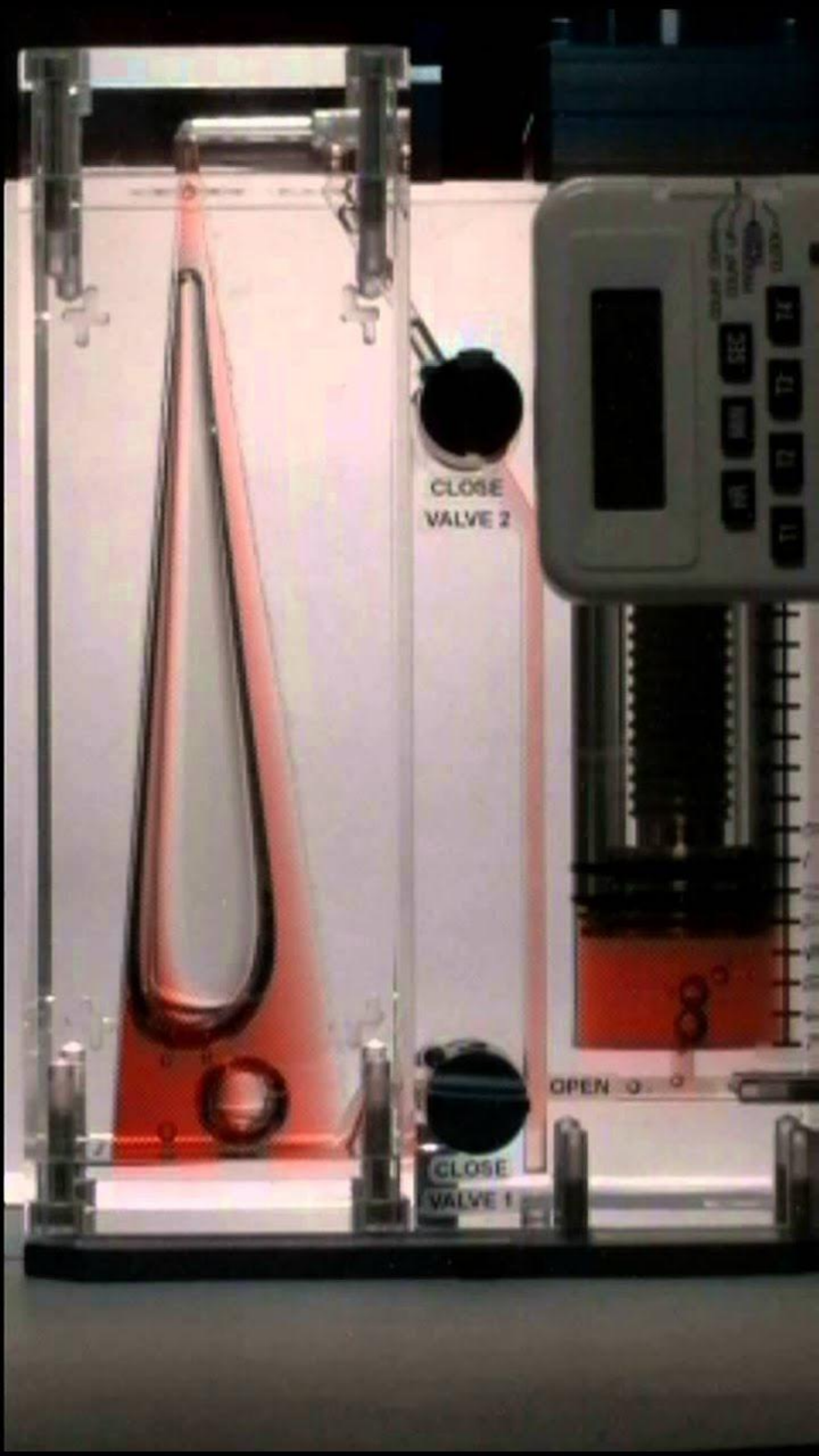
CLOSE
VALVE 2
OPEN
CLOSE
VALVE 1

1
00:00:01,280 --> 00:00:03,950
Good morning this is
mission control Houston.

