

Profiles in Leadership #6

Linda Hudson: Defense Industry Trailblazer

Linda Hudson, Florida Alpha '72, fights her way to the top

by Alan S. Brown

LINDA HUDSON REMEMBERS her first day as quality assurance manager on a multibillion dollar tank program. In one giant leap, she had gone from leading small teams to managing 200 professionals and planning new factories. At 30, she was one of the highest level women in Ford Aerospace.

"I walked in and suddenly started to feel this itching. I stepped into the ladies room and saw that I had broken out in hives. I had never had hives in my life, and there I was, itching from head to toe. I made up some excuse, turned around, went home, and took a Benadryl."

That may have been the only time anything ever held Hudson back. By the time she left corporate service in January 2014, she had risen to president and CEO of BAE Systems, a \$12.8 billion defense contractor with 40,000 employees. Always a trailblazer, she was the first woman CEO in the testosterone-fueled defense industry.

It was a path Hudson began traveling when her family moved to central Florida, from Georgia, when she was seven. She lived only 90 miles from Cape Canaveral. On clear days, she could see the contrails of rockets hurtling the first humans into the skies.

"I was captivated. I knew I had to be involved, but it was foolish in those days for a young girl to dream of being a pilot or an astronaut," Hudson recalled.

Her seventh grade math teacher showed her another way to contribute.

"She was the first person to explain what engineering was. I was really good at math and science, but I knew I didn't want to be a teacher. Both my parents were teachers, and I saw how hard they

What does it mean to be a leader? In this series "Profiles in Leadership," Tau Beta Pi is exploring that essential question through the lives of member engineers who attained leadership positions in their fields.

worked and how little they got paid," Hudson said.

Money was always tight. Sometimes, the family ran low on funds for food at the end of the month. Yet Hudson was happy. Her parents encouraged Hudson and her younger brother's curiosity and sense of adventure. When they stumbled, they learned to pick themselves up and sort it out.

Hudson grew up self-reliant and oblivious to gender stereotypes. At a time when many women stayed at home, Hudson's mother taught math and English. Her father helped in the kitchen. The children had chores.

"I was as likely to play basketball with the boys in the backyard as dolls in the house. I was never told that all I could be was a nurse or a teacher. It never occurred to me that I had to limit my horizons," Hudson said.

"Reengineered" Fashion

In high school, she was on "the outer edge" of the "in" crowd of athletes, a little too smart to be in the center. She was a cheerleader one year, and "reengineered" dress patterns so she could wear the latest fashions. The popular kids often gathered at her house to do homework after school.

She was the first girl in her school to take engineering drawing, winning over a skeptical teacher with hard work and talent. In college, those skills landed a well-paid summer job.

Hudson, however, did not want to settle for drafting. She set her sights on aerospace engineering. At University of Florida, she was one of only two women taking engineering. Some professors were skeptical about women taking their classes.

"I turned it



Linda Hudson with Michael Chertoff, chairman of the board of BAE Systems, Inc., in 2012.

around by excelling in everything,” Hudson said. “In those days, if you were a woman, you had to be the best to succeed. I learned in college that being excellent trumps everything else, and that lesson served me well throughout my career.”

In 1970, her sophomore year, the bottom fell out of the aerospace business. After seeing aerospace Ph.D.’s pumping gas, she switched to systems engineering.

“The discipline was just coming into its own. I liked the idea that it provided a broad background to manage things,” Hudson said.

As she approached graduation, she debated the merits of working in the defense industry. It offered a higher paycheck, but she was no fan about what was happening in Vietnam.

“One professor advised me to take the job that pays the most because every raise would be a percentage of that money. It made sense,” she said.

Because her fiancé wanted to stay in Florida, she accepted an offer to be an R&D engineer at Harris Corp., a Florida-based defense contractor.

“It was ugly,” Hudson said. Even after 40 years, her revulsion comes through loud and clear.

“Companies that worked on government contracts had to meet Equal Opportunity quotas. Everybody questioned if I had the right to be there. The people were ugly. There was lots of harassment. Anyone who complained got fired.

“When I graduated in 1972, women were second class people. I was making more money than my husband, but I didn’t have the right to hold credit in my own name. My income didn’t count towards a mortgage because I could get pregnant,” Hudson recalled.

Bore Down Harder

For four years, she felt everyone at Harris was rooting for her to fail. She bore down harder, trying to do her job better than anyone had done it before.

“Over time, I learned that my bosses wanted to be successful. If I could help them by doing my job well, they would overlook the fact that I was female,” she said. “I never let them question my work.”

It took four years to rise to senior engineer and take on better assignments. Then her husband decided he wanted to return to California. Once there, Hudson joined Ford Aerospace.

“It was like night and day. Ford was a more open and supportive environment. For the first time, I could catch my breath and feel more like everyone else,” she said.

