Advance Questions for Dr. William A. LaPlante
Nominee for the Position of Assistant Secretary of the Air Force for Acquisition

Defense Reforms

The Goldwater-Nichols Department of Defense Reorganization Act of 1986 and the Special Operations reforms have strengthened the warfighting readiness of our Armed Forces. They have enhanced civilian control and clearly delineated the operational chain of command and the responsibilities and authorities of the combatant commanders, and the role of the Chairman of the Joint Chiefs of Staff. They have also clarified the responsibility of the Military Departments to recruit, organize, train, equip, and maintain forces for assignment to the combatant commanders.

Do you see the need for modifications of any Goldwater-Nichols Act provisions, particularly with respect to the role of the service acquisition executives?

I agree with the goals of these defense reforms; indeed they have yielded a demonstrated improvement in the joint warfighting capabilities of the United States military. I do not currently see the need for any modifications.

If so, what areas do you believe might be appropriate to address in these modifications?

None at this time.

Duties

What is your understanding of the duties and functions of the Assistant Secretary of the Air Force for Acquisition?

The Assistant Secretary of the Air Force for Acquisition is the Service Acquisition Executive (SAE) for the Air Force, the senior position authorized to exercise, on behalf of the Secretary, overall responsibility for acquisition functions within the Air Force.

What background and experience do you possess that you believe qualifies you to perform these duties?

I possess more than 28 years of experience in defense technology including positions at the MITRE Corporation and the Johns Hopkins University Applied Physics Laboratory. I have also served as member of the Defense Science Board, a special advisor to the U.S. Strategic Command's Senior Advisory Group and Naval Research Advisory Committee.

Prior to entering public service, I was the Missile Defense Portfolio Director for the MITRE Corporation. In this role, I led a technical team providing analytic and system engineering expertise across the Missile Defense Agency portfolio of ballistic missile defense systems. Previously, I was the Department Head for Global Engagement at the

Johns Hopkins University Applied Physics Laboratory (JHU/APL) where I was responsible for all of APL's work supporting offensive military capabilities. Additionally, I was a member of APL's Executive Council and served on many other Laboratory leadership initiatives. As a senior manager at both MITRE and JHU/APL, I've had the opportunity to successfully lead large organizations with significant technical missions in support of the Department of Defense and its major research and acquisition programs.

In the brief time I have been in the government, I have been extremely impressed with the dedication and professionalism of the Air Force acquisition workforce as well as OSD. I am absolutely committed to help the Air Force Acquisition Enterprise achieve the levels of excellence, including improving acquisition outcomes, that I know it can.

Do you believe that there are actions you need to take to enhance your ability to perform the duties of the Assistant Secretary of the Air Force for Acquisition?

No; however, if confirmed, important to my success in this role will be my continued interaction, engagement and collaboration with other senior leaders engaged in the defense establishment, such as the other Component Acquisition Executives, the Defense Acquisition Executive, and the Air Force leadership. Additionally, continued interaction, engagement and collaboration with the scientific community and defense industry will be a foundation of acquisition success. I intend to heavily leverage my network of defense and technology experts across the government, industry, and academia.

Relationships

If confirmed, what would your working relationship be with:

The Under Secretary of Defense for Acquisition, Technology and Logistics

The Under Secretary of Defense for Acquisition, Technology, and Logistics USD (AT&L) is DoD's most senior acquisition official. If confirmed, I look forward to working with Mr. Kendall on all matters related to acquisition, technology, and logistics programs impacting the Department of the Air Force. In my present role, I have a very good professional relationship with Mr. Kendall and I have found him to be extremely effective and helpful to Air Force efforts to execute our largest and most visible programs.

The Deputy Under Secretary of Defense for Acquisition and Technology

If confirmed, I look forward to working with the Principal Deputy on all matters related to acquisition, technology, and logistics programs impacting the Department of the Air Force. In my present role, I have a very good professional relationship with Mr. Estevez and if confirmed, I look forward to continuing that relationship.

The Secretary of the Air Force

Subject to the authority, direction, and control of the Secretary of Defense, the Secretary of the Air Force is responsible for and has the authority necessary to conduct all affairs of the Department of the Air Force. If confirmed, I look forward to continuing the solid working relationship of the past as a direct report responsible to the Secretary for all acquisition, research and development. In my present role, I have already had significant interaction with Secretary James and have found her to be extremely engaged and supportive of Air Force acquisition success.

The Under Secretary of the Air Force

The Under Secretary of the Air Force is authorized, subject to the Secretary of the Air Force's direction and control, to act for and with the authority of the Secretary of the Air Force on all matters for which the Secretary is responsible; that is, to conduct the affairs of the Department of the Air Force. If confirmed, I would continue to foster a close working relationship with the Mr. Fanning to ensure that policies and resources are appropriate to meet the needs of the Air Force.

The other Assistant Secretaries of the Air Force

If confirmed, I will work closely with the other Assistant Secretaries of the Air Force and foster teamwork and information sharing in order to carry out the goals and priorities of the Department of the Air Force and in cross cutting areas where horizontal integration of Air Force people and resources is required and provides best value to the Department of Defense, the Combatant Commanders and the taxpayer.

The Chief of Staff of the Air Force

The Chief of Staff of the Air Force is subject to the authority, direction, and control of the Secretary of the Air Force, presides over the Air Staff, and is a principal advisor to the Secretary. In addition, as a member of the Joint Chiefs of Staff he is a military adviser to the President, the National Security Council, and the Secretary of Defense. The relationship between the Assistant Secretary and the Chief of Staff is extremely important. If confirmed, I would continue to foster a close working relationship with General Welsh to ensure that policies and resources are appropriate to meet the needs of the Air Force and respect his additional responsibilities as a member of the Joint Chiefs of Staff.

The General Counsel of the Air Force

The General Counsel is the chief legal officer and chief ethics official of the Department of the Air Force and serves as the senior legal advisor to Air Force leaders. He is responsible, on behalf of the Secretary of the Air Force, for the effective and efficient provision of legal services in the Air Force. If confirmed, I will continue to foster a good working relationship with the General Counsel.

The Service Acquisition Executives of the Army and Navy

If confirmed, I look forward to continuing the close working relationship with Mr. Sean Stackley and Ms. Heidi Shyu. A strong national defense will require joint capability portfolios, reduction of program redundancy, improved joint interoperability across service centric platforms, and increased joint R&D and acquisition initiatives with new organizations and processes that cut across traditional stovepipes. As senior leaders in acquisition in the Department, all three Service Acquisition Executives must work together to reshape the defense enterprise.

Major Challenges

In your view, what are the major challenges that will confront the Assistant Secretary of the Air Force for Acquisition?

The Air Force Acquisition Enterprise is exceptionally capable and continues to deliver the world's best and most advanced weapons and other capabilities. After having been in the Principal Deputy position for over eight months, I have a much better understanding of the challenges and opportunities facing the Air Force Acquisition Enterprise. My initial assessment is that the Enterprise has the following areas of concern that require attention: the challenges linked to declining and unstable budgets as well as the need to better manage and develop the acquisition workforce. Furthermore, while progress has been made on acquisition improvement via initiatives such as Better Buying Power, the Air Force acquisition community will need to continue to improve cost and schedule performance. The often well cited challenges to do better up front systems engineering, robust risk management, assessment of technology maturity levels, and disciplined approaches to requirements development and changes, are all areas that are improving in the Air Force but still have ways to go to systemically improve acquisition outcomes across the enterprise. This must be sustained over a long term to have lasting impact, and if confirmed, will be my areas of emphasis.

The budgetary environment challenges acquisitions directly by impacting the dollars available to develop, procure, field and sustain systems, as well as indirectly, including the recent furloughs and government shutdown cutting into the time available for the workforce to accomplish essential tasks. Budgetary limitations and instability will be a fact of life for the foreseeable future. While both the Air Force and Department of Defense are taking steps to mitigate these challenges, there is no doubt the current environment will impact existing programs. Minimizing the impact to key programs like the KC-46 Tanker, F-35, the Long-Range Strike Bomber and others, is a major challenge. Additionally, I have witnessed how budget uncertainty has made it extremely difficult for our program managers to manage established cost and schedule baselines; for example driving decisions toward short term contracts and strategies that may be less efficient for the taxpayer than longer term ones (such as multiyear contracts).

The performance of the workforce is even more impressive given the environment in which they are performing. With the likelihood of a shrinking workforce, it is essential we develop a workforce structure that is agile enough to realign program staffing and skill mix to meet evolving mission needs. The desired end state should be to ensure solid functional career management while permitting the flexibility to better realign the workforce when necessary. We also need to closely monitor the morale and associated attrition rates of our highly skilled early career personnel - the past year has impacted our workforce in ways we are still trying to understand, and we must minimize any negative effect on the broader long term effort to revitalize the acquisition workforce.

Assuming you are confirmed, what plans do you have for addressing these challenges?

If confirmed, I will focus on forcing the Enterprise to determine if a capability requirement is worth the cost. In my current position, I have stressed how requirements can drive cost, with the intent of guiding the community to evaluate how changing or reducing a requirement, even slightly, can have significant cost and schedule ramifications. Cost/schedule versus capability trade-off curves are a valuable tool in identifying which requirements are key cost drivers and can assist in the assessment of which requirements can be reduced. The Configuration Steering Boards (CSB) and the Air Force Requirements Oversight Council (AFROC) provide two forums to evaluate requirements priorities and trade-offs, and while the AFROC has been essential to this task, I am seeking to increase the effectiveness of CSBs in this regard. Finally, the acquisition community has demonstrated its commitment to cultivating a strong working relationship with the requirements community, and the teamwork between acquisitions and requirements will continue to pay dividends as we face a challenging future.

While there are a number of initiatives in work to help the Air Force reduce the cost of programs, I think the most important thing I can do is to increase the senior leadership emphasis on execution. I will personally hold Program Executive Officers and individual program managers accountable for the outcomes of their programs. To enable this, quarterly and Annual Acquisition Performance Assessments of the Acquisition Enterprise are reported and assessed. These can be an invaluable tool to evaluate the state of acquisition cost, schedule, and performance.

Workforce qualifications are another major challenge facing the enterprise. It will be essential that personnel in key positions have knowledge and experience in specific program domains and phases. I have been impressed in my short tenure as Principal Deputy in the quality of the workforce in our key programs; challenges that need attention are to build depth in the talent as well as building mechanisms for increased mobility and flexibility to quickly move top talent to high need programs.

If confirmed, what management actions and timelines would you establish to address these challenges?

If confirmed, I will work closely with our new Secretary of the Air Force as well as our Chief of Staff of the Air Force to establish an action plan that aligns with their priorities for Air Force Acquisition in order to address these areas. I see these challenges as an opportunity to revamp the Air Force Acquisition Enterprise to be more efficient and effective.

Priorities

If confirmed, what broad priorities would you establish for Air Force acquisition, research, and technology?

If confirmed, I plan to focus on what I consider some of the Air Force's most challenging problems in the acquisition arena. My preliminary assessment is that our effectiveness is often measured by how well we execute our most visible programs; however, the discipline and tradecraft with which we do so also makes us successful in the execution of our less visible, smaller programs. Rightfully so, acquisition performance will be judged by our weakest programs, not our strongest. We must continue to develop and grow our acquisition workforce to ensure it can keep our most critical acquisition programs on track, but so that we can also "own the technical baseline" for our weapon systems and other capabilities. We must strengthen our organic ability to develop, produce, field and sustain the most technologically advanced systems this world has ever known. I believe this priority is consistent with our new Air Force Secretary's priority to take care of people, which includes recruiting, training and shaping a quality force.

Sound resource execution is another critical focus item so that we can more effectively stretch the benefit of every dollar with which we are entrusted. Our Secretary of the Air Force (SECAF) has identified as a priority the need to ensure our Air Force remains the most capable in the world at the lowest possible cost. In this environment of declining resources and budget uncertainty, we must be extremely efficient and effective in how we plan to use, and ultimately spend our scarce fiscal resources. Mr. Kendall's Better Buying Power Initiatives are a good set of guiding principles that help us to be effective resource stewards.

