Statement of Lisa J. Porter Nominee to be Deputy Undersecretary of Defense for Research and Engineering Senate Armed Services Committee Confirmation Hearing May 10, 2018

Senator Inhofe, Ranking Member Reed, and distinguished members of the committee, thank you for the opportunity and the privilege to appear before you today. I would like to thank President Trump and Secretary Mattis for nominating me for the position of Deputy Undersecretary of Defense for Research and Engineering, and this committee for consideration of my nomination.

The dominance of our military depends critically on our ability to develop and deploy technologies that provide our warfighters with an overwhelming advantage over our adversaries. Both DoD leadership and this committee have emphasized that the increasingly global nature of technology advancement necessitates a shift in our strategy regarding our military's technology development. Furthermore, not only do we face a diversity of threats, we also face a diversity of technological approaches being employed against us, which range from innovative uses of existing technologies in ways we have not always anticipated, to the employment of cutting edge capabilities ranging from space systems to cyber attacks to machine learning to hypersonics to biotechnology. Delivering effective technological solutions at the speed of relevance against such a complex threat space demands significant depth and breadth of expertise coupled with a sense of urgency and a laser focus on mission impact.

Fortunately, our nation possesses an incredible amount of talent that spans our universities, government and non-profit laboratories, and the private sector. My experience at DARPA, NASA, IARPA, and In-Q-Tel has exposed me to brilliant innovators across the country, and I have seen first-hand the great things that can be accomplished when those powerful minds are focused on a really hard problem and asked to solve it. Each of these communities has an important role to play, and I am confident that the DoD will be able to unleash the full power of the expertise resident throughout our nation's research and engineering enterprise to develop solutions to our military's most pressing problems. If confirmed, I will be fully committed to achieving this goal.

I greatly appreciate the focus of this committee, and of current senior DoD leadership, on the need to significantly expedite technology transition to operational use. The "valley of death" is a term that has been extensively used for decades. It is not a new problem, and importantly, it is not a problem unique to DoD, or even unique to government. It is a fundamental challenge of innovation.

My experience has taught me that one of the key ingredients of successful technology transition is a culture of experimentation and prototyping, with full and early engagement from end users. Rapid and effective prototyping – where meaningful failures steer us quickly through an exploration of both the opportunities and the limitations of innovative ideas – can build a

bridge over the "valley of death". Such an approach must be accompanied by both the willingness to stop doing the things that do not work, and the utilization of sound science and engineering principles that guide the experimental testing of new technologies and systems. If confirmed, I will work with the USD(R&E) to establish a culture of experimentation, technical integrity, and warfighter engagement to ensure that we design, develop, and transition technological solutions that enhance the lethality of our Joint Force.

I would like to thank this committee for its commitment to ensuring that the DoD maintain its ability to rapidly develop and deploy the breadth of technological capabilities that our warfighters need to remain the most impressive and dominant military force in the world. I am truly humbled to be here today, and I look forward to answering your questions.