



**TOM  
MARSHBURN**  
EXPEDITION 35 FLIGHT ENGINEER

1  
00:00:00,506 --> 00:00:06,546  
[ Music ]

2  
00:00:07,046 --> 00:00:08,426  
>> Good morning, this is  
Mission Control Houston.

3  
00:00:08,426 --> 00:00:11,076  
Welcome, and thank you for  
joining us for today's edition

4  
00:00:11,076 --> 00:00:14,196  
of Space Station Live,  
this Wednesday, April 17.

5  
00:00:15,086 --> 00:00:16,466  
Today Commander Hadfield

6  
00:00:16,466 --> 00:00:18,546  
and Flight Engineer  
Marshburn continued

7  
00:00:18,546 --> 00:00:21,296  
to follow a special diet, and  
logged their diet consumption

8  
00:00:21,666 --> 00:00:25,406  
as part of a couple  
of human body studies,

9  
00:00:25,406 --> 00:00:26,176  
[inaudible] and energy.

10  
00:00:26,666 --> 00:00:28,516  
Hadfield also had to set

11  
00:00:28,556 --> 00:00:32,226  
up a continuous blood pressure  
device, donned a leg/arm cuff,

12

00:00:32,226 --> 00:00:34,286  
and worked with the  
pulmonary function system,

13

00:00:34,626 --> 00:00:37,756  
rebreeding protocol  
for a periodic checkup

14

00:00:38,306 --> 00:00:40,296  
for another human  
body study that looks

15

00:00:40,296 --> 00:00:42,946  
at long duration crew  
members' pulmonary function.

16

00:00:43,806 --> 00:00:46,226  
Hadfield also tended  
to the ongoing research

17

00:00:46,276 --> 00:00:49,466  
of binary colloidal  
alloy test, or BCAT,

18

00:00:49,856 --> 00:00:52,806  
checking out the camera system  
that monitors its operations.

19

00:00:53,576 --> 00:00:57,186  
He then also performed a water  
analysis today using the total

20

00:00:57,186 --> 00:01:00,846  
organic carbon analyzer at  
the water processor assembly

21

00:01:00,846 --> 00:01:02,316  
from the water recovery system.

22

00:01:02,686 --> 00:01:05,786

The system converts urine,  
sweat, and condensation

23

00:01:05,856 --> 00:01:08,446

into drinkable water  
for the crew.

24

00:01:08,446 --> 00:01:11,146

Commander Hadfield and  
Flight Engineers Marshburn

25

00:01:11,146 --> 00:01:14,766

and Cassidy also take time  
to talk to kindergarten

26

00:01:14,766 --> 00:01:18,026

through 12th grade  
students and their teachers

27

00:01:18,026 --> 00:01:21,356

at the Fernbank Science  
Center in Atlanta, Georgia,

28

00:01:21,906 --> 00:01:25,296

for Destination Station,  
which is a traveling exhibit

29

00:01:25,296 --> 00:01:26,676

that showcases life, work,

30

00:01:26,676 --> 00:01:29,456

and science aboard  
the Space Station.

31

00:01:29,726 --> 00:01:33,566

Today Marshburn worked much of  
his morning loading software

32

00:01:33,946 --> 00:01:37,036  
to an express rack that  
provides science experiments

33

00:01:37,036 --> 00:01:39,926  
with standard utilities,  
such as power, data,

34

00:01:39,966 --> 00:01:41,946  
cooling, fluid, and gasses.

35

00:01:42,346 --> 00:01:45,066  
He then also loaded the  
payload software to two

36

00:01:45,066 --> 00:01:47,716  
of the onboard [inaudible]  
incubators in the glacier,

37

00:01:48,076 --> 00:01:51,016  
which are part of the  
[inaudible] fleet of hardware

38

00:01:51,356 --> 00:01:53,156  
that are compatible  
with the express racks

39

00:01:53,156 --> 00:01:55,026  
and store science  
experiment samples

40

00:01:55,366 --> 00:01:56,626  
that require refrigeration.

41

00:01:57,276 --> 00:01:59,146  
And Flight Engineer  
Chris Cassidy set

42

00:01:59,146 --> 00:02:01,446  
up the robotics workstation

today to review

43

00:02:01,446 --> 00:02:04,676  
and monitor today's walk off of  
the Space Station robotic arm.

44

00:02:05,246 --> 00:02:07,416  
The robotic ground controllers

45

00:02:07,416 --> 00:02:10,286  
at Mission Control Houston will  
maneuver the Canada arm too

46

00:02:10,636 --> 00:02:13,986  
for a base change from the  
power and data grapple fixture

47

00:02:14,366 --> 00:02:17,166  
on the harmony module to  
the mobile base system.

48

00:02:17,456 --> 00:02:19,756  
And on the Russian side  
of the house, Vinogradov

49

00:02:19,756 --> 00:02:23,176  
and Romanenko donned their Orlan  
space suits once again today

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00:02:23,176 --> 00:02:25,546  
for a suited dry  
run dress rehearsal

51

00:02:25,546 --> 00:02:28,166  
for the procedures they  
will conduct during Friday's

52

00:02:28,166 --> 00:02:30,866  
scheduled spacewalk just  
outside the [inaudible] dock

53

00:02:30,866 --> 00:02:31,986  
and compartment airlock.

54

00:02:32,316 --> 00:02:34,626  
The spacewalk is  
scheduled to begin Friday

55

00:02:34,626 --> 00:02:37,956  
around 9:06 a.m. central  
time, and is scheduled

56

00:02:37,956 --> 00:02:41,436  
to last six hours, as  
Vinogradov and Romanenko deploy

57

00:02:41,696 --> 00:02:45,486  
and retrieve experiments on the  
Russian segment of the station,

58

00:02:45,776 --> 00:02:49,496  
and also replace a faulty  
reflector device on the aft end

59

00:02:49,496 --> 00:02:52,356  
of this [inaudible]  
service module that is part

60

00:02:52,356 --> 00:02:55,606  
of the navigational aid to be  
used for the automated docking

61

00:02:55,606 --> 00:02:58,906  
of the European space  
agency's Albert Einstein,

62

00:02:58,906 --> 00:03:00,586  
the automated transfer vehicle

63

00:03:00,586 --> 00:03:03,596  
for a cargo ship  
[inaudible] later in June.

64

00:03:04,676 --> 00:03:07,356  
Meanwhile back on earth,  
NASA is poised and ready

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00:03:07,356 --> 00:03:11,116  
for its test launch of the  
orbital sciences Antares rocket

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00:03:11,116 --> 00:03:13,316  
from the Wallop Flight  
Facility in Virginia.

67

00:03:13,996 --> 00:03:16,696  
The launch is scheduled  
at 4:00 p.m. central time.

68

00:03:17,346 --> 00:03:21,096  
We'll have live coverage of that  
launch that will set the stage

69

00:03:21,096 --> 00:03:22,696  
for sending a new  
commercial cargo ship