Finally, we have a responsibility to develop and deliver the Air Force capabilities required to fight and win in the 2023 timeframe and beyond. Among other things, this means being able to fight and win in highly contested environments, including being challenged in space, control of the electro-magnetic spectrum, and cyber. I believe this priority meshes well with our SECAF's priority to balance today's readiness with tomorrow's modernization. As we preserve the Service's current readiness posture, our Air Force must also make investment decisions that will ensure we remain the most capable Air Force in the world in the 2023 and beyond timeframe. This requires that we invest in important science and technology advancements, maintain a global technology

horizon scan to identify emerging disruptive technologies, and developing comprehensive modernization and recapitalization strategies designed to keep our Air Force the greatest in the world.

Major Weapon System Acquisition

Do you believe that the current investment budget for major systems is affordable given decreasing defense budgets, the historic cost growth trends for major systems, and the continuing costs of ongoing contingency operations?

Yes. Air Force Acquisition is responsible to uniformed service members and the American taxpayers to ensure that they have the best equipment at the best value. I support USD (AT&L)'s affordability initiative to establish goals and caps to ensure funding limitations are identified early and revalidated at milestone decisions. If programs exceed their affordability goals, the Air Force will make a decision to restructure the programs so they are affordable.

If confirmed, how do you plan to address this issue?

If confirmed, I am committed to working with the requirements and resource communities to ensure programs have clear, achievable requirements and realistic funding profiles.

What would be the impact of a decision by the Department to reduce purchases of major systems because of affordability issues?

Air Force requirements are carefully structured to ensure the service can support its needs based on current threats. Any reduction of major systems will affect our overall. Any reduction of major system purchases will result in reduced force structure. Such reductions to planned force structure will impact the Services ability to meet COCOM requirements, thus affecting readiness. I am committed to ensuring that all Air Force programs meet their affordability goals to best support the warfighter.

Specifically, are sufficient funds allocated in future years' budgets to execute the Air Force's current acquisition plans for major systems, including, but not limited to, the F-35, KC-46, the Long-Range Strike Bomber (LRS-B).

The deep cuts brought on by sequestration-level funding has forced the Air Force to make profound cuts to readiness and major defense acquisition programs funded out of investment accounts in order to achieve the targeted reduction amounts in the first few years of the fiscal year defense plan. When forced to make tough decisions, I understand the Air Force will favor new capabilities over upgrades to legacy forces. I understand the top three acquisition priorities remain the KC-46, the F-35, and the Long Range Strike Bomber. As best as possible, the Air Force will aim to protect these programs in the current fiscal environment.

Nearly half of DOD's major defense acquisition programs have exceeded the so-called "Nunn-McCurdy" cost growth standards established in section 2433 of title 10, United States Code, to identify seriously troubled programs. Section 206 of the Weapon Systems Acquisition Reform Act of 2009 (WSARA) tightened the standards for addressing such programs.

The Air Force is committed to reducing costs across all acquisition programs. The Air Force closely tracks execution and provides guidance as necessary to keep efforts "on track". The number of Nunn-McCurdy breaches has declined significantly since the mid-2000s (FY 2005-2008 had 26 breaches over 14 programs). Over the past 3 years, the AF has had 5 programs declare a significant or critical Nunn-McCurdy breach. Of those, three are no longer MDAP programs (C-27J, C-130AMP, and NPOESS), one was driven by a combination of quantity reductions and cost growth (Global Hawk), and one resulted from restoration to MDAP status (EELV). This past year, the Air Force had no Nunn-McCurdy breaches.

In your opinion, what is the root cause for cost growth in the Department's major weapon system programs?

The 2013 USD/AT&L Report on the Performance of the Acquisition System lists three dominant root causes of Nunn-McCurdy cost growth over the past three years. Poor Management effectiveness was the primary root cause and included: poor systems engineering to translate user requirements into testable specifications; ineffective use of contractual incentives; poor risk management; and poor situational awareness. Additional dominant root causes are unrealistic baseline cost and schedule estimates and changes in procurement quantities.

To what extent does requirements creep and changes in requirement quantities impact cost growth triggering Nunn-McCurdy breaches?

These two factors may impact Unit Cost growth. Changing requirements based on warfighter needs can lead to cost and schedule growth. However, as the Air Force has worked to better integrate the requirements and budgeting process, changing requirements is being seen less as a driver, and I expect that to remain so, especially as we move into an era of decreased budgets. Although over the past 3 years, only 22% of Nunn-McCurdy breeches were driven by changes in procurement quantities, I am concerned with the impact budget reduction-driven changes in quantities will have on Defense programs in an environment of declining resources.

What steps if any would you take, if confirmed, to address the out-of-control cost growth on DOD's major defense acquisition programs?

The DoD, in concert with recent legislation such as WSARA, has begun to address much of the cost growth seen in the past. This may be evidenced by the reduced number of Nunn-McCurdy breaches over the past few years. As a cautionary note, many of the

WSARA reforms as well as the related Better Buying Power initiatives are going to take years to affect the final acquisition outcomes of programs; for that reason it is critical that the enterprise be persistent in their dissemination and application. If confirmed, I am committed to working with fellow Service Acquisition Executives in supporting the Department's efforts in Better Buying Power implementation and related foundational reforms of WSARA. The intent of this effort is to contain cost growth to provide the warfighter increased capability with decreased costs - truly better buying power. I am particularly focused on controlling cost and schedule growth of development programs as that is where we can perhaps see the biggest impact in the near to mid-term.

What steps, if any, do you believe that the Air Force should consider taking in the case of major defense acquisition programs that exceed the critical cost growth thresholds established in the "Nunn-McCurdy" provision?

Under such circumstances, there are mechanisms in place that allow for major restructuring or termination of poorly performing programs. While program terminations are rare, the Air Force leadership, working in conjunction with the Office of the Secretary of Defense and the Joint Staff has the authority to cancel programs. In this era of sharply declining budgets, it would not be surprising to see program terminations used more frequently in the case of troubled programs.

If confirmed, I will continue to work with the Defense Acquisition Executive and Program Executive Officers to ensure the Air Force continues to avoid programs exceeding thresholds. Program Executive Officers have been tasked with implementing Program Integration precepts which organize and synchronize the analyses and outputs that programs must carry out into a comprehensive process. Examples of analyses are cost estimating, schedule management, earned value management, and integrated risk analysis. The program integration function assists them in overseeing proper and efficient execution of the efforts within their respective portfolios.

Do you see the need for any changes to the Nunn-McCurdy provision, as revised by section 206?

I do not currently envision any required changes to the current provision.

What principles will guide your thinking on whether to recommend terminating a program that has experienced critical cost growth under Nunn-McCurdy?

If a program has a Nunn-McCurdy breach, then OSD conducts a review and certification process to meet the requirements as laid out in 10 USC, Sec 2433. My recommendation to continue or terminate a program would be based on an assessment of program execution performance, remaining risk, and Air Force needs.

What principles will guide your thinking on whether someone should be held accountable for Nunn-McCurdy breaches?

An investigation into the decisions, and information available at the time of the decisions, are considered prior to making an accountability determination for anyone in the acquisition execution chain. Using well established best practices, we must arrive at root cause of acquisition failures before moving to the steps of assessing accountability. Accountability must also be directly tied to authority and resources. If an individual did not have the authority or the resources to properly execute their program due to budget, cost, schedule, technical or other factors outside of their control, then the individual cannot and should not be held accountable. In all cases, if confirmed I am committed to giving our program managers and PEOs the right authorities, responsibilities, and then holding the chain of command accountable for the outcome.

Possible Revisions to DODI 5000.02

Undersecretary of Defense for Acquisition, Technology and Logistics Frank Kendall has recently released revisions to Department of Defense Instructions (DODI) 5000.02, which governs the defense acquisition system.

What are the top five changes to this instruction you would recommend to streamline or otherwise improve the defense acquisition system?

I am still in the process of reviewing the recent revision to DoDI 5000.02, but if confirmed, I look forward to working with Mr. Kendall on continuing to streamline and improve the defense acquisition system.

What is your understanding of the objectives of the review effort?

My understanding is the objectives of the review was to publish a revised instruction that: decreased emphasis on "rules" and increases emphasis on process intent and thoughtful program planning; provides program structures and procedures tailored to the dominant characteristics of the product being acquired and to unique program circumstances, (e.g., risk and urgency); enhances the discussion of program management responsibility and key supporting disciplines; and institutionalizes changes to statute and policy since the last issuance of DoDI 5000.02.

Operating and Support Costs

The Department estimates that operating and support (O&S) costs account for up to 70 percent of the acquisition costs of major weapon systems. Section 832 of the National Defense Authorization Act for Fiscal Year 2012 requires the Department to take a series of steps to improve its processes for estimating, managing, and reducing such costs.

What is the current status of the Air Force's efforts to implement the requirements of section 832?

The Air Force has implemented FY 12 NDAA, Section 832 through comprehensive guidance on assessing, managing and controlling operating and support (O&S) cost for major weapon systems. The Air Force is working with key stake holders on readiness and O&S funding drivers to balance readiness and cost in weapon system sustainment strategies. Examples of ongoing Section 832 related initiatives include: implementation of guidance requiring life cycle sustainment planning documents to include comprehensive sustainment strategy and cost information; implementation of independent logistics assessments to ensure effectiveness of sustainment planning; and the establishment and monitoring of program affordability targets.

What steps remain to be taken to implement section 832, and what is the Air Force's schedule for taking these steps?

The Air Force, in a collaborative effort between acquisition and sustainment leadership, is taking steps to increase the effective implementation of performance based product support per guidance from OSD (AT&L). Current actions expected to be completed in 2014 include establishing a program evaluation methodology, identifying a high payoff target program list, and finalizing implementation strategy recommendations.

Regarding section 832 (b)(8), what Air Force processes are being performed to ensure O&S costs are reduced by ensuring the depot maintenance considerations are part of the entire acquisition process? What additional processes are required to further bring down O&S costs by ensuring depot maintenance considerations are part of the entire acquisition process?

Through implementation of statute and regulation, Air Force guidance requires early and continuous consideration of depot maintenance including at oversight reviews and in life cycle planning documentation. Additionally, the Air Force is already taking steps to shift the organizational and cultural focus of acquisition headquarters to adopt an Integrated Life Cycle Management and portfolio perspective. I have no additional process recommendations, but if confirmed, I will continue to look for opportunities to reduce O&S costs.

What steps, if any, are needed to ensure that the requirements and acquisition communities fully and effectively collaborate to understand and control the O&S costs prior to and early in product development, when it is possible to have the most significant impact on those costs?

In November 2012, as a direct result of the Acquisition Continuous Process Improvement (CPI) 2.0 effort, the Air Force implemented policy titled "Implementation of Contractual and Requirements Sufficiency" to address Life Cycle Affordability Cost versus

Capability Tradeoff Analysis at all requirements and acquisition review boards. The policy mandates cost/schedule versus capability/design trade-off curves (metrics) throughout the life of the program. Implementing Commands, such as Air Force Materiel Command, support the requirements sponsor by providing the analysis for all developmental Joint Capabilities Integration and Development System (JCIDS) documents.

What additional steps, if any, do you believe the Air Force needs to take to bring O&S costs under control?

In concert with the logistics community, Air Force Acquisition is focusing efforts on the design, development, and delivery of life cycle supportable and sustainable systems and the appropriate support equipment. The goal is to enhance warfighter mission capabilities while minimizing corrosion, environment, safety, and occupational health risks along with minimizing life cycle system product support costs. The Air Force is also linking weapon systems sustainment resources to readiness measures to optimize cost versus readiness.

Systems Engineering

One of the premises for WSARA was that the best way to improve acquisition outcomes is to place acquisition programs on a sounder footing from the outset by addressing program shortcomings in the early phases of the acquisition process. The Defense Science Board Task Force on Developmental Test and Evaluation reported in May 2008 that "the single most important step necessary" to address high rates of failure on defense acquisition programs is "to ensure programs are formulated to execute a viable systems engineering strategy from the beginning."

