1
00:00:02,690 --> 00:00:04,930
Good morning and welcome
to Mission Control Houston

2
00:00:04,930 --> 00:00:07,810
and the International
Space Station update hour.

3
00:00:07,810 --> 00:00:09,710
We're here with the
International Space Station

4
00:00:09,710 --> 00:00:10,910
flight control team inside

5
00:00:10,910 --> 00:00:12,920
of the space station
flight control room

6
00:00:12,920 --> 00:00:15,490
where flight director Judd
Frieling is leading the team

7
00:00:15,490 --> 00:00:21,010
today with help from
Capcom Anna Fisher.

8
00:00:21,010 --> 00:00:23,560
Things are back to normal
today onboard the space station

9
00:00:23,560 --> 00:00:26,980
with the three members of
the expedition 34 crew.

10
00:00:26,980 --> 00:00:28,570
They are more than
halfway through their day

11

00:00:28,570 --> 00:00:30,540
and currently orbiting 256 miles

12
00:00:30,540 --> 00:00:32,620
above the South Pacific
off the coast

13
00:00:32,620 --> 00:00:34,980
of Australia and New Zealand.

14
00:00:34,980 --> 00:00:37,240
They are Commander Kevin Ford

15
00:00:37,240 --> 00:00:41,420
and Flight Engineer
Tom Marshburn of NASA,

16
00:00:41,420 --> 00:00:45,210
Russian Flight Engineers Oleg
Novitskiy and Evgeny Tarelkin

17
00:00:45,210 --> 00:00:49,430
and Roman Romanenko and Canadian
Space Agency Flight Engineer

18
00:00:49,430 --> 00:00:51,970
Chris Hadfield.

19
00:00:51,970 --> 00:00:54,650
Ford, Novitskiy and Tarelkin
have been at the space station

20
00:00:54,650 --> 00:00:58,640
since October when their
Soyuz TMA-06M vehicle docked

21
00:00:58,640 --> 00:01:00,950
with the Russian Poisk module.

22

00:01:00,950 --> 00:01:04,560
They're now working on their
119th day at the space station

23
00:01:04,560 --> 00:01:08,620
and their 121st day in space,
and they were joined in December

24
00:01:08,620 --> 00:01:11,460
by Marshburn, Hadfield
and Romanenko

25
00:01:11,460 --> 00:01:14,200
who docked their Soyuz TMA-07M

26
00:01:14,200 --> 00:01:18,280
to the stations Rassvet
module on December 21.

27
00:01:18,280 --> 00:01:20,500
That group is on their
64th day in space

28
00:01:20,500 --> 00:01:23,760
and their 62nd at
the space station.

29
00:01:23,760 --> 00:01:28,320
When we wrapped up on
Tuesday the station had been

30
00:01:28,320 --> 00:01:31,400
experiencing communication
issues for about two hours due

31
00:01:31,400 --> 00:01:35,360
to a glitch in the software
update the crew had been

32
00:01:35,360 --> 00:01:38,040

installing with the
ground's help.

33
00:01:38,040 --> 00:01:40,390
After the team here in mission
control got another chance

34
00:01:40,390 --> 00:01:41,850
to talk with the
crew as they passed

35
00:01:41,850 --> 00:01:44,530
over Russian ground stations,
they were able to walk them

36
00:01:44,530 --> 00:01:47,180
through the final steps
needed to fix the issue

37
00:01:47,180 --> 00:01:50,360
and normal communications
were reestablished

38
00:01:50,360 --> 00:01:52,690
at 11:34 AM central time.

39
00:01:52,690 --> 00:01:58,340
The ground is picking back up
with the software update today.

40
00:01:58,340 --> 00:02:01,260
Other activities on the crew's
agenda for today include a range

41
00:02:01,260 --> 00:02:03,750
of science, maintenance
and prep work.

42
00:02:03,750 --> 00:02:05,470
On the science end

of the spectrum,

43
00:02:05,470 --> 00:02:07,360
Commander Kevin Ford
is working again today

44
00:02:07,360 --> 00:02:09,950
with the InSPACE-3
experiment which looks

45
00:02:09,950 --> 00:02:15,460
at how magnetic fluids are
influenced by magnetic fields.

46
00:02:15,460 --> 00:02:19,080
InSPACE has been a recurring
theme in the past couple

47
00:02:19,080 --> 00:02:23,120
of space station expeditions
but today marked the final run

48
00:02:23,120 --> 00:02:27,460
for Expedition 34 and Ford had
some word of thanks to offer

49
00:02:27,460 --> 00:02:31,240
down to the team on the ground
who's been supporting him.

50
00:02:44,010 --> 00:02:49,490
FORD: Huntsville, station
from Destiny for InSPACE.

51
00:02:49,490 --> 00:02:51,490
PAYCOM: Yes sir, go ahead.

52
00:02:51,490 --> 00:02:58,300
FORD: Well I'm not sure back
when you guys started this.

53
00:02:58,300 --> 00:03:01,250
Suni was doing this
experiment when I got up here,

54
00:03:01,250 --> 00:03:03,070
and she gave me a
good handover on it.

55
00:03:03,070 --> 00:03:05,000
And I've done a lot of
them since I've been here.

56
00:03:05,000 --> 00:03:07,290
Chris has done some
of them as well.

57
00:03:07,290 --> 00:03:09,820
So at least I know
Expeditions 33

58
00:03:09,820 --> 00:03:12,850
and 34 have been
part of InSPACE.

59
00:03:12,850 --> 00:03:14,960
I'm going to tell you
what it stands for.

60
00:03:14,960 --> 00:03:16,850
It stands for Investigating
the Structure

61
00:03:16,850 --> 00:03:21,500
of Paramagnetic Aggregates
from Colloidal Emulsions.

