Senate Armed Services Committee
Advance Policy Questions for LTG James H. Dickinson, U.S. Army
Nominee for Appointment to be Commander, United States Space Command

Duties and Responsibilities

Presidential memorandum of December 18, 2018, directed the establishment of a U.S. Space Command (USSPACECOM) as a Unified Combatant Command, with responsibility for Joint Force space operations. Space Policy Directive (SPD)-4, dated February 19, 2019, specified, "[t]his command will have all of the responsibilities of a Unified Combatant Command in addition to the space-related responsibilities previously assigned to U.S. Strategic Command. . . . The Commander of this command will lead space warfighting through global space operations that may occur in the space domain, the terrestrial domains, or through the electromagnetic spectrum. . . . [T]he U.S. Space Command shall ensure unfettered access to, and freedom to operate in, space and provide vital effects and capabilities to joint and coalition forces during peacetime and across the spectrum of conflict."

What is your understanding of the duties and responsibilities of the Commander, USSPACECOM as a Combatant Command in the Department of Defense?

The Commander is responsible for the USSPACECOM mission to conduct operations in, from, and to space to deter conflict, and if necessary, defeat aggression, deliver space combat power for the Joint/Combined force, and defend U.S. vital interests with Allies and partners.

In light of these duties and responsibilities, what background, expertise, and experience do you possess that qualify you to serve as Commander, USSPACECOM?

My more than 3 decades of service have covered a broad swath of key staff and joint warfighting space and missile defense experiences. I've served as the Chief of Staff for U.S. Strategic Command, the U.S. Army Deputy Inspector General, the Director of Test for the Missile Defense Agency, and I currently serve as the first Deputy Commander for USSPACECOM. For the past three years, I commanded both the U.S. Army Space and Missile Defense Command/Army Force Strategic Command and Joint Functional Component Command for Integrated Missile Defense. I commanded two Army Air and Missile Defense Commands supporting USCENTCOM and USINDOPACOM. I commanded at the Brigade, Battalion, and Battery level multiple times and have deployed in support of OPERATIONS SOUTHERN WATCH, ENDURING FREEDOM, and IRAQI FREEDOM. I believe my work across all of these joint space and warfighting operations gives me a unique perspective for the challenges ahead – assuring freedom of operation in space, deterring attacks, employing combat-relevant space capabilities and when necessary, defeating space and counter space threats to the U.S., our Allies, and our partners.

Do you believe there are actions you need to take to enhance your ability to perform the duties and responsibilities of the Commander, USSPACECOM?

Yes. If confirmed, I'll maintain focus on the critical space missions upon which the nation and the joint force depends. To ensure successful execution of these missions, I am committed to developing strong relationships with my fellow Combatant Commanders, our joint and service

component commands, our inter-agency partners, the Intelligence Community, as well as our allied partners. Finally, if confirmed, I look forward to working closely with this committee.

Major Challenges and Opportunities

What do you consider to be the most significant challenges you will face if confirmed as the Commander, USSPACECOM?

As the June 2020 Defense Space Strategy makes clear, Space is now a distinct warfighting domain, demanding enterprise-wide changes to policies, strategies, operations, investments, capabilities, and expertise for a new strategic environment. The Department of Defense is addressing this environment through the most significant transformation in the history of the U.S. national security space program, including through the establishment of USSPACECOM. If confirmed, I'll continue to address the following most significant challenges: (1) threats to U.S space capabilities, (2) threats from adversary space capabilities to U.S. military forces and (3) maintaining and growing our national security space programs and combat-relevant space capabilities in a challenging budget environment.

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

If confirmed, I will work shoulder-to-shoulder with my fellow Combatant Commanders to synchronize our efforts and capitalize on one another's capabilities. I will work closely with the new United States Space Force as it organizes, trains, and equips the preponderance of our space forces, and with developers, acquirers, commercial partners and the Intelligence Community to ensure we're seeking the right capabilities and systems that will enable us to deter aggression and maintain freedom of action in space for ourselves, our Allies, and our partners.

Given the major challenges you identified above, what other priorities would you set for your term as Commander, USSPACECOM?

If confirmed, my initial priorities will be ensuring we are focused on the space domain and remaining consistent with the priorities of the department. Enhancing the readiness and lethality of our space capabilities to effectively operate in today's contested, warfighting domain. Continuing the development of robust global partnerships with the intelligence community, our Allies and commercial industry. Finally, continuing to develop warfighter critical requirements and business models to move rapidly and stay ahead of the growing threat.

If confirmed, what actions would you take to focus your Command's and Department of Defense efforts on each of these priorities?

If confirmed, I will work closely with my fellow Combatant Commanders, ensuring that we take full advantage of one another's unique capabilities. I will also work with the military Services, developers, acquirers, commercial partners and the Intelligence Community to ensure we're seeking the right capabilities and systems that enhance the readiness and lethality of our space capabilities. I will work with all appropriate stakeholders to ensure we're defining and relaying the warfighting requirements that will keep our nation ahead of the threat.

Use of Military Force

In your view, what factors should be considered in making recommendations to the President on the use of military force?

Space is a warfighting domain and we must be prepared to defend U.S., allied and partner space capabilities, in accordance with the rules of engagement as approved by the National Command Authority, and consistent with the Law of Armed Conflict, in order to prevent and/or mitigate hostile acts in Space. We must also factor in our assessment of the potentially hostile intent of adversaries, as well as the costs, risks, and benefits of potential options.

Are there other factors that, in your view, should be considered in making recommendations on the use of military force in space operations, whether conducted in the terrestrial or space domains, or through the electromagnetic spectrum?

We must always be cognizant that in the warfighting domain of space, we operate in an area of close proximity to non-military assets. My recommendation of military force in space operations will always be balanced, measured, and proportional to the hostile act or intent of an adversary. I will also factor in external issues such as non-military assets.

In your view, what is the appropriate role of a Combatant Commander in establishing policies for the use of military force and rules of engagement?

If confirmed, my duty as a Combatant Commander in establishing policies for the use of military force and rules of engagement is to first support the development of those policies with subject matter expertise. In parallel action, we will work to establish policy in coordination with stakeholders across the Department of Defense. We believe that close coordination with all stakeholders is essential to establish the most efficient policies on the use of force and rules of engagement.

Should a Combatant Commander's role in this regard differ, in your view, when establishing policies for the use of military force and the rules of engagement for space operations?

I believe it is a Combatant Commander's responsibility to advise the Secretary of Defense in establishing policies that may be used across the spectrum of military conflict. I realize that a policy cannot be a "one size fits all" approach, but we will work within the framework of existing law and policies for the use of military force and the rules of engagement and request additional authorities when necessary.

National Defense Strategy

The 2018 National Defense Strategy (NDS) moved beyond the "two-war construct" that has guided defense strategy, capability development, and investment for the past three decades, and refocused DOD on "great power competition and conflict" with China and Russia, while directing a "more resource sustainable" approach to counterterrorism.

In your view, does the 2018 NDS accurately assess the strategic environment as it pertains to the domain of space? In your view, what will "great power competition" look like in space? Are there other nation-states or other actors operating in space that you perceive as a risk to the U.S. or as cause for concern? If so, why?

Yes, the 2018 NDS presents an accurate assessment of the strategic environment from a macro sense for all domains--great power competition The new Defense Space Strategy builds on the NDS foundation and provides a much more detailed framework for understanding and addressing the threats, challenges, and opportunities we face in the space environment. As the newest Combatant Command, we have rightfully placed an emphasis on deterrence and warfighting in the contested space domain. Whereas we hold strategic advantages in all domains, China and Russia present the most immediate and serious threats to U.S. space operations. Threats from North Korea and Iran are also growing. While we must remain vigilant against established competitors such as Russia and China, we must also establish visionary practices to identify the next iteration of potential competitors. The proliferation of technology and the lowering of barriers for entry into space, or access to the data provided from space, means we have an increasing circle of other countries that we remain vigilant about. I am concerned about other actors having access to advanced counterspace capabilities possibly resulting in strategic surprise because we have taken risk in monitoring and collecting intelligence to focus on the 4+1 (or 2+3) strategy.

Does the 2018 NDS properly focus the U.S. on preparing to compete, deter, and win against the range of threats in the domain of space? Please explain your answer.

Yes, the 2018 NDS properly focuses the U.S. on preparing to compete, deter, and win against the range of threats in space. The preservation of key U.S. national security and economic interests depends on the continued and widespread use of space-based systems such as command, control, communications, computers and intelligence, surveillance, and reconnaissance (C4ISR); missile defense, and advanced autonomous systems. The NDS rightfully identifies space capabilities as a modernization priority to enhance the lethality of DOD and the Defense Space Strategy provides the appropriate level of guidance and direction to achieve NDS objectives.

What is your understanding of U.S. strategic objectives in space and what role do you believe USSPACECOM should play in supporting these objectives? What does successful implementation of the 2018 NDS "look like" in the domain of space?

The Defense Space Strategy (DSS) directly supports achievement of NDS objectives by identifying how DoD will advance space power to enable the Department to compete, deter, and win in a complex security environment. In an environment characterized by great power competition, DOD has three broad objectives in space: maintain space superiority, provide space support to national, joint, and combined operations; and ensure space stability in order to advance America's security, economic prosperity, and scientific knowledge. USSPACECOM's ability to execute its Unified Command Plan missions enables it to deter and, if necessary, defeat aggression and deliver critical space capabilities for the Joint Force. Successful implementation of the NDS envisions a future where USSPACECOM is able to fully leverage space capabilities

for diplomatic, information, military, and economic activities during peace or war to attain national objectives.

Given your current knowledge of space programs, does the 2018 NDS specify the correct set of capabilities by which the U.S. can achieve its objectives in space, in the face of ongoing competition and potential conflict with China and Russia? What do you perceive as the areas of highest risk?

The NDS specifies the correct sets of capabilities to counter Russian and Chinese aggression in space demonstrated by their investment in technologies specifically intended to degrade, disrupt or deny U.S. space warfighting capabilities. The NDS and the more recent Defense Space Strategy provide an excellent outline for moving forward our nation's objectives in respect to the space domain. These guiding documents, combined with the establishment of the U.S. Space Force and USSPACECOM, help mitigate the highest risk where we continue to treat space differently from other warfighting domains. We have begun to normalize how we operate in the space domain like air, land and sea. We must still address concerns with regard to the classification of some systems and the authorities to operate those systems. Other risks include our ability to quickly change space acquisitions processes and space organization and culture to support a warfighting posture, our ability to provide sustained and predictable investments across the space enterprise, and our ability to form robust partnerships with Allies and industry partners. Chinese and Russian strategic intentions and capabilities present urgent and enduring threats to the ability of the Department to achieve its desired conditions in space. It is imperative that the U.S. maintain and continue to develop space programs and systems to continue to be the leader in the space domain.

Given your current knowledge of space programs, are extant U.S. policies, programs, and authorities applicable to space appropriate to ensure the U.S. can compete, deter, and win in great power competition in space? What do you perceive as the areas of highest risk? If confirmed, what additional measures would you consider and recommend?

Existing U.S. policies, programs and authorities related to space are moving in the right direction to ensure the U.S. prevails in a future great power competition in space. The highest risk from extant policies, programs and authorities is that we continue to treat space differently from other warfighting domains. We must begin to normalize how we operate in the space domain to include the classification of some systems and the authorities to operate those systems. We must also continue to acquire additional capabilities and authorities in order to keep pace with our competitors who seek to hold our space systems at risk. The right authorities are the ones that maintain urgency across the space enterprise to move fast while staying within budget, which will be a challenge. The space enterprise needs to translate National direction into effective space warfighting concepts of operations, tactics and techniques, and training programs to ensure a capable and ready space operations force. In parallel, the space acquisitions community must adopt rapid program acquisition strategies that acquire capabilities on the warfighter's timeline of need.

