Senate Armed Services Committee
Advance Policy Questions for James Mazol
Nominee to be Deputy Under Secretary of Defense for Research and Engineering

Duties and Qualifications

1. **What is your understanding of the duties and functions of the Deputy Under Secretary of Defense for Research and Engineering?**

   It is my understanding that the Deputy Under Secretary of War for Research and Engineering (DUSW(R&E)) assists the Under Secretary of War for Research and Engineering (USW (R&E)) and Chief Technology Officer (CTO) in supervising and managing research, development, and prototyping activities across the Department of War (DoW) enterprise. The DUSW(R&E) also assists in overseeing the activities of the Defense Advanced Research Projects Agency (DARPA), the Missile Defense Agency (MDA), the Office of Strategic Capital, the DoW Laboratory and Engineering Center enterprise, and the Under Secretariat staff focused on developing advanced technology and capability for the U.S. military.

2. **If confirmed, what additional duties and functions would you expect the Secretary of Defense and the Under Secretary of Defense for Research & Engineering (USD(R&E)) to prescribe for you?**

   As the principal assistant to, and under the authority, direction, and control of, the USW(R&E), it is my understanding that the DUSW(R&E) advises and assists the USW(R&E) with all responsibilities in providing staff advice and assistance to the Secretary of War. The DUSW(R&E) exercises the full powers of the USW(R&E) on all matters for which the USW(R&E) is authorized to act, except in areas where delegation of the USW(R&E)'s authority is otherwise restricted by a higher authority or prohibited by law.

   If confirmed, I look forward to supporting the efforts of the Secretary of War and the USW(R&E) by executing all duties and functions that fall under my authority and that are prescribed to me by the Secretary of War and the USW(R&E).

3. **What background and experience do you possess that qualify you to perform these duties?**

   I have significant experience with R&E having previously served as Performing the Duties of (PTDO) USW(R&E) and Chief Technology Officer, where I worked to advance the CTO's mission to set modernization priorities and perform the critical oversight function necessary to align nearly $150 billion in annual research, development, test, and evaluation (RDT&E) funding. Prior to assuming those duties, I

served as the Republican Policy Director of the Senate Armed Services Committee, with responsibility for science and technology programs. I also served as the Republican Policy Director for the Senate Commerce, Science, and Transportation Committee. If confirmed, I will work to ensure that OUSW(R&E) priorities are aligned with the Administration's policies, our resources have a clear strategy against which to operate, and the Department is able to take the lead over our near-peer adversaries.

4. **Do you believe that there are actions you need to take to enhance your ability to perform the duties of the Deputy Under Secretary of Defense for Research and Engineering? Please explain your answer.**

   I believe I am ready to perform the assigned duties upon confirmation.

Conflicts of Interest

Federal ethics laws, to include 18 U.S.C. §208, prohibit government employees from participating in matters where they, or certain family members or organizations with which they have certain relationships, have a financial interest.

5. **Do you agree, without qualification, if confirmed, to disclose any potential conflicts of interest, including investments, business ties, family relationships, or other connections that could be perceived as influencing your decision making?**

   Answer: Yes, I agree to comply with all conflicts of interest disclosure requirements set forth in the Ethics in Government Act and implementing regulations.

6. **Do you agree, without qualification, if confirmed, that if a conflict of interest arises, you will recuse yourself from participating in any relevant decisions regarding that specific matter?**

   Answer: Yes, I agree to comply with all recusal requirements under 18 U.S.C. § 208 and implementing regulations.

7. **Do you commit, without qualification, if confirmed, to decision-making on the merits and exclusively in the public interest, without regard to private gain or personal benefit?**

   Answer: Yes.

Relationships

8. **Please describe your understanding of the relationship of the Deputy Under Secretary of Defense for Research and Engineering with the following:**

a. The Military Service Science and Technology Executives

The Assistant Secretary of War for Science & Technology, who reports directly to the USW(R&E), chairs the S&T Executive Committee composed of the S&T executives from the military Services and Defense Agencies with equity in the S&T Enterprise. This committee provides a forum to unify and coordinate S&T strategies, budgets, and execution decisions. In coordination with the Military Services' and Defense Agencies' S&T Executives via the S&T Executive Committee, the OUSW(R&E) oversees, coordinates, and aligns investments to maximize the Department's resources, avoid unnecessary duplication, and create the future capabilities required by the nation.

b. The Directors of Department of Defense Laboratories and Research Centers

The Department's laboratories engage in numerous activities in support of warfighters. The DUSW(R&E) advocates for, and provides functional leadership of, the DoW laboratory enterprise and facilities supporting research, development, test, and evaluation; advocates for the DoW laboratory infrastructure, personnel, and core competencies; and also assesses the quality and health of DoW laboratories, to include independent reviews.

c. The Director of the Defense Advanced Research Projects Agency (DARPA)

The Director of the Defense Advanced Research Projects Agency (DARPA) leads a Defense Agency under the authority, direction, and control of the USW(R&E). I am committed to ensuring that DAPRA, one of the crown jewels of DoW, continues to have the support it needs to conduct the breakthrough research, but that it also is focused on missions that most align with a rapidly changing world and is a beacon of excellence within the R&E Enterprise.

d. The Administrator of the Defense Technical Information Center

The Administrator of the Defense Technical Information Center (DTIC) is a direct report to the USW(R&E). On behalf of the OUSW(R&E), DTIC administers science and technology (S&T) policy, captures the results of research into a central repository of knowledge, and delivers that knowledge to the community. DTIC reaches across Military Service and Defense Agency silos to connect people and activities. On behalf of the OUSW(R&E), DTIC operates information analysis centers that manage research and development contracts supporting research and analysis services to DoW. If confirmed, would look for opportunities to increase the value that DTIC could provide to DoW.

e. The Director of the Defense Test Resource Management Center

The Director of the Test Resource Management Center (TRMC) is a direct report to the USW(R&E). The TRMC is charged with oversight of the Department's testing and range facilities, as well as certifying the sufficiency of DoW Components' budgeted investments in test infrastructure, maintenance, and upgrades. If confirmed, I look forward to providing direction to ensure the TRMC is able to accomplish its departmental roles and responsibilities supporting DoW needs.

f. The Director of Operational Test and Evaluation

The Director of OT&E is not in the direct chain-of-command for the OUSW(R&E). However, it is imperative for the OUSW(R&E) to maintain a strong relationship with OT&E. Under the OUSW(R&E) resides the responsibility for developmental test oversight and policy, as well as the Test Resource Management Center, which oversees the capability development and capacity of the Department's entire test and evaluation (T&E) ecosystem. If confirmed, I would work with the Director of OT&E to enhance the effectiveness, suitability, and survivability of DoW systems. I would communicate frequently with the Director to discuss strategic T&E policy and review the status of current collaboration efforts. Much can be done in collaboration between the DUSW(R&E) and the Director of OT&E to streamline the transition of weapon systems from developmental testing to operational testing. If confirmed, I would look forward to strengthening our T&E ecosystem alongside the Director of OT&E.

g. The Department of Defense Chief Information Officer

The DoW Chief Information Officer (CIO) coordinates with the OUSW(R&E) on Information Technology, information resource, and data management matters, in accordance with applicable DoW information technology policy and law.

h. The Director of the White House Office of Science and Technology Policy

The DUSWDUSW(R&E) works with the Deputy Director of the White House Office of Science and Technology Policy on topics of interest to both the White House and across the Federal Government. Also, it is my understanding that the Office of Science and Technology Policy establishes committees to work on issues including science, technology, engineering, and mathematics (STEM) education and workforce development, research security, and other matters as they arise. These committees are composed of experts from each of the Federal science funding agencies and work on reports and memoranda that advance the Administration's scientific agenda.

i. The Director of the Defense Innovation Unit (DIU)

The Director, DIU, is codified as a Principal Staff Assistant to the Secretary of War and has a mandate for accelerating the adoption of commercial technology throughout the DoW to transform military capacity and capabilities. From 2019-2024, the Director, DIU, directly reported to the USW (R&E). As such, I understand the

working relationships between the DIU and the Office of the USW (R&E) must be collaborative and, if confirmed, I would strive to continue this constructive collaboration to ensure that relevant technologies can successfully transition from research and development, to prototype, to fielded into the hands of our warfighters.

j. The Director of the Strategic Capabilities Office (SCO)

The Director of SCO is the Principal Staff Assistant and advisor to the Secretary and Deputy Secretary of War whose mission is to develop new and innovative ways to shape and counter emerging threats across all domains, bringing unexpected and game-changing capabilities to create strategic operational effect. The Director collaborates with the USW(R&E) and the DUSW(R&E) to develop program information management strategies, objectives and technologies; conduct demonstrations, experiments, and prototypes to reduce upfront risk on potentially game-changing concepts that can be fielded in the near-term; and develop alternative strategic capability development along with processes to expedite transition timelines.

k. The Director of the Missile Defense Agency

The Director of MDA is a direct report to the USW(R&E). Areas of collaboration include a heavy emphasis on advanced capabilities to include directed energy, hypersonic defense and various special access programs. Additionally, the USW(R&E) chairs the Missile Defense Executive Board.

l. The Director of the Defense Microelectronics Activity

The Defense Microelectronics Activity (DMEA) is a critical, organizational element of the Department providing reliable microelectronics products and solutions to DoW. The DMEA was part of the OUSW(R&E) until January 2021, when the DMEA was transferred and placed under the authority, direction, and control of the USW(A&S). If confirmed, I will work closely with the USW(A&S) and the Director of the DMEA to co-develop and expand assurance techniques for microelectronics and to collaboratively ensure the DMEA's role in the Department's organic manufacturing industrial base is aligned to both sustainment and research objectives.

m. The Director of the Space Development Agency

The Director of the Space Development Agency (SDA) is developing critical space architecture that will support missile defense capabilities; therefore, the SDA and the USW(R&E) should have a collaborative relationship that ensures interoperability between all phases of the missile defense kill chain.

n. The Program Administrator for Department of Defense Small Business Innovation Research

The Principal Administrator of DoW's Small Business Innovation Research (SBIR) program oversees and leads the SBIR Program to unify efforts, while conveying transparency and trust across DoW agencies and components within the program. The Defense SBIR office is under the leadership of the Office of the ASW(S&T), which reports directly to the USW(R&E) and the DUSW (R&E) who oversee its activities.

o. The Executive Director of the Defense Science Board

The Defense Science Board (DSB) is a Federal Advisory Committee tasked with providing independent advice and recommendations on matters supporting the DoW's scientific and technical enterprise. The DSB is supported through the USW(R&E), which helps ensure compliance with the requirements of the Federal Advisory Committee Act, "the Sunshine Act," and DoW policies and procedures. The DSB focuses on specific tasks in response to the USW(R&E) or from the Secretary of War and is an extremely valuable source of independent advice for the Department. If confirmed, I will fully support DSB as it engages its important mission.

