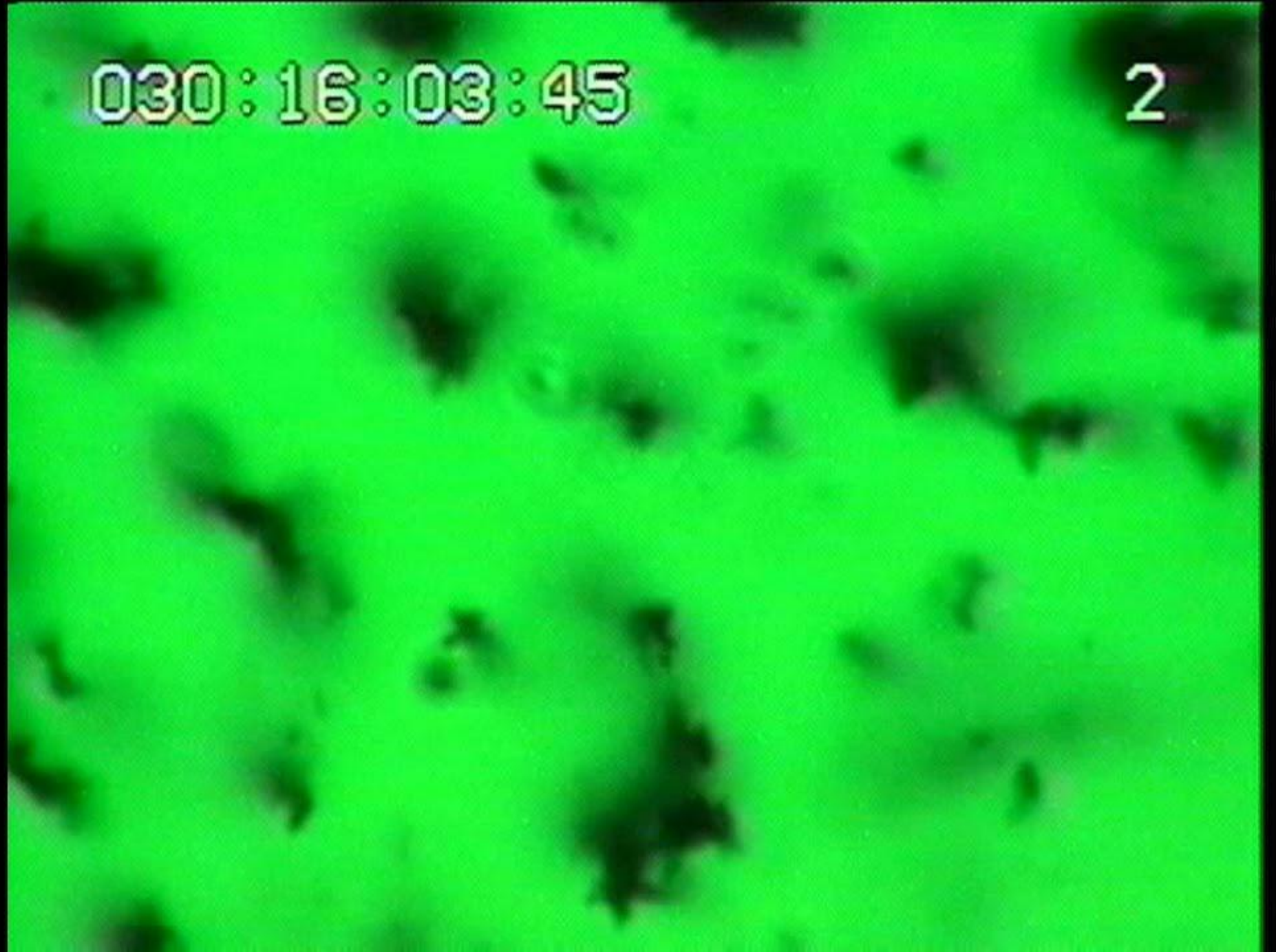
030:16:03:45
2

1
00:00:06,570 --> 00:00:04,410
today and welcome to Mission Control

2
00:00:08,490 --> 00:00:06,580
Houston where an expert team of flight

3
00:00:10,230 --> 00:00:08,500
controllers is watching over the systems

4
00:00:13,289 --> 00:00:10,240
aboard the International Space Station

5
00:00:15,510 --> 00:00:13,299
as the expedition 34 crew continues

6
00:00:17,490 --> 00:00:15,520
through its busy day of primarily

7
00:00:19,820 --> 00:00:17,500
scientific research but with some

8
00:00:22,250 --> 00:00:19,830
routine maintenance thrown into the mix

9
00:00:24,480 --> 00:00:22,260
on board the commander Kevin Ford

10
00:00:27,390 --> 00:00:24,490
continues his work with fellow NASA

11
00:00:29,220 --> 00:00:27,400
astronaut Tom Marshburn and a Canadian

12
00:00:31,950 --> 00:00:29,230
Space Agency astronaut Chris Hadfield

13
00:00:34,710 --> 00:00:31,960

along with Russian cosmonauts Roman

14
00:00:37,200 --> 00:00:34,720
Romanenko Evgeny tarelkin and Oleg

15
00:00:39,120 --> 00:00:37,210
novitskiy today the crew is working on

16
00:00:41,819 --> 00:00:39,130
experiments to study how liquids and

17
00:00:44,460 --> 00:00:41,829
magnetic suspended solids might be used

18
00:00:46,080 --> 00:00:44,470
as smart fluids for mechanical systems

19
00:00:48,660 --> 00:00:46,090
like brakes and earthquake protection

20
00:00:50,400 --> 00:00:48,670
devices we are also looking at a student

21
00:00:52,470 --> 00:00:50,410
experiment that lets middle schoolers

22
00:00:54,270 --> 00:00:52,480
guide a digital camera for photos of the

23
00:00:56,280 --> 00:00:54,280
earth below and another educational

24
00:00:58,170 --> 00:00:56,290
activity to let Japanese students vote

25
00:01:00,690 --> 00:00:58,180
for and suggest physical tasks for

26
00:01:02,850 --> 00:01:00,700
astronauts to demonstrate on orbit that

27
00:01:05,849 --> 00:01:02,860
show the difference between microgravity

28
00:01:07,590 --> 00:01:05,859
and one gravity of Earth Kevin Ford

29
00:01:09,929 --> 00:01:07,600
tighten down some set screws on the

30
00:01:12,300 --> 00:01:09,939
amine swingbed experiment today to try

31
00:01:14,370 --> 00:01:12,310
to improve its functionality researchers

32
00:01:16,709 --> 00:01:14,380
are evaluating how well the experimental

33
00:01:19,199 --> 00:01:16,719
vacuum register generated aiming system

34
00:01:21,510 --> 00:01:19,209
can effectively remove carbon dioxide

35
00:01:24,239 --> 00:01:21,520
and looking toward future space vehicles

36
00:01:27,029 --> 00:01:24,249
so far they've had some resistance to an

37
00:01:28,709 --> 00:01:27,039
important valve moving completely the

38