If confirmed, what changes or adjustments would you advise the Secretary of Defense and the Chairman of the Joint Chiefs of Staff to make in DOD's implementation of the 2018

NDS as regards the domain of space?

If confirmed, I will provide my best military advice to the Secretary of Defense and the Chairman of the Joint Chiefs of Staff regarding changes or adjustments to implementing the 2018 NDS as it relates to space. I view "great power competition" in space with China and Russia due to their emphasis on space systems and growing counter-space capabilities as an area of concern. How we compete with China and Russia in space – the nations that pose the greatest risk – will determine whether the US will face submission to a superior and better-organized space power in the future. This has implications to deterring and countering rogue regimes such as North Korea and Iran.

In your view, how should USSPACECOM be sized, structured, and resourced to implement the 2018 NDS and execute U.S. strategic objectives in the space domain?

As reflected in the President's Budget for FY21 submission, USSPACECOM will have a headquarters size of 1365 personnel composed of active duty and reserve personnel from all Services as well as Department of the Air Force civilians and an initial operating budget of $249.0 million. As Deputy Commander, I have led efforts to maximize the efficiency and efficacy of those personnel. Today, I am proud to state that we have found internal manpower efficiencies with which we intend to resource two joint space commands subordinate to USSPACECOM and embed space warfighters at every Combatant Command without further staff growth. If confirmed, I am committed to maintaining an agile and lean staff structure focused on securing U.S. dominance in space for decades to come through partnership, integration, and innovation in the space domain. To do so, I would direct USSPACECOM to continually self-assess to ensure NDS alignment and enable innovative space warfighting capabilities.

While the command's formal establishment took place in Aug 2019, USSPACECOM was stood up without a formal budget. Successful passage of the FY21 budget will be key to enabling USSPACECOM operations. Establishment of a formal budget for USSPACECOM is essential to secure facilities, information technology, and contracted personnel necessary for successful execution of Unified Command Plan responsibilities and respond to competitor's aggressive pursuits of counter-space technologies designed to erode U.S. interests in space.

In your view, what metrics or conditions would be indicative of U.S. success in the "great power competition" in space?

In my view there are three conditions that are indicative of U.S. success in the "great power competition" in space: the space domain is stable, the U.S. retains unfettered access to space capabilities, and U.S. and our Allies and partners use of space capabilities is underpinned by sustained U.S. military strength.

What role and relationship should US Space Force have with respect to USSPACECOM? What is your opinion on whether organic Space Assets should remain in the other services (vice transfer to Space Force)?

The U.S. Space Force is one of five Services which present forces to the Combatant Commands. All of the Services and Combatant Commands are reliant on space to complete their respective missions and all will need some inherent space expertise and capability. USSPACECOM will ensure Combatant Command needs are met and the space domain remains secure, stable, and accessible. A close working relationship between U.S. Space Force and USSPACECOM will be critical to ensuring security in the space domain.

Regarding the transfer of space assets to Space Force, if confirmed, I will fully support the department's ongoing analysis that allows the Secretary of Defense to make transfers in accordance with the FY20 NDAA.

DOD Readiness in Space

How would you assess the current readiness of the DOD and the U.S. Government as a whole—across the domains of materiel and equipment, personnel, and training—to implement the 2018 NDS and U.S. strategic objectives as they relate to the domain of space?

The U.S. can meet today's challenges with an advantage over potential adversaries. However, competitors like Russia and China are seeking to close the gap and reduce U.S. and allied military effectiveness by rapidly developing counterspace capability to negate and deny U.S. space capabilities. Accordingly, the DOD must further develop and enhance integration of space warfighting doctrine, capabilities, and personnel into national, joint, and combined operations. USSPACECOM, U.S. Space Force, the Space Development Agency, and other key stakeholders must lead DOD efforts to build comprehensive military spacepower through a trained, equipped, and ready force that is integrated into Joint Force plans to support the Department's objectives to compete, deter, and win across the spectrum of conflict.

If confirmed, what actions would you take to move DOD and, as appropriate, other U.S. Government organizations toward full spectrum readiness to execute global space operations and missions, and under what timelines?

If confirmed, I expect to prioritize building partnerships across the DOD and U.S. Government to enable better information sharing, look for synergies between our different capabilities, and work towards shared standards across the community. I would seek significant improvements in partnerships within the year, and then over the next five years making this strategic vision a reality.

If confirmed, how would you oversee compliance with your timelines to ensure that readiness goals are met?

USSPACECOM has in place readiness reporting processes per CJCSI 3401.02B as directed by the Joint Staff. This guidance provides a robust process for tracking our readiness from units assigned and apportioned to the Combatant Commands. If confirmed, I will use this process to maintain visibility into our readiness and identify areas needing more support to meet our readiness goals. If confirmed I will work closely with the assigned Service components to

address USSPACECOM priorities and ensure readiness of the force in order to accomplish assigned Unified Command Plan responsibilities.

Alliances and Partnerships

Mutually beneficial alliances and partnerships are crucial to U.S. success in competition and conflict against a great power. To this end, the 2018 NDS stresses the importance of strengthening existing U.S. alliances and partnerships, building or enhancing new ones, and promoting "mutual respect, responsibility, priorities, and accountability" in these relationships. If confirmed as Commander, USSPACECOM, you would serve as the single point of contact for military space operational matters to U.S. Government agencies, U.S. commercial entities, and international agencies for matters related to military space operations.

If confirmed, what specific actions would you take to strengthen existing U.S. alliances and partnerships, build new partnerships, and exploit opportunities for cooperation in space operations activities and missions?

The USSPACECOM Campaign Plan has a specific engagement plan for Allies and partners. This plan highlights how we will strengthen existing alliances and partnerships as we conduct combined space operations, as well as how we intend to build new partnerships with emerging space faring nations. I intend to implement the plan and continuously evaluate its effectiveness. This includes continuing to expand direct cooperation through the Combined Space Operations Center and through our Multi National Space Collaboration (MSC) relationships. It likewise includes expanding the countries participating in GLOBAL SENTINEL, a security cooperation exercise that combines multinational engagement with real world modeling and simulation to improve interoperability and overall readiness, along with increasing the complexity of real-world experimentation. We are particularly focused on expanding ties with key regions identified in the NDS.

How would you characterize your familiarity with the leaders of other nations' military space operations enterprises, international consultative forums regarding space operations, and processes for enhancing space-related interoperability between allies and partners?

I am familiar with other nations' military space operations enterprises, international consultative forums, and processes for enhancing space-related interoperability between Allies and partners. I have participated in a wide-range of space forums such as the annual Space Symposium Conference hosted by the Space Foundation, National Defense Industrial Association (NDIA) Executive Forum, and international fora. USSPACECOM is a member of the Combined Space Operations (CSpO) initiative alongside Australia, Canada, France, Germany, New Zealand, and the United Kingdom. USSPACECOM has liaison and exchange officers from Australia, France, Germany, New Zealand, and the United Kingdom. We have coordinated 120 Space Situational Awareness (SSA) sharing agreements, 33 SATCOM agreements, and 14 Shared Early Warning (SEW) Agreements with foreign nations, Intergovernmental Organizations (IGOs), commercial partners, and academic institutions. Through these agreements and space engagements, I will continue to increase my familiarity with leaders of nations' military space operations enterprises, international consultative forums, and processes for enhancing space-related interoperability between Allies and partners.

How would you characterize your familiarity with the leaders of the private sector commercial space operations community and how would you engage with them if confirmed as Commander, USSPACECOM?

Commercial space is critical to the success of any space faring nation. I will continue to strengthen our ties with the private sector through our Commercial Integration Cell (CIC) at the Combined Space Operations Center (CSpOC) at Vandenberg AFB, CA. The CIC currently has 8 commercial companies EUTELSAT, Inmarsat, INTELSAT, Iridium, MAXAR, SES, Viasat, and XTAR integrated at the CSpOC. I will continue to establish and build on relationships with civilian and whole of government leaders to include engagement through such critical forums as the annual Space Symposium and the National Defense Industrial Association (NDIA) Executive Forum.

What is your assessment of the risks and benefits associated with building partnerships with private industry to accomplish certain USSPACECOM missions and activities? How would you mitigate any risks you identify?

It is imperative USSPACECOM partners with private industry, which is leading innovation in space systems development and operations. Through capabilities such as resuable launch, proliferated constellations, high-thruput satellite communications, on-orbit servicing, and commercial space situational awareness, industry is expanding the options available to add capability and resiliency to our space operations, thereby helping ensure the joint warfighter will have necessary space services in competition, crisis, and conflict

If confirmed, what steps will you take to improve information-sharing, integration, coordination, and collaboration between USSPACECOM, other DOD commands and organizations, the Intelligence Community, and other governmental agencies?

The command's success relies on our coordination and partnerships. That extends beyond the department, the Intelligence Community, and the U.S. Government. Our Allies, the private sector, and our space partners are our asymmetric advantage. We will continue to proactively seek to expand our influence through sharing agreements, technology exchanges, and transparency through routine engagements. This is an area I can assure you, we will lead the department as an example to others.

USSPACECOM is co-chair of the Space Analysis Consortium (SpAC), along with the Secretary of the Air Force for Space Acquisition and Space Integration (SAF-SP) where we work with over 20 other DOD commands and organizations and the Intelligence Community to objectively guide collaborative efforts across the space analytic community in support of most effectively characterizing and meeting warfighter needs. We are dedicated to leading the consortium, creating a culture of sharing data, and results to best support senior leadership decision making and national security.

We also continue to work with ODNI and USDI&S to identify key areas of information sharing within the national security environment that can inform our partnerships across the interagency

and our Allies and partners. This is especially important in the areas of attribution of aggression and threat information. To enable this, we are implementing a strategic review of the information sharing processes and procedures and working with ODNI on a strategy for Allied and Partner integration that includes intelligence exchange officers.

Relationships

The law, the Unified Command Plan, and traditional practice establish important relationships between the Commander, USSPACECOM/Commander and the Secretary of Defense, the Intelligence Community, and other senior officials and organizations of the DOD and the U.S. Government. Please describe your understanding of the relationship of the Commander, USSPACECOM/Commander to each of the following:

The Secretary of Defense

Pursuant to Title 10, U.S. Code, Section 164, subject to the direction of the President, the Commander, USSPACECOM performs duties under the authority, direction and control of the Secretary of Defense and is directly responsible to the Secretary for the preparedness of the command to carry out assigned missions.

The Director of National Intelligence

The Director of National Intelligence (DNI) has overall responsibility for intelligence support to the President and the day-to-day management of the Intelligence Community. USSPACECOM integrates DNI capabilities, as well as those of the military services, combat support agency (CSA), and its own organic intelligence assets to coordinate intelligence planning, collection management, and analysis to provide a coordinated, timely, all-source intelligence picture.

The Director of the Central Intelligence Agency

The Director of the Central Intelligence Agency reports to the Director of National Intelligence (DNI). The CIA's primary areas of expertise are in HUMINT collection, all source analysis, and the production of political, economic, and biographic intelligence. If confirmed as the Commander USSPACECOM, I look forward to working with the Director to ensure the USSPACECOM Joint Intelligence Operations Center (JIOC) has the appropriate connections to CIA representatives both directly and via the Joint Staff.