Office of the Under Secretary of Defense for Research and Engineering

9. What is your vision for the Office of the USD(R&E)?

It is critical that the Department innovate more quickly and with more efficiency. If confirmed, I would look for opportunities to implement, as appropriate, best practices that I've used in my previous government experiences to drive innovation at speed and with efficiency throughout the organization. I would seek to change a culture that can be overly risk averse. To benefit from an innovative culture, it must be understood that there is knowledge to be gained from experimental failures, and without such failures, the pace of innovation will necessarily be slow. I am committed to working with Congress to develop newer, higher quality and more efficient systems for the warfighter.

10. If confirmed, what recommendations, if any, would you make regarding changes to the organization, management, and resourcing of the Office of the USD(R&E) so as to better execute its duties and responsibilities?

If confirmed, one of my first actions will be to help the USW(R&E) review the organization for how to foster an innovative culture that can move with speed while being efficient. I will work to ensure that our priorities are aligned with the Administration's policies and that our resources have a clear strategy against which to operate. If confirmed, I look forward to reviewing the OUSW(R&E)'s budget including its plans for the Fiscal Year (FY) 2027 budget submission.

11. Are there other resources, including additional staffing and funding that you believe the Office of the Under Secretary of Defense for Research and Engineering requires to optimize mission accomplishment?

A thorough review of the staffing and resources within the OUSW(R&E) is critical to ensure that the Department is aligned with the President's and Secretary Hegseth's national security priorities. Before taking decisive actions, I will want to thoroughly examine the organization's programs, budget, and authorities and solicit feedback from key stakeholders and in support of the USW(R&E). Undoubtedly, the OUSW(R&E) can play a role in speeding up, reducing costs, and improving the performance of the innovation ecosystem.

12. What do you perceive to be the appropriate role of the Principal Directors, designated in accordance with Section 217 of the Fiscal Year 2021 National Defense Authorization Act, for each technology area deemed by the USD(R&E) to be critical for support of the U.S.'s strategic objectives?

It is my understanding that, per Section 217 of the NDAA for FY 2021, Principal Director (PD) as the Senior War Officials referenced in the statute have duties which include: developing and continuously updating research and technology development roadmaps, funding strategies, and technology transition strategies; conducting annual assessments of workforce, infrastructure, and industrial base capabilities and capacity; reviewing the relevant research and engineering budgets of appropriate organizations within the Department of War, including the Armed Forces, and advising the Under Secretary; coordinating the research and engineering activities of the Department with appropriate international, interagency, and private sector organizations; and tasking appropriate intelligence agencies of the Department to develop a direct comparison between the capabilities of the United States in the technology area concerned and the capabilities of adversaries of the United States in that area.

13. What do you see as the management priorities or goals, if confirmed, in order to help improve the efficiency and effectiveness of business operations for the Office of the USD(R&E)?

If confirmed, I will support the USW(R&E) in reviewing management priorities and goals for the organization. I would intent to closely examine how to foster an innovative culture that can move with speed while being efficient. I will work to ensure that our priorities are aligned with the Administration's policies and that our resources have a clear strategy against which to operate.

14. What do you see as the role for DUSD(R&E) in supporting the acquisition programs and activities of the Department?

My understanding is that research and engineering can play a key role in improving the acquisition outcomes, particularly by providing unbiased and deep expertise to

identify technical risk early on in acquisition programs. OUSW(R&E) plays a direct role in reviewing the technical issues involving major defense acquisition programs through Independent Technical Risk Assessments. Recognizing that we are in a competitive race, I would work with my counterparts to evaluate whether the value provided by each step in the process is sufficient to justify the burden on innovators and the cost and schedule impacts. If confirmed, I would work closely with my counterparts to bring best practices from the private sector and to be relentlessly clear-eyed about the tradeoffs that must be made between schedule, capability, and cost.

Major Challenges and Priorities

15. In your view, what are the major challenges that will confront the next Deputy Under Secretary of Defense for Research and Engineering? If confirmed, what plans do you have for addressing these challenges?

The DUSW(R&E) plays a key role in supporting the USW(R&E) in revitalizing the defense industrial base, creating competition, and building a modern and lethal arsenal. As the Department's Deputy CTO, the DUSW (R&E) also helps to secure our supply chains, prevent intellectual property theft and cyber-intrusions, and develop President Trump's Golden Dome for America (GDA) air and missile defense system to protect our homeland. Further, the culture of the R&E Enterprise must evolve to one that delivers the best capabilities at a pace that exceeds that of our adversaries. This must include the reduction of duplicative efforts and re-focusing on key priorities that are clear and understandable to everyone at DoW.

16. If confirmed, what would you do to address each of these challenges?

The challenges of revitalizing the industrial base and building a modern and lethal arsenal requires matching the appropriate DoW investment or development mechanism to each opportunity. For example, the Office of Strategic Capital (OSC) seeks to address industrial base and supply chain issues through long-term investments in companies with tremendous up-side for DoW, while development and transition tools like prototyping, experimentation and the Accelerate the Procurement and Fielding of Innovative Technologies (APFIT) program address the challenge of building modern and lethal capabilities while increasing the size of the defense industrial base, creating competition and opportunities for new and non-traditional defense contractors. Keystone initiatives like the President's GDA air and missile defense system will require the systems engineers across the Department to collaborate on architecture and software, in collaboration with the development and acquisition communities.

17. If confirmed, how would you leverage technical advice from the Defense Science Board to help provide strategic advice and direction to the activities of the R&D enterprise?

The DSB's technical insights and recommendations serve as a critical data point among many in the decision-making process. If confirmed, I intend to integrate their advice with other inputs to inform strategic choices that will shape the DoW's research and development enterprise.

National Defense Strategy (NDS) and Interim National Security Strategic Guidance

The Department of Defense published Interim National Defense Strategic Guidance (INDSG) on March 13, 2025. The INDSG supersedes the Biden Administration's 2022 National Defense Strategy. The INDSG prioritizes defense of the homeland and deterrence of China over all other threats.

18. Do you believe that the 2025 Interim National Security Strategic Guidance accurately assess the current strategic environment, including the most critical and enduring threats to the national security of the United States and its allies?

As the nominee for the DUSW (R&E), I am not in a position to speak on behalf of the OUSW(R&E) at this time. However, I have read the INDSG and my personal belief is that it accurately reflects the current strategic environment. The United States faces one of the most dangerous strategic environments in our nation's history culminated by China's unprecedented military buildup, a vulnerable homeland arising from years of unsecured borders and increasingly capable air and missile threats, and rising adversarial threats stemming from Iran, Russia, and North Korea. If confirmed, I look forward to working with my counterparts across the Department along with stakeholders within the R&E enterprise to reestablish our deterrence and support President Trump's America First defense policy agenda.

19. In your view, what role should the Office of the USD(R&E) play in ensuring the Department of Defense can meet the requirements of the INDSG and forthcoming National Defense Strategy (NDS)?

The OUSW(R&E) is responsible for ensuring the priorities of the President's National Security Strategy and Secretary of War's National Defense Strategy are reflected in RDT&E strategies, programs, and budgets. In general, the OUSW(R&E) focuses on cross-cutting investments that go beyond a single Military Department. The OUSW(R&E) serves as an accelerator to use innovative contracting vehicles and relationships with private industry and academia to develop, test, and field new capabilities in coordination with the Combatant commanders.

20. In your view, how can science and technology programs contribute to an overall hedging strategy to mitigate the broad base of threats to our national security other than China and defense of the homeland?

The pace of change in technology development and on the battlefield has become much faster than the pace of change of requirements. For science and technology

programs to be adequately incorporated in current and future Department-wide or national security strategies, it should include a good technology strategic plan that incorporates the many stakeholders involved in research, qualification, acquisition, fielding, and sustainment. Strategic planning for groundbreaking technology must also identify connections to military Services and program offices to influence requirements rather than just respond to them. Moreover, it should balance technology push for global competitiveness with requirements pull, both addressing future warfighter needs. The plan should include near-, mid-, and far-term capability goals and technology objectives, and integrated across the Department to ensure meaningful and cost-efficient processes.

21. In your view, how can research and engineering priorities best be incorporated in the development of the forthcoming NDS?

If confirmed, I look forward to working with the USW(R&E) and relevant components to identify the organization's greatest priorities that could be incorporated in the forthcoming NDS.

22. In your view, what advantages in the domain of research and engineering must the United States develop and enhance to enable it to prevail in the strategic competition with Russia and with China? If confirmed, what approaches would you implement to develop and sustain such advantages?

America does not enjoy a comfortable lead time between identifying a threat and developing a countermeasure. For example, hypersonic and ballistic missile threats are proliferating across the globe, leading President Trump to direct the development of the Golden Dome for America missile defense shield to bolster missile defense capabilities for the homeland. Delivering such capabilities, and others critical to maintaining technology overmatch in relation to our adversaries, requires a fundamental shift in our approach to innovation. We must move at the speed of relevance. The DoW must sharpen our own research, prototyping, and transition activities while embracing the dynamism and ingenuity of the commercial sector as a force multiplier for our national defense.

