

NROL-85 MISSION

MISSION OVERVIEW

SpaceX is targeting no earlier than Sunday, April 17 for Falcon 9's launch of the **NROL-85** mission from Space Launch Complex 4 East (SLC-4E) at Vandenberg Space Force Base in California. The instantaneous launch window is at 6:13 a.m. PT.

The Falcon 9 first stage booster supporting this mission previously launched the NROL-87 mission in February 2022. Following stage separation, Falcon 9's first stage will return and land on Landing Zone 4 at Vandenberg Space Force Base in California.

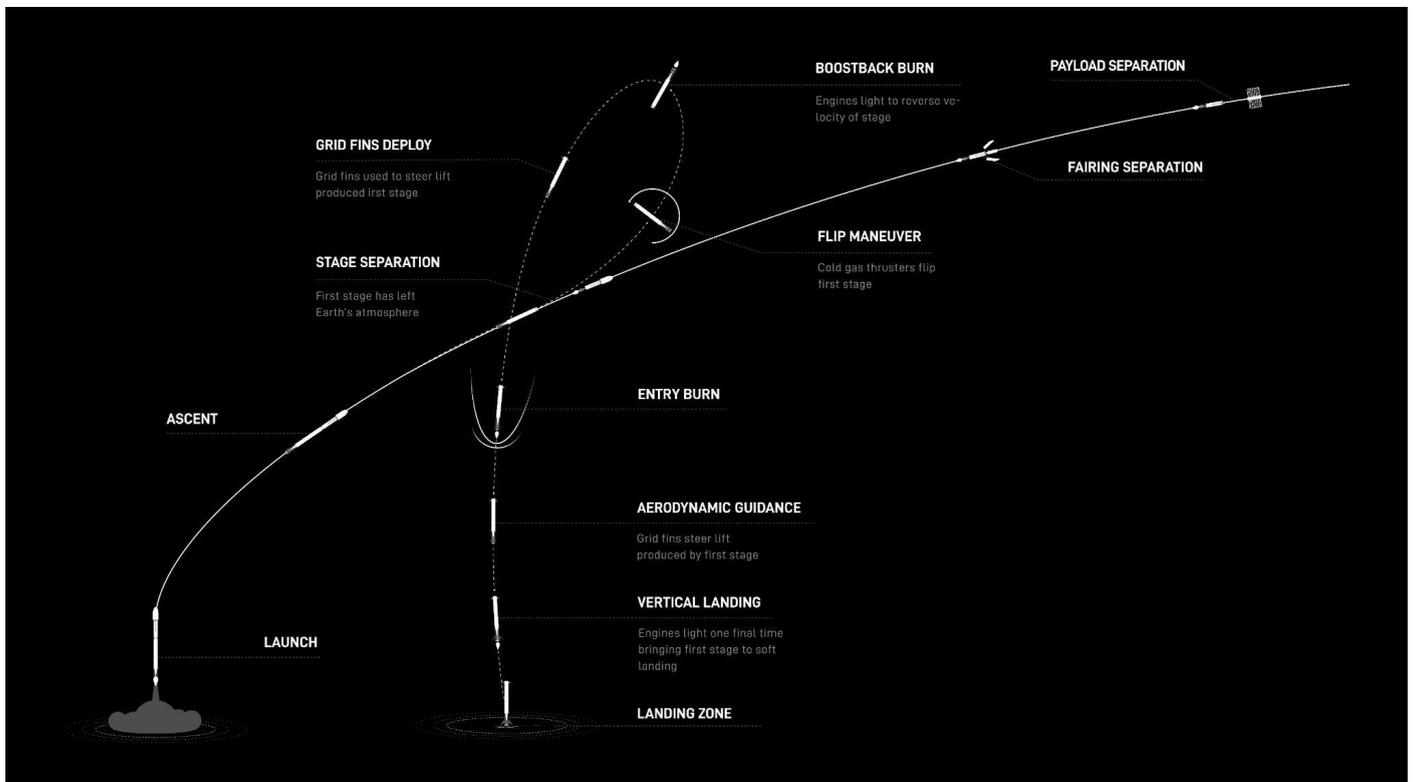
WEBCAST

[A live webcast of this mission](#) will begin about 15 minutes prior to liftoff.

PHOTOS

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

MISSION PROFILE



MISSION TIMELINE (ALL TIMES APPROXIMATE)

COUNTDOWN

Hr/Min/Sec	Event
- 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

Hr/Min/Sec	Event
00:01:12	Max Q (moment of peak mechanical stress on the rocket)
00:02:16	1st stage main engine cutoff (MECO)
00:02:20	1st and 2nd stages separate
00:02:33	1st stage boostback burn begins
00:03:15	Fairing deployment
00:03:21	1st stage boostback burn complete
00:06:15	1st stage entry burn begins
00:06:36	1st stage entry burn complete
00:07:28	1st stage landing burn begins
00:08:00	1st stage lands on Landing Zone 4