



1  
00:00:01,450 --> 00:00:04,070  
Good morning and welcome  
to mission control Houston

2  
00:00:04,070 --> 00:00:06,680  
and the International  
Space Station update hour.

3  
00:00:06,680 --> 00:00:09,390  
We are here with International  
Space Station flight control

4  
00:00:09,390 --> 00:00:11,980  
team inside the space  
station flight control room

5  
00:00:11,980 --> 00:00:14,590  
where Flight Director Royce  
Renfrew is leading the team

6  
00:00:14,590 --> 00:00:18,760  
today with Jeremy  
Hansen serving as Capcom.

7  
00:00:20,480 --> 00:00:23,310  
For one day only this week  
Expedition 35 crew members are

8  
00:00:23,310 --> 00:00:24,960  
back on a regular schedule.

9  
00:00:24,960 --> 00:00:28,280  
Commander Chris Hadfield of  
the Canadian space agency,

10  
00:00:28,280 --> 00:00:30,350  
NASA flight engineer  
Tom Marshburn,

11

00:00:30,350 --> 00:00:33,620  
and Russian flight engineer  
Roman Romanenko all got there

12  
00:00:33,620 --> 00:00:36,860  
wakeup call at the regular  
one a.m. central time today

13  
00:00:36,860 --> 00:00:39,260  
and are now more than  
halfway through their day.

14  
00:00:39,260 --> 00:00:41,880  
They are currently  
orbiting 256 miles

15  
00:00:41,880 --> 00:00:45,490  
above Singapore heading  
northeast

16  
00:00:45,490 --> 00:00:49,200  
over Indonesia toward  
the coast of China.

17  
00:00:49,200 --> 00:00:51,670  
Marshburn, Hadfield  
and Romanenko launched

18  
00:00:51,670 --> 00:00:53,590  
to the space station  
on December nineteenth

19  
00:00:53,590 --> 00:00:57,140  
on their Soyuz TMA-07M,  
which they then docked

20  
00:00:57,140 --> 00:01:01,050  
to the station's Rassvet  
module on December 21.

21

00:01:01,050 --> 00:01:03,580

That puts them on  
their 99th day in space

22

00:01:03,580 --> 00:01:06,350

and their 96th day  
on the space station.

23

00:01:06,350 --> 00:01:09,640

The three have been alone the  
station since March fifteenth

24

00:01:09,640 --> 00:01:12,930

when their previous three  
crewmates, Kevin Ford,

25

00:01:12,930 --> 00:01:15,720

Evgeny Tarelkin and  
Oleg Novitskiy wrapped

26

00:01:15,720 --> 00:01:19,910

up their 143 day stay in  
space and returned home.

27

00:01:19,910 --> 00:01:22,920

They are now looking  
forward being join tomorrow

28

00:01:22,920 --> 00:01:26,030

by three new crew  
members Chris Cassidy

29

00:01:26,030 --> 00:01:29,770

and Russian cosmonauts  
Pavel Vinogradov

30

00:01:29,770 --> 00:01:32,970

and Alexander Misurkin.

31

00:01:32,970 --> 00:01:38,010

Their Soyuz TMA-08M is  
scheduled to not only launch

32

00:01:38,010 --> 00:01:40,850  
at 3:43 p.m. central  
time tomorrow

33

00:01:40,850 --> 00:01:42,140  
from the Baikonur Cosmodrome,

34

00:01:42,140 --> 00:01:44,560  
but it will also  
dock the same day

35

00:01:44,560 --> 00:01:46,150  
to the station's Poisk module

36

00:01:46,150 --> 00:01:50,130  
at 9:32 p.m. It will be the  
first single day journey

37

00:01:50,130 --> 00:01:52,530  
to the space station  
for crewed vehicle.

38

00:01:52,530 --> 00:01:54,700  
The Russians have  
successfully tested the plan

39

00:01:54,700 --> 00:01:58,850  
with Progress cargo  
vehicles in the past.

40

00:01:58,850 --> 00:02:00,470  
NASA TV coverage of  
the they will begin

41

00:02:00,470 --> 00:02:03,830  
at 2:30 p.m. central tomorrow  
and you can see how the

42

00:02:03,830 --> 00:02:06,600  
at other events line up here.

43

00:02:06,600 --> 00:02:10,190  
Coverage of the docking will  
begin at 8:30 p.m. central time

44

00:02:10,190 --> 00:02:14,460  
and final section  
of our coverage

45

00:02:14,460 --> 00:02:17,090  
of for the Hatch  
opening which scheduled

46

00:02:17,090 --> 00:02:22,590  
for 11:10 p.m. will begin  
at 10:30 p.m. central time.

47

00:02:24,360 --> 00:02:28,360  
After seeing off the SpaceX  
Dragon cargo ship yesterday,

48

00:02:28,360 --> 00:02:30,690  
which spashed down safely  
in the Pacific Ocean

49

00:02:30,690 --> 00:02:32,970  
at 11:36 p.m. central time.

50

00:02:32,970 --> 00:02:37,310  
You can see a photo of that  
vehicle in the ocean here.

