Exclusive Interview

Major General Charles F. Bolden Jr., USMC (Ret) Hard Work, Perseverance Launched His Dreams Into Motion

By Sara W. Bock

Major General Charles F. Bolden Jr., USMC (Ret), sat down with Leatherneck for an exclusive interview at the Steven F. Udvar-Hazy Center in Chantilly, Va., the companion facility to the Smithsonian National Air and Space Museum, Feb. 5. A year had passed since he retired as NASA Administrator, a position in which he served for nearly eight years. Add to that 34 years as a Marine officer—14 of which were spent in NASA's Astronaut Corps—and you have an individual with an incredible record of service to his country and Corps. e may not have wanted to be a Marine or an aviator, but when young Charlie Bolden closed his eyes and imagined his future, there was only one place he could see himself: the United States Naval Academy.

Inspired by a television program called "Men of Annapolis," 12-year-old Bolden was mesmerized by the crisp white uniforms worn by the midshipmen and longed to participate in the activities around "the Yard." But despite six years of writing to his South Carolina members of Congress in hope of securing a nomination, the reality of life as a young African-American in the segregated South hit home. One after another, the congressmen replied, "Forget it." "Not going to happen." "Not in our lifetime."

For many young people, the sting of rejection would have extinguished the dream, but not for Bolden. Instead of giving up, he persevered.

"I thought about it for a little while and I said, 'No, my mom and dad didn't teach me to give up that easily,' " said Bolden. He got out a piece of paper and wrote a letter to President Lyndon B. Johnson, who he had corresponded with when he was Vice President. Within weeks, a Navy recruiter showed up at his house and a retired federal judge came to Bolden's hometown of Columbia, S.C., looking for young men of color who were deserving



NASA Administrator Charles Bolden watches the final launch of Space Shuttle *Discovery* from the firing room at Kennedy Space Center, Cape Canaveral, Fla., Feb. 24, 2011.



Above: During his first spaceflight, Charles Bolden mans the pilot's station on Space Shuttle *Columbia*'s flight deck prior to re-entry in January 1986.

Left: Piloted by Bolden, the Space Shuttle *Discovery* launches on April 24, 1990, to deploy the Hubble Space Telescope. Two of Bolden's four spaceflights as an astronaut were aboard *Discovery*, which now is on display at the National Air and Space Museum's Udvar-Hazy Center in Chantilly, Va. (NASA photo)



Mission commander Charles Bolden and the crew of STS-45 have a little fun on the KC-135 zero-gravity-simulating aircraft while preparing for their March 1992 mission aboard Space Shuttle *Atlantis*. (NASA photo)

of service academy nominations.

Before long, he was in Annapolis, wearing the coveted uniform and living the long-awaited dream that had finally come to fruition—but it wasn't everything he had imagined.

"After wanting to be at the Naval Academy forever, I got there and I hated it," recalled Bolden, who was one of seven black midshipmen out of 1,400 in the class of 1968. "It was hard, and people didn't want me there."

In the moments when he wanted to quit, he would call home and talk to his father, a World War II Army veteran. "Hang in there one more day," his father would say.

It all came full circle for Bolden decades later when his son Ché, now an activeduty Marine colonel, followed in his father's footsteps and arrived at the Naval Academy to begin his introductory "plebe year." He, too, found himself struggling to adjust and would call his dad on the hardest of days, looking for advice.

"Look around the company," Bolden would tell his son. "I know you're having a hard time. Everybody's having a hard time. Find somebody in your company who you think is having a harder time than you are and see if you can get them through the day."

To this day, when Bolden runs into his son's classmates, many of them will say that Ché was the only reason they made it through.

Displaying empathy in the face of adversity and fortitude when the cards seem stacked against you is easier said than done; but for Bolden, instilling in his son the values that got him through his own hard times paid dividends, and brought back to the forefront the personal transformation he underwent during his own four years in Annapolis.

"When I came to the Naval Academy, the only two things I knew for certain were that I was not going into the Marine Corps and I was not going to fly airplanes," said Bolden, chuckling at the irony. As he struggled through his first year, the mentorship of his first company officer—a Marine major—was so crucial to his success that Bolden eventually decided that he too wanted to be a Marine officer.

Then, during The Basic School at Marine Corps Base Quantico, Va., Bolden realized he wasn't cut out for life in the infantry and decided to take advantage of the aviation option he had selected "on a hunch" when he commissioned.

"The first time I got in an airplane I fell in love with it, and after that it was on to other things," he said.

Sitting in the McDonnell Space Hangar at the Udvar-Hazy Center, where the Space Shuttle *Discovery* takes center stage, the retired Marine Corps major general shares the story of how he ended up here. An aviator with more than 100 combat



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missions in the A-6 Intruder during the Vietnam War, a graduate of the elite U.S. Naval Test Pilot School, an astronaut with more than 680 hours in space on four shuttle missions-two of which were on board Discovery-and NASA's first African-American Administrator, his accomplishments are many. But what really shines through is his devotion to Marines, his optimism about the future of the space program and his steadfast belief that if you work hard and believe in yourself, you can accomplish anything you set your mind to.

