



SXM-7 MISSION

MISSION OVERVIEW

SpaceX is targeting Sunday, December 13 for the launch of the [SXM-7 mission](#), which will launch from Space Launch Complex 40 (SLC-40) at Cape Canaveral Space Force Station, Florida. The one-hour and 59-minute launch window opens at 11:22 a.m. EST, or 16:22 UTC, and a backup launch opportunity is available on Monday, December 14 with a one-hour and 59-minute launch window opening at 11:22 a.m. EST, or 16:22 UTC.

The Falcon 9 first stage rocket booster supporting this launch previously supported Crew Dragon's first flight to the International Space Station (Demo-1), launch of the RADARSAT Constellation Mission, and four Starlink launches in 2020. Following stage separation, SpaceX will land Falcon 9's first stage on the "Just Read the Instructions" dronship, which will be located in the Atlantic Ocean. One half of Falcon 9's fairing previously supported the ANASIS-II mission in July 2020.

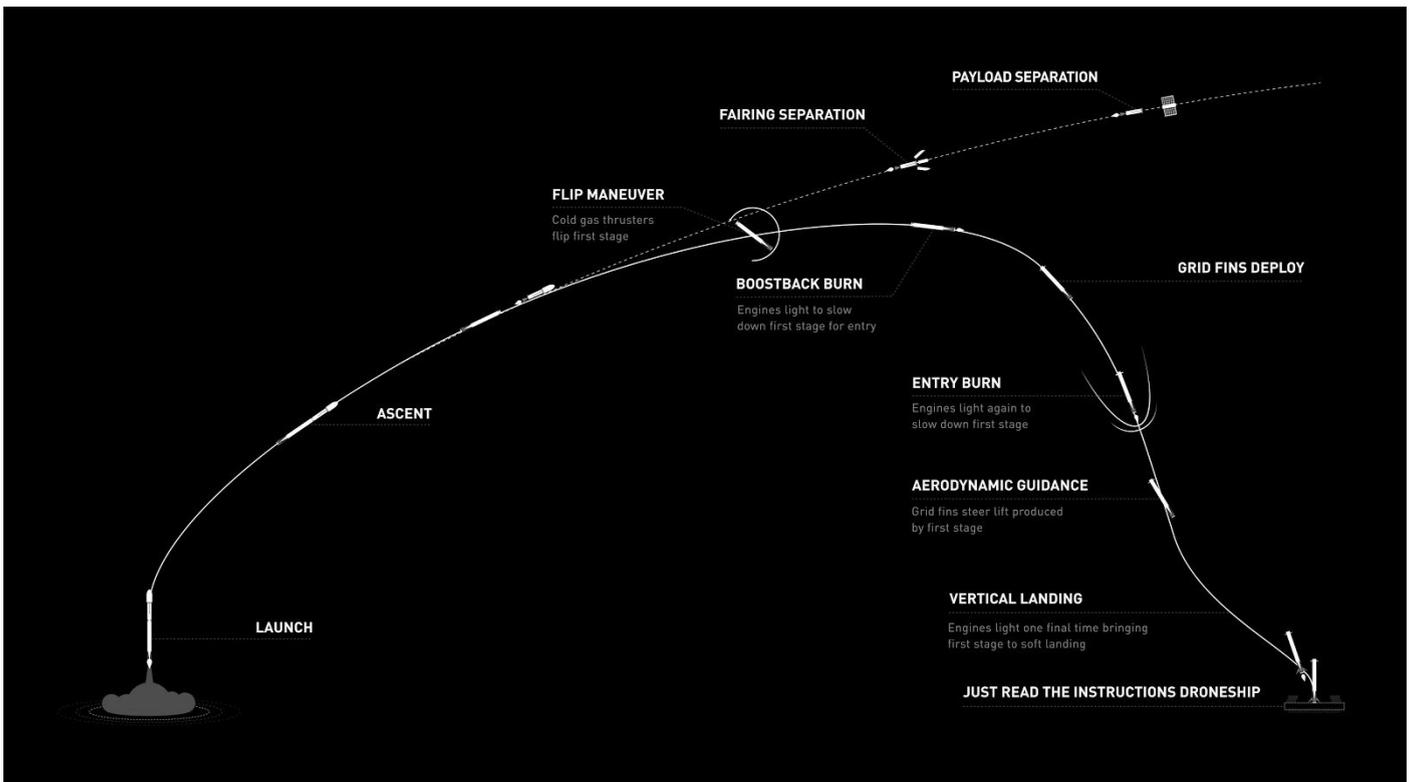
WEBCAST

You can watch a live webcast of this mission, which will begin about 15 minutes prior to liftoff, [here](#).

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 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)
00:02:33	1st stage main engine cutoff (MECO)
00:02:37	1st and 2nd stages separate
00:02:44	2nd stage engine starts
00:03:37	Fairing deployment
00:06:17	1st stage entry burn begins
00:08:14	2nd stage engine cutoff (SECO)
00:08:29	1st stage landing
00:26:03	2nd stage engine restarts
00:26:47	2nd stage engine cutoff (SECO-2)
00:31:39	SXM-7 deployment