

STARLINK GROUP 4-37 MISSION

MISSION OVERVIEW

SpaceX is targeting Saturday, December 17 for a Falcon 9 launch of 54 **Starlink** satellites to low-Earth orbit from Launch Complex 39A (LC-39A) at NASA's Kennedy Space Center in Florida. The instantaneous launch window is at 4:32 p.m. ET (21:32 UTC).

The first stage booster supporting this mission previously launched Crew Demo-2, ANASIS-II, CRS-21, Transporter-1, Transporter-3, and nine Starlink missions. Following stage separation, the first stage will land on the Just Read the Instructions droneship, which will be stationed in the Atlantic Ocean.

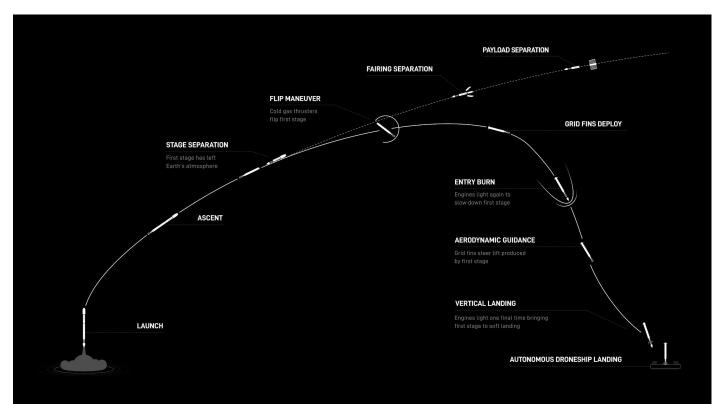
WEBCAST

<u>A live webcast of this mission</u> will begin about five minutes prior to liftoff.

PHOTOS

High-resolution photos will be posted at flickr.com/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 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
- 00:01:00 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)
00:02:27	1st stage main engine cutoff (MECO)
00:02:31	1st and 2nd stages separate
00:02:38	2nd stage engine starts
00:02:42	Fairing deployment
00:06:47	1st stage entry burn start
00:07:06	1st stage entry burn complete
00:08:28	1st stage landing burn start
00:08:41	2nd stage engine cutoff (SECO-1)
00:08:49	1st stage landing
00:15:22	Starlink satellites deploy