CRS-23 MISSION

MISSION OVERVIEW

SpaceX is targeting Saturday, August 28 for Dragon's launch of its 23rd Commercial Resupply Services (CRS-23) mission. Liftoff is targeted for 3:37 a.m. EDT, or 7:37 UTC, from Launch Complex 39A (LC-39A) at Kennedy Space Center, Florida. A backup launch opportunity is available on Sunday, August 29 at 3:14 a.m. EDT, or 7:14 UTC.

Falcon 9's first stage booster previously supported SpaceX's Crew-1 and Crew-2 missions, which launched astronauts to the International Space Station, and launch of SXM-8. Following stage separation, SpaceX will land Falcon 9's first stage on the "A Shortfall of Gravitas" droneship, which will be located in the Atlantic Ocean.

The Dragon spacecraft supporting this mission previously supported SpaceX's 21st Commercial Resupply Services (CRS-21) mission. Dragon will separate from Falcon 9's second stage about twelve minutes after liftoff and autonomously dock to the space station on Sunday, August 29 at approximately 11:00 a.m. EDT, 15:00 UTC.

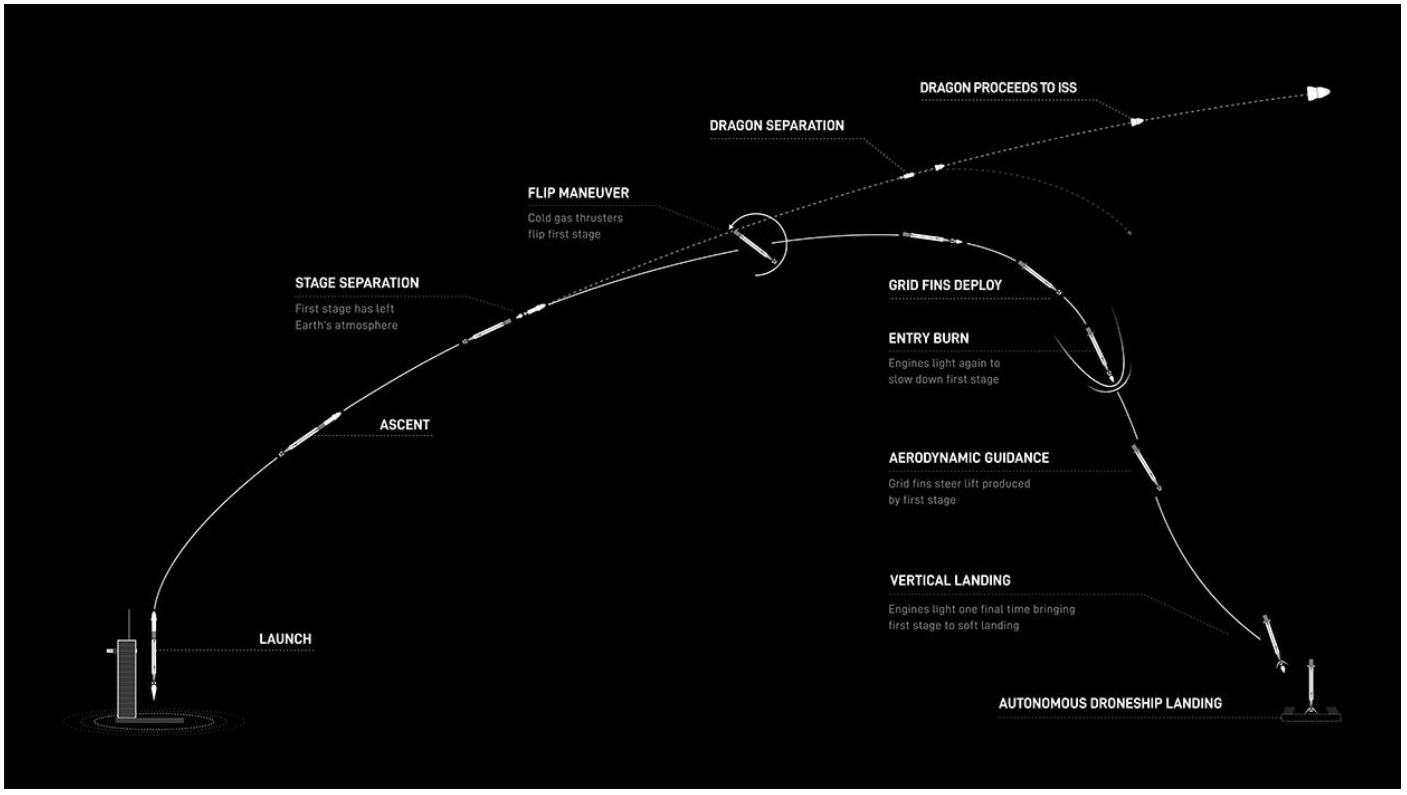
WEBCAST

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.

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 pre-launch engine chill
- 00:05:00	Dragon transitions to internal power
- 00:01:00	Command flight computer to begin final prelaunch checks
- 00:01:00	Propellant tanks pressurize for flight
- 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)
00:02:27	1st stage main engine cutoff (MECO)
00:02:30	1st and 2nd stages separate
00:02:38	2nd stage engine starts
00:02:43	1st stage boostback burn begins
00:05:49	1st stage entry burn begins
00:07:38	1st stage landing
00:08:34	2nd stage engine cutoff (SECO)
00:11:45	Dragon separates from 2nd stage