The DUSW (R&E) plays a significant role in helping delivery the Secretary of War's priorities of rebuilding the military, reestablishing deterrence, and restoring the warrior ethos. There are currently 14 Critical Technology Areas the Department identified as vital to maintaining U.S. national security. These include microelectronics and semiconductor manufacturing, directed energy, artificial intelligence, hypersonic capabilities, among others. If confirmed, I look forward to working with Department leaders along with stakeholders across the R&E enterprise to ensure the Department's resources are focused on our most critical challenges with the right amount of weight behind each area, thereby solidifying U.S. technical advantage against our adversaries.

The Trump Administration's 2018 NDS noted that "effectively expanding the competitive space requires combined actions with the U.S. interagency to employ all dimensions of national power. We will assist the efforts of the Departments of State, Treasury, Justice, Energy, Homeland Security, Commerce, USAID, as well as the Intelligence Community, law enforcement, and others to identify and build partnerships to address areas of economic, technological, and informational vulnerabilities."

23. If confirmed, what recommendations, if any, would you have to better employ all dimensions of national power, including in the domain of research and engineering, to expand the competitive space?

Capitalizing on technology leaps that arise once in a generation is the key broad priority for the DUSW(R&E). For example, learning how to leverage and deploy assured artificial intelligence capabilities to the maximum extent while leveraging private sector innovation and investments; ensuring the military fully benefits from the revolution of quantum computing; and pioneering novel and advanced domestically developed materials. If confirmed, I would assess the Department's efforts in these pivotal technologies to ensure the Department is able to sustain or take the lead over our near-peer adversaries.

24. In your view, how are resourcing decisions for these other agencies, especially the science and research agencies, impacting the ability of the Department of Defense to conduct and integrate cutting edge science and research into its programs?

Science and technology (S&T) often takes a longer view than other investments, addressing future military needs through deliberate, targeted investment. Since there is uncertainty about which technologies could provide revolutionary capabilities in the future, robust S&T investments must ensure our Nation is able to exploit emerging technology areas, informing new asymmetric warfighting capabilities and reducing risk of technological surprise by potential adversaries. An important metric would be comparison in capability to our adversaries, but also the degree to which DoW has advanced new technologies that don't exist elsewhere and doing so at a predictable cost and timeframe. The Department's S&T investments can and should align to key operational challenges and opportunities faced by the Joint Force, and if confirmed, I will assess the DoW S&T portfolios to see if the research areas are well mapped to address capability shortfalls and stay ahead of the threats. Such challenges and opportunities are driven both by top-level strategic guidance as well as by direct interaction and collaboration with the Military Services, the Combatant Commands, allies, and partners.

<u>Support for the Chief Technology Officer</u>

If confirmed, you would be the Deputy to the Chief Technology Officer (CTO) of the Department of Defense.

25. What do you see as the role of the CTO of the Department of Defense?

From my understanding, the CTO serves as the principal advisor to the Secretary and Deputy Secretary of War for all matters regarding advancing technological innovation. The CTO provides technical leadership and oversight, establishes strategic priorities, issues guidance, and acts as the senior responsible official for the supervision of all programs and activities pertaining to the R&E Enterprise across DoW.

26. What experience do you have that will enhance your ability to serve as the Deputy CTO of the Department?

I previously served as Performing the Duties of (PTDO) the USW(R&E) and Chief Technology Officer where I worked to advance the CTO's mission to set modernization priorities and perform the critical oversight function necessary to align nearly $150 billion in annual research, development, test, and evaluation (RDT&E) funding. Prior to assuming those duties, I served as the Republican Policy Director of the Senate Armed Services Committee with responsibility for science and technology programs. I also served as the Republican Policy Director for the Senate Commerce, Science, and Transportation Committee. If confirmed, I will work to ensure that our priorities within the OUSW(R&E) are aligned with the Administration's policies, our resources have a clear strategy against which to operate, and ensure the Department is able to sustain or take the lead over our near-peer adversaries.

27. Given the growing role of information technology and software in military capabilities, what do you understand to be the differences in roles, responsibilities, and authorities between the Office of the Chief Information Officer, the Chief Digital and Artificial Intelligence Officer and the CTO?

The DoW CIO and the DoW CTO must work closely together. The CIO ensures that the department has a solid information technology (IT) foundation upon which the CTO can build, while the CTO's insights help the CIO anticipate future challenges and strategic opportunities. While the two offices focus on seemingly separate efforts, their collaboration is key as they are essential for ensuring that DoW can effectively leverage the power of information technology and maintain its technological edge given the increasing value of data and of systems that can interoperate.

With the realignment of the Office of the Chief Digital and Artificial Intelligence Officer (CDAO) under the USW(R&E), the Department is unifying our AI strategy and implementation, tightening the integration between AI research, engineering, and operational deployment, and streamlining management and oversight of these key technologies.

28. What technologies do you consider the highest priorities for development in the DOD, based upon the ability of each to contribute to DOD mission accomplishment in the short- and longer-terms?

If confirmed, I look forward to working with the USW(R&E) to identify the highest priority technologies for development. My personal view is that AI, hypersonics, directed energy, and biotechnology are among the technologies needed to contribute to the DoW mission accomplishment. The OUSW(R&E) must balance addressing short-term capability gaps with the need to invest in long-term strategies to meet the missions of the future, while being fully informed on the threat perspective and armed with the most relevant intelligence reports.

Investment in Science and Technology (S&T)

29. If confirmed, what metrics would you use to assess the suitability of the portfolio of investments made under the defense science and technology (S&T) program, to include the magnitude and diversity of the investments?

The Department's S&T investments can and should align to key operational challenges and opportunities faced by the Joint Force, and if confirmed, I will assess the DoW S&T portfolios to see if the research areas are well mapped to address capability shortfalls and stay ahead of the threats. Such challenges and opportunities are driven both by top-level strategic guidance as well as by direct interaction and collaboration with the Military Services, the Combatant Commands, allies, and partners. Science and technology often take a longer view than other investments, addressing future military needs through deliberate, targeted investment. Since there is uncertainty about which technologies could provide revolutionary capabilities in the future, robust S&T investments must ensure our nation is able to exploit emerging technology areas, informing new asymmetric warfighting capabilities, and reducing risk of technological surprise by potential adversaries. An important metric would be comparison in capability to our adversaries, but also the degree to which DoW has advanced new technologies that don't exist elsewhere and doing so at a predictable cost and timeframe.

30. What role do you see for the DOD Communities of Interest to help coordinate investments, increase resilience, and reduce unwarranted duplication of efforts across the Department?

From their inception in 2009 as part of the Reliance 21 framework, the DoW Communities of Interest (COIs) have been a means for the Department's S&T leadership to facilitate greater collaboration and coordination in making technology investments and developing coherent S&T programs across all Services and Components. The 16 COIs, which focus on specific technology areas where there is substantial investment across multiple Components, are comprised of the leading scientists and engineers from the Defense technical community as well as the wider

Federal S&T Enterprise. The COIs promote cooperation and partnership both within and across the 16 technology areas reducing any duplication of efforts across the DoW. The nature of the COIs and the Reliance 21 framework inherently promote information, data, and technology sharing and helps to eliminate the compartmentalization of research in any given area.

31. What role should the Deputy Under Secretary of Defense for Research and Engineering play in the development and coordination of the Military Department and Defense Agency S&T investment strategies, programs, and budgets?

The DUSW(R&E) should play a critical role in the development and coordination of S&T investment strategies, programs, and budgets for the Military Departments and the Defense Agency/Field Activities, maximizing return on investments for joint applications.

32. In your view, how can research and engineering priorities best be incorporated in the development of the Secretary of Defense's Defense Planning Guidance?

As noted by Secretary Hegseth, it is President Trump's priority to achieve peace through strength. If confirmed, I understand it would be my role to make recommendations to the Secretary on the budgets for research, development, testing, and evaluation (RDT&E), and that would include participating in the development of the Defense Planning Guidance (DPG) that influences the budget of the Department. I will work with the requisite stakeholders to ensure Department budgets are sufficient to accomplish RDT&E missions for the entire DoW.

33. In your judgment, will the level of funding proposed by the FY26 President's Budget Request for S&T, if appropriated and allocated by Congress, be sufficient for the Department to meet the threats of the future? Please explain your answer.

I support the FY 2026 President's Budget Request. In general, the Department should seek to fully fund critical S&T areas to meet current and future threats. If confirmed, I would look forward to reviewing the Department's S&T budget plans to understand what, if any, S&T areas may need additional resources in future years.

34. Do you believe that the Department's current S&T investment strategy strikes the appropriate balance between funding innovative, disruptive technologies and addressing near-term operational needs and military requirements? Please explain your answer.

Balancing near-term and long-term investments is a persistent, multifaceted challenge that demands addressing immediate warfighting needs while also maintaining long term technical superiority over adversaries. Key to this task is aligning investments in critical technology and capabilities with warfighter needs that are derived from our

national strategy. This involves balancing multiple lines of effort, including modernizing existing systems, developing new emerging technologies, and ensuring a robust, vibrant national security industrial base. Short term investments should include transitioning impactful capability to operational use, while long term investments should involve higher-risk, high-reward activities that have the potential for revolutionary leaps in capability. An important enabler for striking this balance between incremental vs. disruptive progress is continual risk assessment and adaptive budget processes to keep pace with ever-evolving adversaries. I would coordinate closely with the Joint Staff, Combatant Commands, and Services to ensure our investments are aligned to Warfighter needs. The Department must also possess transparent, effective accounting systems to track spending, such as the Transition Tracking Action Group.

The Department's S&T activities form the basis of new technology components and system capabilities. High fidelity models and wargaming can provide insight into the effectiveness of innovative disruptive technologies vs. near-term systems to meet operational needs. A collective informed decision can then be made to balance near-term needs vs the potential of a disruptive capability. In collaboration with other elements of the Office of the Secretary of War, especially the OUSW(A&S), I will support forming new pathways to get the most promising and relevant component technologies into integrating prototypes for rapid transition to operating forces while ensuring our developmental technologies always have an eye toward the next fight and the next challenge.

Basic Research

35. Given the fundamental nature of basic research and the broad implications and applications of discovery-focused and innovation-focused sciences, what criteria would you use, if confirmed, to measure the success of these programs and investments?