The Under Secretary of Defense for Intelligence and Security

The Under Secretary for Intelligence and Security is the advisor and Principal Staff Assistant (PSA) to the Secretary and Deputy Secretary of Defense for all intelligence, counterintelligence, security, sensitive activities, and other intelligence-related matters. Intelligence assessments and products related to the global environment will be extremely important to USSPACECOM. If confirmed, I look forward to working with the Under Secretary, through or in coordination with, the Chairman of the Joint Chiefs of Staff, to ensure the USSPACECOM JIOC is closely aligned and integrated with Under Secretary for Intelligence representatives.

The Under Secretary of Defense for Acquisition and Sustainment

As the Principal Staff Advisor (PSA), the Under Secretary for Acquisition and Sustainment makes recommendations to the Secretary and Deputy Secretary of Defense for DOD acquisition. Using data-driven analysis linked to the National Defense Strategy, USD(A&S) scales to enable new product and process development and supports a culture of innovation, critical thinking, and creative compliance. If confirmed, I look forward to working with the Under Secretary, through or in coordination with, the Chairman of the Joint Chiefs of Staff, to sustain current, and advocate for future, space capabilities.

The Under Secretary of Defense for Research and Engineering

As the Principal Staff Advisor (PSA), the Under Secretary for Research and Engineering makes recommendations to the Secretary and Deputy Secretary of Defense for DOD research and development. The goal of USD(R&E) is to extend the capabilities of current war fighting systems, develop breakthrough capabilities, hedge against an uncertain future through a set of scientific and engineering options and counter strategic surprise. If confirmed as Commander USSPACECOM, I look forward to working with the Under Secretary, through or in coordination with, the Chairman of the Joint Chiefs of Staff to advocate, develop, and field future space capabilities.

The Under Secretary of Defense for Policy

The Under Secretary of Defense for Policy as the Principal Staff Assistant (PSA) and advisor to the Secretary and Deputy Secretary of Defense, the Under Secretary for Policy formulates national security and defense policy, integrates DOD policy and plans and performs oversight of defense policy goals to achieve national security objectives. These policies guide USSPACECOM strategic planning and operations. If confirmed, I look forward to working with the Under Secretary, through or in coordination with, the Chairman of the Joint Chiefs of Staff, to ensure USSPACECOM planning and operations are synchronized with national policy.

The Chairman and Vice Chairman of the Joint Chiefs of Staff

Per Title 10, U.S. Code, Section 151, the Chairman of the Joint Chiefs of Staff is the principal military advisor to the President, the National Security Council, the Homeland Security Council and the Secretary of Defense. Per Title 10, U.S. Code, Section 163, the Chairman transmits communications between the President, the Secretary of Defense, and the USSPACECOM Commander as directed by the Secretary of Defense. As the principal military advisor to the President and Secretary of Defense, the Chairman is a key conduit between the Combatant Commander, Interagency, and the Service Chiefs. These officers are not in the chain of command. If confirmed, I will keep the Chairman, or the Vice Chairman in his absence, and the Secretary of Defense informed without delay on matters for which I am personally accountable as Commander, USSPACECOM.

The Secretary of the Air Force

Per Title 10, U.S. Code, Section 9013, the Secretary of the Air Force is responsible for, and has the authority necessary to conduct all affairs of the Department of the Air Force, including the functions of organizing, training, and equipping of Department of the Air Force forces. Additionally, under Title 10, U.S. Code, Section 165 the Secretary of the Air Force is responsible for administration and support of Department of the Air Force forces that are assigned to unified Combatant Commands. While Combatant Command authority is clear regarding assigned forces, close coordination with each Service secretary is necessary to ensure roles and responsibilities are lawfully executed. Close coordination with the Secretary of the Air Force is critical to successful execution of the USSPACECOM missions, and if confirmed, I look forward to reinforcing a strong and productive relationship with the Secretary of the Air Force.

The Chief of Staff of the Air Force

Per Title 10, U.S. Code, Section 9033, the Chief of Staff of the Air Force advises the Secretary of the Air Force on plans and recommendations for the Air Force and carries those plans into effect. The Chief of Staff of the Air Force is responsible for the organization, training and equipping of Air Force forces to be employed by Combatant Commanders. Close coordination with the Chief of Staff of the Air Force is critical to successful execution of the USSPACECOM missions, and if confirmed, I look forward to reinforcing a strong and productive relationship with the Chief of Staff of the Air Force.

The Chief of Space Operations, U.S. Space Force

Per Title 10, U.S. Code, Section 9082, the Chief of Space Operations, U.S. Space Force, advises the Secretary of the Air Force on plans and recommendations for the Space Force and carries those plans into effect. The Chief of Space Operations is responsible for the organization, training and equipping of Space forces to be employed by Combatant Commanders. The Chief of Space Operations is responsible to the Secretary of the Air Force for the organizing, training and equipping of space forces and capabilities. Close coordination with the Chief of Space Operations is critical to successful execution of the USSPACECOM and U.S. Space Force missions, and if confirmed, I look forward to reinforcing a strong and productive relationship with the Chief of Space Operations.

The Under Secretary of the Air Force

Per Title 10, U.S. Code, Section 9015, the Under Secretary of the Air Force shall perform such duties and exercise such powers as the Secretary of the Air Force may prescribe. Likewise, under Title 10, U.S. Code, Section 165, subject to the authority, direction and control of the Secretary of Defense, and subject to the authority of the Combatant Commanders under Section 164, the Secretary of the Air Force is responsible for administration and support of Air and Space forces that are assigned to unified Combatant Commands. The authority exercised by a Combatant Commander over assigned forces is clear, but requires close coordination with each Service Secretary to ensure there is no infringement upon those lawful responsibilities that a Secretary alone may discharge. If confirmed, I look forward to building a strong and productive

relationship with the Under Secretary of the Air Force.

The Assistant Secretaries of the Air Force

Under Title 10, U.S. Code, Section 9016, the Assistant Secretaries of the Air Force shall perform such duties and exercise such powers as the Secretary of the Air Force may prescribe. There are four such assistant secretaries whose responsibilities cover manpower and reserve affairs; financial management (including comptroller functions); acquisition, technology, and logistics; and installations, environment, and energy. Under Title 10, U.S. Code, Section 165, subject to the authority, direction and control of the Secretary of Defense, and subject to the authority of the Combatant Commanders, the Secretaries of the Military Departments are responsible for administration and support of forces that are assigned to unified and specified commands. The authority exercised by a Combatant Commander over assigned forces is clear, but requires close coordination with each Secretary to ensure there is no infringement upon those lawful responsibilities that a Secretary alone may discharge. If confirmed, I look forward to building a strong and productive relationship with the Assistant Secretaries of the Air Force.

The Secretaries of the other Military Departments and Chiefs of the other Military Services

Under Title 10, U.S. Code, Section 165, subject to the authority, direction and control of the Secretary of Defense, and subject to the authority of the Combatant Commanders under Section 164, the Secretaries of the Military Departments are responsible for administration and support of forces that are assigned to unified Combatant Commands. The authority exercised by a Combatant Commander over assigned forces is clear, but requires close coordination with each Secretary to ensure there is no infringement upon those lawful responsibilities that a Secretary alone may discharge. If confirmed, I look forward to building a strong and productive relationship with each of the Secretaries of the Military Departments.

Likewise, the Service Chiefs perform their duties under the authority, direction, and control of the respective Service Secretaries and are responsible to their respective Secretaries to provide organized, trained, and equipped forces assigned to, and employed by, Combatant Commanders. While Service Chiefs no longer serve in the operational chain of command, they are members of the Joint Chiefs of Staff and have a lawful obligation to provide military advice. If confirmed as Commander, USSPACECOM, I will confer closely and often with the Service Chiefs as they are individually and collectively a tremendous source of experience and judgment.

The Director, Space Development Agency

The Space Development Agency is one of several organizations focused on transitioning requirements into space capabilities to build a more lethal force and reform the department for greater performance and affordability. If confirmed as Commander, USSPACECOM, I look forward to building a strong relationship with the Director of the Space Development Agency. I will help ensure proper coordination continues with organizations such as Space Systems Center and the Space Rapid Capabilities Office to meet the warfighting requirements of USSPACECOM.

The Director, Space Rapid Capabilities Office

The Space Rapid Capabilities Office is one of several organizations focused on transitioning requirements into space capabilities to build a more lethal force and reform the department for greater performance and affordability. If confirmed as Commander, USSPACECOM, I look forward to building a strong relationship with the Director of the SpRCO. I will continue to establish and validate capability requirements and recommend priorities while helping to ensure proper coordination continues with organizations such as Space Systems Center and the Space Development Agency to meet the warfighting requirements of USSPACECOM.

The Commander, Space Systems Command

The Space Systems Command (SSC) will be responsible for developing, acquiring, and fielding lethal and resilient space capabilities for warfighters. Additionally, SSC will be responsible for launch, developmental testing, on-orbit checkout, and sustainment and maintenance of the U.S. Space Force space systems, as well as oversight of U.S. Space Force science and technology activities. Acquisition and development organizations to include the Space and Missile Systems Center, the Space Force Commercial Satellite Communications Office, and program offices of space systems transferring to U.S. Space Force from other DOD organizations will form the building blocks of the new command, which will be built out in the months to come. If confirmed as Commander, USSPACECOM, I will continue to build strong relationships and ensure proper coordination on mission essential warfighter requirements continues with organizations such as Space Rapid Capabilities Office and the Space Development Agency to meet the warfighting requirements of USSPACECOM.

The Commander, U.S. Strategic Command

The USSTRATCOM Commander is responsible for the planning and execution of the strategic deterrence mission. The USSPACECOM Commander provides vital space resources and capabilities to USSTRATCOM in support of that mission and, depending on circumstances, can also receive support in the execution of the space defense mission. If confirmed, I will continue to work closely with Commander, USSTRATCOM and will maintain this working relationship through FOC and beyond.

The Commander, U.S. Cyber Command

U.S. Cyber Command is responsible for the planning and execution of global cyberspace operations as directed, which includes directing Department of Defense information networks security, operations, and defense. The relationship between the space and cyber domains is critical to the success of both. If confirmed, as Commander, USSPACECOM, I will establish a close relationship with Commander, U.S. Cyber Command to support military operations in and through cyberspace, ensure effective cyber support to operations in the space domain, and ensure our policies and practices are consistent with U.S. Cyber Command guidance regarding the security and protection of USSPACECOM networks and systems.

The other Combatant Commanders

If confirmed as Commander, USSPACECOM, and following the establishment of USSPACECOM, I will work to establish close relationships with the other Combatant Commanders as such relationships and coordination are critical to the execution of the National Defense Strategy, National Military Strategy and respective theater strategies. Effective cross Combatant Command relationships are characterized by mutual support, frequent contact, and productive exchanges of information and ideas. The importance of globally synchronized combatant commands has never been more important as the threats we face are becoming increasingly trans-regional in nature.

The Chief, National Guard Bureau

The Chief of the National Guard Bureau, as a member of the Joint Chiefs of Staff, serves as a military Advisor to the President, Secretary of Defense, and National Security Council. Further, the Guard Bureau Chief is the Department of Defense's official channel of communication to the Governors and State Adjutants General on all matter pertaining to the National Guard. Success in the space domain, like air, land, and sea, requires a total force effort. If confirmed as Commander, USSPACECOM, I will coordinate and work with the Chief of the National Guard Bureau on all Guard issues related to USSPACECOM.