Do you believe that the Air Force has the systems engineering and developmental testing organizations, resources, and capabilities needed to ensure that there is a sound basis for key requirements, acquisition, and budget decisions on major defense acquisition programs?

The Air Force has been successfully building towards achieving the systems engineering resources and capabilities required to perform important acquisition activities. Sound systems engineering, especially early on, is fundamental to ensuring there is a sound basis for requirements and that they are affordable, as well as ensuring we implement and execute a successful acquisition program strategy. To this end, the Air Force continuously evaluates the resources and capabilities necessary to supply systems engineering support to acquisition programs. In the process of getting to the necessary systems engineering workforce resource levels, the Air Force has been consistently hitting our yearly goals and there is a plan in place for more improvements for FY 2014. In addition, there is currently a significant enterprise-level effort to evaluate and improve deficiencies in Air Force systems engineering capabilities to enable high quality engineering decisions, improve engineering discipline through technical information

management and standardization, as well as continuously address engineering workforce issues.

In terms of test and evaluation, the Air Force test personnel, facilities, equipment are first class, adequate and efficient. The Air Force Materiel Command reorganization to a 5-center construct has improved management of developmental test. At this time, my concern is that budget pressures will reduce available test resources which may ultimately increase weapon system cost and warfighter risk.

Are all the steps which the Air Force takes to ensure a viable systems engineering strategy necessary to achieve the goals articulated in the 2008 Report? Specifically, which processes and procedures provide little or no value added, or for which any value added is outweighed by the cost or schedule delay of the processes or procedures. In addition, what elements of organizations and layers of review are redundant and unnecessary, add cost, or create schedule delays without adding commensurate value.

Section 102 of the Weapon systems Acquisition Reform Act required systems engineering to support key three key requirements.

1. Acquisition and budget decisions made for each major defense acquisition program prior to Milestone A approval and Milestone B approval through a rigorous systems analysis and systems engineering process.

2. Include a robust program for improving reliability, availability, maintainability, and sustainability as an integral part of design and development within the systems engineering master plan for each major defense acquisition program.

3. Identify systems engineering requirements, including reliability, availability, maintainability, and lifecycle management and sustainability requirements, during the Joint Capabilities Integration Development System process, and incorporate such systems engineering requirements into contract requirements for each major defense acquisition program.

All three of the key requirements have been implemented and I consider value added. The program Systems Engineering Plan and the execution of this plan is key to accomplishing the requirements. In addition, the Air Force has streamlined program technical oversight reviews, when determined necessary by the Air Force Chief Engineer, to minimize added cost while being value added to ensure program success. The Air Force assists the Deputy Assistant of Secretary of Defense Systems Engineering Program Support Reviews which are completed for ACAT ID, MAIS programs, and special interest programs.

What is your assessment of the Air Force's implementation to date of section 102 of WSARA, regarding systems engineering?

I am pleased by the good working relationship that Air Force acquisition has with the Deputy Assistant Secretary of Defense for Systems Engineering. We work with his staff to make improvements in WSARA focus areas and we collaborate to document the status of Air Force systems engineering in the annual WSARA Report.

Specifically, the Air Force is making progress implementing two important areas cited in section 102 of WSARA, early systems engineering and reliability. In 2013, SAF/AQ helped establish the Air Force Requirements Review Group (AFRRG) in order to increase program success by tightening the linkage between requirements development and acquisition. SAF/AQ participates in the AFRRG, allowing Air Force engineers to ensure tight linkage between requirements, technology maturity, and accomplishment of sufficient early systems engineering to inform cost and capability analyses.

In the area of reliability, the Air Force continues to collaborate with OSD and the Army and Navy through the Service Leads meetings held by DASD(SE). We have aided efforts refining the DAES Reliability Growth Curve (RGC) reporting requirement mandated under DTM 11-003, the development and review of the OSD R&M engineering management guide, improving RAM-C Rationale Report Guidance, and the ongoing human capital initiatives for the RAM workforce.

What additional steps will you take, if confirmed, to implement this provision?

If confirmed, I will continue to refine Air Force engineering enterprise governance to enable high-quality engineering decisions and seamless communication. Air Force engineers must have the technical expertise to build a strong collaborative partnership with industry to ensure we acquire and field the capabilities the Air Force needs while ensuring the American taxpayers' interests remain a priority. Furthermore, hiring the best and brightest talent is challenging in this fiscal environment but must also continue to be a priority. I will exercise my authority as Air Force Scientist and Engineer Career Field Functional Authority to explore and pursue, as cited in section 102, additional authorities or resources needed to attract, retain, and reward systems engineers with appropriate levels experience and technical expertise to meet Air Force needs.

Technological Maturity

Section 2366b of title 10, U.S. Code, requires the Milestone Decision Authority for a major defense acquisition program to certify that critical technologies have reached an appropriate level of maturity before Milestone B approval.

What steps if any will you take, if confirmed, to make sure that the Air Force complies with the requirements of section 2366b?

If confirmed, I will ensure the Air Force continues to comply with 2366b certification requirements. The Air Force has established robust compliance processes that I will monitor and continue to improve upon. For example, the Technology Readiness Assessment (TRA) process has been reestablished and guidance is being published to ensure a formal, independent assessment of critical technologies. In accordance with this guidance, TRAs will be conducted by a team of subject matter experts, carefully selected from the Centers' engineering and scientific community, prior to Milestone B. These experts will verify the technologies are sufficiently mature to meet the Milestone B 2366b certification requirement, and their TRA report will be approved by the Deputy Assistant Secretary of the Air Force for Science, Technology and Engineering before a program is recommended to proceed to Milestone B.

Are you satisfied that technology readiness assessments adequately address systems integration and engineering issues which are the cause of many cost overruns and schedule delays in acquisition programs?

No. While technology readiness assessments are essential to help avoid many cost overruns and schedule delays, they are not sufficient as a stand-alone solution for systems integration and engineering risks. The expertise of a professional engineering workforce within the Air Force acquisition community to perform early systems engineering analysis is also critical to addressing these challenges. This workforce must balance the integration of:

1) Overall systems engineering design and process,
2) Concerns for operational mission requirements,
3) The state of current available technologies (TRLs 8 & 9),
4) Near term technologies in laboratory development (TRLs 4-6), and
5) Increasingly stringent concerns for funding and schedule realism.

An engineering workforce effectively addressing these issues earlier in the program will help mitigate cost overruns and schedule delays in future systems.

Beyond addressing technological maturity issues in acquisition programs, what other steps should the Air Force take to increase accountability and discipline in the acquisition process?

It would be unreasonable to hold a program manager accountable for program failures for which he/she has inadequate authorities or resources to affect outcomes. If confirmed, I will continue to improve accountability and discipline in acquisitions by first ensuring program managers have the adequate authorities to execute their missions. I am

committed to vigorously defending the authorities granted to the program manager and ensuring he/she continues to have the required expertise and resources to lead our programs successfully. Finally, the culture must allow for program managers to be able to "raise a flag" if they assess the program they are to manage is not executable.

What features of an acquisition program, in your view, contribute most to the effective maturation and integration of advanced technologies?

Competitive prototyping, when practical and affordable, is important because it drives technology maturation early in the acquisition, enables effective systems engineering, and allows the warfighter to see the potential capability demonstrated in an operational or relevant environment. This leads to the most effective maturation of technology with the minimization of programmatic risk.

Concurrency

Some of the Department's largest and most troubled acquisition programs appear to have suffered significantly from excessive concurrency – the effort to produce a weapon system, even as it is still being designed.

What impact do you believe that such excessive concurrency has on our efforts to produce major weapon systems on schedule and on budget?

With any strategy there are risks of cost growth and schedule slippages. Concurrency is often highlighted as a reason for cost growth. Unfortunately, research into this acquisition strategy is sparse. A study published in the July 2011 edition of the Defense Acquisition Research Journal found that "concurrency by itself is insufficient to predict cost growth." There may be other factors, such as quantity, requirements and budget changes that create cost growth. Surprisingly, the study found that "too little concurrency was actually more problematic than too much concurrency" and could contribute to greater cost growth.

Mr. Kendall has spoken extensively on this subject. He has noted that excessive concurrency can drive cost growth and result in major schedule disruptions that produce further inefficiency. One must keep in mind that the acceptable degree of concurrency between development and production depends on a range of factors including the risk associated with the development phase, the urgency of the need, and the likely impact on cost and schedule of realizing that risk. A careful balance must be struck on every program, taking all these factors and others into account. If confirmed, I look forward to working with the DAE and PEOs to ensure that balance is carefully assessed and properly managed.

What steps will you take, if confirmed, to address this issue?

If confirmed, I will weigh the risks with the potential rewards of concurrency and make informed decisions that are in the best interest of the Air Force and the taxpayer.

Under what circumstances, if any, do you believe that it is useful and appropriate to require prime contractors on major defense acquisition programs to share in concurrency costs?

If the driving reason for taking on concurrency would benefit the prime contractor in executing the contract and the risks and rewards were acceptable to the Air Force, I believe that both parties should share in the concurrency costs and share in both the risk and reward.

In your view, would a requirement for such cost sharing reduce the likelihood of excessive concurrency in the development and production of major weapon systems?

Yes. If both parties have "skin in the game," then the likelihood of taking on concurrency will be a deliberate decision by both parties to accept the risks and rewards.

Unrealistic Cost, Schedule and Performance Expectations

Many acquisition experts attribute the failure of DOD acquisition programs to a cultural bias that routinely produces overly optimistic cost and schedule estimates and unrealistic performance expectations. Section 201 of WSARA seeks to address this problem by promoting early consideration of trade-offs among cost, schedule, and performance objectives in major defense acquisition programs.

Do you believe that early communication between the acquisition, budget and requirements communities in the Department of Defense can help ensure more realistic cost, schedule and performance expectations?

Yes.

If so, what steps if any would you take, if confirmed, to ensure such communication?

If confirmed, I will continue efforts to shift the organizational and cultural focus of acquisition headquarters to adopt an Integrated Life Cycle Management and portfolio perspective. This will help address WSARA Sec 201 and will align acquisition headquarters with life cycle organizational changes already made in the field headquarters and amongst the PEO organizations. The main shift will be having our acquisition program element monitors partnering with the O&S program element monitors and other functional staff to ensure that all actions are a result of total life cycle deliberative process.

The Department of Defense has increasingly turned to incremental acquisition and spiral development approaches in an effort to make cost, schedule and performance expectations more realistic and achievable.

Do you believe that incremental acquisition and spiral development can help improve the performance of the Air Force's major acquisition programs?

Yes. While not a panacea, using an incremental acquisition approach (e.g. block) can help improve program performance. This approach is premised on knowledge-based, incremental development that provides increasing degrees of warfighting capability with each block. This is the preferred strategy that provides the most effective balance of technical risk, financial resources, and the Air Forces' operational needs.

What risks do you see in the Air Force's use of incremental acquisition and spiral development?

If implemented correctly, there would be modest to very little technical risk to using such a strategy. If not correctly implemented, incremental development could result in the program being overwhelmed with frequent milestone or fielding decision points and associated approval reviews. It is important to structure programs so multiple activities or build phases may be approved at any given milestone or decision point, subject to adequate planning, well-defined exit criteria, and demonstrated progress. Having a well-trained acquisition workforce is critical to mitigating the risk since the use of incremental development can lead to additional complexities in all phases of the program including testing, management, sustainment, and security.

In your view, has the Air Force's approach to incremental acquisition and spiral development been successful? Why or why not?

The Air Force has had successes with both incremental acquisition (AMRAAM, F-16,F-15) and spiral development (Ops software for Air Operations Centers). We consider both approaches fundamental in our acquisition strategies. However, using incremental/spiral development strategies with the emerging technologies in MDAP or MAIS programs must be evaluated on a case-by-case basis as there is no one solution that works best. We have found that incremental acquisition/spiral development approaches using mature technologies are critical in both IT and non-IT systems as they allow capability to be delivered to the warfighter faster.

What steps if any do you believe are needed to ensure that the requirements process, budget process, and testing regime can accommodate incremental acquisition and spiral development approaches?

