

Thank you, Chairman Thune, Ranking Member Nelson, and Members of the Committee. I would also like to thank the President and Secretary Ross for their trust and confidence in me with this nomination to be the Assistant Secretary of Commerce for Environmental Observation and Prediction. If I have the honor of being confirmed, I look forward to working with all of you on the important work performed by NOAA in the areas of observations, analysis, and forecasting.

I am the son and grandson of Air Force veterans. My father's F-4 was shot down in Vietnam. After being rescued, he met my mom who was working for the Red Cross in the Philippines. He returned to the Air Force Academy as a flight instructor in Colorado Springs, where I was born. I grew up in Florida at Homestead Air Force Base near Miami, and later moved to South Carolina. Not long after the move, our house in Charleston was nearly destroyed by hurricane Hugo. Having spent my entire life close to the ocean surfing, diving, and fishing, I was naturally drawn towards pursuing an educational path in air-sea interaction and numerical weather prediction.

Upon leaving academia, I was part of a start-up company that was later acquired by Panasonic. The technology I was involved with was designed to supplement the weather balloon program by transmitting observations collected on aircraft through a satellite-based communication system. The sensor was also installed on several manned and unmanned platforms operated by NASA and the Naval Research Laboratory, as well as NOAA's own P-3.

My team and I decided early on that we would leverage the peer review scientific process conducted by NOAA to promote our products. We provided the data free of charge for four years, so that NOAA scientists could vet the data based on their own quality and reliability standards. Part of this program led to a decade-long public-private-academic global modeling effort that rivaled the best in the world. In addition to supporting research at several universities and the National Center for Atmospheric Research, Panasonic also has major facilities in Washington state, New Jersey, Florida, Colorado, and North Carolina.

Having witnessed industry's rapid growth across the entire value chain from observation collection to end-user products, I began to wonder what would happen if industry decided to bypass the public sector. This would be a travesty, and the end result would be tax-paying citizens not having access to the best available weather information for the protection of life and property.

Two years ago, my father passed away on my birthday. I had wanted to follow in his footsteps, but a medical condition prevented me from being a pilot. At his memorial service, I was humbled by the large turnout of Academy cadets and veterans, and I was compelled to find a way to give back. I knew instantly, when I was approached for this position, that this was my opportunity to use my specialized knowledge and skills to serve my country.

While my formal training and expertise is in the areas of observing systems, data assimilation, modeling, and high performance computing, my real-world experience in structuring public-private-academic sustainable business models, most under constrained budgets, will play a key role in improving NOAA's observing and predictive capabilities.

The US Weather Enterprise is at a turning point. If we navigate this paradigm shift successfully, the result will be a mutually-beneficial outcome for all three sectors, private, public and academic. If not addressed, the three sectors may find themselves in a competitive situation, to the detriment of the American people. The framework for addressing this is outlined in the Weather Research and Forecasting Innovation Act of 2017, and implementing this Act will be a top priority.

If confirmed, it would be a tremendous honor to help lead such a distinguished organization of scientists, engineers, forecasters and uniformed officers. I can assure the Committee that I will do my absolute best to ensure this team of 12,000 professionals have the resources and leadership needed to produce transparent, objective and defensible science, so that decisions based on this weather and climate information can be made with confidence.

I would like to thank my wife Jen, who is a computational biologist at Duke University, for her support and understanding, while balancing her career with raising our two sons Nicolaus and Theodore, ages 4 and 2.

Mr. Chairman, Ranking Member Nelson, and Members of the Committee, thank you again for the opportunity to be here. I would be pleased to answer any questions you may have.