



# CREW-4 MISSION

## MISSION OVERVIEW

SpaceX and NASA are targeting no earlier than Wednesday, April 27 for Falcon 9's launch of **Crew-4**, Dragon's fourth science expedition mission to the International Space Station, from Launch Complex 39A (LC-39A) at NASA's Kennedy Space Center in Florida. Launch is targeted for 3:52 a.m. ET (7:52 UTC), with a backup opportunity available on Thursday, April 28.

This will be the first flight of the Dragon spacecraft supporting this mission and the fourth flight for Falcon 9's first stage booster, which previously launched CRS-22, Crew-3, and Turksat 5B. Following stage separation, Falcon 9's first stage will land on the A Shortfall of Gravitas droneship stationed in the Atlantic Ocean.

During their time at the orbiting laboratory, the Crew-4 astronauts will conduct over 200 science experiments in areas such as materials science, health technologies, and plant science to prepare for human exploration beyond low-Earth orbit and benefit life on Earth.

## WEBCAST

[The webcast](#) for the Crew-4 mission will go live about four hours before liftoff.

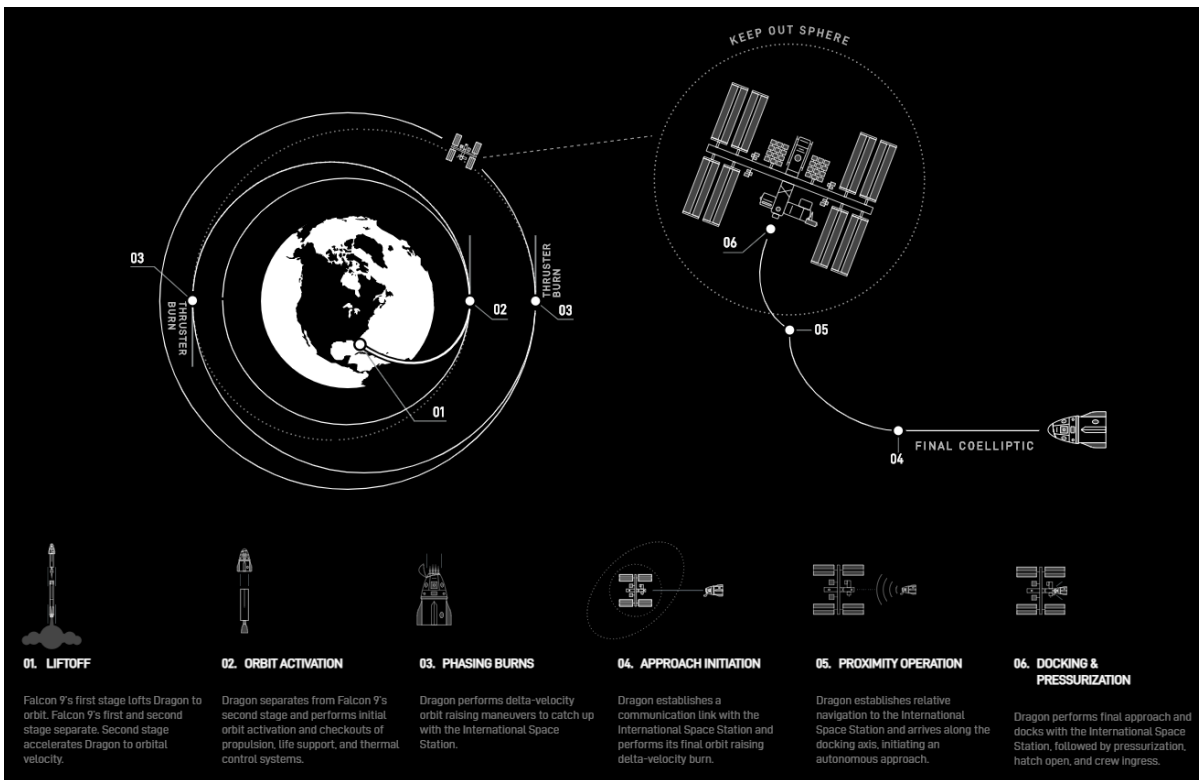
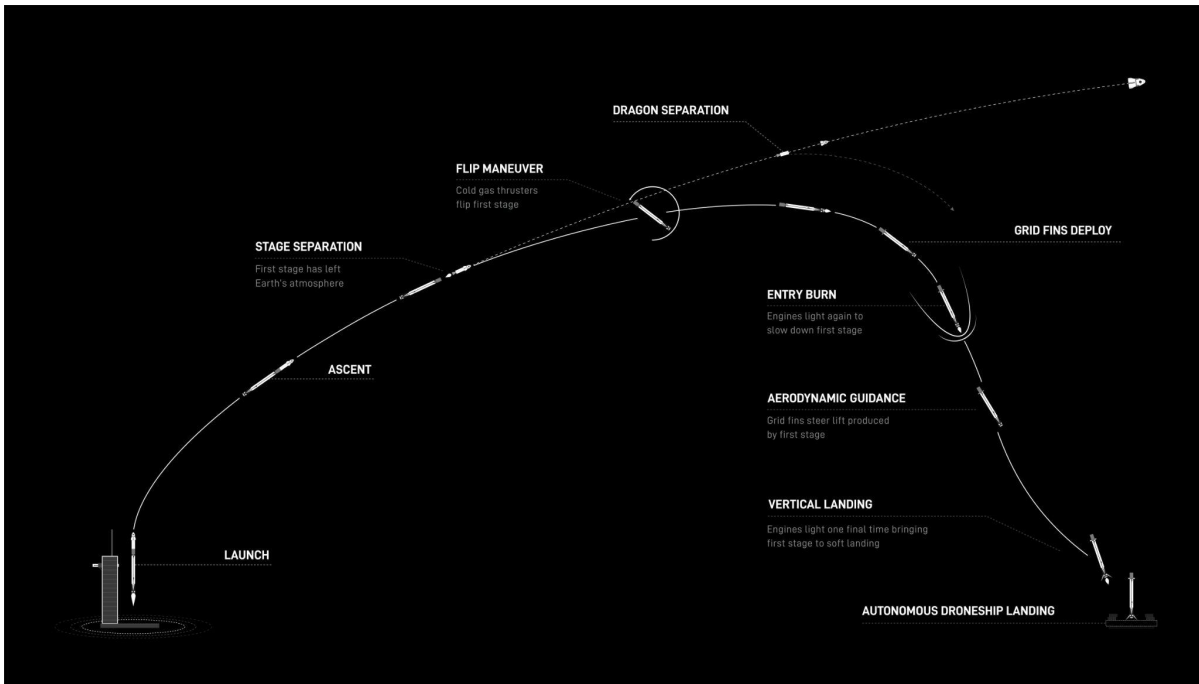
## PHOTOS