Basic research programs have played a unique and critical role in exploring new scientific directions for revolutionary technology development in support of the DoW mission and continue to do so. For example, in the near-term, success includes generating a talented workforce that is able to continue developing solutions for DoW and the emergence of technologies into production by DoW and the private sector. The velocity of basic research maturing into usable technology is a key measure that allows for more long-term investment because of the confidence it builds in the choices that lead to the start of new investments. Longer-term success involves technologies taken from the laboratories into programs of record and dual-use technologies acquired by the Department. New and well-integrated approaches to evaluate the potential impact of discovery-focused basic research programs are needed to facilitate the planning of transition efforts, accelerate innovation, but also better assess the DoW-relevant scientific innovations versus those of our pacing competitors.

36. What concerns do you have, if any, about current levels of funding for Department of Defense basic research? If confirmed, how would you plan to address those concerns?

I support the President's 2026 budget request for DoW basic research. DoW basic research programs have benefitted from consistent budgetary support over the last decade, but near-peer competitors, especially China, are increasing their investments in basic research more quickly than DoW while experiencing lower labor costs and benefitting from intellectual property theft. It is vital to have strong support for basic research in the Department, because otherwise there is a significant risk that China and other nations will be in the lead in fields critical to DoW in the future. It is also incumbent on the R&E Enterprise to be efficient in using its budget to produce more than it has in the past.

37. If confirmed, what steps, if any, would you take to increase efforts in unfettered exploration, which has historically been a critical enabler of the most important breakthroughs in military capabilities?

Unfettered exploration in areas of defense interest is vital to the Department's generation of transformative capabilities and to ensuring that our Warfighter maintains a technological advantage over near peer competitors. If confirmed, I would work to ensure that such investments are sustained and are properly focused in areas of potential interest to the Department.

38. In your view, how should the Department balance the inherent openness and academic freedom that are integral to university-based fundamental research with the need to protect our national security interests and maintain technological advantages over our potential adversaries?

Fundamental research is critical to the Department in generating the science behind the next great warfighter capabilities. If confirmed, I would seek to balance open inquiry against the Department's research security needs as currently described in National Security Presidential Memorandum (NSPM) 33 and other relevant statues and directives.

Research Security and Program Protection Planning

39. If confirmed, how would you ensure that DOD's basic and applied research programs are executed in a manner consistent with National Security Decision Directive 189 and National Security Presidential Memorandum 33?

It is my understanding that National Security Decision Directive (NSDD) 189 has been executed through previous USW(R&E) memoranda and broadly defines fundamental research at the Department as basic and applied research performed at universities or basic research performed at defense labs and in industry. NSPM 33

directs review of all fundamental research projects to protect against foreign government interference and exploitation. If confirmed, I would continue to carry out this NSDD and this NSPM unless modified or superseded by new directives promulgated by the President.

40. What efforts would you make, if confirmed, to enable the Department to benefit from open innovation in fundamental research, while protecting such research from undue foreign interference?

Fundamental research is critical to the Department in generating the science behind the next great warfighter capabilities. If confirmed, I would seek to balance open inquiry against the Department's research security needs as currently described in NSPM 33 and other relevant statutes and directives.

41. If confirmed, what are your ideas for working with the academic community to limit undue foreign influence on university research programs, and limit unwanted foreign access to research expertise and results, without creating an undue burden on the open and collaborative nature of the research community?

I believe that the academic community, the DoW, and the science funding agencies should work collaboratively to solve the problem of undue foreign influence on university research programs in an efficient and implementable way. If confirmed, I will work with the Office of Science and Technology Policy and other interested science funding agencies to implement consistent policies and procedures for our research community. Consistent training, awareness, and education to and by the institutions are critical to limit undue foreign influence in university research programs that supports the Department.

42. In your view, what steps could the USD(R&E) put in place to ensure that regulations pertaining to Department-funded university research are consistently applied and monitored by DOD and ensuring they are well understood by the university community?

If confirmed, I would work with the USW(R&E) to prioritize promulgating and implementing clear, consistent policies across the Department with exceptions made speedily if proven to be needed. I believe the Department should work with university leaders to clearly explain what the Department wants and also to learn from them where burdens can be reduced without reducing effectiveness.

43. If confirmed, what steps would you take to protect U.S. research and intellectual property from undue foreign influence, without unjustly singling out researchers from certain nations?

Intellectual property generated by industry and the results of U.S. funded research is the bedrock of our economic and national security. If confirmed, I will ensure the Department's due diligence reviews for small businesses and university research are

conducted based on a clear set of objective criteria in alignment with the statute and this Administration's priorities.

44. In your opinion, are there ways to better coordinate and streamline the research security guidance to universities and the Program Protection Planning carried out by the government? For example, are there data sharing systems to improve visibility for academia, industry and the government?

A holistic approach to research security and program protection, to include improving and streamlining information sharing, is vital to rapidly and securely fielding capabilities to our warfighters. If confirmed, I will pursue digital modernization opportunities to improve visibility of relevant information such as adversaries' problematic behavior, potential mitigating actions, and security posture best practices while reducing administrative burden to academia, industry, and program offices.

45. If confirmed, how do you propose better leveraging the experience and advice of the university research community to help inform and update DOD policies on research security to ensure they are best informed by current state of practice in the research community?

My understanding is that several organizations and associations actively engage the Department and universities on research security. The Federal Demonstration Partnership and the National Science Foundation are two examples. If confirmed, I would make sure that the Department is engaging with these universities and associations to help researchers be better informed and aligned with the Department's research security priorities and better understand how to work with the Department. The Department's research security efforts can only benefit by increased collaboration with universities, organizations, and associations.

Technology Strategy

46. What weaknesses, if any, do you perceive in the current defense S&T strategic planning process?

Each Military Service carries out its S&T planning to address its specific needs. This is necessary, but there is a risk that needs that are common across the Military Services are not adequately prioritized by each military Service. The OUSW(R&E) is crucial to ensuring that the individual Military Service plans take into account Joint needs and new technology opportunities. The oversight of military Service S&T planning and fostering of collaboration between the Military Services on technology development in areas of common interest is a critical role that the OUSW(R&E) must fulfill to ensure a strategy that results in a robust, truly Joint S&T Enterprise. Further, cooperation with the various S&T organizations could help to limit 'requirements creep' and any capability falling through the cracks of various organizations.

47. What do you believe to be the key attributes of a good technology strategic plan and how could these attributes be carried through effectively to the DOD programming and budgeting purposes?

Very little technology development has an impact in a vacuum. Good strategic planning must incorporate the many stakeholders involved in research, qualification, acquisition, fielding, and sustainment. Strategic planning for groundbreaking technology must also identify connections to military Services and program offices to influence requirements rather than just respond to them. Moreover, a good technology strategic plan should balance technology push for global competitiveness with requirements pull, both addressing future warfighter needs. The plan should include near-, mid-, and far-term capability goals and technology objectives, and integrated across the department to ensure meaningful and cost-efficient progress. Lastly, an effective technology strategic plan should provide clear development metrics, identify where defense fits into the larger commercial investments in dual use technologies, and define a timeline for technology insertion into the acquisition process.

48. If confirmed, how would you ensure reliance on strategic technology plans as foundational elements of the budget, planning, and programming process?

The OUSW(R&E) maintains senior officials for technology areas deemed critical to national defense, who are responsible for ensuring that science, technology, engineering, prototyping, and demonstration investments are effectively leveraged and fully aligned with DoW's priorities. If confirmed, I will support Under Secretary Michael's assessment of whether the Critical Technology Areas are well aligned with the National Defense Strategy. I will ensure that senior officials, as well as other staff within the OUSW(R&E), collaborate closely with the Director of Cost Assessment and Program Evaluation, the Office of the Under Secretary of War (Comptroller), and the military Services to ensure that technology strategic plans are foundational elements of the budget, planning, and programming process. There, however, must be an acknowledgement that the validity of any strategic plan has been reduced in time. As such, these plans must have elements that can be revisited in shorter timeframes if the situation demands.

49. How would you assess the effectiveness of current transition processes and systems?

The current technology transition process is challenged. The primary challenge is the availability of funding in the year of execution or lack of clarity that the capability is on the path to becoming a funded program. As technologies mature and are proven funding must be available to support transition. The current PPBE process does not provide flexibility for accelerated fielding, and DoW must improve the visibility it gives to the suppliers on their chances of succeeding within DoW.

50. In your view, what challenges exist in technology transition in DOD?

The pace of change in technology development and on the battlefield has become much faster than the pace of change of requirements. The Department is too slow to develop the demand signal for a new capability to be relevant. If confirmed, I will attempt to help make the OUSW(R&E) a driver of future requirements to ensure we are investing in and fielding the right things at the right time.

51. What would you do, if confirmed, to address each of these challenges?

The OUSW(R&E) can leverage the Accelerate the Procurement and Fielding of Innovative Technologies (APFIT) program to address the problem of the mismatch between the pace of budgeting and the pace of development; the APFIT program is successfully enabling innovative companies to bridge funding timelines and get technology into production up to two years sooner. If confirmed, I would support APFIT and other programs under the OUSW(R&E) that contribute to mitigating the the transition challenge. The Department can also continue improve the relevance of its technology development cycles through leveraging multi-service collaboration and operational experimentation with the Combatant Commands.

52. As compared to other technologies, do you believe that a different methodology is needed to transition software capabilities from research to operational use?

I was excited to see that earlier this year Secretary Hegseth signed a memorandum recognizing that today's reality is "software-defined warfare" and directing all DoW Components to broadly modernize their approach to software acquisition. I look forward to supporting the Secretary in driving software modernization across the research and engineering portfolio.

53. What are your views as to whether DOD's approach to, and processes for, funding technology transition should be changed? What sort of changes, if any, would you recommend, if confirmed?

If confirmed, I look forward to supporting the USW(R&E) on examining the Department's approach and processing for funding technology transition. An important challenge is the traditional budget process for emerging solutions. This has historically posed significant challenges for small businesses and other innovative businesses that desire to work with DoW. The APFIT program provides a model, which has been successful at bridging the gap. Flexibility in funding is critical to accelerate prototyping, transition, and fielding, but also DoW must endeavor to make decisions faster and communicate more clearly to ensure that indecision fatigue does not set in with aspiring vendors.

