



Welcome to AeroStar News!

Will Black People Live On Mars?



Dear AeroStar Family and Friends,

A student in my AeroStars Aviation Exploration program asked, “Mrs. Holmes, will Black people be on Mars?” I was speechless. And if you know me, that’s a rare phenomenon. That he felt the need to ask, speaks volumes about the exclusion of African Americans from the discussion of planetary colonization, space, and science in general. Except for a small handful of scientists, such as Dr. Mae Jemison, the first African American female astronaut, celebrity astrophysicist Dr. Neil deGrasse Tyson, and cosmologist Hakeem Oluseyi, our voices are inaudible in the vacuum of space media.

Believe it or not, the countdown to Mars has begun. Currently, the race to colonize Mars is dominated by three contenders: SpaceX, Mars One, and NASA. Who are the African American “Hidden Figures” working to devise these strategies? And are their voices being heard?

Many times on my journey, I have been challenged by others to think about diversity, equity, and inclusion (DEI) from a more uniform perspective—meaning that I’m asked to lump African Americans, Latinos, LGBTQ+, women, and then the ambiguous “people of color” (which is synonymous with “anyone else not White”) all into one big melting pot. This is problematic for me. As a Black Woman, I have a unique perspective on DEI based on my lived experiences. Dr. King said it best when, in his last public interview, four days before his assassination, he remarked, “... no other ethnic group has been a slave on American soil... the nation made the black man’s color a stigma...”

This is why, when a child asked me if Black people will be on Mars, I had no words. I have no answer. Who will choose our representatives for the future of interplanetary human existence?

Black History Month is an excellent time to contemplate the ethical implications of planetary colonization that Africans and other indigenous peoples around the world are well qualified to address. Are we to trust the scientists, engineers, and entrepreneurs to get it right this time? After nearly 120 years of exclusion, AeroStar and our partners will work diligently to diversify the industry!

Octavia Butler on Mars

NASA has named the Perseverance rover's touchdown site on the red planet's Jezero Crater "[Octavia E. Butler's Landing](#)," after the great African American science fiction novelist and winner of the Hugo and Nebula awards. Butler was also the first sci fic writer to receive a MacArthur Fellowship. ([Source](#))

I applaud NASA's tribute of this African American woman, but I can't help but wonder if they actually read any of her works. What was the theme running through many of Butler's stories? Enforced colonization of earth by an alien species.

AeroStars in Space!

The new NASA and Lego Education aerospace curriculum for Spring Program has officially launched! AeroStars grades 5-12 join us on Saturdays at Olive-Harvey College for a journey into space led by six of our amazing instructors, in preparation for NASA's Artemis 1 Mission launch. Youth from our new program partner, the Chicago Housing Authority, are joining us for this exciting journey, and we welcome them!

BAE DAY 2022 Is Here!!!

The 2nd Annual Black Aviation Excellence Virtual Celebration (a.k.a. #BAEDay 2022) will be held Saturday, February 26th, 9:30-11:30am. This event designed for **high school and college students**, will host a live panel discussion showcasing history-making African Americans in Aviation. **SPACE IS LIMITED**. Register today [HERE](#)!

Support Underserved Youth This Year!

AeroStar is preparing the next generation of African American "firsts" in aerospace! We are planning a variety of incredible experiences for more than 200 students—including real world design challenges, discovery flights, the Chicago Air and Water show, and a trip to the world's largest air show in Oshkosh, Wisconsin. Every dollar you donate to our mission will help us train incredibly deserving students, K-Career, who are passionate about pursuing their dream jobs in the industry.

Donate cash, in-kind services, and sponsorships. Collaborate and volunteer (click [HERE](#) to volunteer)—**support AeroStar in any way you can! Please contact me today at Tholmes@aerostarcorp.com.**

Giving Wings to Dreams!

Tammera L. Holmes
President & CEO, AeroStar Consulting Corporation
Founder & CEO, AeroStar Avion Institute NFP

#BoeingInspires #BoeingPartner #AeroStarAvion #WingstoDreams, #BAEDay

AeroStar's Coming Attractions

#BAE Day 2022

Students interested in pursuing an aviation career will not want to miss this virtual field trip! We'll be celebrating Black Excellence in Aviation on Saturday, February 26th, 9:30-11:30am. Register [HERE](#) today!