2
00:00:03,950 --> 00:00:05,450
Thank you for joining
us for our coverage

3
00:00:05,450 --> 00:00:08,700
of the International Space
Station's Expedition 34 mission.

4
00:00:08,700 --> 00:00:11,750
Today most of the attention of
the ground control team as well

5
00:00:11,750 --> 00:00:14,970
on orbit crew is focused
on the Progress activities.

6
00:00:14,970 --> 00:00:17,640
Over the weekend, the 48
Progress which had been docked

7
00:00:17,640 --> 00:00:20,440
to the station's nadir
Earth facing port,

8
00:00:20,440 --> 00:00:22,000
successfully undocked making way

9
00:00:22,000 --> 00:00:24,170
for the arrival of
the new Progress.

10
00:00:24,170 --> 00:00:26,160
Progress 50 launched
this morning

11

00:00:26,160 --> 00:00:28,970
at 8:41 a.m. central time.

12
00:00:28,970 --> 00:00:31,700
That spacecraft is now en
route to the space station.

13
00:00:31,700 --> 00:00:35,900
It is on expedited path
on a four orbit rendezvous

14
00:00:35,900 --> 00:00:39,170
between enabling a same-day
docking to the space station,

15
00:00:39,170 --> 00:00:41,780
the Progress arrival to
the station is planned

16
00:00:41,780 --> 00:00:44,920
for 2:40 p.m. central time.

17
00:00:44,920 --> 00:00:47,390
In support of the Progress
docking and ingress activities,

18
00:00:47,390 --> 00:00:52,140
the crew is sleep shifting a
bit, waking up at 8 a.m. GMT

19
00:00:52,140 --> 00:00:53,660
or about an hour
later than normal

20
00:00:53,660 --> 00:00:56,620
and likewise the flight
control team here at the

21
00:00:56,620 --> 00:00:59,110
of space center is

likewise shifted

22
00:00:59,110 --> 00:01:02,760
and will be supporting a longer
than normal shift in order

23
00:01:02,760 --> 00:01:06,870
to see the Progress docking
activities concluded.

24
00:01:06,870 --> 00:01:09,620
The crew woke up at 2 a.m.
central time and had a number

25
00:01:09,620 --> 00:01:12,790
of biomedical data and sample
collections including blood

26
00:01:12,790 --> 00:01:15,690
draws and body mass measurements
in support of an array of health

27
00:01:15,690 --> 00:01:17,740
and human physiology studies.

28
00:01:17,740 --> 00:01:20,320
They then performed routine
vehicle inspection including

29
00:01:20,320 --> 00:01:23,690
laptop reboots and
connector inspections.

30
00:01:23,690 --> 00:01:25,280
The crew members then
had time for hygiene

31
00:01:25,280 --> 00:01:27,910
and breakfast before the start
of their day planning conference

32
00:01:27,910 --> 00:01:31,100
with ground teams aside from the
Progress activities the day will

33
00:01:31,100 --> 00:01:33,830
focus mostly on science
experiments with a mix

34
00:01:33,830 --> 00:01:36,800
of maintenance tasks as well.

35
00:01:36,800 --> 00:01:39,600
Commander Kevin Ford will
start his day with exercise

36
00:01:39,600 --> 00:01:42,960
on the ARED or the advanced
resistive exercise device

37
00:01:42,960 --> 00:01:44,850
and then work on
internal thermal control

38
00:01:44,850 --> 00:01:46,420
system maintenance.

39
00:01:46,420 --> 00:01:49,250
He'll also work on the
capillary flow experiment,

40
00:01:49,250 --> 00:01:51,430
which is a suite of
fluid physics experiments

41
00:01:51,430 --> 00:01:55,270
that investigate capillary
flows of fluids in containers

42

00:01:55,270 --> 00:01:57,650
with a unique geometries
or shapes.

