

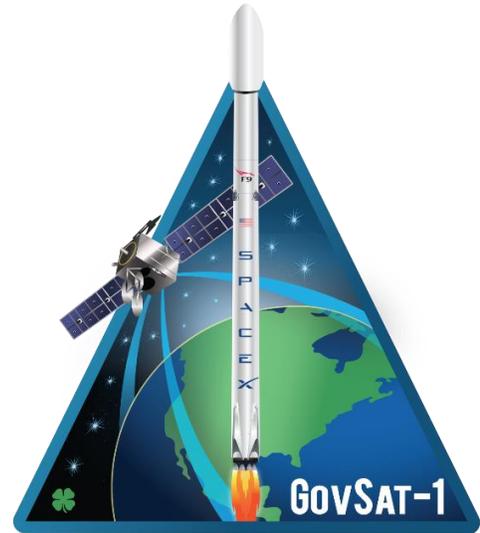
GovSat-1 Mission

Mission Overview

SpaceX is targeting a Falcon 9 launch of the GovSat-1 satellite to a Geostationary Transfer Orbit (GTO) from Space Launch Complex 40 (SLC-40) at Cape Canaveral Air Force Station, Florida. The launch window opens on Wednesday, January 31 at 4:25 p.m. EST, or 21:25 UTC, and closes at 6:46 p.m. EST, or 23:46 UTC. The satellite will be deployed approximately 32 minutes after launch.

A backup launch window opens on Thursday, February 1 at 4:25 p.m. EST, or 21:25 UTC, and closes at 6:47 p.m. EST, or 23:47 UTC.

Falcon 9's first stage for the GovSat-1 mission previously supported the NROL-76 mission from LC-39A in May 2017. SpaceX will not attempt to recover Falcon 9's first stage after launch.



Official SpaceX GovSat-1 Mission Patch

Payload

Designed exclusively to address governmental and institutional security user needs, GovSat-1 is the first satellite of GovSat, a public-private partnership between the Government of Luxembourg and the world-leading satellite operator SES.

The satellite enables secure communication links between theaters of tactical operations, for maritime missions or over areas affected by humanitarian crises. It is ideal to enable mobility and ISR (Intelligence Surveillance and Reconnaissance) applications.

The multi-mission satellite offers X-band and Military Ka-band capacity, up to six high-powered fully steerable spot beams and an advanced Global X-band beam.

Equipped with anti-jamming features, encrypted telemetry and control, GovSat-1 will provide enhanced resilience capabilities operated out of secured ground control facilities.

GovSat-1 will be positioned at 21.5 degrees East in the Geostationary Earth Orbit (GEO) 36,000 kilometers above the equator. It will support communications within Europe, the Middle East and Africa, and enable operations over the Atlantic and Indian oceans, as well as over the Mediterranean and Baltic seas.

GovSat-1 was built by Orbital ATK, and is offering 68 transponder-equivalent units of 36 MHz. It is designed to operate for 15 years, and has a launch mass of over four metric tons.

Mission Timeline (all times approximate)

COUNTDOWN

Hour/Min/Sec

Events

- 01:13:00	SpaceX Launch Director verifies go for propellant load
- 01:10:00	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)
00:02:38	1st stage engine shutdown/main engine cutoff (MECO)
00:02:40	1st and 2nd stages separate
00:02:41	2nd stage engine starts
00:03:44	Fairing deployment
00:08:35	2nd stage engine cutoff (SECO-1)
00:26:40	2nd stage engine restarts
00:27:48	2nd stage engine cutoff (SECO-2)
00:32:19	GovSat-1 satellite deployment

Launch Facility

Space Launch Complex 40 (SLC-40), Cape Canaveral Air Force Station, Florida

SpaceX's SLC-40 at Cape Canaveral Air Force Station is a world-class launch site that builds on a strong heritage. The site, located at the north end of Cape Canaveral Air Force Station, was used for many years to launch Titan rockets, among the most powerful in the U.S. fleet. SpaceX took over the facility in May 2008.

The center of the complex is composed of the concrete launch pad and flame diverter system. Surrounding the pad are four lightning towers, propellant storage tanks, and the integration hangar. Before launch, Falcon 9's stages and payload are housed inside the hangar. The payload is mated to the Falcon 9 inside SLC-40's hangar on the transporter erector. The rocket and payload are then rolled out from the hangar to the launch pad and lifted to a vertical position.

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 15 minutes before liftoff at [spacex.com/webcast](https://www.spacex.com/webcast).