High-resolution photos will be posted at [flickr.com/spacex](https://www.flickr.com/photos/spacex/).

## THE ASTRONAUTS



# MISSION PROFILE



# MISSION TIMELINE (ALL TIMES APPROXIMATE)

## COUNTDOWN

<b>Hr/Min/Sec</b>	<b>Event</b>
- 00:45:00	SpaceX Launch Director verifies go for propellant load
- 00:42:00	Crew access arm retracts
- 00:37:00	Dragon's launch escape system is armed
- 00:35:00	RP-1 (rocket grade kerosene) loading begins
- 00:35:00	1st stage LOX (liquid oxygen) loading begins
- 00:16:00	2nd stage LOX loading begins
- 00:07:00	Falcon 9 begins engine chill prior to launch
- 00:05:00	Dragon transitions to internal power
- 00:01:00	Command flight computer to begin final prelaunch checks
- 00:01:00	Propellant tank pressurization to flight pressure begins
- 00:00:45	SpaceX Launch Director verifies go for launch
- 00:00:03	Engine controller commands engine ignition sequence to start
- 00:00:00	Falcon 9 liftoff

## LAUNCH, LANDING AND DEPLOYMENT

<b>Hr/Min/Sec</b>	<b>Event</b>
00:01:02	Max Q (moment of peak mechanical stress on the rocket)
00:02:36	1st stage main engine cutoff (MECO)
00:02:39	1st and 2nd stages separate
00:02:40	2nd stage engine starts
00:07:28	1st stage entry burn begins
00:08:48	2nd stage engine cutoff (SECO-1)
00:09:02	1st stage landing burn starts
00:09:30	1st stage landing
00:11:58	Dragon separates from 2nd stage
00:12:46	Dragon nosecone open sequence begins