51

00:02:37,310 --> 00:02:40,600  
The crew is now back to  
primarily science experiments

52

00:02:40,600 --> 00:02:43,980  
and preparations for their  
new crew members today.

53

00:02:43,980 --> 00:02:46,220  
Chris Hadfield spent some  
time this morning working

54

00:02:46,220 --> 00:02:49,410  
with the new ISERVE  
experiment that stands

55

00:02:49,410 --> 00:02:53,490  
for ISS server environmental  
research and is

56

00:02:53,490 --> 00:02:55,380  
and visualization system.

57

00:02:55,380 --> 00:02:58,220  
That is an automated system  
designed to acquire images

58

00:02:58,220 --> 00:03:01,240  
of the Earth's surface, from  
space station, both as a way

59

00:03:01,240 --> 00:03:04,080  
to gain experience and expertise  
in automated photography

60

00:03:04,080 --> 00:03:06,740  
from the station and also  
to provide useful images

61

00:03:06,740 --> 00:03:09,390  
for disaster monitoring  
and assessment as well

62

00:03:09,390 --> 00:03:10,950

as environmental  
decision making.

63

00:03:10,950 --> 00:03:12,490

We are going to be hearing more

64

00:03:12,490 --> 00:03:16,890

about that experiment a  
little later in the hour.

65

00:03:16,890 --> 00:03:19,280

Tom Marshburn is spending  
most of his time today

66

00:03:19,280 --> 00:03:21,010

on the energy experiment,  
which is aimed

67

00:03:21,010 --> 00:03:23,040

at measuring how  
much food is needed

68

00:03:23,040 --> 00:03:26,050

for astronauts during  
long-term space missions.

69

00:03:26,050 --> 00:03:29,860

To do so, the science team  
will measure every component

70

00:03:29,860 --> 00:03:34,820

or variable of the astronauts  
energy expenditures reflecting

71

00:03:34,820 --> 00:03:36,870

his or her energy needs.

72

00:03:36,870 --> 00:03:40,160

So Marshburn today, followed a  
prescribed, yesterday rather,

73

00:03:40,160 --> 00:03:43,450  
followed a prescribed  
menu and he will continue

74

00:03:43,450 --> 00:03:45,890  
that plan for breakfast today.

75

00:03:45,890 --> 00:03:48,700  
Then he'll be logging very  
carefully all this other meals

76

00:03:48,700 --> 00:03:51,940  
today and providing urine  
samples as well as spending

77

00:03:51,940 --> 00:03:56,860  
for 45 to 80 minutes sessions,  
monitoring his oxygen intake

78

00:03:56,860 --> 00:04:00,470  
through a mask while relaxing  
by either by listening

79

00:04:00,470 --> 00:04:03,090  
to music or watching a movie.

80

00:04:03,090 --> 00:04:06,220  
In addition, Marshburn and  
Hadfield both performed sessions

81

00:04:06,220 --> 00:04:09,760  
of the reaction self test  
experiment again today.

82

00:04:09,760 --> 00:04:12,370  
In all they have aimed  
to perform 215 runs

83

00:04:12,370 --> 00:04:16,050  
with that experiment by the end  
their stay at the space station.

84

00:04:16,050 --> 00:04:19,950  
Reaction self test is a  
five-minute reaction time task

85

00:04:19,950 --> 00:04:22,680  
that allows crew members to  
monitor the daily effects

86

00:04:22,680 --> 00:04:26,160  
of fatigue on their performance,  
particularly at times like these

87

00:04:26,160 --> 00:04:28,220  
when their sleep  
schedule is that disrupted

88

00:04:28,220 --> 00:04:30,110  
through sleep shifting.

89

00:04:31,870 --> 00:04:34,700  
Hadfield and Marshburn  
have each been taking part

90

00:04:34,700 --> 00:04:37,290  
in the test right before  
their sleep period begins,

91

00:04:37,290 --> 00:04:38,450  
all week long.

92

00:04:38,450 --> 00:04:41,970  
However today, Marshburn  
also performed the tests

93

00:04:41,970 --> 00:04:45,100  
as soon as he woken up.

94

00:04:46,310 --> 00:04:47,590

Tomorrow, the crew  
will be sleeping

95

00:04:47,590 --> 00:04:50,300

in the midst 2:30 a.m.  
central time in preparation

96

00:04:50,300 --> 00:04:53,230

for the arrival of their  
crewmates, later in the day.

97

00:04:53,230 --> 00:04:55,530

Because it will be  
such a long day,

98

00:04:55,530 --> 00:05:01,600

they're also scheduled take one  
four hour long nap at 10 a.m.

99

00:05:01,600 --> 00:05:05,480

and then the backup at 2 p.m.  
for the launch and docking

100

00:05:05,480 --> 00:05:09,960

after which they will go to  
sleep begin until 3:30 a.m.

101

00:05:09,960 --> 00:05:11,860

So a long day for  
the crew tomorrow

102

00:05:11,860 --> 00:05:13,740

and they've got a busy  
day ahead of them today.