# Intelsat 35e Mission

## Mission Overview

SpaceX's Falcon 9 rocket will deliver Intelsat 35e, a commercial communications satellite, to a Geostationary Transfer Orbit (GTO).

SpaceX is targeting launch of Intelsat 35e from Launch Complex 39A (LC-39A) at NASA's Kennedy Space Center in Florida. The 57-minute launch window opens on Wednesday, July 5, at 7:38 p.m. EDT, or 23:38 UTC. The satellite will be deployed approximately 32 minutes after launch.

SpaceX will not attempt to land Falcon 9's first stage after launch due to mission requirements.



Official SpaceX Intelsat 35e mission patch

## Payload

The fourth of the Intelsat Epic[NG] next-generation high throughput satellites, Intelsat 35e delivers high performance services in C- and Ku-bands. Its unique payload of C-band wide- and spot-beams enables higher efficiency and improved throughput for demanding applications including wireless backhaul, enterprise and mobility services in regions where weather patterns necessitate use of highly reliable C-band spectrum. The Intelsat 35e Ku-band services include a customized high power wide beam for DTH service delivery in the Caribbean, as well as services for mobility and government applications in the Caribbean, trans-Europe to Africa and the African continent.

Intelsat operates the world's first Globalized Network, delivering high-quality, cost-effective video and broadband services anywhere in the world. Intelsat's Globalized Network combines the world's largest satellite backbone with terrestrial infrastructure, managed services and an open, interoperable architecture to enable customers to drive revenue and reach through a new generation of network services.

## Mission Timeline (all times approximate)

### COUNTDOWN

| Hour/Min/Sec | Events |
|---|---|
| - 01:03:00 | Launch Conductor takes launch readiness poll |
| - 01:00:00 | RP-1 (rocket grade kerosene) loading underway |
| - 00:35:00 | LOX (liquid oxygen) loading underway |
| - 00:07:00 | Falcon 9 begins engine chill prior to launch |
| - 00:01:00 | Flight computer commanded 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 AND SATELLITE DEPLOYMENT

| Hour/Min/Sec | Events |
|---|---|
| 00:01:18 | Max Q (moment of peak mechanical stress on the rocket) |
| 00:02:42 | 1st stage main engine cutoff (MECO) |
| 00:02:46 | 1st and 2nd stages separate |
| 00:02:53 | Second stage engine starts |
| 00:03:39 | Fairing deployment |
| 00:08:37 | 2nd stage engine cutoff (SECO-1) |
| 00:26:18 | 2nd stage engine restarts |
| 00:27:10 | 2nd stage engine cutoff (SECO-2) |
| 00:32:01 | Intelsat 35e satellite deployment |

# Launch Facility

### Launch Complex 39A at Kennedy Space Center, Florida

Launch Complex 39A (LC-39A) at Kennedy Space Center has a 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 Launch Complex 39A. Since then, the company has made significant upgrades to modernize the pad's structures and ground systems, while preserving its important heritage. Extensive modifications to LC-39A have been made to support launches of both the Falcon 9 and Falcon Heavy launch vehicles. These upgrades will also enable the pad to serve as the complex from which SpaceX will launch crew rotation missions to and from the International Space Station for NASA's Commercial Crew Program.

# 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.
**WEBCAST** | Launch webcast will go live about 10 minutes before liftoff at spacex.com/webcast.