# Senate Armed Services Committee Advance Policy Questions for Ms. Shawn Skelly Nominee to be Assistant Secretary of Defense (ASD) for Readiness

### **Duties**

Section 138 of Title 10, United States Code, provides that an Assistant Secretary of Defense shall perform such duties and exercise such powers as the Secretary of Defense may prescribe.

## 1. What is your understanding of the duties and functions of the ASD for Readiness?

The ASD(Readiness) is the principal advisor to the Secretary of Defense and the USD(P&R) on all matters related to the readiness of the Total Force to execute its assigned missions. The ASD(Readiness) develops policy, and provides oversight and guidance on matters including: readiness assessments and reporting, global force management, military training, joint exercises, professional military education, voluntary education, financial readiness, operational and occupational safety, and occupational health.

### **Qualifications**

## 2. What background and experience do you have that you believe qualifies you to perform the duties and functions of this position?

I believe my cumulative career experience, in uniform and out, provides me both the background and experience to perform the duties and functions of ASD(Readiness). As a career Navy officer and qualified Naval Flight Officer, I have seen and lived many aspects of the portfolio firsthand, from my journey through commissioning as NROTC scholarship graduate through flight school to becoming a fully qualified mission commander, flight instructor, and later department head as a tactical aviator; I'm intimately familiar with how readiness is created and maintained at the Service member and tactical until level. My time as a staff officer at both the U.S. Second Fleet and the then-U.S. Pacific Command at the operational and theater strategic levels taught me how readiness is assessed, how major units are certified for deployment, and how their availability and joint capabilities are applied to contingencies, named operations, and operational plans. As a graduate of the College of Naval Command & Staff, I know with certitude how that specific course of Professional Military Education has enabled my personal performance in every position I've held and endeavor I've undertaken; in uniform, other public service, and industry, over the past nineteen years. As a former aviator, I am keenly aware of the imperative of the Department's safety programs, both operational and occupational, in safeguarding the lives and wellbeing of the Service members and civilians in its charge and protecting the investments the American taxpayers have made in equipment and

facilities. Unswerving vigilance and proactive, accountable leadership of safety programs and practices are paramount. Having led junior Sailors, I know well the importance of financial education programs, how finance issues can complicate family readiness and ultimately impinge upon individual Service member readiness. Finally, my combined experience in uniform, industry, and as a DoD civilian official has given me in depth perspective as to how the determination of requirements, technology and systems development, and the acquisition process provide the materiel capabilities that combine with and enable our personnel to execute their missions in support of the National Defense Strategy.

## 3. Specifically, what leadership and management experience do you possess that you would apply to your service as ASD(Readiness), if confirmed?

The past twenty years of my career have provided me with multiple opportunities to develop my personal skills and experience in leadership and management that I believe would serve me well were I to be confirmed as ASD(Readiness). I have had the responsibility to lead high-performing, cross-functional teams responsible for large portfolios and creating and sustaining joint and interagency relationships in order to provide senior leader decision support at ever increasing levels of the DoD and the Executive Branch. I was an acting division chief responsible for politico-military affairs in thirty countries in the U.S. Pacific Command AOR, frequently briefing the Commander and Deputy Commander personally, in addition to directly supporting the Commander's travel to major treaty allies. I led the Marine Corps' service-level working group responsible for coordinating the response to Improvised Explosive Devices and providing lifesaving capabilities to deployed Marines and Sailors in combat in close partnership with joint and interagency partners and making recommendations on the service's Planning, Programming, Budgeting, and Execution actions required to support those capabilities. I was the day-to-day coordinator of the DoD's Department-wide forum, exercised under the authority of the Deputy Secretary of Defense, to respond to Combatant Commanders' most urgent operational needs, primarily in support of the Operations Inherent Resolve and Resolute Support and the Global War on Terrorism, focusing and facilitating the execution of those responses from requirements definition through delivery, while working with virtually every component of the DoD. I served as a personal and confidential assistant to a Cabinet Secretary and Deputy Secretary, as the Director of the Office of the Executive Secretariat of the Department of Transportation, responsible for all of the Department's official correspondence with Congress, the White House, interagency, and state, local, and tribal levels of government. Finally, I served as a Presidentially-appointed Commissioner, a principal, on the National Commission on Military, National, and Public Service, a three-year effort established by Congress to address the strategic future of the Select Service System and to address other national security and public service needs of the nation, submitting a report on our findings to Congress in 2020, and subsequently testified in front of the Senate Homeland Security and Government Affairs Committee. Through this all, I've learned that the bedrock of any complex, collaborative endeavor is the

relationships formed and maintained with both people and organizations. Relationships that are based on trust, transparency, reliability, and an unwavering focus on mission and shared success. Relationships that endure whether they are close, daily partnerships or episodic. People, whether they are my own organization's team members, partner organization team members, or personal interlocutors, are what make success achievable and sustainable. Finally, I've learned that senior leaders' time, especially in the decision support space, has to be viewed as and actively treated as a precious and vital commodity that requires deliberate planning and execution in furtherance of defined, strategic goals, in each instance. Anything less than such an approach risks squandering often fleeting windows of opportunity, potentially wasting a leader's time, wasting a team's effort and jeopardizing its credibility. This is the very approach I would apply were I to be confirmed as ASD(Readiness).

4. Are there any actions you would take to enhance your ability to perform the duties and exercise the powers of the ASD(Readiness)?

If I were to be confirmed as ASD(Readiness), beside the normal onboarding and introductory briefings and meetings one would reasonably expect to have, I would seek to expeditiously establish relationships with the leaders and organizations responsible for capabilities that I believe are crucial to the future demands of the Total Force's ability to maintain the nation's defense, not only to increase my personal knowledge and understanding of these areas in the context of readiness, but also to ensure the ASD(Readiness) organization understands them as well. These include the U.S. Space Force, the Joint Artificial Intelligence Center, the DoD CIO on the DoD Cloud Strategy, the Joint Staff for the Joint All Domain Command and Control Strategy, and multiple other stakeholders with equity in the Department's way ahead with unmanned and autonomous systems in all domains.