62
00:03:21,500 --> 00:03:23,640
And we had some good training
on this before we flew.

63
00:03:23,640 --> 00:03:27,690
And it's got some really
interesting things about it.

64
00:03:27,690 --> 00:03:29,350
But the bottom line
is there are a lot

65
00:03:29,350 --> 00:03:32,210
of terrestrial applications

66
00:03:32,210 --> 00:03:36,380
in suppressing vibrations
and stuff like that.

67
00:03:36,380 --> 00:03:38,970
And doing things with shock
absorbers and doing things

68
00:03:38,970 --> 00:03:44,860
with seismic dampeners that can
be used to make improvements

69
00:03:44,860 --> 00:03:48,250
like in airplane landing
gear and robotic devices.

70
00:03:48,250 --> 00:03:53,610
Has unfathomable
applications on the planet.

71
00:03:53,610 --> 00:03:56,410
And I know this is a bunch
of good data and I'm proud

72
00:03:56,410 --> 00:03:59,980
to be a part of it, 33 and
34's proud to be a part of it.

73
00:03:59,980 --> 00:04:02,600
And thank you guys for
letting us do the work onboard,

74
00:04:02,600 --> 00:04:05,550
and I can't wait to see
what the future holds

75
00:04:05,550 --> 00:04:09,750
for this study and
further studies.

76
00:04:09,750 --> 00:04:13,180
PAYCOM: Wow, I think
almost everyone down here

77
00:04:13,180 --> 00:04:14,510
in the room is in tears.

78
00:04:14,510 --> 00:04:16,100
That was amazing, Kevin.

79
00:04:16,100 --> 00:04:19,860
Thank you for all that you
have done and Chris has done

80
00:04:19,860 --> 00:04:21,780
and all the crew
members before you.

81
00:04:21,780 --> 00:04:23,980
I know this is the
third round of InSPACE,

82
00:04:23,980 --> 00:04:26,250
and every time you
guys do anything

83
00:04:26,250 --> 00:04:28,740

for it they just get more and
more science and better data

84
00:04:28,740 --> 00:04:30,940
and are extremely thankful

85
00:04:30,940 --> 00:04:34,620
for all the hard work
you guys put in for us.

86
00:04:37,330 --> 00:04:39,530
FORD: Okay, well I guess
that it was a pleasure,

87
00:04:39,530 --> 00:04:41,140
and it was a pleasure
training it before flight,

88
00:04:41,140 --> 00:04:45,600
and I remember standing
up in the SSTF practicing

89
00:04:45,600 --> 00:04:48,660
with the magnet, and
everything we practiced

90
00:04:48,660 --> 00:04:50,010
down there we used up here.

91
00:04:50,010 --> 00:04:51,590
So it was a pleasure.

92
00:04:51,590 --> 00:04:54,000
Congratulations to you guys and
we'll talk to you on the ground.

93
00:04:54,000 --> 00:04:56,750
PAYCOM: Excellent.

94

00:04:56,750 --> 00:04:58,050
Thank you very much, Kevin.

95
00:04:58,050 --> 00:05:00,990
We'll see you when
you come back.

96
00:05:00,990 --> 00:05:03,030
COMMENTATOR: That again was
Commander Kevin Ford talking

97
00:05:03,030 --> 00:05:03,930
with Chrissy Stinson

98
00:05:03,930 --> 00:05:05,850
of the Payload Operations
Control Center

99
00:05:05,850 --> 00:05:09,830
at Marshall Space Flight
Center in Huntsville, Alabama.

100
00:05:09,830 --> 00:05:11,000
That was earlier this morning

101
00:05:11,000 --> 00:05:13,360
after Ford completed
the final session

102
00:05:13,360 --> 00:05:14,920
of the InSPACE-3 experiment.

103
00:05:14,920 --> 00:05:16,150
In addition to InSPACE,

104
00:05:16,150 --> 00:05:18,400
Flight Engineer Tom
Marshburn was working today

105

00:05:18,400 --> 00:05:20,880
with the Circadian Rhythms
experiment which looks

106
00:05:20,880 --> 00:05:23,410
at how astronauts are
affected by living

107
00:05:23,410 --> 00:05:26,120
on the space station outside
of the regular day/night cycle

108
00:05:26,120 --> 00:05:27,640
that we're used to
here on Earth.

109
00:05:27,640 --> 00:05:30,950
And most of the crew members
were also either preparing

110
00:05:30,950 --> 00:05:33,760
for the arrival of the
SpaceX Dragon next week

111
00:05:33,760 --> 00:05:36,750
by prepacking items that
will return to Earth on it

112
00:05:36,750 --> 00:05:39,580
or practicing for its
robotic arm assisted berthing

113
00:05:39,580 --> 00:05:42,850
to the Harmony module,
or they were packing

114
00:05:42,850 --> 00:05:44,250
or unpacking a Progress

115
00:05:44,250 --> 00:05:47,420

on the Russian side
of the space station.

116
00:05:47,420 --> 00:05:50,240
And to round off today's list
of activities Chris Hadfield

117
00:05:50,240 --> 00:05:53,640
and Tom Marshburn were each
involved in maintenance work.

118
00:05:53,640 --> 00:05:57,490
Hadfield was replacing
a rotator belt exchange

119
00:05:57,490 --> 00:06:00,080
on the station's biological
experiment laboratory

120
00:06:00,080 --> 00:06:01,750
in the Columbus module

121
00:06:01,750 --> 00:06:04,770
and Marshburn was replacing
the common cabin air assembly

122
00:06:04,770 --> 00:06:06,400
on the Destiny laboratory
temperature

123
00:06:06,400 --> 00:06:08,840
and humidity control equipment.

124
00:06:08,840 --> 00:06:11,930
That's what's been going
on in space this week,