



1
00:00:15,110 --> 00:00:12,150
good morning from mission control

2
00:00:16,310 --> 00:00:15,120
houston welcome to space station live

3
00:00:17,670 --> 00:00:16,320
joining us here inside of the

4
00:00:19,910 --> 00:00:17,680
international space station flight

5
00:00:22,310 --> 00:00:19,920
control room looking down at the orbit 2

6
00:00:23,750 --> 00:00:22,320
team manning consoles and monitoring all

7
00:00:25,189 --> 00:00:23,760
the systems on board the orbiting

8
00:00:27,029 --> 00:00:25,199
laboratory

9
00:00:28,550 --> 00:00:27,039
today's team right now being led by

10
00:00:30,310 --> 00:00:28,560
flight director chris edlund there in

11
00:00:31,910 --> 00:00:30,320
the middle in that suit jacket and

12
00:00:34,870 --> 00:00:31,920
joining him over on the left of the

13
00:00:36,310 --> 00:00:34,880

capcom position josh matthew serving as

14

00:00:38,150 --> 00:00:36,320

the communication link between all of

15

00:00:40,229 --> 00:00:38,160

our teams down here on the ground and

16

00:00:41,910 --> 00:00:40,239

the astronauts up in space

17

00:00:43,670 --> 00:00:41,920

that crew right now are currently

18

00:00:44,869 --> 00:00:43,680

orbiting about 250 miles over the

19

00:00:46,709 --> 00:00:44,879

earth's surface

20

00:00:48,630 --> 00:00:46,719

comprised of six crew members from

21

00:00:50,549 --> 00:00:48,640

nations all across the globe they're

22

00:00:52,069 --> 00:00:50,559

being led by canadian astronaut chris

23

00:00:54,950 --> 00:00:52,079

hadfield there in the front row on the

24

00:00:56,950 --> 00:00:54,960

right behind him his two soyuz crew

25

00:00:59,349 --> 00:00:56,960

members roman romanenko from the russian

26

00:01:01,750 --> 00:00:59,359

space agency and nasa astronaut tom

27

00:01:03,510 --> 00:01:01,760

marshburn those three have been on board

28

00:01:05,270 --> 00:01:03,520

the international space station since

29

00:01:07,429 --> 00:01:05,280

late december

30

00:01:09,910 --> 00:01:07,439

formerly the crew of expedition 34 and

31

00:01:12,070 --> 00:01:09,920

now expedition 35. over on the left

32

00:01:14,149 --> 00:01:12,080

there are three remaining crew members

33

00:01:16,149 --> 00:01:14,159

pavel vinogradov and alexander misurkin

34

00:01:17,990 --> 00:01:16,159

from the russian space agency and all

35

00:01:20,390 --> 00:01:18,000

the way in the back there nasa astronaut

36

00:01:22,070 --> 00:01:20,400

chris cassidy

37

00:01:23,590 --> 00:01:22,080

it's a pretty busy day onboard the

38

00:01:24,789 --> 00:01:23,600

international space station for these

39

00:01:26,149 --> 00:01:24,799

astronauts

40

00:01:28,870 --> 00:01:26,159

starting off with commander chris

41

00:01:30,149 --> 00:01:28,880

hadfield who's doing an acoustic survey

42

00:01:32,710 --> 00:01:30,159

throughout the international space

43

00:01:34,630 --> 00:01:32,720

station today using sound level meters

44

00:01:36,870 --> 00:01:34,640

to measure the acoustic loads that these

45

00:01:39,270 --> 00:01:36,880

astronauts are exposed to in their

46

00:01:41,190 --> 00:01:39,280

environment he'll also be doing some

47

00:01:43,030 --> 00:01:41,200

in-flight maintenance

48

00:01:45,190 --> 00:01:43,040

replacing the payload ethernet hub

49

00:01:47,510 --> 00:01:45,200

gateway which is used to control the

50

00:01:49,350 --> 00:01:47,520

networking through a number of payloads

51
