

Senate Armed Services Committee
Advance Policy Questions for Lieutenant General Bradley C. Saltzman, US Space Force
Nominee for Appointment to be Chief of Space Operations of the Space Force

Duties

Section 9082 of title 10, United States Code, describes the duties and functions of the Chief of Space Operations of the Space Force.

What is your understanding of the duties and responsibilities of the Chief of Space Operations of the Space Force?

A. The Chief of Space Operations (CSO), acting under the authority, direction, and control of the Secretary of the Air Force, prepares Guardians and space forces to defend the nation, protect its interests, and defeat its enemies. In my appraisal, the CSO does this through four (4) distinct functional responsibilities: 1) As a Service Chief, the CSO is directly responsible to the Secretary of the Air Force for the organizational health and strength of the US Space Force. 2) As a member of the Joint Chiefs of Staff, the CSO is responsible for providing military advice through the Chairman of the Joint Chiefs of Staff to the Secretary of Defense, President, and Congress. 3) As a Space Chief on the international stage, the CSO works to enhance global partnerships with our Allies and like-minded nations to maintain a safe, secure and stable space environment. 4) As the Force Design Architect for Space Systems of the Armed Forces the Chief of Space Operations, under the authority, direction, and control of the Secretary of the Air Force, is responsible for presenting integrated force design recommendations to the Secretary of Defense for space systems of the Armed Forces necessary to meet identified joint requirements and support the National Security Strategy.

What background and experience, including joint duty assignments, do you possess that you believe qualify you to perform these duties?

A. My qualifications to serve as the second Chief of Space Operations are built upon the education, training, and operational experiences I have collected over a 31-year career focused on military space operations. Command tours at multiple echelons have prepared me to lead and serve Guardians while four (4) staff tours at the Pentagon have developed my understanding of DoD corporate processes and prepared me to interact with Congress, the White House, the Office of the Secretary of Defense leadership, and the Joint Chiefs of Staff. Specifically, I served as Chief of Combat Plans and Chief of Combat Operations for the Joint Space Operations Center (now CSpOC) at Vandenberg SFB, including leading the operations when the Chinese conducted their Anti-Satellite (ASAT) test destroying a satellite in 2007. I served twice in the National Reconnaissance Office including commanding the Aerospace Data Facility – Colorado ground station. My final position in the USAF was serving as the Deputy Commander for Air Forces Central Command and the Deputy Combined Forces Air Component Commander where I was responsible for day-to-day management of the air and space campaign in the Central Command area of responsibility. Most importantly, for the last 2+ years I have served as the first Deputy Chief of Space Operations for Operations in the US Space Force where I have had responsibility for intelligence, space and cyber operations, logistics and sustainment, training and readiness,

and nuclear matters. In this role, I have been central to the establishment of many of the new Service's foundational processes, policies and organizational constructs. If confirmed, I am committed to enhancing US Space Force partnerships within the Department of the Air Force as well as with the other services, joint staffs and OSD teammates.

Do you believe that there are any steps that you need to take to enhance your ability to perform the duties and responsibilities of the Chief of Space Operations of the Space Force, particularly in regard to serving as a member of the Joint Chiefs of Staff and in performing certain acquisition-related functions?

A. Yes. If confirmed, I will continuously seek to enhance my ability to perform the duties of the Chief of Space Operations to the level our Guardians deserve, and our nation demands. In my current position as a Deputy Chief of Space Operations for Operations in the Office of the Chief of Space Operations, I am familiar with Service-level resourcing and acquisition efforts; however, an expanded understanding of Space Force acquisition issues will enhance my ability to serve as CSO. If confirmed, my initial preparatory efforts will focus on strengthening my understanding of mid- and long-term force design and acquisition initiatives that are beyond the scope of my current responsibilities. Through this preparation, I will work closely with Assistant Secretary of the Air Force for Space Acquisitions and Integration, Mr. Frank Calvelli, and support his efforts to transform Department of the Air Force space acquisitions and synchronize them across the DoD. In order to properly represent Guardians across the DoD, I will also prioritize developing personal working relationships with the Chairman and Vice Chairman of the Joint Chiefs of Staff, the other Service chiefs, the Combatant Commanders, and OSD leadership. Finally, I will place a high priority on expanding my relationships with members of Congress and their staffs, as I believe it is vital to have mutual trust, respect and open communications between us if we are going to collectively ensure the effectiveness of the US Space Force.

If confirmed, what innovative ideas would you consider providing to the Secretary of the Air Force for enhancing the organization, training, and equipping of the Space Force?

A. If confirmed, I will recommend the Secretary of the Air Force build on the successes of my predecessor and the rest of the Space Force by accelerating initiatives to build a lean, agile, and innovative Service. I believe that if these principles are appropriately applied at the squadron level and below, we can ignite further innovation by empowering Guardians, simplifying the chain of command, and delegating responsibility to the lowest level possible. We should also continue to review and evaluate the career fields used to categorize the expertise of our Guardians. Because space is a remote domain with digital and technological dependencies, space operations cannot be separated from military intelligence, cyber operations, engineering, and acquisition activities. Effective military operations in space will depend on our ability to combine all of this expertise into high-performing teams. Finally, I will present ideas to train and educate the Guardian using innovative approaches. Training for a contested space domain offers opportunities to leverage virtual reality training and synthetic training environments allowing Guardians to creatively assess new tactics and gain experience in future operations. I also believe we can be innovative in how we educate our Guardians by leveraging experiences

with space and other high-tech industries. If confirmed, I plan to explore these ideas to ensure our Guardians have the best opportunities to advance their expertise and skills.

What are your goals, if confirmed, for the transformation of the Space Force to meet new and emerging threats?

A. If confirmed, I would have three overarching goals for the Space Force: (1) field combat-ready forces, (2) amplify Guardian talent and expertise, and (3) partner to win. “Field combat-ready forces” reflects that the Space Force must field military forces – not just systems, but personnel, equipment, and expertise – capable of outcompeting rivals, deterring aggressors, and defeating enemies. For Space Force forces to be combat-ready and viable, we need to empower them to defend US interests in space with capable and survivable weapon systems, secure networks, actionable intelligence, decisive command and control, realistic training infrastructure, and rigorous test capacity. Neglecting any of these elements jeopardizes the ability of space forces to accomplish their assigned missions and tasks. My second goal will be to maximize the Space Force’s ability to attract, develop, and empower talent. The nation benefits from a strong Space Force, and the Space Force is strongest when Guardians thrive. My third goal recognizes that even with superlative talent and exceptional capabilities, the Space Force will not succeed without robust joint, coalition, interagency, commercial, and academic partnerships. If confirmed, I will continually look for innovative ways to engage these mission partners in a way that strengthens Space Force combat capability and sets us up for success in the highly competitive security environment.

Section 9082(d)(4) of title 10 provides that (subject to the authority, direction, and control of the Secretary of the Air Force), that the Chief of the Space Force shall “exercise supervision, consistent with the authority assigned to commanders of unified or specified Combatant Commands under chapter 6 of this title [10], over such of the members and organizations of the Space Force as the Secretary determines;”

Over which members and organizations of the Space Force has the Secretary of the Air Force directed the Chief of Space Operations to exercise supervision and what is the scope of such supervision?

A. The Chief of Space Operations exercises supervision over the Office of the Chief of Space Operations (also known as the Space Staff) and the Space Force’s Field Commands. As part of this supervision, the CSO oversees and manages – under the authority, direction, and control of the Secretary of the Air Force – Service-level processes for designing, resourcing, developing, presenting, and championing military space forces.

If confirmed, how would you exercise meaningful supervision of such members and organizations, while ensuring compatibility with the authorities of the Combatant Commanders?

A. Title 10 clearly distinguishes the authorities of the Combatant Commanders and the roles of Service chiefs. If confirmed, my supervision of Space Force members assigned to Combatant Commanders would be limited to implementing the Secretary of the Air Force’s administrative

control over those forces and monitoring to ensure they have the resources needed to execute operations directed by the Combatant Commanders. These processes are well established within the Department of the Air Force for assigned Air Force forces and will be applied no differently to Space Force forces.

If confirmed, what duties and responsibilities would you assign to the Vice Chief of Staff of the Space Force?

A. If confirmed, I would work with Secretary Kendall to establish appropriate duties and responsibilities for the Vice Chief of Space Operations of the Space Force, which would include various aspects of presiding over the Space Staff, working with the Joint Chiefs of Staff, and assisting in organizing, training, and equipping Space Force Guardians and civilian personnel to accomplish our mission.

2022 National Defense Strategy

The 2022 National Defense Strategy (NDS) puts forward an integrated deterrence framework that incorporates the Nuclear Posture Review (NPR) and Missile Defense Review (MDR) under the NDS. The priorities of the strategy are (1) defending the homeland; (2) deterring strategic attacks against the United States, Allies, and partners; (3) deterring aggression, while being prepared to prevail in conflict when necessary, prioritizing the PRC challenge in the Indo-Pacific, then the Russia challenge in Europe and (4) building a resilient Joint Force and defense ecosystem.

In your view, does the 2022 NDS accurately assess the current strategic environment, including prioritization of the most critical and enduring threats to the national security of the United States and its allies? Please explain your answer.

A. Yes, the NDS accurately assesses the strategic environment as it pertains to the space domain. The space domain will be used much as the sea and air have been, as a way for states to project their power in support of national interests. The NDS accurately captures the actors who pose a threat to US equities in space. Integrated deterrence and collaborating with allies and partners around the globe will go a long way towards mitigating those threats and heading off emerging areas for concern before they become a risk. For a more detailed discussion, I would welcome the opportunity to meet in a classified session.

In your view, does the 2022 NDS correctly specify and prioritize DOD missions in the context of the current strategic environment?

A. Yes, I believe that the NDS prepares us to compete, deter, and win against a range of threats in the space domain. The NDS inextricably links space to the international security environment by asserting the centrality of space in defense priorities and joint operations. The NDS calls on investment, defense, doctrine, employment and reconstitution of space-based capabilities to assure the missions and lethality of the Joint Force across all domains. For a more detailed discussion, I would welcome the opportunity to meet in a classified session.

In your view, does the 2022 NDS specify the correct set of capabilities by which the United States can achieve its security objectives in the face of ongoing competition and potential conflict with China and Russia? What do you perceive as the areas of greatest risk?

A. Yes, the NDS is broadly supportive of the critical capabilities that space brings to the Joint Force to address a potential conflict with China and Russia. In my view, the greatest risk would be to underestimate China and Russia's will and ability to counter our space capabilities. To mitigate that risk, we must invest in the right capabilities, design the right operational concepts and train our Guardians for this contingency now. We cannot afford to lose the first engagement in a conflict that extends to space. If confirmed, I would welcome the opportunity to meet in a classified session on this important topic.

In your view, how does space and the mission of the Space Force integrate into the NDS?

A. The NDS specifically identifies the need for space integration to US strategic objectives and the Joint Force. These objectives include maintaining a robust and responsible national space enterprise, continuing the nation's strength and leadership in space activities, and preserving space for current and future generations. The Space Force integrates into the traditional and complementary roles of the Services with Combatant Commands to provide trained and equipped forces in support of the NDS. This integration is in effect today and, if confirmed, I plan to ensure execution of missions that preserve national interests and the freedom of operation for the nation in, from, and to space. Successful implementation of the NDS would set the conditions of continued leadership in the military space domain, enduring military advantage in space capabilities and resilient architectures, and a safe, secure and stable space environment for the US and its allies and partners.

In light of the lines of effort set forth in the 2022 National Defense Strategy, what other military duties do you anticipate the Secretary of Defense, or the Secretary of the Air Force would assign to you, if confirmed?

A. I anticipate the Secretary of Defense and the Secretary of the Air Force will encourage the expansion of collaboration with our Allies and partners, the US space industrial base, and other nations to shape the strategic environment. This collaboration can be made possible through the establishment and growth of tenets of responsible behavior in space, as well as by addressing supply chain challenges, and by developing resiliency in space architecture, workforce, and capabilities. These actions are at the heart of building enduring advantages. Additionally, I anticipate being assigned the task of developing and fielding capabilities to attribute irresponsible or aggressive behavior in space.

Major Challenges and Priorities

What is your vision for the Space Force of today? Of the future?

A. If confirmed, my vision for the Space Force today, and in the future, is for the Space Force to be the most capable, combat-ready space force in the world. There is no question in my mind that the Space Force meets this standard today. However, given the growing arsenal of potential

Chinese counterspace threats, maintaining that edge will require the Space Force to diligently enhance our combat power with more capable and survivable weapon systems, innovative warfighting concepts, and the most talented and well-trained Guardians in the world.

What is your vision for how the other armed services and the Space Force will work with each other?

A. My vision for the Space Force and other Armed Services is centered on normalization. The joint team's relationship with the Space Force must be consistent with the relationship it has with all other Services. The capabilities that each Service provides are seamlessly integrated together into a synchronized unity of effort. The Space Force can be no different. My vision, therefore, is to ensure the Space Force has the right organizational structures, operational concepts, equipment and training to seamlessly integrate into the Joint Force team. If confirmed, I will work tirelessly to ensure the other armed services account for critical space capabilities in their planning and that the Joint Force understands the necessity of space superiority to protect space capabilities from potential adversary attack while also protecting the rest of the Joint Force from space-enabled attack. Space operations is a collaborative endeavor, and Guardians cannot accomplish their missions without working in close coordination with the other Armed Services and the Joint Force.

What do you consider to be the most significant challenges you will face if confirmed to be the Chief of Space Operations?

A. I consider the most significant challenge for the USSF is staying ahead of the growing arsenal of space and counterspace weapons by strategic competitors. I am confident Guardians, along with the rest of the Services and Joint Force, are postured to deter and, if required, defeat these potential threats today. Maintaining this relative advantage, however, will require the Space Force to outpace the accelerating threat trajectory by relentlessly pursuing innovative and decisive operational capabilities. This includes fielding resilient and defensible architectures, preparing Guardians to outcompete and overcome these threats, and partner with joint, coalition, commercial, and interagency partners to maximize our combat capability.

What plans do you have for addressing each of these challenges, if confirmed?