**BLACK
AVIATION
EXCELLENCE**

#BAE DAY CELEBRATION

FEBRUARY 26, 2022
9:30AM - 11:30AM

FREE VIRTUAL EVENT FOR STUDENTS AND TEACHERS

PERSONAL STORIES, PANEL DISCUSSION, KEYNOTE SPEAKER & MORE

TO REGISTER VISIT:
[LINKTR.EE/AEROSTARAVIONINSTITUTE](https://linktr.ee/aerostaravioninstitute)

QUESTIONS? EMAIL: AAI@AVIONINSTITUTE.ORG



AeroSTEM Expo 2022

Attention students!! Join us for a day of fun and discovery at AeroSTEM Expo 2022 on Saturday, March 26th, 9:00am-12:00pm! The event will be held at Hermann Hall, Illinois Tech. Enrollment is limited, so register [HERE](#) today!



FREE **AEROSTEM** **EXPO**

March 26, 2022
9:00 am to 12:00 pm • Grades 5-12

Illinois Tech
Hermann Hall
3241 South Federal Street
Chicago, IL 60616

Join us for a day of fun and discovery!

- simulators
- space activities
- drones
- meet Aviation professionals
- mentoring
- community STEM resources

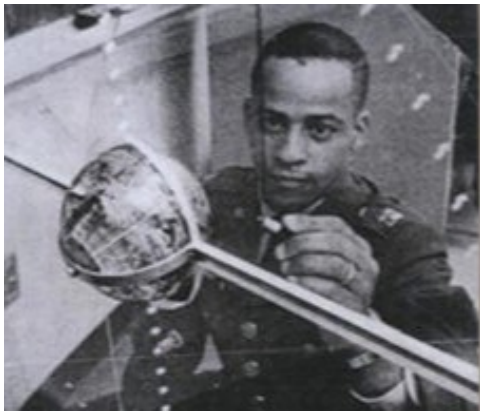
Register today at aerostem2022.eventbrite.com

  Office of Community Affairs   FOOT LOCKER, INC.

Pioneers and Trailblazers (part 2): African American Contributions to Aerospace

In the January 2022 issue of AeroStar News, we honored African Americans in aviation. In this issue, we salute African American contributions to the field of aerospace.

As AeroStar delivers a new aerospace curriculum to students during the Spring Program (currently underway), we stand on the shoulders of those fearless ones who dared to explore the "final frontier."



Captain Edward Dwight Jr.
U.S. Air Force
Test Pilot, Edwards Air Force Base



Colonel Guion "Guy" Bluford Jr.
U.S. Air Force
First African American Astronaut

In the 1960s, U.S. Air Force pilot **Edward Dwight Jr.** was a shoo-in to serve as the first African American astronaut in history. He had achieved the rank of Air force Captain, earned a degree in aeronautics (Arizona State University), and was a test pilot at Edwards Air Force Base, where astronauts Gus Grissom, Gordon Cooper, and Neil Armstrong trained as test pilots. Unfortunately, Dwight would never achieve his goal of going into space—and the reason remains a mystery to this day. ([Smithsonian Magazine](#))

Colonel Guion "Guy" Bluford Jr. of the U.S. Air Force was ultimately the first African American astronaut to go into space. On August 30, 1982, Bluford went on his first mission, the STS-8, which launched from Kennedy Space Center, Florida. ([Source](#))

NASA's Hidden Figures



Katherine Johnson



Dorothy Vaughan



Mary Jackson

The inspiration for *Hidden Figures*, the blockbuster movie, mathematicians Katherine Johnson, Dorothy Vaughan, and Mary Jackson were the first African Americans to serve behind the scenes at NASA during the space race of the mid-20th century.



Robert Henry Lawrence, Jr. (1935-1967) graduated from Bradley University at age 20 with a chemistry degree. In 1965, Lawrence earned his Ph.D. in physical chemistry from Ohio State University. He would go on to serve as an Air Force officer and skilled pilot, logging in 2,500 hours and flying in 2,000 jets.

In 1967, Lawrence was chosen by the Air Force to take part in the Manned Orbiting Laboratory (MOL) program, a clandestine space mission that aimed at spying on Cold War adversaries. As a member of MOL, Lawrence became the first Black astronaut selected to a national space program and the only member with a doctorate.

Lawrence helped to develop the Space Shuttle and would have flown on some of its early missions. Unfortunately, he was killed as a backseat passenger while testing an F-104 Starfighter supersonic jet, which crashed on December 8, 1967.