00:01:51,749 --> 00:01:49,360
onboard the international space station

52
00:01:54,550 --> 00:01:51,759
he'll be removing the old legacy one and

53
00:01:56,389 --> 00:01:54,560
installing a new and improved model

54
00:01:58,230 --> 00:01:56,399
moving on pavel vinogradov flight

55
00:01:59,670 --> 00:01:58,240
engineer number one

56
00:02:01,749 --> 00:01:59,680
is over in the russian segment

57
00:02:03,749 --> 00:02:01,759
collecting some condensate water samples

58
00:02:05,910 --> 00:02:03,759
from the russian gas liquid mixture

59
00:02:07,830 --> 00:02:05,920
filter he's also on the hook for

60
00:02:09,109 --> 00:02:07,840
cleaning the gas liquid heat exchangers

61
00:02:10,710 --> 00:02:09,119
fan screening

62
00:02:13,910 --> 00:02:10,720
some routine maintenance on a few of the

63
00:02:17,030 --> 00:02:13,920

systems over in that russian segment

64

00:02:18,710 --> 00:02:17,040

moving on alexander misurkin our second

65

00:02:20,390 --> 00:02:18,720

russian cosmonaut

66

00:02:21,670 --> 00:02:20,400

is monitoring a number of fluid loops

67

00:02:23,110 --> 00:02:21,680

throughout the russian segment that'll

68

00:02:25,350 --> 00:02:23,120

take up quite a few

69

00:02:27,190 --> 00:02:25,360

hours of his day today he'll also be

70

00:02:28,390 --> 00:02:27,200

doing some data collecting and

71

00:02:31,270 --> 00:02:28,400

monitoring work with the russian

72

00:02:33,509 --> 00:02:31,280

matroyska experiment which is a

73

00:02:36,550 --> 00:02:33,519

radiation monitoring payload onboard the

74

00:02:38,790 --> 00:02:36,560

international space station resembles a

75

00:02:40,869 --> 00:02:38,800

torso of a mannequin has a number of

76

00:02:42,869 --> 00:02:40,879

dosimeters placed throughout it

77

00:02:44,949 --> 00:02:42,879

used to study any of

78

00:02:47,030 --> 00:02:44,959

study and

79

00:02:49,190 --> 00:02:47,040

gather data on the radiation loads that

80

00:02:50,869 --> 00:02:49,200

these astronauts are exposed to

81

00:02:52,790 --> 00:02:50,879

again while flying over the earth's

82

00:02:54,630 --> 00:02:52,800

atmosphere

83

00:02:55,990 --> 00:02:54,640

our nasa astronaut chris cassidy is

84

00:02:58,229 --> 00:02:56,000

working with the capillary flow

85

00:02:59,990 --> 00:02:58,239

experiment today he's actually getting

86

00:03:01,910 --> 00:03:00,000

ready to set that up right now you can

87

00:03:03,589 --> 00:03:01,920

see some video of it here as he works to

88

00:03:06,149 --> 00:03:03,599

prepare that payload

89

00:03:07,990 --> 00:03:06,159

capillary flow is a suite of various

90

00:03:10,630 --> 00:03:08,000

fluid physics experiments looking to

91

00:03:12,790 --> 00:03:10,640

investigate how fluids move up surfaces

92

00:03:15,030 --> 00:03:12,800

in microgravity

93

00:03:17,430 --> 00:03:15,040

this will lead to some direct

94

00:03:19,750 --> 00:03:17,440

improvements and computer models used by

95

00:03:21,350 --> 00:03:19,760

designers down here on the planet earth

96

00:03:23,190 --> 00:03:21,360

as they design

97

00:03:25,750 --> 00:03:23,200

fluid systems and

98

00:03:27,270 --> 00:03:25,760

fuel systems for low gravity and future

99

00:03:29,509 --> 00:03:27,280

spacecraft

100

00:03:31,910 --> 00:03:29,519

aside from that he'll be setting up the

101
00:03:34,229 --> 00:03:31,920
slam device which stands for the space

102
00:03:37,589 --> 00:03:34,239