A. If confirmed, I would build off of the foundation established by General Raymond to ensure the nation maintains its relative advantage in space. The USSF's force design effort has us moving in the right direction to acquire the capabilities we will need to be effective. My plans are focused on ensuring our Guardians have what they need to turn these new systems into operationally effective, combat-ready capabilities for the joint force. If confirmed, I would do this by focusing service efforts on fielding a robust test and training infrastructure; designing, training and implementing effective operational concepts; optimizing the Service's ability to attract, develop, and empower talent; and strengthening the partnerships we rely on to succeed in the space domain.

If confirmed, what actions would you take to focus Space Force efforts on addressing each of these challenges, and on what timeline?

A. If confirmed, my actions will reflect my confidence that the Space Force's trajectory established by Congress, the President, and the civilian leadership of the DoD will outpace our potential adversaries and preserve the US advantage in space. Working under the authority, direction, and control of the Secretary of the Air Force, I'll organize Space Force efforts to stay on this trajectory by establishing three (3) focus areas for my first year in the position: fielding combat-ready forces; amplifying Guardian talent and expertise; and strengthening joint, coalition, civil, commercial, and academic partnerships that bolster our ability to defend the Nation and defeat its enemies. Additionally, if confirmed, I will ensure we have the processes and collaboration venues in place for the Chief of Space Operations to serve as the Force Design Architect for Space Systems of the Armed Forces in time to inform FY24 authorization and appropriation decisions.

Space has traditionally been fragmented across the DoD and the intelligence community. The congressional intent of creating a Space Force is to consolidate space operations of the armed services under one service.

What is your assessment of this consolidation of other service programs and personnel and what outstanding issues remain?

A. Space has been federated across a number of stakeholder organizations because space is critical to so many mission areas and can contribute to the success of so many different organizations. While I do not expect this to change, consolidation of some space capabilities into the US Space Force does make sense in terms of unity of effort and potential efficiencies. For example, the consolidation of military satellite communication units, personnel and capabilities will have the net effect of enhancing effectiveness and efficiency in dynamic allocation and apportionment of high-demand, low-density satellite communications bandwidth. As we continue to finalize those transitions, we must ensure that associated training and sustainment capabilities are effectively transitioned to ensure long-term viability of the mission sets in the Space Force.

What is your assessment of the integration of operations with the intelligence community whose authorities and funding are outlined in title 50 of the United States Code?

A. The intelligence community (IC) provides intelligence and support to both policymakers and warfighters. Within the Department, all domain military operations have well-tested processes for support, synchronization, and integration of intelligence activities. Pertaining to Intelligence, Surveillance, and Reconnaissance operations, the USSF and IC (particularly National Reconnaissance Office and National Geospatial-Intelligence Agency) are currently working together to clearly delineate mission lanes, shared responsibilities, baseline requirements and potential courses of action to optimize our capabilities development, reduce unnecessary redundancy and meet the vast array of customer intel requirements. Any future USSF space-based ISR capabilities will be developed to meet joint warfighting needs (including Guardians)

in concert and collaboration with capabilities that meet these requirements from other organizations. The USSF will focus its efforts in this area to support operational commanders and joint warfighters in concert with Title 50 capabilities. Ideally, these USSF capabilities will enable the IC to increase focus on national and strategic requirements.

The Joint Chiefs of Staff

What is your assessment of the authorities of, and process by which, members of the Joint Chiefs (other than the Chairman) provide military advice and opinions to the President, National Security Council, the Homeland Security Council, and civilian leadership of the Department of Defense?

A. In my current capacity as Deputy Chief of Space Operations for Operations, I sit as the USSF representative to the Operations Deputies (OPSDEP) structure on the Joint Staff. I also oversee Space staff processes that help prepare the CSO to serve as a member of the Joint Chiefs of Staff. Based on these specific roles, my appraisal is that these processes promote a thorough evaluation of the relevant issues and ensure all viewpoints, positions, rationales and opinions are represented to national leadership. I take seriously my role in supporting the Best Military Advice development process. If confirmed, I will offer my Best Military Advice to the Chairman of the Joint Chiefs, the Secretary of Defense, the President and Congress when I am a part of the deliberative process.

If confirmed, would you have any hesitation in providing your best military advice to the President, National Security Council, Homeland Security Council, and civilian leadership of the Department of Defense, even when your advice and opinions might differ from those of the Chairman or the other members of the Joint Chiefs of Staff?

A. No, I would not hesitate, as I believe this is a fundamental responsibility of a Service Chief and member of the Joint Chiefs of Staff. If confirmed, I would provide my best military advice to the President, National Security Council, Homeland Security Council, and civilian leadership in the Department of Defense.

Functions of the Space Force

Section 9081 of title 10, United States Code mandates that the Space Force be organized, trained and equipped to “(1) provide freedom of operation for the United States in, from, and to space; (2) conduct space operations; and (3) protect the interests of the United States in space.”

Please describe in your own words your understanding of each of these three functions.

A. “Provide freedom of operations” ensures that the US can continue to use the space domain in pursuit of its national interests. This is a core responsibility of Space Force forces that endures through peacetime, competition, crisis, and conflict. The US must have the continuous ability to safely and securely launch and operate satellites in space in support of economic, military, and diplomatic interests. The Space Force provides capabilities to ensure no other nation is in a

position to deny the US its access to the space domain. US interests are protected by safeguarding and enhancing the ability of US commercial, civil, intelligence, and military entities to safely and effectively access, maneuver within, and exploit the space domain without interference.

“Conduct space operations” is the technical specialty of our Service. We design, build, launch, employ, integrate, maintain, and responsibly dispose of military space capabilities. It is this responsibility that requires the USSF to present ready forces to Combatant Commanders. Combatant Commanders have the authority to execute operations in pursuit of assigned missions. Generally speaking, for the space element of these missions, it is the Space Force Guardians who conduct the space operations necessary to meet the needs of the Combatant Commander.

“Protect the interests of the United States in space” is the capability development imperative of our Service. Space Force forces must be prepared to outcompete, deter, and defeat the potential adversaries of the US in direct support of a ‘whole-of-government’ approach to integrated deterrence.

Space as a Warfighting Domain

Space is often described as “congested and contested.” Please describe your views of this statement and whether you consider space a warfighting domain?

A. “Congested” refers to the growing number of commercial, civil, and military actors across the globe who have a presence in the space domain. Despite the large volume of space, there are specific orbits and key access points that are highly desirable locations for satellites. This creates parts of the domain where satellites tend to congregate, and thereby create both physical congestion and congestion in the radio frequencies they require to link back to ground stations. This congestion must be monitored and ‘controlled’ to the degree necessary to ensure optimal use and safety of flight. This is one reason why adhering to the tenets of responsible behavior in space is important.

“Contested” refers to the efforts our potential adversaries have taken to deny others the ability to access, maneuver in, or exploit the space domain. We can no longer assume that we will be able to use space capabilities without prohibitive interference.

Yes, I consider space a warfighting domain because of specific actions Russia and China have taken to field space weapons capable of disrupting, degrading and even destroying our space capabilities. Furthermore, these nations continue to prepare forces and weapons that can project military power in, through, and from space in order to advance their own interests and directly threaten our Joint Force.

Near Peer Adversaries

Please describe your assessment of the capabilities for China and Russia relative to section 9081 of 10 United States Code.

A. For the past several decades, the US military has relied upon technological superiority to maintain our Nation's comparative advantage – an advantage that has been underpinned in large part by our military space capabilities. To a certain degree, the Joint Force has been shaped, sized and conceptualized presuming support from space-based capabilities like ISR, GPS and military Satellite Communications. Consequently, both China and Russia are making significant investments to advance their capabilities, capacity, and activities to counter our space-based advantages. I assess that they will continue to invest in (1) counterspace systems that threaten our freedom to operate in space; (2) expand their use of space to enable their broader military forces in other domains; and (3) enhance the use of space-based targeting to threaten our forces on land, air and sea. The pace at which they are doing so is what concerns me the most. China has doubled its launches per year during the past 10 years and has demonstrated the ability to hold US space capabilities at risk in every orbital regime.

Section 9081 of title 10 USC establishes the US Space Force for the express purpose of addressing these concerns. The Space Force is organized, trained and equipped to provide freedom of operation for the US in, from and to space; conduct space operations and protect the interests of the US in space. In short, Section 9081 directs the US Space Force to provide trained personnel and capabilities to counter the aims of potential adversaries in denying us our space advantages.

Force Design Architect

Section 1064(b) of the National Defense Authorization Act for Fiscal Year 2022 (P.L. 117-81) requires the Secretary of Defense to designate within 90 days of enactment that the Chief of Space Operations shall be the Force Design Architect for space systems of the Armed Force. In addition, the Joint Requirements Oversight Council has designated the Space Force as the “integrator for joint space requirements.”

What is your interpretation of the Force Design Architect for space systems of the Armed Forces relative to section 9081 of 10 United States Code, space as a warfighting domain and the abilities of near peer adversaries? Please explain your views in detail.

A. The role of Force Design Architect is complementary to the CSO's Organize, Train and Equip (OT&E) responsibilities, with a focus on ensuring unity of effort in defining critical space capabilities for the future joint fight. In the OT&E role, the CSO is also responsible to assist the Secretary of the Air Force with providing trained forces to operate future capabilities and provide full-scope operational effects to the Joint Force, denying adversaries access to similar services, and protecting the Joint Force from mitigating the operational use of space by adversaries. The Force Design Architect role helps streamline requirements development and brings together the

various space stakeholders to ensure the requirements are defined and pursued in the most efficient and effective way possible.

Do you support the Chief of Space Operations as the Force Design Architect of the Armed Forces? Please explain your views in detail.

A. Yes. CSO's roles and responsibilities as the Force Design Architect for space systems is to evaluate Joint Force mission needs, balancing capability, technology readiness, resiliency, and affordability to inform the requirements development and acquisition communities. This role will allow the CSO to enable agility in the acquisition process (as required in the FY19 NDAA) and ensure that future capabilities are robust and resilient and continue to provide the Joint Force with the space capabilities necessary to win. This will enable cost-informed options to ensure good stewardship of the Nation's resources while allowing the Department to drive strategic partnerships and unity of effort across the National Security Space enterprise (US acquisition organizations, the IC, DoD, allied partners and commercial) to accelerate capability, capacity, and resilience to augment military space capabilities.

What is your interpretation of the Space Force being the integrator for joint space requirements?

A. The Joint Requirements Oversight Council (JROC) has designated the USSF as the integrator for DoD's Joint Space Requirements. The Joint Integrator now has the ability to bring the entire space community together to develop cogent space requirements. Additionally, with this responsibility, the Space Force is able to collect, organize and adjudicate these requirements and provide endorsements and recommendations that help accelerate the JROC's capabilities development processes.

If confirmed, how will you coordinate the two roles designated as the Force Design Architect and the integrator for joint space requirements? Please explain your views with respect to the authorities of the other armed forces and the Office of the Secretary of Defense as outlined in the August 17, 2022, letter designating the Chief of Space Operations as the Force Design architect for space systems of the armed forces. Please give an unclassified example.

A. In essence, both of these roles allow the Space Force to make Enterprise-wide recommendations rather than allowing capability initiatives or requirements to work their way through the process out of context. Because of the global nature of space, capabilities must be designed and fielded as part of a system of systems to optimize mission performance, reduce unnecessary redundancies and maximize resource efficiency. If confirmed as CSO and as the Integrator for DoD's Joint Space Requirements, I would work with the other Services and Combatant Commands to understand their needs for space capabilities. This would inform what architecture I would recommend as the Force Design Architect. One of the first examples of the Force Design Architect and the Joint Integrator role in action was the work done to redesign the Missile Warning/Missile Tracking (MW/MT) Architecture. In collaboration with key stakeholders and in light of emerging threat assessments, rigorous analysis and wargaming was used to define a more resilient, more capable and more defensible MW/MT architecture. The

requirements for the systems ensured that key customers' needs were accounted for. The net result was a well-coordinated and synchronized set of architecture requirements rapidly put in place, and we are on an accelerated path to fielding the enhanced capability.

Space Intelligence, Surveillances, and Reconnaissance

Many of the traditional Intelligence, Surveillances and Reconnaissance missions for ground and air targets that are currently performed by airborne platforms in support of a Combatant Commander's operation are now under consideration to move to space-based platforms.

Do you believe this transition in intelligence mission from air to space platforms is a mission of the armed forces?

A. Yes, I believe the myriad of intelligence collection requirements means there is a need to utilize capabilities in all domains. Furthermore, the Space Force, as the 18th element of the Intelligence Community (IC), is well postured to help support this effort. Each military Service and the Coast Guard are members of the IC because intelligence operations in all domains are critical parts of military operations.

If confirmed, how will this mission of the Space Force be coordinated in terms of acquisition and operations with the intelligence community which falls under title 50 of the United States Code?

A. In accordance with well-established DoD processes, Title 10-focused capabilities will provide space-based Intelligence, Surveillance, and Reconnaissance to operational commanders and joint warfighters at relevant speeds and in concert with Title 50 capabilities. USSF capabilities will complement IC capabilities to continue to provide our nation a strategic advantage.

Acquisition

Section 9016(b)(6)(B)(i) of title 10, United States Code states that the Assistant Secretary of the Air Force for Space Acquisition and Integration shall "be responsible for and oversee all architecture and integration with respect to the acquisition of the space systems and programs of the armed forces, including in support of the Chief of Space Operations under section 9082 of [title 10, United States Code]." In addition, section 9021 of title 10, United States Code authorizes the duties of the Space Acquisition Council whose purpose is to "oversee, direct, and manage acquisition and integration space systems and programs of the armed forces in order to ensure integration across the national security space enterprise" of which, if confirmed, you will be a member.

Please describe how, if confirmed, the duties of a Force Design Architect for space systems of the Armed Forces will integrate with section 9016(b)(6)(B)(i) for the Assistant Secretary of the Air Force for Space Acquisition and Integration.

A. Defining operational requirements is an early and critical step in the broader acquisition process to deliver capabilities. The CSO has the important role of defining and advocating for the operational requirements needed to support USSF missions. The Force Design Architect responsibilities are an expansion of this basic responsibility across the broader set of Armed Forces' space requirements. This broader responsibility for Force Design will enable unity of effort across all stakeholders and allow for accelerated requirements development that meets the needs of the broader joint force.