5. If confirmed, what other duties would you recommend the Secretary of Defense or the Under Secretary of Defense for Personnel and Readiness (USD(P&R)) assign to you, particularly in light of the readiness component of the 2018 National Defense Strategy (NDS)?

If I were to be confirmed as ASD(Readiness), any consideration of additional duties could only come after I have been fully briefed, to include any and all classified elements, on all the component responsibilities, guidance documents, and organizational capabilities, to include personnel, and I have then had an opportunity to assess my ability to perform the duties and functions of ASD(Readiness). If I were to subsequently determine that additional duties were required, I would work with the Administration and Congress as necessary to make that case.

### **Major Challenges**

## 6. In your view, what are the major challenges confronting the next ASD for Readiness?

In my view, the major challenges confronting the next ASD for Readiness are centered first on the need to improve current readiness assessment capabilities in light of the ever increasing availability of data and the ability to capture, process, and analyze that data through advanced analytics systems and approaches the Department is rapidly implementing, to inform strategic resourcing decision making with regard to the creation and sustainment of current and near term Total Force readiness. Second, a simultaneous need to pursue and create a futurefocused definition and understanding of readiness in the context of the numerous capabilities the Department is pursuing as pillars of future Total Force capabilities; such as Artificial Intelligence, next generation joint command and control, new space doctrine and capabilities, and unmanned and autonomous systems, all of which will require an appreciation not just for the numbers of these systems and their operational status but their individual and combined effects' contributions to the Total Force's ability to perform in multiple, if not all mission areas, and most likely simultaneously. Finally, the next ASD(Readiness) will be charged with determining a data-informed means of assessing the Department's long term progress towards those capabilities and their desired effects in order to routinely and regularly inform the ongoing, near term resourcing decisions regarding current and legacy capabilities and systems.

## 7. If confirmed, what actions and timelines would you have for addressing each of these challenges?

If confirmed as ASD(Readiness), my immediate focus in the first three months would be, while becoming familiar with the responsibilities and portfolio itself, understanding the state of the implementation of advanced analytics within the organization, its performance, and effects, while putting in place a deliberate framework to consider the readiness implications of the Department's future capability priorities. In the succeeding three to six months, I would pursue a detailed examination of those future capabilities and apply that knowledge to a portfolio-wide assessment of the implications for the organization's mission relevance and effectiveness in order to inform near- and mid-term ASD(Readiness) organizational decision-making in support of its role in supporting the Secretary of Defense and the Total Force, to include both duties and authorities. After that period, I would look to make any necessary deliberate recommendations with regard to Total Force readiness analysis and reporting in concert with all the appropriate stakeholder organizations and in accordance with relevant Departmental strategic planning and resourcing processes and timelines.

### **National Defense Strategy (NDS)**

The 2018 NDS outlines that the United States faces a rising China, an aggressive Russia, and the continued threat from rogue regimes and global terrorism.

8. Some have suggested that understanding the role of the ASD(Readiness) begins with the question: "Ready for What?". What are you views on this assertion?

"Ready for What?" is a fundamental question that must be continuously reassessed given that the current strategic environment is dynamic and becoming increasingly more complex. If confirmed, I will work closely with my colleagues across the Department to ensure that the Joint Force is ready to operate across all domains to deter, and if necessary, defeat threats posed by a rising China, an opportunistic Russia, and myriad other strategic challenges.

9. In your view, what is the best answer to the "Ready for What?" question? Please explain your answer.

The "Ready for What?" question is the fundamental readiness question across the Department. Both the President and the Secretary of Defense have been clear on the three priorities facing the Department of Defense. The Department must be ready to meet the challenge of our strategic competitors and the Secretary has prioritized China as the pacing challenge. We must also address and be ready to respond to and deter nation-state threats from Russia, Iran, and North Korea. I also share Secretary Austin's view that the Department must be ready to continue supporting ongoing federal COVID-19 response efforts.

10. Where does the DOD stand, in your view, in rebuilding readiness to address the challenges set forth in the NDS—ranging from competition . . . to so-called "gray zone" conflict . . . to full-fledged kinetic conflict with a near-peer?

Building and sustaining strategic readiness must be a priority. If confirmed, I would seek to understand readiness against the requirements of the current strategy and the emerging strategic environment. We must ensure our armed forces are manned, trained, equipped, and appropriately modernized to meet the many challenges posed by strategic competitors both in large-scale combat operations, and in activities below the level of armed conflict.

11. The strategy states that the Global Operating Model is comprised of four layers: contact, blunt, surge, and homeland. In your view, how do each of these layers influence readiness planning and what are the unique factors that must be considered in planning for each?

The Global Operating Model describes how the Department will posture and

employ the Joint Force to achieve its peacetime competition and wartime missions. The model is designed to support the National Defense Strategy in providing a flexible global posture and agile employment model that enables the Department to build the capabilities and readiness needed for strategic competition. For the Global Operating Model to work, the Department will need to ensure sufficient readiness is resident in each layer to support combat credible deterrence in peacetime and effective prosecution of the military strategy in wartime. If confirmed, I would work closely with the Joint Staff and Military Departments and Services to ensure relevance and utility in how we evaluate readiness to meet the expanding strategic requirements of the Global Operating Model.

12. Do you believe that the military services' current force structure and authorized end strengths are sufficient to support the NDS? Please explain your answer.

Force structure and end strength decisions must be informed by rigorous analysis and national strategic priorities. If confirmed, I will work closely with my colleagues in the Office of the Secretary of Defense (OSD), the Military Departments and Military Services, and the Joint Staff to provide data-driven analysis and recommendations that ensure the appropriate joint force structure and end strength to meet the nation's security objectives.

13. What changes to the Services' current force structure or authorized end strength that you would recommend, if confirmed, to implement properly all three lines of effort set forth in the 2018 NDS?

With the FY 2021 authorized force structure and end strengths, I believe the Department will meet the operational demands of the Combatant Commanders. If confirmed, I will work tirelessly to continually assess the force's readiness in the context of the priorities in the President's Interim National Security Strategic Guidance and the National Defense Strategy and ensure that resources are balanced appropriately to build and sustain readiness.