The Director, National Security Agency (NSA)

The Director of the NSA is responsible for global monitoring, collection, and processing of information and data for foreign and domestic intelligence and counterintelligence purposes, specializing in signals intelligence (SIGINT). If confirmed as the Commander, USSPACECOM, I look forward to working with the Director to ensure the USSPACECOM Joint Intelligence Operations Center has the appropriate connections to NSA representatives and to meet the other warfighting requirements of USSPACECOM.

The Director, National Reconnaissance Office (NRO)

The Director, NRO, reports to both the Director of National Intelligence and the Secretary of Defense. The NRO is responsible for research and development, acquisition, launch, deployment, and operation of overhead systems and related data-processing facilities to collect intelligence and information to support national, Intelligence Community, and Department of Defense missions. If confirmed as Commander of USSPACECOM, I will continue the already-close relationship and build upon the successes we have achieved with the Director of the NRO on space mission area requirements—to include the National Space Defense Center (NSDC). The benefits of this teamwork over the last few years demonstrate the importance of bringing shared interests together to successfully address truly complex national security challenges.

The Director, National Geospatial Intelligence Agency (NGA)

The Director, NGA, serves as the functional manager for Geospatial Intelligence Information (GEOINT) and is the principal GEOINT advisor to the Director of National Intelligence, the

Secretary of Defense, the Chairman of the Joint Chiefs of Staff and the Combatant Commanders. NGA receives guidance and oversight from the Department of Defense, the Director of National Intelligence, and Congress. If confirmed as Commander, USSPACECOM, I look forward to working with the Director to ensure the USSPACECOM Joint Intelligence Operations Center has the appropriate connections to NGA representatives and to meet the warfighting requirements of USSPACECOM.

The Director, Defense Intelligence Agency (DIA)

The Director of the Defense Intelligence Agency advises the Secretary of Defense, the Chairman of the Joint Chiefs of Staff, the Combatant Commanders, and other senior leaders, on matters concerning military and military-related intelligence. Also, the DIA Director coordinates intelligence support to meet Combatant Command requirements. As Defense Collection Manager, the DIA Director serves as the conduit for collection coordination with the joint intelligence operation centers (JIOCs). The Joint Staff Directorate for Intelligence (J-2) is both a major component of DIA and a fully integrated element of the Joint Staff. If confirmed as the Commander, USSPACECOM, I look forward to working with the Director to ensure the USSPACECOM JIOC has the appropriate connections to DIA representatives via the Joint Staff and to meet the other warfighting requirements of USSPACECOM.

USSPACECOM

In your view, what are the priority tasks you will, if confirmed undertake as the commander of USSPACECOM?

The priority is to rapidly build the Command to full operational capability (FOC). We have had a great start. For the way forward, we have identified critical mission and mission support essential tasks using National, DOD, and CDRUSSPACECOM guidance. Each critical task is aligned to one of 5 Lines of Operation and an Objective. The highest priority tasks are to maintain readiness of core functions, rapidly build headquarters infrastructure, and personnel. write the USSPACECOM family of plans, mature the Joint Operations center's Command and Control CONOPS, integrate USSPACECOM with Combatant Commands, increase unified action, and build operational intelligence capability.

If confirmed as Commander, USSPACECOM, how would you structure the command and its subordinate components to unify the command and control of operational forces in the space operations domain across the Intelligence Community and the Military Services?

The scope, scale, and complexity of the threats in the Space Domain are real. Thus, our space power and its unmatched lethality must sustain a unified and integrated approach to offensive and defensive space operations. I will continue to structure USSPACECOM and subordinate components (JTF-SD and CFSCC) to drive this integrated unity of effort across the services (SMDC, MARFORSPACE, U.S. Space Force, NAVFORSPACE) and the Intelligence Community, and pivot to a warfighting space architecture that unifies C2 while increasing the speed and effectiveness of response at a reduced cost.

If confirmed, what first steps would you take to integrate space operation and activity planning and execution across all combatant commanders' campaign and contingency plans?

If confirmed, the first step I would take to integrate space planning and execution across all combatant commanders' campaign and contingency plans would be to complete the staffing of our Integrated Space Planning elements in all other combatant commands. These teams are critical to ensuring seamless integration of our plans with those of other COCOMs. USSPACECOM has already made significant progress in integrating space operations planning and execution with key Combatant Commands through space Integrated Planning Elements (IPE) embedded in those commands. If confirmed, I will continue to operationalize that effort for these forward elements of USSPACECOM in each of the Combatant Commands to assist in the globally integrated planning and employment of space capabilities.

Likewise, if confirmed, I will emphasize integration through plans prioritization. The center mass of a Combatant Command's activities and execution are the combatant command plans. Currently, our legacy plans are service delivery centric (i.e. deliver satellite communications or deliver navigation and timing) and focused on developing support plans to the other Combatant Commands. Our current plans must account for both supported and supporting tasks to ensure integration and synchronization with the other Combatant Commands to deter conflict in Space, and if necessary, fight and win.

In your view where is USSPACECOM in its ongoing effort to reach Initial Operating Capability? Full Operating Capability?

If confirmed, I will focus on USSPACECOM achieving full operational capability (FOC). The Command conducted an extensive review of Unified Command Plan responsibilities, Joint Doctrine, and Secretary of Defense tasks to develop the five lines of operation and supporting objectives to track progress towards FOC as reported regularly to the Secretary of Defense. This framework is being codified in Defense Readiness Reporting Requirements with an updated Joint Mission Essential Task List targeted for late 2020. The five Lines of Operation are: Space Warfare: Achieve and maintain superiority in the space domain to influence adversary behavior and defend our national interests. Space Domain Awareness: The effective identification, characterization, and understanding of any factor, passive or active, effecting the space domain whether in space, terrestrial, or links that could affect space operations and thereby impact the security, safety, economy, or environment of our nation. Space Support to Operations: Provides capabilities to aid, protect, enhance, and support space operations (offensive, defensive, or stability) or global terrestrial operations to improve the effectiveness, integration, and availability of space capabilities. Space Service Support: Provides logistics and personnel services to maintain capabilities, ensure access to, transport through, operations in, and return from space to enable freedom of action and operational reach. HQ Capabilities: Staff and subordinate command functions necessary to enable USSPACECOM to execute general Combatant Command and specific space responsibilities.

What missions, functions, and tasks should remain in each service and which should transfer to U.S. Space Force

If confirmed, I will support the Secretary of Defense's decision on any missions and tasks that will be transferred to U.S. Space Force and recognize that each service likely has its own requirements for retaining certain space capabilities. As a Combatant Command, USSPACECOM employs capabilities from all the Services to meet its assigned Unified Command Plan responsibilities.

USSPACECOM Operational Missions and Tasks

The Commander, USSPACECOM is responsible for the planning and execution of global space operations missions and activities, providing space-related support to other combatant commands and their operational plans, and the defense of space assets.

Please explain your views on the "pros" and "cons" of unity of command as compared to unity of effort in space?

Today we effectively execute Unity of Command of our joint space forces and Unity of Effort among DOD and NRO forces. The relationship between DOD and the NRO has never been better. We share a protect and defend strategy, concept of operations, programs and organizations. We have built a strong "unity of effort" construct at the National Space Defense Center, which serves us very well in day-to-day space operations. Space Policy Directive 4 directs the Secretary of Defense and the Director of National Intelligence to create and enhance mechanisms for collaboration. If confirmed, I look forward to continuing to strengthen this relationship.

In your view, in a time of conflict in space, is unity of command, unity of effort, or some other approach the most effective in ensuring the protection and defense of U.S. Government and allied space assets? Please explain you answer.

If confirmed, I will work closely with every organization that operates U.S. government and allied space assets to ensure that those capabilities are protected and defended, within the USSPACECOM area of responsibility, in a time of crisis. In some cases, it is appropriate for USSPACECOM to exercise unity of command in order to meet the directives from the Secretary of Defense as outlined in the Unificied Command Plan. If desired, I can share the specific examples in a closed session with either members of Congress or their staff.

If confirmed, what would be your approach to executing each of following responsibilities of the Commander, USSPACECOM:

Conducting offensive and defensive space operations.

Utilizing proven Joint and Combined warfighting doctrine inherent in the Combatant Command structure, USSPACECOM will continue to build on the relationships developed with the other Combatant Commands to integrate in campaign planning and conducting offensive and defensive operations. Embedding planning elements at each Combatant Command will help synchronize the use of space capabilities across all AORs ensures synergy in multi-domain operations. Joint Task Force-Space Defense (JTF-SD) as a subordinate command of USSPACECOM with the mission to, in unified action with mission partners, conduct offensive

and defensive operations in the USSPACECOM AOR in order to deter aggression, protect and defend U.S. space interests, and defeat potential adversaries in, through and to the space domain in support of CDRUSSPACECOM objectives. This will require forces and capabilities from all the Services and close coordination across the Combatant Commands.

Protecting and defending U.S., and as directed, allied and partner space operational capabilities.

Space is a warfighting domain and our potential adversaries continue to reinforce that idea with the capabilities they are developing. The best way to protect and defend U.S., and as directed, allied and partner space operational capabilities is to deter adversary aggression towards them. Deterrence only occurs from a position of strength thus strengthening our relationships with our Allies and partners as well as fielding new capabilities are key first steps to protecting and defending on-orbit capabilities.

Advocating for space operations capabilities.

If confirmed, I will advocate for, and set priorities for space operations capabilities through the Combatant Command's Integrated Priority List, in coordination with DOD, Intelligence Community, and the military services to identify seams in our current capabilities, establish warfighting requirements and develop future space capabilities to enhance our combat power and ensure space superiority. Additionally, I will advocate for streamlining acquisition to deliver warfighter capabilities, while appropriately balancing risk to deliver those capabilities in a timely manner.

64. Serving as DOD manager for human space flight operations.
USSPACECOM currently serves as the DOD entry point for NASA's requests and requirements for human space flight support (HSFS) and should continue to do so. USSPACECOM also serves as the Combatant Command that coordinates for contingency rescue forces for NASA's Commercial Crew Program and will coordinate for nominal rescue forces for the Artemis program in the near future. Part of this responsibility includes tasking other GCCs with HSFS tasks and involves the C2 of the actual rescue forces by the Combined Force Space Component Command (CFSCC).

Providing warning and assessment of attacks on space assets, defending on-orbit space assets and associated data links, and coordinating with other Combatant Commands for defense of USSPACECOM terrestrial assets.

Providing warning and assessment of attacks on U.S. space-based or terrestrial assets is an assigned task to USSPACECOM from the Unified Command Plan. All of the Services contribute to this task. Over the past year, we have integrated USSPACECOM Command and Control capabilities into the existing National Military Command System to enable timely sharing of critical data to military and civilian leadership. We have established the USSPACECOM Joint Operations Center that provides integrated operations that improves warning and assessment. This ensures decision-makers and stakeholders at all levels of government receive complete, accurate, and timely information when they need it most.

Serving as the single point of contact for military space operational matters to U.S. Government agencies, U.S. commercial entities, and international agencies for matters related to military space operations.

The Joint, Combined, and Interagency partnerships form the foundation of today's U.S. space capabilities and are fundamental to securing U.S. space superiority. If confirmed, I will serve as a prominent voice that ensures seamless operations, and promotes the best interests of U.S. and Allied national security.

Planning and executing space situational awareness operations for the DOD, and for assets used for national and homeland security purposes; coordinating with U.S. Government agencies; and, as appropriate, commercial and force space entities.

