

Merah Putih Mission

MISSION OVERVIEW

SpaceX is targeting launch of the Merah Putih satellite to a Geostationary Transfer Orbit (GTO) from Space Launch Complex 40 (SLC-40) at Cape Canaveral Air Force Station, Florida. The two-hour launch window opens on Tuesday, August 7 at 1:18 a.m. EDT, or 5:18 UTC. The satellite will be deployed approximately 32 minutes after liftoff.

A two-hour backup launch window opens on Wednesday, August 8 at 1:18 a.m. EDT, or 5:18 UTC.

Falcon 9's first stage for the Merah Putih mission previously supported the Bangabandhu Satellite-1 mission in May 2018. Following stage separation, SpaceX will attempt to land Falcon 9's first stage on the "Of Course I Still Love You" droneship, which will be stationed in the Atlantic Ocean.



Official SpaceX Merah Putih Mission Patch

PAYLOAD

Merah Putih is a geostationary commercial communications satellite which will be operated at an orbital position of 108 degrees east. The satellite, built by SSL on their SSL 1300 platform, will be integrated into PT Telkom Indonesia's greater network to provide service to Indonesia and other areas in South and Southeast Asia.

Merah Putih, which stands for the red and white colors of the Indonesian flag, will carry an all C-band payload capable of supporting a wide range of applications, including providing mobile broadband across Indonesia and Southeast Asia. The satellite is expected to have a service lifetime of 15 or more years.

PT Telkom Indonesia is the largest telecommunications and network provider in Indonesia. The company offers a wide range of network and telecommunications services, including fixed wireline connections, cellular services, and internet and data communication services.



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 DEPLOYMENT

Hour/Min/Sec	Events
00:01:19	Max Q (moment of peak mechanical stress on the rocket)
00:02:30	1st stage main engine cutoff (MECO)
00:02:34	1st and 2nd stages separate
00:02:36	2nd stage engine starts
00:03:28	Fairing deployment
00:06:13	1st stage entry burn
00:08:06	2nd stage engine cutoff (SECO-1)
00:08:08	1st stage landing
00:26:15	2nd stage engine restarts
00:27:13	2nd stage engine cutoff (SECO-2)
00:31:53	Merah Putih satellite deployment

LAUNCH FACILITY

Space Launch Complex 40 at 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 | James Gleeson, Communications Director, 202-649-2633, <u>media@spacex.com</u>. Photos | High-resolution photos will be posted at <u>flickr.com/spacex</u>. Webcast | Launch webcast will go live about 15 minutes before liftoff at <u>spacex.com/webcast</u>.