### **Readiness Responsibilities**

Section 136 of title 10, United States Code, assigns to the Under Secretary of Defense for Personnel and Readiness (USD(P&R)) certain responsibilities for military readiness. The Secretaries of the Military Departments, the Joint Staff, and other Under Secretaries of Defense (e.g., the Under Secretary for Acquisition and Sustainment exercises purview over logistics, sustainment, and materiel readiness), each have important responsibilities in the readiness domain.

14. What is the role of the USD(P&R) in the domain of readiness?

The USD(P&R) is the senior advisor to the Secretary on the overall readiness of the Joint Force to execute its assigned missions. This includes readiness to respond quickly in the case of contingency operations, as well as by projecting the readiness of Forces to engage in strategic competition across the continuum of conflict today and in the future.

### 15. What is the role of the ASD(Readiness)?

The ASD(Readiness) develops policy, and provides oversight, guidance, and assessments of the readiness of the Joint Force to execute assigned missions. The ASD(Readiness) also prepares policy for military training, joint exercises, military education, operational and occupational safety, and occupational health. The ASD(Readiness) engages stakeholders across the OSD staff, Joint Staff, and Military Departments and Services to ensure all inputs to readiness are being considered to inform senior leader decisions, and that decisions across the Department consider readiness impacts.

# 16. How do the roles of the USD(P&R) and the ASD(Readiness) network with the roles of the Military Department Secretaries, the Joint Staff, and the other Under Secretaries in the domain of readiness?

The USD and ASD must work hand-in-hand with the Military Departments, the Joint Staff, and the other Under Secretaries of Defense, to ensure the most pressing readiness issues are identified and addressed. As members of the Secretary's staff, the USD(P&R) and ASD(Readiness) must develop the policies that set the conditions for readiness across the force for today and in the future. They must then provide the oversight to ensure progress toward those readiness goals, and guidance regarding the tools (e.g., authorities, processes, best practices) available to the Military Departments and Services for building and sustaining readiness under all conditions.

# 17. What is your understanding of the responsibilities of the ASD(Readiness)in developing and promulgating policies and in exercising oversight of the implementation of materiel readiness policies and programs?

It is my understanding that commanders assess the status of their unit's readiness based upon personnel, training, and equipment (condition and supply). The Under Secretary of Defense for Personnel and Readiness has policy oversight for most aspects of personnel and training, while the Under Secretary of Defense for Acquisition and Sustainment has policy oversight for materiel readiness. If confirmed, I would work closely with the Assistant Secretary of Defense for Sustainment to ensure that equipment condition and supply levels are sufficient to meet readiness requirements, that pertinent policies and oversight processes are in place, and that the universe of equipment and supply data are available to ensure timely, relevant monitoring of material readiness across the Joint Force.

# 18. What role does the ASD(Readiness) play in ensuring that the personnel and health programs under the auspices of the USD(P&R) promote the readiness requirements of the Military Departments?

Readiness is connected to the personnel and health issues overseen by USD(P&R) because challenges in these areas can have detrimental impacts on the readiness of the Force. Issues in recruiting, retention, end strength, deployability, resilience, and medical readiness are prime drivers that reduce readiness of the Joint Force. If confirmed, I will work with my counterparts within the Office of the USD(P&R), including the ASD(Health Affairs) and ASD(Manpower and Reserve Affairs) to ensure we are aware and mutually supportive in these areas to reduce the potential impact to readiness.

# 19. Given that responsibility for reserve affairs also resides under the USD(P&R), what role does the ASD(Readiness) play in matters of Reserve Component readiness?

Secretary Austin has been clear that increasing Joint Force readiness is one of his top priorities, and the readiness of our Reserve Components is a key element of Joint Force Readiness. The ASD for Readiness has responsibility for Joint Force Readiness programs and assessments to execute the National Defense Strategy, as well as implementing Reserve Component mobilization policy and overseeing Reserve Component participation in the global force management process. If confirmed, I will ensure the Department meets this priority and continues to access the Reserve Component in accordance with current polices. I will also assess and reinforce all appropriate efforts currently underway to ensure the readiness of the Joint Force.

# 20. Given that responsibility for health affairs also resides under the USD(P&R), what role does the ASD(Readiness) play in matters related to the medical readiness of military forces—both Active and Reserve Components?

The ASD(Readiness) works closely with the ASD(Health Affairs) to monitor and report on the medical readiness of the Joint Force, and advocate for key initiatives and policies to ensure the Department has the ready medical capabilities required to maintain the most capable Active and Reserve force. If confirmed, I would continue the strong relationship I understand exists with Health Affairs to implement reporting and data analysis improvements that assist the Department in monitoring and accurately assessing the medical readiness of the Joint Force.

## 21. Do you believe that the position of the ASD for Readiness would be better aligned under a different Undersecretary of Defense? Why or why not?

No, I do not believe that the ASD for Readiness should be aligned anywhere other than under the USD(P&R). As Secretary Austin noted in his Message to the Force, "we remain the preeminent fighting force in the world because of our

personnel in and out of uniform." Our readiness to confront the challenges of today and in the future is rooted in our people. Most importantly, the more you look at readiness, the more you realize that the recruiting, retention, development, education, and training of people are the principal generators of ready forces. Personnel and readiness are inextricably linked because people are the foundational building block of readiness.

## 22. What do you perceive to be the most critical duties and functions that should be assigned to the ASD(Readiness) for execution?

Foremost, the ASD(Readiness) must be charged with ensuring the Department is doing all it can to promote and sustain the readiness of the Joint Force to accomplish its assigned missions today and in the future. The ASD(R) should lead the Military Departments and Services, and the Joint Staff, and the Office of the Secretary of Defense in a team effort focused on identifying key challenges to readiness, and employing the most appropriate means to mitigate operational and strategic risks.

The ASD(Readiness) should be expected to influence readiness - not just report it. This means being an active voice in the development of policies for manning, training, and equipping the force in such a way that we incentivize continuity and professionalism of our leaders and warfighters, educate them to out-think our adversaries, train them in a realistic and rigorous environment, live or virtual, and equip them with the best affordable technologies available.

# 23. Does the ASD(Readiness) have purview over these duties and functions today? If not, what specific steps would you take, if confirmed, to bring these critical duties and functions under the authority, direction, and control of the ASD(Readiness)?