(Sources: [Wikipedia](#), [NASA](#))



Dr. Mae Jemison

Engineer, Physician, Former
NASA Astronaut

Photo: [NASA](#)

The first African American woman astronaut, **Dr. Mae Jemison** was selected for the NASA astronaut program in June 1987. On her first flight, she served as the science mission specialist on STS-47 Spacelab-J. The mission, which was a cooperative one between the U.S. and Japan, included 44 life science and

materials processing experiments. Jemison was a co-investigator on the bone cell research experiment flown on the mission.

In this image, Dr. Jemison looks out the aft flight deck ports on Space Shuttle Endeavour's STS-47 mission in 1992.



Dr. Sian Proctor

- 4th African American Woman Astronaut
- 1st African American Woman Pilot of All-Civilian Spacecraft



Edward Langley Proctor Jr.

- NASA Contractor
- Tracked Apollo Flights in Guam (1960s)

Dr. Sian Proctor was the fourth African American woman astronaut in history and the first to pilot a spacecraft, Inspiration4, the first all-civilian mission to orbit (SpaceX). Dr. Proctor is an artist, pilot, educator, geoscientist, explorer, and science communication specialist.

Born on the island of Guam, Dr. Proctor's passion was inspired by her father, **Edward Langley Proctor Jr.** Langley was a NASA contractor assigned to track Apollo flights at a remote station on Guam in the late 1960s. He was self-taught in advanced STEM subjects. The one personal item Dr. Proctor took aboard the Dragon capsule was a letter signed by Neil Armstrong, the first man to walk on the moon. In the letter, Armstrong thanked her father for his help on the Apollo mission.

The Inspiration4 flight was the achievement of a childhood dream. "I have dreamed about going to space my entire life," she said.

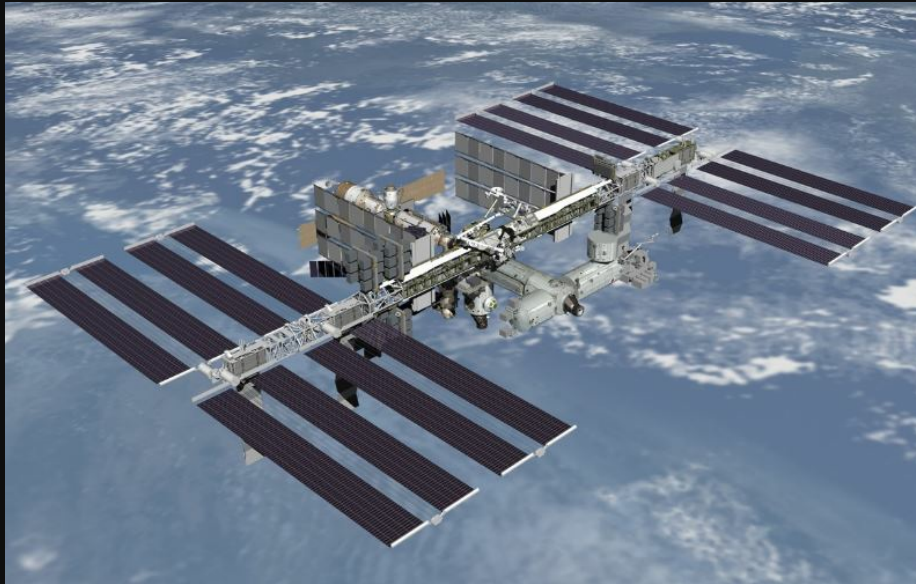
Commander Victor Glover

- 1st African American Astronaut to serve on the International Space Station (ISS)
- Served for a six-month tour of duty



Jessica Watkins, NASA Astronaut, will be the first African American woman to complete a long-term mission aboard the ISS for the forthcoming SpaceX Crew-4 launch (April 2022). This will be Watkins' first voyage. (Source: [Smithsonian Magazine](#))

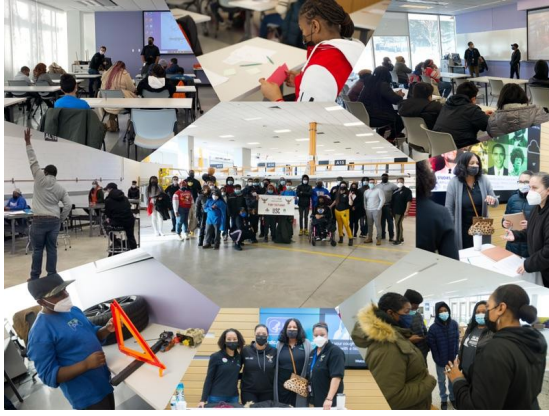
Did You Know...