These duties will naturally integrate with the Assistant Secretary of the Air Force for Space Acquisition and Integration's responsibilities and authorities for acquiring the systems to meet the defined requirements. The faster and more appropriately we can tell the acquisition community the mission needs, the faster they can build it. For example, the new missile warning/missile track force design shaved years off the requirements process versus the process used to generate requirements for the predecessor program. If confirmed, I will ensure there is robust collaboration and coordination with the ASAF for Space Acquisition and Integration to ensure there are no seams between requirements development and the acquisition processes needed to field the resultant systems.

Please describe, if confirmed, your role on the Space Acquisition Council, and as required by Section 1064(b) the National Defense Authorization Act for Fiscal Year 2022 (P.L. 117-81) your duty as the Force Design Architect on the Space Acquisition Council.

A. As a statutory member of the Space Acquisition Council (SAC), if confirmed, I will support the congressional mandate for the SAC to oversee, direct, and manage the acquisition and integration of space systems and programs of the armed forces, to ensure integration across the National Security Space enterprise. In my capacity as the Force Design architect, if confirmed, I will utilize the SAC as a forum to synchronize requirements with the acquisition process. As an example, the SAC served as a forum for stakeholders to review and approve the Missile Warning/Missile Tracking (MW/MT) requirements, acquisition approach, and program office structure.

If confirmed as Chief of Space Operations, how would you assist the Secretary of the Air Force in the performance of certain acquisition-related functions, while ensuring compatibility with the duties and responsibilities of the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics (primarily established in sections 3104, 9013 and 9016 of title 10, United States Code)? Please give specific examples.

A. If confirmed, my primary role in supporting the Secretary of the Air Force in performance of certain acquisition-related functions would be to ensure the Assistant Secretary of the Air Force for Space Acquisition and Integration, as the Space Service Acquisition Executive, has the operational requirements and programmed funding to craft acquisition strategies and programs that deliver the capabilities we need to stay ahead of our competitors. Additionally, if confirmed,

it is my responsibility to recruit, train, and develop the military acquisition professionals that drive our capability development. Where those inputs affect Joint or Air Force programs, if confirmed, I will provide the same support to the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics.

If confirmed, what actions would you take to improve each of the three aspects of the acquisition process—requirements, acquisition, and budgeting?

A. The Space Force must focus on providing inputs to the acquisition system and the Assistant Secretary of the Air Force for Space Acquisition and Integration (SA&I) that enable speed and flexibility. Ensuring we develop accurate and timely requirements is vital to kickstart the process of delivering capabilities when we need them. We must accelerate space acquisition to outpace our potential adversaries and maintain our technological advantage. To that end, if confirmed, I would support the ASAF(SA&I)'s priorities. Stable funding and requirements are essential to program execution, the science and technology pipeline, and delivery of capability on time and within budget. Therefore, if confirmed, I will work hard to ensure that from the outset funding and operational requirements are well founded and deliberately planned so that we can maintain them throughout the life cycle of the program.

If confirmed, what actions would you propose, if any, to ensure that requirements are realistic, technically achievable, and prioritized?

A. The Space Force's role as DoD's Joint Integrator for Space Requirements and the Force Design Architect presents an opportunity to develop cohesive space capabilities across the DoD. The rigorous technical analysis, wargaming and prototyping performed by the Space Warfighting Analysis Center will be leveraged to ensure the Force Design work is both cost-informed and shaped by what is technically feasible. After Force Designs transition to formal requirements documentation, the Joint Integrator role ensures the requirements are prioritized by the gaps identified by the Joint Force. If confirmed, I look forward to the opportunity to collaborate with Congress as we evaluate operational requirements against these standards.

If confirmed, what specific measures would you recommend to control "requirements creep" in the defense acquisition system?

A. In my experience, 'requirements creep' is the result of two (2) main factors: 1) requirements developed without analytic rigor making them subject to adjustment and 2) the absence of a single unifying authority disciplining the system towards requirements stability. The USSF's Force Design process is underpinned by Space Warfighting Analysis Center's rigorous technical analysis, wargaming, modeling and simulation that should allow the resultant requirements to carry through program definition without the need to make major modifications. Further, designation of CSO as the Force Design Architect for space capabilities across the Armed Force and the added role of being Joint Space Requirements Integrator provides a unifying authority that ensure there is discipline in the requirements development process. Finally, because this unifying authority is also the chief programmer for the enabling budget submission, there will be incentives to maintain stability in the programs and not let the requirements 'creep.' In collaboration with the Assistant Secretary of the Air Force for Space Acquisition and Integration

(ASAF/SA&I), the Space Acquisition Council will serve as the governing mechanism to ensure we maintain requirements stability throughout the acquisition process.

If confirmed, how would you utilize your authority to arrest the exponential escalation in cost that, in recent history, has marked the acquisition life-cycle of Service platforms and weapons systems?

A. While acquisition authorities to make these kinds of decisions reside with the Service Acquisition Executive, the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I), if confirmed, I will not hesitate to collaborate with the ASAF/SA&I and provide my best military advice related to program costs. Furthermore, if confirmed, as I execute CSO responsibilities associated with budget submissions, program cost will be a prime consideration for funding levels. Therefore, if confirmed, I will work very closely with the acquisition authorities to ensure we are spending our resources on the programs that provide the most effective capabilities informed by the overall cost of the program. As stewards of national defense resources, I am committed to rigorous assessment of space capabilities and programs.

In your view, in whom should accountability for large-scale acquisition failures and/or extraordinary cost overruns rest?

A. Just as successes are not the result of an individual person or organization, failures are rarely the result of a single individual or organization. In my estimation, large-scale failures occur as a result of many factors coming together in unpredictable ways. Because factors and conditions can change dynamically, the key is to ensure effective monitoring and assessment mechanisms are in place to enable vigilance and sensitivity to changes so that mitigation efforts can keep programs on track. Even then, it is possible for programs to fail to meet expectations and then tough decisions need to be made in collaboration and with full transparency to all stakeholders, including Congress as they execute their vital oversight functions. If confirmed, I will support all efforts to ensure proper program oversight is in place and that communication with all stakeholders, including Congress, is transparent and routine. I will also support the priority of the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I) to drive rigorous program management discipline to deliver capabilities on cost and schedule. If large-scale failures occur, I will support the Secretary of the Air Force in understanding what led to the failure and putting measures in place to improve our future performance.

Are there other roles or responsibilities in the acquisition process that should be assigned to the Chief of Space Operations and the other Service Chiefs, in your view?

A. I believe that the current assignment of responsibilities to the Chief of Space Operations and the Service Chiefs in supporting the acquisition process is appropriate. If confirmed, I will focus on establishing realistic operational requirements and stable funding to maximize the probability of acquisition program success.

Acquisition of Specific Space Systems

The Space Force executes a wide range of acquisition efforts in space in order to support Combatant Command requirements, *synchronized* with ground systems and user terminals. If confirmed, please describe what you would consider to be the most serious issues with the following areas:

Missile Warning, Tracking, and Space Sensing

Next Generation Overhead Persistent Infrared Satellites

A: The Next Generation Overhead Persistent Infrared program is designed to detect traditional ballistic missile warning signatures primarily associated with early boost phase. If confirmed, the most serious issue I expect to tackle is delivering missile warning capabilities that outpace the rapidly evolving adversarial threats. Along with our operations and acquisition teams, I remain committed to supporting the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I) to ensure the USSF delivers the seamless 24/7 on-demand, global, and localized coverage of infrared events our joint warfighters demand for this no-fail mission.

Proliferated constellations for missile tracking including non-ballistic missiles

A: If confirmed, the most serious issue I expect to address is the urgent need for resiliency in our space and ground architectures in support of this emerging architecture. The USSF completed a critical Force Design analysis last August that resulted in our request for a pivotal mission area architecture shift from a geosynchronous and highly elliptical force presentation to a proliferated low and medium earth orbit design. This approach allows for resiliency and detection of new and emerging threats, such as hypersonics.

Space and Ground Weather

A: While we are challenged by an expanding need for consistent access to weather data, this leads to big opportunities. One of the biggest opportunities within the Space and Ground Weather mission area is fostering relationships to optimize persistent warfighter capability. If confirmed, I will collaborate with departmental, civil, commercial, and international communities to expand access to space-based environmental monitoring in support of our national security imperatives.

Nuclear Event detection on ground and in space

A: Based on my experience, the most serious issue in this arena is maintaining our technological advantage as new threats emerge, and as legacy systems degrade. If confirmed, I will support the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I) and collaborate with the broader space community to ensure the department is postured effectively to detect nuclear events in any domain - air, land, sea, or space - well into the future.

Intelligence Reconnaissance, and Surveillance

Air and Ground Movement Target Indicator capabilities to support Combatant Commander requirements

A: Moving Target Indication (MTI) is a new mission being considered by the Space Force. The main challenge with MTI is focusing the target collection requirements so the systems can be fielded in a way that provides data for decision makers and operators to ensure target prosecution can occur in a timely manner. If confirmed, I will leverage our experience from our Missile-Warning/Missile-Track (MW/MT) mission area and work closely with the Department of the Air Force and Joint team to ensure the DoD pursues an integrated solution for the joint warfighter.

GPS

GPS III, IIF

A: The greatest challenges to GPS are the proliferation and threat of purposeful signal jamming. This purposeful interference represents a significant challenge due to the negative economic and military impacts that GPS degradation causes. Protecting Positioning, Navigation and Timing services are critical for the nation. If confirmed, I will support the Assistant Secretary of the Air Force for Space Acquisition and Integration, ASAF (SA&I), in delivering GPS III and IIF systems to ensure the Department delivers jam-resistant Military-Code GPS capabilities to warfighters.

Military Grade User Equipment

A: With respect to Military GPS User Equipment, an important challenge is integrating GPS equipment into thousands of platforms across the DoD. It is critical for our joint warfighters to have resilient Positioning, Navigation and Timing in times of crisis or conflict. If confirmed, I will continue to work across the Department to prioritize Military GPS user equipment integration into weapon platforms across the Services.

Alternate Positioning Navigation and Timing

A: Countering real threats to navigation estimates in an anticipated contested space domain is a valid concern. The Space Force is exploring alternative space-based Positioning, Navigation, and Timing systems to augment our GPS capabilities and improve resiliency. If confirmed, I will help ensure alternative PNT capabilities are explored to provide viable pathways towards resiliency for the critical GPS enterprise.

SATCOM

Advanced Extremely High Frequency satellites and their follow-on constellation for strategic communications

A: The Advanced Extremely High Frequency satellite program capability is critical to the President and the National Command Authorities for protected strategic communications capabilities, including globally connected operations through nuclear-related events. A key challenge is to ensure continuous capability in this mission area as we transition the enterprise and field follow-on capabilities. If confirmed, I will work across the Department and this Committee to protect against any gap in capability.

Family of Advanced Beyond Line-of-Sight Terminals and other strategic grade user terminals

A. A key challenge for the FAB-T capability is speed of delivery to the diverse set of platforms that require this upgrade. Each platform that requires the upgrade has unique constraints that must be addressed individually as the capability continues to be fielded. If confirmed, I will continue to work across the Department to support this important upgrade, as well as support integration into platforms across the Services.

Protected Tactical Enterprise Service and user terminals

A: If confirmed, my top priority for Protected Tactical Enterprise Service will be to maintain synchronization between space, ground, and terminal segments to ensure Joint warfighters can fully leverage the system for contested operations near enemy jammers.

Absorbing the current fleet of the Army's Wideband Gap Satellites (WGS) and their Replacement

A: The USSF (and Air Force Space Command before it) has operated the WGS satellites for many years and has recently taken control of the WGS payload operations. The remaining challenge will be to transition the payload management training currently conducted by the Army and the sustainment of the wideband satellite capability. Planning to complete this transition is underway across the Department of the Air Force. If confirmed, I will ensure the planning to address this challenge enables an efficient and effective transition.

Absorbing the Navy's Mobile User Objective System satellites and their replacement

A: Transition of the Navy's Mobile User Objective System to the Space Force is complete. If confirmed, I will ensure all efforts associated with the transition of the Mobile User Objective System continue to support Joint warfighters.

Assured Access to Space

National Security Space Launch Phase II procurements

A: The most pressing issue for space launch is ensuring we have an infrastructure to support the rapid expansion of commercial launches while also ensuring we meet our high priority national security space launches. For us to keep pace with potential threats posed by strategic competitors our launch capacity must be optimized. For Phase II, we must continue National Security Space Launch's mission success track record to ensure access to space and to counter threats posed by potential adversaries. If confirmed, I will work with this Committee and across the Department and space enterprise to help maintain the ability for assured access to space.

National Security Space Launch Phase III procurements

A: I believe the most pressing issue for Phase 3 acquisition is to maintain a vibrant market for launch service providers in order to assure access to space, maximize competition to reduce cost, and ensure the USSF continues to encourage a strong launch industrial base. If confirmed, I will support efforts to set strategy for the next acquisition phase.

Tactical and Responsive Launch and replenishment of space-based assets

A: If confirmed, the most critical issue I would address is expanding the scope of tactically responsive space to ensure we generate complete operational capabilities that respond to any on-orbit threats on a tactically relevant timeline. We must have end-to-end capabilities that include launch vehicles, satellites, ground systems, operational concepts, and most importantly, the specific requirements of the Combatant Commanders, that enable a tangible response to potential adversary destabilizing actions in space.

Battle Management, Command and Control, and Associated Ground Systems

Space Command and Control, including the Kobayshi Maru program to replace the operating systems (SPADOC) at the Combined Space Operations Center

A: A significant challenge to space command and control is the integration and fielding of a system of systems to enable multiple software applications to work together. If confirmed, as a member of the Space Acquisition Council, and in coordination with the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I), I will work to ensure delivery of a Space Domain Awareness Command and Control (C2) capability that will replace the antiquated Space Defense Operations Center currently in use. While also ensuring that we deliver the additional needed capabilities in a way that eases integration into our various C2 nodes. We need to recognize that no single system or single software program or algorithm is capable of meeting all of USSF's C2 needs.

Integration of disparate capabilities into a common platform enabling sharable data is the key to success.