If confirmed, one of my first tasks will be to confirm my assumptions about whodoes-what across the broad readiness community in the DoD.

The ASD(Readiness) has within its organization today the DASD for Force Readiness, the DASD for Force Education and Training, and the Director of Force Safety and Occupational Health, so those duties and functions (including military education, training, and safety) are already organic to ASD(Readiness). The ASD(Readiness) also manages the Defense Readiness Reporting System – Strategic, providing access to thousands of Commanders' assessments of their readiness today. The Manpower and Reserve Affairs and Health Affairs staffs within USD(P&R), enable access and collaboration to promote the best personnel and medical readiness practices and outcomes.

Partner offices for specific readiness concerns such as acquisition, sustainment, posture, global force management, and resourcing policies are also within the OSD staff, and if confirmed, I will seek out these partners to ensure all of our

efforts are synchronized. If confirmed, I am fully committed to leading the Readiness team by enforcing effective policies, oversight, and guidance for readiness, with the greatest regard and support for the Secretaries of the Military Departments in making the tough decisions as they balance the risks and payoffs associated with their readiness.

Currently, the ASD for Readiness exercises authority, direction, and control over a number of disparate offices with no clear relationship to producing combat readiness.

# 24. In your assessment, why is the Deputy Assistant Secretary of Defense for Force Education and Training aligned under the Assistant Secretary of Defense for Readiness?

The Deputy Assistant Secretary of Defense for Force Education and Training (DASD(FE&T)) plays a vital role in advancing force readiness, advising the ASD(R) on all policy aspects of military education and training to ensure the readiness of the total force to execute the strategy and missions assigned by the President and the Secretary of Defense. DASD(FE&T)'s oversight of training develops the ability of our warfighters to perform their assigned missions and continually remain ready in the future, while DASD(FE&T)'s oversight of military education develops the leadership capacity and cognitive readiness skills of our warfighters. DASD(FE&T)'s portfolio collectively contributes to force readiness at all levels – from building initial readiness, to increasing readiness, to sustaining readiness. In so doing, it also closely aligns with and reinforces the mission of the DASD(Force Readiness) under the ASD(R).

### **Relationship with the Military Departments**

The Under Secretary of Defense for Personnel and Readiness has implemented a Readiness Recovery Framework that includes working with the Military Departments to establish a defined readiness-rebuilding plan, to include developing comprehensive goals and metrics to evaluate the extent to which identified goals are achieving intended outcomes.

## 25. Is the Readiness Recovery framework fully institutionalized across all component of the DOD?

I believe so. The Department developed the Readiness Recovery Framework (R2F) to track the readiness of our most stressed combat force elements and ensure that resources are connected to readiness. The Department currently tracks 42 Major Force Elements (MFEs) in the R2F, across the Military Services. The Readiness Recovery Framework is the Department's method for tracking and assessing readiness trends for select force elements that face the most severe readiness challenges.

## 26. If confirmed, what specific steps would you take to continue the rebuild of full spectrum readiness across the department.

Thanks to Congress' support, the Department has made significant progress in rebuilding Joint Force readiness. If confirmed, I will make readiness analysis and reporting a priority, take stock of the current ability of our tools and expertise, and refine our assessment processes to ensure we are employing the best technologies and people to convey readiness challenges and develop appropriate mitigating strategies. Advanced analytics are key to providing senior leaders holistic understanding of the risks and tradeoffs between current readiness, future readiness, and modernization.

## 27. In your view, what are the metrics that should be used to track readiness-rebuilding progress?

Any efforts at rebuilding full spectrum readiness must be well-grounded in analysis and risk/benefit tradeoffs. Metrics should derive from solid data from authoritative data sources. If confirmed, I will strive to focus on data-rich readiness-rebuilding efforts with definable metrics and supported by rigorous analysis.

### 28. Are these metrics being tracked today?

I understand that the Department is improving readiness data collection and sharing and, as a result, is increasing its ability to accurately measure and build readiness. If confirmed, I will continue to build and advance the Department's data integration efforts, leveraging data science and other analytic techniques to ensure an unbiased, data-driven approach to measuring readiness, identifying trends, systemic issues, and leading indicators of readiness, to provide the Department and Congress with valuable, actionable readiness information.

### 29. Which components of DOD currently track these metrics?

It is my understanding that the Office of the Secretary of Defense, the Joint Staff, and the Military Departments and Services develop, refine, and track various readiness metrics used to identify readiness trends in select force elements and provide input into appropriate leadership decision-making processes. If confirmed, I will continue to advance USD(P&R)'s data analytic capability to develop predictive readiness indicators and a "Readiness Common Operating Picture" that will support senior leader awareness and influence key decision processes throughout the Department.

## 30. How should these metrics be employed to affect decision making in the domain of readiness?

If confirmed, I will assess and reinforce all efforts currently underway to track and report on the readiness of the Joint Force. This includes developing required policies and maintaining oversight needed to develop, standardize, and refine meaningful metrics that convey relevant information to decision makers, consistent with the way forces are actually employed, to optimize management of the current and future force. If confirmed, I will employ advances in data science to make our data more strategically informative and help the Department develop predictive readiness models to anticipate, and ultimately avoid readiness shortfalls.

### 31. Are these metrics currently being employed in the fashion you suggest?

If confirmed, I will work with my partners in the Office of the Secretary of Defense, the Joint Staff, and Military Departments and Services to ensure readiness metrics are properly aligned with the National Defense Strategy and employed in a manner that provides rigorous data-driven information to influence critical decision making processes and provide the most accurate and relevant reporting to senior Department leadership and to Congress.

32. In your view, what additional investments or departmental reforms are needed to ensure the Military Services are addressing readiness recovery?

In my view, the Department must continue to invest in technology that enhances readiness analysis and decision-making processes. We need accelerated investments in artificial intelligence, machine learning, and other advanced technologies that help us to see ourselves better, and answer in response to the question of "Ready for What?" These investments will enable the optimization of resources needed to generate force readiness capable of deterring or defeating adversaries.

33. Do you believe the ASD for Readiness has the necessary authorities to engender and oversee meaningful readiness improvements? If not, what additional authorities does the ASD(Readiness) need?