Hudson started in reliability and was drafted to help write a multibillion dollar proposal for the Sergeant York anti-aircraft tank. When the quality assurance manager left, Hudson picked up the slack. After Ford won the contract, her boss asked her to become the company’s first female divisional QA manager.

The move jet-propelled Hudson into management. After taking a day off for hives, she tackled the work with her usual high-energy diligence. She was promoted to production program manager four years later. Now in her early thirties, she was running a multibillion dollar program, from engineering and finance to operations.



This Leader In Brief

Full professional name: Linda P. Hudson.

Current position: Chairman and CEO, The Cardea Group.

Birthplace: Sandersville, GA, 1950.

Highest degree: B.A., School of Engineering, University of Florida, 1972.

Major career highlights: Ford Aerospace, 1976-85, where she rose to production program manager. Martin Marietta (later Lockheed Martin), 1985-1997, led company’s ammunition business and was second ranking executive when it was integrated with an aircraft gun company acquired from GE in 1992. General Dynamics, 1997-2007, named first female corporate officer; promoted to president of armament and technical products. BAE Systems, Inc., 2007-14, president, Land & Armaments; president/CEO, BAE Systems, Inc.

Board memberships: Corporate board member, Bank of America, Ingersoll Rand, and Southern Company; non-profit board member, University of Florida Foundation, Wake Forest University Charlotte Center, and Center for a New American Security.

Honors: USO’s 2011 Woman of the Year Distinguished Service Award; C200’s 2011 Luminary Award for Corporate Innovation; Industrial and Systems Engineering Hall of Fame; Washington Business Hall of Fame; honorary doctorates from Worcester Polytechnic Institute and University of Florida.

Greatest accomplishment: There is not one I can single out. My life has been a continuum of events and every step was important and meaningful.

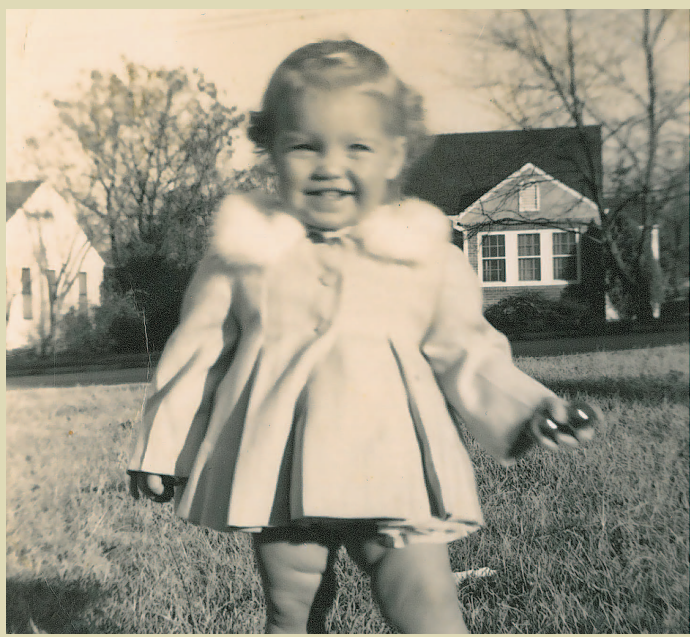
Leader most admired: Colin Powell.

Hobbies: Global travel, reading, cooking.

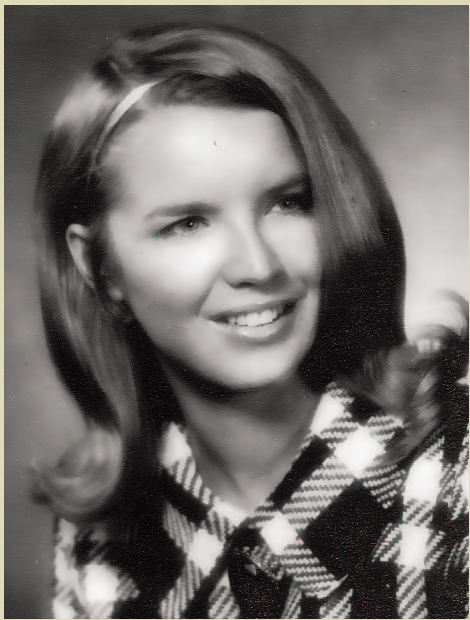
Favorite books: *Atlas Shrugged* by Ayn Rand; *When Everything Changed* by Gail Collins; and *Leading Change* by John Kotter.

Personal motto: Anything you can imagine is possible. The only constraints are time, money, and risk.

If you could do one thing over: I’d be a better mother.



Linda Hudson as a four-year-old in Sandersville, GA; as a senior at Leesburg, FL, high school; and as president of BAE Systems Land & Armaments.