While the Service is working to make our processes more flexible and complementary to accommodate incremental acquisition and spiral development approaches, more can be done to take additional steps to make these approaches more amenable. We can start

with working on budgeting models that are more flexible to shorter timelines. This is similar to the concerns raised in the section 804 report about the budgeting lag and difficulty in differentiating appropriations for some of the new technology.
For testing, we have to continue to strengthen the integrated testing approach to ensure that we are using dollars and testing activities more efficiently. We have made strides in the requirements community in implementing methodologies that allow us to set high level requirements through the formal process and standing up lower level boards to manage requirements for increments and releases, but we need to continue on working on setting realistic and executable requirements up front. Finally, demanding open architecture designs for our programs is critical to helping enable cost effective spiral development; this leads to a need for government and industry to arrive at mutually agreeable terms on data rights ownership.

How should the Air Force ensure that the incremental acquisition and spiral development programs have appropriate baselines against which to measure performance?

As part of implementing statute and regulation, Air Force guidance requires each program or increment to have a baseline establishing program goals—thresholds and objectives—for the minimum number of cost, schedule, supportability, and performance parameters that describe the program over its life cycle.

Funding and Requirements Stability

The poor performance of major defense acquisition programs has also been attributed to instability in funding and requirements. In the past, the Department of Defense has attempted to provide greater funding stability through the use of multi-year contracts. More recently, the Department has sought greater requirements stability by instituting Configuration Steering Boards to exercise control over any changes to requirements that would increase program costs.

Do you support the use of Configuration Steering Boards to increase requirements stability on major defense acquisition programs?

Yes. In my current position, I have received a Configuration Steering Board (CSB) briefing on every ACAT I program. I have found them to be an effective forum for stabilizing requirements of major defense acquisition programs. CSBs provide a collaborative environment for rigorous scrutiny on controlling derived requirements and I believe they will continue to be a value-added function.

What other steps if any would you recommend taking to increase the funding and requirements stability of major defense acquisition programs?

Funding and requirements stability are critical to stable, successful programs. The acquisition community has an obligation to work closely with the requirements and other stakeholder communities to ensure programs have clearly defined and achievable

requirements with realistic funding profiles. I have found that the Defense Acquisition Management System tends to have optimism baked in (overoptimistic schedules, cost estimates, execution plans). The acquisition community must guard against overoptimistic planning and remain engaged with stakeholders throughout the process to enable requirements and funding profiles that are inherently stable because they are realistic and affordable.

The Joint Requirements Oversight Council (JROC) has recently launched an initiative to ensure "appropriate trade-offs are made among the life-cycle cost, schedule, and performance objectives, and procurement quantity objectives in the establishment and approval of military requirements." Specifically, the JROC has issued guidance that "encourages Program Managers, Program Executive Officers and Component Acquisition Executives, in coordination with the requirements sponsor, to officially require requirements relief, through the appropriate requirements validation authority, where Key Performance Parameters appear out of line with an appropriate cost-benefit analysis."

If confirmed, what steps will you take to ensure the continued success of this initiative?

The Air Force has taken steps to incorporate the appropriate trade-offs during the requirements development and validation process as part of the Capability Based Analysis and Analysis of Alternatives. During program execution, the Air Force continues to address trade-off opportunities in Configuration Steering Boards and Air Force Review Boards. If confirmed, I will continue to work with the Secretary, Chief, and other departmental offices to foster a culture of teamwork with the Requirements and Resource Communities to ensure the programs started have firm cost goals in place, appropriate priorities set, and the necessary analysis to make these informed trade-offs to keep programs within affordable limits while meeting warfighter needs.

Fixed Price-Type Contracts

Recent Congressional and DOD initiatives attempt to reduce technical and performance risks associated with developing and producing major defense acquisition programs so as to minimize the use of cost-reimbursable contracts.

Do you think that the Air Force should move towards more fixed price-type contracting in developing or procuring major defense acquisition programs? Why or why not?

I prefer not to make blanket statements regarding the use of contract types as I believe it's important to match the contract type to each specific and unique circumstance. That said, cost-type contracts are generally the best option to explore concepts, mature technologies and buy down risk during development. Cost-type contracts may also be appropriate during system integration when performing Low Rate Initial Production (LRIP). Once a program is in production, fixed-price contracts become a more appropriate contract type. What is fundamental is to understand risk.

Under what circumstances, if any, do you believe it would be appropriate for the Air Force to use a cost-type contract for the production of a major weapon system?

Initial production of satellites is a situation where cost-type contracting is often appropriate. Often in this situation, the LRIP number is so low that the initial production space vehicles may begin production prior to the LRIP space vehicles completing final integration testing. Production actuals are key to an effectively negotiated fixed-price agreement. The low production volume for satellites does not usually allow cost visibility to be carried over until later production lots enter production.

Technology Transition

The Department continues to struggle with the transition of new technologies into existing programs of record and major weapons systems and platforms. Further, the Department also has struggled with moving technologies from DOD programs or other sources rapidly into the hands of operational users.

What impediments to technology transition do you see within the Air Force?

I see resource constraints and risk as the greatest impediments to technology transition. Technology transition has a cost and in our current fiscally constrained environment, this is among the greatest impediments. The Air Force will continue to carefully assess costs associated with sustaining existing weapon systems vice recapitalizing with new ones, all while ensuring we continue to meet the needs of the warfighters. Our industry partners continue to invest in and share incredible technological advances, but, we simply cannot afford to pursue them all. Those the Air Force chooses to pursue introduce risk into development programs, especially in instances where the technology has never before been integrated into similar capabilities or designs. It is imperative that Defense program managers perform adequate risk assessments of such technologies and develop well thought out risk mitigation plans. Once a choice is made to pursue a new technology, the program team must effectively utilize early systems engineering and integration, sound technology maturation techniques and carefully manage associated lifecycle costs.

What steps if any will you take, if confirmed, to enhance the effectiveness of technology transition efforts?

If confirmed, I will facilitate effective communication of capability gaps and promising technologies between the warfighter and S&T communities. As a former member of the Defense Science Board, and a key contributor to the recent DSB Study on "Technology Enablers for Military Superiority in 2030," I am committed to finding, developing, and transitioning technology into our systems. I will further champion the continued investment in innovative technologies important to ensuring the best Air Force in the world remains the most capable in the future. For those technologies that we pursue, I will emphasize strong early systems engineering and integration, and when appropriate, prototyping, to reduce schedule and cost risks. I also look to collaborate with

organizations such as small business. Small businesses drive the majority of our technology revolutions, while our large prime contractors lead integration, prototyping, and major program production. If confirmed, I will place increased emphasis on large prime contractor partnerships with innovative small business companies.

What can be done from a budget, policy, and organizational standpoint to facilitate the transition of technologies from science and technology programs and other sources, including small businesses, venture capital funded companies, and other non-traditional defense contractors, into acquisition programs?

If confirmed, with regards to policy, I will focus on ensuring the warfighter's prioritized capability gaps are appropriately communicated and aligned with the efforts of our laboratories and industry partners, to include small businesses and venture capitalists. I will continue to coordinate efforts with my counterparts in the other Services and in OSD to maximize the return on our investment and continue to sustain/modernize the most capable warfighting force in the world.

With regards to budget, I will ensure appropriate cost assessments are accomplished for technologies available for transition, enabling effective decisions in a fiscally constrained environment. I intend to reach out to the small business, venture capital, and non-DoD traditional industrial base to leverage technology innovations of benefit to the future Air Force.

Finally, if confirmed, I will continue to assess, and when necessary, make required organizational adjustments, to maximize our ability to effectively transition technologies from our S&T community to the warfighter.

Do you believe that the Air Force's science and technology organizations have the ability and the resources to carry technologies to higher levels of maturity before handing them off to acquisition programs?

The Air Force Research Laboratory has the ability to mature technology to Technology Readiness Level (TRL) / Manufacturing Readiness Level (MRL) 6/7 and then in partnership with our Program Executive Officers and Centers to take that technology to TRL/MRL levels of 8 or 9 where it can be transitioned into a program of record. The Research Laboratory does a phenomenal job balancing the resources associated with research, applied research and technology development. If more resources are prioritized for increasing the level of maturity, then resources for longer-term activities decrease or fewer projects are selected to be matured at a higher level.

A major challenge is securing funding for the demonstration and evaluation of technology that is at TRL/MRL 6/7. This is why the role of our Program Executive Officers is so important. They serve as the transition agent between the lab and the warfighter.

What steps if any do you believe the Air Force should take to ensure that research programs are sufficiently funded to reduce technical risk in programs so that technological maturity can be demonstrated at the appropriate time?

With limited funding, it's critical we prioritize our efforts and allocate resources appropriately. To accomplish this, we must clearly understand our warfighter's capability gaps, the potential capability inherent in the new technology, and the cost associated with maturing, integrating and transitioning it to the warfighter. These steps will enable effective investment in research programs that will maximize the benefit to the warfighter and ensure the continued national security of the United States.

What role do you believe Technology Readiness Levels and Manufacturing Readiness Levels should play in the Air Force's efforts to enhance effective technology transition and reduce cost and risk in acquisition programs?

TRLs and MRLs play an important role in communicating the development stage of the technology and the risk associated with pursuing various RDT&E or acquisition decisions. TRLs and MRLs are tools that should be considered by stakeholders in determining whether to proceed with the next stage of technology development. As a guide, TRL/MRL 6 indicates a technology has reached the point where it should be considered for demonstration. However, as Undersecretary of Defense Frank Kendall often says, TRLs do not end the conversation about risk. TRLs may start the risk conversation, and they may provide a convenient shorthand benchmark, but they do not provide the answer to the question is the risk acceptable to proceed. Mr. Kendall believes, as do I, good program managers will take the TRL assessment and then perform a professional risk assessment and produce well thought out risk mitigation plans before moving forward.

What is your view of the Rapid Innovation Program established pursuant to section 1073 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011?

The Rapid Innovation Program has been an excellent means for the Air Force to communicate critical needs and solicit vendors to respond with innovative technology solutions. The response to the program has been overwhelming, and instrumental to the transition of capability by small businesses. Over the last three years, the Air Force has received submissions from thousands of vendors offering solutions to critical Air Force needs. We have awarded over 60 projects directly to small businesses and anticipate awarding another 25 by the end of the year.

What do you see as the major challenges to successful implementation of this program?

The main challenge is centered on the overwhelming vendor response to the program. Since the Rapid Innovation Fund started 3 years ago, we have reviewed over 2,200 white papers on innovative solutions to our critical needs. Setting up and managing the

program to review these white papers, down-selecting only the most compelling, and awarding contracts on the top 3% is challenging. We are up to this task but it does take time to complete. The pressure on our acquisition team, especially our contracting officers, intensifies greatly with budget uncertainty. Last year due to the length of the Continuing Resolution Authority, many of our contracts were not signed until September, the final month prior to expiration of the funds.

What steps will you take, if confirmed, to ensure that funds authorized and appropriated for this program are spent in the most effective manner possible to promote the objectives of the program?

If confirmed, I will continue to monitor and improve the established robust processes to increase the likelihood that these technologies transition into programs of record. We have Air Force transition agents identify critical focus areas, a fair and open competition where subject matter experts from the field select winning proposals, and rely on our transition agents to execute the contracts. Ensuring direct Program Executive Office sponsorship from the beginning is the way to guarantee a very effective use of the appropriated monies. If confirmed, I will continue to capitalize and build on these processes to enable decentralized execution with our transition agents to ensure we have a high rate of success.

Multi-Year Contracts

The statement of managers accompanying Section 811 of the National Defense Authorization Act for Fiscal Year 2008 addresses the requirements for buying major defense systems under multiyear contracts as follows: "The conferees agree that 'substantial savings' under section 2306b(a)(1) of title 10, United States Code, means savings that exceed 10 percent of the total costs of carrying out the program through annual contracts, except that multiyear contracts for major systems providing savings estimated at less than 10 percent should only be considered if the Department presents an exceptionally strong case that the proposal meets the other requirements of section 2306b(a), as amended. The conferees agree with a Government Accountability Office finding that any major system that is at the end of its production line is unlikely to meet these standards and therefore would be a poor candidate for a multiyear procurement contract."