<u>Commercial Technologies</u>

54. What role do you see for the DUSD(R&E) in the space of identification and adoption of commercial innovation, especially in relation to other parts of the

Department that have a similar mission like the Defense Innovation Unit or the elements of the acquisition enterprise?

We must utilize the strength and innovation of the U.S. commercial sector, particularly dual-use technology, to assist the DoW and improve Warfighter lethality. In fields like AI, microelectronics, quantum science, space-based systems, and hypersonics, the pace of innovation outside government is far faster than within. The Department must close that gap by creating new collaborations and leveraging existing innovation on-ramps. The Department must identify operational problems to solve and perform rapid prototyping and fielding. In addition, the Department must identify current year funding to help the Services bridge the gap from current year funding to the Military Services' Program Objective Memorandum (POM) cycles. This will demonstrate to Industry the Department's current interests and long-term commitments. In my role as the DUSWUSW(R&E), if confirmed, I will advocate for the Department to fully leverage U.S. industry within the DoW's authorities and authorizations.

55. What steps would you take to make appropriate use of commercial technologies for the benefit of DOD institutions and the warfighter?

We must utilize the strength and innovation of the U.S. commercial sector, particularly dual-use technology, to bolster DoW and improve Warfighter lethality. In my role as the DUSW (R&E), if confirmed, I will advocate for the Department to fully leverage U.S. industry. For example, the close collaboration between OUSW(R&E) and DIU on key technological advancements have built off of initial USW(R&E) investments, such as in quantum sensing, that DIU is now prototyping and fielding with commercial vendors for critical defense missions today. There are programs in that OUSW(R&E), such as Technology Readiness Experimentation (T-REX), that inform DIU's initial fielding of commercial technologies for the Warfighter.

56. In your view, would there be benefit to the Department's establishment of a comparative testing program for domestic commercial technologies—perhaps a program modeled on the successful Foreign Comparative Testing program?

The Foreign Comparative Testing (FCT) program has done an excellent job at determining procurement alternatives for current and emerging requirements, capitalizing on partner and ally investments and expertise in many warfighting capability areas. FCT authorities that allow follow-on procurement without additional competition could be applied to current defense innovation acceleration efforts to enable similar benefits domestically. If confirmed, I look forward to considering the comparative testing program described in the question.

57. What do you see as the test and evaluation needs for non-developmental or commercial items to ensure they can still meet the technical requirements and human factors needs of environments often more complex and demanding than commercial settings?

It is vital that the Department continues to integrate existing commercial and non-developmental capabilities to meet technical requirements in efforts to achieve cost effectiveness, resilience, and drive rapid innovation. However, commercial technologies often are not designed, in the first instance, to operate under contested, high-stress, and complex environments – including adversary electronic warfare and cyber capabilities. In my role as the DUSW(R&E), if confirmed, I will ensure that technology readiness experimentation evaluates commercial technologies to measure readiness for the modern battlefield. I look forward to working with industry, particularly nontraditional defense contractors, to implement these processes. I believe that many commercial technology providers will work with DoW to adapt their technologies for dual use if the process is simplified and streamlined.

Biotechnology

58. The National Security Commission on Emerging Biotechnology has released its final report. What are your views on their recommendations, and are there any specifically that you have identified that you would like to champion within DOD?

I have read the report and met with many of the Commissioners. Biotechnology and biomanufacturing provide innovative tools and capabilities that directly support DoW missions, strengthen domestic supply chains, and reduce reliance on foreign sources for critical materials. If confirmed, I look forward to supporting the Department's investments in biotechnology. Some of the Commission's recommendations have been included in the National Defense Authorization Acts under consideration in the House and Senate. I look forward to providing the Department's official response on those recommendations.

59. How would you propose that the Department improve its coordination and collaboration with other agencies involved with biotechnology research?

Sharing information across government agencies is too often a challenging and unwieldy process. If confirmed, I look forward to removing unnecessary barriers slowing or preventing collaboration by entities in the OUSW(R&E) enterprise with other Department entities and Federal agencies. Secretary Hegseth has made it a priority for the Department to eliminate unnecessary red tape within the Department. Following his leadership, reducing bureaucratic hurdles to meaningful collaboration will help increase the effectiveness of the OUSW(R&E) and ultimately benefit the warfighters.

60. How would you propose that the DOD better educate the workforce to understand the implications, as well as the risks and opportunities, for emerging biotechnology research on non-biology related S&T efforts?

Advances in emerging biotechnologies have inherent risks but also create opportunities. If confirmed, I would be interested to learn more about best practices and standards for biosafety and biosecurity to prevent against misuse, whether deliberate or accidental.

61. One particular area of emphasis for the commission's report is the intersection of data, artificial intelligence, and biotechnology. How would you propose increasing collaboration and investment between the Office of the USD(R&E) and the DOD CDAO to increase emphasis and unity of effort in fostering fundamental data processing capabilities to support biotechnology research?

Leveraging AI provides an incredible advantage, and the Department must continue to invest in quality, reliable, and assured AI processes and models.

The realignment of the CDAO to the OUSW(R&E) will only further the OSW's support of AI and biotechnology research. The OUSW(R&E) has a continued interest in fostering collaboration between industry and academic partners to create tools which can greatly further the ability of researchers to bring lifesaving technologies forward.

Microelectronics

62. If confirmed, specifically what steps would you take to ensure that the Department of Defense has assured access to the microelectronics it requires for defense systems?

I understand the OUSW(R&E) manages the Trusted and Assured Microelectronics Program (T&AM) program and the Microelectronics Commons Program. Initiatives under the T&AM program include accelerating access to the most advanced microelectronics technologies from domestic foundries, development of methods to verify and validate the integrity of microelectronics procured for DoW missions, and promoting technology refresh on DoD platforms through prototype and demonstrations of improvements in capabilities derived from incorporating advanced microelectronics into systems. If confirmed, I look forward to continuing to learn about the on-going efforts within the OUSW(R&E) and with interagency partners to ensure that DoW has access to the microelectronics it requires for defense systems.

63. What is your assessment of the Department of Defense's microelectronics needs, to include both legacy, state-of-the-practice, and state-of-the-art?

It is my understanding the Department has the need for a variety of microelectronics including legacy, state-of-the-practice, and state-of-the-art. Some of these needs are specific to DoW, such as radiation-hardened microelectronics, and others are needs shared with the commercial sector. If confirmed, I look forward to ensuring that the

Department has access to the many types of microelectronics it requires for defense systems.

64. If confirmed, what steps would you take to ensure that the nation has an effective microelectronics research enterprise?

Microelectronics has been designated as a Critical Technology Area under the OUSW(R&E) which constructs research and technology roadmaps with reference to microelectronics research activities at other agencies. I would consider assessments of the microelectronics workforce, infrastructure, and industrial base capabilities are conducted and updated to identify gaps and opportunities that can be addressed with DoW research initiatives.

65. What role should the Department of Defense play in supporting the commercial microelectronics industry?

The DoW relies on a robust microelectronics industrial base to manufacture the components needed to ensure that DoW systems deliver the capabilities needed by the warfighter. Research and development to accelerate DoW adoption of the most advanced microelectronics technologies supports the commercial microelectronics industry to the benefit of both defense and economic security. In addition, if confirmed I will support technology transfer of the results of DoW microelectronics research and development to the commercial electronics industry.

66. What role should the Department of Defense play in working with the interagency regarding domestic production of microelectronics?

The DoW and the rest of the U.S. Government, collectively, can help aggregate demand for microelectronics supported through onshore full lifecycle capabilities. Communication and collaboration across the U.S. Government is key to identifying critical needs that are shared across agencies and prioritizing domestic production. Interagency engagement is a key element of the OUSW(R&E)'s mandate to construct research and development roadmaps and perform industrial base assessments of capabilities. I look forward to engaging across the U.S. Government to ensure DoW's needs are met.

67. How can the Department of Defense reduce or mitigate its dependence on foreign sources of microelectronics for its systems and programs?

Onshoring both advanced microelectronics manufacturing and the supply chains that support the industrial base will reduce DoW reliance on foreign sources. If confirmed, I look forward to continuing to learn more about the OUSW(R&E)'s efforts under the T&AM program to promote domestic manufacturing of advanced microelectronics**.**

68. What are your views on the role of the Office of the USD(R&E) within the Joint Federated Assurance Center, and the office's role in updating the charter based on Section 922 of the FY25 NDAA?

I understand the OUSW(R&E) established and maintains the Department's Joint Federated Assurance Center to develop and provide software and hardware assurance capabilities and expertise and that a Joint Federated Assurance Center Executive Steering Group, co-chaired by the USW(R&E) and the USW(A&S), is being established to govern the Joint Federated Assurance Center. I look forward to learning more about the OUSW(R&E)'s role in updating the charter based on Section 922 of the NDAA for FY 2025. I understand that the implementation of Section 922, including the JFAC charter update is important and, if confirmed, I commit to working to carrying it out and making myself available to discuss it in support of the USW(R&E).

69. What is your assessment of the effectiveness of the secure enclave initiative?

I understand that the Microelectronics Secure Enclave (MSE) program office was established inside the Department of the Air Force to provide oversight and direction of the nation's investment in a secure state-of-the-art (SOTA) microelectronics advanced fabrication and packaging capability in support of the Secretary of War's priority to rebuild the military through reviving the U.S. defense industrial base. I look forward to learning more about the OUSW(R&E)'s role with regard to the assessment of the effectiveness of the secure enclave initiative.

70. If confirmed, do you believe that the evidence-based assurance initiative should receive greater priority and investment than it has to date?

I understand that Section 922 of the NDAA for FY 2025 directs the OUSW(R&E) and the OUSW(A&S) to foster and mature evidence-based assurance of trusted defense microelectronics systems' needs. I look forward to learning more about the OUSW(R&E)'s priority and investments to date with regard to the evidence-based assurance initiative.

Using Commercial Technology for National Security Missions

71. If confirmed, what changes would you pursue to current research and engineering, experimentation, and prototyping processes to make better use of commercial technologies?