Sensor agnostic integration for Space Domain and Situational Awareness, including MDA's BMC2 to meet US SPACECOM requirements

A: Space Domain Awareness (SDA) is a condition achieved by the performance of a variety of operations that require multiple software capabilities exploiting data from a diverse set of disaggregated sensors. Cloud-based sensor data management, common data standards and integration protocols are the foundational elements that allow mission software tools needed for SDA and BMC2 to have access to the data needed for mission success. If confirmed, as a member of the Space Acquisition Council, and in coordination with the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I), I will work to ensure the Space Force drives towards a more integrated, resilient, multi-source information architecture to accept, discern, and trust data from all valid sources, while ensuring it is accessible to, and supported by, our Joint warfighters.

Integrated Tactical Warning and Attack Assessment (ITW/AA), including the Combatant Commanders Integrated Command and Control System (CICCS) for assured missile warning as part of the NC3 system

A: If confirmed, as a member of the Space Acquisition Council and in coordination with the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I) I will collaborate to help develop a standardized, integrated C2 system of systems across the NC3 enterprise to meet warfighter and National Command Authority needs.

Integration of Space Force systems into the Joint All Domain Command and Control system.

A: Because of the nature of the USSF missions, we inherently think in Joint and all-domain terms. Clearly the space domain is our focus, but we cannot be successful without cyber operations in our ground networks and the cyber mission assurance of them. Furthermore, the USSF must understand the domains of our multiple Service users from SATCOM receivers on the ground, at sea or in the air. We must understand the needs of worldwide GPS users in all domains, and we must understand the requirements for missile warning data to globally distributed networks in all domains. The Space Force will specifically integrate into the JADC2 concepts because the C2 capabilities will require worldwide distribution of data, shared situational awareness, sensor data on tactical timelines and global communication with decentralized units. None of this is complete without space capabilities. The Space Force's unique capabilities will be crucial features that enable the joint force to realize the JADC2 vision. If confirmed, as a member of the Space Acquisition Council and in coordination with the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I) I will

work across the Department and space community to ensure the Space Force's contributions to JADC2 meet user needs and support Joint warfighter decision-making.

Space Domain Awareness and Space Control

Synchronization writ large between satellite and ground systems

A: It is important that we have synchronization between satellite and ground systems to ensure delivery of a comprehensive operational capability that integrates effectively to accept, discern, and fuse data from national, defense, and commercial sources and share it across multiple security boundaries. If confirmed, I will work closely with the Assistant Secretary of the Air Force for Space Acquisition and Integration (ASAF/SA&I) and the space acquisition community to address challenges and deliver a Space Domain Awareness (SDA) architecture with synchronized space and ground systems.

Procurement of Commercial Space Services

Procurement of commercial satellite communications services for other armed forces and Combatant Commands.

A: The rapid growth of the commercial space sector provides a significant opportunity for the DoD to use innovative commercial capabilities and production processes to deliver critical space capabilities. We must evaluate each mission area to determine the risks to achieve the balance between government and commercial capabilities. If confirmed, I will take a balanced, risk-informed approach to adding commercial space capabilities that leverages agility, innovation, and value of commercial systems without compromising critical national security missions.

Recruiting, Training and Readiness

The Space Force is a new service that is standing up a capability to recruit, train, and present a ready military force of guardians to the Combatant Commanders in order to support their operational plans. Please describe your views on the following:

The ability of the Space Force to achieve enlisted and officer recruiting goals.

A. Space Force has successfully met and exceeded its FY22 enlisted (105%) and officer (119%) recruiting and accession goals by leveraging high interest. We are well positioned to achieve our FY23 goals based on a current pool of interested cadets and civilians currently selected for entry.

The current and future readiness status of the force, including shortfalls of training guardians including the stand up of STARCOM.

A. The standup of the Space Training and Readiness Command (STARCOM) is a significant step forward in improving the training of Guardians. However, because we have operated in a relatively benign space environment for decades, we have not fielded a sufficient test and

training infrastructure that allows our Guardians to prepare properly for a contested space domain. If confirmed, it will be one of my top priorities to design and field an Operational Test and Training Infrastructure that allows our Guardians to innovate new tactics, validate those tactics, train to execute the tactics and then practice the tactics against a simulated adversary. This set of capabilities will be essential in the USSF's ability to present combat-ready forces to US Space Command (USSPACECOM) and other Combatant Commands and ensure that they are ready to face an emerging spectrum of threats.

The ability to assess readiness, including range training, of guardians in performing their mission consistent with section 117 of title 10 of the United States Code.

A. Space Force's readiness reporting is based on a legacy set of standards that was not customized for its missions and did not adequately account for threats in the space domain. We are changing this rapidly. If confirmed, I will continue the work of redefining our readiness standards including training requirements, equipment sustainment standards, exercise frequency requirements and generally the ability of the force to meet its assigned mission sets even in the face of a determined adversary.

Support to Combatant Commands

The relationship as a space force provider to the US Space Command is unique compared to other Combatant Commands. Please explain how the Space Force delineates between a presenter of forces and their functions to the US Space Command as compared to other Combatant Commands.

A. As a Service Force Provider, the USSF's number one customer is USSPACECOM. Most space missions are conducted at a global enterprise level by USSPACECOM and therefore, the vast majority of USSF capabilities are appropriately presented to USSC. However, other Combatant Commands have requirements for space expertise, activities and space capabilities. These requirements include planning and exercise integration expertise, regional space activities like security cooperation activities with allies and partner nations and establishment of networks and procedures to disseminate missile warning data to all forces in the theater regardless of dynamically shifting bases or disadvantage comm positions in the theater. Regional space capabilities like counter-SATCOM capabilities to support personnel recovery or force protection of maneuver elements may also be requested in theater. The USSF will be postured to provide command and control structures and ready forces to meet these requirements as well.

What are the key areas in which the Space Force must improve to provide the necessary capabilities and capacity to:

US Indo-Pacific Command

A. Particularly here, with China as the pacing challenge, the USSF must be postured to provide command and control (C2) structures and ready forces to provide space expertise, conduct space-related activities and C2 attached space capabilities. These requirements include planning and exercise integration expertise, security cooperation

activities to build partner capacity and establishment of networks and procedures to disseminate critical space data to dynamically shifting theater forces. In my view, the key improvements will be in capacity of personnel and both organic and deployable capabilities to meet Combatant Command needs.

US European Command

A. With the acute Russian threat, the USSF must be postured to provide command and control (C2) structures and ready forces to provide space expertise, conduct space-related activities and C2 attached space capabilities. These requirements include planning and exercise integration expertise, security cooperation activities to build partner capacity and establishment of networks and procedures to disseminate critical space data to dynamically shifting theater forces. The key improvements will be in capacity of personnel and both organic and deployable capabilities to meet Combatant Command needs.

US Central Command

A. With the continued Iranian and Violent Extremist Organizations (VEO) threats, the USSF must be postured to provide command and control (C2) structures and ready forces to provide space expertise, conduct space-related activities and C2 attached space capabilities. These requirements include planning and exercise integration expertise, security cooperation activities to build partner capacity and establishment of networks and procedures to disseminate critical space data to dynamically shifting theater forces. The key improvements will be in capacity of personnel and deployable capabilities to meet Combatant Command needs.

US Northern Command

A. With growing threats to the homeland, the USSF must be postured to provide command and control (C2) structures and ready forces to provide space expertise, conduct space-related activities and C2 attached space capabilities. These requirements include planning and exercise integration expertise, security cooperation activities to build partner capacity and establishment of networks and procedures to disseminate critical space data to dynamically shifting theater forces. The key improvements will be in capacity of personnel, situational awareness and rapid access to assured data in support of missile warning and missile defense to meet Combatant Command needs.

US Strategic Command

A. With continuous need for nuclear deterrence and national command and control and communications (NC3), the USSF must be postured to provide command and control (C2) structures and ready forces to provide space expertise, conduct space-related activities and C2 attached space capabilities. These requirements include planning and exercise integration expertise, security cooperation activities to build partner capacity and establishment of networks and procedures to disseminate critical space data to

dynamically shifting theater forces. The key improvements will be in capacity of NC3 protected SATCOM, survivable and endurable missile warning, personnel, space superiority capability to protect NC3 and missile warning satellites, situational awareness and rapid access to assured data in support of missile warning, missile defense and space superiority to support Combatant Command needs.

US Transportation Command

A. With the need to support worldwide mobility, distribution and sustainment of military forces, the USSF must be postured to provide command and control (C2) structures and ready forces to provide space expertise, conduct space-related activities and C2 attached space capabilities. These requirements include planning and exercise integration expertise, security cooperation activities to build partner capacity and establishment of networks and procedures to disseminate critical space data to dynamically shifting theater forces. The key improvements will be in capacity of personnel, situational awareness and rapid access to supply chains and logistics to meet Combatant Command needs.

US Southern Command

A. With growing investments by strategic competitors in the southern hemisphere, the USSF must be postured to provide command and control (C2) structures and ready forces to provide space expertise, conduct space-related activities and C2 attached space capabilities. These requirements include planning and exercise integration expertise, security cooperation activities to build partner capacity and establishment of networks and procedures to disseminate critical space data to dynamically shifting theater forces. The key improvements will be in capacity of personnel, situational awareness and rapid access to assured data in support of Combatant Command needs.

US Cyber Command

A. With growing cyber threats to space ground infrastructure, the USSF must be postured to provide command and control (C2) structures and ready forces to provide space-related cyber expertise, conduct space-related cyber defense activities and C2 attached cyber capabilities. These requirements include planning and exercise integration expertise, security cooperation activities to build partner capacity and establishment of networks and procedures to disseminate critical space data to dynamically shifting theater forces. The key improvements will be in capacity of personnel, situational awareness of the cyber terrain of space systems and rapid access to assured data in support of cyber defense of our space systems and to meet other Combatant Command needs.

Alliances and Partnerships

Mutually beneficial alliances and partnerships are crucial to US success in competition and conflict against a great power.

If confirmed, what specific actions would you take to build strong international partnerships, overcome challenges to our partnerships, and exploit opportunities in international cooperation?

A. I believe the foundation of international partnerships is routine interaction to build relationships of mutual respect, trust and thorough understanding of partners' needs and capabilities. If confirmed, I will continue to expand the quantity and quality of international partnerships by engaging more like-minded space-faring nations and moving from data sharing agreements to more operations integration, payload sharing, and even mission sharing where appropriate.

How would you characterize your familiarity with international space leaders, forums, and processes? If confirmed, which leaders and forums would you focus your engagement with a view to advancing most effectively the national security interests of the Space Force?

A. In my previous positions, I have had only a few engagements with international space leaders and have only been in supporting roles in international forums and processes. However, if confirmed, I will rapidly seek to build on existing relationships and ensure the USSF continues to enjoy and expand international partnerships. Early expansion should focus on Finland and Sweden as likely new members of NATO as well as India to counterbalance Chinese activity. These partnerships are critical in enhancing resilience and developing a coalition around responsible behaviors in space and therefore extremely valuable to protecting national security interests.

How will the Space Force participate within NATO and its developing Space Capabilities?

A. NATO has extreme interest in expanding efforts to share space information and integrate space capabilities into plans and operations. In addition to continuing with the existing NATO forums, the USSF will focus on integrating with the newly formed NATO Space Centre. Additionally, the USSF is seeking to establish a USSF Service Component HQ under European Command which will allow more comprehensive integration of capabilities and effects into all NATO activities.

How will the Space Force ensure that the correct levels of information are getting to and from allies that are integral to various missions of the Space Force?

A. The key to ensuring the correct levels of information are being shared for mission success starts with transparency of requirements and solid feedback loops with the partner nations. If confirmed, I plan to collaborate extensively with stakeholders and authorities needed to ensure the right information is made available to the right people to optimize mission sharing with our international partners. While the USSF will need to be sensitive to protecting our most critical

information, I believe there are opportunities to expand how and with whom we share information.

Norms of Space Behavior

Actions by other nations in space have direct consequences on the ability of the United States to execute freedom of movement and operations both in space and on the ground for civilian and national security means. One example includes recent destructive anti-satellite operations in November of 2021 by Russia, whose debris field affected the international space station causing it to maneuver and its astronauts to seek shelter in its return capsule.

What are your views on international norms of behavior in space and how should the Space Force be part of a whole of government approach to negotiating and implementing such norms?

A. Shortly after the reckless, dangerous, and destructive Russian direct-ascent anti-satellite (ASAT) missile test in November 2021, US leaders such as the Vice President, Secretary of State, and the Deputy Secretary of Defense spoke about the importance of standards of responsible behaviors to address these types of actions. I believe that the US, along with allies and partners must uphold international standards and develop new standards in space. Standards help us identify safe versus malign activities, reduce risks of misperception, and shape perceptions regarding collective reactions and cost imposition. We are fully engaged regarding interagency, whole-of-government efforts on tenets of responsible behaviors in space. Our collective ability to deter a conflict from beginning or extending into space relies on our cooperation with allies and partners to develop best practices and standards of behavior for responsible space operations and then to holding violators accountable to the international community.

Cyber

In May 2018, the Cyber Mission Force achieved full operational capability. In September of the same year, DOD released its 2018 Cyber Strategy.

In your view, how well postured is the Space Force to meet the goals outlined in the 2018 DOD Cyber Strategy? What actions will you take, if confirmed, to remediate any gaps between Space Force capacity and capability and Cyber Strategy goals?

A. The Space Force is postured to support the DoD Cyber Strategy but will require a realignment of our cyber capabilities to fully meet the goals and objectives of the strategy. The USSF will rely on USCYBERCOM component cyber forces to collect intelligence and prepare military cyber capabilities to be used in the event of crisis or conflict and for disrupting and/or halting malicious cyber activity at its source. However, USSF is actively strengthening the security and resilience of networks and systems that contribute to current and future US military advantages in the space domain. If confirmed, I am committed to meeting the DoD cyber strategy objectives by fully integrating cyber defense into space missions and by transforming

cyber Guardians' duties from traditional base support IT functions to execute mission assurance capabilities to secure, monitor and defend Space Force missions. Finally, I will advocate for the necessary investments in the tools and systems needed to fortify our space mission networks to enhance their resiliency and defensibility.