What are your views on multiyear procurements? Under what circumstances do you believe they should be used?

I believe multi-year contracts are appropriate if the business case indicates they will provide significant savings and if there is a strong commitment to the procurement. The economies of scale linked to multi-years have the potential to generate substantial savings and can present strong incentives for suppliers to reduce negotiated price and cost. Because they create a multiple-year funding commitment with penalties, the Business

Case supporting such a determination must clearly demonstrate an advantage to the Air Force and the taxpayer.

What is your opinion on the level of cost savings that constitute "substantial savings" for purposes of the defense multiyear procurement statute, 10 U.S.C. § 2306b?

There is historical support for 10 percent cost savings as being adequate to justify the pursuit of a multi-year contract. While this is a good rule of thumb, it is not an absolute determining factor. Thorough analysis is required. The associated business case analysis should demonstrate the savings associated with the contract would be substantial in terms of the relative difference in price the Service would pay otherwise for annual procurement and in terms of dollars saved for the taxpayer.

If confirmed, under what circumstances, if any, do you anticipate that you would support a multiyear contract with expected savings of less than 10 percent?

It is difficult to answer this question in absolute terms. While generally, I would like to see a business case analysis projection of at least 10 percent savings before proceeding, there may be rare circumstances when I might support pursuing a multi-year with just short of 10 percent projected savings. For example, if I had strong confidence in the government contract negotiation team's ability to achieve an excellent price for the Department, and if I had equal confidence the Air Force will acquire the systems I might consider supporting the multi-year.

If confirmed, under what circumstances, if any, would you support a multiyear contract for a major system at the end of its production line?

I cannot imagine under what circumstances I would support a multiyear contract for a major system at the end of its production line; however, there may be a future situation where this would be appropriate. The Business Case supporting such a determination would have to clearly demonstrate an advantage to the Air Force and the taxpayer.

Under what circumstances, if any, do you believe that a multiyear contract should be used for procuring weapons systems that have unsatisfactory program histories, e.g., displaying poor cost, scheduling, or performance outcomes but which might otherwise comply with the requirements of the defense multiyear procurement statute, 10 U.S.C. § 2306b?

If confirmed, I look forward to working with the DAE and PEOs to correct circumstances which may have led to unsatisfactory program histories. Once a program has demonstrated a capability to deliver satisfactory cost, schedule, and performance outcomes, it may become a candidate for multiyear procurement. The Business Case supporting such a determination would have to clearly demonstrate an advantage to the Air Force and the taxpayer.

What is the impact of the Department's current budget situation, in your view, on the feasibility and advisability of additional multiyear procurement contracts for major weapon systems?

Given ongoing budget uncertainties, additional multiyear procurement contracts for major weapons systems would have to be on a long standing program with many years remaining and the Business Case supporting such a determination clearly demonstrates an advantage to the Air Force and the taxpayer.

Under what circumstances, if any, should the Air Force ever break a multiyear procurement?

The circumstances that I would consider ever breaking a multi-year procurement would be if the contractor fails to perform, the Air Force has significant changes to requirements, or the Business Case supporting such a determination clearly demonstrates an advantage to the Air Force and the taxpayer.

Continuing Competition and Organizational Conflicts of Interest

Section 202 of WSARA requires DOD to take steps to promote continuing competition (or the option of such competition) throughout the life of major defense acquisition programs.

What is your view on the utility of continuing competition as a tool to achieve long-term innovation and cost savings on major defense acquisition programs?

I agree that implementing appropriate measures to ensure competition throughout the life of a program, such as those identified in Section 202, can be a valuable tool to achieve long-term innovation and cost savings.

Do you believe that such continuing competition is a viable option on major defense acquisition programs?

Continuing competition is a viable option on many major defense acquisition programs, but may not be viable for all areas of all major programs. It does require continued effort and management.

If so, what steps if any can and should the Air Force take to address this issue?

The Air Force should continue to address long-term competitive effects of program decisions during periodic system or program reviews.

Section 203 of WSARA requires the use of competitive prototypes for major defense acquisition programs unless the cost of producing such prototypes would exceed the lifecycle benefits of improved performance and increased technological and design maturity that prototypes would achieve.

Do you support the use of competitive prototypes for major defense acquisition programs?

Yes, I support the USD (AT&L) implemented policy changes to address WSARA that increased focus on early and competitive prototyping and all efforts that will result in improvements in the Defense acquisition process. Competitive prototyping has the clear benefit of protecting procurement flexibility by keeping multiple competitors in the hunt during system development. In addition, it is key to addressing several critical program issues, to include risk management, assessment of technology maturation and integration, identification of potential problems and assessment of the framing assumptions upon which requirements are based. This contributes to the assessment of potential trade-offs between requirements and cost. It is also useful in establishing reliability growth potential and to help prepare systems for manufacturing. Finally, it supports efforts to maintain the Defense industrial base by funding companies to continue to develop technologies and systems.

Under what circumstances do you believe the use of competitive prototypes is likely to be beneficial?

Competitive prototyping is likely to be beneficial when more mature designs are required to begin manufacturing planning, to reduce technological risk, to aid in developing operational requirements, and the competition is likely to result in lower costs. Competitive prototyping can be especially cost-effective when it can be focused on individual subsystems and components or focused on integration challenges, rather than prototyping full systems. Subsystem and component prototyping is beneficial when there are critical technologies that require significant innovation and maturation prior to system integration. Competitive prototyping of integration issues is valuable for programs that involve mature platforms, subsystems, and components.

Under what circumstances do you believe the cost of such prototypes is likely to outweigh the potential benefits?

Competitive prototyping is likely to be cost prohibitive when it requires complete prototypes of complex systems, especially those with significant integration and technology maturation issues. Additionally, there are certain sectors of the industrial base that are low volume and highly technically specialized that may not support more than a single vendor.

Section 207 of WSARA required the Department to promulgate new regulations to address organizational conflicts of interest on major defense acquisition programs.

Do you agree that organizational conflicts of interest can reduce the quality and value of technical support services provided to the Air Force and undermine the integrity of the Air Force's acquisition programs?

I agree that organizational conflicts of interest can increase risk and that the quality and value of technical support services provided to the Air Force would be impacted. It could also undermine the integrity of the Air Force's acquisition programs.

What is your understanding of the steps the Air Force has taken to implement section 207 and the new regulations?

The Air Force revised acquisition policy and contracting guidance to implement the requirements of section 207, including reiterating restrictions on lead system integrators and inherently government functions.

What additional steps if any do you believe the Air Force should take to address organizational conflicts of interest in major defense acquisition programs?

I believe the current statutory and regulatory framework is adequate to protect the government's interests in this area, but will continue to look for opportunities to reduce risks to programs.

What are your views on the use of system engineering and technical assistance contractors that are affiliated with major defense contractors to provide "independent" advice to the Air Force on the acquisition of major weapon systems?

It is critical for advice to the Air Force to be truly independent. In those instances where subject matter expertise is required, I will seek to avoid any conflicts of interest so that advice received is truly unbiased.

What lines do you believe the Air Force should draw between those acquisition responsibilities that are inherently governmental and those that may be performed by contractors?

It is my understanding that new Defense Federal Acquisition Regulations Supplement provisions, coupled with heightened awareness of the issue among the contracting workforce and changes in the defense industrial base, have gone a long way to ameliorating the issue making the likelihood of unmitigated Organizational Conflicts of Interests less common. I will continue to support these efforts.

If confirmed, what steps if any would you take to ensure that defense contractors do not misuse their access to sensitive and proprietary information of the Air Force and other defense contractors?

Policies emphasize reliance upon competition at the prime and subcontract levels to provide for innovation, flexibility, reduced life cycle costs, and increased quality. The Air Force expects their program managers and contracting officers to pay close scrutiny to the government's best interests when a contractor may propose the use of its own resources when other capabilities are available, and we reserve the right to consent to subcontracts to ensure that the government's interests are adequately protected. I will continue to support these efforts.

If confirmed, what steps if any would you take to ensure that defense contractors do not unnecessarily limit competition for subcontracts in a manner that would disadvantage the government or potential competitors in the private sector?

If confirmed, I will support Air Force policies that emphasize reliance upon competition at the prime and subcontract levels to provide for innovation, flexibility, reduced life cycle costs, and increased quality. The Air Force expects their program managers and contracting officers to pay close scrutiny to the government's best interests when a contractor may propose the use of its own resources when other capabilities are available, and the Air Force reserves the right to consent to subcontracts to ensure that the government's interests are adequately protected.

Contracting for Services

Do you believe that the Air Force can do more to reduce spending on contract services?

The Air Force uses a mix of military, civilians and contractors to accomplish its mission, and in today's fiscal environment, we are looking at each for potential savings without compromising mission effectiveness. In services acquisition, we are examining opportunities to reduce costs through the use of enterprise-wide vehicles as well as partnering with other services and agencies. We need to improve understanding of types of services being contracted and ways they can be made more efficient.

Do you believe that the current balance between government employees (military and civilian) and contractor employees is in the best interests of the Air Force?

I believe we must continue to examine this balance and to ensure that inherently governmental functions are not outsourced. Additionally, we must assess the work accomplished by military, civilian, and contractor personnel to achieve the correct balance. For services acquisition projects, the Air Force does have a process to conduct these discussions during the requirements definition phase.

What steps if any would you take, if confirmed, to control the Air Force's spending on contract services?

The Air Force has made significant improvements in the management of services acquisition -- from requirements review to contract execution. If confirmed, I will continue to refine these processes, raise visibility and oversight, and partner with Major Command Commanders and the Program Executive Officer for Combat and Mission Support to maximize the effectiveness of available services resources.

Do you believe that the Air Force has appropriate organizations, capabilities, and procedures in place to manage its service contracts?

Through the Single Manager for Services and Program Executive Officer structures, the Air Force has successfully put in place the right capabilities and processes to manage services acquisition. Even with these advances, the Service is still examining methods to increase effectiveness, such as engaging senior leaders to improve their understanding of services related to their mission area. We recognize this is an important area to manage and improve for the taxpayer.

If not, what steps would you take, if confirmed, to develop such organizations, capabilities, and procedures?

N/A

Section 863 of the National Defense Authorization Act for Fiscal Year 2011 requires the Department of Defense to establish a process for identifying, assessing, reviewing, and validating requirements for the acquisition of contract services.

What is the status of the Air Force's efforts to implement the requirements of section 863?

Focused on these same areas, the Air Force instituted a requirements review process for services acquisitions in 2008 and continues to refine it to address the requirements in Section 863 and meet the needs of the Service.

What steps remain to be taken, and what schedule has the Air Force established for taking these steps?

While the Major Command Commanders and SAF/AQ are involved in the current requirements review process, the Service is expanding the involvement of senior leaders who oversee their functional services and expect to formalize their involvement in this process during Fiscal Year 2014.

What additional steps if any would you take, if confirmed, to improve the Air Force's management of its contracts for services?

If confirmed, I will continue to engage with senior leaders within the Air Force and across the Department on requirements, acquisition strategies and methodologies for managing the execution of services acquisitions. I will work similarly with OSD AT&L.

Do you believe that the use of Indefinite Delivery Indefinite Quantity (IDIQ) contracts are beneficial or harmful for the acquisition of services?

If used correctly, Single- and Multiple-Award IDIQ contracts are very beneficial. Our acquisition teams perform market research to determine the appropriate strategy to meet the mission requirement. In services acquisitions, the Air Force has been using Multiple-Award IDIQ contracts extensively as they provide a continuous opportunity for competition among a set of qualified contractors.

Contractor Performance of Critical Governmental Functions

Over the last decade, the Department has become progressively more reliant upon contractors to perform functions that were once performed exclusively by government employees. As a result, contractors now play an integral role in areas as diverse as the management and oversight of weapons programs, the development of personnel policies, and the collection and analysis of intelligence. In many cases, contractor employees work in the same offices, serve on the same projects and task forces, and perform many of the same functions as DOD employees.

In your view, has the Air Force become too reliant on contractors to support the basic functions of the Department?

