



A projection screen displaying a technical data table with multiple columns and rows of text.

Item	Value	Unit
101	100	100
102	100	100
103	100	100
104	100	100
105	100	100
106	100	100
107	100	100
108	100	100
109	100	100
110	100	100



A workstation with multiple monitors and a nameplate that reads "CATO". The workstation is equipped with several computer monitors, a keyboard, and a mouse. A small American flag is visible on the desk.

A workstation with multiple monitors and a nameplate that reads "OSO". The workstation is equipped with several computer monitors, a keyboard, and a mouse.

A workstation with multiple monitors and a nameplate that reads "ISS". The workstation is equipped with several computer monitors, a keyboard, and a mouse.

1  
00:00:01,467 --> 00:00:03,035  
You're joining us here inside

2  
00:00:03,035 --> 00:00:05,137  
of the International Space  
Station flight control room

3  
00:00:05,137 --> 00:00:07,873  
at the Johnson space  
center in Houston, Texas,

4  
00:00:07,873 --> 00:00:10,209  
looking down as the orbit  
two team is controlling all

5  
00:00:10,209 --> 00:00:14,413  
of the systems operating on  
board this orbiting laboratory.

6  
00:00:14,413 --> 00:00:17,249  
Today the team being led by  
flight director Jerry Jason,

7  
00:00:17,249 --> 00:00:18,984  
you can see there  
in the blue shirt.

8  
00:00:18,984 --> 00:00:21,153  
Joining him at the  
Capcom position serving

9  
00:00:21,153 --> 00:00:24,090  
as the communication link  
between all of our teams

10  
00:00:24,090 --> 00:00:25,658  
down here on the  
ground and astronauts

11

00:00:25,658 --> 00:00:28,527  
up in space is Josh Matthew.

12

00:00:28,527 --> 00:00:32,932  
And those astronauts up  
in space on the last week

13

00:00:32,932 --> 00:00:36,035  
of Expedition 34, You  
can see the crew here.

14

00:00:36,035 --> 00:00:39,472  
They're being led by NASA  
astronaut Kevin Ford there

15

00:00:39,472 --> 00:00:41,107  
in the front row on the left.

16

00:00:41,107 --> 00:00:43,008  
Behind him the two  
Russian cosmonauts

17

00:00:43,008 --> 00:00:44,810  
who will be returning  
back down to Earth

18

00:00:44,810 --> 00:00:48,747  
with him later this week, Oleg  
Novitskiy and Evgeny Tarelkin.

19

00:00:48,747 --> 00:00:50,082  
Rounding out our crew

20

00:00:50,082 --> 00:00:52,718  
of Expedition 34 remaining  
onboard the station are russian

21

00:00:52,718 --> 00:00:54,720  
cosmonauts Roman Romanenko,

22

00:00:54,720 --> 00:00:57,590

Canadian astronaut Chris  
Hadfield, and then all the way

23

00:00:57,590 --> 00:01:01,494

on the right there another  
NASA astronaut Tom Marshburn.

24

00:01:02,928 --> 00:01:06,198

As mentioned this is the  
final week of Expedition 34

25

00:01:06,198 --> 00:01:09,802

on board the station,  
currently engaged in a number

26

00:01:09,802 --> 00:01:12,538

of various science  
activities today.

27

00:01:12,538 --> 00:01:15,508

Starting off with Commander  
Ford who is currently inside

28

00:01:15,508 --> 00:01:17,643

of the Japanese Kibo module.

29

00:01:17,643 --> 00:01:20,579

He'll be working with the  
SPHERES experiment throughout

30

00:01:20,579 --> 00:01:23,516

our update today and  
for a few hours today.

31

00:01:23,516 --> 00:01:27,786

That SPHERES, standing for  
the Synchronized Position Hold

32

00:01:27,786 --> 00:01:31,390  
Engage Reorient Experimental  
Satellites, are a system

33

00:01:31,390 --> 00:01:36,562  
of satellites used to do various  
formation flying activities

34

00:01:36,562 --> 00:01:39,665  
provided a very unique  
opportunity.

35

00:01:39,665 --> 00:01:42,835  
on board station for these  
self-contained satellites

36

00:01:42,835 --> 00:01:45,571  
to test out various algorithms.

