1
00:00:01,459 --> 00:00:03,940
George Diller, NASA Launch Commentary: From
Cape Canaveral in Florida, this is

2
00:00:03,940 --> 00:00:10,590
Falcon Launch Control at T-minus one hour,
20 minutes, 53 seconds and counting.

3
00:00:10,590 --> 00:00:16,250
Countdown is on schedule for launch of the
SpaceX CRS-7 Falcon 9 with the Dragon

4
00:00:16,250 --> 00:00:21,050
capsule bound for rendezvous with the International
Space Station on a five-week

5
00:00:21,050 --> 00:00:22,050
mission.

6
00:00:22,050 --> 00:00:26,710
Launch is targeted for liftoff at 10:21 this
morning.

7
00:00:26,710 --> 00:00:31,069
The Dragon capsule was powered on atop the
rocket yesterday at T-minus 28 hours.

8
00:00:31,069 --> 00:00:36,310
The launch activities have been underway at
Space Launch Complex 40 on Cape

9
00:00:36,310 --> 00:00:38,320
Canaveral Air Force Station since midnight.

10
00:00:38,320 --> 00:00:42,429
The Falcon 9 rocket was powered on.

11
00:00:42,429 --> 00:00:43,920
Shortly afterwards, there was a vehicle

12
00:00:43,920 --> 00:00:48,879
verification check with the Tracking and Data
Relay Satellite system and the Air Force

13
00:00:48,879 --> 00:00:51,920
tracking station here at Cape Canaveral.

14
00:00:51,920 --> 00:00:57,829
Work began clearing the launch pad began shortly
after 5 a.m., and loading of the RP-1

15
00:00:57,829 --> 00:01:04,790
fuel, a highly refined kerosene, began at
6:33 a.m., and was followed by loading of

16
00:01:04,790 --> 00:01:05,790
the

17
00:01:05,790 --> 00:01:07,880
cryogenic liquid oxygen at 6:58 a.m.

18
00:01:07,880 --> 00:01:14,799
The S-band telemetry and video transmitters
on the rocket have been checked out and

19
00:01:14,799 --> 00:01:20,119
the flight termination system checks with
the Eastern Range have been completed.

20
00:01:20,119 --> 00:01:24,940
Upcoming, at T-minus one hour, will be a weather
briefing from the launch weather

21
00:01:24,940 --> 00:01:25,940
officer.

22
00:01:25,940 --> 00:01:30,050
The launch computer's automated terminal countdown

sequence for the Falcon

23
00:01:30,050 --> 00:01:35,380
9 and the Dragon capsule is initiated at T-minus
10 minutes.

24
00:01:35,380 --> 00:01:40,020
At T-minus two minutes, the SpaceX Launch
Director gives a "go" for launch and

25
00:01:40,020 --> 00:01:45,460
concurrences received by the range control
officer from the Air Force Eastern Range.

26
00:01:45,460 --> 00:01:49,870
At T-minus 60 seconds, the onboard flight
computer will initiate the final prelaunch

27
00:01:49,870 --> 00:01:52,130
countdown operation.

28
00:01:52,130 --> 00:01:57,060
At T-minus 40 seconds, the Falcon 9 propellant
tanks will be pressurized for flight and

29
00:01:57,060 --> 00:02:01,310
then finally at T-minus three seconds, the
main engine controller aboard the vehicle

30
00:02:01,310 --> 00:02:07,470
commands the engine ignition sequence for
the start of the liftoff operation.

31
00:02:07,470 --> 00:02:13,480
The Dragon capsule on this flight will transport
a total of 5,461 pounds of cargo to the

32
00:02:13,480 --> 00:02:15,870
International Space Station.

33
00:02:15,870 --> 00:02:18,120
Four thousand three hundred one pounds are
in the

34
00:02:18,120 --> 00:02:25,720
pressurized section, and 1,160 pounds in the
unpressurized section of the module,

35
00:02:25,720 --> 00:02:29,220
including the 1,021 pound International Docking
Adapter.

36
00:02:29,220 --> 00:02:36,340
Dragon is actually capable of carrying up
to 7,300 pounds of supplies to the station.

37
00:02:36,340 --> 00:02:40,930
Splashdown in the Pacific Ocean at the end
of the mission is planned for August 5 at

38
00:02:40,930 --> 00:02:47,310
6:28 p.m., West Coast time, three hours prior
to sunset, just under 396 statute miles

39
00:02:47,310 --> 00:02:50,520
offshore from the coastline of southern California.

40
00:02:50,520 --> 00:02:52,770
Dragon will be bringing home 1.5 tons

41
00:02:52,770 --> 00:02:59,260
of cargo and research experiments from the
International Space Station.