



CREW-2 MISSION

MISSION OVERVIEW

SpaceX and NASA are targeting Friday, April 23 for Falcon 9's launch of Dragon's second six-month operational crew mission ([Crew-2](#)) to the International Space Station (ISS) from historic Launch Complex 39A (LC-39A) at NASA's Kennedy Space Center in Florida. The instantaneous launch window opens at 5:49 a.m. EDT, 9:49 UTC, with a backup opportunity available on Monday, April 26 at 4:38 a.m. EDT, 8:38 UTC.

Following stage separation, Falcon 9's first stage will land on the "Of Course I Still Love You" droneship, which will be stationed in the Atlantic Ocean.

WEBCAST

The Crew-2 mission webcast will go live about 4 hours before liftoff. Tune in [here](#) to watch live.

PHOTOS

High-resolution photos will be posted at [flickr.com/spacex](https://www.flickr.com/photos/spacex/).

This is the first human spaceflight mission to fly astronauts on a flight-proven Falcon 9 and Dragon. The Falcon 9 first stage supporting this mission previously launched the [Crew-1](#) mission in November 2020, and the Dragon spacecraft previously flew [Robert Behnken](#) and [Douglas Hurley](#) to and from the International Space Station during SpaceX's [Demo-2](#) mission in 2020.

