

UPCOMING LAUNCH

# STARLINK MISSION

WATCH

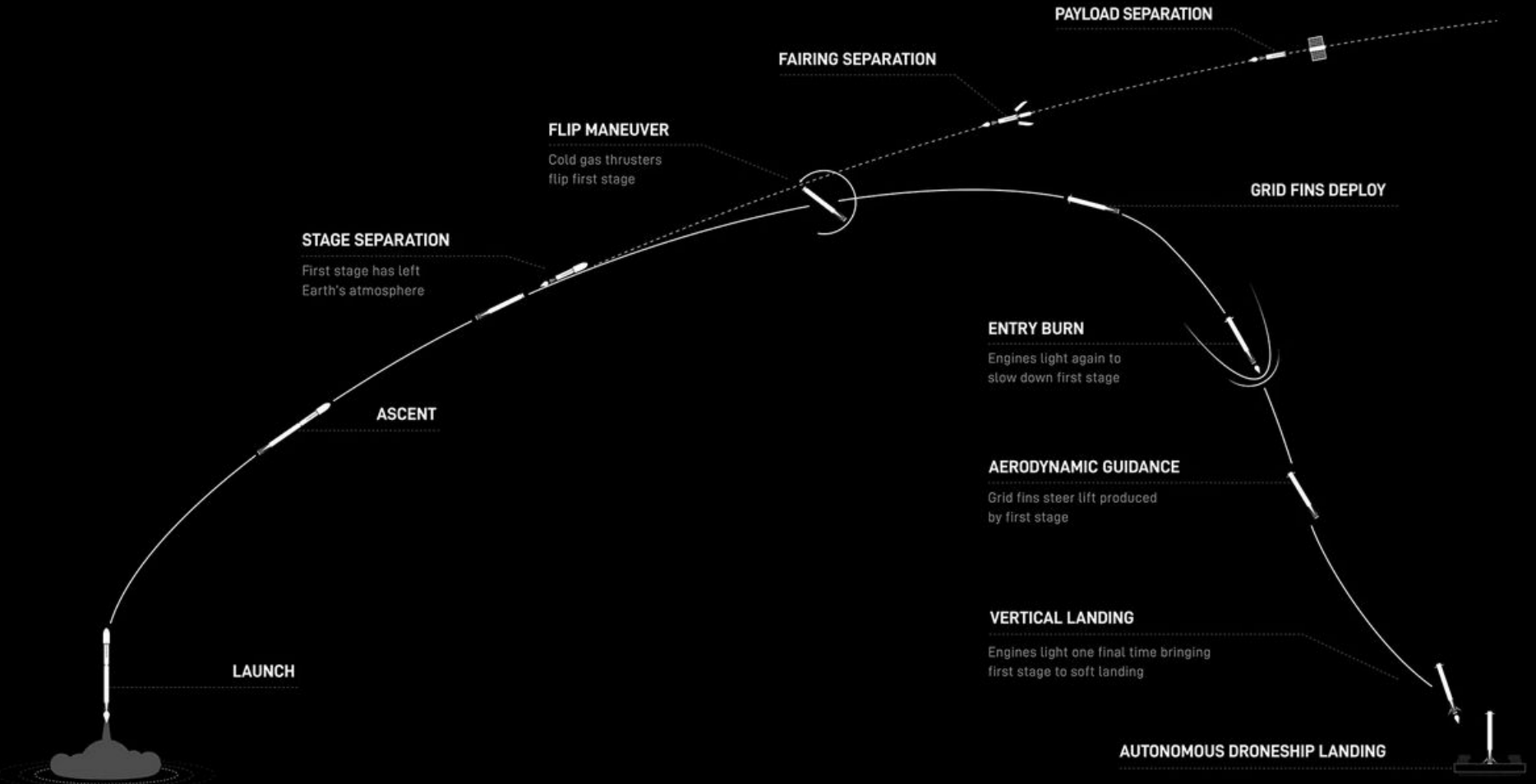
SpaceX is targeting Sunday, July 28 for a Falcon 9 launch of 21 **Starlink** satellites, including 13 with **Direct to Cell** capabilities, to low-Earth orbit from Space Launch Complex 4 East (SLC-4E) at Vandenberg Space Force Base in California. Liftoff is targeted for 12:24 a.m. PT, with backup opportunities available until 4:14 a.m. PT. If needed, additional opportunities are available on Monday, July 29 starting at 12:53 a.m. ET.

A live webcast of this mission will begin about 15 minutes prior to liftoff, which you can watch here and on **X @SpaceX**.

This is the 17th flight for the first stage booster supporting this mission, which previously launched NROL-87, NROL-85, SARah-1, SWOT, Transporter-8, Transporter-9, NROL-146, and nine 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
00:01:08	Max Q (Moment of peak mechanical stress on the rocket)
00:02:26	1st stage main engine cutoff (MECO)
00:02:30	1st and 2nd stages separate
00:02:37	2nd stage engine starts (SES-1)
00:03:02	Fairing deployment
00:06:07	1st stage entry burn begins
00:06:28	1st stage entry burn ends
00:07:46	1st stage landing burn begins
00:08:15	1st stage landing
00:08:40	2nd stage engine cutoff (SECO-1)
00:53:47	2nd stage engine starts (SES-2)
00:53:48	2nd stage engine cutoff (SECO-2)
01:00:41	Starlink satellites deploy