USSPACECOM will continue to partner with the joint, combined, and interagency community to build a robust picture of the space domain, with emphasis on identifying threats and maintaining our Nation's space superiority. We will continue to use traditional and long-proven space surveillance network assets, while at the same time look to incorporate not only more modern assets already being developed (e.g., Space Fence) but also non-traditional sensors and techniques from across the Services, agencies and partners.

Providing space capabilities such as satellite communications; missile warning; nuclear detonation detection; environmental monitoring; military intelligence surveillance, and reconnaissance; and positioning, navigation, and timing information to combatant commands, allies, and other entities.

As the supporting Combatant Command, providing these critical capabilities will remain a top priority for USSPACECOM. These mission essential space capabilities are a force enhancement to the other Combatant Commands, our Allies, and other agencies. While predominantly provided by the U.S. Space Force, all of the Services may contribute to this mission area. As China and Russia are fielding new capabilities, we collectively need to improve our nation’s response to the challenging threats we face. To that end, we are closely working across the Services and with other government organizations to define the requirements that will drive the development and fielding of the next generation of space capabilities to counter these evolving threats.

Planning, executing, and assessing security cooperation activities that support space operations, in coordination with geographic combatant commands and the Intelligence Community.

If confirmed, I would prioritize space security cooperation activities that strengthen our national security objectives with allies and partners. The space Integrated Planning Elements (IPE) that reside in other combatant commands are key to planning and coordinating integrated security cooperation activities to achieve NDS objectives. Our Multinational Space Collaboration (MSC) effort at Vandenberg AFB is another security cooperation initiative that supports on-going engagements with participating nations to strengthen deterrence.

Do you believe that in the event of a conflict in space, reliance on a single operational commander would benefit or detract from U.S. success?

Space responsibilities were separated from USSTRATCOM into the new USSPACECOM to address the fact that our potential adversaries have made space a warfighting domain. A warfighting command was needed to provide a singular focus on requirements, infrastructure and authorities that are specific to that AOR. Having a single operational commander focused on the space domain would not, but itself, be sufficient. Recognition of the importance of cross Combatant Command coordination and synchronization, greatly benefits the U.S. by deterring conflict from extending into space and ensuring that we maintain our space-based advantages in the event that deterrence fails.

Should there be a conflict—whether in space or another domain—what are your views on the importance of unity of command and/or unity of effort between DOD and Intelligence Community assets, both in space on the ground?

Space is a contested domain with determined potential adversaries dedicated to neutralizing the advantage the U.S. held in space for decades. Given the integral nature of our civilian and military space systems to our way of life and way of waging war it is absolutely essential to have unity of command and unity of effort where required to maximize delivery of effects and optimized efficient use of space capabilities.

The tasking of on-orbit assets must be conducted, and the data they collect made available in a timeframe relevant to the warfighter to ensure mission accomplishment. Given the current allocation of authorities and responsibilities across DOD and the Intelligence Community, how can these processes be accelerated to increase mission impact, in your view?

USSPACECOM is a warfighting combatant command focused on protecting and defending national security on-orbit space capabilities, which allows for the continuous delivery of sensor data, satellite communications, and navigation signals to a diverse set of end users. We do need a comprehensive review of classification for collection data to ensure widest dissemination possible to the warfighter in a timely fashion. Additionally, continued integration and exchange of personnel between the DOD and the Intelligence Community will foster common understanding of strategic, operational, and tactical uses of on-orbit data collection. Leveraging technology, in particular machine to machine interfaces, will better orchestrate collection and accelerate existing processes to a great degree.

Given the growth of both the space enterprise and threats to space assets, how will you ensure the mission resiliency and survivability of USSPACECOM assets?

In order to achieve both resiliency and survivability of space combat power, I am advocating for a multi-faceted and multi-layered approach that leverages diversity in assets, orbits, and partnerships with Allies and commercial suppliers, as well as integration of defensive technologies in our space systems. I also recognize that the defense of space assets may require

support from other combatant commanders, and we are integrated into the joint fires planning process to ensure those supporting requirements are established. With strong budget support, improvements are underway in both offensive and defensive space capabilities. New counterspace systems are being developed while new and legacy space systems are incorporating defensive measures, tactics, techniques, and procedures. We'll need to effectively integrate those capabilities across all domains and ensure requisite authorities are in place.

DOD military operations against peer competitors and rogue nation threats require constant monitoring and tracking of critical mobile targets, close integration between space and airborne intelligence systems, and tight coupling with strike planning and execution systems.

If confirmed, how would you propose to satisfy these warfighting requirements?

If confirmed, there is no question that providing space capabilities to the warfighter and defending space capabilities requires an integrated approach. On orbit we are building capacity to secure the satellites which provide these essential services. We are increasing our ability to see satellites on orbit and identify nefarious actions of our peer competitors. We are working with our Allies and partners to establish norms of behavior for responsible nations to follow and enhance security of our orbiting systems. Space is no longer a safe haven. Nefarious actions of our competitors necessitate we adapt and build our capacity to defend our critical space systems. They are developing a first mover advantage to reduce our space systems with kinetic anti-satellite weapon, electronic warfare, and cyber capabilities. There are systems on orbit that can threaten U.S. Space systems today, we are keeping a close eye on them. Defending against these threats necessitates close cooperation in all warfighting domains. Space warfighting will not be done in a vacuum. Just as we expect support and cooperation across the globe, we support intelligence, surveillance, reconnaissance and targeting across the globe. Delivering these capabilities to the warfighter is our top priority. The high ground of space delivers a critical advantage to our nation's warfighters.

What are the implications of these tactical military requirements for constellation planning, processing agility, speed of dissemination, and coordination with the Military Services and commanders?

These tactical requirements necessitate greater integration of space warfighting operations, intelligence, capabilities, and personnel into military plans and staffs. The integration of superior space capabilities into and throughout the Joint Force, along with operational integration with Allies and partners, is essential for securing our military advantage against threats in space. The establishment of USSPACECOM, with a full-time operational focus on the integration and employment of military space power, further enables DOD to meet tactical warfighter needs on operationally-relevant timelines. USSPACECOM is embedding Space Integrated Planning Elements within each of the other combatant commands to globally integrate space operations for execution. These efforts will enhance space warfighting readiness and lethality while accelerating the integration of space capabilities into other warfighting forces.

Tasking and control between overhead satellites has grown and evolved significantly. If confirmed, what would you do to ensure unity of effort and deconfliction of taskings in the space warfighting domain across DOD and the Intelligence Community?

USSPACECOM is leading the way on synchronizing DOD space domain efforts, and is partnering with the Intelligence Community to create an environment of mutual support. If confirmed, I will continue to mature the relationships and processes that enable the DOD and the Intelligence Community to achieve unity of effort and ensure the United State's competitive advantage in Space. This can be achieved through close working relationships across the government, combined exercises, and a shared awareness of our goals in space.

In your view, would there be operational advantages in NSA and NGA overhead tasking organizations fully integrated their operations? Please explain your answer.

Fully orchestrated collection, integrating both overhead collection and theater collection, is critical to advancing National Security interests. While direct tasking authority will usually create an individual operational advantage, understanding the strategic level impacts to the organization being tasked and its mission sets is important. Expediency in tasking should be balanced by the risk that it may overshadow other mission tasks and priorities. These organizations and their capabilities serve more than just the DOD. USSPACECOM's focus should and will to protect and defend all national security space capabilities, which will ensure the expert delivery of sensor data, satellite communications, and navigation signals. If confirmed, I will ensure SPACECOM works with the DOD and the Intelligence Community in refining the tasking processes and linkages.

In your view, would operational advantages accrue to our military forces if operations tasking NRO satellites were closely integrated with DOD airborne intelligence collection and targeting operations? Please explain your answer.

The operational advantages to careful synchronization between multiple elements are always significant. The advantage grows when a combined operation leverages multiple domains to provide a more holistic view of the challenge at hand. Actions that streamline and speed up sensor taskings can be very beneficial. At USSPACECOM, we seek to enhance our ability to integrate more closely within the DOD, across the government, and especially with our Allies and partners.

The NRO is the only defense intelligence agency that is not designated as a combat support agency (CSA) as defined in the Goldwater-Nichols DOD Reorganization Act of 1986. Historically, the NRO has asserted that it should not be designated as a CSA because it does not make operational decisions regarding the satellites that it builds and controls. In NRO's view, others, principally its Intelligence Community mission partners—NSA and NGA—both of which are designated as CSAs, are responsible for determining the requirements that guide NRO satellite designs and the operational tasking of deployed satellites. Now, however, there exists a class of operational decisions for which the NRO director *is* responsible. In situations in which U.S. satellites are under attack or threatened

with the same, the NRO Director has the authority to make operational decisions regarding space control.

In your view, what should be the relationship between the Commander, USSPACECOM and the Director of the NRO when responding to hostile acts or evidence of hostile intent that threaten or could threaten DOD and NRO space assets?

The relationship between USSPACECOM and the NRO has never been better. We have built a strong "unity of effort" construct with the NRO at the strategic and operational level, which serves us very well in day-to-day space operations and if confirmed, I will continue to build upon this construct. USSPACECOM has worked with the NRO extensively on hostile intent indicators and explored under what circumstances the NRO would take direction from CDRUSSPACECOM. More work in this area is still ahead of us, but in the command's first year it secured an initial framework between the Director of the NRO, the Commander of USSPACECOM and the Deputy Director of National Intelligence, that ensures these organizations understand how our command and control will be executed. Ultimately, defense of our nation's assets in space resides with CDRUSSPACECOM. Consistent with Space Policy Directive 4, I support continued discussions with the NRO to increase cooperation in space operations and evolve our relationship to further enhance our "unity of effort."

Might the designation of NRO as a CSA with respect to space control matters prove helpful to ordering the relationship between Commander, USSPACECOM and the Director, NRO in these situations?

The relationships between any combatant command and CSAs are defined by individual agency authorities and capabilities required by the command, and codified in individual MOAs. It is important to ensure that the relationship between USSPACECOM and NRO is properly codified and institutionalized in our operations. USSPACECOM will continue its close cooperation with NRO in these matters to ensure unity of effort.

Do you agree with maintaining separation between the NRO and the U.S. Space Force?

The partnership between the Combatant Command and NRO has never been better—we have a shared strategy, concept of operations, programs, and work together at the National Space Defense Center conducting operations. The NRO provides a vital service to the Nation and the Department of Defense. If confirmed as Commander USSPACECOM, I will maintain this close relationship on space mission area requirements--to include the National Space Defense Center. The benefits of this teamwork over the last few years demonstrate the importance of bringing shared interests together to successfully address truly complex national security challenges. I foresee ever increasing cooperation between the NRO, U.S. Space Force and USSPACECOM as we work in support of our nation's national security objectives.

Are there any conditions or circumstances, in your view, in which NRO and space operations forces should be integrated, going forward?

The integrated construct is conducted and executed today at the National Space Defense Center (NSDC) in which NRO staff members are fully integrated with DOD and other Intelligence Community personnel. The NSDC provides space domain awareness, indications and warnings, and space superiority at all levels of conflict in order to allow strategic leaders across the space enterprise a common operating picture of the space domain. This enables the NRO to synchronize its operation with USSPACECOM, especially during times of conflict. It is possible that in the future, as certain threats evolve, the NRO and USSPACECOM may need to be integrated to a greater level. We are working closely in current operations as well as exercises and wargames to understand what, if any changes may be required in the future. In the current environment, USSPACECOM and the NRO work side by side very effectively.