37

00:01:45,571 --> 00:01:49,041  
Also now creating  
three-dimensional models

38

00:01:49,041 --> 00:01:51,710  
of various unknown  
objects in space.

39

00:01:51,710 --> 00:01:53,946  
He'll be working  
with teams at MIT

40

00:01:53,946 --> 00:01:57,850  
and the Defense Advanced  
Research Projects Agency

41

00:01:57,850 --> 00:02:01,253  
or DARPA on this SPHERES  
VERTIGO activity today.

42

00:02:01,253 --> 00:02:05,824

Asides from that Ford  
will be doing a number

43

00:02:05,824 --> 00:02:08,427  
of crew departure  
activities a little bit later

44

00:02:08,427 --> 00:02:11,397  
as again he's preparing to  
return back down to Earth

45

00:02:11,397 --> 00:02:15,034  
with two Russian cosmonauts Oleg  
Novitskiy and Evgeny Tarelkin.

46

00:02:15,034 --> 00:02:19,205  
They'll be returning in their  
Soyuz TMA-06M spacecraft a

47

00:02:19,205 --> 00:02:21,173  
little bit later this week,

48

00:02:21,173 --> 00:02:24,443  
scheduled on Thursday  
evening central time.

49

00:02:24,443 --> 00:02:26,812  
As always we'll be  
bringing you live coverage

50

00:02:26,812 --> 00:02:28,180  
of all these events.

51

00:02:28,180 --> 00:02:31,450  
You see a timeline with things  
kicking off with a farewell

52

00:02:31,450 --> 00:02:34,220  
and hatch closure at 3:45 pm.

53

00:02:34,220 --> 00:02:37,056

That undocking scheduled to take place from the station later

54

00:02:37,056 --> 00:02:41,227

at about 7:30, all setting up for the Soyuz crew landing

55

00:02:41,227 --> 00:02:45,698

in Kazakhstan scheduled for 10:57 pm central time.

56

00:02:45,698 --> 00:02:49,401

So again tune in a little bit later this week to follow along

57

00:02:49,401 --> 00:02:53,572

with the departure of our Expedition 34 astronauts.

58

00:02:53,572 --> 00:02:55,040

Also on board the station one

59

00:02:55,040 --> 00:02:58,244

of those departing cosmonauts Oleg Novitskiy also doing some

60

00:02:58,244 --> 00:03:00,679

crew departure work installing some items inside

61

00:03:00,679 --> 00:03:02,281

of the Soyuz vehicle.

62

00:03:02,281 --> 00:03:05,117

He'll also be completing his final cardiovascular

63

00:03:05,117 --> 00:03:07,786

conditioning training in advance

64

00:03:07,786 --> 00:03:10,923  
of coming home a little  
bit later this week.

65

00:03:10,923 --> 00:03:13,726  
Also Evgeny Tarelkin finishing

66

00:03:13,726 --> 00:03:16,929  
up another biological  
experiment collecting some blood

67

00:03:16,929 --> 00:03:19,698  
and saliva samples  
that'll be brought back

68

00:03:19,698 --> 00:03:21,467  
down inside the Soyuz vehicle.

69

00:03:21,467 --> 00:03:25,204  
Also taking some microbial  
samples off of a number

70

00:03:25,204 --> 00:03:28,274  
of surfaces onboard the  
station, just checking

71

00:03:28,274 --> 00:03:30,643  
on their nominal levels.

72

00:03:30,643 --> 00:03:34,280  
Our third Russian cosmonaut  
who'll be remaining as part

73

00:03:34,280 --> 00:03:39,218  
of the Exhibition 35 crew, Roman  
Romanenko is working to clear

74

00:03:39,218 --> 00:03:41,120  
out some the urine  
tanks and push them

75

00:03:41,120 --> 00:03:45,624  
over into the Rodnik water  
tank in the 49 Progress vehicle

76

00:03:45,624 --> 00:03:48,160  
which will eventually be  
undocked from the station

77

00:03:48,160 --> 00:03:51,530  
and deorbited a little  
bit later in the Spring.

78

00:03:51,530 --> 00:03:53,465  
He'll also be flushing out  
a few of the tank lines

79

00:03:53,465 --> 00:03:56,802  
from the vehicle in preparation  
for all those activities.