I recognize this is an area of concern. The Service must continue to examine mission requirements and ensure that inherently governmental functions are not outsourced. If confirmed, I will review the Air Force use of contractors in basic functions.

Do you believe that the current extensive use of personal services contracts is in the best interest of the Air Force?

I believe the appropriate use of personal services contracts is in the best interest of the Air Force. The Federal Acquisition Regulation (FAR) and 10 USC Section 129 restrict the use of personal services contracts. While not extensive, the Air Force does use it where authorized, such as in the Medical support area. If confirmed, I would continue to work with leaders across the Air Force to ensure compliance with applicable laws and policies.

What is your view of the appropriate applicability of personal conflict of interest standards and other ethics requirements to contractor employees who perform functions similar to those performed by government employees?

While they are prohibited from making decisions on behalf of the government, I believe the rule set for these personnel should more closely mirror the rule set of a government employee.

Contracting Methods

In recent years, the Department of Defense has relied heavily on time-and-materials contracts for the acquisition of services. Under such a contract, the Department pays a set rate per hour for contractor services, rather than paying for specific tasks to be performed. In some cases, contractors have substituted less expensive labor under time-and-materials contracts, while continuing to charge federal agencies the same hourly rates, resulting in effective contractor profits of 25 percent or more.

What is your view of the appropriate use of time-and-materials contracts by the Air Force?

In general, I prefer the use of almost any other type of contract for services, but there are still limited situations where time-and-materials contracts are appropriate. For example, time-and-materials contracts may be appropriate when the Government lacks historical data on the nature of work to be performed or there is a large variation in the work to be performed. These situations prevent the reasonable estimation of the resulting work and labor mix for an effective task-based contract. If confirmed, I will strive to limit the use of time-and-materials contracts to only appropriate situations and provide effective oversight to prevent contractor abuse.

What steps if any do you believe the Air Force should take to minimize the abuse of time-and-materials contracts?

The Air Force began focusing on reducing the use of time-and-materials contracts several years ago and if confirmed I will continue these efforts. In FY06, the Air Force spent approximately $3 billion on time-and-materials contracts and that number was reduced to $371 million in FY13.

Section 802 of the FY 2013 NDAA requires the Department of Defense to promulgate regulations to ensure the review and justification of any "pass-through" contracts on which more than 70 percent of the work will be performed by subcontractors.

What is your understanding of the status of the Department's efforts to implement the requirements of section 802?

It is my understanding that a FAR case, 2013-012, was initiated for this statutory provision. I also understand as part of the rule making process some concerns were raised and I believe those have been resolved and the case is moving forward in the process.

What additional steps if any do you believe the Air Force should take to address the problem of unjustified pass-through contracts?

I support the idea of the language because it is in the best interest of the Air Force and cost to the taxpayer.

Better Buying Power

The Department of Defense's Better Buying Power initiative provides acquisition professionals with important guidance on how to achieve greater efficiency, enhanced productivity and affordability in how the Department procures goods and services.

What steps if any will you take, if confirmed, to ensure that the Air Force's acquisition and contracting professionals implement this guidance, and achieve intended results?

If confirmed, I will continue to ensure that all Air Force acquisition and contracting professionals implement this guidance and achieve the levels of success already seen to date. In my current position, I have been actively engaged in promoting the concepts behind Better Buying Power to our workforce, through visits to the field and recognition of our personnel on individual successes and cost savings. Additionally, the Air Force has set policy and guidance on a wide variety of initiatives including Better Buying Power, and integrated these tenets in all levels of acquisition reviews. This active engagement is just the first step towards institutionalizing the process and making it the new way of doing business.

Which elements of this guidance, if any, do you disagree with and would not expect to fully implement, if confirmed?

OSD's Better Buying Power initiatives are positive steps towards achieving successful program management and acquisition excellence. If confirmed, I look forward to working with USD (AT&L) to implement the initiatives to the maximum extent possible.

How would you measure how effectively the Air Force's acquisition and contracting workforce is implementing the tradecraft and best-practices called for under this initiative?

Some of the initiatives are easier to measure effectiveness than others, but one concrete example on which we are already seeing great returns is the implementation of "should cost." The "should cost" strategy is aimed at seeking out and eliminating low- and non-value added aspects of program costs. Managers are then 'rewarded' by being given the opportunity to utilize those savings as additional resources to support efforts within the program, the portfolio itself, or elsewhere within the Department's acquisition community as deemed appropriate and necessary.

The Air Force is actively gathering should cost data and reporting our successes to OSD. In FY13, the Air Force realized $673M in should-cost savings. Additionally, in FY13, only one program requested a should cost waiver, down from 79% of programs in FY12, which indicates that these initiatives are becoming second nature. This is just one example of how the Air Force has already accepted and begun to implement Better Buying Power. If confirmed, I will continue to implement Better Buying Power to the maximum extent possible, and I am confident we will continue to see cost savings and other efficiency trends throughout the Air Force.

What steps would you take, if confirmed, to implement the following elements of the Better Buying Power initiative?

If confirmed, I am committed to the Air Force being the leader in implementing Better Buying Power initiatives throughout the Department of Defense. The Air Force has been at the forefront through preliminary implementation and will continue to realize cost savings as these new processes become more familiar.

1) Sharing the benefits of cash flow

I agree with the Department's initiative to better align profitability with performance goals, and with including the use of cash flow as another incentive. If confirmed, I will emphasize training and education for contracting officers on the benefits from cash flow as an incentive tool during negotiations.

2) Targeting non-value-added costs

The Air Force continues to make great progress with respect to identifying opportunities to reduce and eliminate non-value added costs. The Air Force is primarily doing this through our concerted efforts aimed at implementing should cost based management practices. The program executive officers are actively instilling a culture within their portfolios that requires their program managers to continually scrutinize each element of cost under their control and assess how it can be reduced.

This should cost strategy is aimed at seeking out and eliminating low- and non-value added aspects of program costs. Managers are then 'rewarded' by being given the opportunity to utilize those savings as additional resources to support efforts within the program, the portfolio itself, or elsewhere within the Department's acquisition community as deemed appropriate and necessary.

3) Mandating affordability as a requirement

The Air Force has already taken steps to improve management of long-term affordability for Major Defense Acquisition Programs in the establishment and tracking of Affordability Goals/Caps at the next Milestone review. If confirmed, I would continue to work with the user community to improve articulation of long-term affordability constraints during the requirements process.

4) Eliminating redundancy within warfighting portfolios

The staff is working hand-in-hand with the acquisition staffs of the Navy and Army to assure everyone is meeting the intent of this initiative. Last month the Senior Acquisition Executives provided a status to AT&L regarding joint efforts to address this initiative. The Air Force feels comfortable that processes and guidance are well-established for the larger ACAT Programs across the Services. While the Air Force believes that there are many processes in place to help eliminate redundancy in the smaller ACAT programs, if confirmed, I will continue to work together to assure duplication is eliminated.

Interagency Contracting

What is your assessment of the risks and benefits associated with the Air Force's use of inter-agency contracts?

A risk of inter-agency contracts is additional costs and fees which could result in higher costs to the Air Force. One of the primary benefits of inter-agency contracts is the ability to leverage existing contracts to expedite contract award and delivery while reducing duplication of effort. Inter-agency contracts can create an efficient use of scarce resources and provide better support to our warfighter. The use of existing vehicles makes sense and is encouraged when it results in faster delivery for the warfighter at a fair and reasonable price.

Do you believe additional authority or measures are needed to hold Air Force or other agency personnel accountable for their use of inter-agency contracts?

No. The Air Force has a process that requires any Military Interdepartmental Purchase Request (MIPR) or interagency transfer of funds to be reviewed by the contracting officer. This ensures the contracting officer engages the requiring activity to use the most cost effective mechanism to receive the supply or service. This review has been effective

in ensuring the appropriate use of inter-agency contracts while also maintaining control and accountability of MIPR'd funds.

Do you believe contractors have any responsibility for assuring that the work requested by Air Force personnel is within the scope of their contract?

Yes. Contractors are required by the terms and conditions of their contract to inform the contracting officer if they believe work is outside the scope of the contract. If asked to perform work outside contract scope, the contractor must request the contracting officer modify the contract and reach an agreement on the work and resulting consideration.

Acquisition of Information Technology

Most of the Department's Major Automated Information System (MAIS) acquisitions are substantially over budget and behind schedule. In particular, the Department has run into unanticipated difficulties with virtually every new business system it has tried to field in the last ten years. Section 804 of the National Defense Authorization Act for Fiscal Year 2010 required the Department of Defense to establish a new acquisition process for information technology.

What role if any do you expect to play, if confirmed, in oversight and management of the Air Force's acquisition of information technology?

If confirmed, I will work with the MAIS stakeholders, to include USD (AT&L), the Chief Management Officer, the Chief Information Officer and functional communities, to provide rigorous oversight and efficient management. I will actively engage in efforts to implement important lessons learned from previous IT acquisition efforts.

Do you believe that unique problems in the acquisition of business systems require different acquisition strategies or approaches?

Yes, I believe there are unique challenges associated with the acquisition of information systems that call for the use of acquisition approaches different from those normally used by the Department for acquiring weapons and other systems. Undersecretary of Defense Kendall often says that all acquisitions should be tailored to the nature of the product being acquired. He has further noted that as a class, business systems are products having characteristics that tend to dictate a specific type of program structure. Additionally, there is an existing requirement to keep Air Force business systems relevant with evolving technology and ensure both current and planned systems are meeting mission needs in a cost-effective way. In particular, the success of the Service with these programs depends on the ability to recognize, plan and execute to a roadmap for how each acquired system will exchange very vast and complex sets of data within our existing ("As-Is") and future ("To-Be") information architectures. Air Force decision-makers at all levels must have clear policy and an effective governance structure that they can translate into execution of a tailored strategy to smartly acquire business systems—

particularly at the program manager level. Likewise, end-users must be accepting of the changes a new business system will likely have on their operating culture.

What steps if any do you believe the Air Force should take to address these problems?

The Air Force is addressing these problems by moving away from large-scale Enterprise Resource Planning (ERP) programs, like the former Expeditionary Combat Support System (ECSS), in favor of smaller-scoped capability-based increments.

A perfect example of the Air Force's current efforts is the Logistics Transformation Maintenance Repair and Overhaul initiative (MROi). MROi is the first critical increment to transforming the Air Force's entire logistics IT required functionality. Subsequent capability initiatives will follow MROi, building upon each other to ultimately achieve critical improvements across all areas of the Air Force's logistics enterprise.

With both MROi and future business systems acquisition, the Air Force will implement a more robust requirements definition process up front that fully maps out our existing and required end-state architectures before pursuing any materiel solution through the use of Business Process Re-engineering (BPR) and related architecture disciplines. Another key element of the application of these architecture and BPR disciplines is the ability to scope the delivered IT solution to a user-defined capability as opposed to a developer-defined software release that may not be the most effective solution for the user. This user focus serves as the basis for determining the appropriate increments. The architecture and BPR disciplines provide the means to manage and deliver smaller-scoped solutions and satisfy mission objectives. This BPR rigor also ensures that the users' requirements are defined correctly up front and remain stable through the lifecycle of the program.

What steps has the Air Force taken to implement the requirements of section 804? What steps remain to be taken?

On 26 Nov 2013, OSD published a new DoDI 5000.02 that further clarifies policies, streamlines defense acquisition procedures and eliminates redundant / conflicting guidance. As a result, the core processes within DoDI 5000.02 and the former Business Capability Lifecycle (BCL) process are better aligned. The Air Force has also strengthened the processes associated with Business Process Re-engineering (BPR) and IT certification to further ensure acquired capabilities meet mission needs. OSD DCMO, now working in concert with USD (AT&L) is further refining these processes to better integrate its key assertions into DoD acquisition guidance, in part as a result of its previous joint efforts with the Air Force.

If confirmed, how would you work with the Chief Information Officer of the Air Force to take these steps?