Are the size and capabilities of the Space Force components sufficient to meet current and future cyber and information warfare (IW) requirements?

A. With regards to meeting cyber and information warfare requirements, the primary challenge is the alignment of duties for the cyber Guardians not the number of cyber Guardians. Many of our cyber Guardians are needed to perform traditional base communication and IT support functions and therefore are not available to perform the more critical mission assurance to secure, monitor and defend USSF mission systems. The USSF is working to contract out most of the traditional communication and IT support functions to free up more cyber Guardians to focus on cyber defense. Once resourced to do this we will have a better understanding of the full set of cyber defense manpower requirements. As for future cyber and IW manpower requirements, the USSF is investing in tools and training that will make our cyber workforce more efficient and effective in performing their cyber defense roles; however, with the growing number of cyber threats and the expansion of critical networks, I believe there will be a future need for more cyber experts in the Space Force. If confirmed, I look forward to working with Congress on the right kinds of investments in tools, networks, training and personnel to ensure that the USSF meets its cyber defense needs in the most efficient way possible.

What is your view on the current definition of the Cyber Operational Forces? Are additional categories needed to support the Space Force

A. The Cyber Operational Forces (COF) are made up of several elements including the Cyber Mission Force and the Cyber Security Service Providers (CSSP). The Cyber Mission Force is composed of 133 teams conducting offensive and defensive cyber operations and the associated support functions under USCYBERCOM authorities. The CSSPs are focused on network defense. Having service-retained cyber mission defense teams, specifically not included in the DoD COF, that can focus training and operations on the specific and unique cyber terrain of USSF weapon system networks is also an important element of USSF cyber defense capabilities to enable tactical command and control of weapon systems and critical infrastructure resiliency. A combination of these service-retained cyber mission defense capabilities with the DoD COF is suitable and provides all the categories needed to support the Space Force.

Do you think the Space Force should be responsible for providing teams to the Cyber Mission Force?

A. Since all other Services provide teams to the Cyber Mission Force (CMF), it is reasonable for some to assume that the Space Force should also provide teams. However, the analysis of manpower required to standup the USSF did not include cyber manpower requirements to provide teams to the CMF. Therefore, any requirement to support the CMF would be new mission that would require a commensurate increase to USSF manpower to support this new mission area.

In your view, should the Space Force expand acceptable professional qualifications for its cyber workforce to include non-traditional professional credentialing and schooling from so-called technology boot camps and massive online open courses (MOOCs) as an alternative to traditional education, provided candidates meet the necessary technical standards?

A. The Space Force is committed to innovative approaches in recruiting and talent management to ensure we always have access to the expertise needed to conduct our critical missions. Assuming candidates meet necessary technical standards, I believe non-traditional professional credentialing and schooling would open up the pool of talent available to the USSF creating a broader and more diverse set of applicants. The larger the pool of applicants, the greater the selectivity, and the better the workforce which enhances the USSF cyber capabilities.

If confirmed, what would you do to enhance Space Force information dominance capabilities?

A. There are three (3) lines of effort needed to enhance USSF information dominance capabilities. First, we must ensure our cyber Guardians are focused on their mission assurance to secure, monitor, and defend USSF mission systems, not traditional base communications and IT support functions. Second, cyber Guardians need an operational test and training infrastructure to allow them to innovate cyber defense tactics, train to execute those tactics in a realistic environment and then practice their skills against a simulated adversary on a cyber range. Third, cyber Guardians need the tools and technology to fully map and monitor the cyber terrain associated with USSF weapon systems. If confirmed, I will be committed to building a ready force of cyber Guardians by investing along these lines of effort.

If confirmed, what would you do to improve military cybersecurity career pathways to meet the present and future needs of the Space Force and US Cyber Command?

A. Force Development is a critically important task of any military service, but the highly technical and expert workforce required for USSF success makes it even more critical that we ensure all of our personnel, including cybersecurity personnel, have meaningful career pathways in order to retain the talent we need for success. If confirmed, one important way I intend to accomplish this is to develop career broadening and professional development opportunities with the commercial cyber security industry that Guardians will be expected to take advantage of at various points throughout their career. I expect the commercial cybersecurity industry to continue to accelerate its capabilities, techniques and technologies, therefore it will be imperative that our cyber Guardians keep pace professionally. To this end, the USSF must develop opportunities to send our cyber Guardians into the commercial sector periodically to immerse themselves in these capabilities and cultures in order to bring back new and advanced expertise and ideas to protect and defend USSF cyber infrastructure and data.

Electronic Warfare (EW)

What is your vision for the future of Space Force EW capabilities?

A. We fully realize the importance the electromagnetic spectrum, including cyberspace, holds in warfare today, and I expect it to grow in the future as our potential adversaries attempt to capitalize and exploit its strengths and vulnerabilities. As seen in the current conflict between Russia and Ukraine, Russia's disruption of commercial satellite communications and the provider's prompt adaptation to restore service is but one example of what we can expect in the future, but on a far greater scale. As such, the USSF must develop and field a diversified array of active, adaptive, and networked electronic warfare capabilities to project power and defend the Joint Force across the competition continuum. We must develop and employ cutting-edge technology to expand our maneuver space and provide the Joint Force maximum operational flexibility while denying a potential adversary the ability to do the same. If confirmed, I will work with Congress to ensure that USSF Force Design includes the necessary EW capabilities to support the Joint Force.

US Strategic Command is the Joint Staff lead for ensuring the Joint Force can defend and conduct offensive EW strike operations. How has the Space Force integrated with STRATCOM to conduct Joint Electromagnetic Spectrum Operations including the following:

The Joint Electromagnetic Warfare Center?

The Joint Navigation Warfare Center?

The Joint Electromagnetic Readiness Center?

The Defense Information Systems Agency?

The Development of the Electromagnetic Battle Management tool?

A. Electromagnetic Spectrum Superiority (EMSS) is of critical importance to the national security of the nation. To ensure Electromagnetic Spectrum superiority, Space Force must work with other Headquarters Department of the Air Force offices and US Strategic Command (USSTRATCOM) to have an integrated approach to governance that prioritizes EMSS through requirements, resourcing, workforce, and operations. As the Space Force Deputy Chief Space Operations for Operations, I stood up an Electromagnetic Spectrum Operations (EMSO) branch within the Space Force specifically to coordinate and partner with other Headquarters Department of the Air Force, Joint and Agency partners on Electromagnetic Spectrum Operations topics. This branch works to advocate for Space Force EMSO equities, to grow Space Force EMSO capabilities, and to ensure full integration with USSTRATCOM and other Electronic Warfare supporting Centers and Agencies. Space Force is currently working with the Joint Electromagnetic Warfare Center on a DoD-wide Electronic Warfare Assessment of our EW capabilities to inform funding recommendations. Additionally, Space Force works closely with DISA, STRATCOM, and the Air Force in various forums and working groups, such as their

working group focused on delivering the initial toolset for the Electromagnetic Battle Management Tool. If confirmed, I will continue to work with all stakeholders to ensure the Joint Force has the required capabilities to maintain our competitiveness, conduct operations, and protect our vital national interests.

Spectrum

Electromagnetic spectrum plays a critical role in many DOD missions and is integrally related to electronic warfare.

In what ways does the Space Force rely on spectrum to support warfighter requirements?

A. Space Force relies on spectrum for everything from launching space vehicles, to operating those vehicles, and to providing mission effects worldwide. Everything we do in space relies on our ability to effectively utilize spectrum.

In your view, which warfighter spectrum requirements will be essential to competing with Russia and China on a future battlefield?

A. Broad access to a diversity of commercial and military wideband satellite capabilities will be required for warfighters on any potential future battlefield.

In testimony before the House Armed Services Committee in February 2020, then-Secretary of Defense Esper stated that DOD is willing to share spectrum with 5G networks in the “Mid-Band” (3 to 4.2 gigahertz). What Space Force systems might be affected by this “sharing” and how could “sharing” affect homeland defense, in your view?

A. The DOD 5G Strategy Implementation Plan outlines how the DoD will support research, development, testing, acquisition, and fielding of systems incorporating new technologies that permit greater spectrum access while preventing harmful interference to legacy systems. DoD will develop capabilities needed for near-real-time sharing, to enable military operations in congested spectrum environments to ensure that DoD can continue to use its radars to sense threats both domestically and internationally. To accomplish this, DoD is standing up a highly controlled testing environment to better understand 5G and radar spectrum dynamics that impact interference between these systems. Based on interference measurements and analyses from this testbed, dynamic spectrum utilization technologies for radar and 5G are being developed and evaluated. Interference with these systems could result in negative homeland defense mission impact and overall Space Force readiness. Therefore, it is critical that an effective sharing plan is in place to ensure that Space Force and homeland defense systems can operate in a way to enable readiness and mission accomplishment without interference.

If DOD were required to “vacate” or leave the spectrum “Mid-Band” instead of sharing, what are the potential operational and dollar costs to the Space Force, in your view? How long would a move to a different area of the spectrum take, in your view?

A. At this point, I am not in a position to make a full assessment. If confirmed, I will be able to assess how spectrum changes impact Space Force both financially and operationally in support of the National Defense Strategy. At that time, I would welcome the opportunity to come back to the Committee to discuss this important issue.

Science, Technology, and Innovation

US superiority in key areas of innovation is decreasing or has disappeared, while our competitors are engaging in aggressive military modernization and advanced weaponry development. DOD has identified 14 critical technology areas in which investment to develop next generation operational capabilities is imperative: biotechnology; quantum science; future generation wireless technology (FutureG); advanced materials; trusted artificial intelligence (AI) and autonomy; integrated network systems-of-systems; microelectronics; space technology; renewable energy generation and storage; advanced computing and software; human-machine interfaces; directed energy; hypersonics; and integrated sensing and cyber. Much of the innovation in these technologies that could prove suitable for national defense purposes is occurring outside of the traditional defense industry.

What do you see as the most significant challenges (e.g., technical, organizational, or cultural) to US development of these key technologies?

A. Maintaining our technology lead over our peer competitors is critical to USSF’s continuing ability to deter conflict in space. Pressing issues include meeting the pacing challenge. China is a very advanced and technology-savvy competitor who is innovating at a rapid pace, in some areas faster than we and our Allies can keep pace. We need to identify the best opportunities and mechanisms to leverage the tremendous commercial innovation and then we must be able to rapidly integrate those capabilities into a resilient hybrid architecture. If confirmed, I look forward to working with this Committee and across the DoD to address these challenges.

How is Space Force integrating and synchronizing investments in these technologies across all Services? In your view, how is OSD doing in helping that integration process?

A. There are several initiatives that assist the USSF in integrating and synchronizing investments in key technologies. The concept of “One AFRL – Two Services” (Air Force Research Lab) allows the Space Force to integrate and synchronize with AF science and technology activities, as well as with other Services. The Space Acquisition Council allows us to integrate and synchronize across the DoD and Intelligence Community. The OSD-led Space Community of Interest is key in coordinating technology roadmaps and investments. If confirmed, I look forward to working with this Committee and across the DoD to address these challenges.

How has the Space Force prioritized limited research and development funding across its technology focus areas? Specifically, where is the Space Force either increasing or decreasing focus and funding?

A. The USSF is working to establish a balanced science and technology portfolio that supports current technology needs, Space Warfighting Analysis Center force design efforts, and longer term technology horizon scanning. These are critical efforts as the USSF seeks to deliver evolutionary and game changing capabilities to the warfighter to keep us ahead of our pacing threats. Areas of increased investment include hybrid space architecture, integrating commercial and allied partners, artificial intelligence/machine learning, space mobility and logistics, tactical intelligence, surveillance, and reconnaissance, missile warning for hypersonics, multi-domain resilient space data transport and positioning, navigation, and timing.

In the FY 2023 President’s Budget request, the Space Force increased overall Research, Development, Test and Evaluation (RDTE) funding from \$11.5 to \$15.8 billion. How would you prioritize these budget areas in future budget requests?

A. Based on my experience, I am concerned about and see critical opportunities in resiliency, especially protection and proliferation to build toward the resilient hybrid space architecture across all our mission areas. Additionally, it will be important for us to assess the appropriate missions to migrate to space (e.g., Ground Moving Target Indicator [GMTI]) to optimize mission performance in light of emerging threats to the existing capabilities. If confirmed, I would work to ensure the space Research, Development, Test & Evaluation portfolio provides long-term competitive advantage, balancing the pursuit of transformational capabilities and nearer-term incremental improvements.

One of the main objectives of the defense research enterprise is to develop advanced technologies that will be of benefit to the warfighter. In this regard, it is critical that advancements quickly transition from the development phase into testing and evaluation and ultimately into a program of record for the deployment of capability to the warfighter.

The Air Force Research Laboratory (AFRL) is responsible for Science and Technology (S&T) research for both the Air Force and Space Force. They have adopted a motto of “One lab, two services.” In your opinion, how is that dual-hatted relationship working for the Space Force? Are there other labs within the Army or Navy that you also think contribute to the Space Force mission?

A. It is my understanding that the “One AFRL – Two Services” approach is working well. The construct allows us to accomplish significantly more science and technology innovation for the Space Force than we would be able to accomplish with a separate space laboratory. It provides an opportunity to leverage shared world-class lab facilities, test assets, tools, and expertise to prepare for future threats that require multi-disciplinary solutions. The Space Force is also able to work with the Navy Research Lab on space technology.

If confirmed, how would you ensure that a greater percentage of the Space research technologies being developed by AFRL transition into programs of record for deployment

to the warfighter? How would you ensure that appropriate technologies are transitioning more quickly into programs of record?

A. If confirmed, I will work to strengthen the relationship between operators and researchers to ensure that the voice of operators is heard in the development and deployment of new technologies. Additionally, I will continue to advocate for modular, open systems approaches, commercial as-a-service models, and investment in foundational enterprise infrastructure that allow rapid insertion of emerging technologies to enable the delivery of capabilities in iterations similar to industry.

What efforts is the Space Force making to identify new technologies developed commercially by the private sector and apply them to military and national security purposes?