Yes, I do believe that the position has the necessary authorities to create and direct meaningful readiness improvements. However, if confirmed, I will review existing authorities and work with the Administration and with Congress if I determine additional authorities are necessary.

34. Does OUSD(P&R) have the analytic tools and expertise to assist you in evaluating DOD personnel and training readiness across the spectrum of challenges presented by the current strategic environment—from low intensity, gray-zone conflicts to protracted, high-intensity fights with major-power rivals? Please explain your answer.

There are always ways to improve how we analyze data and assess readiness. If confirmed, I will continue ongoing efforts to develop a data-informed decision-making tool, one that will take a strategic level view of readiness, and will help clarify impacts of policy and resourcing decisions on readiness and modernization over the long term. I would seek to increase the role that the ASD(Readiness) plays in the Department's resource allocation process to ensure funding for readiness is appropriately balanced with other priorities, such as modernization.

### **Readiness Monitoring**

Section 117 of title 10, U.S. Code, directed the Department of Defense (DOD) to "establish a comprehensive readiness reporting system for the Department of Defense." This led to the creation of the Defense Readiness Reporting System (DRRS). Initially, each Military Department established its own service-specific DRRS. But the Fiscal Year (FY) 2019 National Defense Authorization Act (NDAA) prohibited any further expenditure of funds for the development of service-specific systems, and required transition to single system—DRRS-Strategic—by 2020.

35. In your view, does the current readiness reporting system accurately and reliably collect and display the information necessary to establish that our forces are not only "ready" but "Ready for What?"?

The Defense Readiness Reporting System - Strategic (DRRS-S) presents valuable insight into the readiness of the Military Services and Combatant Commanders to meet specified missions. I understand that the Semi-Annual Readiness Reports to Congress use that DRRS-S information to display it within the "Ready for what?" context from the Military Department and Military Services. Going forward, however, the "Ready for what?" context could capture a broader range of potential contexts – from low intensity, gray-zone conflicts to protracted, high-intensity fights, to provide a better sense of our strategic readiness for many or all likely scenarios.

36. What is your understanding of the responsibility you will have, if confirmed, for the operation and evolution of DRRS?

If confirmed, the Defense Readiness Reporting System – Strategic (DRRS-S) will be a significant part of my portfolio and I will have the responsibility to oversee the development, operation, sustainment, and modernization of it. As such, if confirmed I will work to ensure DRRS-S continues to evolve to meet the needs of the Department to provide leadership with timely and accurate, data-driven strategic and operational level readiness assessments, through sound data analytics using authoritative data sources, in order to inform policy and programmatic decisions.

37. How satisfied are you with the current utility and usage of DRRS in

### informing the development or update the NDS? Please explain your answer.

I believe the Department's readiness reporting system should continually evolve to meet the needs of the Department and its overseers in order to provide timely and accurate, data-driven strategic and operational level readiness assessments which can inform policy decisions and strategic documents. If confirmed, I will work with my counterparts in the Office of the Under Secretary of Defense for Policy to determine how the Department's readiness reporting system can help inform National Defense Strategy development.

# 38. How satisfied are you with the current utility and usage of DRRS in informing the Secretary of Defense's development of the defense planning guidance pursuant to section 113(g) of title 10?

I believe the Department's readiness reporting system should continually evolve to meet the needs of the Department in order to provide timely and accurate, data-driven strategic and operational level readiness assessments which can inform policy, programming, and budgeting decisions. If confirmed, I will work with my counterparts in the Office of the Under Secretary of Defense for Policy to determine how the Department's readiness reporting system can help inform the Defense Planning Guidance.

# 39. How satisfied are you with the current utility and usage of DRRS in informing the Chairman of the Joint Chiefs of Staff's development of the National Military Strategy?

I believe the Department's readiness reporting system should continually evolve to meet the needs of the Department in order to provide timely and accurate, data-driven strategic and operational level readiness assessments which can inform policy decisions and strategic documents. If confirmed, I will work with the Chairman of the Joint Chiefs of Staff to determine how the Department's readiness reporting system can help inform the National Military Strategy.

# 40. How satisfied are you with the current utility and usage of DRRS in informing the development and review of Combatant Commanders' operational plans and acceptance of risk?

It is my understanding that the current DRRS-S functionality captures Combatant Commander assessed risk against Operational Plans and named operations through consolidated mission essential task assessments. If confirmed, I will seek to continually evolve this aspect of readiness reporting, working with stakeholders to ensure the Department's readiness reporting system is responsive to both the Combatant Commanders in deriving risk assessments and to senior Departmental leadership in understanding strategic level risks.

### 41. How satisfied are you with the current utility and usage of DRRS in

## informing DOD Planning, Programming, Budgeting, and Execution systems to address readiness gaps?

It is my understanding that, as currently structured, DRRS-S is not configured as a tool to forecast future readiness. If confirmed, I will work to evolve the Department's readiness reporting system to meet the Department's needs in providing timely and accurate, data-driven strategic and operational level readiness assessments which could be used to inform the Department's Planning, Programming, Budgeting, and Execution systems. I will also continue ongoing efforts to develop a data-informed decision-making tool, one that will take a strategic level view of readiness, and will help clarify impacts of policy and resourcing decisions on readiness and modernization over the long term.

# 42. Will you commit, if confirmed, to conducting a review of the utility and usage of DRRS—across all domains—and reporting your findings and recommendations back to this Committee within 120 days of your appointment?

Yes. If confirmed, I would undertake a review of the current utility and usage of DRRS and report the findings and recommendations back to Congress.

Recent op-eds by Generals Brown and Berger, Chief of Staff of the Air Force and Commandant of the Marine Corps, respectively, posited that readiness reporting across DOD should be updated. They proposed, "... a broader framework for readiness to better integrate elements of current availability, effects across combatant commands, future availability and readiness, and modernization efforts."

## 43. How does the current readiness reporting structure integrate the four elements to which Generals Brown and Berger referred?

I believe there is always opportunity to better understand readiness at the enterprise level and to improve how the Department assesses readiness. If confirmed, I would work toward developing a policy that defines strategic readiness and establishes a framework for integrated assessment. This type of assessment would address the Generals' concerns about the balance of current availability, modernization, and risks. Similarly, if confirmed I am committed to continuing ongoing efforts to leverage data from across the Department to help improve readiness and risk assessments over the short- and long-term.

