

# BAM S

A detailed illustration of a satellite in space. The satellite has a central body with various instruments and a large circular dish antenna. Two long solar panel arrays extend from the sides. The background is a dark blue space filled with numerous white stars of varying sizes. The overall color palette is dominated by blues and greys.

## Configuring Constellations

Simulation Experiments Help Determine Optimal Design

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## Uncovering an Inspirational Legacy

**BAMS** spoke with author Kelly V. Porter about her new book, *The Weather Officer*, a biography and tribute to her father, Alonzo Smith Jr., who was a pioneer among America's first Black meteorologists. Porter is a lifelong resident of the Washington, D.C., area and a graduate of Howard University, where she earned a degree in communications. Early in her career, she worked in public affairs at The National Endowment for the Humanities (NEH). While at NEH, she spent time with Pulitzer Prize-winning poet and author Gwendolyn Brooks, who encouraged Porter to follow her dreams as a writer. After leaving the agency, Porter became a business owner and contributor, and began to hone her craft as a freelance writer. She is passionate about uncovering little-known aspects of history.

**BAMS:** Why write this book?

**Porter:** I wrote the book because my father asked me to. This was back in 1999. I'd been working in public affairs as a writer and had recently left my job to be a stay-at-home mom to three boys. They were very young at the time, and my husband and I were consumed with parenting. I barely had time to breathe, but of course I said yes to my dad, because as I wrote in the beginning pages of the book, I didn't have the heart to tell him I was too busy. What I later realized was, he didn't have the heart to tell me he was dying. He'd been diagnosed with stage-four cancer, and he passed away less than a year later. So, we never had the chance to work on the book together, but I knew I had to find a way to keep my promise. I feel very fortunate to have fulfilled his wish.

**BAMS:** Who is it for?

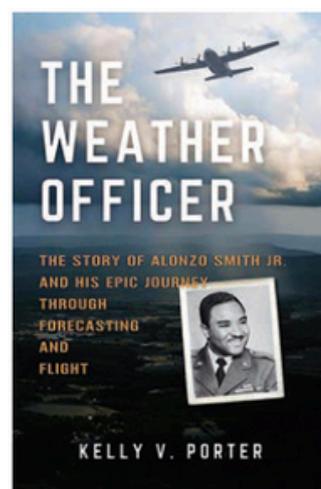
**Porter:** I think it will appeal to fans of *Hidden Figures*, and anyone who's interested in the history of weather forecasting and aviation, as well as military history. The story touches all three of those areas while weaving through the broader scope of American history over the span of 40 years beginning in 1930s Harlem. It's also a story for anyone who's curious about understanding the past through a different lens.

The fact that my father was a Black atmospheric scientist and a military officer during an era when those who looked like him were rarely seen in either of those spaces and not deemed intelligent enough to be there—well, that's a very unique perspective that I think readers will find inspiring and memorable. This story offers something drastically different than what's been told before.

**BAMS:** What obstacles did you face?

**Porter:** After my father died, I had a lot of guilt for not starting on the book right away. I'd just figured we had time. My dad had given me handwritten notes that he'd jotted down over the years, but I really didn't know where to start, so I just put the whole thing aside. For the next 10 years I raised my kids and started a business. Though, not a day went by that I didn't think about writing the book. I knew I had to find a way to get it done, and one day I just said to myself, "You have to do this."

The information gathering was challenging and, at times, emotional. Aside from my mom and my dad's closest brother, finding the right people to interview was a bit difficult. Many of those individuals were up in age or had passed away, but eventually the research came



Kelly V. Porter

together in a way that probably wouldn't have been possible in 1999 or the early 2000s, when the Internet was barely a thing. I was also writing the book while I was *learning how* to write a book. Being a writer and being an author are two very different things.

**BAMS:** What did you learn?

**Porter:** I learned what a weather officer was! [laugh] Before this process, I had no idea what my father's military career entailed. The dad I knew was a retired lieutenant colonel, who got up every day and drove to his nine-to-five job at NOAA, where he worked as a meteorologist. His life in the air force was somewhat a mystery to me because I was only three years old at the time of his retirement.

As part of my research, I requested my father's military personnel records, and only then did I realize all he'd accomplished. I knew he was a math genius, but he'd also developed an extremely high level



Alonzo Smith Jr. working on his graduate degree at The Pennsylvania State University, 1959.

of scientific and technical expertise. He possessed a keen understanding of both weather prediction and aeronautics. And in 1961, he led the design and build-out of a weather center at Warren Air Force Base in Cheyenne, Wyoming. It was the first such facility on the base and provided weather support to the missile launch crews. So, he also knew a thing or two about missile operations.

For the first half of his 20-year career as a weather officer, my dad worked without the technology we take for granted today. There were no weather satellites or advanced computer modeling. Back then, gathering and interpreting data was a much more hands-on, involved process. Yet, when technology evolved, my father didn't miss a beat. He enrolled in college courses, took specialized training, and was able to keep pace with those changes.



Alonzo Smith Jr. in the weather center at Landstuhl-Ramstein Air Base, Germany, in the early 1950s.

**BAMS:** What surprised you?

**Porter:** As I kept writing, the story went beyond the military, science, and aviation. It began to take on unexpected themes such as self-discovery, love, and belonging. For Gen Xers, I think there's a part in the book that gives *Officer and a Gentleman* vibes. There's family and relationship drama. I also included the story of how my parents came to adopt my oldest sister, who was among Germany's post-WWII mixed-race orphans (called Brown Babies). These were the children of Black American GIs and German women, and their plight is not well known. I didn't set out to include so many personal narratives, but I'm glad I did because it has created a more layered story that readers are connecting with on a deeper level.

**BAMS:** What are the implications of this work?

**Porter:** In 1970, my father was awarded the Air Force Commendation Medal for his groundbreaking work in the development of computerized flight planning. That achievement set the foundation for the technology that's being used today in aviation, both in the military and within the commercial airline industry. His legacy is an important part of the evolution of meteorology and flight. Unfortunately, we're living in a time when the accomplishments of Black Americans are being faced with erasure, so I'm proud to have published a book that documents some of this important history.

**BAMS:** Where do you go from here?

**Porter:** Writing this book felt like being back in school—but in a good way. I uncovered so many incredible stories and people that I never learned about. It sparked an obsession in me to keep digging and sharing. In particular, I've discovered so many Black hidden figures whose stories deserve to be told, and I've been sharing those discoveries in my Substack newsletter, *Bios & Backstories*. The response has been amazing. Readers are surprised at how much they're learning. In addition to my newsletter, I'm also conceptualizing my next book.

*The Weather Officer* ends in 1970, so I want to write a novel that picks up where my dad's story left off and focuses on my experience coming of age in the Washington, D.C., suburbs. Our community was unusually diverse and liberal for that time period. Black and White kids became close friends, and our families did things together like host block parties. Looking back, it was wonderfully unique, yet things began to change with time. I'm still brainstorming the overall plot, but I think that's the next big project you'll be seeing from me. ●

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Alonzo Smith Jr. monitoring conditions in the new weather facility at Warren Air Force Base, Cheyenne, Wyoming, in the early 1960s.