



TRANSPORTER-2 MISSION

MISSION OVERVIEW

SpaceX is targeting Wednesday, June 30 for launch of [Transporter-2](#), SpaceX's second dedicated [SmallSat Rideshare Program](#) mission, from Space Launch Complex 40 (SLC-40) at Cape Canaveral Space Force Station in Florida. The 58-minute launch window opens at 2:56 p.m. EDT, or 18:56 UTC.

Falcon 9's first stage booster previously supported launch of GPS III Space Vehicle 03, Turksat 5A, and five Starlink missions. Following stage separation, SpaceX will land Falcon 9's first stage on Landing Zone 1 (LZ-1) at Cape Canaveral Space Force Station. One half of Falcon 9's fairing previously supported Transporter-1 and a Starlink mission, and the other previously flew on SAOCOM 1B and a Starlink mission.

WEBCAST

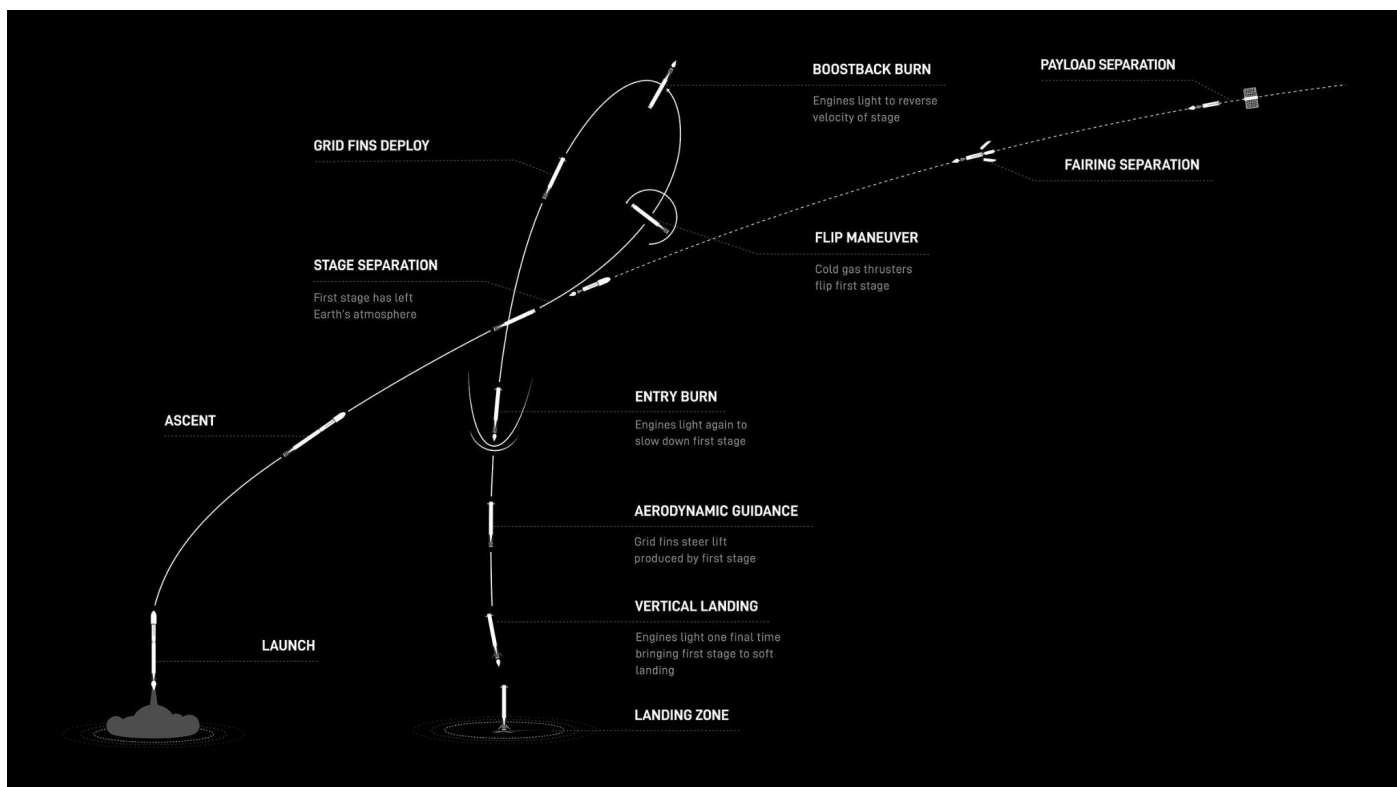
[A live webcast](#) of this mission will begin about 15 minutes prior to liftoff.

PHOTOS

High-resolution photos will be posted at [flickr.com/spacex](https://www.flickr.com/photos/spacex/).

On board this launch are 85 commercial and government spacecraft (including CubeSats, microsats, and orbital transfer vehicles) and 3 Starlink satellites. While there are fewer spacecraft on board compared to Transporter-1, this mission is actually launching more mass to orbit for SpaceX's customers.

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 tanks 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)
00:02:15	1st stage main engine cutoff (MECO)
00:02:18	1st and 2nd stages separate
00:02:26	2nd stage engine starts
00:02:32	Boostback burn begins
00:03:42	Fairing deployment
00:06:34	1st stage entry burn begins
00:08:24	2nd stage engine cutoff (SECO)
00:08:24	1st stage landing
00:54:13	2nd stage engine restarts
00:54:15	2nd stage engine cutoff (SECO-2)
00:57:50	NASA PACE-1 deploys
00:57:57	Satellogic's NewSat-19 deploys
00:58:04	The 1st ICEYE satellite deploys from EXOPort-5
00:58:32	NASA's TROPICS Pathfinder deploys
00:58:37	PlanetiQ's GNOMES-2 deploys
00:58:44	Tyvak-0173 deploys
00:59:47	The 2nd ICEYE satellite deploys from EXOPort-3
01:00:00	Tyvak-0211 deploys
01:00:08	Loft Orbital's YAM-3 deploys from EXOPort-5
01:00:18	TU Berlin's TUBIN deploys from EXOPort-4
01:00:23	UmbraSAR deploys
01:00:33	D-Orbit's ION satellite carrier deploys
01:01:50	Space Development Agency/General Atomics/Peraton's LINCS-2 deploys
01:02:16	Satellogic's NewSat-20 deploys
01:02:30	Satellogic's NewSat-21 deploys
01:02:40	Capella SAR satellite deploys
01:02:46	The 3rd ICEYE satellite deploys from EXOPort-4
01:04:12	Space Development Agency/General Atomics/Peraton's LINCS-1 deploys
01:04:29	DARPA/Space Development Agency/Air Force Research Laboratory's Mandrake-2 Able deploys
01:05:33	The 4th ICEYE satellite deploys from EXOPort-3
01:06:48	Swarm's 1st SpaceBEE cluster deploys from EXOPort-4
01:07:10	Swarm's 2nd SpaceBEE cluster deploys from EXOPort-4
01:07:17	NanoAvionics' D2/AtlaCom-1 deploys from EXOPort-3
01:07:24	Spire's LEMUR number 1 deploys from EXOPort-3
01:07:47	Satellogic's NewSat-22 deploys

01:07:56 Loft Orbital's YAM-2 deploys
01:09:51 Spires's LEMUR number 2 deploys from EXOPort-3
01:09:58 DARPA/Space Development Agency/Air Force Research Laboratory's Mandrake-2 Baker deploys
01:21:10 Spaceflight Inc.'s Sherpa-FX2 deploys
01:21:14 Spaceflight Inc.'s Sherpa-LTE1 deploys
01:27:35 Starlink satellites deploy