1
00:00:01,333 --> 00:00:03,302
Good morning from
Mission Control Houston.

2
00:00:03,302 --> 00:00:04,904
Welcome to this Friday's edition

3
00:00:04,904 --> 00:00:07,540
of International
Space Station update.

4
00:00:07,540 --> 00:00:13,012
So pretty busy week for the
crew as they dealt with a number

5
00:00:13,012 --> 00:00:14,547
of our science experiments

6
00:00:14,547 --> 00:00:16,048
and maintenance tasks
throughout the week

7
00:00:16,048 --> 00:00:19,218
and also some expected
communications issues.

8
00:00:19,218 --> 00:00:23,722
Starting off on Monday our three
USOS crew members Marshburn,

9
00:00:23,722 --> 00:00:26,926
Hadfield and Commander Ford
enjoyed an off-duty day

10
00:00:26,926 --> 00:00:29,061
for the Presidents' Day holiday.

11
00:00:29,061 --> 00:00:31,897
Following that, moving

in to Tuesday,

12
00:00:31,897 --> 00:00:34,066
they went in with
a number of tasks,

13
00:00:34,066 --> 00:00:38,003
including commander Kevin
Ford preparing some items

14
00:00:38,003 --> 00:00:40,473
for the upcoming
Dragon spaceflight

15
00:00:40,473 --> 00:00:42,475
to the International
Space Station.

16
00:00:42,475 --> 00:00:46,045
That Dragon spacecraft the
second full-up commercial

17
00:00:46,045 --> 00:00:48,814
resupply mission of the
cargo craft scheduled

18
00:00:48,814 --> 00:00:51,450
to launch next week on Friday.

19
00:00:51,450 --> 00:00:53,519
We'll be bringing
you live coverage

20
00:00:53,519 --> 00:00:57,356
of all the Dragon
events here on NASA TV.

21
00:00:57,356 --> 00:01:01,193
Again that launch scheduled
for Friday, March 1 at 9:10 AM.

22
00:01:01,193 --> 00:01:04,597
If all goes according to
plan they'll then set that up

23
00:01:04,597 --> 00:01:07,032
for an early morning
grapple and rendezvous

24
00:01:07,032 --> 00:01:11,737
on Saturday March 2 delivering
another cache of supplies

25
00:01:11,737 --> 00:01:14,940
to the astronauts on board the
International Space Station.

26
00:01:14,940 --> 00:01:18,177
So again on Tuesday Commander
Ford was preparing a number

27
00:01:18,177 --> 00:01:20,045
of items that are
going to be returned

28
00:01:20,045 --> 00:01:21,914
on that Dragon spacecraft.

29
00:01:21,914 --> 00:01:23,782
Meanwhile, Chris
Hadfield was inside

30
00:01:23,782 --> 00:01:27,286
of the Quest airlock doing
some routine maintenance,

31
00:01:27,286 --> 00:01:31,457
scrubbing out the cooling
loops on the US spacesuits used

32
00:01:31,457 --> 00:01:33,626
by these astronauts
for spacewalks.

33
00:01:33,626 --> 00:01:35,895
While he was doing that Tom
Marshburn was collecting a few

34
00:01:35,895 --> 00:01:39,365
water samples from the station's
environmental health system.

35
00:01:39,365 --> 00:01:43,602
Also on Tuesday at about 9:45
AM central time the station

36
00:01:43,602 --> 00:01:47,873
experienced a temporary loss of
communication with the ground.

37
00:01:47,873 --> 00:01:51,777
This was due to an ongoing
process by flight controllers

38
00:01:51,777 --> 00:01:54,213
as they were updating the
station's command-and-control

39
00:01:54,213 --> 00:01:57,049
software, and as they were
transitioning from one

40
00:01:57,049 --> 00:02:00,553
of the primary computers to
a backup computer the loss

41
00:02:00,553 --> 00:02:02,555
of communications occurred.

42

00:02:02,555 --> 00:02:05,958
Mission Control here in
Houston was able to communicate

43
00:02:05,958 --> 00:02:08,327
with the crew whenever
they flew over the set

44
00:02:08,327 --> 00:02:10,129
of Russian ground stations.

45
00:02:10,129 --> 00:02:13,432
They were able to relay
instructions to the crew

46
00:02:13,432 --> 00:02:16,202
to connect to another
computer to begin the process

47
00:02:16,202 --> 00:02:20,172
for restoring communications,
completing that successfully.

