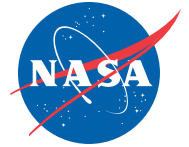




National Aeronautics and
Space Administration



NASA'S COMMERCIAL CREW PROGRAM MISSION OVERVIEW

NASA's SpaceX Crew-3



NASA's SpaceX Crew-3 mission is the third crew flight of the Crew Dragon spacecraft and Falcon 9 rocket, carrying NASA astronauts [Raja Chari](#), mission commander, [Tom Marshburn](#), pilot, and [Kayla Barron](#), mission specialist plus ESA (European Space Agency) astronaut [Matthias Maurer](#), who also will serve as a mission specialist, to the International Space Station.

This is the first spaceflight for Chari, Barron and Maurer. It is the third spaceflight for Marshburn, who previously served as a crew member of the space shuttle STS-127 mission in 2009 and Expedition 34/35 aboard the space station, which concluded in 2013.

The mission will lift off from Launch Complex 39A at NASA's Kennedy Space Center in Florida. The crew is scheduled for a long-duration stay aboard the orbiting laboratory, living and working as part of what is expected to be a seven-member crew.



LAUNCH VEHICLE

SpaceX Falcon 9

HEIGHT: 229.6 ft

DIAMETER: 12 ft

PROPELLENT: LOX (liquid oxygen) and rocket grade kerosene (RP-1)

PROPULSION: 9 SpaceX Merlin engines – 190,000 lbf each

LAUNCH LOCATION: Launch Complex 39A at NASA's Kennedy Space Center in Florida

Falcon 9 will launch Dragon from historic Launch Complex 39A. It will accelerate Dragon to an orbital velocity of 17,500 mph prior to spacecraft separation and rendezvous and docking with the International Space Station. The Falcon 9 that will be used to launch this mission flew previously on SpaceX's 22nd commercial resupply mission to the station in June 2021.

SPACECRAFT

SpaceX Crew Dragon

HEIGHT: 26.7 ft

DIAMETER: 13 ft

VOLUME: 328 ft³

CREW CAPACITY: Up to seven

RETURN: Splashdown-based water return



The Crew-3 mission will fly a new Crew Dragon spacecraft and will be the first mission to fly a previously used nosecone. It is tradition for a crew flying a new capsule to name it, so the astronauts chose *Endurance*. It is a tribute to the tenacity of the human spirit as we push farther than ever with commercial opportunities in low-Earth orbit and plans to go to the Moon and Mars.

Crew-3 is scheduled for a long-duration stay aboard the International Space Station, spending several months conducting science and maintenance before the four astronauts return to Earth in spring 2022.

MEET THE CREW-3 CREW

Raja Chari
COMMANDER

Hometown: Milwaukee, WI
Previous Missions:
First Mission



Thomas Marshburn
PILOT

Hometown: Statesville, NC
Previous Missions: STS-127,
Expeditions 34/35



Kayla Barron
MISSION SPECIALIST

Hometown: Richland, WA
(born in Pocatella, ID)
Previous Missions:
First Mission



Matthias Maurer
MISSION SPECIALIST

Hometown: Sankt Wendel
(Saarland), Germany
Previous Missions:
First Mission



BEHIND THE DESIGN



The Crew Dragon Crew-3 patch highlights the beauty of space and the vehicle that is delivering our team to the International Space Station. The sunlit capsule heralds the dawn of a new era of human space flight, as commercial vehicles expand into low earth orbit. The capsule flies upward, thrusting beyond the edge of the circle, representing an international effort that pushes to reach new heights of space exploration. The flames below the capsule honor the of thousands of workers who contributed to the US commercial vehicle effort—the fire in their hearts propels the program’s success. Since Crew-3 is the third operational flight to the Space Station, the number three figures prominently in both the shape of the exhaust below the capsule and the highlighted stars. A dragon is embedded in the exhaust opposite the three for the capsule’s namesake. Finally, four red planets represent the four crew members of the mission, as well as humanity’s dream to explore Mars and even more distant planetary bodies.