

UPCOMING LAUNCH

CRS-31 MISSION

SpaceX is targeting Monday, November 4 for Falcon 9's launch of Dragon's 31st Commercial Resupply Services (CRS-31) mission to the International Space Station from Launch Complex 39A at NASA's Kennedy Space Center in Florida. Liftoff is targeted for 9:29 p.m. ET with a backup launch opportunity available on Wednesday, November 5 at 9:06 p.m. ET if needed.

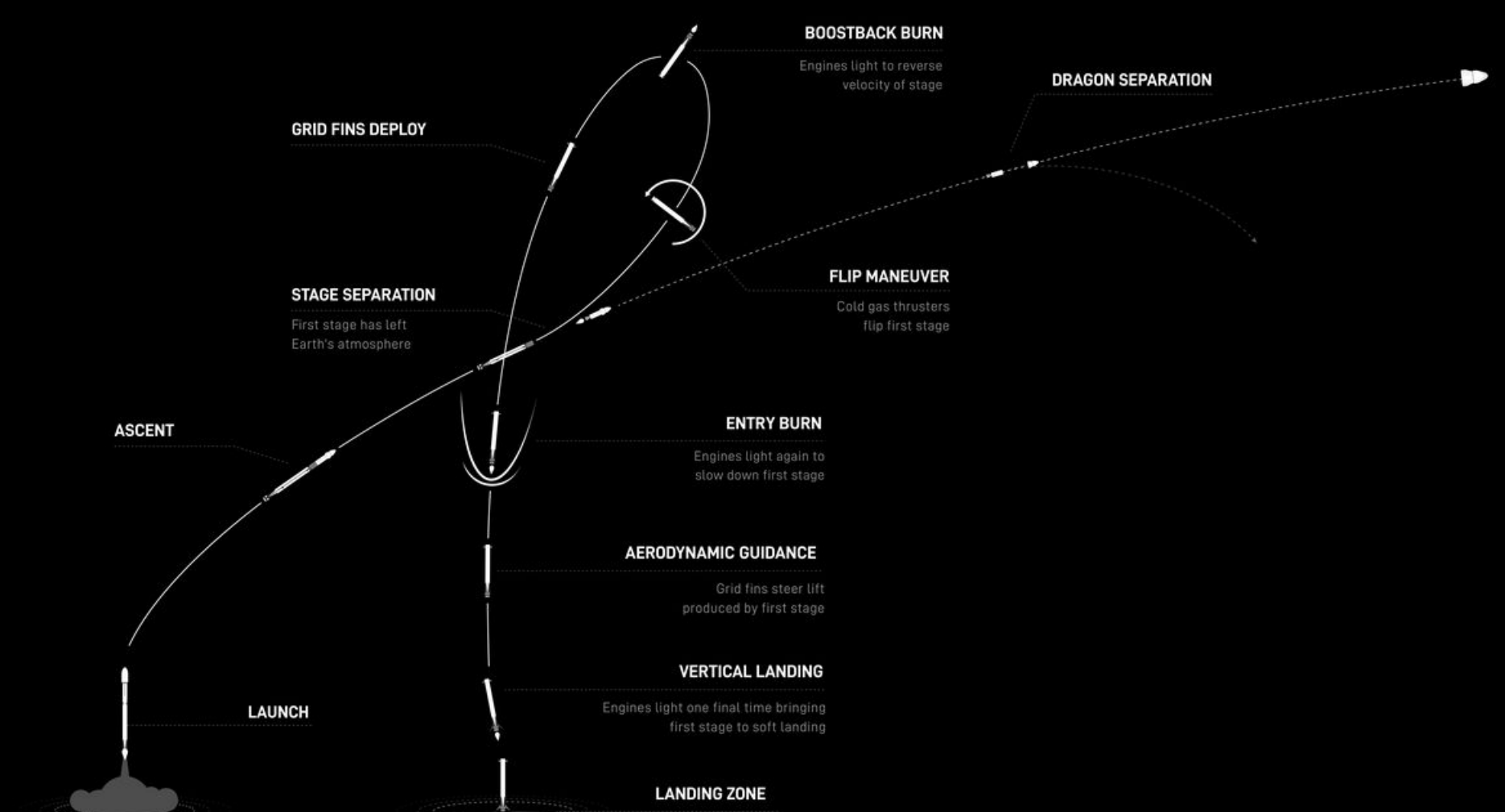
A live webcast of this mission will begin about 20 minutes prior to liftoff, which you can watch here and on X @SpaceX. You can also watch the webcast on the new X TV app.

This is the fifth flight of the first stage booster supporting this mission, which previously launched Crew-8, Polaris Dawn, and two Starlink missions. Following stage separation, Falcon 9 will land at Landing Zone 1 at Cape Canaveral Space Force Station.

CRS-31 is the fifth flight for this Dragon spacecraft, which previously flew CRS-21, CRS-23, CRS-25, and CRS-28 to the space station. After an almost 13-hour flight, Dragon will autonomously dock with the space station on Tuesday, November 5 at approximately 10:15 a.m. ET.

