

UPCOMING LAUNCH

STARLINK MISSION

WATCH

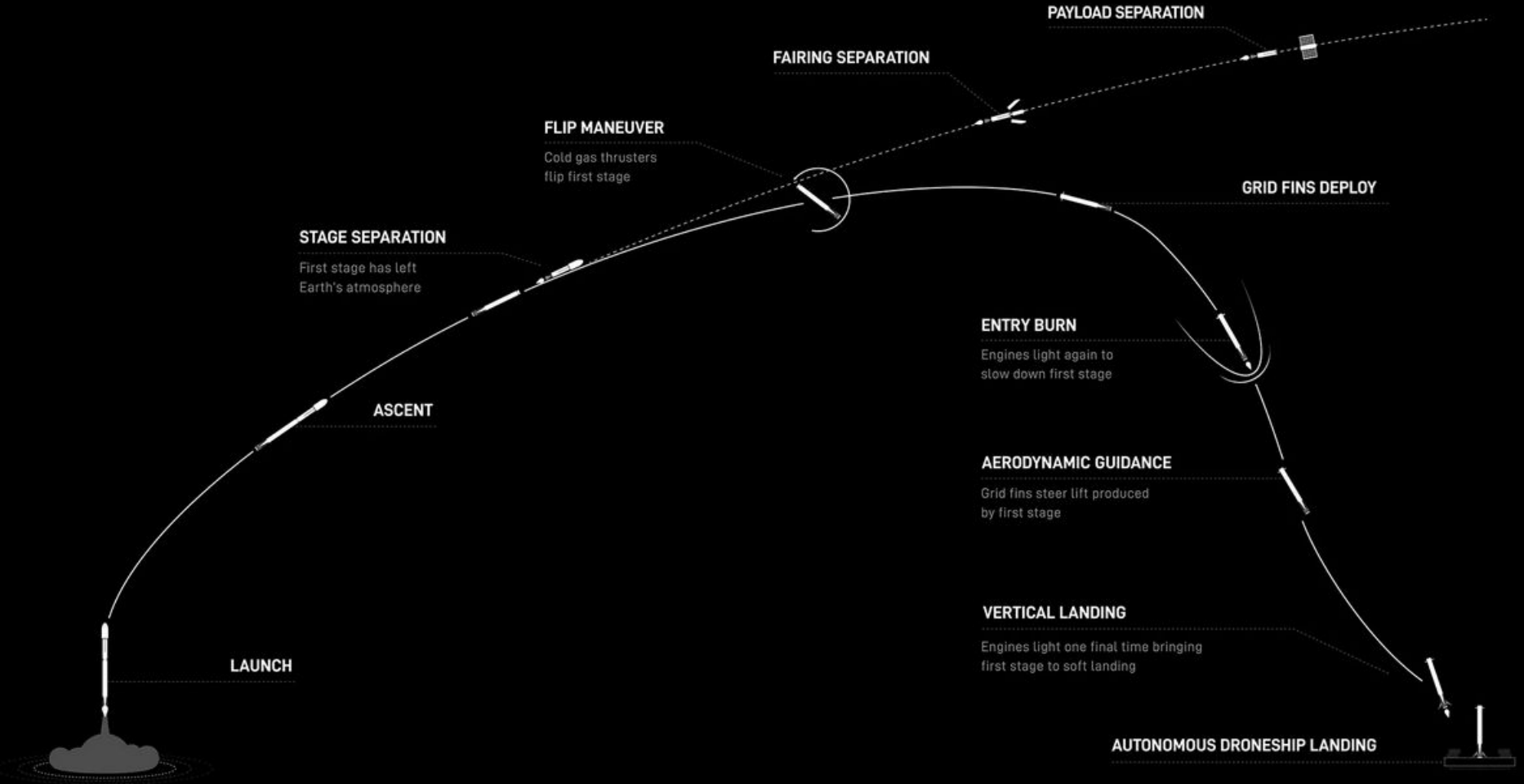
SpaceX is targeting Sunday, November 17 for a Falcon 9 launch of 20 **Starlink** satellites, including 13 with **Direct to Cell** capabilities, to low-Earth orbit from Space Launch Complex 4 East (SLC-4E) at Vandenberg Space Force Base in California. Liftoff is targeted for 9:47 p.m. PT, with backup opportunities available until 1:46 a.m. PT. If needed, additional opportunities are also available on Monday, November 18 starting at 11:19 p.m. PT.

A live webcast of this mission will begin about five minutes prior to liftoff, which you can watch here and on **X @SpaceX**. You can also watch the webcast on the new X TV app.

This is the 20th flight for the first stage booster supporting this mission, which previously launched Transporter-8, Transporter-9, NROL-85, NROL-87, SWOT, SARah-1, NROL-146, and 12 Starlink missions. Following stage separation, the first stage will land on the Of Course I Still Love You dronship, which will be stationed in the Pacific Ocean.

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

All Times Approximate

HR/MIN/SEC	EVENT
00:01:07	Max Q (Moment of peak mechanical stress on the rocket)
00:02:25	1st stage main engine cutoff (MECO)
00:02:29	1st and 2nd stages separate
00:02:36	2nd stage engine starts (SES-1)
00:03:03	Fairing deployment
00:06:04	1st stage entry burn begins
00:06:29	1st stage entry burn ends
00:07:44	1st stage landing burn begins
00:08:13	1st stage landing
00:08:37	2nd stage engine cutoff (SECO-1)
00:54:54	2nd stage engine starts (SES-2)
00:54:56	2nd stage engine cutoff (SECO-2)
01:01:48	Starlink satellites deploy