He speaks candidly about the times he doubted himself, sharing that he almost didn't apply to become an astronaut because he was afraid of failure.

"I was intimidated-I knew that I would not be selected and I just did not want to have somebody else tell me no, so I told myself no," said Bolden.

But Charles Bolden was destined for space flight: it's apparent in the way his eyes light up when he talks about the view from the space shuttle, attempting to put into words the indescribable. Though it's been 24 years since his final shuttle mission aboard Discovery, he paints a picture with his words and expressions that would make any listener think he returned just yesterday.

As Bolden recounts the effects of the shuttle launch and Low Earth orbit on the senses, Discovery rests just a few feet away, quiet and motionless. Once a "magic machine," as Bolden affectionately refers to it, the massive shuttle is now a relic-albeit an important one-that



Above: Then-Col Charles Bolden and Gen Carl E. Mundy Jr., 30th Commandant of the Marine Corps, visit with Bolden's son Ché, left, and his fellow Marines at the "Bravo" Company Mess Night at The Basic School in 1994.

Left: In 1991, this official astronaut portrait of Bolden was taken between his second and third shuttle missions.

will serve as a source of inspiration for generations to come. But as inanimate as Discovery is now, it comes to life in the imagination as Bolden explains the feeling of the vibrations from the rocket boosters below and the incredible sensation of weightlessness once the shuttle reaches the proper speed and altitude.

"But then you look out the window, and earth from that vantage point is unlike

anything you've ever seen in your life. The vivid colors and the image of the planet from that vantage point is just mind-boggling," said Bolden, adding that photographs and even IMAX films can't adequately capture the beauty he observed from the shuttle during each of his four spaceflights, the longest of which spanned nine days. "Just the vivid colors and detail and the fact that there's no evidence that



Toward the end of his tenure as NASA Administrator, Charles Bolden promotes his son, Ché, to the grade of colonel on Feb. 1, 2016.







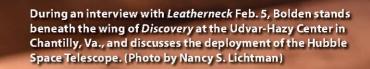
Left: Charles Bolden testifies during a U.S. Senate Committee on Commerce, Science and Transportation hearing in Washington, D.C., March 7, 2012.

we live here! That's the other thing. You see this incredibly beautiful planet and no signs of life."

Seeing the earth from that vantage point, he said, never gets old. Given his success as a pilot and an astronaut, it's hard to believe that at one point, he nearly let the fear of failure hold him back from experiencing something so profound. For Bolden, it was a dream set in motion with the fulfillment of an aspiration he first realized during flight school: becoming a test pilot. It's part of the traditional career progression for military pilots who aspire to be astronauts, and an opportunity for which Bolden had to apply more than a dozen times before he was accepted.

Shortly afterward, in 1978, NASA selected its first group of shuttle astronauts. Among them was Ronald McNair, a young African-American physicist from South Carolina. McNair and some other newly selected astronauts spent a weekend at Patuxent River, Md., where Bolden was assigned as a test pilot. The two hit it off right away and McNair regaled Bolden with stories about astronaut training.

"He [McNair] asked me if I was going to apply for the space program. I said, "Not on your life!' And he looked at me really strangely because he thought he'd convinced me,' "Bolden recalled. "I said, "They'll never pick me.' And he said,



'That's the dumbest thing I've ever heard. How do you know if you don't ask?' "

Bolden couldn't argue with that, so he applied, was called to Houston for a weeklong screening and interview process, and then waited for a phone call that would change his life. Out of thousands of applicants, he made the cut. With his wife and two small children in tow, he headed to Houston for what would turn into a 14-year assignment with NASA.

Over the course of his four shuttle missions, Bolden and his crew deployed the SATCOM KU satellite and the Hubble Space Telescope, conducted various experiments and measurements and used a variety of cameras, including the IMAX in-cabin and cargo bay cameras, for Earth observations.

As remarkable as those opportunities were, Bolden doesn't stray from discussing the more difficult aspects of the job primarily the strain his involvement in the space program had on his family. The 1986 Space Shuttle *Challenger* disaster, which occurred only 10 days after Bolden landed from his first shuttle mission, hit the Bolden family hard. Among the astronauts lost in the tragedy was Ron McNair, who had been instrumental in Bolden's decision to apply for the Astronaut Corps.

In 1993, as he prepared for his fourth and final shuttle mission, Bolden began to ponder what he wanted to do when he left the space program. While he had spent more than a decade away from the operating forces, being a Marine had remained central to his identity. But a voice in the back of his head repeated the things he'd been told when he left for test pilot school, and again when he joined the space program.

"You know, we don't take people back," people had said about returning to the fleet. "You'll go be a test pilot for however long you do and then you'll get out and go do something, but it won't be coming back to the Marine Corps."

In an attempt to counteract these claims, Bolden had made a concerted effort while part of the Astronaut Corps to work with Marine recruiters and visit Marine Corps installations as often as possible.

"I never left the Marine Corps, to be quite honest," he said. As he weighed his options, a surprising phone call offered Bolden welcomes home STS-127 astronauts Dave Wolf and Christopher Cassidy at NASA's Kennedy Space Center in Cape Canaveral, Fla., shortly after the Space Shuttle *Endeavour* and its crew landed, July 31, 2009.

him what seemed to be a foot back in the door. Would he consider returning to the Naval Academy as the Deputy Commandant of Midshipmen?

