

STARLINK GROUP 3-2 MISSION

MISSION OVERVIEW

SpaceX is targeting Friday, July 22 for a Falcon 9 launch of 46 **Starlink** satellites to low-Earth orbit from Space Launch Complex 4 East (SLC-4E) at Vandenberg Space Force Base in California. The instantaneous launch window is at 10:39 a.m. PT (17:39 UTC).

The first stage booster supporting this mission previously launched NROL-87, NROL-85 and SARah-1. Following stage separation, Falcon 9's first stage will return to Earth and land on the Of Course I Still Love You droneship stationed in the Pacific Ocean.

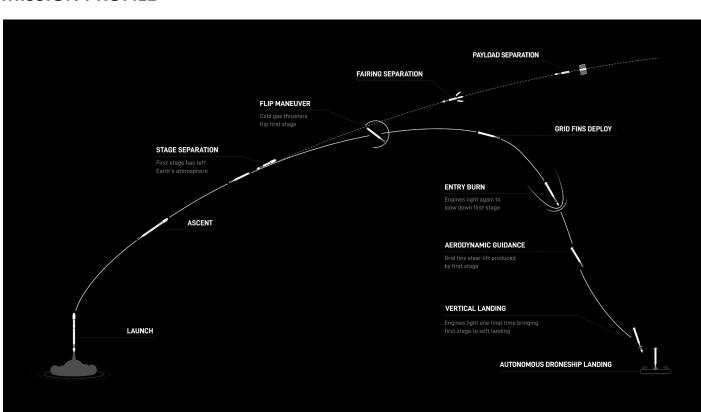
WEBCAST

A live webcast of this mission will begin about five minutes prior to liftoff.

PHOTOS

High-resolution photos will be posted at <u>flickr.com/spacex</u>.

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) |
| 00:02:32 | 1st stage main engine cutoff (MECO) |
| 00:02:35 | 1st and 2nd stages separate |
| 00:02:42 | 2nd stage engine starts (SES-1) |
| 00:02:48 | Fairing deployment |
| 00:06:18 | 1st stage entry burn start |
| 00:06:36 | 1st stage entry burn complete |
| 00:08:03 | 1st stage landing burn start |
| 00:08:24 | 1st stage landing |
| 00:08:48 | 2nd stage engine cutoff (SECO-1) |
| 00:54:01 | 2nd stage engine starts (SES-2) |
| 00:54:02 | 2nd stage engine cutoff (SECO-2) |
| 01:03:03 | Starlink satellites deploy |