## 44. Do you agree with their assessment and proposed approach to readiness reporting? Please explain your answer.

I agree we need a more rigorous, data-driven framework that is capable of viewing readiness through a strategic lens, incorporating longer-term considerations of future availability and modernization efforts. If confirmed, I am committed to continuing our consolidation and refinement of the Defense

Readiness Reporting System—Strategic (DRRS-S), DoD's ongoing progress toward digital modernization, and incorporation of advanced analytic capabilities.

### **Quarterly Readiness Report to Congress**

45. In your view, does the Quarterly Readiness Report to Congress provide the elements of information required to clearly inform Congress of the readiness of the joint force, including near-term risks and areas where congressional action may be needed?

I believe so. I understand that the Department's Semi-annual Readiness Report to Congress delivers a report on the current state of readiness and the top concerns of the Military Departments and Services, and provides information on how the Department is mitigating these challenges. Additional reporting requirements enacted through National Defense Authorization Act language have expanded the aperture for readiness reporting, and highlight additional issues that are complementary to operational readiness concerns reported by the Military Departments and Services. If confirmed, I am committed to working with Congress to ensure that the Semi-annual Readiness Report meets the needs of the Members and professional staff.

46. Are you aware of readiness information that is currently in use within DOD, but that is not currently shared with Congress and that would be useful for the exercise of congressional oversight? Please explain your answer.

The Defense Readiness Reporting System—Strategic (DRRS-S) is the system of record for reporting readiness data and as we expand our data analytics efforts to incorporate more authoritative data sources, additional readiness data will become available. If confirmed, I would work with Congress to determine what data and information should be included in periodic reporting such as the Semi-Annual Readiness Report to Congress to support congressional oversight responsibilities.

### **Overall Readiness of the Armed Forces**

47. How do your assessment of the current readiness of the Armed Forces?

I believe the armed forces of the United States are ready to meet the challenges in this environment of strategic competition. The Military Services are manned, trained, and equipped to compete, and if required, succeed in Operational/Contingency Plans in support of the National Defense Strategy.

48. If confirmed, what would be your roles and responsibilities for monitoring the Military Department and Service progress toward goals for reset and reconstitution of combat forces and equipment?

There are multiple interested parties within the Department involved in monitoring the Military Departments' and Services' progress toward goals for reset and reconstitution of equipment and combat forces. The Assistant Secretary of Defense for Readiness has the responsibility to establish and execute policy, oversight, and guidance for strategic and operational readiness across the Department. If confirmed, I will execute these responsibilities by working with all stakeholders to ensure that impacts of reset and reconstitution on readiness equities are identified and appropriately addressed.

# 49. What is your understanding of the timeline on which the Department will restore readiness, and the specific shortfalls that will require the longest investment of time and money?

I have not been privy to the most current data that would inform this response. If confirmed, however, I am committed to finding out what specific shortfalls will require the most time and money, and then lead the Readiness team to provide recommendations to work-down this list in priority order. If confirmed, I also commit to keeping the Congress informed through the Semi-Annual Report to Congress.

## 50. If confirmed, how would you plan to restore full spectrum readiness and on what timelines?

If confirmed, I would work with the Military Departments and Military Services and the Joint Staff to ensure progress made thus far in building full spectrum readiness does not erode. The Assistant Secretary of Defense for Readiness maintains readiness metrics with established milestones to measure progress across the Military Departments and Military Services. If confirmed, I will continue to improve the Department's ability to assess readiness through improved readiness data collection and analytics to develop readiness indicators that can identify readiness challenges before they become an issue.

In recent years, the term "readiness" has come to mean many things to different stakeholders, in a variety of contexts.

### 51. What is your definition of "readiness"?

As currently defined, I look at readiness from the perspective of "operational readiness," defined in the DOD Dictionary of Military and Associated Terms as "the capability of a unit/formation, ship, weapon system, or equipment to perform the missions or functions for which it is organized or designed." However, I believe the Department must expand its thinking and gear its assessments toward strategic-level readiness spanning the short- and long-term, gauging whether the Department possesses the amount of "readiness" to meet the challenges and objectives outlined in the President's Interim National Security Strategic

Guidance, and the National Defense Strategy.

## 52. In your view, would there be value in establishing a standardized DOD-wide definition of "readiness"? Please explain your answer.

Yes. If confirmed, I would lead the effort to establish a standardized definition of "readiness." I would work to establish a standard definition that views readiness from the strategic level, across echelon and timeframes, and focus the Department on building the kind of readiness that postures DoD for success in meeting objectives outlined in the President's Interim National Security Strategic Guidance, and the National Defense Strategy.

# 53. What is your understanding of the degree to which units are completing all Military Department and Combatant Commander-mandated training before deploying?

It is my understanding that DoD policy requires that the Secretaries of the Military Departments to execute pre-deployment training to satisfy theater-entry training requirements. Before deploying forces, they are to ensure units are trained and ready and must notify the relevant Combatant Commander of any requirements that their Service members and units will not be able to fulfill before deployment. If confirmed, I would assess how well our current readiness reporting systems account for mitigations taken by commanders to meet deployment timelines (e.g., conducting required training while underway and intransit to the theater of operations).

### **Monitoring Deployments**

Current DOD policy is to set rotational deployment goals for both active and reserve component service members. However, some service force elements are deploying more frequently than DOD policy intends.

# 54. If confirmed, what mitigation efforts would you propose to deal with the high pace of operations, particularly for high-demand, low-density force elements that deploy more frequently?

The Department must balance sustainable readiness to meet today's challenges while also modernizing the Joint Force and preserving readiness to respond in the future if needed. To do this, the Department must judiciously manage the availability and readiness of those high-demand, low-density force elements that are critical in both day-to-day competition and in wartime. If confirmed, I would monitor and assess readiness impacts to those force elements to prevent impacts to their ability to respond to crisis. I would work across the DoD to investigate mitigation strategies, including building additional capacity, pursuing modernization, exploring alternative capabilities, and considering active/reserve component mix.

