the spacewalk we'll  
have the update for you here

54

00:02:04,336 --> 00:02:07,536  
on NASA Television  
and also nasa.gov.

55

00:02:08,746 --> 00:02:11,736  
Aki Hoshide has been  
working on what's known

56

00:02:11,736 --> 00:02:13,086  
as the Aquatic Habitat.

57

00:02:14,676 --> 00:02:16,996  
This is basically  
an aquarium that is

58

00:02:16,996 --> 00:02:18,076  
on board the space station.

59

00:02:18,076 --> 00:02:20,106  
It takes a look at  
how different fish,

60

00:02:20,106 --> 00:02:24,126  
specifically the Medaka fish  
and things like that, a small,

61

00:02:24,126 --> 00:02:26,946  
they look like little  
guppies live up in space.

62

00:02:26,946 --> 00:02:31,566  
We can learn a lot by how  
small animals and fish live

63

00:02:31,566 --> 00:02:33,116  
up aboard the space  
station number,

64  
00:02:33,116 --> 00:02:35,156  
how their own bodies  
react to being up there.

65  
00:02:35,156 --> 00:02:38,006  
So he's putting together that  
particular piece of equipment.

66  
00:02:38,256 --> 00:02:41,836  
They are fairly hardy fish which  
is why they were selected to fly

67  
00:02:41,836 --> 00:02:42,766  
up to the space station.

68  
00:02:42,766 --> 00:02:45,606  
They have flown on the space  
shuttle before, including back

69  
00:02:45,606 --> 00:02:48,376  
in 1994 aboard space  
shuttle Columbia.

70  
00:02:48,376 --> 00:02:51,106  
But you see that fancy  
aquatic habitat there

71  
00:02:51,106 --> 00:02:53,176  
that is inside the  
Japanese laboratory.

72  
00:02:54,256 --> 00:02:56,826  
He's about to kickoff  
cleaning the, what's known

73  
00:02:56,826 --> 00:02:58,266

as the port crew quarters.

74

00:02:58,266 --> 00:03:00,566

This is the sleeping quarters for the crew members.

75

00:03:00,566 --> 00:03:02,686

It's on the left side of the space station.

76

00:03:02,686 --> 00:03:04,926

He's been talking with ground controllers here

77

00:03:04,926 --> 00:03:05,806

in Houston about that.

78

00:03:07,116 --> 00:03:10,206

And Yuri Malenchenko, who is another flight engineer as part

79

00:03:10,206 --> 00:03:13,086

of Expedition 33, has been working a change

80

00:03:13,086 --> 00:03:15,526

out of a thermal loop panel back in the Russian segment.

81

00:03:15,526 --> 00:03:17,476

He's continuing to do that as we speak.

82

00:03:17,726 --> 00:03:20,066

As we talked about yesterday,

83

00:03:20,066 --> 00:03:21,816

the space station performed a reboost

84

00:03:22,246 --> 00:03:24,316  
of its altitude using  
engines back

85

00:03:24,316 --> 00:03:25,576  
on the Zvezda service module.

86

00:03:25,576 --> 00:03:27,096  
That went off as expected.

87

00:03:27,596 --> 00:03:31,156  
The burn lasted 19 seconds  
and raised the altitude

88

00:03:31,156 --> 00:03:34,066  
of the station 0.39  
statute miles.

89

00:03:34,346 --> 00:03:36,906  
That is to set up for the  
upcoming Progress flight that's

90

00:03:36,906 --> 00:03:39,236  
coming up at the end of  
the month on October 31,

91

00:03:39,736 --> 00:03:42,986  
as well as the launch on  
October 23 of the next crew

92

00:03:42,986 --> 00:03:47,456  
of Expedition 33 and their  
arrival coming up on October 25.

93

00:03:48,186 --> 00:03:51,516  
To remind you of our  
programming, here's the look

94

00:03:51,516 --> 00:03:52,606

at the crew that's coming up.

95

00:03:52,916 --> 00:03:55,916

On October 23, Oleg  
Novitskiy, Evgeny Tarelkin

96

00:03:55,916 --> 00:03:57,236

and Kevin Ford are  
going to launching

97

00:03:57,236 --> 00:03:59,646

from the Baikonur  
Cosmodrome down in Kazakhstan.

98

00:04:00,306 --> 00:04:02,186

That launch time is  
currently scheduled

99

00:04:02,186 --> 00:04:06,676

for 5:51 a.m. Central time,  
6:51 a.m. Eastern time.

100

00:04:07,446 --> 00:04:08,726

They will be docking,  
as we said,

101

00:04:08,726 --> 00:04:10,886

two days later on October 25.

102

00:04:11,436 --> 00:04:15,046

That docking time is scheduled  
for 7:35 a.m. Central time,

103

00:04:15,046 --> 00:04:16,896

8:35 a.m. Eastern time.

104

00:04:16,896 --> 00:04:18,116

Of course, we'll  
have live coverage

