

SARAH-1 MISSION

MISSION OVERVIEW

SpaceX is targeting Saturday, June 18 at 7:19 a.m. PT, 14:19 UTC, for a Falcon 9 launch of the **SARah-1** mission from Space Launch Complex 4 East (SLC-4E) at Vandenberg Space Force Base in California. A backup opportunity is available on Monday, June 20 at 7:19 a.m. PT, 14:19 UTC.

The Falcon 9 first stage booster supporting this mission previously launched the NROL-87 and NROL-85 missions. Following stage separation, Falcon 9's first stage will return to land on Landing Zone 4 (LZ-4) at Vandenberg Space Force Base in California.

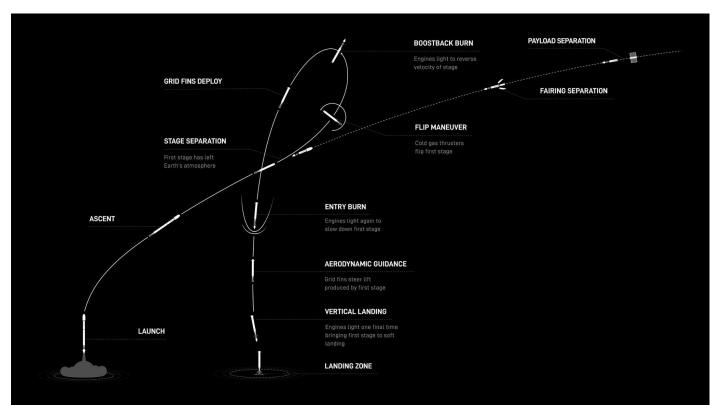
WEBCAST

<u>A live webcast of this mission</u> will begin about 10 minutes prior to liftoff.

PHOTOS

High-resolution photos will be posted at <u>flickr.com/spacex</u>.

MISSION PROFILE



MISSION TIMELINE (ALL TIMES APPROXIMATE)

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

Hr/Min/Sec	Event
00:01:12	Max Q (moment of peak mechanical stress on the rocket)
00:02:17	1st stage main engine cutoff (MECO)
00:02:20	1st and 2nd stages seperate
00:02:34	1st stage boostback burn begins
00:02:49	Fairing deployment
00:03:21	1st stage boostback burn complete
00:06:09	1st stage entry burn begins
00:06:31	1st stage entry burn complete
00:07:25	1st stage landing burn begins
00:07:56	1st stage lands on Landing Zone 4