



TRANSPORTER-5 MISSION

MISSION OVERVIEW

SpaceX is targeting Wednesday, May 25 for a Falcon 9 launch of **Transporter-5** to low-Earth orbit from Space Launch Complex 40 (SLC-40) at Cape Canaveral Space Force Station in Florida. The 57-minute launch window opens at 2:27 p.m. ET, or 18:27 UTC. A backup opportunity is available on Thursday, May 26, with the same launch window. Falcon 9 will fly along Florida's eastern coast over the ocean and may be visible from the ground.

Falcon 9's first stage booster previously launched Crew-1, Crew-2, SXM-8, CRS-23, IXPE, one Starlink mission, and Transporter-4. After stage separation, Falcon 9 will return to Earth and land on Landing Zone 1 (LZ-1) at Cape Canaveral Space Force Station.

Transporter-5 is SpaceX's fifth **dedicated smallsat rideshare mission**. On this flight are 59 spacecraft, including CubeSats, microsats, non-deploying hosted payloads, and orbital transfer vehicles.

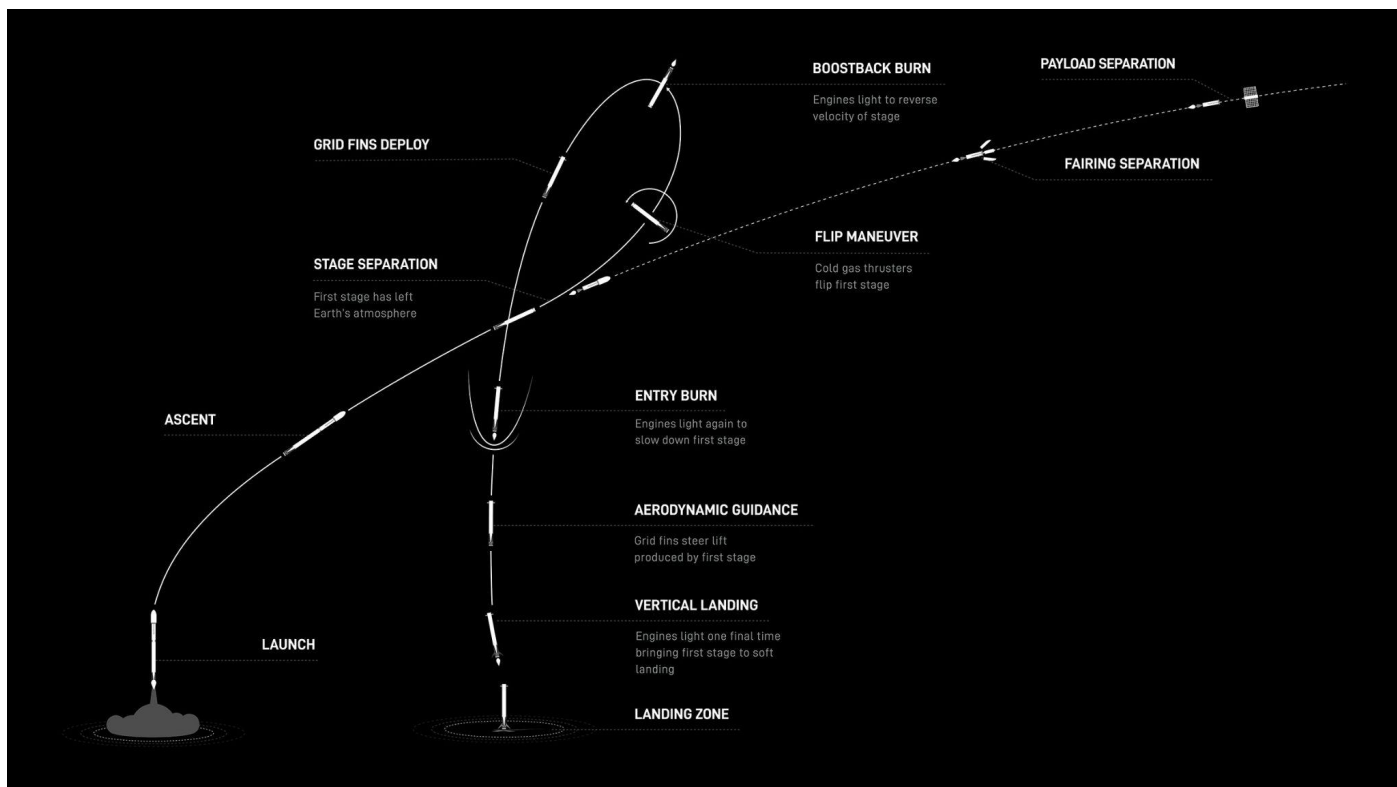
WEBCAST

[A live webcast of this mission](#) will begin about 10 minutes prior to liftoff.

