

Iridium-7 NEXT Mission

MISSION OVERVIEW

SpaceX is targeting Wednesday, July 25 for the launch of ten Iridium NEXT satellites from Space Launch Complex 4E (SLC-4E) at Vandenberg Air Force Base in California. This is the seventh set of satellites in a series of 75 total satellites that SpaceX will launch for Iridium’s next generation global satellite constellation, Iridium® NEXT.

The instantaneous launch opportunity is at 4:39 a.m. PDT, or 11:39 UTC, and the satellites will begin deployment about an hour after launch.

A backup instantaneous launch opportunity is available on Thursday, July 26 at 4:33 a.m. PDT, or 11:33 UTC.

Following stage separation, SpaceX will attempt to land Falcon 9’s first stage on the “Just Read the Instructions” droneship, which will be stationed in the Pacific Ocean.

PAYLOAD

For this seventh Iridium mission, ten Iridium® NEXT satellites will be launched as part of the company’s campaign to replace the world’s largest commercial satellite network. A total of eight Iridium NEXT launches are planned with SpaceX, which will deliver 75 new satellites to orbit. In total, 81 satellites are being built, with 66 in the operational constellation, nine serving as on-orbit spares and six as ground spares. Iridium is the only satellite communications network that spans the entire globe.

Iridium NEXT is one of the largest “tech upgrades” in space history. The process of replacing the satellites one by one in a constellation of this size and scale has never been completed before. The new constellation is enabling the development of innovative products and services including Iridium CertusSM, the Company’s next-generation broadband solution for specialized applications, like safety services, data and communications, remote monitoring, tracking and more.



Official SpaceX Iridium-7 Mission Patch

MISSION TIMELINE (ALL TIMES APPROXIMATE)

COUNTDOWN

Hour/Min/Sec	Events
- 00:38:00	SpaceX Launch Director verifies go for propellant load
- 00:35:00	RP-1 (rocket grade kerosene) loading underway
- 00:35:00	1st stage LOX (liquid oxygen) loading underway
- 00:16:00	2nd stage LOX loading underway
- 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 SATELLITE DEPLOYMENTS

Hour/Min/Sec	Events
00:01:12	Max Q (moment of peak mechanical stress on the rocket)
00:02:24	1st stage main engine cutoff (MECO)
00:02:27	1st and 2nd stages separate
00:02:29	2nd stage engine starts
00:03:11	Fairing deployment
00:05:39	1st stage entry burn
00:07:17	1st stage landing
00:08:33	2nd stage engine cutoff (SECO-1)
00:51:28	2nd stage engine restarts
00:51:37	2nd stage engine cutoff (SECO-2)
00:56:38	Iridium NEXT satellites begin deployment
01:11:38	Iridium NEXT satellites end deployment

LAUNCH FACILITY

Space Launch Complex 4E at Vandenberg Air Force Base, California

SpaceX's Space Launch Complex 4E at Vandenberg Air Force Base has a long history dating back to the early 1960s. Originally an Atlas launch pad activated in 1962, SLC-4E was in active use until its last Titan IV launch in 2005. SpaceX's groundbreaking was in July 2011, and extensive modifications and reconstruction of the launch pad were completed just 17 months later.

SLC-4E consists of a concrete launch pad/apron and a flame exhaust duct. Surrounding the pad are RP-1 and liquid oxygen storage tanks and an integration hangar. Before launch, Falcon 9's stages, fairing and the mission payload are housed inside the hangar. A crane/lift system moves Falcon 9 into a transporter erector system and the fairing and its payload are mated to the rocket. The vehicle is rolled from the hangar to the launch pad shortly before launch to minimize exposure to the elements.

RESOURCES

SpaceX Contact | Eva Behrend, Sr. Communications Manager, 310-363-6247, 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).