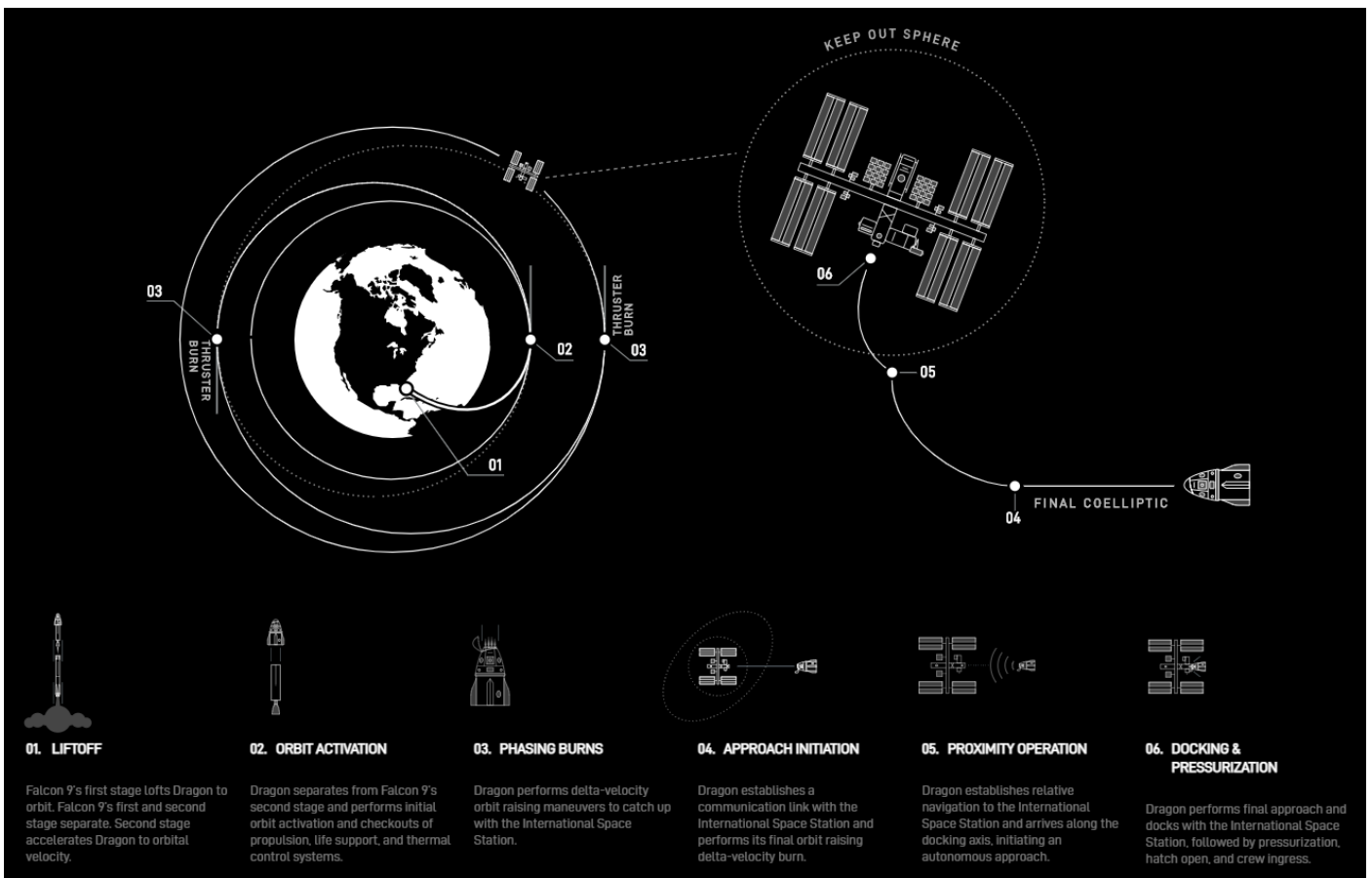
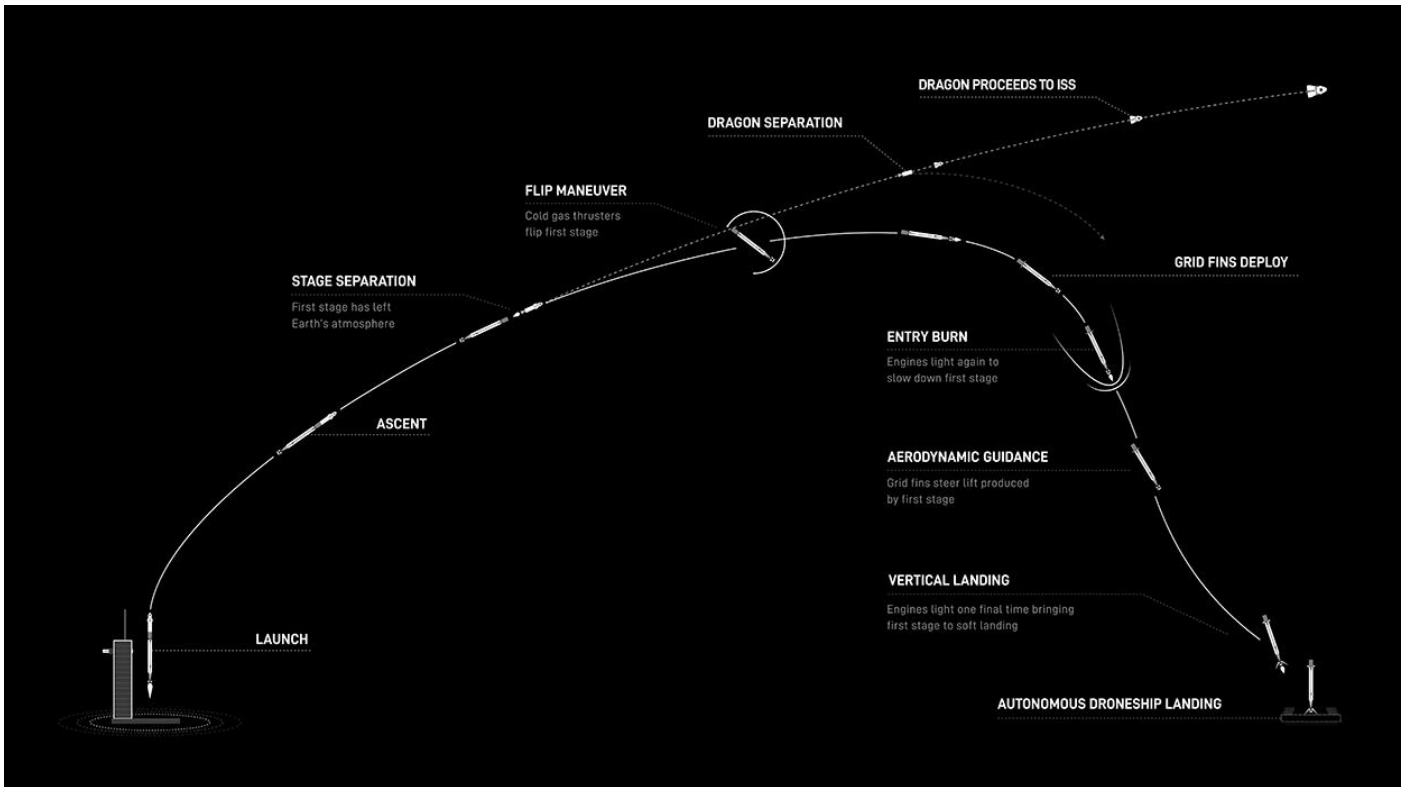
As part of the Commercial Crew Program, NASA astronauts [Shane Kimbrough](#) and [Megan McArthur](#), Japanese Aerospace Exploration Agency (JAXA) astronaut [Akihiko Hoshide](#), and European Space Agency (ESA) astronaut [Thomas Pesquet](#) will fly aboard the Dragon spacecraft during the Crew-2 mission. On Saturday, April 24, at approximately 5:10 a.m. EDT, 9:10 UTC, Dragon will autonomously dock with the International Space Station. This will be the first time Dragon will fly two international partners and it will also be the first time two Crew Dragons are attached simultaneously to the orbiting laboratory.

After an approximate six-month stay, Dragon and the Crew-2 astronauts will depart from the space station no earlier than October 31 for return to Earth and splashdown in the Atlantic Ocean off the coast of Florida.

THE ASTRONAUTS



MISSION PROFILE



MISSION TIMELINE (ALL TIMES APPROXIMATE)

COUNTDOWN

Hr/Min/Sec	Event
- 00:45:00	SpaceX Launch Director verifies go for propellant load
- 00:42:00	Crew access arm retracts
- 00:37:00	Dragon's launch escape system is armed
- 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
- 00:05:00	Dragon transitions to internal power
- 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
00:01:02	Max Q (moment of peak mechanical stress on the rocket)
00:02:36	1st stage main engine cutoff (MECO)
00:02:39	1st and 2nd stages separate
00:02:47	2nd stage engine starts
00:07:27	1st stage entry burn
00:08:47	2nd stage engine cutoff (SECO-1)
00:09:03	1st stage landing burn
00:09:31	1st stage landing
00:11:58	Dragon separates from 2nd stage
00:13:02	Dragon nosecone open sequence begins