43
00:01:57,650 --> 00:02:00,190
Results from this study will
help improve current computer

44
00:02:00,190 --> 00:02:01,870
models that are used
by designers

45
00:02:01,870 --> 00:02:03,960
of low gravity fluid systems

46
00:02:03,960 --> 00:02:08,610
and may improve fluid transfer
systems on future spacecraft.

47
00:02:08,610 --> 00:02:11,990
Tom Marshburn's morning
will include a collection

48
00:02:11,990 --> 00:02:15,650
of water samples from a
throughout the orbiting complex

49
00:02:15,650 --> 00:02:17,290
as well as performing
software updates

50
00:02:17,290 --> 00:02:19,300
for the regenerative
environmental control

51
00:02:19,300 --> 00:02:21,720
and life support
system or eclipse,

52
00:02:21,720 --> 00:02:24,270

he will be performing
software updates on equipment

53
00:02:24,270 --> 00:02:26,380
that supports those systems.

54
00:02:26,380 --> 00:02:28,850
Canadian Space Agency astronaut
Chris Hadfield will work

55
00:02:28,850 --> 00:02:32,180
on the Inspace-3 experiment
investigating the structure

56
00:02:32,180 --> 00:02:35,470
of aggregates from colloidal
emulsions or mixtures.

57
00:02:35,470 --> 00:02:37,290
This particular experiment
obtains data

58
00:02:37,290 --> 00:02:40,000
on fluids containing
unique shaped particles

59
00:02:40,000 --> 00:02:42,390
that change the physical
properties of the fluids

60
00:02:42,390 --> 00:02:44,360
in response to magnetic fields.

61
00:02:44,360 --> 00:02:45,470
The rapid transformation

62
00:02:45,470 --> 00:02:47,920
of these fluids have many
possible technological

63
00:02:47,920 --> 00:02:49,260
applications on Earth,

64
00:02:49,260 --> 00:02:51,840
especially for actuator-type
devices.

65
00:02:51,840 --> 00:02:54,260
This technology has promised
to improve the ability

66
00:02:54,260 --> 00:02:57,020
to design structures such
as bridges and buildings

67
00:02:57,020 --> 00:02:59,950
to better withstand
earthquakes forces.

68
00:02:59,950 --> 00:03:02,090
Hadfield will also on
start pre-packing supplies

69
00:03:02,090 --> 00:03:04,370
for the upcoming Dragon vehicle
which is scheduled for trip

70
00:03:04,370 --> 00:03:06,660
to the station in early March.

71
00:03:06,660 --> 00:03:09,640
Cosmonaut Oleg Novitskiy day
will include work on experiment

72
00:03:09,640 --> 00:03:12,120
such as Matroyshka, which
measures radiation exposure

73
00:03:12,120 --> 00:03:14,490

in space and the
Typologia experiment,

74
00:03:14,490 --> 00:03:15,610
which is a Russian experiment

75
00:03:15,610 --> 00:03:18,290
to better understand a crew
members' performance on orbit.

76
00:03:18,290 --> 00:03:19,470
He'll be assisted in that

77
00:03:19,470 --> 00:03:22,110
by fellow cosmonauts
Evgeny Tarelkin,

78
00:03:22,110 --> 00:03:24,650
who will also conduct checks
of the vacuum gauges and work

79
00:03:24,650 --> 00:03:25,740
on the visor experiment,

80
00:03:25,740 --> 00:03:28,510
a Russian photographic
and imagery study.

81
00:03:28,510 --> 00:03:31,160
Roman Romanenko will work on
Russian experiments as well

82
00:03:31,160 --> 00:03:33,740
and perform ventilation system
preventative maintenance

83
00:03:33,740 --> 00:03:35,460
in the service module.

84

00:03:35,460 --> 00:03:37,580
Towards the end of
the day, Romanenko

85
00:03:37,580 --> 00:03:39,620
and Tarelkin will turn
their focus to the arrival

86
00:03:39,620 --> 00:03:42,810
of the Progress 50 spacecraft,
that docking again scheduled

87
00:03:42,810 --> 00:03:45,520
to occur at 2:40
p.m. central time,