

INSPIRATION4 MISSION



MISSION OVERVIEW

SpaceX is targeting a five-hour launch window on Wednesday, September 15, opening at 8:02 p.m. EDT (Thursday, September 16 at 00:02 UTC) for launch of the **Inspiration4** mission – the world's first all-civilian human spaceflight to orbit – aboard SpaceX's Falcon 9 rocket and Dragon spacecraft from historic Launch Complex 39A at NASA's Kennedy Space Center in Florida. Approximately three days after liftoff, Dragon and the Inspiration4 crew will return to Earth and splash down at one of several possible landing sites off the Florida coast.

WEBCAST

SpaceX's [webcast for launch](#) of the Inspiration4 mission will go live ~4 hours before liftoff.

PHOTOS

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

Inspiration4 is commanded by Jared Isaacman, founder and CEO of Shift4 Payments and an accomplished pilot and adventurer. Joining him are Medical Officer Hayley Arceneaux, a physician assistant at St. Jude Children's Research Hospital® and pediatric cancer survivor; Mission Specialist Chris Sembroski, an Air Force veteran and aerospace data engineer; and Mission Pilot Dr. Sian Proctor, a geoscientist, entrepreneur, and trained pilot.

THE ASTRONAUTS



Jared Isaacman

Hayley Arceneaux

Chris Sembroski

Dr. Sian Proctor



MISSION OBJECTIVES

RAISE \$200M FOR ST JUDE

The Inspiration4 mission is part of Jared's ambitious fundraising goal to give hope to all kids with cancer and other life-threatening diseases. Visit St. Jude Children's Research Hospital to learn how you can help the Inspiration4 crew reach their \$200M fundraising goal.

STUDY THE HUMAN BODY IN SPACE

During their multi-day journey in orbit, the Inspiration4 crew will conduct **scientific research** designed to advance human health on Earth and during future long-duration spaceflights.

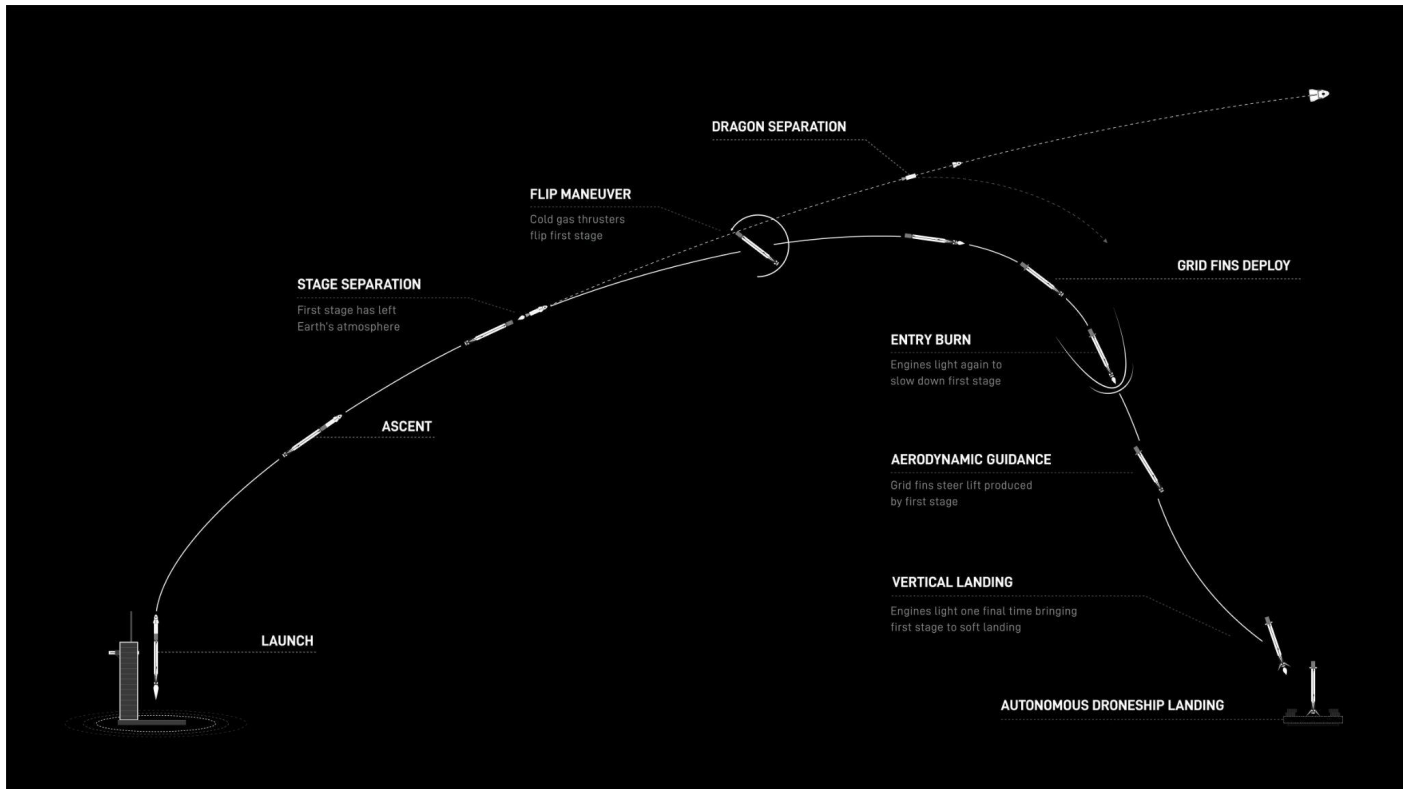


DRAGON

Once in flight, Dragon will travel to an apogee of approximately 575 kilometers — flying farther than any human spaceflight since the Hubble missions. Dragon's new cupola observation dome will be the largest contiguous space window ever flown. The three-layer observation dome, which was extensively tested and qualified for flight in six months, replaces the mechanism used on Dragon's previous flight to dock to the International Space Station.



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)
00:02:37	1st stage main engine cutoff (MECO)
00:02:40	1st and 2nd stages separate
00:02:41	2nd stage engine starts
00:07:30	1st stage entry burn
00:08:51	2nd stage engine cutoff (SECO-1)
00:09:04	1st stage landing burn
00:09:31	1st stage landing
00:12:09	Dragon separates from 2nd stage
00:13:02	Dragon nosecone open sequence begins