



## **MARY JACKSON 1921-2005**

- Earned her bachelor's degree in mathematics and physical science, Hampton University in 1942.
- She was recruited by NASA (then NACA) in 1951. She started as a research mathematician "computer" working under supervisor, Dorothy Vaughan.
- In 1953, she accepted the offer to work for engineer, Kazimierz Czarnecki in the Supersonic Pressure Tunnel. The wind tunnel was 60,000 horsepower and used to study forces by generating winds at almost twice the speed of sound.
- Czarnecki, with whom she co-authored 16 papers, encouraged her to train for promotion as an engineer. She needed to take graduate level courses in mathematics and physics to qualify for the job. She had to petition the City of Hampton to allow her to attend night classes for the University of Virginia at the all-white Hampton High School, approved!
- After completing the courses, she was promoted to aerospace engineer in 1958 and became NASA's first African American female engineer.
- Jackson analyzed data from wind tunnel experiments and real-world aircraft flight experiments at the Theoretical Aerodynamics Branch of the Subsonic-Transonic Aerodynamics Division at Langley. She studied air flow, including thrust and drag forces to improve United States aircraft.
- Jackson later worked in other NASA divisions: the Compressibility Research Division, the Full-Scale R.D., and the High-Speed Aerodynamics Division.
- She also worked with women and minorities to advance their careers and how to study to qualify for promotions.
- By 1979, Jackson had achieved the most senior title in the engineering department. She took a demotion to serve as administrator in the Equal Opportunity Specialist field.
- She worked as manager for the Federal Women's Program in the EOP and as the Affirmative Action Program. She continued to influence career paths for women in science, engineering, and mathematics at NASA until her retirement in 1985.
- NASA renamed a building in Washington, DC the Mary W. Jackson NASA Headquarters in 2021, and she was awarded the Congressional Gold Medal in 2019.

[https://en.wikipedia.org/wiki/Mary\\_Jackson\\_\(engineer\)](https://en.wikipedia.org/wiki/Mary_Jackson_(engineer))