00:01:30,749 --> 00:01:28,719

hope was that adjusting the set screws

39
00:01:32,879 --> 00:01:30,759
would allow the valve to move freely but

40
00:01:35,760 --> 00:01:32,889
early results show the adjustment didn't

41
00:01:38,519 --> 00:01:35,770
solve the issue for it also did some

42
00:01:40,319 --> 00:01:38,529
transfer work of recycled water from the

43
00:01:42,870 --> 00:01:40,329
water recovery system to use on the

44
00:01:44,909 --> 00:01:42,880
station and collected trash to go in the

45
00:01:47,730 --> 00:01:44,919
progress 49 spacecraft before it departs

46
00:01:49,800 --> 00:01:47,740
on February the 9th Chris Hadfield work

47
00:01:52,050 --> 00:01:49,810
with the colloid experiment that works

48
00:01:54,120 --> 00:01:52,060
with solids suspended in fluids it's

49
00:01:55,919 --> 00:01:54,130
called the investigating the structure

50
00:01:58,139 --> 00:01:55,929
of paramagnetic aggregates from

51
00:02:00,749 --> 00:01:58,149
colloidal emulsions three or inspace-3

52
00:02:02,899 --> 00:02:00,759
experiment researchers at the University

53
00:02:05,940 --> 00:02:02,909
of Delaware obtaining data on

54
00:02:07,529 --> 00:02:05,950
magnetorheological fluids those that

55
00:02:09,960 --> 00:02:07,539
change properties in response to

56
00:02:12,330 --> 00:02:09,970
magnetic fields Tom Marshburn worked

57
00:02:14,510 --> 00:02:12,340
with a setup and activation of the Iserv

58
00:02:17,540 --> 00:02:14,520
investigation that's a joint NASA

59
00:02:19,340 --> 00:02:17,550
and US aid program to document earth

60
00:02:21,830 --> 00:02:19,350
disasters from the station's unique

61
00:02:24,440 --> 00:02:21,840
location on orbit you also work to do

62
00:02:27,410 --> 00:02:24,450
some experiment demonstrations for the

63
00:02:29,360 --> 00:02:27,420

Japanese try zero-g experiment and took

64
00:02:31,000 --> 00:02:29,370
measurements of noise levels in the

65
00:02:33,800 --> 00:02:31,010
complex with the sound level meter

66
00:02:35,690 --> 00:02:33,810
meanwhile the Russians nowitzki tarelkin

67
00:02:37,280 --> 00:02:35,700
and romanenko also worked on a variety

68
00:02:39,920 --> 00:02:37,290
of experiments as well as station

69
00:02:42,590 --> 00:02:39,930
maintenance ask activities Romanenko

70
00:02:44,180 --> 00:02:42,600
worked on packing progress 49 for its

71
00:02:45,860 --> 00:02:44,190
departure and on an experiment that

72
00:02:48,080 --> 00:02:45,870
looks at how the heart and blood stream

73
00:02:50,330 --> 00:02:48,090
are affected by life in space Darrell

74
00:02:52,660 --> 00:02:50,340
can work with the relaxation experiment

75
00:02:56,180 --> 00:02:52,670
that makes ultraviolet spectrometer

76