55. What steps would you take, if confirmed as the ASD for Readiness to ensure that the Military Departments deploy service members in accordance with established rotational goals, or to adjust deployment and dwell policy, as appropriate? Please address both the active and reserve components in your response.

I understand the Department has clearly established both its goals and "redlines" for deployment-to-dwell (D2D) and mobilization-to-dwell (M2D) for the active and reserve components, respectively. I support the current policy of a 1:3 goal and 1:2 "limit" for D2D and a 1:5 goal/1:4 "redline" for M2D. As the Joint Staff develops and proposes changes to Global Force Management policies, and actions are taken to deploy units, I will, if confirmed, ensure the Military Departments and Services provide solid, data-informed rationale for the few instances where they may need the Secretary's approval to break the M2D or D2D redlines, if all other proposed sourcing solutions fail.

56. If confirmed, what specific steps would you take to collect and analyze reliable data to measure service member "time away," consistent with Comptroller General recommendations in the report "Military Readiness: Clear Policy and Reliable Data Would Help DOD Better Manage Service Members' Time Away from Home" (GAO-18-253)?

I agree with the Comptroller General's recommendation and, if confirmed, will ensure that the Assistant Secretary of Defense for Readiness provides all information and support needed to establish a consistent and reliable Department-wide personnel tempo system. Part of this support could include revision to current policy to establish a consistent set of standards and definitions across the Department.

### **Force Safety and Occupational Health**

The ASD (Readiness) is the DOD Designated Agency Safety and Health Official and oversees DOD Occupational Safety and Occupational Health (OSHA) policies. The calendar year 2019 DOD Occupational Safety & Health Reports states, "DOD has some of the lowest civilian employee injury and lost time case rates among all federal agencies." But despite a lower overall case rate, a higher percentage of DOD OSHA cases were "lost time" cases compared to the Federal government overall. These lost time cases are more significant and disruptive. Although DOD comprises 26 percent of the total Federal civilian workforce, it accounted for 31 percent of OSHA fatalities.

57. Specifically, what is the value added provided by the ASD(Readiness) in the domain operational safety and occupational health?

I understand that the ASD(Readiness) provides an enterprise perspective of safety and occupational health, promulgating DoD-wide guidance, supporting

enterprise-wide analysis, and gathering the safety community to share best practices and lessons learned. If confirmed, I will work to ensure goals and objectives for reducing and eliminating occupational accidents, injuries, and illnesses are met and evaluated to ensure that the DOD occupational safety and health program remains effective at all operational levels. I will also work with the Military Departments to ensure compliance with the safety and occupational health policies that I would oversee. I will ensure safety programs remain an integrated part of daily operations and activities, maintain awareness of specific risk areas, and oversee ongoing efforts to mitigate risk across the Department.

## 58. If confirmed, how would you use the forum provided by the Defense Safety Oversight Council to address safety challenges that present across the force?

If confirmed, I will use the Department's senior safety governance forum to set the tone for promoting a safety culture throughout the Department. I will institute a culture that ensures safe decisions in both high risk situations and daily operations and activities. The Defense Safety Oversight Council forum must possess the right membership with the right experience to effectively influence any safety challenge that may arise. If confirmed, I will lead by example—safety must start at the top and be woven into the culture of every organization.

## 59. What are the most critical issues you would you identify for the Council to tackle?

If confirmed, I will work with the Military Departments and Services to implement, as appropriate, the recommendations provided by the National Commission on Military Aviation Safety to address aviation mishaps and focus on other high risk areas such as motor vehicle safety. I will ensure safety data is accurate, reliable, timely, and informative to support resource and policy decisions. Additionally, I will also review safety-related funding throughout the Department to ensure adequate resources are available to support safety programs and technologies.

## 60. If confirmed, what specific steps would you plan to take to reduce DOD's lost time rates and workplace fatalities?

If confirmed, I will work to understand the issues impacting civilian workplace lost time and fatalities, and provide policy guidance and oversight to reduce hazards that result in lost time. To fully understand what is causing lost time and workplace fatalities, I will work to ensure the Military Departments and Services improve safety data standards, and include safety information in all data modernization efforts. I will regularly review safety data and trends, and collaborate with the Military Services on specific risk areas. This informed approach will ensure we can mitigate the appropriate risk to occupational injury, illness, or potential fatality.

### 61. What are the most common causes of DOD workplace fatalities?

If confirmed, I will work with the Military Departments and Services to understand the primary causes of workplace fatalities amongst our civilian workforce. It would be my responsibility to provide oversight, policy, and guidance of all workplace safety programs and I will seek to ensure preventable fatalities are effectively mitigated though clear communication and hazard abatement.

### **Voluntary Education Programs**

## 62. Do you believe DOD's Voluntary Education Programs contribute to military recruiting and retention, and to military readiness?

Yes, I believe the Tuition Assistance (TA) program offers tangible progress toward personal growth expectations and thus contributes to military recruiting and retention. It is also my understanding that there are positive correlations with promotions, retention, and successful civilian transition. If confirmed, I will ensure that the tuition assistance continues to provide Service members the opportunity to achieve their respective professional and personal educational goals.

## 63. By what metrics does DOD assess and evaluate the contribution of such programs to recruiting, retention, and readiness?

I understand that DoD policy allows each Military Service to employ TA to provide benefits and incentives that contribute to recruitment, retention, professional development, force management, and overall Military Service budget priorities as they judge best, and each Service measures their return on their investment differently. It is critical to ensure there is an enterprise perspective to share best practices, and review return on investment in common terms. If confirmed, I will ensure that DoD has the information necessary to assess and evaluate these programs.

## 64. Do you believe such metrics adequate to discern a causal relationship between these programs and desired recruiting and retention outcomes?

Yes, I understand that education opportunities have been, and continue to be, a top reason cited by respondents in their decision to join the military. Educational pursuits conducted off-duty contribute to the readiness of the force, as education prepares individuals to think critically and develop leadership skills.

# 65. Should military service obligations incurred through participation in the Tuition Assistance Program run consecutively or concurrently with other incurred service obligations, in your view?

