1
00:00:04,509 --> 00:00:06,390
Mike Curie/NASA Launch Commentator: Good morning,
from Cape Canaveral Air

2
00:00:06,390 --> 00:00:10,490
Force Station in Florida, you are watching
live coverage of the launch of the SpaceX

3
00:00:10,490 --> 00:00:14,100
Falcon 9 rocket and Dragon capsule.

4
00:00:14,100 --> 00:00:21,200
This is Falcon Launch Control at T-minus one
hour, 14 minutes and counting.

5
00:00:21,200 --> 00:00:25,380
After four previous flights to the International
Space Station, including three official

6
00:00:25,380 --> 00:00:30,390
resupply missions for NASA, SpaceX is set
to launch its fourth Commercial

7
00:00:30,390 --> 00:00:39,360
Resupplies Services, or CRS, mission to the
station, which is designated as CRS-4.

8
00:00:39,360 --> 00:00:46,199
Liftoff is targeted for an instantaneous launch
window at 2:14 a.m. and 38 seconds

9
00:00:46,199 --> 00:00:48,190
Eastern Time.

10
00:00:48,190 --> 00:00:51,899
And at the time of launch, the International
Space Station will be flying at an altitude

11
00:00:51,899 --> 00:01:02,109

of 262 miles over the Arabian Sea, west of
the southern tip of India and Sri Lanka.

12
00:01:02,109 --> 00:01:06,780
The Dragon spacecraft will be filled with
more than 5,000 pounds of supplies and

13
00:01:06,780 --> 00:01:11,720
payloads including critical materials to support
the 255 science and research

14
00:01:11,720 --> 00:01:18,750
investigations that will occur during ISS
Expeditions 41 and 42.

15
00:01:18,750 --> 00:01:23,370
Dragon will be carrying three powered cargo
payloads in it pressurized section and

16
00:01:23,370 --> 00:01:25,900
two in it unpressurized trunk.

17
00:01:25,900 --> 00:01:31,980
The science payloads will enable model organism
research using rodents, fruit flies

18
00:01:31,980 --> 00:01:34,130
and plants.

19
00:01:34,130 --> 00:01:40,180
A special science payload is the ISS RapidScat
Scatterometer to monitor ocean

20
00:01:40,180 --> 00:01:43,030
surface wind speed and direction.

21
00:01:43,030 --> 00:01:48,350
Several new technology demos aboard will enable
bone density studies, test how a

22
00:01:48,350 --> 00:01:53,890
small satellite moves and positions itself
in space using new thruster technology,

23
00:01:53,890 --> 00:01:59,090
and use the first 3D printer in space for
additive manufacturing.

24
00:01:59,090 --> 00:02:03,600
The mission also will be delivering IMAX cameras
for filming during four station

25
00:02:03,600 --> 00:02:09,140
increments and replacement batteries for the
spacesuits.

26
00:02:09,140 --> 00:02:13,709
This is the fourth of 12 missions under the
SpaceX Commercial Resupplies Services

27
00:02:13,709 --> 00:02:15,640
Contract with NASA.

28
00:02:15,640 --> 00:02:18,920
Under the contract, SpaceX will deliver a
minimum of 20 metric

29
00:02:18,920 --> 00:02:24,870
tons of cargo to the station.

30
00:02:24,870 --> 00:02:31,580
The weather forecast is not exactly ideal,
however a "go" was given to fuel the

31
00:02:31,580 --> 00:02:33,159
Falcon 9 rocket.

32
00:02:33,159 --> 00:02:35,150
The launch team is on station.