00:02:59,630 --> 00:02:56,190
observations of the chemiluminescent

77
00:03:01,490 --> 00:02:59,640
reactions in the xenon plasma outside

78
00:03:04,160 --> 00:03:01,500
the space station from firings of two

79
00:03:05,990 --> 00:03:04,170
plasma contactor units he talked with

80
00:03:07,310 --> 00:03:06,000
experts in Moscow about the installation

81
00:03:09,800 --> 00:03:07,320
of data gathering equipment for that

82
00:03:11,450 --> 00:03:09,810
experiment Nowitzki worked on routine

83
00:03:12,740 --> 00:03:11,460
maintenance in the zarya cargo module

84
00:03:15,530 --> 00:03:12,750
the first module to launch to the space

85
00:03:17,510 --> 00:03:15,540
station and did some russian life

86
00:03:19,040 --> 00:03:17,520
support system maintenance meanwhile

87
00:03:21,050 --> 00:03:19,050
outside the space station the robotics

88
00:03:23,240 --> 00:03:21,060

flight controllers in Houston backed up

89
00:03:25,970 --> 00:03:23,250
by their Canadian counterparts near

90
00:03:28,100 --> 00:03:25,980
Montreal and safety bear have been used

91
00:03:29,870 --> 00:03:28,110
in Canada arm too and the dexter 5

92
00:03:31,400 --> 00:03:29,880
manipulator system throughout the week

93
00:03:34,430 --> 00:03:31,410
to move spare equipment replacement

94
00:03:37,699 --> 00:03:34,440
units around a slow but deliberate work

95
00:03:40,340 --> 00:03:37,709
by the robos this week so far has moved

96
00:03:42,380 --> 00:03:40,350
I failed main bus switching unit from

97
00:03:44,630 --> 00:03:42,390
its temporary stowage location on

98
00:03:46,160 --> 00:03:44,640
external storage platform 2 which is

99
00:03:47,810 --> 00:03:46,170
outside the quest airlock over to

100
00:03:50,540 --> 00:03:47,820
external logistics carrier two on the

101
00:03:52,970 --> 00:03:50,550
starboard truss and a transfer of a

102
00:03:55,640 --> 00:03:52,980
cargo transport container from external

103
00:03:58,220 --> 00:03:55,650
logistics carrier to over to dexters

104
00:03:59,750 --> 00:03:58,230
temporary equipment holder later today

105
00:04:01,430 --> 00:03:59,760
they're going to be moving a direct

106
00:04:03,560 --> 00:04:01,440
current switching unit component

107
00:04:05,930 --> 00:04:03,570
electrical system from external storage

108
00:04:08,000 --> 00:04:05,940
platform to to external logistics

109
00:04:10,460 --> 00:04:08,010
carrier to and then tomorrow they'll

110
00:04:12,620 --> 00:04:10,470
still dexter on its mobile serving

111
00:04:14,240 --> 00:04:12,630
system that runs up and down the railway

112
00:04:16,640 --> 00:04:14,250
along the length of the trust structure

113
00:04:19,099 --> 00:04:16,650

so that the robot arm can reach any