1
00:00:04,950 --> 00:00:03,189
good day and welcome to mission control

2
00:00:07,110 --> 00:00:04,960
houston where flight director ron

3
00:00:08,710 --> 00:00:07,120
spencer and spacecraft communicator anna

4
00:00:10,470 --> 00:00:08,720
fisher are

5
00:00:12,789 --> 00:00:10,480
among the leaders of the team that is

6
00:00:14,390 --> 00:00:12,799
working to support the expedition 35

7
00:00:15,509 --> 00:00:14,400
crew aboard the international space

8
00:00:18,630 --> 00:00:15,519
station

9
00:00:19,910 --> 00:00:18,640
which currently is orbiting over western

10
00:00:21,590 --> 00:00:19,920
canada

11
00:00:23,590 --> 00:00:21,600
and of course commander of the

12
00:00:25,109 --> 00:00:23,600
international space station right now is

13
00:00:27,509 --> 00:00:25,119

chris hadfield the first canadian

14
00:00:28,630 --> 00:00:27,519
commander of the orbiting research

15
00:00:31,269 --> 00:00:28,640
outpost

16
00:00:33,270 --> 00:00:31,279
he's on orbit with nasa's tom marshburn

17
00:00:34,950 --> 00:00:33,280
and russia's roman romanenko and they're

18
00:00:37,750 --> 00:00:34,960
working through a variety of different

19
00:00:39,590 --> 00:00:37,760
activities today

20
00:00:42,150 --> 00:00:39,600
hadfield has spent the majority of his

21
00:00:43,830 --> 00:00:42,160
morning reinstalling the amine swingbed

22
00:00:46,069 --> 00:00:43,840
experiment it's a technology

23
00:00:47,830 --> 00:00:46,079
demonstrator that looks at whether a

24
00:00:50,549 --> 00:00:47,840
vacuum-generated

25
00:00:52,229 --> 00:00:50,559
amine system can effectively remove

26
00:00:55,110 --> 00:00:52,239
additional carbon dioxide from the

27
00:00:56,869 --> 00:00:55,120
international space station's atmosphere

28
00:00:59,510 --> 00:00:56,879
using smaller more efficient vacuum

29
00:01:01,830 --> 00:00:59,520
regeneration the components

30
00:01:04,390 --> 00:01:01,840
there are two different carbon dioxide

31
00:01:05,990 --> 00:01:04,400
removal systems in the u.s side of the

32
00:01:07,910 --> 00:01:06,000
station and one in the russian side of

33
00:01:09,750 --> 00:01:07,920
the station this is

34
00:01:11,510 --> 00:01:09,760
intended to eke out a little bit more of

35
00:01:13,510 --> 00:01:11,520
that carbon dioxide so that can be

36
00:01:15,109 --> 00:01:13,520
recycled

37
00:01:17,109 --> 00:01:15,119
at the end of the day hadfield also is

38
00:01:19,030 --> 00:01:17,119

going to process some samples from the

39
00:01:20,870 --> 00:01:19,040
coarsening and solid liquid mixtures

40
00:01:23,109 --> 00:01:20,880
experiment that is aimed at developing

41
00:01:25,350 --> 00:01:23,119
methods for manufacturing better metal

42
00:01:28,310 --> 00:01:25,360
alloys for a host of applications on

43
00:01:30,310 --> 00:01:28,320
earth hadfield also has a ham radio pass

44
00:01:33,270 --> 00:01:30,320
later today with the ann richards school

45
00:01:35,030 --> 00:01:33,280
in austin that is a school for young

46
00:01:36,950 --> 00:01:35,040
female leaders

47
00:01:38,710 --> 00:01:36,960
roman romanenko working with the

48
00:01:40,069 --> 00:01:38,720
matroshka experiment in the russian

49
00:01:41,749 --> 00:01:40,079
segment of the station today he's

50
00:01:44,389 --> 00:01:41,759
looking at radiation levels throughout

51
00:01:46,550 --> 00:01:44,399
the station complex he's also doing some

52
00:01:48,950 --> 00:01:46,560
transfer items for the progress 50

53
00:01:50,870 --> 00:01:48,960
spacecraft which is currently docked to

54
00:01:54,069 --> 00:01:50,880
