

STARLINK GROUP 4-1 MISSION



MISSION OVERVIEW

SpaceX is targeting Friday, November 12 for a Falcon 9 launch of 53 **Starlink** satellites to orbit from Space Launch Complex 40 (SLC-40) at Cape Canaveral Space Force Station in Florida. The instantaneous launch window is at 7:41 a.m. EST, or 12:41 UTC, and a backup opportunity is available on Saturday, November 13 at 7:19 a.m. EST, or 12:19 UTC.

The booster supporting this mission previously launched Crew Demo-2, ANASIS-11, CRS-21, Transporter-1, and four Starlink missions. Following stage separation, SpaceX will land Falcon 9's first stage on the Just Read the Instructions droneship, which will be stationed in the Atlantic Ocean. One half of Falcon 9's fairing previously supported the GPS III-4 mission and a Starlink mission, and the other previously supported another Starlink mission.

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)
00:02:32	1st stage main engine cutoff (MECO)
00:02:36	1st and 2nd stages separate
00:02:43	2nd stage engine starts
00:02:53	Fairing deployment
00:06:41	1st stage entry burn start
00:07:01	1st stage entry burn complete
00:08:20	1st stage landing burn start
00:08:42	1st stage landing burn complete
00:08:50	2nd stage engine cutoff (SECO-1)
00:15:31	Starlink satellites deploy