

# Expedition 35-36/Soyuz TMA-08M Launch

## MISSION EVENTS

ALL TIMES CENTRAL

### Thursday, March 28

2:30pm - NASA TV Soyuz Launch Coverage

3:43pm - Soyuz Launch

8:30pm NASA TV Soyuz Docking Coverage

9:32pm Soyuz Docking with ISS

10:30pm - NASA TV Soyuz Hatch Opening Coverage

11:10pm Soyuz Hatch Opening



1  
00:00:04,060 --> 00:00:06,460  
>> The International Space  
Station is currently orbiting

2  
00:00:06,460 --> 00:00:10,450  
about 250 miles above the  
southern ocean just starting a

3  
00:00:10,450 --> 00:00:15,480  
northwestern - northeastern  
track towards Indonesia.

4  
00:00:15,480 --> 00:00:20,690  
And it is today now one visiting  
vehicle short following the

5  
00:00:20,690 --> 00:00:23,460  
unberthing of a release of  
the SpaceX Dragon this morning

6  
00:00:23,460 --> 00:00:25,300  
at 5:56 a.m. Central Time.

7  
00:00:25,300 --> 00:00:28,780  
The two Expedition 35  
crew members who took part

8  
00:00:28,780 --> 00:00:31,010  
in that activity got  
up early for the event.

9  
00:00:31,010 --> 00:00:33,420  
Commander Chris Hatfield of  
the Canadian Space Agency

10  
00:00:33,420 --> 00:00:36,560  
and NASA flight engineer Tom  
Marshburn both started their day

11

00:00:36,560 --> 00:00:40,140

yesterday our time  
at 10 p.m. Central,

12

00:00:40,140 --> 00:00:43,310

while Russian flight  
engineer Ramon Romanenko slept

13

00:00:43,310 --> 00:00:48,180

in until the regular 1 a.m.  
space station wake-up time.

14

00:00:48,180 --> 00:00:50,900

Marshburn and Hatfield  
and Romanenko launched

15

00:00:50,900 --> 00:00:52,880

from the space station  
on December 19

16

00:00:52,880 --> 00:00:56,150

in their Soyuz TMA07N,  
which they then docked

17

00:00:56,150 --> 00:00:57,590

to the station's Rothsted  
[assumed spelling] module

18

00:00:57,590 --> 00:00:59,450

on December 21.

19

00:00:59,450 --> 00:01:01,400

That puts them on  
their 90th day in space

20

00:01:01,400 --> 00:01:04,780

and their 95th day  
at the space station.

21

00:01:04,780 --> 00:01:07,100

The three have been alone at the station since March 15,

22

00:01:07,100 --> 00:01:08,830

when their previous three crew members --

23

00:01:08,830 --> 00:01:12,080

Kevin Ford, Yevgeny Tarelkin, and Oleg Novitsky --

24

00:01:12,080 --> 00:01:15,550

left to return home after about 143 days in space.

25

00:01:15,550 --> 00:01:18,310

They are now looking forward to being joined

26

00:01:18,310 --> 00:01:20,850

by three new crew members on Thursday,

27

00:01:20,850 --> 00:01:23,890

when NASA astronaut Chris Cassidy

28

00:01:23,890 --> 00:01:27,010

and Russian cosmonaut Pavel Vinogradov

29

00:01:27,010 --> 00:01:30,780

and Alexender Misurkin are scheduled to not only launch

30

00:01:30,780 --> 00:01:34,310

at 3:43 p.m. Central Time from the Baikonur Cosmodrome

31

00:01:34,310 --> 00:01:35,870

but also dock that same day

32

00:01:35,870 --> 00:01:37,390  
to the station's Poist  
[assumed spelling] module

33

00:01:37,390 --> 00:01:41,650  
at 9:32 p.m. It'll be the  
first single-day journey

34

00:01:41,650 --> 00:01:45,020  
to the space station  
for a crewed vehicle,

35

00:01:45,020 --> 00:01:46,600  
although the Russians  
have tested that plan

36

00:01:46,600 --> 00:01:49,590  
out with several  
Progress cargo ships now.

37

00:01:49,590 --> 00:01:52,060  
NASA TV coverage will  
begin for the day

38

00:01:52,060 --> 00:01:54,300  
at 2:30 p.m. Central  
Time on Thursday.

39

00:01:54,300 --> 00:01:57,220  
And as you can see here, it  
will pick up several other times

40

00:01:57,220 --> 00:01:59,500  
to follow along with the events.

41

00:01:59,500 --> 00:02:02,110  
Docking coverage will start  
at 8:30 p.m. Central Time.

42

00:02:02,110 --> 00:02:06,180

And the Soyuz hatch  
opening coverage,

43

00:02:06,180 --> 00:02:09,090

once it has reached the station,  
will begin at 10:30 p.m.

44

00:02:09,090 --> 00:02:13,260

for an 11:10 p.m.  
planned hatch opening.

45

00:02:15,270 --> 00:02:17,760

The bulk of the day thus  
far has been devoted

46

00:02:17,760 --> 00:02:19,250

to seeing the Dragon off.