The satellites that the NRO builds and operates are tasked by small organizations that are subordinate to the Directors of NSA (for SIGINT) and NGA (for IMINT). The Director of NGA and DIA, and the national intelligence elements of the Military Services, report through separate chains to both the Secretary of Defense and the Director of National Intelligence. Even though NSA and NGA are CSAs, as yet there exists no formal operational relationship between the Commander, USSPACECOM and these organizations, notwithstanding the fact that battlefield commanders rely on these satellites for vital intelligence support and their operations must be tightly coordinated with other DOD intelligence systems, command and control networks, and strike systems.

Would it be advisable, in your view, for the Commander, USSPACECOM to be in the chain of command for the tasking of NRO satellites in conflict situations, as a means of rationalizing space command and control in support of U.S. military forces?

The NRO and USSPACECOM have already agreed to an initial framework which lays out what responsibilities the NRO will maintain for themselves and under what circumstances the NRO will take direction from USSPACECOM for the protection and defense of space capabilities. It is not necessary for CDRUSSPACECOM to be in the "NRO chain of command." We have established a framework and the common understanding of how we will execute defensive operations in a time of crisis, which we practice during wargames and exercises on a routine basis. We exercise this in wargames that NRO and USSPACECOM jointly participate in. We will continue to work together and make adjustments as needed to ensure the security of our critical space capabilities.

In your view, would it be feasible and advisable to apply the current model pursuant to which the commander, U.S. Cyber Command serves also as the Director of NSA and reports to the DNI on national intelligence operations, to grant authority to the Commander, USSPACECOM to control the tasking of national intelligence space assets in support of military forces in combat?

While likely feasible, it is not necessary for USSPACECOM to control the tasking of Intelligence Community space capabilities. Having a Combatant Command focused on warfighting in the space domain is critical; there is risk of diluting this warfighting focus by including the considerable responsibilities associated with management of all Intelligence Community assets. Likewise there could be risk introduced to the nation's focus on intelligence

collection if the positions were dual-hatted. Close coordination is absolutely required and there are mechanisms in place today to ensure communication and collaboration between USSPACECOM and the Intelligence Community. If a specific tasking authority is required to ensure military advantage and enhance coordination, USSPACECOM will pursue that specific authority.

Space Operations Joint Force Provider

If confirmed as Commander, USSPACECOM, you will be charged with providing trained and ready joint space operations forces to other Combatant Commands.

If confirmed, what would be your approach to executing each of following responsibilities:

Identifying and recommending global joint sourcing solutions to the Chairman of the Joint Chiefs of Staff in coordination with the Military Services and other combatant commands?

Our Global Force Management team is currently implementing the joint process in working with supported Combatant Commands to identify risks, trade-offs, and opportunities for the employment of space forces and capabilities. If confirmed, my duty will be to advocate and integrate with the other Combatant Commands to determine those risks, trade-offs, and opportunities for terrestrial forces in support of space objectives.

Inculcating in space operations forces across all Military Services and in the active and reserve components a warfighting culture and ethos.

USSPACECOM's designated AOR and assigned space operations forces confirm that we are, indeed, a warfighting Combatant Command, and must instill a warfighting culture and ethos across the command. With the recent acknowledgement of space as a warfighting domain, USSPACECOM will leverage ongoing efforts by the services to create a similar warfighting mindset that extends into the space domain. If confirmed, I will ensure USSPACECOM will establish the ethos, culture and mindset that demonstrates our commitment to fight and win in space.

Embedding at each Combatant Command staff to comprise a space planning cell, consistent with USSPACECOM's overall responsibilities under the Unified Command Plan.

Our plan is to send an embedded staff section, an integrated planning element or Space IPE into each combatant command. Many are already fielded. They are led by an O-6 who is focused on integrating space capabilities across the combatant command. They will support planning, operations, execution, assessment and act as a liaison to the COCOM on behalf of USSPACECOM's equities.

Establishing enterprise-wide standards for the training and readiness of space operations forces across all Military Services and in the active and reserve components.
Space training and readiness is a critical component of our force readiness. We need operators across all services ready to integrate space capabilities within their respective domains and

services. While the services provide the specific space training required for their members, the synchronization of joint training is critical. If confirmed, I will establish core competencies, and commission joint courses to facilitate readiness and meet specific needs such as: planning for a new contested space domain, integrating space capable Allies into a larger network to combat future adversaries, familiarizing intelligence analysts with space capabilities, and educating members chosen to be part of a Space Integrated Planning Element (S-IPE). These courses will be specific to USSPACECOM and delivered in concert with the U.S. Space Force.

Validating that space operations forces are fully trained and interoperable with other forces.

If confirmed, I will ensure that the members of the J7 directorate- representatives from all services- provide the most robust training to supplement service-level requirements. This will also encapsulate coalition forces, as required. As the operating environment changes, so too will the training and educational needs. We will be flexible with respect to the dynamic environment.

Conducting and supporting joint exercises, experiments, and war games.

USSPACECOM will participate in Joint Exercises and I will ensure the Combatant Command's Joint Exercise Program trains and validates our ability to carry out assigned missions with global capabilities while simultaneously supporting the space training objectives of other combatant commanders. Additionally, I will standup a Wargaming Center to provide an operational environment promoting the collaboration and coordination required to inform my decisions across all event horizons and mission sets. Finally, I will conduct experiments to provide technical demonstrations of emerging capabilities and analysis of tactics, techniques, and procedures to counter emerging threats.

Developing recommendations to the Chairman regarding strategy; doctrine; concepts of operation; tactics; and tactics, techniques, and procedures for the joint employment of space operations forces and space capabilities.

If confirmed, I will provide my best military advice on what I see as the most effective means and ways to employ space forces and space capabilities to confront current and future threats. I will work closely with the Secretary of Defense, service chiefs, and the other Combatant Commanders to identify those space capabilities that provide depth and versatility to the joint force in order to provide more effective and flexible forces for employment.

Equipping Space Operations Forces and Providing Space Operations Capabilities

Part and parcel of DOD's enhanced approached to the domain of space, the Department has established the Space Development Agency. In testimony before this Committee, DOD officials reinforced that the first and most important task assigned to the Space Development Agency is to develop, in cooperation with the space industry, a highly distributed and resilient space layer to support military targeting operations. In 2018, the NRO published a document stating:

"NRO provides the nation's unified space-based ISR overhead architecture, addressing the needs of both national and tactical users. The nation does not need a competing and duplicative set of capabilities from what is currently being provided and developed to address these needs. Setting up a competing, tactically-focused ISR overhead architecture will cause budgetary and congressional issues for both DOD and IC, and should be avoided. Splitting the national overhead architecture into capabilities that focus on IC customers vs. DOD customers will create a seam where a seam does not exist today—all will lose in this proposed end-state. The nation is better off with a national agency chartered to develop intelligence capabilities that are operated/orchestrated as an architecture to support both IC and DOD missions."

Do you share the view that neither the DOD Space Development Agency nor the Space Rapid Capabilities Office should be engaged in acquiring and fielding satellites that provide tactical support to military operations?

As a combatant commander, one of my most important roles is to identify the requirements for capabilities that will meet existing and emerging threats. I rely on the acquisition experts in DOD and the Services to help determine the best approach to acquiring the most effective capabilities at the speed of relevance and, within resource constraints in support of USSPACECOM.

Should NRO be the only organization in the U.S. Government with the mission of acquiring satellites capable of collecting intelligence from space? Please explain your answer.

The NRO is currently not the only organization in the U.S. Government with the mission of acquiring satellites capable of collecting intelligence from space. Other organizations, with differing intelligence missions, acquire their own capabilities much like Intelligence, Surveillance and Reconnaissance (ISR) platforms in the air, maritime, and ground domains. All Services have their own intelligence organizations and all have their own acquisition programs to support tailored platforms in other domains for their missions. Given that Space is a warfighting domain, both the Intelligence Community and the military services should have the ability to acquire reconnaissance and surveillance space capabilities. This is something that occurs across all other domains, with close Title 10-Title 50 partnerships.

In your view is there an appropriate role for the Space Development Agency in providing a highly distributed and resilient space layer to support military targeting operational requirements?

The Secretary of Defense and Service Secretaries have defined the important role that each acquisition organization plays in providing combatant commanders with the capabilities they need to address the varied threats we face as a nation; I appreciate the critical role and contributions by each agency.

Do you perceive any advantages to establishing the Space Development Agency as the defense organization charged to focus on tactical space capability speed to market by leveraging commercial technologies and products?

The Secretary of Defense and Service Secretaries have a keen understanding of how the roles of acquisition organizations should be properly balanced to achieve optimal solutions for combatant commanders. This includes, where appropriate, the ability to leverage commercial capabilities to support the national interests.

In addition to sharing technology, how could the capabilities vested in the NRO and the Space Development Agency be employed to rationalize and harmonize the efforts of both organizations?

To rationalize and harmonize the efforts of both organizations, the R&D efforts would need to be coordinated and integrated so that technology and innovation are shared. Capabilities could potentially be fielded to both the Intelligence Community and the DOD while, in theory, minimizing duplication of effort and acquisition costs.

As regards the Space Development Agency's role in equipping space operations forces and providing innovative capabilities and capacity for space operations, how would you propose to solve—in short order—the long-standing problems associated with overly bureaucratic and late-to-need systems and processes for identifying requirements for, and developing, procuring, and fielding space warfighting capabilities?

If confirmed, my role as a Combatant Commander is to be a demanding customer. With the strong support of Congress, the Department of Defense has begun implementing the acquisition reforms in the FY20 and prior NDAAs, which include establishment of the Space Force Acquisition Council and creation of a new Air Force Assistant Secretary solely focused on all architecture and integration of the Air Force for space systems and programs. These legislative reforms coupled with a number of internal DOD reforms to the requirements and acquisition processes, are putting us on the right trajectory to speed development and fielding of critical space capabilities.

Science, Technology, and Innovation

U.S. 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 ten key areas—space among them—in which investment to develop next generation operational capabilities is imperative. 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 U.S. development of technologies key to dominance in space?

The most significant challenge to U.S. development of crucial space technologies is cultural. First, we need to complete a cultural shift to accept space as a warfighting domain as opposed to

the previous perception of space as a non-competitive benign environment both militarily and economically. Second, the government and DOD must embrace commercial innovation in order to enable National Space Security and support a dominant and self-reliant economic position for the space community. We must reform technology development by accepting and balancing higher risk and competitive timeliness, accelerating space capability acquisitions guided by succinct and strategic requirements, and rapidly fielding integration-enabling capabilities to the Joint warfighter within five years. The space industry already knows how to innovate and implement new technologies, and our challenge is to more fully incorporate industry advances into government acquisition processes within timelines that are operationally relevant. I am committed to working collaboratively with U.S. Space Force to develop space warfighting requirements and facilitate the rapid integration of new technologies for our warfighters.

In your view, has DOD properly integrated and synchronized investments in technologies key to space across all its Components?

The establishment of U.S. Space Force will certainly streamline and improve technology integration for space. I think we will also benefit from the recently announced Space Systems Command that will act as the umbrella organization for multiple space acquisition agencies along with the transfer of five space-related units from the Air Force Research Laboratory to U.S. Space Force. As we modernize acquisition processes that will tolerate greater risk, I expect investment to focus on next-generation and game-changing technologies key to defense of space capabilities and space support to the joint warfighter. My focus will ensure that we at the warfighting command are developing sound capability requirements to drive technology development in areas that will allow us to compete and win in space.

