



# NROL-108 MISSION

## MISSION OVERVIEW

SpaceX is now targeting Saturday, December 19 for launch of the [NROL-108 mission](#) from Launch Complex 39A (LC-39A) at Kennedy Space Center, Florida. Saturday's three-hour launch window opens at 9:00 a.m. EST, or 14:00 UTC, and closes at 12:00 p.m. EST, or 17:00 UTC.

Falcon 9's first stage booster previously supported launch of SpaceX's 19th and 20th cargo resupply missions to the International Space Station, a Starlink mission, and the SAOCOM 1B mission. Following stage separation, SpaceX will land Falcon 9's first stage on Landing Zone 1 at Cape Canaveral Space Force Station in Florida.

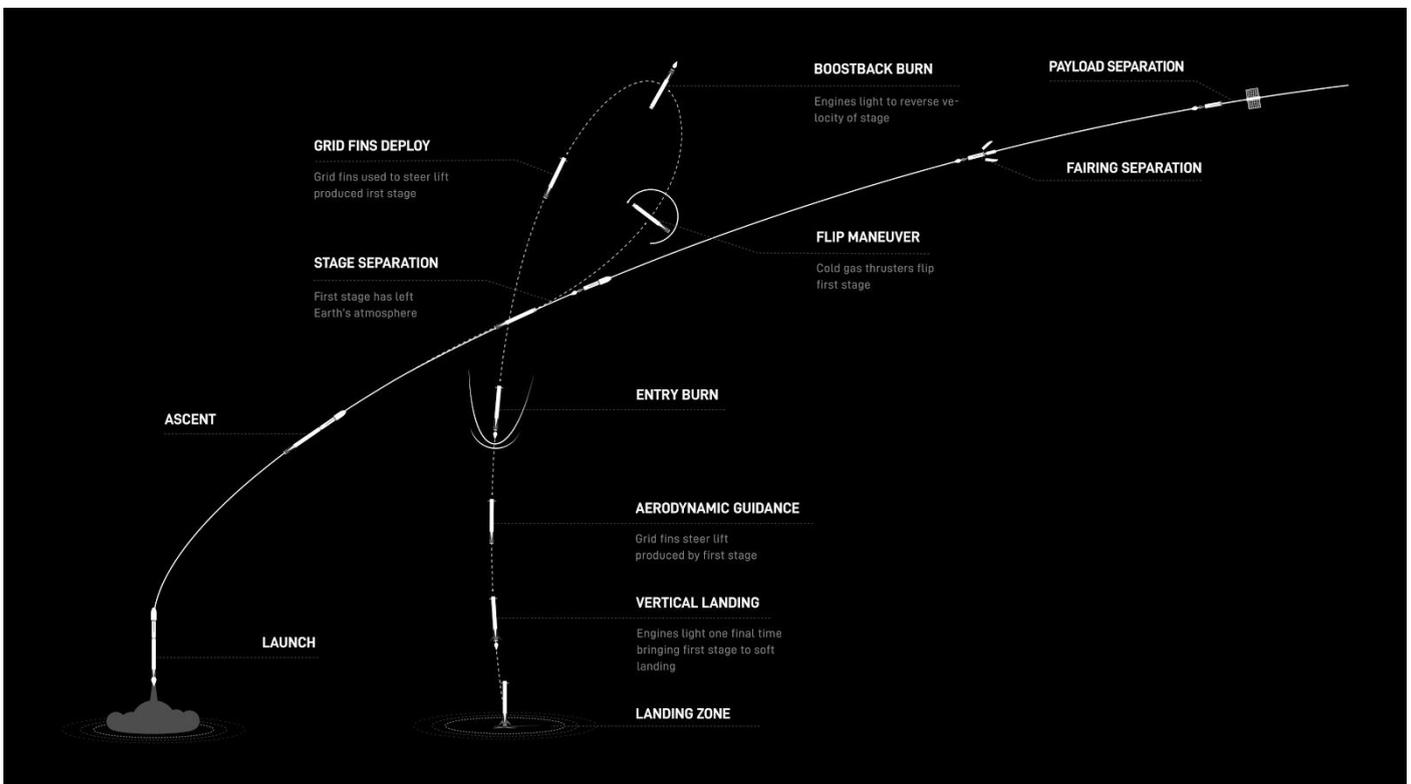
## WEBCAST

You can watch a live webcast of this mission, which will begin about 15 minutes prior to liftoff, [here](#).

## PHOTOS

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

## MISSION PROFILE



# MISSION TIMELINE (ALL TIMES APPROXIMATE)

## COUNTDOWN

| <b>Hr/Min/Sec</b> | <b>Event</b>   |
|-------------------|--|
| - 00:38:00        | SpaceX Launch Director verifies go for propellant load       |
| - 00:35:00        | RP-1 (rocket grade kerosene) loading underway                |
| - 00:35:00        | 1st stage LOX (liquid oxygen) loading underway               |
| - 00:16:00        | 2nd stage LOX loading underway                               |
| - 00:07:00        | Falcon 9 begins engine chill prior to launch                 |
| - 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>   |
|-------------------|--|
| 00:01:12          | Max Q (moment of peak mechanical stress on the rocket) |
| 00:02:18          | 1st stage main engine cutoff (MECO)                    |
| 00:02:22          | 1st and 2nd stages separate                            |
| 00:02:30          | 2nd stage engine starts                                |
| 00:02:35          | Boostback burn   |
| 00:02:41          | Fairing deployment                                     |
| 00:06:23          | 1st stage entry burn begins                            |
| 00:08:15          | 1st stage landing                                      |