80

00:03:56,802 --> 00:03:58,904  
He's also doing one

81

00:03:58,904 --> 00:04:01,907  
of two radiation  
monitoring experiment works

82

00:04:01,907 --> 00:04:03,575  
on board the station  
today working

83

00:04:03,575 --> 00:04:06,478  
with the Russian Matryoshka,  
named after the set

84

00:04:06,478 --> 00:04:08,314

of Russian nested dolls.

85

00:04:08,314 --> 00:04:10,616

He'll be reading some  
of the dosimeters

86

00:04:10,616 --> 00:04:13,819

and gathering the  
data from those.

87

00:04:13,819 --> 00:04:17,356

Meanwhile the current  
Expedition 34 flight engineer

88

00:04:17,356 --> 00:04:20,726

and future Expedition 35  
Commander Chris Hadfield was

89

00:04:20,726 --> 00:04:22,461

working on the CRUISE experiment

90

00:04:22,461 --> 00:04:25,331

or the Crew User Interface  
System Enhancements.

91

00:04:25,331 --> 00:04:28,534

A little bit earlier he was  
inside the Columbus module

92

00:04:28,534 --> 00:04:30,636

which you can see here.

93

00:04:30,636 --> 00:04:34,573

Aside from that he was  
transferring some samples

94

00:04:34,573 --> 00:04:38,344

out of the Melfi of the Minus  
80 Degree Laboratory Freezer,

95

00:04:38,344 --> 00:04:41,113

one of the cryogenic freezers  
used onboard the station

96

00:04:41,113 --> 00:04:44,850

for storing various  
biological research samples.

97

00:04:44,850 --> 00:04:49,021

He was also setting up the  
SLAMMD device on which is used

98

00:04:49,021 --> 00:04:52,057

for measuring body mass  
of these astronauts while

99

00:04:52,057 --> 00:04:53,792

in microgravity.

100

00:04:53,792 --> 00:04:56,528

SLAMMD stands for the Space  
Linear Acceleration Mass

101

00:04:56,528 --> 00:04:58,097

Measurement Device.

102

00:04:58,097 --> 00:05:00,899

He'll also be collecting  
a number of detectors

103

00:05:00,899 --> 00:05:05,237

for the RaDI-N or the  
Radiation Dosimetry Inside ISS.

104

00:05:05,237 --> 00:05:08,907

Another radiation monitoring  
research project on board

105

00:05:08,907 --> 00:05:11,210

that looks to study  
the neutron radiation

106  
00:05:11,210 --> 00:05:13,045  
and how much these  
astronauts are exposed

107  
00:05:13,045 --> 00:05:15,914  
to during long-duration  
spaceflight.

108  
00:05:15,914 --> 00:05:19,718  
Our final Expedition 34  
astronaut Tom Marshburn,

109  
00:05:19,718 --> 00:05:21,820  
transferring some  
samples from the MELFI

110  
00:05:21,820 --> 00:05:25,791  
over to the SpaceX GLACIER  
freezer freezers onboard the

111  
00:05:25,791 --> 00:05:27,459  
Dragon spacecraft.

112  
00:05:27,459 --> 00:05:30,028  
Dragon currently docked  
to the Earth-facing side

113  
00:05:30,028 --> 00:05:31,897  
of the Harmony node as one

114  
00:05:31,897 --> 00:05:33,599  
of three cargo craft  
currently docked

115  
00:05:33,599 --> 00:05:35,033  
to the International  
Space Station

116

00:05:35,033 --> 00:05:38,904  
and will be returning quite  
a variety of experiments

117

00:05:38,904 --> 00:05:43,175  
and samples from ongoing  
research on board the station.

118

00:05:43,175 --> 00:05:46,278  
Aside from that Marshburn  
working on setting up the BRIC

119

00:05:46,278 --> 00:05:49,715  
or the Biological Researching  
Canisters experiment,

120

00:05:49,715 --> 00:05:53,252  
which is a suite of hardware  
that looks to support a variety

121

00:05:53,252 --> 00:05:56,021  
of different plant growth  
investigations onboard

122

00:05:56,021 --> 00:05:57,256  
the station.

123

00:05:57,256 --> 00:05:58,724  
He'll also be doing a little  
bit of maintenance work

124

00:05:58,724 --> 00:06:02,528  
on the Water Recovery  
Management System cleaning out