How has DOD prioritized limited R&D funding across key areas of space-related technology? Specifically, where is the DOD either increasing or decreasing focus and funding?

In prioritizing R&D funding and recognizing that U.S. space capabilities will be aggressively targeted by our competitors, we must shift our focus from solely maximizing capability on orbit and prioritize R&D resources to equally maximize survivability of those capabilities. Key force enhancement technology remains a focus, to provide space-based force-multiplier capabilities to warfighters in all domains. Now we must also address our expanded mission and necessary competitive viability, and therefore expect increased focus in defending our domain and providing for the freedom of action in space. We also expect to see funding emphasizing game-changing technology that increases our advantage while maintaining necessary incremental advances to our current capabilities. In this rapidly developing era of competition, it is important that we have the ability to direct R&D funds and efforts critical to developing the right space technologies at the right time. Our partnership with the U.S. Space Force will enable their understanding of our capability requirements, founded on a need for strategic effects. I also think, like USTRANSCOM, we have a unique mission with nuances vital to all Combatant Commands that will focus key innovative investments through limited R&D funding initiatives. Like USTRANSCOM, this directly increases understanding of operational mission needs, provides low-cost concept of capability, and accelerates refinement of capability requirements, providing a foundation to provide the best capabilities for our nation.

How is the Department balancing space-related revolutionary capability advancements as compared to "quick win" incremental improvements that can be rapidly fielded?

With the cultural shift to accept space as a warfighting domain and in light of competitors' rapid advancements, we must balance our economy of resources today. Near-term adversary threats require the DOD to take advantage of "quick win" capabilities by focusing on speed and rapid implementation of commercial capabilities and technologies that require a minimum level of additional research and development. This is balanced by smartly increasing our investment in revolutionary capabilities to ensure technological dominance and competitive viability. In both cases, we rely heavily on developing joint warfighting requirements that properly characterize and realize strategic capabilities, using innovation to envision the art of the possible. Meeting immediate space capability needs and driving longer-term positions of superiority both necessitate partnerships with the services, industry, and our Allies to reduce development times, leverage transformative processes, and realize efficient investment strategies to deliver space solutions on a timeline and at a cost that meet warfighter needs.

Commercial technology often surpasses the innovative edge once held by the military and the Intelligence Community in the domain of space. Industry is rapidly moving into space in ways not seen before, and may eclipse the capabilities of our national security satellites in both technology and ability to reconstitute in space.

Do you believe it wise for DOD to take advantage of these commercial developments? Why or why not?

The DOD must take advantage of rapid commercial development, streamlined operational testing processes and innovative technology advancements to deliver immediate and revolutionary space capabilities on-time and at cost. Commercial industry is already helping us get space launch costs under $100 million dollars per launch, but there is still work to be done to get satellites developed within industry timelines of three-to-five-years. The U.S. government acquisitions process must adopt commercial practices and develop modular spacecraft which are rapidly integrated onto government or commercial buses and operated on an integrated ground architecture. We do take advantage of commercial R&D and we must continue to do so. Government space budgets make up less than 25% of the $360B global space economy and we continuously look for ways to leverage the large amounts of capital being invested from outside of the DOD. The major elements of a satellite like solar arrays, rocket thrusters and attitude control equipment are beneficial to both DOD and Commercial entities, making use of similar supply chains. Extensive partnership with U.S. space industry will encourage reestablishment of U.S. foundries and secure supply chains in accordance with national strategy. We are now in an era where even some of the payloads for remote sensing, weather and communications are finding both commercial and national security uses, and we will take advantage of this alignment wherever possible.

What efforts is the DOD making to identify space-relevant new technologies developed commercially and apply them to military and national security purposes?

The Department's new Defense Space Strategy released in June of this year emphasizes the necessity of integrating new commercial technology to advance our space superiority and USSPACECOM will be a champion in implementing this strategy. In close partnership with U.S. Space Force, I will expand our outreach to modern innovation and technology development constructs. Examples of these include DOD's Defense Innovation Unit, dedicated to leveraging the commercial space industry, and the Small Business Innovation Research/Small Business Technology Transfer programs which accelerate revolutionary innovation from good ideas to game-changing capabilities. This is important, as commercial space activities provide national security benefits with new technologies and services and create new economic opportunities in established and emerging markets. The same activities, however, also create challenges in protecting critical technology, ensuring operational security, and maintaining strategic advantages. As we confront these challenges, our commitment to boosting cooperation with industry, Allies, and partners is explicitly stated in the strategy with a line of effort which calls for expanding information-sharing, cooperative research, technology development, and acquisition efforts. I also embrace leveraging commercial technological advancements and acquisition processes and modernizing the Defense Department's approach to the commercial licensing approval process.

If confirmed, how will you ensure that commercial technology is appropriately incorporated into USSPACECOM mission execution at acceptable risk levels? What are the challenges that you perceive to increasing collaboration between the private sector and DOD?

U.S. and allied commercial technology is a competitive advantage for the U.S. that we must leverage in order to keep pace with adversary threats and identify potentially game-changing opportunities. One way we are currently doing this is through the Combined Space Operations Center's (CSpOC) Commercial Integration Cell (CIC). CIC is the first-ever collaborative government and industry effort to integrate commercial satellite owner/operators into the CSpOC. This mission partnership enhances cooperation and synergy in the space domain to support coordinated, time-sensitive responses to critical day-to-day and emerging space activities while also increasing the overall resilience of U.S. government space operations.

A large barrier to collaboration on private industry investment in military-related technology advancements has been a lack of clear commitment by the U.S. government through a predictable, multi-year budget. In addition, proper risk management controls will be needed to document appropriate risk levels and to codify where certain types of risks will be managed and at what level risk decisions will be made. Additionally, we face the challenge of protecting critical technology, ensuring operational security, and maintaining strategic advantages that commercial technology provides. Despite these challenges, our commitment to boosting cooperation with industry, Allies, and partners is explicitly stated in the strategy with a line of effort that calls for expanding information-sharing, cooperative research, technology development, and acquisition efforts.

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

I am fully appreciative of Congress' recognition of and leadership in developing our National Security Innovation Base through acquisition reforms and focused efforts with industry, Allies, and partners. Improving the space industrial base has centered on test maturation and risk reduction activities to mature technology and manufacturing levels and reduce development risk for U.S. space payloads and ground architectures. Strengthening the innovation base is a different activity where industry is motivated to invest in pioneering national security technologies and where critical sources of sensitive national capability are properly protected from adversary attempts to acquire the technology. DOD and industry must educate and enforce information security practices throughout their organizations and cybersecurity measures to thwart theft by foreign intelligence entities and industrial competitors. Another key attribute of building the National Security Innovation Base is a long term space budget that drives confidence in industry and will provide incentive to pursue cutting-edge technologies while investing in skilled personnel. We must continue to pair these investments with steps to streamline acquisition processes and reduce bureaucratic overhead to improve the business prospects of innovative companies. Finally, I have a role in driving the message with industry that our ability to win this high stakes competition will have significant implications for their continued ability to live securely and continue to benefit from their technology development efforts.

The national security space community has begun to blend the use of traditional spacecraft and new flexible smallsats to provide improved mission support to users. In your view, how can USSPACECOM exploit commercial launch and other less expensive launch options to allow for more rapid replenishment and on-orbit employment of vital warfighting systems, while minimizing the risk of mission failure?

A hybrid architecture that spreads capability around a diverse mix of systems, even across domains, is a key element of our strategy, and there will almost certainly be a place for small satellites in that mix. A mixed architecture increases warfighting resilience by ensuring that the loss of any single platform does not result in serious mission degradation or failure. This opens up the opportunity for more frequent refresh of technology and creates an additional demand signal for appropriately sized launch options. I fully appreciate your support of R&D to advance commercial launch technology to meet future national security launch requirements.

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.

What are the challenges you perceive to effectively transitioning technologies from research programs into programs of record?

DOD acquisitions processes have traditionally been slow to integrate new technologies into program-of-record activities due either to funding limitations or concerns of risk and mission assurance. We must continue to support rapid prototyping and development to expedite the integration of new technology into DOD space operations at a pace which exceeds that of our potential adversaries. Our current capability development and resourcing processes are

incentivized to eliminate risk as much as possible before embarking on a traditional program of record. We need a dramatic cultural paradigm shift to leverage front-end low-cost, higher-risk prototyping and experimentation to buy down overall enterprise risk, refine capability requirements, and progress at a competitively viable pace. I look forward to working with the U.S. Space Force to ensure effective technology transitions that are informed and supported early identifying and providing funding, manpower, training, and sustainment requirements.

If confirmed, what specific steps will you take to ensure that the DOD space enterprise is benefitting more quickly and directly from research being performed across the defense research enterprise?

The key to USSPACECOM's ability to benefit quickly and directly from the entire defense research enterprise is the identification of space capabilities required across the missions of the DOD and every Combatant Command. USSPACECOM will pursue critical drivers to include operational and strategic warfighting requirements capturing near-term and long-term vision, communicating the highest priority requirements, and actively engaging operators in technology development and capability transition to ensure the warfighter receives the right capability at the right time. We will sustain and grow effective outreach to the DOD, government, commercial, allied, and partner S&T communities ensuring collaborative communication, and synergy in all pursuits. I will strongly advocate across the services, labs, and industry for research and development of space capabilities that will enhance mission success in every theater. If confirmed, I will work with appropriate Department of Defense Research and Development organizations to ensure that space capability gaps that have significant impacts across the Department are properly prioritized with these far-reaching implications in mind.

China

What is your assessment of the strategic objectives of China in space?

Beijing has the goal of building China into a space power in all respects. They view it as great power competition. China is developing space capabilities that will allow them to operate with the same advantages that we enjoy, while supporting civil and military interests, science and technology, and military modernization. Chinese military doctrines indicate that they view space as important to modern warfare and view counterspace capabilities as a means to reduce U.S. and allied military effectiveness. China's Defense White Papers stress the importance of superiority in the information domain, including through space operations.

In what ways, if any, do China's strategic objectives in space conflict with U.S. strategic objectives?

China has studied how the U.S. joint force operates and has embarked on major efforts to develop, test, and field counter-space capabilities in order to destroy or disrupt U.S. and allied space capabilities in a crisis or conflict. Bejing views space as an area where it can weaken U.S. advantages and cause cascading impacts on our sea, air, land, and cyber systems that rely on space-based capabilities.

To what extent do you view China's activities related to the space domain as a threat or challenge to U.S. national security interests?

China is making considerable gains and our operational advantage is shrinking. The PLA views space superiority, the ability to control the information sphere, and denying potential adversaries the same, as key components of information warfare. Space and counterspace operations will form integral components of PLA campaigns. China continues to develop a variety of counterspace capabilities designed to limit or prevent an adversary's use of its space-based assets during a crisis or conflict.

Which Chinese initiatives and capabilities poses the greatest risk to U.S. space-related capabilities and assets? Please explain your answer?

Beijing continues to improve its counterspace weapons and analysis of the PLA's published documents suggest reconnaissance, communications, navigation, and early warning satellites could be among the targets of attacks. Not only do these weapons and potential targets impact U.S. military operations, but they also have the potential to impact activities such as human space flight, humanitarian assistance and disaster response, and overall day to day civil activities. China is likely pursuing antisatellite weapons capable of destroying satellites operating in geosynchronous Earth orbits. China's PLA currently operates and trains with a ground-based antisatellite missiles capable of destroying satellites in Low Earth Orbits. China is currently designing jammers capable of targeting military reconnaissance platforms and disrupting military communications transmitted at extremely high frequencies. China will likely soon field a ground-based laser weapon capable of disrupting or damaging satellite sensors in low orbits.

Are U.S. policies and the associated authorities—as applicable to space operations and assets—sufficient to counter China's activities and influence, or are there additional measures we should be considering? What role should USSPACECOM play in this regard?

I fully support the policies and authorities as outlined in the newly published Defense Space Strategy and other relevant strategic documents. The U.S. continues to be the best in Space and if confirmed, I will ensure USSPACECOM continues to lead the Department of Defense's progress toward countering China's activities and influence in the domain. USSPACECOM is commited to deterring aggression and defending the nation, our allies, and U.S. interest from hostile acts in space.

Which additional capabilities will be most important to maintaining the U.S. advantage over China in space, in your view?

Our efforts in space have traditionally focused on delivering unmatched "force enhancement" capabilities and functions to the warfighter from space. With China's demonstrated commitment to holding our space assets at risk, we must invest in and continue to develop offensive and defensive space control capabilities, along with the associated Command and Control architecture that will enable us to achieve and sustain space superiority throughout the spectrum of conflict. Additionally, the combined ingenuity of U.S. commercial space companies, advanced

science and technology industries, DOD labs, and academia provide an unequaled competitive advantage. We must continue working with allies and partners to strengthen laws and processes for foreign investment reviews, supply chain protections, and export controls to protect our technological advantages, particularly as China seeks to blur the lines between military and civil development. Finally, we need to continue to reform our acquisition processes to make them more agile and risk tolerant in order to capitalize on these advantages.

Russia

What is your assessment of the strategic objectives of Russia in space?

Russia believes that having the military capabilties to counter space operations will deter aggression by space-enabled adversaries and enable Russia to control escalation of conflict if deterrence fails. Russia has aggressively pursued a modernization strategy to neutralize our space-enabled command and control, intelligence, and information support advatages. In space, Russian systems are intended to disrupt, degrade, and damage U.S. satellites in orbit. Russia has already fielded ground-based directed energy weapons, has developed aircraft-launched anti-satellite missiles, and continues to develop additional counterspace capabilities, to include testing of possible orbital kill vehicles. Russia now has the third largest collection of operational satellites in the world, behind the U.S. and China.

In what ways, if any, do Russia's strategic objectives conflict with U.S. strategic objectives?

Russian military doctrine and authoritative writings identify space as a warfighting domain and concluded that gaining and maintaining supremacy in space has a decisive impact on the outcome of future conflicts. . Even though Russia regularly expresses concern over the weaponization of space and is pursuing legal, binding space arms control agreements Moscow has been developing a suite of counterspace weapons capabilities, including EW to deny, degrade, and disrupt communications and navigation and DEW to deny the use of space-based imagery. Russia views America's perceived dependence on space as the "Achilles heel" of U.S. military power, which can be exploited to to control escalation if deterrence fails. Russia, therefore, is pursuing counterspace systems to neutralize or deny U.S. space-based services, both military and commercial, as a means of offsetting a perceived U.S. military advantage.

To what extent do you view Russia's activities related to the space domain as a threat or challenge to U.S. national security interests?

Russia's activities in space directly challenge U.S. and allied space superiority. However, there still exist areas of alignment in space exploration and scientific research. These areas offer possible avenues for communication and cooperation to counter Russia aggression. Russia is making considerable gains, and our operational advantage is shrinking. Russia is pursuing a broad spectrum of threats to our space capabilities. These include on-orbit activities, directed energy, jamming, and kinetic destruction from the ground.

Which Russian initiatives and capabilities pose the greatest risk to U.S. space-related capabilities and assets? Please explain your answer?

Moscow's broad spectrum of counterspace weapons- GPS jammers, SATCOM Jammers, directed energy weapons, orbital threats, and ground-based kinetic energy threats all pose a threat to U.S. space-related assets. Russia will use these weapons in part to gain and maintain information superiority over its competitors. The weaponization of information is a key aspect of Moscow's information confrontation strategy to be employed in times of peace, crisis, and war.

Are U.S. policies and the associated authorities—as applicable to space operations and assets—sufficient to counter Russia's activities and influence, or are there additional measures we should be considering? What role should USSPACECOM play in this regard?

I fully support the policies and authorities as outlined in the newly published Defense Space Strategy and other relevant strategic documents. The U.S. continues to be the best in Space and if confirmed, I will ensure USSPACECOM continues to lead the Department of Defense's progress toward countering Russia's activities and influence in the domain. USSPACECOM has a central role in the shared interest and responsibility of all space-faring nations to create the conditions for a safe, stable and operationally sustainable space environment.

In your view, what types of activities are most important to deterring Russian aggression in space and mitigating any threat it may present?

To deter Russia, as well as other potential competitors, USSPACECOM is focused on strengthening coordination between the joint force, U.S. interagency, our strategic alliances and partners. Events such as the Schriever Wargames and globally integrated exercises demonstrate our ability to integrate space capabilities into military operations. Engaging our Allies and partners in identifying potential threats is key to deterring irresponsible behavior in Space. We are stronger together.

Sexual Assault Prevention and Response in USSPACECOM

In your view, are the policies, programs, and training of the USSPACECOM to prevent sexual assault and respond to sexual assault when it does occur, adequate and effective?

While progress has been made over the past 10 years, there is much more to do: my understanding is that the 2018 survey of the force found that the occurrence of sexual assault increased for our youngest active duty women in all four Services. If confirmed, I intend to support the Secretary of Defense's May 2019 directions to improve and expand existing prevention and response programs, including: implementing the Sexual Assault Accountability Investigation Task Force (SAAITF) recommendations, developing new climate assessment tools, continuing to support the Catch a Serial Offender (CATCH) Program, enhancing efforts to select recruits of the highest character, preparing new leaders and first-line supervisors for leadership challenges, and executing the DOD Sexual Assault Prevention Plan of Action. The Secretary of Defense is committed to doing more for the women and men who serve this country; I whole-heartedly agree with these directed actions.

In your view, are the policies, programs, and training of the USSPACECOM to prevent sexual harassment effective?

USSPACECOM's efforts to date appear to have been successful in preventing sexual harassment. While I am confident that our policies, programs and training, based upon the Secretary of Defense's May 2019 directions form an excellent foundation for addressing this issue, we must acknowledge that we remain a relatively new command and cannot assume that we have fostered a perfect environment and entirely eliminated sexual harassment. Rather, we must acknowledge that the effort to prevent sexual harassment is an ongoing enterprise to which we must pay constant attention. If confirmed, I will emulate The Secretary of Defense's commitment to do more for the women and men who serve this country.

When sexual harassment does occur, does USSPACECOM have the tools needed to hold harassers accountable and to change the culture that allowed the harassment to occur?

Having followed the guidance of the Secretary of Defense, we have the tools and policies in place to ensure we hold harassers accountable and foster a healthy command climate free of sexual harassment. Similar to my answer above, it is important to acknowledge that USSPACECOM remains a relatively new command and while we have been fortunate to have few reports of sexual harassers within the command to this point, we are fully ready for and committed to addressing any sexual harassment incidents swiftly and with impartial justice.

What will be your approach to sexual assault and sexual harassment prevention and response in USSPACECOM, given that, if confirmed, you will lead a diverse workforce of service members and civilians?

If confirmed, I will reinforce USSPACECOM's current command climate that promotes an environment of dignity and respect, free from unlawful sexual harassment and sexual assault. I will support implementation of the six major actions as directed by the Secretary of Defense, which include recommendations of the Sexual Assault Accountability Investigation Task Force (SAAITF). I will also ensure my command continues to have a robust Sexual Assault Prevention and Response (SAPR) program, and foster an environment where sexual harassment and sexual assault are not condoned, tolerated or ignored.

What is your view of the necessity of affording a victim both restricted and unrestricted options to report a sexual assault?

Sexual assault victims should be afforded every option available to report a sexual assault. Restricted and unrestricted reports offer victims a personal choice and greater voice, ensuring victim safety and support while also ensuring the chain of command is aware of a crime.

What is your assessment of the potential impact, if any, of proposals to remove from military commanders, case disposition authority over felony violations of the Uniform Code of Military Justice, including sexual assaults?

Commanders are responsible for maintaining good order and discipline in their command. The legal authority to dispose of misconduct is vital to maintaining good order and discipline, and effectively exercising command responsibilities. Removing the responsibility and authority to dispose of felony Uniform Code of Military Justice violations runs counter to the expectations

our government and nation place on our commanders and potentially disrupts a commander's ability to enforce good order and discipline. Commanders, advised by trained and qualified legal advisors, and by implementing the recommendations of the Sexual Assault Accountability Investigation Force (SAAITF), ensure their disposition decisions are both fair and just. Commanders are in the best position to take action appropriate for both offenders and victims of crime.

What is your assessment of DOD's implementation of protections against retaliation (including reprisal; social ostracism; and acts of cruelty, oppression, and maltreatment) for reporting sexual assault or sexual harassment?

The Joint Force is resolute in protecting service members from retaliation for reporting sexual assault. The Department of Defense and Military Services continue to develop policies and procedures that implement the retaliation-related notification, training, and reporting requirements prescribed by the National Defense Authorization Act for Fiscal Year 2016, 2017 and 2018 to protect those who report sexual assault. The DOD issued the Defense Retaliation Prevention and Response Strategy to provide support to individuals who experience retaliation after reporting sexual assault or sexual harassment. I fully support the subsequent Retaliation Implementation Plan and, if confirmed, will execute tasks as indicated in the identified issue areas and support the comprehensive and consistent approach to retaliation prevention and response across the Department.

What is your understanding of the "continuum of harm" in the context of sexual harassment and sexual assault and their effects on the readiness of military units?

The "continuum of harm" is a spectrum of behaviors that can escalate and create an environment conducive to sexual violence, ranging from inappropriate behavior to sexual harassment, and tragically, sexual assault. These behaviors are fundamentally incongruent with our values and erode combat readiness of military units to deploy, fight and win. Sexual harassment and sexual assault are unacceptable! Sexual harassment and sexual assault have no place in the military, and destroy the climate of trust, teamwork, and cohesion necessary for effective units and organizations.

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

In my experience, units led by strong, disciplined, and engaged commanders have less indiscipline. Commanders at all levels are expected to promote an environment of dignity and respect; free from unlawful discrimination, sexual harassment, and sexual assault. The chain of command plays a vital role in all aspects of command climate and maintenance of good order and discipline.

How will you ensure that military and civilian leaders in USSPACECOM have the training, authorities, and resources needed to hold subordinate commanders and supervisors accountable for the prevention of and response to sexual harassment and sexual assault?

If confirmed, I am committed to ensuring good order and discipline in the command climate in USSPACECOM, and to ensuring dignity and respect is fundamental to daily interactions between our service members. If confirmed, I will ensure that my military and civilian leaders have the required training, authorities, and resources to hold subordinates, commanders and supervisors accountable. Key to this will be implementing the actions directed by the Secretary of Defense, which include the Sexual Assault Accountability and Investigation Task Force (SAAITF) Report recommendations, Prevention Plan of Action, and CATCH a Serial Offender Program.

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 with a simple yes or no.

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 with a simple yes or no.

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 with a simple yes or no.

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 with a simple yes or no.

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 with a simple yes or no.

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 with a simple yes or no.

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 with a simple yes or no.

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 with a simple yes or no.

Yes.