48
00:02:20,172 --> 00:02:24,043
Moving on to Wednesday, Ford
and Marshburn were inside

49
00:02:24,043 --> 00:02:27,213
of the cupola conducting
a training session

50
00:02:27,213 --> 00:02:29,615
with the station's robotic
arm known as Canadarm2,

51
00:02:29,615 --> 00:02:32,551
the space station robotic
manipulator system.

52
00:02:32,551 --> 00:02:35,321

They will be using it
to reach out and grapple

53
00:02:35,321 --> 00:02:37,656
with the Dragon spacecraft
once it makes its way

54
00:02:37,656 --> 00:02:41,060
to the International Space
Station next Saturday.

55
00:02:41,060 --> 00:02:44,363
So they were conducting a
training session familiarizing

56
00:02:44,363 --> 00:02:46,165
themselves with the controls.

57
00:02:46,165 --> 00:02:48,801
Meanwhile, Tom Marshburn
was working

58
00:02:48,801 --> 00:02:51,537
on the common cabin air
assembly replacing some

59
00:02:51,537 --> 00:02:55,207
of the temperature and humidity
control components while our

60
00:02:55,207 --> 00:02:57,376
three Russian cosmonauts
on board the station -

61
00:02:57,376 --> 00:03:01,080
Oleg Novitskiy, Evgeny
Tarelkin and Roman Romanenko --

62
00:03:01,080 --> 00:03:04,116
were busy on Wednesday

reviewing all the cargo items

63
00:03:04,116 --> 00:03:08,754
that are going to be located
in the Soyuz TMA-06M vehicle.

64
00:03:08,754 --> 00:03:11,323
That's the one that brought
Ford, Novitskiy and Tarelkin

65
00:03:11,323 --> 00:03:14,293
to the International Space
Station back in October.

66
00:03:14,293 --> 00:03:16,895
They were reviewing all
the items that are going

67
00:03:16,895 --> 00:03:18,297
to be stored in the vehicle

68
00:03:18,297 --> 00:03:20,833
when those three
astronauts return home coming

69
00:03:20,833 --> 00:03:23,669
up on March 15.

70
00:03:23,669 --> 00:03:27,640
Then moving onto Thursday
Commander Kevin Ford was back

71
00:03:27,640 --> 00:03:30,943
inside of that Soyuz with his
two Russian cosmonaut crewmates

72
00:03:30,943 --> 00:03:34,213
checking out their specialized
seat liners as they continue

73
00:03:34,213 --> 00:03:37,650
to do some of the prep work
for that upcoming departure.

74
00:03:37,650 --> 00:03:39,285
Commander Ford also
getting some hands

75
00:03:39,285 --> 00:03:42,888
on pretty interesting science
experiment on Thursday known

76
00:03:42,888 --> 00:03:47,926
as InSPACE-3 which looks to
obtain data on various fluids

77
00:03:47,926 --> 00:03:51,463
that contain specialized
particles that have the ability

78
00:03:51,463 --> 00:03:53,732
to change their physical
properties in response

79
00:03:53,732 --> 00:03:55,701
to varying magnetic fields,

80
00:03:55,701 --> 00:03:58,871
having some pretty
significant implications

81
00:03:58,871 --> 00:04:01,373
in improving the
earthquake resistance

82
00:04:01,373 --> 00:04:04,943
and structural integrity of
large-scale building projects

83

00:04:04,943 --> 00:04:08,981
down here on Earth like
bridges and skyscrapers.

84
00:04:08,981 --> 00:04:14,219
Also on Thursday Canadian Chris
Hadfield was taking a number

85
00:04:14,219 --> 00:04:17,056
of microbial samples from
the station's air system

86
00:04:17,056 --> 00:04:21,260
and also a number of surfaces
throughout the US segment.

87
00:04:21,260 --> 00:04:24,963
He was joined in
that ongoing check

88
00:04:24,963 --> 00:04:29,134
out of the station atmosphere
and environment by Tom Marshburn

89
00:04:29,134 --> 00:04:31,136
who was taking a number
of acoustic samples,

90
00:04:31,136 --> 00:04:34,306
basically measuring noise
loads around the station

91
00:04:34,306 --> 00:04:35,441
to make sure they're

92
00:04:35,441 --> 00:04:38,444
within acceptable ranges
for these astronauts.

