



**WOMEN'S  
LEADERSHIP**  
SUMMIT

**JOAN HIGGINBOTHAM**  
**NASA ASTRONAUT (RETIRED)**



## **ABOUT**

Joan Higginbotham was born in Chicago, IL, enjoys motivational speaking, working out, and a variety of music genres.

She received a Bachelor of Science Degree in Electrical Engineering from Southern Illinois University at Carbondale (SIU-C), a Master of Science Degree in Management from the Florida Institute of Technology (FIT), a Master of Science Degree in Space Systems from FIT, a Doctorate (honorary) in Aerospace Science from SIU-C, and a Doctorate (honorary) in Humanities from the University of New Orleans.

Joan is extremely active in the community and is involved with the following organizations:

- Association of Space Explorers (ASE), Life Member
- ☐ The Links, Incorporated, Crown Jewels Chapter
- ☐ Delta Sigma Theta Sorority, Inc.
- ☐ Johnson C. Smith University, Board of Visitors
- ☐ Economic Development Partnership of North Carolina



Her awards and honors are numerous; select ones are cited below:

- 2016 AT&T Heritage Calendar Honoree
- Charlotte's 50 Most Influential Women, 2014
- Inductee National Association of Negro Business and Professional Women's History Hall of Fame, 2013
- St. Augustine University's Heritage Award Recipient, 2013
- Savoy Magazine's 2012 Top Influential Women in Corporate America
- Honored in the 'America I Am: The African American Imprint' Exhibit, Harvey B. Gantt Center for African American Arts & Culture, Charlotte, NC
- Honored with displays at the DuSable Museum of African-American History in Chicago, IL, and the Buffalo Soldier Museum in Houston, TX
- World Who's Who of Women 2009
- Who's Who in Black Houston 2007 Inaugural Edition, 2008, 2009, 2010
- Appeared in Alicia Key's 'Superwoman' video, 2008
- More Magazine/Wilhelmina Model Search Semi-finalist, 2008
- Honored by President George W. Bush at the 81st White House Black History Month Celebration, 2007
- Women of Color in Technology Career Achievement Award Recipient, 2007
- National Technical Association's Technical Achiever (Engineer), 2007
- National Space Medal, 2006
- Essence Magazine's Top 50 Women of 2004
- Southern Illinois University's Distinguished Alumni



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**COLLINS AEROSPACE EXPERIENCE:** In November 2018, UTC Aerospace Systems acquired Rockwell Collins and the integrated company was renamed Collins Aerospace. Ms. Higginbotham was assigned to the Customer and Account Management function where she manages the relationships with governmental and human exploration agencies.

**UTC AEROSPACE SYSTEMS EXPERIENCE:** Joan joined UTC Aerospace Systems on October 2, 2017, as Director of Corporate Social Responsibility (CSR). She worked closely with strategic stakeholders and executive leadership across UTC Aerospace Systems' business units and functions to ensure alignment and coordination of all internal and external community programs, focusing on creating a stronger corporate social responsibility identity that delivers social impact in key markets around the world.

**LOWE'S EXPERIENCE:** Joan joined Lowe's Companies, Inc., in October 2011, as Director of Community Relations. She led Lowe's efforts to support communities in the United States, Canada and Mexico through corporate contributions totaling more than \$32 million annually. She also was responsible for Lowe's Heroes employee volunteer program as well as Lowe's Toolbox for Education, the company's signature education grant program, which has donated nearly \$35 million in grants to K-12 public schools since its inception in 2006. Also under her purview was Lowe's disaster response.

In December 2015, Joan transitioned to the role of Director of Supplier Diversity. In this capacity, she identified and developed the capability of high potential small and diverse suppliers and matched them with the enterprise strategic sourcing and merchandising teams for integration into new sourcing frameworks.