It was hard work. The York was controversial. Its innovative technology came with performance and cost issues. Critics wanted the Army to invest in anti-aircraft missiles instead of guns. In August 1985, Secretary of Defense Casper Weinberger cancelled the program. Hudson heard about it while driving to work. It meant the company had to lay off 1,800 people. She offered to resign if it would save those jobs.

Ford refused, but she left anyway. She returned to Florida to join Martin Marietta, working first on production and then a new air defense program. After it ended, the company's president asked her to lunch. Hudson was startled when he asked her to take over the company's \$100 million ammunition business.

"I owned the business from beginning to end. I had my own parking space. I remember walking into the corner office and thinking, 'I can't believe it. This is too good to be true.'"

It was the start of her real business education. Hudson became an expert in high-speed manufacturing and discovered that she could bring in new business.

Looking back, Hudson sees that the job was a test to see if she could step into a more senior management role. She must have passed, because Martin Marietta asked her to integrate her organization with an airplane gun company acquired from GE Aerospace in 1992. She was the number two executive in the new business.

The position was in Burlington, VT. Her husband and 14-year-old daughter refused to move. For four years, Hudson commuted to Florida every other weekend, but the strains on her marriage proved irreversible.

For most of their marriage, Hudson's husband was her biggest supporter and a great father. Yet, after 25 years, they had grown apart. He was content to live next to a golf course; she wanted to see the world and reshape businesses.

Diversifying Operations

She did that at Burlington, winning new programs and diversifying operations. When General Dynamics bought the unit, its executives were impressed enough to ask her to join their staff as vice president of business development.

"The CEO, Nick Chabraja, was committed to diversity. They created this job for me because they thought I had real potential and wanted to get to know me better. It was a developmental assignment, to see how I operated in a strategic role, and if I could move from munitions and tanks to ships and submarines."

She learned how senior corporate officers thought and made decisions. "The biggest surprise for me was that these are just normal people making very big bets based on their experience. I had to learn how to be comfortable with the magnitude of the decisions we were making," Hudson said.

After two years, Chabraja asked her to return to Burlington, now called GD Armament Systems, as president. Military aircraft were switching to rockets, from guns, and the business was hemorrhaging money.

At Ford, Hudson had tried to resign rather than fire workers. From her new perspective, she saw that she had to stop the bleeding before the business could recover.

Hudson moved fast. She closed capacity, outsourced manufacturing, and laid off hundreds of workers. This slashed manufacturing costs by 40 percent and let her re-focus on program management and final assembly.

Within one year, GD Armament Systems was profitable. Within five years, she quadrupled sales and moved the headquarters to Charlotte, NC, to be near a major airport.

Within seven years, she was bored. That's when BAE Systems called. Hudson always ignored headhunters, but her administrative assistant insisted that she respond.

"She told me the job looked like it was made for me. It was. I would run BAE Systems Land & Armaments group. The business was four times larger and the money was attractive," Hudson recalled.

In some ways, she knew BAE well, since it was her main competitor. After decades of struggling to master new tasks, it seemed like an easy stretch. Hudson thought she would work at BAE for a few years and retire.

Then the CEO quit. Instead of turning to someone younger, the board asked Hudson, now 59, to lead the company as it downsized after fighting peaked in Iraq and Afghanistan.

See Bigger Picture

This made Hudson the defense industry's first woman CEO. To get there, she had changed. She went from an engineer who mastered details to a manager who could see the bigger picture. She learned how to control her temper and value inclusive decision making.

She adjusted to life as a senior executive. Some of the changes were unexpected. After being named president of GD Armament Systems, Hudson bought some new suits at Nordstrom's. The salesperson showed her an exotic way to tie her scarf.

"Within a few days, I ran into no fewer than a dozen women at work who had tied their scarfs exactly the same way I tied mine," she recalled. "I realized the days of off-the-cuff comments were done. Everything I did and said was going to be scrutinized."

Hudson was always scrutinized, but her performance made that a plus rather than a minus. She blazed new paths in the defense industry, as other women established themselves in executive suites throughout America. Today's woman CEOs include Lockheed Martin's Marillyn Hewson and General Dynamics' Phebe Novakovic.

But Hudson was the first.

Although she retired in 2014, Hudson continues to evolve. Her consulting firm, The Cardea Group, helps clients navigate leadership transitions and workforces when scaling operations. She also shares what she has learned as a board member of Bank of America, Southern Company and Ingersoll Rand, and such nonprofits as University of Florida Foundation, Wake Forest University Charlotte Center, and Center for a New American Security.

"It was a great way to cap off a long corporate career. I reached a level I never dared dream of, and exceeded every expectation I had ever imagined," she said.



Above: Hudson speaks to girls at a local school. Below: Four generations of Hudson women in 2005. Linda holds her granddaughter, Lilly Mingus; then clockwise, granddaughter Isabel Mingus; mother Virginia Parker; and daughter Jordan Mingus.