A. The USSF, and Space Systems Command specifically, is continuously engaged with the private sector collaborating to discover and assess new technologies for military and national security utility. Industry Days (and reverse Industry Days) including crosstalks, demonstrations and sharing of modeling and simulation data have been productive in sharing operational challenges and potential mitigation capabilities between the government and the private sector. Commercial space capabilities and services offer many benefits for national security space missions and architectures. The DoD uses commercial space services to augment government systems and missions where practical; the opportunity to use these services and technologies will only grow in the future. The DoD intends to serve as a reliable customer to stimulate market segments that might not otherwise mature. Stimulating demand in these areas strengthens the industrial and economic base and incubates commercial capabilities that may meet future requirements. If confirmed, I will work to identify and reduce the barriers to leverage the best available commercial technologies to meet warfighter requirements.

In your view, what steps must DOD take to protect and strengthen our National Security Innovation Base to ensure that critical information is protected?

A. Based on my experience, a balance between collaboration with industry and protection of critical information is needed. Educating industry partners about threats is key, as many small businesses may not be aware of threats. Continuing the work the USSF has begun to build out secure facilities, which can be shared by small companies who do not have their own, is another way to reduce the threshold for smaller companies to contribute and thereby strengthen the industrial base. If confirmed, I will work across the Department to reduce barriers for small businesses, share operational challenges with the private sector and work to quickly integrate commercial capabilities of value to the DoD.

How are you leveraging the National Technology and Industrial Base as a means of fostering the industrial base needed for space, as well as promoting collaboration and interoperability with key allies?

A. The USSF is committed to implementing flexible terminals, networks, and ground interfaces, establishing an infrastructure and a management framework. This framework would allow

National Technology and Industrial Base partners to provide the DoD operational advantages by providing more capability options to theater commanders to accomplish joint warfighter objectives.

Technical Workforce

A significant challenge facing the Space Force today is a shortage of highly skilled data scientists; computer programmers; cyber; and other scientific, technical, and engineering talent to work at Defense laboratories and technical centers.

In your view, what are the pros and cons of having Space Force active duty military personnel trained and working as scientists, engineers, software coders, and in other technical positions across the Air Force's research, development, and acquisition enterprise?

A. Active duty personnel trained in these technical positions offer greater insights into operational challenges, mission necessity and tighter coupling of technical solutions to operational realities. However, the challenges, requirements and hardships inherent in military service coupled with financial incentives to work in the private sector make retaining technical talent for career long service challenging. Therefore, it is imperative that we create a mix of personnel and employment models to ensure the USSF has access to the talent it needs in the most operational relevant way possible. If confirmed, I will work hard to leverage innovations in talent management and career field progression to maximize the USSF's access to these important technical skillsets.

What are the pros and cons of employing Federal civilian employees in these fields, and what, in your view, is the optimum force mix of civilian, military, and contractor personnel?

A. The USSF has a unique force distribution, relative to other Services, between its military and civilian personnel numbers. The higher percentage of civilians is a direct reflection on the need to leverage very skilled, experienced technical experts in order to accomplish USSF missions. While it is true that both military and civilian personnel are important to mission execution, they cannot be treated as completely interchangeable parts of the USSF workforce. Each cohort brings different capabilities and limitations in terms of experience, background, motivations, perspectives, positional stability and rotational agility. If confirmed, I will leverage all of the talent management tools at my disposal to ensure we recruit and retain the necessary talent and maintain an effective balance between military and civilian personnel numbers to optimize mission performance and workforce development and sustainability.

What shortfalls (both in numbers and technical disciplines) do you have in your technical workforce outside of the labs and acquisition workforce, for both military and civilian personnel?

A. The USSF technical workforce is currently experiencing military shortfalls in the following disciplines: cyber operations (-67), intelligence (-158), and space operations (-189). While these

numbers are small relative to other Services, they represent a consequential percentage of our most critical mission areas. Additionally, the USSF continues to experience challenges in recruiting civilian talent within the artificial intelligence and data analytics fields. Because of the USSF's approach to being as lean as possible, there is very little slack in the system to absorb any shortfalls at all. If confirmed, I look forward to working with Congress on building some level of resiliency in our workforce numbers so that we can mitigate severe drops in mission effectiveness in the event of small numbers of personnel shortages.

Space Force Military End Strength

The Space Force has requested an end strength of 8,600 guardians for FY 2023.

Do you have any major concerns with the Space Force end strength target? If so, what are they, and how will you address them if confirmed?

A. The Space Force is focused on ensuring the authorized end-strength of 8,600 is comprised of the right mix, to include background, experience, and skills, so that we can effectively execute our mission requirements. The USSF's end strength is expected to grow over the next few years as we continue building out the necessary force to meet NDS objectives, integrate with the Joint Force and fulfill operational requirements of Combatant Commanders. If confirmed, I intend to review end strength requirements to ensure we continue to balance risk in maintaining legacy capabilities against demands of future force requirements, as well as provide for healthy and sustainable career progression for our Guardians.

What is the appropriate mix of active, reserve component, and civilian employees in the Space Force? How will you review current proposals if confirmed?

A. The mix of the force will be informed by a combination of current and future requirements as well as current and future available inventory. We expect our business processes to inspire quality competition and innovative talent management. We will employ the best we can afford to empower a lean and agile mission-focused force in an accountable environment using all the human resource vehicles. In pursuit of this vision, we must leverage all of the personnel tools at our disposal, including military and civilian cohorts with both full-time and part-time options. If confirmed, I will evaluate personnel policies and talent management processes through a force readiness lens. I will focus on implementing the policies and processes that optimize our readiness in the most expeditious manner.

What additional force shaping authorities and tools does the Space Force need, in your view?

A. The authorities granted by Congress have been sufficient to shape the size and composition of the Space Force. If confirmed, I welcome the opportunity to work with Congress if changing conditions require us to evaluate future force shaping authorities or tools.

Space Force Reserve Component

As of now, there are no Space Force components in the National Guard. What is your opinion on whether a Space National Guard should be established?

A. The capabilities the space units in the Air National Guard provide are critical – the Space Force cannot do its mission without them. As a military leader, I am most concerned with maintaining the readiness of these units in whatever organization is settled upon. We can do that a few ways and, if confirmed, I look forward to working with this Committee to make sure we get this important question right.

In your view, does the Space Force have a role in supporting domestic civil support missions?

A. Yes. Space Force capabilities like GPS, environmental monitoring, and communication satellites are critical capabilities for several contingencies. During emergencies, and under the direction of the President or Secretary of Defense, Space Force forces have a role in supporting domestic civil support missions.

What is your vision for the proposed full-time/part-time “Space Component?”

A. Properly implemented, the full-time/part-time “single component” for the Space Force can be a powerful recruiting and retention tool. This approach gives Guardians the flexibility to pursue interests outside of the Space Force without completely severing their connection to the Service. However, the ability of the Service and the members to seamlessly take advantage of this connection is complicated under the traditional Regular/Reserve components model by an administrative burden associated with transferring from the Regular to Reserve components. If implemented effectively, a single component could alleviate some of this burden and make it easier to retain high performing Guardians, then leverage them in full-time and part-time status more seamlessly throughout their career. If confirmed, I will work with Congress to explore the implementation of this important legislative initiative.

Space Force Recruiting and Retention

The National Defense Strategy Commission asserted unequivocally that the most critical resource required to produce a highly capable military is highly capable people, in the quantity required, willing to serve. The recruitment and retention of quality guardians—officer and enlisted, active and Reserve Component—is vital to the Space Force. Yet, DOD studies indicate that only about 29% of today’s youth population is eligible for military service. Further, only a fraction of those who meet military accession standards are interested in serving.

If confirmed, how would you ensure that the Space Force maintains sufficiently high recruitment and retention standards?

A. If confirmed, step one in this process will be to maximize the pool of acceptable candidates. We will continue to review and make appropriate changes to our entry standard (aptitude, moral, and medical) to ensure we are recruiting individuals that are not only highly qualified, but ensure we are not excluding individuals based on certain non-mission critical standards (tattoo, height/weight, etc.). Maintaining high standards is essential to attracting, building, and retaining a capable, competent and combat-ready force. I will ensure recruiters have the tools necessary to attract men and women who meet and exceed the high standards of the Department of the Air Force from every corner of America. I will monitor retention trends and take prudent steps to ensure we have the necessary room within our authorized end strength to continue to recruit and access talent that will sustain us into the future and maintain force readiness.

What steps will you undertake to ensure that the Space Force is a diverse and inclusive military service?

A. Establishment and sustainment of a diverse and inclusive Space Force begins with accessions. Therefore, the Space Force has taken active steps to modernize its outreach as well as recruiting programs targeting diverse populations to ensure a capable force for the future. For example, we are developing the University Partnership Program, which includes Historical Black Colleges and Universities. We have instituted an Applicant Pool Cycle inside our recruiting efforts which enables us to handpick the optimal candidates over the course of a year rather than fill our ranks on a first-come, first-served basis. Once in the Space Force, our workforce must be continually challenged and be provided advancement and development opportunities in order to retain diverse talent. Therefore, if confirmed, I will routinely review recruiting strategies and outcomes, using data to deliberately shape future recruiting and retention efforts so that Space Force represents the best and full breadth of diversity in America. I will also assess workplaces of our Guardians to ensure there is a culture of respect and universal inclusion so that all members of the Space Force team know that they are valued. I will also rigorously evaluate the developmental and advancement opportunities for Guardians to ensure we are providing for and enhancing the capabilities of all segments of our workforce.

What do you consider to be key to the Space Force's future success in retaining the best qualified personnel for continued service in positions of greater responsibility and leadership in the Space Force?

A. I believe there are two (2) key factors primarily associated with retaining talent in the Space Force: 1) Empowering Guardians to do meaningful work and recognizing the value of their contribution and 2) Providing Guardians with development and advancement opportunities. If confirmed, I will work to cultivate a Space Force culture in which Guardians can fully embody our values and who are recognized and rewarded for personifying those values in a respectful, innovative and risk-tolerant environment. I will also work to institute challenging and innovative developmental opportunities to ensure Guardians remain at the leading edge of their professional expertise.

What steps, if any, do you feel should be taken to ensure that current operational requirements and tempo do not adversely impact the overall recruiting, retention, readiness, and morale of guardians?

A. To retain talented Guardians, we must constantly look to maximize the quality of their service and the quality of life for them and their families. There are inherent sacrifices associated with military service. If confirmed, my job will be to ensure the rewards and the quality of the experience for military members and their families balances or outweighs the sacrifices that each will inevitably need to make.

In your view, what effect do current recruiting standards—particularly DOD-wide criteria for tier-one recruits—have on recruit attrition and/or future success in the Space Force?

A. Because of the size of the Space Force and the requisite number of accessions needed each year, Tier 1 education standards currently have minimal impact on the Space Force. Currently 99% of all enlisted Space Force entries are Tier 1, far exceeding the DoD requirement of 90%.

Military Compensation

What is your assessment of the adequacy of military compensation?

A. On average, Service members are compensated well when compared to their counterparts in the private sector. The military compensation system, to include cash compensation (basic pay, BAH, BAS, Retirement, etc.) and non-cash compensation (health care, leave and liberty, etc.), is adequate to recruit and retain the majority of the nation's military forces and to ensure an appropriate quality of life for military Service members. There are specific career fields that require higher levels of compensation to meet retention goals, and Congress has provided the military Services a robust package of special and incentive pays to address those populations. It is also true that the Space Force as a newly formed independent Armed Service does not have a large amount of historical trending data to rely on to predict retention trends. If confirmed, I will monitor closely all available data and seek active feedback from the workforce to assess retention of our critical talent.

In your view, are there any unique challenges or issues within the Space Force with respect to military compensation?

A. The competitive environment for talent faced by the Space Force is significantly different, in the aggregate, than that faced by our sister Services. We have a higher percentage of highly technical career fields whose talent is in high demand across all sectors of employment. As we seek to attract the quality of talent that can succeed in these fields, we must always remember that compensations include not only monetary compensation, but also non-monetary incentives, culture, environment, and quality of life. The Space Force must present a total compensation package to attract and retain the talent we need in a highly competitive and dynamic environment. If confirmed, I will advocate for the appropriate resources to retain Space Force talent but also work hard to build a culture and environment that appeals to our workforce and entices them to stay.

What recommendations would you have for controlling the rising cost of personnel?

A. If confirmed, I will assess the size, composition, and compensation structure of the entire force in order to create a force composed of the highest quality individuals that are properly trained and equipped to meet our national defense goals. To maximize the talents and potential of Space Force members, we should be considering as many innovative ideas as possible for talent management. Alternative approaches like grade-in-person system versus a grade-in-position system may better enable the workforce to develop and contribute across the Force. The key is to leverage any tool that would optimize the investment we make in our employees allowing them to contribute to mission achievement more broadly (avoid organizational stovepipes). In the end, this may provide greater retention, enhanced career growth with career variety and a deeper bench of expertise and skills to leverage.

Non-Deployable Service Members

The Department has published DODI 1332.45, *Retention Determinations for Non-Deployable Service members*.

Do you agree that guardians who are non-deployable for more than 12 consecutive months should be subject either to separation from the Space Force or referral into the Disability Evaluation System?

A. I believe every Service member must be able to perform their assigned missions effectively when the Nation calls. Deployability is one aspect of readiness for the Space Force. If a Service member is non-deployable for 12 consecutive months, an assessment is needed to determine if continued service is in the best interests of the Space Force, specifically, and the military more generally. When continued service is not in these best interests, the member should be separated or referred into the Disability Evaluation system.

DODI 1332.45 provides that the Secretaries of the Military Departments may “retain . . . those service members whose period of non-deployability exceeds the 12 consecutive month limit . . . if determined to be in the best interest of the Military Service.”

In your view, under what circumstances might the retention of a guardian who has been non-deployable for more than 12 months be “in the best interest of the [Space Force]”?

A. In my experience, there are circumstances that make someone non-deployable but do not prevent the member from performing operational duties in CONUS-based garrisons. Since many of the USSF’s missions are conducted as employed-in-place operations from CONUS-based installations, it may be in the best interest of the Space Force to retain the member because they can still perform vital missions from Space Force bases despite not being eligible to perform duties from deployed locations. If confirmed, I would ensure that our processes for making these determinations take advantage of our smaller numbers allowing more individualized consideration of factors. In the end, the optimal answer will be the one that enhances Space

Force readiness and accounts for the health and safety of Space Force members and their families.