Bolden accepted, and found himself right back where it all began: this time from a different vantage point. Just a year later, he was selected for brigadier general and went on to serve in a variety of billets until his retirement from the Marine Corps in 2003.

He's a strong believer in the mantra "every Marine a rifleman," stating that the infantry training he received at The Basic School was vital as he flew combat missions in Vietnam—which he said were far more challenging than any mission he flew in space.

"There is nothing that equips you better to be able to put bombs on target ... than to know that there are young Marines down there who are counting on you to understand their maneuvering," said Bolden. "It's absolutely essential for an aviator, particularly if they're going to be putting bombs or rockets on the ground close to Marines. I think it's essential that



we have been there at least in training and know what they're going through."

Bolden recalls the overwhelming sense of pride he felt when, as the commanding general of 3rd Marine Air Wing, his idea of a "Wing run" with all of the 3rd MAW Marines stationed at Marine Corps Air Station Miramar, Calif., came to life.

"We started out on the flight line at Miramar, and as we ran, you could look back. You could see thousands of Marines, all running, one unit and everything and I said, 'Damn, this is good,' "Bolden related with tears in his eyes.

The loss of *Challenger* during his time in the space program wasn't his only bad day in the Corps. He tells the story of losing a young Marine in a freak accident during an exercise; a 2002 KC-130 crash in Pakistan, which killed the entire crew;

Inside the Space X processing facility in Florida, NASA Administrator Charles Bolden announces new milestones in the nation's commercial space initiatives, Aug. 23, 2012. One of the things that excited him most during histenure with the Obama administration was the opportunity to foster NASA's partnership with Space X and other commercial ventures. (NASA photo)



and the loss of a CH-53E in the mountains of Afghanistan the same year. He felt those losses—and a sense of responsibility for them as wing commander—deeply, and they continue to impact him today. He was, and still is, a Marine to the core.

Decades of hard work and persistence culminated for Bolden in 2009, when, after phone calls and visits to Washington, D.C., he was nominated by President Barack Obama to be the 12th Administrator of NASA.

Bolden recalls a particular visit to Washington prior to the nomination, during which he had the opportunity to sit down with President Obama and talk about the future of the space program. He laughs as he says that getting to meet the President was the only reason he agreed to travel from Houston to Washington on that occasion—"T'd never forgive myself for saying no!"

President Obama picked Bolden's brain about various NASA-related topics before telling him of his own experience being inspired by the space program as a young child growing up in Hawaii with his grandparents.

"He remembered his grandfather putting him up on his shoulders and taking him down to see the Apollo astronauts coming in on the aircraft carriers, and he really wanted to make sure that kids in the U.S. had that same opportunity that he had," said Bolden of Obama, adding that during that visit, there was no mention of the fact that he was being considered for NASA Administrator. "Just asking questions and talking, and it was incredible," he added.

When Bolden finally was presented with the opportunity, it was impossible to pass up. After being confirmed by the U.S. Senate in July 2009, he got right to work.

Tasked with turning around the exploration program and guiding the transition from space shuttle missions to utilization of the International Space Station, he worked to reinvigorate the development of aeronautics technology. During his tenure, which lasted through both of President Obama's terms, the Curiosity rover made its groundbreaking landing on Mars, the Juno spacecraft was launched to Jupiter and technology was developed that will enable the journey to Mars.

"The things we were doing were just more and more exciting every day," he said of the administration's second term, which he characterized as "fun."

He was especially enthusiastic about the opportunity to team up with commercial space companies like Space X and Orbital ATK, who would carry cargo to the International Space Station and were instrumental in collaborative efforts to



Charles Bolden greets a young aspiring astronaut during a stargazing event in Arlington, Va., Nov. 7, 2013. While NASA Administrator, he enjoyed meeting with children around the world, taking every opportunity to encourage them to work hard and pursue their dreams.

set forth a path for the future of aeronautics. Bolden also enjoyed expanding international partnerships, traveling to every continent except Antarctica, and in particular the opportunity to meet with kids everywhere.

He's encouraged by the renewed interest in space exploration he sees among young people today, referencing the record-breaking 18,300 applications that NASA received for its 2017 astronaut class. Bolden believes the release of bigbudget films like "The Martian," "Hidden Figures" and "Gravity" in recent years has helped fuel the dreams of America's youth.

To them, his advice is simple. "Study

hard, work hard and never be afraid of failure."

For someone who has come so far from where he started, he still remembers clearly what it's like to be a young person with a dream. And while Charlie Bolden ended up fulfilling dreams his younger self didn't know he'd ever have, it all began with one goal—and the determination to make it happen—that set in motion a life beyond his wildest imagination.

Author's bio: Sara W. Bock joined the Leatherneck staff in 2008 and is presently the magazine's only full-time writer. She has a bachelor's degree in English and is the wife of a Marine aviator. Reproduced with permission of copyright owner. Further reproduction prohibited without permission.