We must utilize the strength and innovation of the U.S. commercial sector, particularly dual-use technology, to assist the DoW and improve Warfighter lethality. In fields like AI, microelectronics, quantum science, space-based systems, and hypersonics, the pace of innovation outside government is far faster than within. The Department must close that gap by creating new collaborations and leveraging existing innovation on-ramps. The Department must identify operational problems to

solve and perform rapid prototyping and fielding. In my role as the DUSWUSW(R&E), if confirmed, I will advocate for the Department to fully leverage U.S. industry within the DoW's authorities and authorizations.

72. If confirmed, how would you effectively transition the outputs of such processes to major defense acquisition programs or capabilities that are fielded at scale within the Military Departments?

An important issue is the traditional budget process which is not well suited to rapidly emerging solutions. This has historically posed significant challenges for small businesses and other innovative businesses that desire to work with DoW. The Accelerate the Procurement and Fielding of Innovative Technologies (APFIT) program provides a model which has been successful at bridging the gap. Flexibility in funding is critical to accelerate prototyping, transition, and fielding, but the DoW must also endeavor to make decisions faster and communicate more clearly to ensure that these factors are improved and do not impact aspiring vendors.

73. Many of the Military Departments have created their own organizations to make use of commercially available technologies. If confirmed, what role for you see for the Office of the USD(R&E) in coordinating those efforts with each other and with the Office of the USD(A&S), such that unnecessary overlaps in investment are avoided?

The OUSW(R&E) can play a more assertive role in forecasting when Military Service programs should begin based on anticipated technology readiness levels and capability maturity, matching technology with purchasing opportunity. The OUSW(R&E) also has tools it can leverage to conduct transition, like the Accelerate the Procurement and Fielding of Innovative Technologies (APFIT) program, designed to address the mismatch between the pace of budgeting and accelerated development. The Department can advance technology development through increased emphasis on multi-service collaboration and operational experimentation with the Combatant Commands.

Manufacturing

74. How should the Department of Defense use investments in advanced manufacturing capabilities to support achieving the goals of the INDSG?

In alignment with the Interim National Defense Strategic Guidance, the OUSW(R&E) should strategically invest in advanced manufacturing to rapidly scale production of critical components, deter China by accelerating the development of next-generation weapons and resilient supply chains, and empower allies by streamlining technology transfer. If confirmed, my office would utilize the DoW Manufacturing Technology Program – already collaborating with the United Kingdom on additive manufacturing and working with the USINDOPACOM on biomanufacturing requirements – and the DoW Manufacturing Innovation Institutes, the Department's advanced manufacturing public-

private partnerships. Focused, joint-Service advanced manufacturing investments should prioritize cybersecurity, workforce development, and standardization to translate technological breakthroughs into tangible warfighting advantages. Partnering with the OUSW(A&S) will be crucial to accelerating research and development into acquisition using non-traditional, commercial companies, including expeditionary manufacturing capabilities within the USINDOPACOM regions.

75. In your view, how can the Department better advance and integrate biomanufacturing processes to meet the needs of the Department?

In my view, the Department should prioritize strategic investments in domestic infrastructure and workforce development, coupled with clear articulation of defense-specific requirements and performance metrics. Fostering collaborations between academia, industry, and government labs, while incentivizing dual-use biomanufacturing applications and streamlining regulatory pathways and acquisition processes for biomanufactured products, will all be essential to meeting the needs of the Department. I think we should leverage proven models, like Tri-Service Biotechnology for Resilient Supply Chains (T-BRSC) and the Distributed Bioindustrial Manufacturing Program (DBIMP), with integrated funding pathways spanning 6.2 through 6.4 activities and cross-functional program structures, to rapidly mature biomanufacturing to meet Defense needs. I believe we should also leverage DoW-led public-private partnerships, including the Manufacturing Innovation Institutes, to connect our research enterprise with industry and academia to rapidly scale breakthrough technologies while maintaining mission-critical standards.

Systems Engineering and Prototyping

76. Does the Department of Defense have sufficient systems engineering expertise in its current workforce and contractor base?

If confirmed, in support of the USW(R&E), I would want to fully assess the capabilities of the current workforce and contractor base. Regardless, in order to address emerging challenges, we need to continuously enhance this expertise. The OUSW(R&E) leads a number of initiatives to upskill the systems engineering workforce. These efforts focus on equipping individuals with the necessary skills to perform critical acquisition tasks, such as systems engineering, digital engineering, production, quality assurance, manufacturing, information technology, agile software development, and testing. It is also important that we enable new contractors to compete for DoW business so that we have a more robust ecosystem.

77. What changes, if any, do you believe should be made in the Department's systems engineering organizations and practices?

Engineering serves as the foundation for technology development, transition, acquisition, and sustainment. Studies of DoW acquisition outcomes have shown that implementing rigorous foundational engineering activities early in the capability life

cycle leads to improved cost, schedule, and performance results. To achieve this, the Department must prioritize modular open systems architecture, digital engineering, and workforce training to deliver capabilities to the warfighter. By doing so, it can effectively identify, mitigate, and prevent potential challenges in development, manufacturing, deployment, and sustainment.

78. What role does prototyping play in efforts to increase the success of the Department's acquisition efforts?

The development of advanced prototypes, coupled with rigorous experimentation in representative environments, has rapidly fielded warfighting capability. When coupled with appropriate, timely resource planning, prototyping and experimentation has enabled the Department to bring operational capabilities to the force two to five years faster than traditional acquisition pathways. If confirmed as the DUSW(R&E), I will explore the full potential of this approach with the Military Services and acquisition leaders.

79. If confirmed, how would you work to increase the breadth and scope of systems engineering projects and prototyping efforts undertaken by the Department and its contractor base?

The development of advanced prototypes, coupled with rigorous experimentation in representative environments, has rapidly fielded warfighting capability. When coupled with appropriate, timely resource planning, prototyping and experimentation has enabled the Department to bring operational capabilities to the force two to five years faster than traditional acquisition pathways. If confirmed as the DUSW(R&E), I will explore the full potential of this approach with the Military Services and acquisition leaders.

80. What are your views on the maturity and availability of digital twin or model based systems engineering tools in the commercial space, and their potential applicability for DOD needs. Please explain your answer.

Mission engineering processes provide the approach for systems analysis across complex operational environments. This approach defines breadth and scope of system engineering projects and prototyping efforts to fill critical warfighting gaps. These gaps are shared across the development community, academia, and industry for common understanding. This approach aligns a common threat, mission thread, and systems-of-systems architectures across the community. Shared development results in comprehensive solutions for acquisition.

<u>Venture Capital and Private Equity</u>

81. In your view, what role should venture capital and private equity firms play in the Department's investments in developing technologies, including in the Small Business Innovation Research program?

Venture capital (VC) and private equity investment in defense technologies could play an even bigger role in the revitalization of the defense industrial base, particularly for small businesses seeking to gain entry and provide innovative solutions to meet evolving warfighter demands, delivering breakthrough, war-winning capabilities. Programs such as Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) provide opportunities for small businesses – many of which are VC-backed – to be a part of these revitalization efforts. If confirmed, I will pursue opportunities within the Defense SBIR/STTR programs that allow for small businesses to leverage critical defense VC investment, increasing the ability to rapidly develop and field critical capabilities at scale.

82. What advantages and disadvantages do you see in the use of venture capital and private equity strategies?

Through programs at the Office of Strategic Capital (OSC), DoW leverages one of the U.S. strengths by leveraging the investment acumen and skillsets of successful and experienced fund managers who act as a force multiplier to surface, foster, and develop new critical technologies, components, and production processes vital to national and economic security. Such strategies can involve risk, particularly given investments in emerging technology companies, but funds can mitigate that risk by taking a portfolio approach while programs, such as SBIR/STTR, provide opportunities to fuse Government research and development funding with private capital from defense venture and private equity firms. Technology transition programs focused on bridging innovative solutions developed through the SBIR/STTR programs can benefit from contracting with VC-backed small businesses. With the Department's strategic efforts to acquire dual-use technologies in lieu of home-grown solutions, firms backed by private VC demonstrate strong commercial demand, which provides a level of both cost and technical risk mitigation when the Government is assessing investment of finite sources towards a particular solution or capability.

One disadvantage of VC and private equity strategies is that investors may need to see returns on a shorter timeframe, which may not be conducive for certain research projects. However, with clearer communication and changes that enable funding in earlier intervals, we could improve the effectiveness.

83. Should the Department decide to use venture capital and private equity strategies, what steps do you believe should be taken to ensure that Department funds are invested in technologies and companies that properly reflect national defense priorities, avoid the potential for conflicts of interest by industry partners, and to ensure that the Department's investments are not diluted?

The DoW National Defense Science and Technology Strategy specifies 14 Critical Technology Areas vital to national security. Within that framework and consistent with statute, the OSC Investment Strategy further identifies and prioritizes integrated

strategies for maintaining and enhancing competitive advantage. Investments can fail to reap synergies that might otherwise be available through coordination, both within OSC's portfolio and with the adjacent efforts of interagency partners and the private sector.

A foundational component of OSC's activities with VC and private equity funds is the requirement for participating funds to invest a significant portion of its portfolio in the DoW Critical Technology Areas. OSC, through its own authorities and interagency partnerships, embraces these target areas for investment and implements programs aligned with DoW needs. Furthermore, OSC's initial program invests in the funds (rather than competing with industry as a direct venture or private equity investor), which alleviates inherent conflicts. OSC's mandate could be further extended to back-up financing to even further extend its purview.

84. How can the Department leverage other innovative financing strategies, like loans, loan guarantees, equity or reinsurance to help support the technology development strategies of the Department?

Capital markets are a major source of strength for the United States in the global competition for technological advantage. DoW can leverage the advantage provided by capital markets through financial instruments like loans and loan guarantees, equity, and re-insurance, all of which have been used as part of proven strategies to attract and scale private capital in support of national security priorities, including the development of critical technologies, their components, and the ability to grow and scale production. When paired with DoW's expertise with promising critical technologies, supply chains, and broader industrial base requirements, these tools enable efficient investments that deliver unprecedented value to DoW and the taxpayer.