In your view, how should this policy be applied to guardians with HIV or other chronic diseases? To guardians who identify as transgender?

A. The health and safety of Space Force members and the impact it has on force readiness is the primary consideration for this policy. If confirmed, it will be my responsibility to weigh these factors and make recommendations to the Secretary of the Air Force related to the readiness impact any policy decision could have.

Has the Space Force established any class or group of personnel deemed “deployable with limitations,” such that the class or group is exempt from the 12-month non-deployable retention determination requirement?

A. The Space Force is challenging traditional deployment availability limitations that are based on scenarios where most personnel deploy to forward and/or austere locations. Where these limitations can be adjusted in the context of a Force postured against a greater proportion of deployed-in-place requirements, it opens the potential for talented Guardians to be mission effective who would otherwise be deployment ineligible or even disqualified from service. In the interim, the Space Force follows the deployment readiness requirements established in DoD and DAF guidance.

In your view, what percentage of guardians can be non-deployable at any given time without adversely affecting the readiness of the force to execute the NDS and associated operational plans?

A. Today the Space Force actively manages deployment availability by assigning Guardians Deployment Availability Codes when they have deployment limitations. Those codes help commanders identify risks and, in some cases, disqualifying factors that prevent Guardians from performing certain missions. As the Space Force re-assesses what risks and factors are acceptable in deployed-in-place missions (i.e., that would not be disqualifying), the Space Force has the opportunity to weigh the advantages these Guardians offer by bringing other desirable qualities (such as specialized skills), without the constraints that would limit military members deploying to forward and/or austere locations.

Military Quality of Life

The Committee remains concerned about the sustainment of key quality of life programs for military families, such as family advocacy and parenting skills programs; childcare; spouse education and employment support; health care; and morale, welfare and recreation (MWR) services.

If confirmed, what quality of life and MWR programs would you consider a priority? How will the Space Force work with the Air Force and other military services to ensure MWR support for guardians and their families?

A. Military family readiness and quality of life are critical to recruiting and retaining the force required to meet current and emerging threats. The range of quality of life (QoL) and MWR programs are all a priority if we are to meet the needs of our Guardians' families and thus not impact Service Member's readiness and availability. From my experience, while there are many programs that are important in supporting our Guardians and their families, the highest priority QoL issues are related to housing, medical care and childcare. Because the Space Force was established intentionally without organic support capabilities, we rely heavily on the Air Force to provide much of the supporting structure that takes care of our families. If confirmed as CSO, it will be my role to partner with the AF to ensure we take care of all our families (particularly in these high priority areas), and the Guardians can expect me to be a demanding customer of the AF to ensure we get the support we need.

Family Readiness and Support

What do you consider to be the most important family readiness issues for guardians and their families?

A. Personal (and family) resiliency in a demanding and often stressful military environment is one of the most critical family readiness issues for Guardians and their families. Military life can be inherently difficult and family readiness issues encompass various aspects of well-being for Guardians and their families. Priorities for family-readiness issues must include opportunities for increasing resilience to encourage and sustain wellbeing and helping families overcome the adversities associated with military life. Development of the requisite skills needed to increase and promote resilience is a key priority for addressing the issue. Furthermore, easy access to child and medical care and suitable, safe and affordable housing are important factors in promoting family well-being. If confirmed, I will support programs that address these primary considerations for quality of life and reinforce a strong Space Force community and focus on those that build and sustain resilient families.

If confirmed, how would you ensure that the family readiness issues you identified are properly addressed and adequately resourced?

A. If confirmed, I plan to conduct frequent visits to the field to see and hear for myself from the people most affected by our quality of life decisions. The relatively small size of the Space Force provides an opportunity to have a higher degree of senior leader interaction and engagement. Therefore, I will leverage formal and informal feedback mechanisms and collect as much information as possible to assess for myself the effectiveness and suitability of the programs we establish or need to establish. If confirmed, I will work hard to receive honest, comprehensive and constructive feedback directly from the field and then connect these inputs directly to resourcing decisions and monitor outcomes utilizing all available methods and information.

In your view, what role do non-medical counseling services provided by DOD Military Family Life Counselors have in promoting the readiness of the force and family?

A. Because personal resiliency and well-being is a very individual condition, the quality and quantity and variety of services are important. It is hard to predict which services will provide the best support to an individual. Because personal well-being is linked to force readiness, I think leaders have a responsibility to provide as many options as possible to optimize the effectiveness of the programs to the greatest number of individuals. Happier and healthier personnel are inherently more capable and ready to perform their missions.

The Committee often hears that active duty families have difficulty obtaining childcare on base and that there are thousands of military families on waitlists to receive care.

If confirmed, what specifically would you do to provide Space Force families with accessible, high-quality childcare, at an appropriate cost?

A. Available, affordable, and quality childcare services allow Guardians to focus on and execute the Space Force's mission. Before making any specific recommendations, a more in-depth evaluation of the issue is required to ensure the right solution is brought forth for Guardian's accessibility to high-quality childcare at an appropriate cost. The evaluation includes assessing the current state of program operations (including analysis of wait times for access to care and program financial models, and staffing and facility requirements), identification of facilitators and barriers contributing to childcare successes and challenges, and development and execution of a plan of action to ensure Guardians' childcare needs are met, they receive quality childcare, and it is delivered at an appropriate cost. If confirmed, I will work closely with my Department counterparts to ensure garrison childcare programs are well staffed and operating to maximize existing childcare spaces, utilize all available community based childcare options, and smartly invest in facilities to expand the number of childcare spaces where needed.

How would you ensure that childcare services for Space Force families are properly resourced?

A. Step 1 is to collect information to fully understand the capabilities, challenges and opportunities related to this important family readiness issue. Step 2 would be to partner with the Air Force, who provides this support to the Space Force, to determine the appropriate way ahead. Space Force is already establishing and fostering a partnership with HQ USAF/A1S. If confirmed, I would advocate to ensure the Department of the Air Force continues to recognize and support the critical need to provide available, affordable and quality childcare services for Air and Space families.

Support for Military Families with Special Needs

If confirmed, how would you ensure that a guardian with a special needs family member is relocated only to a new duty station at which the medical and educational services required by that family member are available?

A. The Department of the Air Force (DAF) has made significant strides in its multi-year transformation of the Exceptional Family Member Program (EFMP) with the most recent focus on Family Member Travel Screening and Centralized Medical Screening. If confirmed, I would continue to support DAF EFMP transformation efforts, implementation of EFMP standardization requirements identified in the National Defense Authorization Act for Fiscal Year 2021, and continually solicit feedback from Guardians and their families to ensure that the permanent change of station (PCS) process was efficient and that all required services were available at the new duty location.

If confirmed, what tools would you use to encourage guardians to enroll in the exceptional family member program (EFMP)?

A. If confirmed, I would use all avenues available to me - leadership at every level, messaging and social media platforms - educating Guardians and their families on the benefits of enrollment in the program and the support it provides throughout the military lifecycle is critical to enrollment and the success of the program.

If confirmed, what role would you establish for yourself in ensuring that Military Housing Privatization Initiative partners and military commanders consider the needs of service members with an exceptional family member in making assignments to privatized military housing?

A. A strong and healthy home life underpins a ready Force. If confirmed, I would continue to be a strong advocate for the needs of our Guardians and their families. I will work with key agencies across the Department of the Air Force, who provide this support to the Space Force, to address the unique requirements of families enrolled in the Exceptional Family Member Program (EFMP).

Domestic Violence and Child Abuse in Military Families

What is your understanding of the extent of domestic violence and child abuse in the Department of the Air Force, and if confirmed, what actions would you take to address these issues within the Space Force?

A. Crimes of domestic violence and child abuse run counter to our Space Force culture and core values and cannot be tolerated. Domestic violence and child abuse must be addressed to ensure victims are given the resources and support they need, and abusers are held accountable. My understanding is the Department is engaged in multiple efforts to improve available resources and communication of those resources to domestic violence victims, while simultaneously improving education on domestic violence prevention to Guardians throughout the entire Space

Force. Additionally, the Department of the Air Force (DAF) is committed to holding abusers appropriately accountable through their chains of command pursuant to the Uniform Code of Military Justice. Additionally, it's my understanding that by the end of 2023, disposition of domestic violence and child sex abuse offenses will fall under the exclusive jurisdiction of Office of Special Trial Counsel (OSTC). In the interim, OSTC has begun phased implementation, to include Special Trial Counsel input on commanders' disposition decisions for these offenses. Until the OSTC effective date, the DAF will continue to provide principled legal counsel to commanders exercising disposition authority over these offenses. If confirmed, I will support these initiatives and any others that help protect our Guardians and their families.

In your view, what more can the Department do to *prevent* child abuse and domestic and intimate partner violence?

A. We must continue to collaborate with agencies inside and outside the Department of the Air Force to ensure that Airmen and Guardians live a life free from family violence. The Prevention Workforce will integrate primary prevention efforts with the goal of reducing risk factors shared across multiple forms of violence and increasing efficiency in the installation prevention system. We will continue to press forward with institutionalizing and implementing prevention at all levels while engaging key stakeholders to find innovative and promising approaches.

Do you believe that the Air Force Department's Family Advocacy Program strikes the right balance between healing families and holding individuals accountable for acts of domestic violence and child abuse?

A. Domestic violence and child abuse must be addressed to ensure that individuals and families get the resources needed to heal from the abuse. The Family Advocacy Program is primarily focused on ensuring families are provided with the appropriate support resources. Our military justice system operates within a careful balance between the interests of the government, the rights of the accused, and the respect for the dignity of victims. We need to be focused on all aspects of this issue. If confirmed, I will ensure we continue to place an emphasis on supporting families through the Family Advocacy Program and holding offenders appropriately accountable under the Uniform Code of Military Justice. Additionally, it is my understanding that by the end of 2023, disposition of domestic violence and child sex abuse offenses will fall under the exclusive jurisdiction of Office of Special Trial Counsel (OSTC). In the interim, OSTC has begun phased implementation, to include Special Trial Counsel input on commanders' disposition decisions for these offenses. Until the OSTC effective date, the Department of the Air Force will continue to provide principled legal counsel to commanders exercising disposition authority over these offenses. If confirmed, I will support these initiatives and any others that help protect our Guardians and their families.

Sexual Assault Prevention and Response

Despite significant efforts by the Military Services to enhance their response to sexual assaults, including measures to care for victims and hold assailants accountable, prevalence surveys continue to show increases in sexual assault and unwanted sexual

conduct, primarily for female service members aged 17 to 24, similar to findings of the prevalence of sexual harassment and assault at the Military Service Academies.

What is your view of the role of the Space Force chain of command in maintaining a command climate in which sexual harassment and sexual assault are not tolerated?

A. This issue is important for the Department as any instance of sexual assault or sexual harassment is unacceptable and must not be tolerated. It betrays the trust of our Guardians, it negatively impacts readiness and as a parent myself, I believe military leaders have an obligation to protect America's sons and daughters who have chosen to serve their country. Because I am committed to the health and safety of our Guardians, you will not find a better partner working with Congress on this issue because I believe there will always be more that leaders can do to protect our Guardians.

If confirmed, what specific role and tasks would you establish for yourself in the Space Force's program of preventing and responding to sexual harassment and sexual assault?

A. If confirmed I will continue to emphasize the importance of Commanders' and other leaders' roles in ensuring that the climate and culture within their units are free of sexual harassment and sexual assault. Leaders set the tone for their units by their words and actions. If confirmed, I will also play an active role in reviewing incidents of sexual assault and harassment and will ensure that programs designed to prevent them from happening are properly resourced.

In your view, are the policies, programs, and training that the Space Force has put in place to prevent sexual assault and to respond to sexual assault when it does occur adequate and effective?

A. Because any instance of sexual assault is too many, the policies, programs and training that are in place are continuously being evaluated and improved to reduce the occurrence and ensure if sexual assault occurs, the response and support are adequate and effective.

Are Space Force policies for addressing retaliation and reprisal—most notably, social ostracism and reputation damage—for reporting sexual assault adequate in your view?

A. At this time DAF policy for addressing retaliation and reprisal encompasses the USSF and is moving in the right direction with implementing protections against retaliation. I am supportive of these efforts. If confirmed, I will use data to inform future changes and efforts to reinforce protections against retaliation and social ostracism.

What is your assessment of the adequacy of Air Force resources and programs to provide victims of sexual assault the medical, psychological, and legal help they need?

A. The policies, programs and training that are in place are continuously evaluated and improved to ensure if sexual assault occurs, the response and support are adequate and effective to facilitate healing. This is an important issue and the health and safety of Guardians, and their families are a top priority so there is always more we can do to protect them.

Suicide Prevention

The number of suicides in each of the Services continues to concern the Committee.

If confirmed, specifically what would you do to maintain a strong focus on preventing suicides in the Space Force, including their family members?

A. If confirmed, I will ensure the USSF continues to actively participate in the Department of the Air Force (DAF) effort to ensure we maintain our focus on prevention of suicides. DoD and DAF are working several initiatives in this area to include DAF's time-based prevention and expanding the Prevention Workforce initiative.

If confirmed, specifically what more would you do to enhance the reporting and tracking of suicide among family members and dependents of Guardians?

A. If confirmed, I will ensure the USSF will continue to align with the Department of the Air Force's efforts to increase reporting and tracking of deaths by suicides among our family members and dependents.

Audit

Why is it important for the Department of the Air Force to achieve a clean audit opinion?

A. Achieving a clean audit opinion demonstrates the Department of the Air Force's ability to accurately and comprehensively account for the dollars we spend to perform our mission. The audit is driving necessary changes to improve the way we equip and pay Airmen and Guardians, protect our IT systems and data, and optimize our budget and spend cycles. Data consolidation efforts, motivated by the audit, are arming decision-makers with real time Department-wide views and advanced data analytic capabilities that support efficiencies and sustain improvements. Continuing to engage in a financial statement audit and prioritizing the big rocks identified during that annual process, will empower the DAF to innovate, accelerate, and transform how we do business for years to come.

Space Force General Officer (GO) Authorizations

What is the appropriate number of General Officers in the Space Force, and why?