PHOTOS

High-resolution photos will be posted at [flickr.com/spacex](https://www.flickr.com/photos/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 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)
00:02:16	1st stage main engine cutoff (MECO)
00:02:19	1st and 2nd stages separate
00:02:27	2nd stage engine starts
00:02:32	1st stage boostback burn begins
00:03:19	1st stage boostback burn complete
00:03:47	Fairing deployment
00:06:43	1st stage entry burn begins
00:07:08	1st stage entry burn ends
00:08:00	1st stage landing burn begins
00:08:25	2nd stage engine cutoff (SECO)
00:08:33	1st stage landing
00:08:35	Outpost Mars Demo 1 experiment initiation, manifested by Nanoracks
00:55:27	2nd stage engine restarts (SES-2)
00:55:59	2nd stage engine cutoff (SECO-2)
00:59:00	GeoOptics CICERO-2 Vehicle 2 deploys, manifested by Terran Orbital
00:59:09	SharedSat_2141 deploys, manifested by Exolaunch
00:59:18	NASA Pathfinder Technology Demonstrator 3 deploys, manifested by Terran Orbital
00:59:27	LEMUR 2 KAREN_B deploys, manifested by Exolaunch
00:59:37	URDANETA deploys, manifested by Exolaunch
00:59:46	GeoOptics CICERO-2 Vehicle 1 deploys, manifested by Terran Orbital
00:59:56	LEMUR 2 VANDENDRIES deploys, manifested by Exolaunch
01:00:05	Omnispace Spark-2 deploys, manifested by Exolaunch
01:00:24	LEMUR 2 TENNYSONLILY deploys, manifested by Exolaunch
01:00:47	GHGSat-C4 Penny deploys
01:01:00	Planetum-1 and SPiN-1 deploy, manifested by Exolaunch
01:01:09	LEMUR 2 HANCOM-1 deploys, manifested by Exolaunch
01:01:21	GHGSat-C3 Luca deploys
01:01:38	NASA CubeSat Proximity Operations Demonstration deploys, manifested by Terran Orbital
01:01:50	Connecta T1.1 deploys, manifested by Exolaunch
01:01:59	LEMUR 2 MIMI1307 deploys, manifested by Exolaunch
01:02:13	GHGSat-C5 Diako deploys
01:03:18	Foresail-1 deploys, manifested by Exolaunch
01:03:49	Fleet Space Centauri-5 deploys, manifested by Terran Orbital
01:04:04	CnCE V4 and CnCE V5 deploys
01:04:20	Satelogic's Newsat 28 deploys

01:04:42 Spaceflight Inc's Sherpa-AC1 deploys
01:05:28 Varisat-1C deploys, manifested by Momentus
01:05:43 AMS deploys
01:06:07 BroncoSat-1 deploys, manifested by Momentus
01:06:35 Satellogic's Newsat 29 deploys
01:08:19 Satellogic's Newsat 30 deploys
01:08:40 First ICEYE deploys, manifested by Exolaunch
01:09:00 Satellogic's Newsat 31 deploys
01:09:22 D-Orbit's ION SCV006 Thrilling Thomas deploys
01:09:44 Umbra deploys
01:10:05 HaykEye 360's Hawk-5B deploys
01:10:26 HaykEye 360's Hawk-5C deploys
01:10:48 HaykEye 360's Hawk-5A deploys
01:11:17 Momentus' Vigoride deploys
01:11:56 Second ICEYE deploys, manifested by Exolaunch
01:12:29 Third ICEYE deploys, manifested by Exolaunch
01:12:51 Fourth ICEYE deploys, manifested by Exolaunch
01:15:22 Fifth ICEYE deploys, manifested by Exolaunch