1
00:00:04,150 --> 00:00:02,869
good morning this is mission control

2
00:00:06,309 --> 00:00:04,160
houston welcome and thank you for

3
00:00:11,749 --> 00:00:06,319
joining us for today's edition of iss

4
00:00:15,350 --> 00:00:13,830
joining us now inside the international

5
00:00:16,870 --> 00:00:15,360
space station flight control room where

6
00:00:18,550 --> 00:00:16,880
the team has been monitoring the systems

7
00:00:21,189 --> 00:00:18,560
aboard the station and supporting the

8
00:00:24,470 --> 00:00:21,199
day's activities of the expedition 34

9
00:00:29,029 --> 00:00:26,230
leading the orbit 2 team here in the

10
00:00:31,269 --> 00:00:29,039
station flight control room

11
00:00:33,830 --> 00:00:31,279
today is uh flight director tomas

12
00:00:35,910 --> 00:00:33,840
gonzalez taurus shown here in this view

13
00:00:37,270 --> 00:00:35,920

and next to him serving as capcom is

14
00:00:39,430 --> 00:00:37,280
leslie ringo

15
00:00:43,190 --> 00:00:39,440
relaying all ground messages up to the

16
00:00:47,029 --> 00:00:44,790
now aboard the international space

17
00:00:49,110 --> 00:00:47,039
station is commander of the complex nasa

18
00:00:50,869 --> 00:00:49,120
astronaut kevin ford with flight

19
00:00:53,670 --> 00:00:50,879
engineers russian cosmonauts oleg

20
00:00:54,790 --> 00:00:53,680
novitskiy and evgeny tarelkin who will

21
00:00:56,549 --> 00:00:54,800
work aboard the station as a

22
00:01:00,470 --> 00:00:56,559
three-member crew until the arrival of

23
00:01:02,790 --> 00:01:00,480
three new crew members in a few weeks

24
00:01:04,469 --> 00:01:02,800
ford novitskiy and turalkin arrived at

25
00:01:07,270 --> 00:01:04,479
the international space station after

26
00:01:10,149 --> 00:01:07,280
docking their soyuz tma-06m

27
00:01:14,070 --> 00:01:10,159
spacecraft shown here too the poisk

28
00:01:19,350 --> 00:01:14,080
module last month on october 25th

29
00:01:23,510 --> 00:01:21,429
meanwhile the space station with its

30
00:01:24,830 --> 00:01:23,520
crew flying aboard is flying at an

31
00:01:27,910 --> 00:01:24,840
altitude of

32
00:01:29,109 --> 00:01:27,920
about a little more than 260 statute

33
00:01:31,270 --> 00:01:29,119
miles

34
00:01:33,350 --> 00:01:31,280
the orbiting facility is on an east

35
00:01:35,590 --> 00:01:33,360
southeast track coming now across the

36
00:01:40,950 --> 00:01:35,600
north pacific ocean and will pass an

37
00:01:45,109 --> 00:01:43,109
the expedition 34 crew members began

38
00:01:47,830 --> 00:01:45,119

their day with some time this morning

39
00:01:50,870 --> 00:01:47,840
for work prep preparation

40
00:01:53,429 --> 00:01:50,880
breakfast morning hygiene and a daily

41
00:01:55,109 --> 00:01:53,439
station inspection the crew then kicked

42
00:01:56,469 --> 00:01:55,119
off the day with the first of two daily

43
00:01:58,630 --> 00:01:56,479
planning conferences with ground

44
00:02:00,230 --> 00:01:58,640
controllers around the world to review

45
00:02:05,910 --> 00:02:00,240
the day's activities and plan for the

46
00:02:10,630 --> 00:02:08,550
at the top of the task list commander

47
00:02:13,270 --> 00:02:10,640
kevin ford began his day early this

48
00:02:15,589 --> 00:02:13,280
morning working with the aquatic habitat

49
00:02:18,550 --> 00:02:15,599
that is home to madoka fish aboard the

50
00:02:20,390 --> 00:02:18,560
international space station

51
00:02:22,869 --> 00:02:20,400
researchers are using this facility that

52
00:02:25,589 --> 00:02:22,879
was brought up to the space station back

53
00:02:28,550 --> 00:02:25,599
this summer in july to look at how

54
00:02:30,550 --> 00:02:28,560
microgravity impacts marine life

55
00:02:33,350 --> 00:02:30,560
the ongoing studies will look at the

56
00:02:37,589 --> 00:02:33,360
impacts of radiation bone degradation

57
00:02:39,830 --> 00:02:37,599
muscle atrophy and developmental biology

58
00:02:41,110 --> 00:02:39,840
ford this morning had performed a water

59
00:02:43,910 --> 00:02:41,120
quality check

60
00:02:45,910 --> 00:02:43,920
measuring the concentration of ammonium

61
00:02:49,110 --> 00:02:45,920
nitrate and nitrate in the water at that

62
00:02:51,509 --> 00:02:49,120
aquatic habitat

63
00:02:53,350 --> 00:02:51,519

commander ford then uh moved along to

64
00:02:54,550 --> 00:02:53,360
more research on orbit

65
00:02:56,790 --> 00:02:54,560
he had

66
00:02:58,470 --> 00:02:56,800
performed a new data takes with its

67
00:03:00,150 --> 00:02:58,480
spheres experiment

68
00:03:01,990 --> 00:03:00,160
shown here in this video that was

69
00:03:04,309 --> 00:03:02,000
downlinked from earlier this morning

70
00:03:06,550 --> 00:03:04,319