85. What other strategies do you intend to employ, if confirmed, to ensure that the nation's most innovative companies work on the Department's research and engineering programs?

OSC works with the private sector to strengthen technological advantages in the United States. By aligning Government and private sector incentives around technology areas vital to national security and economic security, DoW uses the power of the market and economic competition to attract the capital required for critical technology investment through organizations like OSC and programming like the SBIR/STTR Strategic Funding Increase.

International Research Cooperation

86. In your view, how should the globalization of defense technology affect the Department of Defense's research and technology development and investment strategy?

If confirmed, I would seek to increase opportunities for industry to provide commercial solutions to the hardest defense problems. I would also engage with our allies and partners to leverage their technological capabilities to complement and protect the Department's strategic investments in technology maturation and capability delivery. The OUSW(R&E) investment strategy should focus on reestablishing deterrence and maintaining strategic advantage while preventing critical technologies from falling into the hands of global adversaries or competitors.

87. In your view, what are the obstacles to more effective international cooperation, and, if confirmed, how would you address those obstacles?

From my perspective, the most significant obstacles to effective international research and development cooperation are conflicting priorities. If confirmed, I would increase awareness across the DoW Components' international science and technology activities to promote transparency and accountability across the Department as well as ensuring the DoW Research and Engineering Enterprise pursues international collaboration, both government-to-government and with industry, in support of the Secretary's strategic priorities and to deliver capabilities at the speed of relevance. Finally, I intend to work with the DoW Components to identify funding that will be used specifically to pursue international cooperation with Allies and partners that bring an equitable investment to collaborative activities.

88. In your view, what are the benefits of international technology cooperation on our domestic defense industrial base?

If confirmed, I would work with the DoW Components to consider acquisition and sustainment pathways early in the co-development process. This will allow the U.S. defense industrial base to leverage the industrial bases of trusted allies and partners to meet DoW procurement and production demands, potentially leading to a more competitive and innovative ecosystem.

Test and Evaluation

89. What are your views on the adequacy and effectiveness of the Department of Defense's developmental test and evaluation activities?

Thorough testing in an operationally realistic environment is critical for informing acquisition decision making, identifying programmatic opportunities to apply additional engineering and risk mitigation resources, and ensuring operational readiness. I believe that DoW still has work to do to align its test activities with the Adaptive Acquisition Framework and to ensure that test and evaluation processes are properly structured to assess software-intensive systems, new capabilities such as artificial intelligence-enabled autonomous systems, and to leverage new systems engineering approaches such as digital engineering.

90. What modifications would you recommend to the test and evaluation processes in the Department to more efficiently and quickly develop and deliver operationally effective and suitable technologies to the warfighter?

If confirmed, I look forward to improving the Department's use of digital ecosystems across the capability lifecycle from science and technology work through systems delivery and sustainment while providing data-driven decision making through a campaign of learning, all focused on delivering operationally effective and suitable technologies to the warfighter.

91. What role do you believe OSD should play in developmental test and what type of organizational structure and staffing is required to effectuate this role?

Per section 133a of title 10, U.S. Code, the USW(R&E) is responsible for establishing policies on and supervising developmental testing activities and programs across the Department. If confirmed, I will work with the USW(R&E) to review the existing organizational structure and staffing and from that advise the USW(R&E) to determine what, if any, changes are needed to maintain an effective developmental test and evaluation role across the Department.

92. What are your views with respect to the Test Resources Management Center and in particular with respect to ensuring the services budget appropriately funding for Major Range Test Facility Bases such as the Ronald Reagan Ballistic Missile Test Site?

I support the National Defense Authorization Act for FY 2025, which gives the TRMC additional authorities to oversee the support infrastructure on the Kwajalein Atoll in the Marshall Islands, which encompasses the Ronald Reagan Ballistic Missile Test Site. If confirmed, I look forward to working with the Director of the TRMC and the Secretary of the Army to ensure these facilities are adequately maintained and upgraded consistent with Secretary Hegseth's priorities.

93. Do you believe the Office of the Test Resource Management Center has sufficient resources and authority to manage the test and evaluation infrastructure of the Department? If not, what changes would you recommend?

If confirmed, I look forward to working with the TRMC to understand its current resources and authorities and to determine if those are sufficient to manage the T&E infrastructure for the Department.

94. Do you believe the Department has sufficient test and evaluation infrastructure to support the needs of both research and development and acquisition? If not, how would you ensure DOD has sufficient test and evaluation infrastructure?

As I understand it, the Department faces big challenges in meeting the projected demand for testing new technologies like hypersonic weapons. If confirmed, I will

need to verify that the Department's current and planned T&E infrastructure will be sufficient to meet projected demand. I would work with the requisite stakeholders to determine sufficiency of current T&E infrastructure and make any necessary adjustments.

Small Business Issues

The Department of Defense has the largest Small Business Innovation and Research Program (SBIR) government wide. In 2025, the SBIR program will be up for renewal.

95. What recommendations do you have to improve the Department's use of the Small Business Innovation Research programs in order to develop and field new, advanced capabilities?

The SBIR/STTR programs are important tools to grow the small business ecosystem that is critical to Department's modernization efforts. These programs have delivered numerous technologies and capabilities that have been adopted by warfighters and commercial entities. It is essential that the programs are executed in a manner that prioritizes Departmental needs, ensures merit-based selection procedures, and decreases barriers to entry to ensure a robust defense industrial base. If confirmed, I look forward to reviewing the SBIR and STTR programs to build on existing improvement initiatives and ensuring robust delivery of critical capabilities expeditiously and consistent with the demands of the Department.

96. If confirmed, how would you work to ensure that the Small Business Innovation Research (SBIR) program is an integral part of DOD modernization strategies and activities?

The DoW invests over $3B each fiscal year through the SBIR/STTR programs in innovative technologies to meet critical needs of the warfighter and grow and modernize the defense industrial base while ensuring responsible stewardship of taxpayer funds. If confirmed, I am committed to working with Congress, the Service Acquisition Executives, and all other parties of interest to ensure that the SBIR/STTR programs are fulfilling their missions of developing and delivering innovation, consistent with the Department's modernization strategies and Critical Technology Areas.

97. If confirmed, how might you modify the SBIR program to improve the transition of S&T capabilities into acquisition programs?

Many game-changing technologies adopted by DoW came from small innovative businesses. The SBIR and STTR programs are important tools to support the small business ecosystem. If confirmed, I look forward to reviewing these programs and driving efficiencies. I will work closely with Congress and with my counterpart, the Deputy Under Secretary of War for Acquisition and Sustainment, to make appropriate improvements to the SBIR program.

98. If confirmed, how might you modify the SBIR program to improve its ability to attract new entrants into the defense ecosystem, such as small startup companies, as participants?

Small business concerns, including nontraditional defense contractors, may require additional assistance to understand Government-specific processes and procedures such as proposal submission requirements, pre-award activities, cybersecurity rules and practices, and foreign disclosure requirements. If confirmed, I would work with the Under Secretary of War for Acquisition and Sustainment and the Director of the DoW Office of Small Business Programs to review ways to increase opportunities to educate small business concerns, ensuring the Department is making a concentrated effort to educate small businesses on how to do business with DoW.

99. If confirmed, what steps would you take to improve DOD's consideration of intellectual property rights as an incentive for small business to engage with the Department?

Many game-changing technologies adopted by DoW came from small innovative businesses. The SBIR and STTR programs are important tools to support the small business ecosystem. If confirmed, I look forward to reviewing these programs and working with my counterpart, the Deputy Under Secretary of War for Acquisition and Sustainment, on ways to improve how the Department incentivizes small business to engage with intellectual property rights.

100. What emphasis would you place, if confirmed, on participation by the acquisition community in setting research priorities for the SBIR program and in incorporating new technologies and methods into existing programs of record?

Many game-changing technologies adopted by DoW came from small innovative businesses. The SBIR program is an important tool to support the small business ecosystem. If confirmed, I look forward to reviewing this program and working with my counterpart, the Deputy Under Secretary of War for Acquisition and Sustainment, to involve the acquisition community in setting research priorities for the program and incorporating new technologies and methods into existing programs of record.

101. The recently introduced INNOVATE Act, which would reauthorize the SBIR/STTR program, includes firm caps on the number of proposals that can be made each year. Do you have any concerns about how these caps might limit the Department's ability to leverage the SBIR/STTR program?

If confirmed, I look forward to learning more about the INNOVATE Act and the caps issue.

102. As Congress focuses on reauthorization of SBIR and STTR in 2025, in your view, are there authorities that could be expanded to incentivize the number of new entrants into the SBIR program?

The SBIR program is an important tool to support the small business ecosystem. If confirmed, I look forward to reviewing this program and exploring how the Department can incentivize new entrants into the SBIR program and improve its effectiveness. Current authorities lack a clear definition of open topics, so I believe a clearer definition is needed to ensure consistency of open topic generation across the Department. Additionally, I would like to see the Department have a delegation of authority for setting threshold amounts for Sequential Phase II awards to more effectively take innovative solutions across the valley of death, scale production or operational testing, and reach program transition or commercialization.

103. If confirmed, what steps would you take to improve existing risk management processes to ensure intellectual property and technology do not end up with adversaries?

If confirmed, I will review the current policies and data captured by the Defense SBIR/STTR Program Office with regards to due diligence and explore how to work with different stakeholders to improve existing risk management to ensure intellectual property and technology do not end up in the hands of adversaries.

104. In what ways can the Department balance the desire for new entrants into the defense space with the need for veteran SBIR providers that have a successful track record for delivering needed technology solutions to the Department?

If confirmed, I will work with the Defense SBIR/STTR Program Office to review the current ratio of new entrants to existing awardees and commit to ensure that policies are in place to meet the needs of the Warfighter.

105. How can we better collect and align data on SBIR between the DOD components and that collected and presented by the Small Business Administration to ensure consistent analysis of outcomes?

If confirmed, I would explore opportunities to improve data collection.