If confirmed, I commit to reviewing the issue of consecutive or concurrent application of service obligations. If confirmed, I will ensure the service obligation requirements for the tuition assistance program do not have an adverse impact on Service member retention, morale, or abridged length of Service.

## 66. Does DOD receive an adequate return on its investment in Tuition Assistance?

I believe that these programs are critical to providing incentives for service, enabling Service members to grow during their service, encouraging continued service, and benefitting the Department by encouraging a more educated workforce. If confirmed, I will ensure that DoD has the information necessary to assess and evaluate the return on investment for these programs.

67. What is your view of the adequacy of the Department's mechanisms and processes for protecting service members seeking to make use of Tuition Assistance Program funding from marketing by educational institutions that offer academic programs of dubious rigor and applicability?

I understand that the Department has developed significant oversight mechanisms with provisions that help to mitigate potential noncompliance with its policies and the provisions of the Memorandum of Understanding (MOU) that is required to participate in the TA Program. If confirmed, I will ensure that the Department's processes are sufficiently protecting Service members from predatory practices and focused marketing by educational institutions.

68. What progress has the Department made in identifying and leveraging credentialing programs, both to enhance a service member's ability to perform his/her official duties, and to qualify the member for meaningful civilian employment on separation from the military?

It is my understanding that the Department has made genuine strides in strengthening the credentialing and apprenticeship to support these goals. If confirmed, I will continue the progress being made to build on and leverage the Department's credentialing programs to support mission readiness and successful transition to civilian life.

### **Professional Military Education**

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

69. What do you perceive to be the role of the ASD(Readiness) in enhancing DOD's PME system to ensure that it fosters the education and development of a cadre of strategic thinkers and planners with the intellectual acumen,

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

Military education should emphasize intellectual leadership, military professionalism, and independence of action in the art and science of warfighting to develop intellectual agility required for success within the profession of arms. If confirmed, I will ensure the Department's learning opportunities focus on outcomes and reflect the priorities of the national security and national defense strategic guidance. If confirmed, I will also ensure the military education system includes assessments and evaluations to measure development and performance, and to support continuous improvement of the education system.

70. How is the ASD(Readiness) ensuring that officers who have completed the Secretary of Defense Executive Fellows program are identified and tracked, with a view to ensuring that the knowledge and experience they glean from the fellowship can be applied in follow-on tours of duty?

Managing talent is critical to ensuring we are getting the most out of the investments we make in our workforce and Service members. If confirmed, I will ensure that the Department is sufficiently tracking individuals following assignments to key developmental programs, like the Secretary of Defense Executive Fellows program

## 71. If confirmed, what more would you do to improve the utility of this program?

If confirmed, I will ensure that DoD Components have a plan to match Service members' follow-on and subsequent career assignments to areas that use the special skills acquired in their fellowship assignment.

### **Training Ranges**

DOD is fielding Unmanned Aircraft Systems (UAS) in greater numbers, which has created a strong demand for access to national airspace to conduct training and for other purposes. The demand has quickly exceeded the current airspace available for military operations.

72. What is your understanding and assessment of the DOD's efforts to develop a comprehensive training strategy for the Department's UAS, to include identifying any shortfalls associated with current policies, education, stationing plans, and simulator technologies?

I understand that there are a number of efforts underway in the Department to incorporate UAS into the training ecosystem, but at this time I do not have the details to assess the Department's efforts in this area. If confirmed, I will review

and assess these ongoing training efforts, including identifying shortfalls and can brief the committee at their request.

73. In your view, what infrastructure improvements must be made to ensure that DOD training ranges are constructed and equipped to provide meaningful training for fifth generation aircraft?

It is critical to ensure the Department's training range capabilities are able to support training for next generation platforms and technology. These capabilities must include live, virtual, and constructive entities to enable training in the full range of military operations under multi-domain conditions. If confirmed, I will continue to pursue training and range capabilities required to enable training for strategic competition with near-peer competitors.

### **Relations with Congress**

74. What are your views on the state of the relationship between the ASD for Readiness and the Senate Armed Services Committee in particular, and with Congress in general?

It is my understanding that the ASD(Readiness) maintains a positive working relationship with the Senate Armed Services Committee in particular, and with Congress in general, but I welcome the Committee's view on the state of the relationship.

75. If confirmed, what actions would you take to sustain a productive and mutually beneficial relationship with Congress?

Congress is a key partner in ensuring that the Department has forces that are ready to deter war and ensure our nation's security. If confirmed, I will maintain an open dialogue with the Congress on all readiness issues to ensure that the information the Department provides through the Semi-Annual Readiness Report to Congress, and other reports and engagements, provides the Congress with the information necessary to perform their oversight functions.

### **Sexual Harassment**

In responding to the 2018 DOD Civilian Employee Workplace and Gender Relations survey, 17.7 percent of female and 5.8 percent of male DOD employees indicated that they had experienced sexual harassment and/or gender discrimination by "someone at work" in the 12 months prior to completing the survey.

76. What is your assessment of the current climate regarding sexual harassment and gender discrimination in the DOD?

The data from the last survey indicates that far too many civilian employees are experiencing harassment and discrimination. I also am aware that, since this survey fielded, the Department has issued a number of policies that specifically address harassment by Service members and civilian employees. I think having policies such as these are critical and, if confirmed, would work to ensure they are fully implemented and effective.

77. If confirmed, what actions would you take were you to receive or become aware of a complaint of sexual harassment or discrimination from an employee of the Office of the ASD(Readiness)?

I have always taken every complaint of this nature extremely seriously and will continue to do so if confirmed. I would ensure the individual not only understood the options of redress available to them within the Department, depending on the specifics of the incident, but I would also ensure the individual has access to supportive resources throughout the process. As a leader, I am responsible for the climate under me and would work to ensure all can serve safely and honorably.

### **Congressional Oversight**

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

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

Yes.

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

Yes.

80. Do you agree, without qualification, if confirmed, to consult with this committee, its subcommittees, and other appropriate committees of Congress, and their respective staffs, regarding your basis for any delay or denial in providing testimony, briefings, reports, records – including

documents and electronic communications, and other information requested of you? Please answer with a simple yes or no.

Yes.

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

Yes.

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

Yes.

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

Yes.

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

Yes.