Her last role at Lowe's was as Director of Global Sourcing where she provided collaborative leadership and strategic direction for growing Lowe's Global Sourcing (LGS) export opportunities in key, emerging countries, managed the LGS Operations and Initiatives team whose principle purpose is to solicit, prioritize and implement process improvement initiatives which align with the strategic objectives of the LGS operational pillars, and supervised the Import Classification Analyst Team responsible for compliance with federal trade laws and regulations for international shipments, determining the harmonized tariff classification and whether the shipment qualifies for special tariff treatment, such as NAFTA, or other reduced duty rate programs.

**MARATHON OIL EXPERIENCE:** Joan joined Marathon in December 2007 and embarked on a series of rotational project assignment in Business Development; specifically, in the Gas-to-Fuels (GTF) proprietary technology group, Commercial Negotiations, and the Budget Office. In 2009, she kick-started a project to develop a multi-year budget and timeline to implement the arc flash analysis for the company's domestic and international assets. Later that year, she was assigned as the Manager of the Corporate Social Responsibility Office where she manages the Bioko Island Malaria Control Project (BIMCP) in Equatorial Guinea, Africa.

**NASA EXPERIENCE:** Joan Higginbotham began her career in 1987 at the Kennedy Space Center (KSC), Florida, as a Payload Electrical Engineer in the Electrical and Telecommunications Systems Division. Within six months she became the lead for the Orbiter Experiments (OEX) on OV-102, the Space Shuttle Columbia. She later worked on the Shuttle payload bay reconfiguration for all Shuttle missions and conducted electrical compatibility tests for all payloads flown aboard the Shuttle.



She was tasked by KSC management to undertake several special assignments where she served as the Executive Staff Assistant to the Director of Shuttle Operations and Management, led a team of engineers in performing critical analysis for the Space Shuttle flow in support of a simulation model tool, and worked on an interactive display detailing the Space Shuttle processing procedures at Spaceport USA (Kennedy Space Center's Visitors Center). Higginbotham then served as backup orbiter project engineer for OV-104, Space Shuttle Atlantis, where she participated in the integration of the orbiter docking station (ODS) into the space shuttle used during Shuttle/Mir docking missions. Two years later, she was promoted to lead orbiter project engineer for OV-102, Space Shuttle Columbia. In this position, she held the technical lead government engineering position in the firing room where she supported and managed the integration of vehicle testing and troubleshooting. She actively participated in 53 space shuttle launches during her 9-year tenure at Kennedy Space Center.

Selected as an astronaut candidate by NASA in April 1996, Joan Higginbotham reported to the Johnson Space Center in August 1996. Since that time, she had been assigned technical duties in the Payloads & Habitability Branch, the Shuttle Avionics & Integration Laboratory (SAIL), the Kennedy Space Center (KSC) Operations (Ops) Support Branch, where she tested various modules of the International Space Station for operability, compatibility, and functionality prior to launch, the Astronaut Office CAPCOM (Capsule Communicator) Branch in the startup and support of numerous space station missions and space shuttle missions, the Robotics Branch, and Lead for the International Space Station Systems Crew Interfaces Section. Joan has logged over 308 hours in space having completed her first mission with the crew of STS-116 where her primary task was to operate the Space Station Remote Manipulator System (SSRMS).



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S U M M I T

Joan Higginbotham was assigned to the STS-126 mission targeted for launch in September 2008; however, in November 2007, she retired from 20-year distinguished career with NASA in order to pursue a career at Marathon Oil Company.

**SPACE FLIGHT EXPERIENCE:** STS-116 Discovery (December 9-22, 2006). The seven-member crew on this 12-day mission continued construction of the ISS outpost by adding the P5 spacer truss segment during the first of four spacewalks. The next two spacewalks rewired the station's power system, preparing it to support the addition of European and Japanese science modules by future shuttle crews. The fourth spacewalk was added to allow the crew to coax and retract a stubborn solar panel to fold up accordion-style into its box. Discovery also delivered a new crew member and more than two tons of equipment and supplies to the station. Almost two tons of items no longer needed on the station returned to Earth on STS-116. Mission duration was 12 days, 20 hours and 45 minutes.