

SES-10 Mission

Mission Overview

SpaceX’s Falcon 9 rocket will deliver SES-10, a commercial communications satellite for SES, to a Geostationary Transfer Orbit (GTO). SES is a world-leading satellite operator, providing reliable and secure satellite communications solutions across the globe.

SpaceX is targeting launch of SES-10 from historic Launch Complex 39A (LC-39A) at NASA’s Kennedy Space Center in Florida. The two and a half hour launch window opens on Thursday, March 30, at 6:27 p.m. EDT, or 10:27 p.m. UTC. The satellite will deploy approximately 32 minutes after launch.



Official SpaceX SES-10 Mission Patch

A backup launch window opens on Saturday, April 1, at 6:27 p.m. EDT, or 10:27 p.m. UTC.

The SES-10 mission will mark a historic milestone on the road to full and rapid reusability as the world’s first reflight of an orbital class rocket. Falcon 9’s first stage for the SES-10 mission previously supported the successful CRS-8 mission in April 2016.

Following stage separation, Falcon 9’s first stage will attempt a landing on the “Of Course I Still Love You” dronship that will be stationed in the Atlantic Ocean.

Payload

SES-10 is SES’s first satellite designed exclusively to serve the thriving markets of Latin America. With 55 Ku-band transponder equivalents, SES-10 will be one of the biggest satellites covering Latin America and will provide significant capacity expansion to support SES’s reach in the region.

To be positioned at 67 degrees West, SES-10, pursuant to an agreement with the Andean Community (Bolivia, Colombia, Ecuador and Peru), will be used for the Simon Bolivar 2 satellite network. It will replace the capacity currently provided by two SES satellites at that location, and bring additional high-powered capacity across Latin America ranging from the Gulf of California in Mexico to Cape Horn in Chile.

Thanks to its ability to provide interconnection among the beams, the satellite will offer substantial flexibility to best respond to the markets’ needs.

Mission Timeline (all times approximate)

COUNTDOWN

Hour/Min/Sec	Events
- 01:18:00	Launch Conductor takes launch readiness poll
- 01:10:00	RP-1 (rocket grade kerosene) loading underway
- 00:45:00	LOX (liquid oxygen) loading underway
- 00:07:00	Falcon 9 begins engine chill prior to launch
- 00:02:00	Range Control Officer (USAF) verifies range is go for launch
- 00:01:30	SpaceX Launch Director verifies go for launch
- 00:01:00	Flight computer commanded to begin final prelaunch checks
- 00:01:00	Propellant tank pressurization to flight pressure begins
- 00:00:03	Engine controller commands engine ignition sequence to start
00:00:00	Falcon 9 liftoff

LAUNCH AND SATELLITE DEPLOYMENT

Hour/Min/Sec	Events
00:01:22	Max Q (moment of peak mechanical stress on the rocket)
00:02:38	1st stage engine shutdown/main engine cutoff (MECO)
00:02:41	1st and 2nd stages separate
00:02:49	Second stage engine starts
00:03:49	Fairing deploy
00:06:19	1st stage entry burn begins
00:08:32	1st stage landing
00:08:34	2nd stage engine cutoff (SECO-1)
00:26:29	2nd stage engine restarts
00:27:22	2nd stage engine cutoff (SECO-2)
00:32:03	SES-10 satellite deploy

Launch Facility

Launch Complex 39A at Kennedy Space Center, Florida

Launch Complex 39A (LC-39A) at NASA's Kennedy Space Center has a long and storied history dating back to the early 1960s. Originally built to support the Apollo program, LC-39A supported the first Saturn V launch (Apollo 4), and many subsequent Apollo missions, including Apollo 11 in July 1969. Beginning in the late 1970s, LC-39A was modified to support Space Shuttle launches, hosting the first and last shuttle missions to orbit in 1981 and 2011 respectively.

In 2014, SpaceX signed a 20-year lease with NASA for the use of historic Launch Complex 39A. Since then, the company has made significant upgrades to modernize the pad's structures and ground systems, while also preserving its important heritage. Extensive modifications to LC-39A have been made to support launches of both commercial and crew missions on SpaceX's Falcon 9 and Falcon Heavy launch vehicles.

Resources

SPACEX CONTACT | John Taylor, Director of Communications, 310-363-6703, media@spacex.com.

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

WEBCAST | Launch webcast will go live about 20 minutes before liftoff at [spacex.com/webcast](https://www.spacex.com/webcast).