If confirmed, I will continue to collaborate with our CIO to identify and take steps needed to improve acquisition of information technology and to leverage use of a common

technology baseline across Air Force IT systems. This common baseline will facilitate common hosting standards and promote consistent security practices and sustainment methods allowing us to bring new capabilities online more quickly and at lower cost. If confirmed, I will also work with the CIO to ensure cyber security is built into Air Force systems, leveraging the processes of the newly defined Risk Management Framework.

Some have argued that the current test and evaluation process does not appropriately address the unique circumstances applicable to the acquisition of information technology systems.

What steps if any do you believe the Air Force should take to improve the test and evaluation process for information technology systems, including their vulnerabilities in the face of a growing cybersecurity threat environment?

The Air Force needs to better integrate developmental test, operational test, and certification and accreditation activities to the greatest extent practical. Programs should utilize early user involvement, automated testing, and continuous monitoring of deployed capabilities. To better address the growing cybersecurity threats, programs will need to engineer and test mission assurance and cyber security from the ground up.

The Air Force planned for the Expeditionary Combat Support System to be an "underlying business system intended to tie… [the service's] transformation efforts together and provide a holistic, end to end view of the… [Air Force's] logistics enterprise." This was to be accomplished using Commercial-Off-The-Shelf software. Unfortunately, after approximately seven years and $1.03 billion the program was cancelled.

What lessons have you and the Air Force learned from this episode and how will future MAIS programs be structured differently to ensure such a result does not occur in the future?

The Air Force has learned a great deal from Expeditionary Combat Support System (ECSS) and is following through on the specific recommendations made in the Acquisition Incident Review (AIR) report. Specifically, the AIR report found four contributing causes and six root causes to the failure of ECSS. The four contributing causes were a confusing and sometimes ineffectual governance structure; challenges with tactics, techniques and procedures of acquisition tools; difficulty of changing from our legacy systems; and a high rate of churn among personnel and organizational structures. The six root causes were the Air Force's lack of understanding of the data, lack of understanding of the "As-Is" and "To-Be" architectures, lack of a transition plan, lack of an execution plan, an unrealistic development environment, and the fact that the right culture was not in place for ECSS to be successful.

Following the release of the AIR report the Secretary of the Air Force directed a review of existing major Air Force business systems to determine to what extent the ECSS AIR lessons learned were being incorporated, and recommended specific actions in addition to

the AIR report to further ensure mistakes made during ECSS are not repeated on future programs. The Air Force is taking steps to ensure the recommendations from both the AIR report and the Secretary of the Air Force-directed review are fully implemented.

Several examples of Air Force actions to implement lessons learned include: Standardizing practices to increase collaboration with functional stakeholders earlier on in the acquisition process; Blueprinting current architecture for our existing core logistics systems; Applying rigorous Business Process Re-engineering (BPR) before determining whether new materiel solutions are required and should be pursued; Establishing Integrated Functional and Program Executive Office teams to bolster co-accountability for program outcomes among key stakeholders; Increasing training opportunities for end-users on technology transition management curricula.

The Department's Information Technology Enterprise Strategy and Roadmap, dated 6 September 2011, proposes overhauling IT policies to provide improved access to information, common identity management, standardized Department-wide services/applications/tools, streamlined IT acquisition, consolidated data centers, and cloud computing services.

What reorganization, if any, do you believe will be needed in the IT acquisition structures of the Air Force to achieve these objectives?

At this time, I do not believe the Air Force needs to reorganize in the IT acquisition structures to achieve these objectives. The Air Force is taking steps to clearly define roles and responsibilities, develop common standards and to empower the CIO to provide strategic direction and corporate investment inputs. These steps will move us closer to these objectives and ultimately, improve warfighting effectiveness across the cyber mission area.

In your view, how fundamentally different, in ways relevant to procuring needed defense capability effectively, is acquiring information technology products and services from how the Air Force more typically procures products and services?

The fundamental difference in procuring information technology products and services is the greater use of rapidly evolving commercial technology. Leveraging this commercial technology allows the Department to more quickly deploy capabilities through shorter delivery cycles, incremental and concurrent development and test, use of established standards, use of common infrastructures and integrated cyber-security. With shorter timelines and incremental capabilities, there is a greater need for architecture and integration. The interim DoDI 5000.02 identifies models tailored for IT to better enable rapid delivery and an incremental build process to reach full system functionality.

What specific changes, if any, would you recommend to improve how the Air Force procures Major Automated Information Systems?

I would recommend clearly defining the roles and responsibilities of the many MAIS stakeholders, to include AT&L, CIO, DOT&E and the Chief Management Office. Additionally, in order for MAIS acquisitions to be successful, there must be efficient execution authority, improved governance and stable requirements throughout the process.

In your view, what are the implications of the challenges and differences you discussed above on efforts by the Air Force to procure effectively cyber-security products and services?

One implication is that much more collaboration will be required in order to procure effective cyber-security products and services. As we move towards more common and integrated capabilities, the shared opportunities will be greater, but so will the shared risks. The Air Force, other members of the DoD and Federal Agencies must act in concert to implement cyber capabilities and security. Stakeholders need to collaborate on everything from architectures, to acceptable common technologies, to cyber-security strategies, and how to best access and share information. Collaboration must be part of our culture. Having been a member of the recent Defense Science Board Task Force on Resilient Military Systems and the Advanced Cyber Threat, I am under no illusions that making our combat systems cyber resilient to a competent adversary will be simple or easy. The magnitude of the challenge to all of the Department here is significant and will be so for the years ahead. We will need to systemically build resiliency in at the beginning, continually assess end-to-end potential vulnerabilities, and then implement countermeasures (whether they be material solutions or new CONOPS/TTPs).

Are there any special acquisition authorities not currently available that if authorized could help address some of the observed IT and cybersecurity-related acquisition shortfalls?

While not specifically an acquisition authority, a major challenge with IT acquisition is the application of funding rules that are based on traditional, non-IT weapon system procurement. As identified in the 804 report, IT programs are currently funded with a mix of three principal appropriations (Research and Development, Procurement, and Operations and Maintenance), each with unique rules and definitions that are based on funding for traditional weapon system models. IT acquisition would benefit greatly from a specific appropriation designed for unique IT needs and challenges. A specific IT appropriation would also help the Air Force articulate, support and defend the type and amount of funding needed to meet requirements.

In your view, does the Defense Information Systems Agency (DISA) deliver enterprise computing services and provide IT infrastructure in an operationally responsive and cost effective manner?

It does, in most cases. Air Force systems continue to move to the DISA services, to leverage this common, enterprise suite of capabilities. The Air Force is working closely with DISA to characterize Air Force IT infrastructure requirements and develop a streamlined process for hosting Air Force systems. The Service expects DISA to gain efficiencies through economies of scale and a la carte menu of services.

What specific recommendations would you make to improve DISA's delivery of telecom and IT contracting, enterprise services, and computing/application hosting?

Air Force engagement with DISA is essential to ensure that the IT infrastructure and services DISA provides meet Service needs. Competitive pricing, clearly defined standards and interfaces, and increased collaborative engagement will continue to facilitate movement to DISA services.

Acquisition Workforce

Section 852 of the National Defense Authorization Act for Fiscal Year 2008 established an Acquisition Workforce Development Fund to help the Department of Defense address shortcomings in its acquisition workforce. The fund provides a continuing source of funds for this purpose.

Do you believe that the Acquisition Workforce Development Fund is still needed to ensure that DOD has the right number of employees with the right skills to run its acquisition programs in the most cost effective manner for the taxpayers?

Yes. With the pressure on O&M budgets, the Defense Acquisition Workforce Development Fund (DAWDF) has become even more important to providing a highly capable acquisition workforce. As O&M funds have been reduced, the Air Force has become much more reliant on DAWDF to train and develop the acquisition workforce with both Defense Acquisition University and Air Force specific courses. If confirmed, I would also like to explore utilizing the fund to replenish skilled personnel losses from retirements and attrition as well to adjust the personnel skill mix as future needs dictate.

What do you see as the most significant shortcomings, if any, in the quality of the Department's acquisition and contracting workforce?

I believe the Air Force has an exceptional workforce that is executing very difficult tasks. The workforce receives excellent training from Defense Acquisition University and other sources; however, if confirmed, I intend to increase the emphasis of on-the-job experience to put into practice the training received. The Air Force needs to continue to

address development of practical application skills emphasizing technical and business acumen because classroom training is not enough.

What role do you expect to play, if confirmed, in addressing these shortcomings?

If confirmed, I plan to work closely with OSD (AT&L) and Air Force acquisition leadership at all levels to continue to improve the training and development provided to the acquisition workforce. In my current role, I've been directly involved in leading and communicating workforce requirements through multiple forums including the OSD(AT&L) acquisition workforce Senior Steering Board and Business Senior Integration Group as well as the Air Force Leadership and Development Review. Additionally I will continue to work closely with the Air Force's Director, Acquisition Career Management who manages the Air Force Acquisition Professional Development Program.

How do you communicate those shortcomings to such organizations as the Defense Acquisition University?

If confirmed, I will communicate shortcomings via the forums identified above. Additionally, the Air Force Defense Acquisition Career Manager and Functional Managers routinely communicate training requirements to the Defense Acquisition University and OSD counterparts.

What specific skill sets or core competencies if any do you believe to be vital the Department's ability to procure goods and services effectively and are lacking within the Department's acquisition and contracting workforce?

I believe improved business acumen is vital to acquisition excellence. The Air Force should strive to leverage experience from commercial industry as well as promote, track and leverage business experience within the workforce.

Do you believe that the Department's human capital plan for the acquisition workforce includes adequate measures to acquire or reconstitute these vital skill sets or core competencies?

Yes. I believe the incorporation of the Defense Acquisition Workforce Development Fund (DAWDF) into the Department's overall approach to the acquisition workforce has been the most important addition to its human capital plan.

What steps if any would you take if confirmed to improve the Department's human capital plan for the acquisition workforce?

If confirmed, I will continue to work with OSD (AT&L) to make replenishment of the acquisition workforce a focus of the human capital plan. I will advocate use of the DAWDF to enable continued entry level hiring of recent college graduates in order to

backfill as members move up, separate or retire. I will also explore modifying existing demo programs to better target shortage skills using direct/expedited hiring authorities.

Science and Technology

What, in your view, is the role and value of science and technology programs in meeting the Air Force's transformation goals and in confronting irregular, catastrophic, traditional and disruptive threats?

The Air Force Science and Technology (S&T) Program prepares and equips the warfighter to face threats in an uncertain future. The Air Force S&T Program investigates game-changing technologies to affordably transition the "art-of-the possible" into military capabilities. The Air Force invests in research that addresses urgent, near-term warfighter needs as well as research that will provide revolutionary capabilities in the future.

If confirmed, what direction will you provide regarding funding targets and priorities for the Air Force's long term research efforts?

If confirmed, I will actively work with the Air Force S&T Executive, the Air Force Chief Scientist and Air Force Research Laboratory leadership to develop affordable research priorities and resource those priorities accordingly.

What specific metrics would you use, if confirmed, to assess whether the Air Force is making adequate investments in its basic research programs?

If confirmed, I will work to ensure the Air Force's S&T investment supports a balanced foundation of basic research, applied research, and advanced technology development that will provide demonstrated transition options for future warfighting capabilities. The Air Force is currently working with OSD and Service counterparts to identify appropriate leading indicators (such as metrics) to assess S&T investments.

Do you feel that there is sufficient coordination between and among the science and technology programs of the military services and defense agencies such as DARPA?

While there is always room for communication improvements, I believe there is sufficient coordination. The Air Force, working with the other Services, OSD, and their Agencies, have an extensive formal coordination mechanism for S&T focused on areas with Defense Department-wide utility. Currently, they have organized into seventeen Communities of Interest covering technology areas such as materials and manufacturing, cyber security, and autonomy. Service representatives are engaged daily in nurturing and growing this formal approach to address S&T needs and priorities.

Additionally, informal coordination, discussions, and debates that happen at the individual researcher or program manager level with counterparts in the other Services and Agencies through professional societies and other avenues are just as important.

In many areas such as hypersonics, lasers, and cyber technology, AF partnerships with DARPA, other Agencies, and sister Services are pushing the new capabilities that will keep the Air Force the best in the world.