A. I am sensitive to Congressional concerns regarding excess growth in leadership and believe resources should be prioritized to focus on combat capability. Today we are supporting and executing the Space Force missions successfully with 21 full-time general officers. This number represents a lean approach to leadership across our headquarters staff, three (3) Field Commands, our largest launch Delta, and several other key positions across the DoD. However, it is my personal opinion that although currently working, this number is not sustainable in that the capacity in each grade is not sufficient to sustain the two (2) four-star positions as the Service Chief and Vice that are necessary to effectively lead the service. Furthermore, there are key areas where senior ranking leadership is required for proper Space Force integration across DoD,

on the Joint Staff and inside the Combatant Commands but we lack the capacity to participate at the expected grade levels. If confirmed, I look forward to working with Congress to determine the appropriate number of General Officers that allows for effective integration and career sustainment of key leadership positions while limiting any unnecessary growth in the size of the Space Force.

How have Space Force GOs been affected by the layering of post-government employment constraints, including the enactment of section 1045 of the National Defense Authorization Act for Fiscal Year 2017 (P.L. 114-328)—applicable only to DOD?

A. All officers that transferred to the Space Force accepted a two-year service commitment, so we are only now experiencing our first general officer retirements. As such, the extent of impact of section 1045 of the National Defense Authorization Act for Fiscal Year 2017 on the USSF remains unknown. It is our hope and desire to have legal and ethical access to retired Service members of all grades in an advisory and mentoring fashion without delay.

In your view, does the Space Force have sufficient training and resources in place to provide its GOs with the training, advice, and assistance they need to avoid and address conflicts of interest, comply with travel regulations, and ensure that government resources—including employee time—are used only for official purposes? Please explain your answer.

A. Yes. All newly promoted general officers within the Space Force receive mandatory ethics training which covers conflicts of interest and a variety of other topics such as proper utilization and oversight of resources. Refresher training is provided, and financial reporting is required on an annual basis.

Adverse and Reportable Information

Incidents of misconduct or substandard performance, and the findings of Inspectors General and command-directed investigations are documented in various ways in each of the Military Services. Procedures for reviewing and forwarding adverse and reportable information for consideration in the promotion selection process, including consideration by the Senate where applicable, are set forth in title 10, United States Code, and in DOD Instruction 1320.4.

How is the Space Force ensuring compliance with the requirements of law and regulation regarding the investigation and review of adverse and reportable information in the context of both GO and below-GO promotion selection processes?

A. The Department of the Air Force's (DAF's) Inspector General and Office of Special Investigations serve both the Air Force and the Space Force. The Space Force utilizes the DAF's investigation, review and personal processes to consistently support the requirements of law and regulations regarding the investigation and review of adverse and reportable information related to promotion selection.

Do you believe current procedures and practices applicable to the Space Force concerning the review of records of officers pending the President’s nomination for promotion or assignment are sufficient to enable fully-informed decisions by the Secretary of the Air Force, the Chairman of the Joint Chiefs of Staff, the Secretary of Defense, and the President?

A. Yes, I do. The Space Force leverages the existing and effective Department of the Air Force’s (DAF’s) processes to support the promotion and assignment recommendation process.

In your view, are these procedures and practices fair to the individual military officers proceeding through the promotion or assignment process? Please explain your answer.

A. Yes, I believe the procedures and practices of the promotion and assignment processes are fair. They ensure rigorous adherence to all associated laws, policies and guidance and are generally conducted in a timely manner.

Joint Officer Management

The National Defense Authorization Act for Fiscal Year 2017 (P.L. 114-328) modified the Joint Qualified Officer (JQO) system established by the Goldwater-Nichols Act in two significant ways. First, it broadened the statutory definition of “joint matters” to expand the types of positions for which an officer can receive joint duty credit. Further, it reduced from three years to two the minimum tour length required for joint duty credit.

What is your assessment of the effectiveness of the FY 2017 modifications to the JQO system?

A. I believe the modification maintains the effectiveness of the JQO system while maximizing the flexibility that is inherently needed in the system to ensure the right officer is matched to the right position in the right timeframe. Furthermore, my experience tells me that the US military has become so “joint” that there are many Service responsibilities that are inherently and significantly joint in character and responsibility. Therefore, it is logical that the “joint matters” definition be expanded.

In your view, are the requirements associated with becoming a JQO, and the link between attaining joint qualification and eligibility for promotion to general and flag officer rank, consistent with the operational and professional demands of Space Force officers?

A. The USSF should not be treated differently with regard to qualifications and eligibilities associated with joint duties. However, the USSF is not yet fully integrated into Joint staffs and commands in the right quantities and ranks. This is partly because we do not have enough personnel to perform service responsibilities and many joint responsibilities. However, I believe there is also work to be done inside the Joint organizations to create a sufficient demand single for appropriate levels of USSF support so that the Service can respond to the request rather than trying to drive integration from the outside in.

In your view, what additional modifications, if any, to JQO prerequisites are necessary to ensure that Space Force officers are able to attain both meaningful joint and Space Force-specific leadership experience and adequate professional development?

A. Space Force officers are already well postured to take on joint leadership positions. With very few junior grade exceptions, USSF officers all were commissioned in another Service and learned other domains before transitioning into the USSF. This makes many of them perfectly suited for joint duty and leadership. On the other hand, most non-USSF Joint officers have very little experience with space operations. Joint PME should include far more space training, as this is a critical domain with critical missions to the Joint Force. If confirmed, I will work with my Joint and Service counterparts to enhance space expertise outside the USSF ranks.

Professional Military Education

The 2018 NDS asserts that Professional Military Education (PME) has stagnated—that it focuses on the accomplishment of mandatory credit at the expense of lethality and ingenuity.

What is your vision for PME in the Space Force?

A. Like all other Services, USSF PME will abide by educational requirements established for Joint Professional Military Education. Second, USSF PME will provide opportunities for the other Services to send personnel to become educated in depth on space domain, capabilities and culture. Finally, USSF PME will explore and leverage non-traditional educational venues to expand perspectives and experiences. USSF will explore Education with Industry and Academic and Inter-agency Fellowships to maximize the diversity of viewpoints that Space Force personnel bring to problem solving.

In your judgement, what is the most significant shortcoming of today's PME system?

A. The richness of the in-residence experience is limited to only a small percentage of personnel in the Services. It is my hope that due to the smaller number of Guardians in the Space Force we can expand in-residence PME options to a much larger percentage of Guardians. The expansion of developmental opportunities leads to greater pools of candidates for senior positions of responsibility and ultimately to a more capable force.

Do you believe that PME today creates adequate joint leaders? Why or why not?

A. In conjunction with the experiences acquired in joint assignments, Joint PME helps create adequate joint leaders. The most significant educational shortfall is the relatively small amount of space-based curriculum provided to non-USSF personnel. Additionally, the USSF will need to secure more joint duty assignments for its personnel to maximize the number of candidates for joint leadership positions.

If confirmed, what specific actions would you take to develop a Space Force PME system to ensure that it fosters the education and development of a cadre of strategic thinkers and

planners with the intellectual acumen, military leadership proficiency, and sound judgment to lead the Joint Force in a globally integrated, multi-domain fight?

A. The most important action is to create and leverage non-traditional educational opportunities for Guardians to immerse themselves in the space industry, commercial tech sector, civil space agencies, foreign institutions, think tanks and similar mind expansion environments. Diversity of thought is key to driving innovation and is fostered by external experiences that move USSF members outside their normal comfort zones and teach them to think differently about the challenges we face.

What changes or reform would you recommend to the PME system to ensure that tomorrow's leaders have the tools necessary to ensure the Space Force is able to meet the national defense objectives of the future?

A. Not knowing precisely where tomorrow's leaders will come from, the most important change is to expand PME capacity to provide professional development opportunities to the greatest number of Guardians possible. Education of a maximum number of junior members is the hedge against not knowing who the CSO will be 20 years from now. Then ensure that our development opportunities focus on lasting skills like critical thinking, logic and reasoning and communication...there is no shelf life to these skills, and they will inevitably help the CSO of 2050 in ways that specific tech details of today may not.

Officer Personnel Management System Reforms

The John S. McCain National Defense Authorization Act for Fiscal Year 2019 (P.L. 115-232) contained several provisions to modernize the officer personnel management system. These reforms were designed to align officer career management with the priorities outlined in the 2018 NDS.

How is the Space Force implementing these authorities today and to what effect?

A. The new authorities granted by the National Defense Authorization Act of Fiscal Year 2019 have given the Space Force more flexibility to better manage the officer corps. We appreciate continued Congressional support. It is imperative we continue to develop and modernize our talent management tools to build the force we need for a future high-end fight. If confirmed, I will ensure the Space Force is working hard to modernize personnel management practices and policies to reflect best practices in talent management.

In your view, does the Space Force need any additional authorities to modernize the management of military personnel?

A. We appreciate the authorities Congress has granted the Space Force and DoD. We will work to maximize the use of currently available authorities, but our work will require expanded authorities to transition more easily between full and part-time employment. There will be a need for new authorities to support our proposed human capital structure—the Space Component. The space component will leverage permeability and flexibility between full and

part-time service of current and former military as well as with other Services. With the significant number of recent Inter-Service Transfers to the Space Force, we are reviewing options to make this more efficient for the losing and gaining Service. If confirmed, I will look into any additional authorities the Space Force may need in the future and will work with Congress to develop these authorities.

Space Force Civilian Personnel Workforce

In your judgment, what is the biggest challenge facing the Space Force in effectively and efficiently managing its civilian workforce, and how would you address that challenge, if confirmed?

A. The biggest challenge is ensuring a sustainable work force with the right skill set. To maintain a civilian workforce to operate effectively within the Space Domain we must provide our employees growth opportunities to foster excitement and engagement. We must ensure they are provided opportunities to work on meaningful projects and be collectively part of the USSF force as a multiplier and critical aspect. If confirmed, I will work to ensure their development and training are an effective part of our civilian workforce strategy.

How would you assess the adequacy of compensation and benefits for Department of Space Force civilian employees, the morale of the civilian workforce, and the Department's ability to recruit and retain the very best talent for civilian service?

A. It is my understanding that there are concerns about the adequacy of existing levels of compensation to recruit and retain top talent in highly technical fields particularly in areas of the country with higher costs of living. The current morale of the civilian workforce is facing challenges in balancing the building of the force while developing its identity as Guardians. If confirmed, I would welcome the opportunity to work with Congress on developing strategies and securing the resources needed to retain our talented civilian workforce.

How will the Space Force build and sustain requisite capacity and capability in its civilian workforce to meet national defense requirements over the next decade?

A. We need significant emphasis on forecasting future skillsets needed to meet nation defense requirements. If confirmed, I am committed to supporting the analysis of our future workforce skillset.

In your view, how can DOD and its Components better utilize telework, and other alternative work arrangements, while maintaining supervisory and employee accountability for high quality performance and the appropriate use of official time?

A. High quality performance is achieved through clear supervisory and employee communications and engagement, there are technology enhancements needed to capitalize this for a robust telework or alternate work arrangement. If confirmed, I am committed to exploring innovations that enable flexible work environments while maintain high levels of productivity and high quality work.

One long-standing special civilian personnel management program is the DOD Civilian Acquisition Workforce Personnel Demonstration Project (commonly known as AcqDemo). Originally implemented in 1999, AcqDemo provides tremendous flexibility in the compensation, hiring, and overall management of the DOD acquisition workforce. AcqDemo has been deemed a success by the Department and by the employees it covers, yet almost 20 years later, it remains a “temporary” authority.

In your view, are there sound reasons for transitioning AcqDemo to a permanent program?

A. Yes, I believe the successes shown in simplifying and streamlining the hiring processes while maintaining Merit System Principles warrants consideration for permanency. But I also believe that our experiences in implementing AcqDemo also allow us to offer suggestions for improvements in pay scales, promotion opportunities, etc. If confirmed, I will collaborate with the personnel teams in the DAF to explore ways to improve this program.

In your view, could the AcqDemo system be applied successfully—as it currently stands, or with modifications—to other civilian personnel functional communities?

A. Yes, there are several streamlined practices and authorities that could be applied across multiple functional communities. The benefits of such “demo programs” merit expansion across wider populations. But I also believe that our experiences in implementing AcqDemo allow us to offer suggestions for improvements in pay scales, promotion opportunities, etc. If confirmed, I will collaborate with the personnel teams in the DAF to explore ways to improve this program.

Sexual Harassment in the Civilian Workforce

In responding to the inaugural DOD Civilian Employee Workplace and Gender Relations survey administered in 2016, 14.2 percent of female DOD employees and 5.1 percent of males indicated that they had experienced sexual harassment or gender discrimination by “someone at work” in the 12 months prior to completing the survey.

In your view, is civilian workforce harassment prevention and response training across the Space Force adequate and useful to employees?

A. Because a single instance of sexual harassment is too many, the policies, programs and training that are in place are continuously evaluated and improved to reduce the occurrence, and ensure if sexual harassment occurs, the response and support are adequate and effective.

Does the Space Force’s method for responding to complaints of sexual harassment or discrimination in the civilian workforce provide appropriate care and services for victims?

A. Yes. The policies, programs and training that are in place are continuously evaluated and improved to ensure if sexual harassment or discrimination occurs, the response and support are adequate and effective to provide appropriate care and services for the victim.

If confirmed, what role would you establish for yourself in preventing and responding to sexual harassment in the Space Force civilian workforce?

A. This issue is important for the Department, as any instance of sexual harassment is unacceptable and must not be tolerated. If confirmed, I will continue to emphasize the importance of Commanders' and other leaders' roles to ensure that the climate and culture within their units are free of sexual harassment. Leaders set the tone for their units by their words and actions. If confirmed, I will also play an active role in reviewing incidents of sexual harassment and will ensure programs designed to prevent it are properly resourced.

Congressional Oversight

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.

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 yes or no.

A. YES

Do you agree, without qualification, if confirmed, and when asked before this committee, its subcommittees, or other appropriate committees of Congress to give your personal views, even if those views differ from the position of the Administration? Please answer yes or no.

A. YES

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 yes or no.

A. YES

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 yes or no.

A. YES

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 yes or no.

A. YES

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 yes or no.

A. YES

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 yes or no.

A. YES

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 yes or no.

A. YES