The International Space Station flies 17,100 miles per hour, 248 miles above earth orbit!

AeroStar's Spring Program — *A Journey to Space!*

During our Spring Program lift-off at Olive-Harvey College, AeroStar students learned about the Artemis 1 Mission to the Moon! This program season, our students are



engaging in the Build To Launch Series curriculum created by LEGO Education and NASA as the Artemis 1 Mission prepares for launch this month! We are excited students will be joining us for this journey and will witness history in the making as the Artemis program will land the first person of color—and the first woman—on the moon!

After School Matters Program

If you are a CPS high school student you can participate in AeroStar Programs while also earning money! Students participating in our ASM program will also be engaging in the LEGO Education Build to Launch Series curriculum via a virtually remote format.

Click [**HERE**](#) to apply or scan the QR code on the flyer below.



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Scholarships, Opportunities

Million Girls Moonshot wants you to be a member of the inaugural youth Flight Crew. Students will participate in six months of virtual programming aimed at telling stories about afterschool STEM experiences. Flight Crew members will develop the skills necessary to chart their STEM journey and lead the next generation of scientists, inventors, and engineers. Applications are due February 25th. Click [HERE](#) to apply.

Adler Planetarium Teen Opportunities (Grades 9-12). Go to a fair. Build your resume. Be an intern. Do some science! Click [HERE](#) to apply to Adler Planetarium's Summer Teen Internship, Astro-Science Workshop opportunities, and other upcoming special events!

Donate Today!

One person *can* make a difference. Your generosity will help the AeroStar Avion Institute train and prepare students—K-12, college, and beyond—to pursue the aviation and aerospace careers of their dreams!

Please donate!

We're fired up about our mission to train and employ youth in this exciting industry, and we need your help more than ever before. To give, click **HERE**. Your donation is tax deductible, and 100% of your gift goes toward training the next generation of aviation and aerospace professionals.

Invest in the passion ... the mission ... DONATE NOW!

Give Wings to Dreams!

Book Teaches Kids to Fly Through Fear

What if you were afraid to fly? Authors Kenyatta Scott and Tamera L. Holmes join forces to show girls and boys how to face their fears!



Tamera L. Holmes Teaches Violet How to Fly Through Fear!

Follow along as ***Violet Takes Flight*** for the first time! Daddy teaches her and her brother Derek the true meaning of "doing it afraid." Follow along as Pilot Holmes makes her literary debut as Violet's flight teacher!

30% of all book sales support AeroStar Avion Institute, NFP, a female, minority owned NFP that teaches underrepresented youth in underserved neighborhoods about aviation STEM careers.

Buy your copy of ***Violet Takes Flight*** **HERE** today!

#thevioletbookseries
#wingstodreams

CORRECTION

In the January 2022 issue of AeroStar News, we stated that Stephanie Johnson was Delta Airlines' first black captain. Correction: Captain Johnson is the first black female captain as well as the first black and female chief pilot with Delta Airlines.

ON THE RADAR

Revisiting 'Hidden Figures' by Alexis Brownlow

Shirley Chisholm, the first black woman elected to the United



States Congress, once said, “Tremendous amounts of talent are being lost to our society just because that talent wears a skirt.” In the movie *Hidden Figures*, director Theodore Melfi tells a story that reflects Chisholm’s concern. Three African American mathematicians—Katherine Johnson, Dorothy Vaughan, and Mary Jackson—were forced to overcome gender inequality and racial injustice while contributing to the success of NASA’s Space Race program.

While discrimination and racism are at the forefront of this film, we enjoy these brilliant young black women advocating for themselves. They were tired of the way they and others like them were being treated. By raising their voices, their work conditions improved. Katherine, Dorothy, and Mary teach us that speaking up about issues and challenges you face help pave the way for others. Ultimately, *Hidden Figures* reflects on the value of hard work, determination, and strength. It is a message that clearly says, “Dear woman, you can grow and become anything you desire to be.”

Alexis Brownlow is Social Media Coordinator, AeroStar Avion Institute.



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