47

00:02:19,250 --> 00:02:22,560

Hatfield and Marshburn began  
working toward that event

48

00:02:22,560 --> 00:02:25,490

about 10 minutes after 11 p.m.  
yesterday, when they wrapped

49

00:02:25,490 --> 00:02:27,820

up the work they  
started yesterday morning

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00:02:27,820 --> 00:02:31,380

to get the vestibule -- that's  
the slim area between the Dragon

51

00:02:31,380 --> 00:02:34,200

and the Harmony node -- ready  
for the Dragon's unberthing,

52

00:02:34,200 --> 00:02:36,550

and then depressurization.

53

00:02:38,100 --> 00:02:39,720

Once that work was  
done, the team here

54

00:02:39,720 --> 00:02:41,800

on the ground commanded  
the bolts

55

00:02:41,800 --> 00:02:43,980

that have been securing  
the Dragon to Harmony

56

00:02:43,980 --> 00:02:46,000

to release the Dragon.

57

00:02:46,000 --> 00:02:48,430

That took place at  
3:05 a.m. Central Time

58

00:02:48,430 --> 00:02:50,910

and allowed Hatfield  
and Marshburn then

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00:02:50,910 --> 00:02:52,650

to maneuver the Dragon away

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00:02:52,650 --> 00:02:56,450

from the station using  
the Canada Arm 2.

61

00:02:56,450 --> 00:02:59,280

When they had moved it to  
a point about 50 feet away

62

00:02:59,280 --> 00:03:01,920

from the station, they then

commanded the robotic arm

63

00:03:01,920 --> 00:03:05,290  
to release it at 5:56  
a.m. Central Time.

64

00:03:05,290 --> 00:03:08,370  
And over the following 10  
minutes they performed three

65

00:03:08,370 --> 00:03:10,690  
short engine burns that  
began moving it farther away

66

00:03:10,690 --> 00:03:12,280  
from the space station,

67

00:03:12,280 --> 00:03:15,220  
and since then this distance  
has been steadily increasing.

68

00:03:15,220 --> 00:03:18,870  
The Dragon is now scheduled to  
perform its final deorbit burn

69

00:03:18,870 --> 00:03:23,260  
in less than 10 minutes at  
10:42 a.m. Central Time.

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00:03:23,260 --> 00:03:25,090  
That burn will last  
for about 10 minutes

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00:03:25,090 --> 00:03:28,360  
and drop the capsule back  
into the Earth's atmosphere.

72

00:03:28,360 --> 00:03:29,320  
And then it should splash

73

00:03:29,320 --> 00:03:33,780  
down at 11:34 a.m. Central  
Time 246 miles off the coast

74

00:03:33,780 --> 00:03:35,320  
of Baja California.

75

00:03:35,320 --> 00:03:37,460  
We are seeing here  
some of the video

76

00:03:37,460 --> 00:03:40,640  
that was captured today  
from that release.

77

00:03:40,640 --> 00:03:43,540  
If all goes as planned,  
Dragon will be back

78

00:03:43,540 --> 00:03:48,900  
on dry land tomorrow, and the  
2,668 pounds of science samples

79

00:03:48,900 --> 00:03:53,180  
from human research biology and  
techno - biotechnology studies,

80

00:03:53,180 --> 00:03:54,880  
physical science investigations,

81

00:03:54,880 --> 00:03:57,130  
and educational activities  
will be making their way back

82

00:03:57,130 --> 00:03:59,630  
to NASA for further study.

83

00:03:59,630 --> 00:04:02,560  
The crew's part in the Dragon

departure is over, however.

84

00:04:02,560 --> 00:04:04,600

And Chris Hatfield and Tom Marshburn each have some

85

00:04:04,600 --> 00:04:06,920

scientific work scheduled for the remainder of their day.

86

00:04:06,920 --> 00:04:10,940

Hatfield will be doing some work on the BCAT C1 experiment,

87

00:04:10,940 --> 00:04:14,310

that is, the Binary Colloidal Alloy Test,

88

00:04:14,310 --> 00:04:15,750

which studies the effect

89

00:04:15,750 --> 00:04:18,150

of phase separation on crystal growth.

90

00:04:18,150 --> 00:04:20,380

And Marshburn is working on a session [phonetic]

91

00:04:20,380 --> 00:04:21,860

of the energy experiment

92

00:04:21,860 --> 00:04:24,180

which evaluates how much food is needed

93

00:04:24,180 --> 00:04:27,840

for astronauts during long-term space missions.

94

00:04:27,840 --> 00:04:29,770

In addition, they are both  
taking part again today

95

00:04:29,770 --> 00:04:31,290

in the Reaction Self Test,

96

00:04:31,290 --> 00:04:33,990

which is a portable  
5-minute reaction time test

97

00:04:33,990 --> 00:04:36,760

that allows crew members to  
monitor the daily effects

98

00:04:36,760 --> 00:04:39,850

of team on their  
performance while in space.

99

00:04:39,850 --> 00:04:41,420

That's what's going  
on in space today,