that employs three bowling ball

71
00:03:09,509 --> 00:03:06,560
free-flying satellites known as

72
00:03:12,550 --> 00:03:09,519
synchronized position hold engage

73
00:03:14,949 --> 00:03:12,560
reorient experimental satellites these

74
00:03:16,630 --> 00:03:14,959
satellites are used to test techniques

75
00:03:19,190 --> 00:03:16,640
that could lead to advancements in

76
00:03:21,030 --> 00:03:19,200
automated dockings satellite servicing

77
00:03:24,869 --> 00:03:21,040
spacecraft assembly and emergency

78
00:03:28,630 --> 00:03:26,390
yesterday ground controllers in the

79
00:03:31,110 --> 00:03:28,640
mission control commanded the canada arm

80
00:03:33,910 --> 00:03:31,120
2 to walk off from the mobile base

81
00:03:36,390 --> 00:03:33,920
system power and data grapple fixture to

82
00:03:39,110 --> 00:03:36,400
the harmony power and data grapple

83
00:03:41,910 --> 00:03:39,120
fixture today commander ford had worked

84
00:03:44,309 --> 00:03:41,920
from inside the cupola to begin a

85
00:03:46,710 --> 00:03:44,319
routine inspection of the space station

86
00:03:49,270 --> 00:03:46,720
arm latching end effector by snapping a

87
00:03:52,070 --> 00:03:49,280
series of pre-identified photographs of

88
00:03:53,830 --> 00:03:52,080

the snare cable

89
00:03:55,670 --> 00:03:53,840
and meanwhile on the russian side of the

90
00:03:58,309 --> 00:03:55,680
house flight engineers novitskiy and

91
00:04:00,309 --> 00:03:58,319
tarelkin

92
00:04:02,229 --> 00:04:00,319
work together to gather data for the

93
00:04:04,390 --> 00:04:02,239
russian scientific study known as

94
00:04:06,710 --> 00:04:04,400
typology which looks at the effect of

95
00:04:09,110 --> 00:04:06,720
long-term space flight on a crew

96
00:04:11,509 --> 00:04:09,120
member's psycho-physical state his

97
00:04:14,309 --> 00:04:11,519
ability to withstand stress and to

98
00:04:16,710 --> 00:04:14,319
perform and communicate

99
00:04:19,270 --> 00:04:16,720
novitskiy then replaced a couple fire

100
00:04:21,110 --> 00:04:19,280
extinguishers in the zvezda service

101
00:04:22,550 --> 00:04:21,120
module

102
00:04:24,629 --> 00:04:22,560
while tarelkin

103
00:04:26,550 --> 00:04:24,639
performed regular daily maintenance to

104
00:04:34,390 --> 00:04:26,560
the serge with a russian life support

105
00:04:38,310 --> 00:04:36,629
we're getting a view again here inside

106
00:04:40,550 --> 00:04:38,320
the international space station flight

107
00:04:42,790 --> 00:04:40,560
control room this is the orbit 2 team

108
00:04:44,629 --> 00:04:42,800
who continues to monitor the systems and

109
00:04:46,629 --> 00:04:44,639
the crew's activities aboard the

110
00:04:48,790 --> 00:04:46,639
international space station meanwhile

111
00:04:51,030 --> 00:04:48,800
each of the crew members will uh put in

112
00:04:53,430 --> 00:04:51,040
their daily two hours of exercise using

113
00:04:56,469 --> 00:04:53,440

the onboard gym equipment that includes

114
00:04:59,030 --> 00:04:56,479
a station bicycle a treadmill and an

115
00:05:02,469 --> 00:04:59,040
advanced resistive exercise device that

116
00:05:04,310 --> 00:05:02,479
simulates weightlifting here on earth

117
00:05:06,230 --> 00:05:04,320
the crew will then wrap the day with a

118
00:05:08,310 --> 00:05:06,240
final daily planning conference with the

119
00:05:15,590 --> 00:05:08,320
ground and is then scheduled to go to

120
00:05:21,110 --> 00:05:18,310
also activity back on earth three more

121
00:05:23,270 --> 00:05:21,120
crew members are in star city russia

122
00:05:25,189 --> 00:05:23,280
preparing for their launch next month to

123
00:05:26,950 --> 00:05:25,199
return the station to a six-member crew

124
00:05:28,629 --> 00:05:26,960
3435

125
00:05:30,550 --> 00:05:28,639
is reporting

126
00:05:33,670 --> 00:05:30,560
at the gagarin cosmonaut training center

127
00:05:39,189 --> 00:05:33,680
expedition 3435 prime crew members shown

128
00:05:42,390 --> 00:05:40,790
chris hadfield

129
00:05:44,870 --> 00:05:42,400
along with their backups conducted the

130
00:05:46,390 --> 00:05:44,880
second of two days of russian soyuz and

131
00:05:49,029 --> 00:05:46,400
russian segment qualification

132
00:05:51,029 --> 00:05:49,039
simulations and exams today

133
00:05:53,270 --> 00:05:51,039
this will lead to their final

134
00:05:55,590 --> 00:05:53,280
certification for flight and a december

135
00:05:59,029 --> 00:05:55,600
19 launch from the baikonur cosmodrome

136
00:06:00,790 --> 00:05:59,039
in kazakhstan in their soyuz tma-07m

137
00:06:02,390 --> 00:06:00,800
spacecraft

138
00:06:06,469 --> 00:06:02,400

that will dock to the rassvet module of