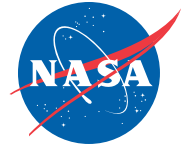




National Aeronautics and
Space Administration



NASA'S COMMERCIAL CREW PROGRAM MISSION OVERVIEW

NASA's SpaceX Crew-5



NASA and SpaceX once again are gearing up to launch crew on an American rocket and spacecraft to the [International Space Station](#) to perform science, technology demonstrations, and maintenance activities aboard the microgravity laboratory.

NASA's SpaceX Crew-5 will launch astronauts [Nicole Mann](#) and [Josh Cassada](#) of NASA, astronaut [Koichi Wakata](#) of JAXA (Japan Aerospace Exploration Agency), and cosmonaut [Anna Kikina](#) of Roscosmos, from Launch Complex 39A at NASA's Kennedy Space Center in Florida.

The international crew of four will fly aboard the SpaceX Dragon Endurance spacecraft and will launch on a new Falcon 9 booster to the orbiting laboratory to spend several months at the space station before returning to Earth in the spring of 2023.

The flight is the fifth crew rotation mission with SpaceX to station, and the sixth flight of Dragon with people as part of NASA's Commercial Crew Program.



LAUNCH VEHICLE

SpaceX Falcon 9 Rocket

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

After liftoff, Falcon 9 will accelerate Dragon to an orbital velocity of 17,500 mph prior to spacecraft separation and rendezvous and docking with the International Space Station. This will be the first mission for this Falcon 9 booster.

SPACECRAFT

SpaceX Dragon

HEIGHT: 26.7 ft

DIAMETER: 13 ft

VOLUME: 328 ft³

CREW CAPACITY: Up to seven

RETURN: Splashdown-based water return off the coast of Florida



The Crew-5 mission will fly aboard *Dragon Endurance*. The capsule, which flew Crew-3 astronauts, underwent refurbishment and will be flying a combination of new and previously flown components. This will be the first time all four forward bulkhead Draco engines, which orient and provide altitude adjustment for the spacecraft during flight, are reused on a NASA commercial crew mission. New spacecraft components include the heat shield, parachutes, and nosecone.

MEET THE CREW-5 ASTRONAUTS

Nicole Mann
COMMANDER

Hometown: Petaluma, California

Previous Missions:
First Mission



Josh Cassada
PILOT

Hometown: Born in San Diego, California, but considers White Bear Lake, Minnesota, his hometown

Previous Missions:
First Mission



Koichi Wakata
MISSION SPECIALIST

Hometown: Saitama, Japan

Previous Missions:
STS-72, STS-92, STS-119/127,
and TMA-11M (Expedition 38/29)



Anna Kikina
MISSION SPECIALIST

Hometown: Novosibirsk, Russia

Previous Missions:
First Mission



BEHIND THE DESIGN



A fire-breathing, five-shaped dragon propels the NASA's SpaceX Crew-5 Dragon spacecraft beyond the confines of a pentagon's outline and into low-Earth orbit. As the spacecraft ascends above the Earth's atmosphere and its crew of courageous explorers embarks on their expedition aboard the International Space Station, the dragon's fire transitions to the colors of NASA's Commercial Crew Program representing the unrelenting efforts of the many teams who have met this challenge with unparalleled determination. The sun shines its light on this international team as they bravely pursue scientific advancement and international collaboration for the future of humanity.