

JANUARY 16, 2026

# NROL-105 MISSION

WATCH →

On Friday, January 16 at 8:39 p.m. PT, Falcon 9 launched the [NROL-105](#) mission from Space Launch Complex 4E (SLC-4E) at Vandenberg Space Force Base in California.

There was the possibility that residents of Santa Barbara, San Luis Obispo, and Ventura counties may have heard [one or more sonic booms](#) during the launch, but what residents experienced depended on weather and other conditions.

This was the second flight for the first stage booster supporting this mission, which previously launched one Starlink mission. Following stage separation, the first stage landed on Landing Zone 4 (LZ-4) at Vandenberg Space Force Base.

## 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

All Times Approximate

HR/MIN/SEC	EVENT
00:01:12	MAX Q (MOMENT OF PEAK MECHANICAL STRESS ON THE ROCKET)
00:02:11	1ST STAGE MAIN ENGINE CUTOFF (MECO)
00:02:14	1ST AND 2ND STAGES SEPARATE
00:02:22	2ND STAGE ENGINE STARTS (SES-1)
00:02:27	BOOSTBACK BURN STARTS
00:02:56	FAIRING SEPARATION
00:03:21	BOOSTBACK BURN ENDS
00:06:00	1ST STAGE ENTRY BURN BEGINS
00:06:16	1ST STAGE ENTRY BURN ENDS
00:07:14	1ST STAGE LANDING BURN BEGINS
00:07:40	1ST STAGE LANDS ON LANDING ZONE 4