the piers compartment at the end of the

55
00:01:56,310 --> 00:01:54,079
spa april uh and it's going to be uh

56
00:01:58,550 --> 00:01:56,320
later today working with the relaxskaia

57
00:02:00,389 --> 00:01:58,560
experiment

58
00:02:02,630 --> 00:02:00,399
tom marshburn is working with the

59
00:02:04,230 --> 00:02:02,640
advanced colloids experiment today

60
00:02:07,030 --> 00:02:04,240
that experiment looks at removing

61
00:02:09,430 --> 00:02:07,040
gravitational jabbing and sedimentation

62
00:02:12,949 --> 00:02:09,440
so that it's possible to observe how

63
00:02:15,110 --> 00:02:12,959

order arises out of chaos and to learn

64
00:02:17,510 --> 00:02:15,120
how to control the process in these

65
00:02:19,910 --> 00:02:17,520
colloids which are mixtures of solids

66
00:02:21,830 --> 00:02:19,920
and liquids you also work with the setup

67
00:02:23,910 --> 00:02:21,840
for the marangoni experiment that's

68
00:02:25,990 --> 00:02:23,920
looking at surface tension of liquids in

69
00:02:27,830 --> 00:02:26,000
space that same effect you see when you

70
00:02:29,270 --> 00:02:27,840
have a wine glass and the legs trickle

71
00:02:31,509 --> 00:02:29,280
down the side

72
00:02:34,630 --> 00:02:31,519
today's crew earth observations include

73
00:02:36,550 --> 00:02:34,640
the nile river delta and the red sea

74
00:02:39,589 --> 00:02:36,560
johannesburg africa

75
00:02:41,430 --> 00:02:39,599
puerto novo benin and saint helena

76
00:02:43,990 --> 00:02:41,440
island there's also three different

77
00:02:45,830 --> 00:02:44,000
areas of uh volcanic activity that they

78
00:02:48,150 --> 00:02:45,840
had pointed out to them and

79
00:02:49,830 --> 00:02:48,160
stromboli and mount aetna of europe and

80
00:02:53,910 --> 00:02:49,840
kankar

81
00:02:56,869 --> 00:02:55,670
earlier today hadfield called down to

82
00:02:58,710 --> 00:02:56,879
mission control that the crew had

83
00:03:01,190 --> 00:02:58,720
completed all of its work for the day

84
00:03:02,790 --> 00:03:01,200
including job jar work and offered to

85
00:03:04,550 --> 00:03:02,800
take care of any other available work

86
00:03:06,710 --> 00:03:04,560
that mission control might have for them

87
00:03:08,309 --> 00:03:06,720
and as a

88
00:03:10,309 --> 00:03:08,319

result mission control likely is going

89
00:03:11,110 --> 00:03:10,319
to be sending up some additional tasks

90
00:03:12,790 --> 00:03:11,120
to

91
00:03:14,949 --> 00:03:12,800
deal with some full waste tanks for the

92
00:03:16,710 --> 00:03:14,959
station's toilets that are involved in

93
00:03:19,110 --> 00:03:16,720
the recycling system

94
00:03:20,869 --> 00:03:19,120
tonight at 7 25 p.m the station is

95
00:03:23,190 --> 00:03:20,879
scheduled to perform a reboost maneuver

96
00:03:25,350 --> 00:03:23,200
using the thrusters on the progress 49

97
00:03:27,270 --> 00:03:25,360
spacecraft that's stocked to the station

98
00:03:29,830 --> 00:03:27,280
that reboost will raise the station's

99
00:03:31,910 --> 00:03:29,840
altitude about three miles to prepare

100
00:03:34,789 --> 00:03:31,920
for the first same-day soyuz rendezvous

101
00:03:36,869 --> 00:03:34,799
and docking that's coming up on march 28

102
00:03:39,509 --> 00:03:36,879
with the upcoming crew members

103
00:03:41,350 --> 00:03:39,519
pavel vinogradov chris cassidy and

104
00:03:43,030 --> 00:03:41,360
alexander misurkin

105
00:03:45,910 --> 00:03:43,040
the burn is going to last 11 minutes and

106
00:03:48,869 --> 00:03:45,920
13 seconds and our nasa coverage begins