93
00:04:38,444 --> 00:04:40,412

Also taking a number
of water samples

94
00:04:40,412 --> 00:04:44,416
from the station's
potable water supply.

95
00:04:44,416 --> 00:04:46,885
Then all that brings
us to today Friday,

96
00:04:46,885 --> 00:04:50,189
where the crew will be wrapping
up again a pretty busy week.

97
00:04:50,189 --> 00:04:53,859
Commander Ford will
be working inside

98
00:04:53,859 --> 00:04:55,761
of the regenerative
environmental control

99
00:04:55,761 --> 00:04:58,364
and life support system
onboard the station also known

100
00:04:58,364 --> 00:04:59,932
as ECLSS for short.

101
00:04:59,932 --> 00:05:03,102
He'll be replacing one of
the recycling tanks inside,

102
00:05:03,102 --> 00:05:05,571
also taking some time a
little later this afternoon

103
00:05:05,571 --> 00:05:09,241
to participate in the

Reversible Figures experiment.

104
00:05:09,241 --> 00:05:12,811
That's an ongoing European
experiment though looks to track

105
00:05:12,811 --> 00:05:14,279
and monitor any changes

106
00:05:14,279 --> 00:05:17,182
in perception these
astronauts have while operating

107
00:05:17,182 --> 00:05:19,952
in the microgravity environment.

108
00:05:19,952 --> 00:05:23,956
Meanwhile our three Russian
cosmonauts are doing a lot

109
00:05:23,956 --> 00:05:28,093
of work today upgrading the
communication systems inside

110
00:05:28,093 --> 00:05:29,561
of the Russian segment.

111
00:05:29,561 --> 00:05:32,664
Novitskiy and Tarelkin
will be doing an audit

112
00:05:32,664 --> 00:05:36,368
of all the communication
headsets and push-to-talk units

113
00:05:36,368 --> 00:05:39,705
and cables while
Roman Romanenko works

114

00:05:39,705 --> 00:05:42,708
to remove a space-to-space
radio located inside

115
00:05:42,708 --> 00:05:44,543
of the Zvezda service module.

116
00:05:44,543 --> 00:05:47,813
He'll also be taking out
an antenna switching unit.

117
00:05:47,813 --> 00:05:49,615
The Russians will
also be involved

118
00:05:49,615 --> 00:05:52,751
in reinstalling the
TVIS or the Treadmill

119
00:05:52,751 --> 00:05:55,754
with Vibration Isolation
Stabilization

120
00:05:55,754 --> 00:06:00,025
in its regular home inside
of the Zvezda service module.

121
00:06:00,025 --> 00:06:03,495
It just finished undergoing
some regular maintenance.

122
00:06:03,495 --> 00:06:07,099
Meanwhile Canadian Chris
Hadfield was working on setting

123
00:06:07,099 --> 00:06:10,602
up some samples for the
Binary Colloidal Alloy Test.

124
00:06:10,602 --> 00:06:12,805

That's an ongoing
experiment that looks

125
00:06:12,805 --> 00:06:17,142
at the varying structure of
particles known as colloids

126
00:06:17,142 --> 00:06:20,679
as they're suspended
in microgravity.

127
00:06:20,679 --> 00:06:22,114
He'll also be working inside

128
00:06:22,114 --> 00:06:25,651
of the Microgravity Science
Glovebox doing an inspection

129
00:06:25,651 --> 00:06:29,321
of some of equipment located
inside and cleaning it out.

130
00:06:29,321 --> 00:06:31,290
And then our final crew
member, Tom Marshburn,

131
00:06:31,290 --> 00:06:34,126
the resident doctor on board
the International Space Station,

132
00:06:34,126 --> 00:06:37,229
will be conducting an
eye ultrasound exam,

133
00:06:37,229 --> 00:06:39,531
also prepacking some more items

134
00:06:39,531 --> 00:06:44,169
for that Dragon spacecraft
visit, and then he just wrapped

135
00:06:44,169 --> 00:06:48,207
up just a few minutes ago
a Google+ interactive event

136
00:06:48,207 --> 00:06:50,676
alongside Kevin Ford
and Chris Hadfield,

137
00:06:50,676 --> 00:06:54,613
taking questions submitted by
the general public from all

138
00:06:54,613 --> 00:06:57,149
over the world and giving
them a look inside of life