linear acceleration mass measurement

103
00:03:40,229 --> 00:03:37,599
device it's used to calculate the mass

104
00:03:42,869 --> 00:03:40,239
of these astronauts using

105
00:03:45,270 --> 00:03:42,879
very basic equations of force mass and

106
00:03:47,190 --> 00:03:45,280
acceleration by applying a known

107
00:03:48,710 --> 00:03:47,200
acceleration and force to these

108
00:03:50,789 --> 00:03:48,720
astronauts they're then able to

109
00:03:53,589 --> 00:03:50,799
calculate their mass in that zero

110
00:03:55,190 --> 00:03:53,599
gravity environment of space

111
00:03:57,350 --> 00:03:55,200
our third russian cosmonaut roman

112
00:03:59,830 --> 00:03:57,360
romanenko is doing some networking

113
00:04:01,190 --> 00:03:59,840

computer hardware auditing throughout

114

00:04:03,589 --> 00:04:01,200

he'll also be working with that

115

00:04:06,789 --> 00:04:03,599

matroshka payload installing a few of

116

00:04:08,710 --> 00:04:06,799

the bubble-sized dosimeters initializing

117

00:04:10,869 --> 00:04:08,720

those and positioning it

118

00:04:13,110 --> 00:04:10,879

for radiation exposure

119

00:04:14,630 --> 00:04:13,120

and meanwhile our sixth crew member tom

120

00:04:15,429 --> 00:04:14,640

marshburn

121

00:04:17,590 --> 00:04:15,439

is

122

00:04:20,069 --> 00:04:17,600

has replaced a number of belts on two of

123

00:04:22,469 --> 00:04:20,079

the centrifuges in the european modular

124

00:04:24,230 --> 00:04:22,479

cultivation system you can see him

125

00:04:26,070 --> 00:04:24,240

continuing some of that work right here

126

00:04:28,230 --> 00:04:26,080

over in the columbus module

127

00:04:30,150 --> 00:04:28,240

aside from that he'll also be doing some

128

00:04:32,469 --> 00:04:30,160

data gathering on some of the nanoracks

129

00:04:33,990 --> 00:04:32,479

payloads a number of smaller payloads

130

00:04:36,230 --> 00:04:34,000

taking up a little bit of space on board

131

00:04:38,070 --> 00:04:36,240

the station

132

00:04:39,749 --> 00:04:38,080

with all this going on all six of our

133

00:04:41,590 --> 00:04:39,759

crew members having a hand in some of

134

00:04:44,469 --> 00:04:41,600

the departure and

135

00:04:46,790 --> 00:04:44,479

prep work for the eventual leave taking

136

00:04:48,870 --> 00:04:46,800

of three of our astronauts

137

00:04:50,469 --> 00:04:48,880

commander chris hadfield and then flight

138

00:04:52,469 --> 00:04:50,479

engineers tom marshburn and roman

139

00:04:54,310 --> 00:04:52,479

romanenko scheduled to leave the

140

00:04:55,830 --> 00:04:54,320

international space station just under

141

00:04:58,070 --> 00:04:55,840

two weeks from now

142

00:05:01,350 --> 00:04:58,080

so many of them will be packing items

143

00:05:03,270 --> 00:05:01,360

inside of that soyuz 33 or tma-07m

144

00:05:04,790 --> 00:05:03,280

spacecraft you can see there it's

145

00:05:06,469 --> 00:05:04,800

currently docked to the earth-facing

146

00:05:07,510 --> 00:05:06,479

side of the station at the rasviet

147

00:05:10,230 --> 00:05:07,520

module

148

00:05:12,390 --> 00:05:10,240

they'll be departing coming up on monday

149

00:05:13,990 --> 00:05:12,400

may 13th central time

150

00:05:17,189 --> 00:05:14,000

setting up for an eventual landing in

151

00:05:21,350 --> 00:05:17,199

kazakhstan currently targeted at 9 31 pm

152

00:05:22,870 --> 00:05:21,360

central 10 31 pm eastern and as with all