

Honoree
Rocket Scientist
Young STAR Award

Jacqueline Mims



Ms. Jacqueline Mims is truly a role model for African-Americans pursuing science, technology and engineering. In 1986, Mims began her career at NASA Goddard Space Flight Center as an Administrative Assistant. After networking with NASA engineers, while performing her administrative tasks, Mims realized that she too wanted to be able to “reach for the stars”. So, she quit her job and pursued a Bachelors in Computer Science at Towson State University in Baltimore Maryland. After graduating, Mims was rehired by NASA Goddard Space Flight Center where she continued to climb the ladder of success.

Her responsibilities at the NASA's Goddard Space Flight Center included Spacecraft Command Controller Engineer, Spacecraft Analyst Engineer and Deputy Flight Operations Engineer for NASA's Small Explorer (SMEX) Wide-Field Infrared Explorer (WIRE) spacecraft. The WIRE spacecraft was designed to examine and test the theoretical evolutionary origins of starburst galaxies and to determine if the Sun was formed within a starburst in our Milky Way some 4.6 billion years ago.

In 1996, Goddard's Mission Operations Division offered a challenging, hands-on opportunity to the civil servant work force. The program consisted of highly specialized scientific and technical training required for civil servants to be certified to “fly” or command and control spacecraft as command controllers.

She accepted the career opportunity and challenge, and began training. This represented a historical milestone for any employee, and especially for an African-American at NASA.

The successful completion of the courses of study was no easy task.

After her successful certification to command control the WIRE spacecraft, Ms. Mims was promoted to the position of Deputy Operations Engineer. She was responsible for overseeing all of the day shift Flight Operations Team's pre-launch simulations, as well as the launch telemetry and early orbit activities.

Unexpectedly, the new levels of training would be put to the test because shortly after its launch, the WIRE spacecraft demonstrated gyroscopic stability problems and went into a high-speed tumble. It became her job and responsibility for coordinating corrective interactions with the Flight Operations Team, NASA's top level management and the spacecraft Attitude and Control experts required to bring the spacecraft under control.

The spacecraft stabilization effort was successful however, there still developed a mission setback. The spacecraft's telescope lenses were destroyed as a result of the tumble placing the telescope in the direct unfiltered rays of the sun. Essentially, the sun's rays overloaded and burned the telescope's camera lens.

This unfortunate development eliminated the 4.6 million-dollar WIRE spacecraft's ability to capture pictures of the stars. All of the spacecraft's subsystems, actuators and sensors remained fully functional so, it was decided by NASA management to transition WIRE into an engineering test satellite. Jacqueline was promoted to Project Manager of this endeavor.

Ms. Mims was the recipient of three very prestigious awards as a result of her recognized outstanding achievements at NASA, the National Technical Association's 1998 Top Ten Minority Women in Science, Engineering and Technology, the 1999 Woman of Color Technological Excellence in Government Leadership and the 2000 Black Engineer of the Year's Most Promising Engineer in Government.