Chairman Wicker, Ranking Member Reed, and distinguished members of the Committee:

It is a profound honor to appear before you today as the President's nominee for Assistant Secretary of War for Science and Technology. I am deeply grateful to President Trump and Secretary Hegseth for their confidence in nominating me to this critical role, and I thank the Committee for the opportunity to speak with you today and earn your trust.

I also want to express my gratitude to my family who have made the trip out from Indiana and Michigan to be here: especially my wife, Katie, and our three sons, Richard, Theodore, and Elliott Jewell: 10, 8, and 5 years old respectively and God's sweetest blessings in our lives; my mother and sister, Suzanne and Elizabeth Jewell; and my Aunt and Uncle, Barbara and Tal Day.

I have in mind today, also, those in my family who have served our country, stretching back to the Revolutionary War, in which my 8- and 7-times great-grandfathers (via my grandmother Kay Jewell), Colonel Daniel and his son Lieutenant Elijah Plimpton, mustered as part of the Massachusetts militia, down to my 4-times great-grandfather, Emory Plimpton, who during the Civil War was Captain of Company M of the 4th Michigan Volunteer Cavalry Regiment, the Company recruited primarily from Berrien County in Southwest Michigan where, 120 years later, I was born and raised.

The most significant formative influences in my life came, in that corner of Michigan, from my grandparents, three of whom served during World War II, Chief Petty Officer Charles Jewell (US Navy) and 1st Lieutenant Richard Kramer (US Army), who were in the Pacific Theatre, and my

grandmother Dorothy Fiedler Kramer, who was in the US Public Health Service's Cadet Nurse Corps. While I have not had the privilege of serving in uniform, as they did, their example of service to family and country resonates strongly with me.

Throughout my career—in academic work at Michigan, Oxford, and Caltech, as a research scientist at the Air Force Research Laboratory, and now as a professor at Purdue University—I have been privileged to work at the intersection of advanced science and national defense. My research has focused on hypersonic aerothermodynamics, flight test data analysis, and the development and operation of uniquely capable hypersonic wind tunnel facilities: areas that are not only technically demanding but also strategically vital to our national security. As an active aerospace researcher and educator, I have sent numerous graduates into impactful science and engineering roles in national security in the DoW, national labs, and industry, and have executed hypersonic test programs for the Army, Navy, and Air Force.

If confirmed, I will bring to this role a deep commitment to ensuring that the United States regains and maintains its technological superiority over our adversaries. We are in an era of renewed great power competition, where nations including China are investing heavily in disruptive technologies to challenge our military advantage. The Department of War must respond with urgency, clarity, and resolve.

President Trump, Secretary Hegseth, and Under Secretary Michael have made clear that peace through strength is the cornerstone of American security. That strength must be underpinned by a robust and agile science and technology enterprise. If confirmed as Assistant Secretary, I will prioritize the acceleration of basic and applied research with

relevance for defense needs, in areas like hypersonics, directed energy, and artificial intelligence, while ensuring that our investments are aligned with warfighter needs and national strategic objectives.

I believe that innovation is not just about discovery; it is about delivery. We must shorten the timeline from laboratory breakthroughs to battlefield capabilities. That means effectively leveraging the best of American academia, fostering public-private partnerships, and empowering our defense laboratories to operate with greater flexibility and speed. It also means holding ourselves accountable for results and ensuring that taxpayer dollars are spent wisely and to maximum effect.

Furthermore, as I see every day as an aerospace engineering professor in my laboratory and classroom, America's technological edge depends on our ability to cultivate and retain the world's best scientists, engineers, and technologists. If confirmed, I will work to support STEM education opportunities like the ones I received at Lakeshore Public Schools back in Stevensville, Michigan, empower early-career researchers, and create new pathways for talent to enter the defense innovation ecosystem. We must inspire the next generation to serve—not only in uniform, but also in the laboratories and industries that power our defense enterprise.

Finally, I want to emphasize the importance of collaboration. The challenges we face are too complex for any one institution to solve alone. If confirmed, I will work closely with our military services, combatant commands, allies, and partners in academia and industry to ensure that our science and technology strategy is unified, coherent, and mission-driven.

In closing, I am humbled by the opportunity to serve. I believe deeply in the mission of the Department of War and in the power of American

innovation to preserve peace, protect freedom, and secure our future. If confirmed, I look forward to working with this Committee and with all stakeholders to ensure that the nation that my three young sons, Richard, Theodore, and Elliott, someday inherit is the global leader in defense science and technology.

Thank you for your time and consideration. I welcome your questions.