

Full Details About how to Became a Astronaut

Space Shuttle Commanders are given overall responsibility for onboard operations during each Space Shuttle mission, including management of the crew and vehicle. Space Shuttle Pilots assist the Commander in the control and operation of the Space Shuttle.

Pilot Astronauts must possess a bachelor's degree from an accredited institution in engineering, biological science, physical science or mathematics. An advanced degree is desirable. At least 1,000 hours of pilot-in-command flight time is required for Pilot Astronauts. Flight test experience is desirable.

Ability to pass a NASA Class I space physical is required for Pilot Astronauts, which includes a minimum 20/50 uncorrected vision, correctable to 20/20 vision and a maximum blood pressure of 140/90 in a sitting position. Pilot Astronauts must have a height of between 5-foot, 4-inches and 6-foot, 4-inches.

Mission Specialist Astronauts, in association with the Space Shuttle Commander and Space Shuttle Pilot, are responsible for the coordination of Space Shuttle operations unique to each individual mission.

Mission Specialist Astronauts are typically involved in crew activity planning, management of consumable supplies, experiment operations and payload operations during each mission. Mission Specialist Astronauts are required to have a detailed knowledge of all Space Shuttle systems.

Mission Specialist Astronauts also need to have a detailed knowledge of the operational characteristics, mission requirements, objectives, supporting systems and equipment for each payload incorporated in their specific mission.

All spacewalks performed during Space Shuttle missions are performed by Mission Specialist Astronauts, who are also involved in operating the Space Shuttle Remote Manipulator System (RMS) and in managing and performing a variety of onboard scientific experiments.

Mission Specialist Astronauts must possess a bachelor's degree from an accredited institution in engineering, biological science, physical science or mathematics. This degree must be followed by at least three years of related professional experience. Advanced degrees may be used to substitute for professional experience.

Ability to pass a NASA Class II space physical is required for Mission Specialist Astronauts, which includes a minimum 20/150 uncorrected vision, correctable to 20/20 and a maximum blood pressure of 140/90 in a sitting position. Mission Specialist Astronauts must have a height of between 4-foot, 10.5-inches and 6-foot, 4-inches.

As per federal regulation, NASA is not allowed to specify an age range for astronaut candidates. In addition, NASA maintains an affirmative action program to assure that qualified minority and female candidates are selected as astronauts. NASA astronauts must be U.S. citizens.

Payload Specialists are not maintained as NASA astronauts, but are consigned by NASA as required for each individual mission. Payload Specialists must possess knowledge and expertise unique to a particular payload. They train along with an assigned crew for each mission, but are released at the conclusion of that mission.

For that reason, specific qualifications for each Payload Specialist may vary. Throughout the history of the Space Shuttle program, Payload Specialists have represented the commercial, educational, scientific and international communities.

Astronauts flown essentially as passengers, including U.S. Senator Jake Garn, U.S. Representative Bill Nelson and U.S. Senator John Glenn were assigned to specific missions as Payload Specialists. The NASA use of Payload Specialists has declined sharply following the Challenger accident.

Although the Space Shuttle program never achieved a planned frequency of up to 60 missions per year, the existing flight schedule required NASA to draft a large number of astronaut candidates from the outset of the program through today.