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 pre-launch engine chill
00:05:00	Dragon transitions to internal power
00:01:00	Command flight computer to begin final prelaunch checks
00:01:00	Propellant tanks pressurize for flight
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

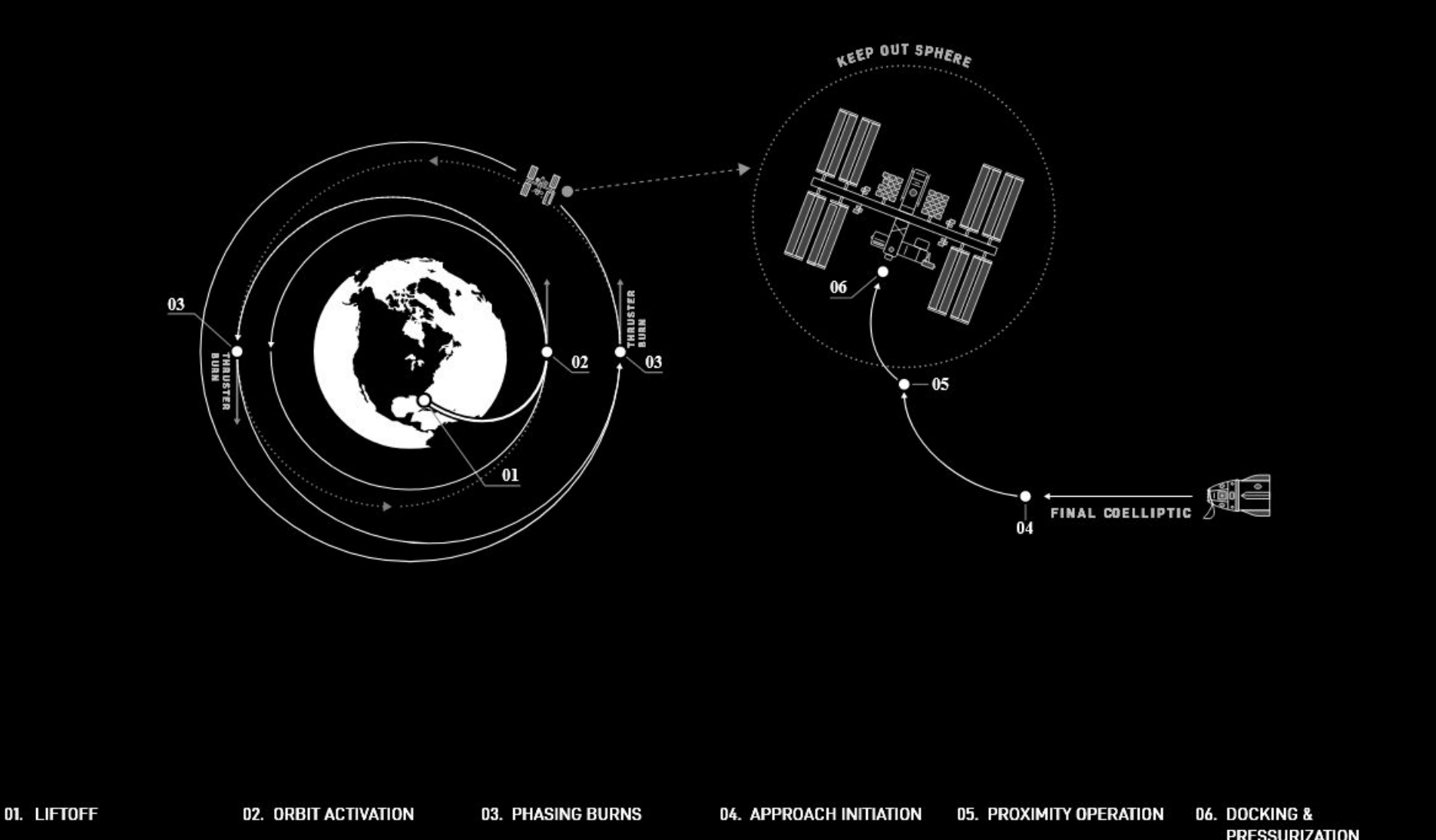
All Times are Approximate

HR/MIN/SEC	EVENT
00:01:08	Max Q (moment of peak mechanical stress on the rocket)
00:02:19	1st stage main engine cutoff (MECO)
00:02:22	1st and 2nd stages separate
00:02:30	2nd stage engine starts
00:02:36	Boostback Burn Starts
00:03:28	Boostback Burn Ends
00:06:25	1st stage entry burn starts
00:06:38	1st stage entry burn ends
00:07:26	1st stage landing burn starts
00:07:49	1st stage landing
00:08:35	2nd stage engine cutoff (SECO-1)
00:09:25	Dragon separates from 2nd stage
00:10:08	Dragon nosecone open sequence begins

MISSION

TO THE SPACE STATION

On its flight to the International Space Station, Dragon executes a series of burns that position the vehicle progressively closer to the station before it performs final docking maneuvers, followed by pressurization of the vestibule, hatch opening, and crew ingress.



01. LIFTOFF02. ORBIT ACTIVATION03. PHASING BURNS04. APPROACH INITIATION05. PROXIMITY OPERATION06. DOCKING & PRESSURIZATION