What is the Department's role and responsibility in addressing national issues related to science, technology, engineering, and mathematics education and workforce development?

Nurturing the next generation of science, technology, engineering, and mathematics (STEM) professionals is an Air Force, DoD and national concern. To maintain the U.S. military's decisive technological edge, the Department must be able to recruit, retain and develop a capable STEM workforce in the face of worldwide competition for the same talent. An objective of the STEM Strategic Communication Plan is to encourage all Airmen to attract tech-savvy students to an Air Force career.

What steps if any would you take to support efforts to ensure that the nation has the scientific and technical workforce needed for its national security technological and industrial base?

If confirmed, I look forward to continue supporting efforts to recruit, retain and develop a world-class STEM workforce for the Air Force and the Nation. The Air Force has successfully used tools such as the Science, Mathematics, and Research for Transformation (SMART) Scholarship Program. Over the past eight years, the Air Force has averaged providing 60 scholarships per year to scientists and engineers. After payback of the recipient's commitment, the Air Force has retained 88 percent of scholars in Air Force jobs. Additionally, the Air Force is updating the *Bright Horizons* STEM workforce strategic roadmap published in 2011. This roadmap addresses the "people" dimension of delivering and operating required technology by having the right STEM qualified people in the right place, at the right time, and with the right skills.

How would you use science and technology programs to better reduce technical risk and therefore potentially reduce costs and schedule problems that accrue in large acquisition programs?

If confirmed, I will continue efforts to deliberately align S&T planning, technology transition planning, and development planning. The linkages between these activities are critical to initiating acquisition programs with mature technologies and credible cost estimates.

Do you feel that the science and technology programs of the Air Force are too near-term in focus and have over-emphasized technology transition efforts over investing in revolutionary and innovative research programs?

No. A top priority of the Air Force S&T Strategy is to execute a well-balanced, integrated program. I am confident that the Air Force S&T portfolio is properly balanced between meeting current warfighter capability needs and discovering and developing innovative new technology opportunities.

Are you satisfied that the Air Force has a well-articulated and actionable science and technology strategic plan?

Yes. The Air Force is currently updating the Air Force S&T Strategy, which was signed by Air Force Leadership 2010. This flexible strategy allows the Air Force to adapt its S&T program to dynamic strategic, budgetary and technology environments. Additionally, the priorities in the strategy will shape actionable S&T plans.

Do you see a need for changes in areas such as hiring authority, personnel systems, financial disclosure, and ethics requirements, to ensure that the Air Force can recruit and retain the highest quality scientific and technical workforce possible?

An objective of the Air Force STEM Strategic Communication Plan is to build the understanding and recognition that the Air Force's success is based on the innovation and technical contributions of Airmen. The Air Force is updating the *Bright Horizons* STEM workforce strategic roadmap published in 2011. This roadmap is investigating these areas and others to assure technologically superior warfighting capabilities through attracting, recruiting/accessing, developing, and retaining a world class STEM workforce.

What is your view of the effectiveness of the Military Accessions Vital to National Interest Program to recruit non-U.S. citizens who graduate from U.S. universities with advanced degrees in scientific and technical fields of critical national importance?

Citizenship is required for Commissioned service in the military. The military does not commission scientists who do not meet citizenship requirements. The Military Accessions Vital to the National Interest Program (MAVNI) is a pilot program that could be considered useful in its ability to utilize the limited authority provided in law to enlist non-citizens in the military service to fill critical skills. To date, the Air Force has only used MAVNI to enlist people with certain language and associated culture capabilities to meet a critical strategic need.

What steps if any would you take if confirmed to ensure the continued effectiveness of this program?

If confirmed, I will work with other Air Force and DoD leaders to ensure we are taking full advantage of all authorities within the law to acquire military and civilian forces to meet our science and technology needs in the Air Force.

Test and Evaluation

The Department has, on occasion, been criticized for failing to adequately test its major weapon systems before these systems are put into production.

What are your views about the degree of independence needed by the Director of Operational Test and Evaluation in ensuring the success of the Air Force's acquisition programs?

I support the independence of the Director of Operation Test and Evaluation as granted by Title 10 United States Code (10 U.S. Code 2399, Operational Test & Evaluation of Defense Acquisition Programs). This independence is important to ensuring the Department's acquisition systems are realistically and adequately tested in their intended operational environment. Third party verification of system performance is a necessary and important step in acquiring weapon systems.

Are you concerned with the level of test and evaluation conducted by the contractors who are developing the systems to be tested?

The level of test and evaluation conducted by contractors in developing systems to be tested is appropriate; however, it is important to ensure government representatives lead the testing and perform effective oversight of all contractor test events.

What is the impact of rapid fielding requirements on the standard testing process? If confirmed, how will you work to ensure that all equipment and technology that is deployed to warfighters is subject to appropriate operational testing?

If confirmed, I will continue efforts to ensure capabilities provided in response to urgent operational requirements are balanced with testing that ensures the system is reasonably safe and effective within resource and time constraints. Many times this balance is achieved by the combined efforts of the acquisition and operational communities, sometimes taken to the extent of the design engineers working side by side with the warfighter to resolve issues in real time. In addition to meeting the urgent mission needs, the initial operational data derived during this activity actually adds to a more realistic, complete and robust operational test regime than an isolated test alone. Sometimes when a capability is fielded, the innovative warfighter effectively uses the capability in a way other than expected or tested; this drives a constant evolution of concept of operations and test planning and execution to maximize effectiveness.

Do you believe that the developmental testing organizations in the Air Force are adequate to ensure an appropriate level of developmental testing, and testing oversight, on major defense acquisition programs?

Yes. The AFMC reorganization with the 5-center construct is an improvement in consolidating leadership and management of development test in order to ensure an appropriate level of developmental testing and testing oversight. The reorganization is leading to increased test efficiency and cross flow of information among the test organizations located at the Arnold Engineering Development Complex, 96th Test Wing at Eglin AFB and the 412th Test Wing at Edwards AFB. However, reduced budgets could have a negative impact on testing as resources continue to shrink.

If not, what steps would you take, if confirmed, to address any inadequacies in such organizations?

If confirmed, I will work with AF/TE to continue to look at Air Force test organizations to ensure structures support the Air Force vision for 2023. Continued test efficiencies need to be investigated to accommodate budget constraints. Part of this investigation should include, where appropriate, increased integrated developmental and operational testing. Duplication of test effort must be avoided to ensure resources are used as efficiently and effectively as possible.

As systems grow more sophisticated, networked, and software-intensive, DOD's ability to test and evaluate them becomes more difficult. Some systems-of-systems cannot be tested as a whole until they are already bought and fielded.

Are you concerned with Air Force's ability to test these new types of systems?

Yes. These new complex systems deserve a healthy concern and respect so they are not underestimated and are addressed adequately. The Air Force needs to continue to conduct robust Developmental and Operational Test of all new systems to ensure they are safe and meet their intended purpose.

What steps, if any, do you believe the Air Force should take to improve its test and evaluation facilities to ensure adequate testing of such systems?

First and foremost, the Air Force must maintain its unique core set of T&E infrastructure and associated workforce. These must be preserved as a national asset to provide T&E capabilities to support national defense. The Air Force must continue to assess test facilities to ensure they are sized, operated, and maintained appropriately to provide for the mission.

In your view, does the Air Force have sufficient capabilities to test and evaluate the cybersecurity of its new information technology systems and networks?

The cyber world is rapidly progressing and evolving and the Air Force must continue to work hard to keep pace with this evolution. "Sufficient capabilities" is a constantly changing standard in this rapidly changing world. Underestimating its dynamism is to be left behind.

What steps, if any, would you propose to take, if confirmed, to enhance this capability?

We will continue to build on the Air Force Chief Scientist's, Cyber Vision 2025, which provides a blueprint for cyber S&T and includes test and evaluation shortfalls. In addition, the Air Force will continue to support the tri-service/OSD Technical Assessment Sub-Working Group (TASWG) for Cyber issues.

Some have argued that testing takes too long and costs too much. Others contest this view pointing out that testing and evaluation is an essential tool to assist in the development of weapon systems and ensure that they perform as intended. The Armed Services Committee has expressed concern that problems with weapons systems have been discovered during operational testing and evaluation that should have been discovered during developmental testing and corrected during subsequent development.

Do you believe that major defense acquisition programs are helped or hurt by cutting tests budgets and reducing the time available for developmental testing?

Reduced test budgets and time are detrimental to Major Defense Acquisition Programs and inherently increase costs over the life of the system and delays fielding to the warfighter.

What steps if any will you take, if confirmed, to ensure that the program management community and the testing and evaluation community work collaboratively and effectively in a way that maximizes the likelihood that developmental testing and evaluation will detect and identify problems timely in software and hardware to provide opportunities to correct them before production and before operational testing and evaluation begins?

If confirmed, to ensure that the program management community and the test and evaluation community work collaboratively and effectively I would continue to ensure an emphasis is placed on integrated T&E. In my current position, I have taken steps to foster this collaboration, meeting bi-weekly with the Air Force T&E executive. Linkages for coordination between developmental test, operational test, live fire test and evaluation and modeling and simulation must be maintained through communication among the various agencies as well as the program management office.

To what extent do you think that dedicated operational testing can be more efficiently integrated into developmental and live-fire testing in a way that is also sufficiently rigorous?

I support increased integration of operational testing into developmental and live-fire testing. The newly revised DoDI 5000.02 emphasizes integration of developmental and operational testing where possible. The key is early involvement of operational testers in the development of the Test and Evaluation Master Plan. Early collaboration between weapons designers, developmental testers and operational testers allows test scenarios to be developed that provide the needed data for the developer and in turn can be utilized by the operational tester in determining operational suitability. This integration can also uncover operational issues early in the development cycle when resolution is possible with less impact to cost and schedule.

Noted defense analysts Andrew Krepinevich and Todd Harrison have argued the formal requirements of a weapons system should also include a statement as to how a weapons system will be tested. Therefore, a testing program will be identified before awarding contracts. The purpose of this proposal is to enable the contractor to have a much better understanding of what the military hopes to achieve.

Do you agree with this proposal?

A proposal limiting the development of test protocols to one single stage of the acquisition process may not fully address the complexity of the issue. However, I agree that testing should be a consideration early in the acquisition process. There should be early focus on the development of requirements that are operationally relevant, technically feasible and testable. The Air Force saw this need when forming the Air Force Requirements Review Group (AFRRG) in 2012. AF/TE was included in this Group that reviews all requirements documents for new weapons development in the future. The AFRRG tightly couples requirement, technical, acquisition and test and this process should improve Air Force performance in this area.

Air Force Industrial Base

What is your assessment of the health and status of the key elements of the Air Force's industrial base, including the Air Logistic Complexes?

The readiness of the Air Force to provide the capabilities inherent in Global Vigilance, Global Reach, and Global Power is sustained by the products and services purchased from the national technology and industrial base. Without the support of both the organic and the commercial components of the industrial base, the Air Force would not be ready to respond to the needs of the nation. From the laces in boots to the electronics in air, space, and cyber systems, the Air Force draws upon a broad and diverse network of suppliers.

Through this dynamic network, the Air Force equips Airmen, maintains bases, laboratories, and ranges, modernizes current systems, and designs, develops, and procures new capabilities to remain the world's preeminent Air Force. I assess the overall health of this dynamic network of suppliers and sustainers as sufficient for the current needs of the Air Force.

As I look to the ability of the industrial base to support future requirements in military-unique areas such as tactical aircraft and strategic missiles, I have some concerns about whether the Air Force can sustain the current level of these key industrial capabilities during this period of fiscal challenges. In addressing these concerns, the Air Force is collaborating with the other elements of the Defense Department to ensure thorough analysis leading to informed decisions about mitigating these concerns.

In your view, is DOD's sector-by-sector, tier-by-tier (S2T2) activity providing useful information to assist the Army in maintaining and improving key elements of its industrial base?

The Air Force recognizes and supports the need to understand the network of firms providing goods and services to the Air Force and how the demands of the Air Force interact with those of the other Services and Defense Agencies. