### Senate Armed Services Committee Advance Policy Questions for Dr. Christopher Scolese Nominee for Appointment to be Director, National Reconnaissance Office

#### **Duties/Responsibilities**

The National Reconnaissance Office (NRO) was established as a Department of Defense (DOD) and Intelligence Community (IC) joint effort to develop, launch, and operate signals, imagery, and communications satellites to enable its mission partners to produce intelligence products for the military, Congress, and the Executive Branch.

### **1.** What is your understanding of the specific duties and responsibilities of the Director of the NRO?

My understanding of the responsibilities of the Director of the National Reconnaissance Office (NRO) is to provide direction, guidance, and supervision over all matters pertaining to the NRO mission to develop, acquire, launch, and operate overhead reconnaissance systems and associated ground command and control, mission management, processing, and communications segments. Accordingly, the Director of the NRO is accountable for the day-to-day management of the NRO and the execution of its mission. To accomplish the NRO mission, the Director is authorized to establish strategic guidance, policy, and procedures for the execution of the NRO mission and the accomplishment of National Security Space responsibilities. Additionally, from my review of Executive Order 12333, as amended, and Department of Defense (DoD) Directive 5105.23, as of 29 October 2015, the Director of the NRO executes other authorities specifically delegated by the Director of National Intelligence (DNI) and Secretary of Defense (SecDef) and is responsible for:

- Managing and operating the NRO, its program activities, and acquisition of NRO systems, which includes developing a capable workforce, and fostering effective teams and partnerships internal to NRO;
- Serving as Principal Advisor to the DNI, SecDef, Chairman of the Joint Chiefs of Staff, DoD Combatant Commanders, and Secretary of the Air Force on overhead reconnaissance;
- Delivering intelligence, surveillance, and reconnaissance capabilities; and information products, services, and tools in coordination with the Functional Managers, as established by the DNI;
- Maintaining close, integral relationships and partnerships with Intelligence Community and DoD mission partners; and U.S. government agencies, departments, and entities with specific responsibility for overhead and space activities in peacetime and wartime; and
- Sharing responsibility for leading and managing the National Security Space community.

### 2. What background and experience do you possess that you believe qualify you to perform these vitally important duties and responsibilities?

Throughout my career at the National Aeronautics and Space Administration (NASA), I have been involved in all aspects of space systems development, ground system design, launch operations, facilities management, and personnel management. This experience included involvement in the management and oversight of over 100 space missions in Earth orbit and beyond. These missions addressed science, operational, and communication requirements and included all classes of satellites, from individual instruments on CubeSats to large missions with integrated constellations.

I have deep expertise in developing and acquiring space systems at NASA that is directly relevant to the National Reconnaissance Office (NRO) mission, and I have served as an advisor on NRO programs. Throughout my career, I have been responsible for making difficult decisions on requirements, infusing technology effectively, building strong partnerships, and communicating progress on activities. Some specific examples include the redesign of the Earth Observing System and the development of the Earth Observing System Data and Information System.

While the NASA and NRO missions are in many ways different, they are also similar. At a fundamental level, we share some of the same industrial base partners, launch systems, and at times, personnel. NASA missions are designed to address a specific set of requirements based upon prior scientific discoveries. Throughout my career, including in my current position as the Director of the NASA Goddard Space Flight Center (GSFC), I have sought to apply state-of-the-art technologies, combined with capabilities from industry, academia, and industrial partners, to ensure the most efficient use of resources to meet the NASA mission. Similarly, the NRO is responsive to intelligence requirements, and the fundamental principles of space system design and acquisition from my experience at NASA would apply.

Similar to the mission of the NRO to support intelligence requirements, NASA and the GSFC are charged with developing space and ground systems that are responsive to the user communities' requirements. To this end, GSFC and the NRO use the same components, vendors, and in some cases, systems, to accomplish their respective missions. NASA, GSFC, and the NRO often participate in common activities, such as the Space Collaboration Council, the Joint Missions Assurance Council, the Space Quality Improvement Council, and the Mission Assurance Improvement Workshop, all of which are intended to improve our performance and assure communication among the agencies and industry about common concerns and best practices. We also work together in areas of critical importance, such as setting common standards for launch vehicles and looking at future capabilities. One example of this is the recent "Science and Technology Partnership Open Forum: Information Exchange for Market Analysis of Commercial In-Space Assembly Activities." The purpose of such joint forums is to coordinate efforts, especially in the areas of cutting edge technology, to achieve common goals more efficiently than could be accomplished by one organization alone. Often these activities result in community standards or new capabilities that improve reliability and resiliency.

While the preponderance of my career has been outside the Intelligence and Defense communities, if confirmed, I believe my unique experiences at NASA directly correlate to the NRO mission. I will bring innovative approaches to the NRO mission and leverage best practices to enhance the NRO's intelligence collection mission, from satellite design through delivery of data to users. If confirmed, I believe that all of these experiences will benefit the NRO and will provide different perspectives and approaches to accomplishing the mission.

## **3.** Do you believe there are any actions that you need to take to enhance your ability to perform the duties and responsibilities of the Director of the NRO? Please explain your answer.

Based on my understanding of the position of Director, National Reconnaissance Office (NRO), I believe my expertise in space systems development, acquisition, launch and operations over the past 30 years at National Aeronautics and Space Administration uniquely qualifies me for this position. If confirmed, I believe this experience will benefit the NRO and will provide different perspectives and approaches to accomplishing the mission and in meeting the overhead intelligence, surveillance and reconnaissance needs of the Department of Defense and Intelligence Community. At this time, and if confirmed, I am not aware of any additional actions needed to enable me to perform successfully in this position.

#### 4. What is your understanding of the unique role of the NRO within the IC?

From my understanding of the publicly available history of the National Reconnaissance Office (NRO), in September 1961, the Central Intelligence Agency (CIA) and Department of Defense (DoD) signed the first NRO Charter that established management arrangements for the National Reconnaissance Program. This consolidated many of America's national space and aerial reconnaissance projects under a covert, highly-compartmented National Reconnaissance Office. In 1992, the U.S. government declassified the "fact of" or existence of the NRO.

As a defense agency and as a member of the Intelligence Community (IC), the NRO is organized and managed as a partnership between the Director of National Intelligence and the Secretary of Defense to meet their overhead intelligence requirements. The NRO mission is to develop, acquire, launch, and operate overhead reconnaissance systems and associated ground command and control, mission management, processing, and communications segments. The NRO maintains close partnerships across the IC and with defense and space-faring organizations, such as the National Security Agency, the CIA, the Defense Intelligence Agency, the National Geospatial-Intelligence Agency, Air Force Space Command, U. S. Strategic Command, and the National Aeronautics and Space Administration. The NRO supports current operations with existing systems and plays a critical role in providing global situational awareness, including access to high-risk and denied areas. Working closely with its mission partners, the NRO provides policy makers, analysts, and warfighters timely access to high-value, multiple-intelligence fusion content. Using NRO data, NRO mission partners produce intelligence products for the President, Congress, national policymakers, and warfighters.

I certainly appreciate and value the criticality of this mission, and if confirmed, I will work to maintain and further strengthen the NRO's contributions to the IC, the DoD, and other key partners.

### 5. What is your understanding of the unique role of the NRO within the Defense enterprise?

From my understanding of the publicly available history of the National Reconnaissance Office (NRO), in September 1961, the Central Intelligence Agency (CIA) and Department of Defense (DoD) signed the first NRO Charter that established management arrangements for the National Reconnaissance Program. This consolidated many of America's national space and aerial reconnaissance projects under a covert, highly-compartmented National Reconnaissance Office. In 1992, the U.S. government declassified the "fact of" or existence of the NRO.

As a defense agency and as a member of the Intelligence Community (IC), the NRO is organized and managed as a partnership between the Secretary of Defense and the Director of National Intelligence to meet their overhead intelligence requirements. The NRO mission is to develop, acquire, launch, and operate overhead reconnaissance systems and associated ground command and control, mission management, processing, and communications segments. The NRO maintains close partnerships across the IC and with defense and space-faring organizations, such as the National Security Agency, the CIA, the Defense Intelligence Agency, the National Geospatial-Intelligence Agency, Air Force Space Command, U. S. Strategic Command, and the National Aeronautics and Space Administration.

The NRO supports current operations with overhead intelligence, surveillance and reconnaissance from existing systems and plays a critical role in providing global situational awareness, including access to high-risk and denied areas. Working closely with its mission partners, the NRO provides policymakers, analysts, and warfighters timely access to high-value, multiple-intelligence fusion content. Using NRO data, NRO mission partners produce intelligence products for the President, Congress, national policymakers, and warfighters.

I certainly appreciate and value the criticality of this mission, and if confirmed, I will work to maintain and further strengthen the NRO's contributions to the DoD, the IC, and other key partners.

#### 6. In light of the lines of effort set forth in the December 2017 National Security Strategy and the 2018 National Defense Strategy, what other duties and responsibilities do you anticipate will be assigned to you?

From my understanding of the 2017 National Security Strategy (NSS) and the 2018 National Defense Strategy (NDS), the National Reconnaissance Office (NRO) plays a critical role in achieving national security objectives by developing, acquiring, launching, and operating overhead intelligence, surveillance and reconnaissance systems. To meet the NSS and NDS objectives, the NRO will need to ensure those systems are resilient, survivable, and delivered at the speed of relevance.

It is my understanding that today NRO systems are critical to maintaining our national strategic advantage and enhancing the effectiveness of warfighters in every domain. I expect to strengthen and, where appropriate, expand collaboration with mission partners to achieve these objectives. This includes engagement across defense, intelligence and civil partners, as well as with the commercial sector.

If confirmed, I look forward to further discussions with the Secretary of Defense, the Under Secretary of Defense for Intelligence, and the Director of National Intelligence on their expectations for the NRO to further the national security objectives outlined in the 2017 NSS and 2018 NDS.

#### **Major Challenges and Opportunities**

#### 7. What is your vision for the NRO of today? For the NRO of the future?

Based on my 30 years of experience at National Aeronautics and Space Administration, and from my discussions with the Under Secretary of Defense for Intelligence (USD(I)), the Principal Deputy USD(I), the Director of National Intelligence, and the Principal Deputy Director of National Intelligence, as part of the confirmation process, it is my understanding that National Reconnaissance Office (NRO) is currently focused on modernizing its architecture, increasing the speed of delivery of data to the user, and ensuring continuity of operations. If confirmed, I would expect to continue these initiatives and would look to increase the NRO's focus on infusing the latest technology, leveraging commercial capabilities, and achieving resiliency across the future NRO architecture from ground through space.

### 8. What do you consider to be the most significant challenges you will face if confirmed as the Director of the NRO?

As space technologies continue to evolve, to include small satellites and flexible launch solutions, the space community must routinely assess current and future architectures to accomplish our respective mission sets. In many cases, this might mean breaking up complex large systems into simpler, smaller ones with a faster tech refresh rate, or tipping and cueing between satellites of multiple sizes. If confirmed, I anticipate that integrating new architectures without disrupting the continuity of operations will be a challenge.

Additionally, space is an increasingly contested domain with increased threats to both ground and space systems. Therefore, I view resiliency as a top priority and a persistent challenge. If confirmed, it will be critical to leverage the latest technology in our space and ground systems to stay ahead of our adversaries.

Lastly, strategic and tactical users are increasing reliant on intelligence, surveillance, and reconnaissance space systems. If confirmed, I would also seek to increase the speed at which the National Reconnaissance Office (NRO) delivers data to users, while maintaining the high degree of reliability and data integrity expected of NRO systems.

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

Based on my experience at National Aeronautics and Space Administration (NASA), I think that a mix of small, medium, and large satellites allows for greater innovation, optimizes the architecture, and achieves resiliency. If confirmed, I would address the architecture challenge by pursuing a hybrid approach at the National Reconnaissance Office (NRO) to maximize its ability to meet user requirements. Additionally, I would ensure that the NRO is weighing all architecture options against mission needs, recognizing that at times, innovative architectures comprised of both larger and smaller satellites may best meet user needs.

At Goddard, I have worked closely with other agencies to provide resiliency to our systems. I have directed changes to our space and ground systems—existing and future—to reduce susceptibility to attack and provide protection for our space and ground systems. If confirmed, I would bring a similar approach to the NRO, designing ground and space systems with resiliency integrated into foundational system designs and operations.

I have experience in increasing the speed of data delivery to a diverse user community. At NASA, we implemented and experimented with direct downlink and direct broadcast to the user in the field. As ground processing capabilities have improved, data and information access has also improved, and I expect this trend to continue. Finally, from my NASA experience, it has become clear that data from multiple platforms is necessary to produce the products needed by the user, so that any solution requires a combination of space and ground assets.

## 10. Given the major challenges you identified above, what other priorities would you set for your tenure as the Director of the NRO, if confirmed? Please explain your answer.

In addition to the challenges outline above, my discussions with the Under Secretary of Defense for Intelligence (USD(I)), the Principal Deputy USD(I), the Director of National Intelligence, and the Principal Deputy Director of National Intelligence, as part of the confirmation process, reinforced the importance of recruitment and retention, as well as the importance of leveraging commercial innovation.

From my experience at the National Aeronautics and Space Administration (NASA), talent recruitment and workforce development are fundamental to the success of any organization. It is critical for a highly technical space agency to recruit and retain science, technology, engineering, arts, and math expertise. If confirmed, workforce management will be a priority for me as the National Reconnaissance Office (NRO) Director. As I learn more about NRO's talent recruitment and workforce development initiatives, I will seek to incorporate best practices from my NASA experience into the NRO.

Additionally, with respect to leveraging commercial capabilities, I have a strong record of using commercially available components and systems. If confirmed, I will continue to encourage their use, where appropriate. I believe it is the responsibility of any government agency to buy commercially available products and services when they meet the requirements, are available, and are verified trustworthy to perform their intended function. Rapid technology insertion is best accomplished by developing a technology pipeline, maintaining awareness of other organizations' developments, and ensuring the architecture is flexible enough to accommodate new technology. Commercial or other partner capabilities can enhance or replace existing systems. Common data standards and interfaces can increase industry participation to meet mission requirements.

## **11.** If confirmed, what actions would you take to focus NRO efforts on each of these priorities?

If confirmed, workforce management will be a priority for me as the National Reconnaissance Office (NRO) Director. During my tenure at National Aeronautics and Space Administration (NASA) Goddard Space Flight Center, I actively partnered with professional societies, high schools, colleges, and universities to educate students on the NASA mission and encourage students to pursue science, technology, engineering, arts, and math fields with an eye towards NASA and Goddard as ideal places to utilize their talent. By working to develop relationships with minority and underrepresented institutions, Goddard significantly leads NASA in minority intern recruitment. These efforts have ensured a healthy pipeline of students engaged in multi-year programs leading to potential employment. Beyond recruitment, I believe one of the most important things in retaining a workforce is having an exciting mission. I believe the NRO has a very exciting mission, and supporting national security is not only important, but provides people with an opportunity to serve their nation. I also believe it is important to create an environment where people know their views will be respected, that they have an opportunity for advancement, and where they can use their creativity to develop new capabilities.

As a result of my focus on personnel engagement, the Goddard Space Flight Center has been rated as one of the best NASA workplaces for the last two years, according to the annual Best Places to Work in the Federal Government rankings.

With regard to leveraging commercial capabilities, at NASA we have seen that spacecraft buses for many applications are commercially available and can perform with little to no modification to meet mission requirements. As a result, at Goddard, we implemented the Rapid Spacecraft Development Office to acquire fixed-price commercially available spacecraft buses. This allowed NASA to focus on the unique areas that required significant technology development to meet the mission's requirements. The results have been successful, from the first mission that supported the Earth Observation System—QuikScat—to the most recent science mission—the Fermi Astrophysics Observatory—in terms of both mission performance and cost. In addition, this philosophy has helped missions for the National Oceanic and Atmospheric Administration (NOAA) that serve the operational community. For instance, the Suomi National Polar-Orbiting Partnership mission used a commercially available bus to rapidly address and prevent a gap in weather observations. NOAA and the U.S. Geological Survey now rely on commercially available buses for operational weather and land imaging satellites.

If confirmed, I will determine if these approaches for workforce management and commercial innovation can apply to the NRO.

#### **Relationships**

12. The law and traditional practice establish important relationships between the Director, NRO, the Secretary of Defense, the Director of National Intelligence and other senior officials of the DOD, the IC and the U.S. Government. Please describe your understanding of the relationship of the Director, NRO to each of the following:

The Secretary of Defense

**The Director of National Intelligence** 

The Director, Central Intelligence Agency

The Under Secretary of Defense for Intelligence

The Under Secretary of Defense for Acquisition and Sustainment

The Under Secretary of Defense for Research and Engineering

The Chairman and Vice Chairman of the Joint Chiefs of Staff

The Secretary of the Air Force

The Chief of Staff of the Air Force

The Under Secretary of the Air Force

The Assistant Secretaries of the Air Force

The Commander of the United States Space Force (once established)

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

The Director, Space Development Agency

The Director, Space Rapid Capabilities Office

The Commander, Space and Missile Systems Center

The Commander, U.S. Strategic Command

The Commander, U.S. Space Command (once confirmed)

The other Combatant Commanders

The Chief, National Guard Bureau

#### The Directors of the National Security Agency (NSA), the National Geospatial-Intelligence Agency (NGA), and the Defense Intelligence Agency (DIA)

In support of its national intelligence mission, the National Reconnaissance Office (NRO) serves the needs of users across the Intelligence Community (IC) and the Department of Defense (DoD).

As a member of the IC and as an operating agency of the DoD, the NRO is organized and managed as a partnership between the Director of National Intelligence (DNI) and the Secretary of Defense (SecDef) to meet their overhead intelligence requirements. Within the Office of the Secretary of Defense, the NRO primarily works through the Under Secretary of Defense for Intelligence (USDI). The NRO mission is to develop, acquire, launch, and operate overhead reconnaissance systems and associated ground command and control, mission management, and communications segments. To achieve mission success, the NRO maintains close partnerships across the IC and the DoD, such as with the Central Intelligence Agency (CIA), the National Security Agency (NSA), the National Geospatial-Intelligence Agency (NGA), the Defense Intelligence Agency (DIA), U.S. Strategic Command and the U.S. Air Force, to include Air Force Space Command, Space and Missile Systems Center.

The NRO is staffed by a diverse group of personnel from across DoD and the IC, including NRO employees and military members (active, reserve, and National Guard) from all branches of the U.S. armed forces. If the U.S. Space Force is created, I would expect the NRO to have a similarly close relationship with that service. Because a significant proportion of NRO personnel come from the CIA and the military services, I understand close working partnerships are vital to the continued success of the NRO.

Since the NRO was established in 1961, it has supported various users and mission priorities across both the IC and DoD. As the nation addresses the challenges of an evolving space domain, I expect the NRO will partner closely with new and developing entities—such as the Space Rapid Capabilities Office, the Space Development Agency, U.S. Space Command, and the U.S. Space Force—to ensure unity of effort and continued excellence in meeting the overhead reconnaissance needs of our nation. It is important that the NRO maintains a close relationship with IC and DoD partners to ensure it can deal with current and evolving threat environments.

The NRO plays a vital role in providing global situational awareness including access to high-risk and denied areas. Working closely with its mission partners, the NRO provides policy makers, analysts, and warfighters timely access to high-value, multiple-intelligence fusion content. The NRO responds to taskings levied by Functional Managers, such as the Director, NSA for signals intelligence and Director, NGA for imagery intelligence, but does not itself establish the requirements for intelligence collection tasked of NRO satellites. These Functional Managers, such as Director, NSA and Director, NGA, provide tasking for NRO systems after taking into account the priorities and requirements of U.S. Combatant Commanders and national strategic priorities. Using NRO data, NRO mission partners produce intelligence products for the President, Congress, national policy makers, and warfighters.

I appreciate and value the criticality of the national mission of the NRO to both the IC and DoD. If confirmed, I will work to maintain and further strengthen the NRO's contributions to the IC, the DoD, and other key partners. I will ensure the NRO remains focused on meeting the requirements of Intelligence Community and Department of Defense customers.

#### **2018 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.

## 13. In your view, does the 2018 NDS accurately assess the strategic environment as it pertains to space? Please explain your answer.

In my role at National Aeronautics and Space Administration, I have had access to the publically available 2018 National Defense Strategy (NDS) summary that highlights the importance of space to our national defense. I agree with the priority placed on assuring space capabilities to support strategic and tactical users, and the increased emphasis on achieving resiliency against kinetic, directed energy, and cyberattacks on space and ground systems. I agree with the NDS's outline of the strategic environment with space as a warfighting domain in which competitors and adversaries threaten U.S. space activities and freedom of action. The strategy also describes rapid technological advancement, challenges to U.S. and allied domain superiority, and a lower basis for entry for potential adversaries. These conditions all apply to a space domain that is increasingly contested and congested.

It is my understanding that today the National Reconnaissance Office (NRO) focuses on achieving increased sensitivity, speed, and survivability of its space and ground systems. If confirmed, it is my intent to sustain these efforts, look for new collaborative opportunities, and ensure that the NRO continues to deliver world-class space-based intelligence, surveillance, and reconnaissance capabilities at the speed of relevance to national leaders, senior policymakers, the intelligence community, and the warfighter.

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

Yes, I believe the 2018 National Defense Strategy summary outlines a strategic approach designed to combat threats in multiple domains, to include space, and accurately reflects the threats to operating in an increasingly contested and congested space domain. I believe it is necessary to prepare to compete, deter, and win in space, given the rate at which our competitors and adversaries are building their own spacebased and counter-space capabilities. For these reasons, if confirmed, I will place an emphasis on ensuring that NRO systems are resilient and mission-capable in a contested environment.

#### 15. In your view, what will "great power competition" look like in space?

As with other domains, I expect "great power competition" in space will include actions by our competitors and adversaries intended to further their strategic objectives and displace U.S. influence and access. These actions might include coercion of other nations, and development of advanced and non-traditional warfighting capabilities to have an asymmetric impact on U.S operations and partnerships. From my experience, I understand that potential competitors and adversaries are already building their own space-based and terrestrial counter-space capabilities that pose a threat to U.S. space assets and operations.

I believe it is important to collaborate with Department of Defense, Intelligence Community, civil, allied, and commercial mission partners to ensure efficient and costeffective use of resources, support unity of effort, and enable space superiority in the increasingly congested and contested domain to address these shared threats. If confirmed, I will work to strengthen these partnerships to counter any potential "great power competition."

# 16. Given your current knowledge of space programs, does the 2018 NDS specify the correct set of capabilities by which the United States 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?

I believe the 2018 National Defense Strategy (NDS) summary provides a baseline for the Department of Defense to field effective space capabilities to counter the Chinese and Russian counter-space threats. These programs must be successfully executed and sustained to ensure our space assets can operate in contested space.

Based on the January 2019 Director of National Intelligence Worldwide Threat Assessment and testimony, my understanding is that the Chinese and Russian counterspace programs are also developing their capabilities, and that their final force structure is not yet determined. This uncertainty in the threat may be the highest risk to our space resiliency programs and they must be designed to be flexible and adaptive. Another potential high-risk area is a cyberattack against any facet of the National Reconnaissance Office operational construct. If confirmed, I look forward to learning more about these challenges.

### 17. Are there other nation-state or other actors operating in space that you perceive as a risk to the United States or as cause for concern? If so, why?

Based on the January 2019 Director of National Intelligence Worldwide Threat Assessment and testimony, my understanding is that there are other threats from state and non-state actors that can disrupt our U.S. space capabilities through physical or cyberattacks. Additionally, I am concerned about the proliferation of counter-space capabilities. If confirmed, I will look forward to examining the latest intelligence on space threats.

# 18. Given your current knowledge of space programs, are extant U.S. policies, programs, and authorities applicable to space appropriate to ensure the United States can compete, deter, and win in great power competition in space? Are there additional measures we should be considering? What do you perceive as the areas of highest risk?

As directed in Space Policy Directive-4, the Executive Branch is reviewing the authorities governing space control activities to determine if the existing authorities— primarily captured in Title 10 and Title 50—are adequate for U.S. space control efforts to be fielded and operated effectively. If confirmed, I will closely follow this review and ensure that National Reconnaissance Office (NRO) space resiliency programs can be effectively executed.

#### 19. What role do you believe the NRO should play in supporting the 2018 NDS?

If confirmed, I believe the National Reconnaissance Office (NRO) will need to work closely with Department of Defense (DoD), Intelligence Community (IC), civil, allied, and commercial mission partners to field more resilient capabilities, strengthen existing and forge new relationships, and identify opportunities to enhance unity of effort in the space domain. The NRO's responsibility to develop, acquire, launch, and operate overhead intelligence, surveillance, and reconnaissance systems to address user requirements supports the National Defense Strategy (NDS) objectives and strategic approach. To that end, the NRO ensures its systems are resilient, survivable, and deliver intelligence information at the speed of relevance to meet the needs of national leaders, senior policymakers, the IC, and the warfighter.

## 20. Is the NRO adequately sized, structured, and resourced to provide all requisite support to implementation of the 2018 NDS as regards the space domain?

It is my understanding that today the National Reconnaissance Office (NRO) is jointly funded by the Department of Defense (DoD) and the Intelligence Community (IC) to develop, acquire, launch, and operate overhead intelligence, surveillance and reconnaissance systems to meet both DoD and IC requirements. If confirmed, I look forward to receiving detailed briefings on NRO's current size, structure, and resources; and understanding how it is postured to support implementation of the 2018 National Defense Strategy.

## 21. If confirmed, how will you address any gaps or shortfalls in the NRO's ability to meet the demands placed on it by implementation of the 2018 NDS and the associated operational plans?

If confirmed, I look forward to receiving detailed briefings on National Reconnaissance Office's current and future capabilities and understanding if there are any gaps or shortfalls in supporting the 2018 National Defense Strategy (NDS).

Additionally, if confirmed, I will build upon the strong foundation of cooperation between the NRO and Department of Defense (DoD) space elements—to include U.S. Space Command and, if established, the U.S. Space Force—in areas such as acquisition, planning, and operations in support of 2018 NDS objectives.

## 22. If confirmed, what changes or adjustments would you advise the Secretary of Defense to make in DOD's implementation of the 2018 NDS as regards the domain of space?

It is my understanding that today, in addition to leading the National Reconnaissance Office (NRO), the Director of the NRO also serves as the principal advisor to the Secretary of Defense (SecDef) regarding overhead reconnaissance. If confirmed, I would expect to work closely with the SecDef and the Under Secretary of Defense for Intelligence to ensure the Department of Defense's (DoD) intelligence, surveillance, and reconnaissance overhead collection requirements are met, consistent with the objectives outlined in the 2018 National Defense Strategy.

If confirmed, I look forward to more fully understanding the DoD's current and anticipated overhead reconnaissance needs, so that I may fulfill that advisory role.

### 23. If confirmed, specifically what would you do to enhance or expedite the implementation of the 2018 NDS and U.S. strategic objectives in space?

If confirmed as the Director, National Reconnaissance Office (NRO), I would partner across the Department of Defense (DoD) and the Intelligence Community (IC) to understand the full scope of space threats and ensure that NRO capabilities meet current and future intelligence and warfighter requirements. Furthermore, I would continue to strengthen partnerships and unity of effort engagements with DoD, IC, civil, allied, and commercial mission partners. The NRO must work closely with mission partners to ensure that implementation of the 2018 National Defense Strategy keeps pace with the advancement of threats and continues to provide the U.S. and its allies with a strategic advantage.

#### **NRO Missions and Functions**

## 24. As space shifts from categorization as a domain that exclusively supports operations in other domains, to a domain that is itself contested, how will you shift NRO's approach to space, if confirmed?

If confirmed, I look forward to fully understanding the mechanics of current National Reconnaissance Office (NRO) operations and how Department of Defense (DoD) and Intelligence Community (IC) challenges are, or are not, being met. If confirmed, I look forward to understanding more specifics of the current and future challenges of the NRO, the DoD, and the IC. With that understanding, I will be better able to assess the NRO's approach to space moving from a supporting to a supported domain.

## 25. If confirmed, how will you guarantee that NRO has the capability and capacity to support DOD's priority space warfighting missions, while ensuring responsiveness to the needs of other NRO mission partners?

With my current information, I believe that supporting the Department of Defense's (DoD) priority space warfighting missions and ensuring responsiveness to the needs of other National Reconnaissance Office (NRO) mission partners can be met concurrently. If confirmed, I plan to coordinate with the Functional Managers for specific intelligence collection, such as Director, National Security Agency and Director, National Geospatial-Intelligence Agency, to ensure that we have a robust process that enables them to properly adjudicate all requirements from both the DoD and the Intelligence Community, and ensure that future DoD space warfighting and responsiveness, and national strategic priorities, are all met when levying such tasking on NRO assets.

# 26. 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. How can these processes, both at NRO and as executed by your mission partners, be accelerated to increase mission impact, in your view?

Throughout my 32-year career at the National Aeronautics and Space Administration (NASA), I have managed multifaceted partnerships with other agencies, including the National Oceanic and Atmospheric Administration, the U.S. Geological Survey, the Department of Defense, the National Reconnaissance Office (NRO), and international organizations to meet shared requirements and priorities. As part of these collaborations, I came to understand the need for data to be delivered to the user as soon as possible. At NASA, we implemented and experimented with direct downlink and direct broadcast to the user in the field to meet those needs. These downlinks and broadcasts consisted of direct measurements from sensors that provided imagery or physical products. Additionally, as ground processing capabilities have improved, data and information access has also improved, and I expect this trend to continue.

My experience has also made it clear that data from multiple platforms may be necessary to produce the products needed by the user, so that any single solution may require a combination of space and ground assets.

If confirmed, I look forward to receiving in-depth briefings on the NRO's current technologies, system architecture, and the relationships with Intelligence, Defense, and other partners. I will look to leveraging those assets, bolstering them where needed, and building strong, cooperative relationships to ensure the NRO continues to provide timely intelligence at the speed of relevance to support policymakers, analysts, and warfighters.

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.

27. If confirmed, how would you ensure that NRO satisfies these warfighting requirements? 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?

My understanding is that the National Reconnaissance Office's (NRO) tasking priorities are set by the Functional Managers for specific intelligence collection, such as Director, National Security Agency and Director, National Geospatial-Intelligence Agency, within the Intelligence Community and not the NRO itself, and that the NRO works to best achieve those requirements levied on its assets. Similarly, many of the missions at Goddard Space Flight Center support other organizations, like National Oceanic and Atmospheric Administration or U.S. Geological Survey, and it is our responsibility to work with them to best accomplish the requirements they have developed. That includes a discussion about the resources we have available, our technological capability, commercial opportunities, and other organizations that can provide what they need. I have considerable experience in supporting a diverse customer base and developing a mission based on external requirements, and if confirmed, I would bring that experience to the NRO.

## 28. Given the seismic shifts in the global threat environment and sustained vibrant growth in the commercial space sector in the U.S. and overseas, what do you see as the primary challenges to the NRO's existing space and software architectures?

If confirmed, I look forward to learning more about specific challenges facing National Reconnaissance Office's (NRO) existing space and software architecture.

From my experience at the National Aeronautics and Space Administration (NASA), I know a strong partnership with private industry is necessary to accomplish the mission. Mission development is a team effort between government and private industry, and all team members are critical to success.

Private industry typically has the personnel, tools, and facilities to conduct largescale developments and the ability to manufacture multiple copies of systems very effectively. Further, as commercial demand for products increases, the private sector can offer solutions that augment or replace existing systems, thus allowing the government to enhance capability or focus on new capabilities. Also, in many cases, private industry can infuse technology or implement processes at a more rapid rate.

From my NASA perspective, and from what I understand is the NRO's perspective as well, the government has a broader and longer-term perspective than private industry. The government has the advantage of historical perspective based on long-term knowledge of system capabilities and evolution, of observing the performance and capabilities of multiple suppliers, and of knowing what capabilities may be needed in the future. Also, the government can often invest in very early stage technologies through universities and government labs that have long-term potential to enhance capabilities for both government needs and commercial applications.

This creates an opportunity for teamwork between government and industry where industry can build the systems, provide commercial alternatives, where appropriate, and infuse technologies, while the government can focus on mission performance, continuity of operations, and maturing very new technologies that may not have a commercially viable payoff at this time, but could significantly improve the mission.

I believe that neither the government nor the commercial sector alone can maintain the level of performance needed to keep the U.S. competitive in space, given the ambitions of our adversaries, so partnership with private industry is not only beneficial, but also necessary.

## **29.** The NRO has fostered explosive growth in tasking and control between overhead satellites. How will you ensure unity of effort and deconfliction of taskings in the space warfighting domain across DOD and IC customers and equities?

It is my understanding that both the Secretary of Defense (SecDef) and the Director of National Intelligence (DNI) have the ability to set requirements, and they work together and with the Functional Mangers for specific intelligence collection, such as Director, National Security Agency and Director, National Geospatial-Intelligence Agency, within the Intelligence Community, who are responsible for levying collection requirements on NRO assets, to adjudicate taskings and set priorities.

The National Reconnaissance Office (NRO) has a responsibility to serve the needs of users across the Department of Defense (DoD) and the Intelligence Community (IC), and since the NRO was established in 1961, it has been supporting various users and mission priorities across both communities. The shift to space as a warfighting domain creates new challenges and opportunities to strengthen our collective unity-of-effort. I have demonstrated experience at the National Aeronautics and Space Administration (NASA) supporting diverse customer sets across varied missions that is not unlike the diverse set of customers the NRO supports. If confirmed, my NASA experience will enable me to work effectively with IC and DoD customers. It will be a priority for me to ensure that NRO continues to fulfill and deliver its core missions and capabilities.

## **30.** Given the growth of both the space enterprise and threats to space assets, what specifically will you do, if confirmed, to ensure mission resiliency and survivability of NRO on-orbit systems, communications lines, and mission processing facilities?

Based on my experience at the National Aeronautics and Space Administration (NASA), I recognize that there is a significant and growing threat to our space and ground systems. NASA operates or develops critical systems for communicating with our astronauts, collecting and distributing data from our satellites, and providing critical data about our weather and resources. Many of these systems are developed or operated by NASA Goddard Space Flight Center. As a result, I have worked closely with other agencies to ensure the safety of these systems and to provide resiliency where and when possible. I have directed changes to our space and ground systems—both existing and future—to reduce susceptibility to attack and provide protection for our spacecraft.

From what I understand, the National Reconnaissance Office, like NASA, takes these threats very seriously and is making systems more resilient through design and operation, and by relying on multiple types of systems to assure the continuity of data. If confirmed, I would view mission resiliency and survivability as a top priority. If confirmed, I look forward to learning more about protections the NRO currently has in place, and exploring opportunities for improvements.

## **31.** How will you use both Artificial Intelligence (AI) and machine learning in executing the NRO mission best to support the DOD and your other primary customers?

It is clear that artificial intelligence (AI) is rapidly becoming more capable, and as we move to more diversified and proliferated sources of information, we will need to leverage AI to accomplish the mission. If confirmed, I would seek to work with industry and academia to maximize their potential to support the incorporation of AI technologies into the National Reconnaissance Office (NRO) mission, in areas such as ground architecture and tipping and cueing across the constellation.

Based on my experience at the National Aeronautics and Space Administration (NASA), AI, if implemented successfully, is a force multiplier that enables assessment of large volumes of data not easily done by humans, speeds the delivery of information to the end user, and can help increase system robustness. Leveraging AI is critical to maximizing collection platforms to solve complex intelligence problems.

If confirmed, I will encourage partnerships across the Department of Defense (DoD), Intelligence Community, and private industry to ensure we are using AI to the fullest extent to accomplish the NRO mission and support the DoD and other customers.

# 32. As the capability of collection platforms increases, the challenges associated with data transmission and storage have grown commensurately. Similarly, the importance of data in supporting AI algorithms is increasing. What do you intend to do, if confirmed, to ensure that data vital to NRO mission sets is readily available and secure?

It is critical to save mission data to enable discovery and to train artificial intelligence (AI) algorithms. It is my experience that although storage costs are trending down, the growth of data tends to offset this trend. My experience at the National Aeronautics and Space Administration (NASA) has shown me that it is critical to maintain a combination of data and algorithms that enables a trade between data storage and processing capability to manage costs.

It is my understanding that the National Reconnaissance Office (NRO) is also evolving its ground systems to support a data-centric architecture, which I believe will enable effective data management strategies, such as tiered data storage, minimized duplication of records, and facilitated data sharing across the Intelligence Community and Department of Defense.

If confirmed, I will work with NRO mission partners to develop data retention strategies that provide the best intelligence determination opportunities.

## **33.** If confirmed, what steps would you take to improve the information-sharing, integration, coordination, and collaboration between NRO and the DOD, as well as between NRO and other elements of the IC?

Throughout my 32-year career at the National Aeronautics and Space Administration, I have partnered with, and worked across, a diverse community of agencies, scientists, engineers, and analysts, with a disparate set of requirements. This experience has instilled in me a strong belief in the value of building and sustaining partnerships with customers and communicating regularly on the status and future direction of programs. I have managed multifaceted partnerships with agencies, including the National Oceanic and Atmospheric Administration, the U.S. Geological Survey, the Department of Defense, the National Reconnaissance Office (NRO), and international organizations to meet shared requirements and priorities. Consequently, I place a priority on listening to partners' needs throughout the conception, development, and operation of a system(s) and communicating progress so that adjustments can be made to ensure operational performance satisfies user needs within technical, cost, and schedule constraints.

If confirmed, I look forward to receiving in-depth briefings on the NRO's current relationships with Defense, Intelligence, and other partners, and look forward to building strong, cooperative relationships to ensure the NRO continues to provide critical intelligence to support policymakers, analysts, and warfighters.

## 34. What is your assessment of the risks and benefits associated with building partnerships with private industry to accomplish NRO's missions? How would you mitigate any risks you identify?

From my experience at the National Aeronautics and Space Administration (NASA), I know a strong partnership with private industry is necessary to accomplish the mission. Private industry typically has the personnel, tools, and facilities to conduct large-scale developments and the ability to manufacture multiple copies of systems very effectively. Also, in many cases, private industry can infuse technology or implement processes at a more rapid rate. The government has the advantage of historical perspective based on long-term knowledge of system capabilities and evolution, of observing the performance and capabilities of multiple suppliers, and of knowing what capabilities may be needed in the future. Also, the government labs that have long-term potential to enhance capabilities for both government needs and commercial applications.

I believe that neither the government nor the commercial sector alone can maintain the level of performance needed to keep the U.S. competitive in space, given the ambitions of our adversaries, so partnership with private industry is not only beneficial, but also necessary. However, supply chain control is always a concern, and we must be diligent at every step of the acquisition process to ensure quality control. This risk is not unique to the NRO. At NASA I have worked in forums with other government agencies to mitigate supply chain threats and develop solutions. If confirmed, I would ensure that NRO carefully monitors the risk of counterfeit or corrupted parts, and collaborates with other government agencies to remain informed and vigilant against that threat.

# 35. NRO is blending the use of traditional spacecraft and new flexible smallsats to provide improved mission support to users. How can NRO 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?

From my experience at the National Aeronautics and Space Administration (NASA), mission requirements and physics largely drive the size of a satellite, telescope, or constellations of satellites. At NASA Goddard Space Flight Center, I championed the use of CubeSats and small satellites. I supported the development of miniaturized instruments for use on CubeSats, identified missions best suited for small satellites, and modified policies to address the unique aspects of small satellites and CubeSats. The ability to manifest CubeSats and small satellites on a variety of launch platforms, along with their lower cost compared to larger satellites, has afforded the opportunity to more quickly space-qualify technologies, train scientists and engineers, and allow for constellations of satellites. More recently, the combination of miniaturized instruments with CubeSats and the greater variety of launch platforms has demonstrated the ability to accomplish significant scientific goals.

CubeSats, small, and medium satellites can provide a range of benefits, from quickly testing and space-qualifying technologies, to meeting or enhancing mission requirements. I also think that a mix of small, medium, and large satellites provides an increased capability to best meet the mission, allows for greater innovation, optimizes the architecture, and achieves resiliency. If confirmed, I would ensure that the National Reconnaissance Office (NRO) is weighing all architecture options against mission needs, recognizing that at times, requirements may best be met using hybrid architectures comprised of both larger and smaller satellites.

We have a responsibility to infuse the latest technology into our programs to stay ahead of our competitors and adversaries and to ensure that we are providing the needed data quickly and efficiently. Our competitors and adversaries are not afraid to take risks. If the U.S. is to maintain its competitive advantage in space, we must be willing to try new technologies and accept that not all new technologies will be a success. However, we should always seek to distribute risk so that no one system or data product is vulnerable to catastrophic loss. New launch capabilities, commercial capabilities, and acquisition approaches have expanded the range of options with which we can move quickly while managing risk. Over the last 20 years, I have held positions in which I was responsible for program oversight and for reporting progress to Congress and other organizations. I have found that regular reporting ensures oversight is fully and currently informed on the status of programs and acceptable levels of risk. Only by engaging with oversight can we assure Congress that we are managing risk while meeting mission requirements. Therefore, I believe that communicating with Congress on a regular and continuing basis enables us to increase the pace at which we address the threats we face in space, prevent acts of aggression, and remain consistent with American laws and values while managing risk.

#### 36. The NRO has cultivated an exceedingly capable workforce of highly-technical and qualified space and intelligence professionals. Given the constant competition for talent across the technical community, specifically what would you do ensure the NRO sustains and enhances its ability to recruit, develop, and retain the cadre of qualified technical experts it needs to perform its current and future missions?

I believe one of the most important things in retaining a workforce is having an exciting mission. I believe the NRO has an exciting mission, and supporting national security provides people with an opportunity to serve their nation. I also believe it is important to create an environment where people know their views will be respected, that they have an opportunity for advancement, and where they can use their creativity to develop new capabilities.

To bring people into the organization, I think it is important to develop a strong pipeline. During my tenure at National Aeronautics and Space Administration (NASA) Goddard Space Flight Center, I actively partnered with professional societies, high schools, colleges, and universities to educate students on the NASA mission and encourage them to pursue science, technology, engineering, arts, and math fields with an eye towards NASA and Goddard as ideal places to utilize their talent. By working to develop relationships with minority and underrepresented institutions, Goddard significantly leads NASA in minority intern recruitment. These efforts have ensured a healthy pipeline of students engaged in multi-year programs leading to potential employment. If confirmed, I want to learn more about the NRO's recruitment efforts, to include potential internship programs, to replicate the success we had at Goddard.

#### <u>Integration of Tasking of NRO Signals Intelligence (SIGINT) and Imagery Intelligence</u> (IMINT) Satellites

SIGINT can and should be used to "cue" IMINT collection, and vice versa. For example, a SIGINT "tip" can be used to cue the collection of an image to verify a target and locate it precisely. An image of what appears to be an air defense system can be confirmed by the intercept of radar emissions or radio communications from the same target. Accordingly, SIGINT and IMINT tasking should be closely integrated and coordinated, particularly when there exists an imperative to maintain custody of critical targets and to move rapidly

to strike them. However, NSA and NGA maintain physically separate, and only loosely coordinated tasking organizations for NRO satellites.

## **37.** In your view, would there be operational advantages to NRO's customers in the military and intelligence communities if NSA and NGA overhead tasking organizations fully integrated their operations?

It is my understanding that today the NRO works closely with the Defense and Intelligence communities to effectively "tip and cue" between systems to best meet user needs and collection requirements in collaboration with the Director, National Security Agency and the Director, National Geospatial-Intelligence Agency, as the respective Functional Managers responsible prioritizing and levying requirements for signals and geospatial intelligence collection.

## **38.** Would there be operational advantages to our military forces if operations tasking NRO satellites were closely integrated with DOD airborne intelligence collection and targeting operations?

It is my understanding that today the Director, National Security Agency and the Director, National Geospatial-Intelligence Agency, as the respective Functional Managers responsible for prioritizing and levying requirements for signals and geospatial intelligence collection work closely with military forces on their collection needs.

#### **NRO Acquisition Programs**

NRO has long maintained a reputation for the quality of its acquisition process as compared to the existing DOD acquisition process for space. At the same time, the NRO has experienced its share of major acquisition program failures, including large cost overruns, schedule delays, and programs that were cancelled due to a lack of performance, even after the investment of billions of dollars.

## **39.** One of NRO's core missions is to procure, build, test and deliver world-class satellites. If confirmed, how would you prioritize execution of NRO's acquisition and fielding of capabilities?

If confirmed, my priorities for the National Reconnaissance Office (NRO) would be focused on meeting the requirements of Department of Defense and Intelligence Community customers.

Based on my one-on-one meetings with Senators from this committee, as well as drawing on the conversations with both the Under Secretary of Defense for Intelligence and the Director of National Intelligence, I would prioritize acquisitions that seek to increase the speed at which data is delivered to users and increase the NRO's ability to leverage new technologies. If confirmed, I would also work to ensure that these upgraded systems also maintain the high degree of reliability and data integrity expected of the NRO.

## 40. Please explain your view of NRO space acquisition, testing, and fielding processes as compared to those of DOD.

It is my understanding that the National Reconnaissance Office (NRO), like National Aeronautics and Space Administration, has end-to-end responsibility for its systems. This means that the NRO owns the development of a space system through research and development, acquisition, operation, to end-of-life. From my experience as an advisor on NRO programs, the end-to-end acquisition approach allows for innovation across all phases of development and is highly effective. I have had limited experience working with Department of Defense space systems acquisitions and therefore cannot draw an informed comparison.

### 41. If confirmed as Director, NRO, what changes or improvements would you make to NRO space acquisition, testing, and fielding processes, and why?

It is my understanding that the National Reconnaissance Office (NRO) has a successful record of space systems acquisitions that, if confirmed, I hope to continue. As far as improving acquisitions, I know that NRO, like National Aeronautics and Space Administration, has end-to-end responsibility for its systems, which is a highly efficient acquisition approach.

However, having been involved in government acquisition for a very long time, I think that the NRO should explore new ways to further streamline its processes to increase the speed of development and improve performance, without compromising the mission or increasing cost risk.

If confirmed, I also think the NRO has to be dedicated to communicating status updates to partner and sponsor organizations to avoid duplication and ensure a common understanding of progress and challenges.

### 42. Are there one or more components of NRO's space acquisition, testing, and fielding process that are functioning optimally, in your view?

Based on my current understanding of the National Reconnaissance Office (NRO) acquisition, testing, and fielding processes, I believe that the NRO's end-to-end acquisition approach is effective and enables innovation and technology insertion across the process.

The Air Force is seeking to disaggregate its space missions to larger constellations of less expensive satellites. Similarly, the commercial sector is rapidly developing inexpensive satellite technology that supports massive constellation sizes.

## 43. What do you perceive to be the impact of these shifts in approach on the design of reconnaissance satellites and constellations?

CubeSats, small, and medium satellites can provide a range of benefits, from quickly testing and space-qualifying technologies, to meeting or enhancing mission requirements. I also think that a mix of small, medium, and large satellites provides an increased capability to best meet the mission, allows for greater innovation, optimizes the architecture, achieves resiliency, and facilitates technology refresh. If confirmed, I would ensure that the National Reconnaissance Office (NRO) is weighing all architecture options against mission needs, recognizing that at times, requirements may best be met using hybrid architectures comprised of both larger and smaller satellites.

From my experience at the National Aeronautics and Space Administration (NASA), mission requirements and physics largely drive the size of a satellite, telescope, or constellations of satellites. At NASA Goddard Space Flight Center, I championed the use of CubeSats and small satellites. I supported the development of miniaturized instruments for use on CubeSats, identified missions best suited for small satellites, and modified policies to address the unique aspects of small satellites and CubeSats. The ability to manifest CubeSats and small satellites on a variety of launch platforms, along with their lower cost compared to larger satellites, has afforded the opportunity to more quickly space-qualify technologies, train scientists and engineers, and allow for constellations of satellites. More recently, the combination of miniaturized instruments with CubeSats and the greater variety of launch platforms has demonstrated the ability to accomplish significant scientific goals.

Additionally, at the NASA Goddard Wallops Flight Facility, NASA personnel work closely with National Science Foundation-sponsored researchers to develop, manifest, and track nanosats and CubeSats for educational and outreach activities. These activities accomplish science goals while demonstrating new technologies and training the next generation of scientists and engineers. Further, NASA continues to work with the NRO on small satellite launches from Wallops.

#### 44. Today, commercial technology often surpasses the innovative edge once held in the domain of space by the military, the IC, and the government contractors that traditionally support them. How will you ensure that commercial technology is appropriately incorporated into NRO acquisition and mission execution at acceptable risk levels?

I have a strong record of using commercially available components and systems, and if confirmed, I will continue to encourage their use, where appropriate. I believe it is

the responsibility of any government agency to buy commercially available products and services when they meet the requirements and are available.

At the National Aeronautics and Space Administration (NASA), we have seen that spacecraft buses for many applications are commercially available and can perform with little to no modification to meet mission requirements. As a result, at NASA Goddard Space Flight Center, we implemented the Rapid Spacecraft Development Office to acquire fixed-price commercially available spacecraft buses. This allowed NASA to focus on the unique areas that required significant technology development to meet mission requirements. The results have been successful, from the first mission that supported the Earth Observation System—QuikScat—to the most recent science mission—the Fermi Astrophysics Observatory—in terms of both mission performance and cost. In addition, this philosophy has helped missions for the National Oceanic and Atmospheric Administration (NOAA) that serve the operational community. For instance, the Suomi National Polar-Orbiting Partnership mission used a commercially available bus to rapidly address and prevent a gap in weather observations. NOAA and the U.S. Geological Survey now rely on commercially available buses for operational weather and land imaging satellites.

NASA also worked with commercial providers for data on weather and land imaging to provide or enhance data sets. An example is the Sea-Viewing Wide Field-of-View Sensor (SeaWiFS) project that employed a data-buy arrangement where a commercially developed system acquired measurements of the ocean for commercial and scientific customers at a lower cost than if either party developed the system alone.

#### **DOD Review of NRO Acquisition Programs**

Given the role that NRO assets have in providing intelligence for warfighting functions, the Joint Requirements Oversight Council (JROC) reviews NRO acquisition programs to ensure DOD requirements are being met.

### 45. If confirmed, how will you ensure that NRO's close relationship with the JROC continues?

A key responsibility of the Director of the National Reconnaissance Office (NRO) is to maintain close, integral relationships and partnerships with Intelligence Community and Department of Defense mission partners, including the Joint Requirements Oversight Council, as well as U.S. government agencies, departments, and entities with specific responsibility for overhead and space activities in peacetime and wartime.

If confirmed, it is important that the NRO continue to maintain and further develop a close relationship with each of its partners to ensure that it continues to provide the support they each require.

### 46. Will you commit to this Committee that NRO will be open and transparent in its relationship with the JROC?

Yes. A key responsibility of the Director of the National Reconnaissance Office (NRO) is to maintain close, integral relationships and partnerships with Intelligence Community and Department of Defense mission partners, including the Joint Requirements Oversight Council, as well as U.S. government agencies, departments, and entities with specific responsibility for overhead and space activities in peacetime and wartime. To be successful these relationships and partnerships must be built upon a foundation of trust established through open and transparent communications.

If confirmed, it is important to the NRO for it to continue to be open and transparent with those with whom it has formed a partnership or relationship.

## 47. If requested, will you provide this Committee with your views of the JROC analysis of NRO acquisition programs relative to meeting DOD requirements?

Yes. If confirmed, I will keep Congress fully and currently informed.

#### <u>China</u>

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

Based on my understanding of China's space program, it seeks to demonstrate its technological prowess through space capabilities, such as landing on the far side of the moon, as well as its advanced military capability through space robotics and counterspace weapons. Additionally, China seeks to deny the U.S. a capability to monitor military force movements and targeting from space over the Western Pacific region, which requires the Department of Defense, the Intelligence Community, and other organizations to develop a comprehensive and effective response.

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

Based on the January 2019 Director of National Intelligence Worldwide Threat Assessment and testimony, this is a major strategy question for the nation that involves our alliances, commitments, and strategic objectives. Potential adversaries have recognized the U.S. military's dependence on space for modern military operations and the advantages space provides to joint and coalition forces. China and other potential adversaries are developing strategies, organizations, and capabilities to exploit possible vulnerabilities in space. If confirmed, my role as Director of National Reconnaissance Office (NRO) is to ensure NRO systems provide overhead intelligence, surveillance, and reconnaissance information to support national policymakers, analysts, and warfighters. If confirmed, I look forward to participating, as appropriate, in the broader national security discussions regarding the challenge of Chinese competition.

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

China is developing highly capable space systems to support their commercial, scientific, and military objectives. This includes launch, precision navigation and timing, space robotics, lunar activities, and development of counter-space capabilities. Therefore, China's activities in space are both a threat and a challenge. If confirmed as Director of National Reconnaissance Office (NRO), I will ensure the NRO remains the world leader in providing overhead reconnaissance capability at all times to support U.S. national security interests.

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

The Executive Branch acknowledges the rise of China as a strategic competitor in space. In Space Policy Directives 1 through 4, the President directs activities to ensure the U.S. maintains its strategic advantage and leadership in space. If confirmed, I look forward to continuing the National Reconnaissance Office's (NRO) role as a leader in space systems development and overhead reconnaissance.

#### <u>Russia</u>

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

Based on my understanding of Russia's space program, it seeks to demonstrate its technological prowess through space capabilities such as human space flight, launch, and rocket engines, as well as its advanced military capabilities, such as counter-space weapons and hypersonics. Additionally, Russia seeks to deny the U.S. a capability to monitor military force movements and targeting from space. These aspirations require the Department of Defense, the Intelligence Community, and other organizations to develop a comprehensive and effective response.

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

Based on the January 2019 Director of National Intelligence Worldwide Threat Assessment and testimony, this is a major strategy question for the nation that involves our alliances, commitments, and strategic objectives. If confirmed, my role as Director of the National Reconnaissance Office (NRO) is to ensure NRO systems provide overhead intelligence, surveillance, and reconnaissance information to support national policymakers, analysts, and warfighters. If confirmed, I look forward to participating, as appropriate, in the broader national security discussions regarding the challenge of Russian competition.

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

Russia continues to develop highly capable space systems to support their commercial, scientific, and military objectives. This includes launch, precision navigation and timing, human space flight, and development of counter-space capabilities. Therefore, Russia's activities in space are both a threat and a challenge. If confirmed as Director of National Reconnaissance Office (NRO), I will ensure the NRO remains the world leader in providing overhead reconnaissance capability at all times to support U.S. national security interests.

## 55. Are United States policies and the associated authorities—as applicable to space—sufficient to counter Russia's influence, or are there additional measures we should be considering? What role should the NRO play in this regard?

Russia remains a strategic competitor in space. In Space Policy Directives 1 through 4, the President directs activities to ensure the U.S. maintains its strategic advantage and leadership in space. If confirmed, I look forward to continuing the National Reconnaissance Office's role as a leader in space systems development and overhead reconnaissance.

## Establishment of U.S. Space Command (USSPACECOM), the Space Force, and the Space Development Agency (SDA)

In Space Policy Directive (SPD)-4, the President directed DOD to stand up the United States Space Command (USSPACECOM), a combatant command that will be responsible for the operational planning of DOD space missions and activities, space-related support to other combatant commands and their operational plans, and defense of space assets.

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

As I understand the concepts, "unity of effort" and "unity of command" are fundamental principles of joint operations. From my experience as Director of the National Aeronautics and Space Administration (NASA) Goddard Space Flight Center, I have found unity of effort to be an effective way to achieve mission success in space with multiple stakeholders. Similar to how NASA supports multiple users, I understand the National Reconnaissance Office (NRO) supports the Department of Defense and the Intelligence Community (IC) as well as other agencies such as law enforcement and first responders, to address their needs. To accomplish its mission and improve the efficiency of its operations, it is necessary for NRO to communicate effectively with its mission partners to establish clear requirements and effective tasking. Given the diversity of NRO's user community, a unity of effort construct most efficiently leverages NRO resources to accomplish national security objectives.

If confirmed, I would support the NRO continuing to operate under a unity of effort construct with DoD and other national partners, given the NRO's mission to provide space-based intelligence, surveillance, and reconnaissance support to the diverse user community, including policymakers, analysts, and warfighters.

## 57. 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 your answer.

In my view, a time of conflict in space is not a time to change the organizational construct under which assets are controlled. From my understanding, the National Reconnaissance Office and the Department of Defense already work effectively in a unity of effort construct at the National Space Defense Center to coordinate space operations. That said, I believe our shift to space as a warfighting domain creates new challenges and opportunities to enhance our unity-of-effort, and if confirmed, I look forward to working with the Secretary of Defense and Director of National Intelligence to define those enhancements. Additionally, from my experience, I believe in the "Train Like You Fight" principle. Therefore, training exercises should consider various scenarios to address possible conflict. It is important that the same decision-makers and operators command and control the assets during both training and operations.

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

58. In your view, what should be the relationship between the Director of the NRO and the Commander, USSPACECOM during hostilities in which DOD and NRO

#### assets are or could be threatened?

If confirmed, I believe the Director, National Reconnaissance Office (NRO) should work closely with the Commander, U.S. Space Command at all times, including times of hostility. It is my understanding that today the NRO cooperates closely with the U.S. Strategic Command—and will in the future with the U.S. Space Command—and leverages forums such as the Joint Space Warfighting Forum, the National Space Defense Center, and joint acquisition programs for space protection and space situational awareness. That said, I believe our shift to space as a warfighting domain creates new challenges and opportunities to enhance our unity-of-effort, and if confirmed, I look forward to working with the Secretary of Defense and Director of National Intelligence to define those enhancements.

Additionally, from my experience, I believe in the "Train Like You Fight" principle. It is important that the same decision-makers and operators command and control the assets during training and operations. If confirmed, I would seek to partner with the U.S. Space Command similarly to how the NRO partners with the U.S. Strategic Command today.

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

No. It is my understanding that the National Reconnaissance Office (NRO) provides data to National Security Agency (NSA) and National Geospatial-Intelligence Agency (NGA), both of which are designated as Combat Support Agencies (CSA), to be distilled into intelligence products prior to delivery to Combatant Commanders (COCOM). For space control matters, I would anticipate that the Functional Managers within the Intelligence Community who are responsible for prioritizing taskings of NRO assets, such as Director, NSA and Director, NGA, will utilize data provided by the NRO and others to meet U.S. Space Command intelligence needs. It is also my understanding that today the NRO effectively provides significant support to our military and national customers without a CSA designation.

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 NRO tasking 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.

# 60. 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?

No. It is my understanding that today the U.S. Combatant Commanders work through the Functional Managers, such as Director, National Security Agency (NSA) and Director, National Geospatial-Intelligence Agency (NGA), within the Intelligence Community who are responsible for prioritizing taskings of NRO assets, and I would expect U.S. Space Command to follow the same process.

Additionally, if confirmed, I would expect to work closely with the Commander, U.S. Space Command similar to how I understand the National Reconnaissance Office currently works with the U.S. Strategic Command and the Air Force Space Command on space operations today.

### 61. 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?

No. My understanding is that the Functional Managers, such as Director, National Security Agency (NSA) and Director, National Geospatial-Intelligence Agency (NGA), within the Intelligence Community who levy collection requirements on National Reconnaissance Office (NRO) assets, and not the NRO itself, are responsible for adjudicating tasking requests based on priorities of the Secretary of Defense and Director of National Intelligence. I understand that this approach has worked effectively to meet Department of Defense, Intelligence Community, and other organizations' overhead intelligence, surveillance, and reconnaissance collection requirements.

In SPD-4, the President further directed the Secretary of Defense to craft a legislative proposal to establish a Space Force within the U.S. Air Force. The legislative proposal DOD presented to Congress intentionally omitted a primary role for the NRO and other IC organizations, to the concern of many Members of Congress and their staffs. In recent confirmation hearing testimony before the Senate Select Committee on Intelligence you expressed your views on the Space Force and NRO's affiliation with it, stating, "[k]eeping the NRO and the Space Force separate is the correct way to go."

62. In light of the critical role that space will play in the future of the United States, and given the likelihood that space could become a domain of active, existential conflict, please explain your view of the benefits that accrue to the Nation and the space mission by maintaining separation between the NRO and

### the Space Force? How does separation of the NRO and the Space Force provide advantage in our great power competition with China or Russia?

It is my understanding that for the National Reconnaissance Office (NRO) to accomplish its mission, it is staffed by a diverse group of personnel from across the Department of Defense and the Intelligence Community, including NRO employees and military members from all branches of the U.S. armed forces. Once created, I would expect the NRO to have a similarly close relationship with the U.S. Space Force.

My experience at National Aeronautics and Space Administration is that a diverse workforce brings new ideas, concepts, and solutions that result in superior mission accomplishment. From my experience in dealing with the NRO, I see the same benefits being realized in accomplishing their missions.

The NRO's ability to deliver highly capable systems to collect vital data in support of national and tactical needs provides an advantage in a great power competition, as well as other areas of national interest.

### 63. Are there any conditions or circumstances, in your view, in which NRO and the Space Force should be further integrated, going forward?

If confirmed, I would expect the National Reconnaissance Office to work closely with a future U.S. Space Force, as it does today with the U.S. Air Force and other services. If confirmed, I will seek to identify areas of cooperation and any further touchpoints where it would be appropriate to collaborate or synchronize our efforts.

## 64. Would you support further integration of NRO Space Acquisition Authority with the Space Force if such provided speed to launch, orbit, and operations in support of the 2018 NDS?

In my time at the National Aeronautics and Space Administration (NASA) I have found value in collaboration with other organizations to include the National Reconnaissance Office (NRO) and the U.S. Air Force. If Congress establishes the U.S. Space Force, and if confirmed as the Director of the NRO, I would expect to work closely with the Space Force as I understand the NRO works today with the Air Force and other military services. Additionally, if confirmed, I would see value in partnering with the military services, the Intelligence Community, and civil organizations, while sharing best practices to most effectively acquire, launch, and operate space systems.

Part and parcel of DOD's enhanced approach to the domain of space, the Department has established the SDA. In testimony before this Committee, DOD officials reinforced that first and most important task assigned to the SDA is to develop, in cooperation with the space industry, a highly distributed and resilient space layer to support military targeting operations. While this Committee was deliberating on the administration's Space Force proposal, NRO published a document stating:

"Clear, delineated missions for both the NRO and the Space Force are an essential foundation to ensuring unity of effort success. For example, the Space Force's foundational mission should not include an intelligence collection mission. 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."

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

It is my understanding that today the National Reconnaissance Office (NRO) is responsible for providing the Nation's space-based intelligence, surveillance, and reconnaissance architecture, supporting both strategic and tactical intelligence missions. The increased reliance on space to provide the U.S. strategic advantage in the warfighting domain, coupled with the growth of the commercial space sector, has expanded the areas in which the Department of Defense can benefit from space-based assets. Organizations such as Space Development Agency and the Space Rapid Capabilities Office play a vital role in developing new technologies for the space domain. If confirmed, I would work to ensure close collaboration between our respective organizations.

## 66. 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.

From my experience at the National Aeronautics and Space Administration and in working closely with Defense and Intelligence space elements, I have seen the benefit to maintaining civil, defense, and intelligence space missions — each developing capabilities to meet user requirements in their respective disciplines, from science and weather missions to intelligence, surveillance, and reconnaissance, to global positioning systems. In my view, space is a domain, not a mission.

If confirmed, I would expect the National Reconnaissance Office to work closely with mission partners, to include a future U.S. Space Force, if established, as it does today with the U.S. Air Force and other services. If confirmed, I would work to ensure close collaboration between our respective organizations.

## 67. In your view is there any appropriate role for the SDA in providing a highly distributed and resilient space layer to support military targeting operational requirements?

At this time, the newly established Space Development Agency (SDA) is in the process of standing up. From my understanding of recent guidance from the Acting Secretary of Defense, the SDA has been tasked with developing innovative space-based approaches to meet Department of Defense tactical requirements. If confirmed, I look forward to working with the SDA and other agencies to identify areas of cooperation in the space systems development domain.

## 68. Do you perceive any disadvantages to establishing the SDA as the defense organization charged to focus on tactical space capability speed to market by leveraging commercial technologies and products?

From my experience at National Aeronautics and Space Administration (NASA), it is the responsibility of all space-faring agencies to leverage emerging or commercial technologies to best meet mission needs. Private industry typically has the personnel, tools, and facilities to conduct large-scale developments and the ability to manufacture multiple copies of systems very effectively. Further, as commercial demand for products increases, the private sector can offer solutions that augment or replace existing systems, thus allowing the government to enhance capability or focus on new capabilities. Also, in many cases, private industry can infuse technology or implement processes at a more rapid rate. If confirmed, I look forward to better understanding the roles and responsibilities of the Space Development Agency and how the government can inject new commercial technologies at a faster rate.

# 69. In addition to sharing technology, how could the capabilities vested in the NRO and the SDA be employed so that each organization complements the other? For example, is there an appropriate role for both organizations in maintaining custody of targets?

In addition to sharing technology innovations and best practices, the National Reconnaissance Office (NRO) and the Space Development Agency should work collaboratively to benefit from lessons learned on the development and employment of space assets to address national security priorities. If confirmed, I look forward to working with the SDA and other agencies to identify areas of cooperation in the space domain.

### 70. If confirmed to be Director of the NRO, how would you work with the SDA to rationalize and harmonize the efforts of both organizations?

It is my understanding that the National Reconnaissance Office (NRO) has an internal technology development organization that has served the NRO well. If confirmed, I look forward to working with the Space Development Agency (SDA) and other research and development elements of space-faring agencies to identify areas of cooperation in technology development.

#### Sexual Assault Prevention and Response in the NRO

## 71. What policies, programs, and training does the NRO have in place to prevent sexual harassment and sexual assault and to respond to sexual harassment and assault when they do occur?

While I have not yet received any briefings on National Reconnaissance Office (NRO)-specific policies, programs, and training to prevent sexual harassment or to respond to sexual harassment and assault, I am knowledgeable on National Aeronautics and Space Administration's policies and training. If confirmed, I will ensure that the NRO maintains an environment that provides dignity and safety for the NRO workforce.

#### 72. Are these policies, programs, and training adequate and effective, in your view?

If confirmed, I will need to familiarize myself with the specific policies and procedures currently in place at the NRO to determine if changes are necessary.

## 73. What is your view of the role of the senior leaders in maintaining an organizational climate in which sexual harassment and sexual assault are not tolerated?

I view even one instance of sexual assault or sexual harassment to be unacceptable. If confirmed, I would clearly communicate this view to the National Reconnaissance Office (NRO) senior leadership team and workforce and hold them accountable for maintaining an environment that provides dignity and safety for the NRO workforce.

74. In your view, do military and civilian leaders in the NRO have the training, authorities, and resources needed to hold subordinate supervisors accountable for the prevention of and response to sexual harassment and sexual assault? If not,

### what additional training, authorities, or resources to you believe are needed, and why?

If confirmed, I will familiarize myself with the specific policies and procedures currently in place at the National Reconnaissance Office to determine if changes are necessary.

#### **Quality-of-Life Challenges in the NRO**

## 75. What unique quality-of-life challenges affect NRO civilian employees, service members assigned or detailed to NRO, and their families?

The National Reconnaissance Office's (NRO) workforce includes NRO cadre as well as Intelligence Community personnel and personnel from the military and private industry, all of whom have unique needs. If confirmed, I will familiarize myself with the services available at the NRO to determine if additional services or changes are necessary.

## 76. If confirmed, how would you address these challenges to help improve the quality-of-life, retention, and productivity of these personnel and their families?

If confirmed, I will familiarize myself with the services available at the National Reconnaissance Office to determine if additional services or changes are necessary.

#### **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.

### 77. Do you agree, if confirmed, and on request, to appear and testify before this committee, its subcommittees, and other appropriate committees of Congress?

I agree, if confirmed, and on request, to appear and testify before this Committee, its subcommittees, and other appropriate Committees of Congress.

78. Do you agree, 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?

I agree, if confirmed, to provide this Committee, its subcommittees, other appropriate Committees of Congress, and their respective staffs such witnesses and briefers, briefings, and accommodate requests for reports, records—including documents and electronic communications, and other information, as may be requested of me, and to do so timely.

# 79. Do you agree, 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?

I agree, 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 me.

# 80. Do you agree, 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?

I agree, 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, recordsincluding documents and electronic communications, and other information me or my organization previously provided.

## 81. Do you agree, 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?

I agree, if confirmed, to accommodate requests from this Committee and its subcommittees for records and other information within their oversight jurisdiction, even absent a formal Committee request.

## 82. Do you agree, 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?

I agree, if confirmed, to respond timely to letters to, and/or inquiries and other requests of me or my organization from individual Senators who are members of this Committee.

# 83. Do you agree, 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?

I agree, if confirmed, to 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.