Defense Laboratories

106. What is your overall assessment of the technical capabilities and quality of Defense laboratories relative to their peers at the Department of Energy, and in Federally Funded Research and Development Centers (FFRDCs), industry, and academia—both foreign and domestic?

Defense laboratories and FFRDCs can play a critical role in national security by conducting specialized research and developing technologies not easily replicable elsewhere. Comparing them to other sectors, including the foreign sector, requires careful consideration of their distinct missions, strengths, and limitations.

107. In your view, are there specific or unique capabilities the defense laboratories provide the Department that industry would not be capable of providing?

The defense laboratories do have unique capabilities. The defense laboratories have world-class scientists and engineers capable of leading the development of technologies critical to the distinctive needs of the military fighting force. With quality scientists and engineers and unique laboratories and testing facilities, the defense laboratories are capable of tackling high risk technical challenges that may be in some cases beyond what industry and academia can achieve on their own. In addition, as leaders in technology development, the defense laboratories and test centers focus on the needs of the warfighter as their top priority.

108. What do you believe to be the most effective management and human resources approaches for personnel at these Defense laboratory facilities?

An innovative and empowered workforce requires a flexible and progressive human resources system. My understanding is that the Department's Science and Technology Reinvention Laboratory (STRL) Personnel Demonstration Program (Lab Demo), managed by the OUSW(R&E), may meet this need. The OUSW(R&E) collaborates with the STRLs to leverage congressional workforce authorities and to develop new personnel flexibilities to enable them to recruit, retain and cultivate a quality and optimized Department laboratory workforce.

109. If confirmed, what specific steps, if any, would you take to improve the quality, technical capabilities, and mission performance of the Defense laboratories?

If confirmed, I would seek to review the defense laboratories and identify ways to improve quality, technical capability and mission performance across the enterprise.

<u>Personnel Management</u>

110. If confirmed, which particular research and engineering workforce challenges would you focus on first?

The Department must be able to attract top talent not only literate in the latest technologies but also capable of learning and adapting to future technological developments. It is critical that the Department's R&D work happens at the speed of relevance. However, as new technologies develop and mature faster than ever before,

it is becoming difficult to maintain a workforce and an overall organization that can keep pace. Having a workforce that can rapidly learn and integrate new methods, technologies, and strategies will allow the Department to absorb and capitalize on new technologies rather than to be left behind.

111. Should the Office of the USD(R&E) and organizations under the purview of the USD(R&E) be permitted to apply the same hiring flexibilities as those of the Defense Advanced Research Projects Agency or the Defense laboratories, in your view?

If confirmed, I look forward to assessing existing and potentially new hiring and retention authorities.

112. If confirmed, how would you work with the personnel policy and management communities within the Office of the Secretary of Defense and the Military Departments to ensure that personnel flexibilities are delegated to the lowest appropriate level?

If confirmed, I will coordinate with Under Secretary Michael, the OUSW(R&E) components, and the Military Departments to assess their needs to continue supporting their human capital requirements and improving their critical skills to ensure that critical technologies are rapidly fielded.

113. In your view, does the Department of Defense have adequate technical expertise within the government workforce to execute its designated acquisition and technical development missions?

Ensuring that the Department has access to and retains the best and brightest candidates in the workforce is essential. It is also important that these experts maintain their technical literacy and maintain pace with the capability development in critical technology areas. If confirmed, I will strongly support DoW efforts to improve workforce recruitment, retention, and technical development such that the Department has the right skills and expertise to lead in these critical areas.

114. Are there "health metrics" that the DOD is or could be using to help ensure that the DOD research enterprise workforce is adequately sized for all of the tasks assigned to it?

Capturing workforce capabilities and especially the necessary systems engineering expertise to successfully enable each critical technology area is one important metric that should be included in assessing the strength of the Department's research enterprise.

Defense Advanced Research Projects Agency (DARPA)

115. What adjustments would you expect to make, if confirmed, in the current style of DARPA research program management and investment strategy?

If confirmed, I look forward to learning more about DARPA's program management and investment strategy.

116. What is the appropriate relationship between DARPA and the Military Service S&T programs and laboratories?

It is my current understanding that DARPA executes its high-risk model because of the existence of the Military Service S&T organizations that diligently pursue more evolutionary requirements-driven research. While the Military Service laboratories frequently provide the "Plan A" baseline for program advancements, DARPA offers a disruptive "Plan B" that, if successful, creates leap-ahead capabilities, accelerated timelines, and/or dramatically reduced costs. Sometimes DARPA proves that a new technological vector is possible but needs the Military Service laboratories to carry out the maturation and system application work necessary to scale the new technology. The key to making these handoffs effective is ensuring that the Military Services don't get stuck in "sunk cost" or "not invented here" thinking that would keep them from embracing DARPA-created disruption and that the Military Services have the budget flexibility to be able to quickly pivot to new DARPA-driven opportunities.

117. If confirmed, what steps would you take to improve DARPA's effectiveness in transitioning successful programs and innovations to the Services?

If confirmed, I look forward to learning more about DARPA's approach to, and record of, transition to the Services.

Office of Strategic Capital

118. What is your understanding of the role and function of the OSC?

It is my understanding that the OSC's role is to attract and scale private capital investment in critical technologies and critical components in the supply chain to support American national and economic security. The OSC leverages the inherent competitive advantage of U.S. capital markets through loans and loan guarantees to motivate capital markets to support investments in areas that have been deemed critical by the Department. These priorities include production and component-level technologies critical to national security that adversaries are also currently prioritizing.

119. How does OSC play a role in accomplishing the Department's core missions and functions?

The United States is in a technological-economic competition with global adversaries such as China. That competition requires critical component and production-level inputs that feed into both defense and commercial capabilities that advance U.S. national security in this competition. I understand the Department has historically provided grants for research and development and contracts for capabilities; however, the OSC uses Federal credit to incentivize capital markets to make investments into those component and production-level critical technologies that are critical for present and future national security. These direct investments address a "missing middle" segment of the current market and increase competitiveness and resiliency in the U.S. industrial base and supply chains.

Science, Technology, Engineering, and Mathematics (STEM) Education

120. In your view, what role should the Department play in supporting STEM education, including for military dependents?

If confirmed, I look forward to learning more about the role that the Department plays in STEM education. We should seek opportunities, as appropriate, to support military dependents. Clearly, the Department relies on talented scientists and engineers in the public and private sectors to carry out its mission.

121. In your view, what role should the Department play in supporting STEM education opportunities for transitioning service members?

If confirmed, I look forward to learning more about the role that the Department plays in STEM education. Clearly, the Department relies on talented scientists and engineers in the public and private sectors to carry out its mission.

Health of R&D Enterprise

122. What is your assessment of the current health of the Department of Defense's R&D enterprise as a whole?

From my perspective, there are several opportunities to improve health of the Department's R&D enterprise. First, the Department needs to identify and eliminate unnecessary bureaucratic processes that hinder its ability to act quickly in development of new technology. Second, the Department needs to ensure that all DoW R&D efforts directly support an existing warfighter need. Third, there needs to be a move away from the risk-averse culture that is prevalent across the Department's R&D enterprise; if our military is going to stay ahead technologically of our adversaries, then we need to be bold and take risks in our R&D. Secretary Hegseth and Under Secretary Michael are already orienting the Department and the

OUSW(R&E) in this direction, and if confirmed, I would pursue all three of these opportunities and follow the Secretary's leadership.

123. Are the statutory authorities, rules, and regulations currently in place to govern the Department's R&D conducive to a healthy enterprise? Please explain your answer.

The Department's R&D efforts must move at the speed of relevance. To keep up with the quickening pace of technological development, the Department needs to be agile and flexible.

As a former Congressional staffer, I appreciate the need for the Department to maintain a close relationship with Congress. If confirmed, I intend to prioritize the OUSW(R&E)'s engagements with Congress and ensure there is always an open line of communication concerning R&E's authorizing statutes.

124. The Department has recently taken criticism for not devoting enough funding to constructing and upgrading facilities, especially those related to testing and R&D. If confirmed, how would you address that issue?

The Department's modernization of S&T and T&E infrastructure is critical to retaining the Nation's global leadership and development of decisive technology to compete with our adversaries. If confirmed, I will work with the USW (R&E) in understanding and advocating for a long-term infrastructure strategy, which will address these issues.

<u>Congressional Oversight</u>

In order to exercise legislative and oversight responsibilities, it is important that this committee, its subcommittees, and other appropriate committees of Congress receive timely testimony, briefings, reports, records—including documents and electronic communications, and other information from the executive branch.

125. Do you agree, without qualification, if confirmed, and on request, to appear and testify before this committee, its subcommittees, and other appropriate committees of Congress? Please answer with a simple yes or no.

Yes.

126. Do you agree, without qualification, if confirmed, to provide this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs such witnesses and briefers, briefings, reports, records—including documents and electronic communications, and other information, as may be requested of you, and to do so in a timely manner? Please answer with a simple yes or no.

Yes.

127. Do you agree, without qualification, if confirmed, to consult with this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs, regarding your basis for any delay or denial in providing testimony, briefings, reports, records—including documents and electronic communications, and other information requested of you? Please answer with a simple yes or no.

Yes.

128. Do you agree, without qualification, if confirmed, to keep this committee, its subcommittees, other appropriate committees of Congress, and their respective staffs apprised of new information that materially impacts the accuracy of testimony, briefings, reports, records—including documents and electronic communications, and other information you or your organization previously provided? Please answer with a simple yes or no.

Yes.

129. Do you agree, without qualification, if confirmed, and on request, to provide this committee and its subcommittees with records and other information within their oversight jurisdiction, even absent a formal Committee request? Please answer with a simple yes or no.

Yes.

130. Do you agree, without qualification, if confirmed, to respond timely to letters to, and/or inquiries and other requests of you or your organization from individual Senators who are members of this committee? Please answer with a simple yes or no.

Yes.

131. Do you agree, without qualification, if confirmed, to ensure that you and other members of your organization protect from retaliation any military member, federal employee, or contractor employee who testifies before, or communicates with this committee, its subcommittees, and any other appropriate committee of Congress? Please answer with a simple yes or no.

Yes.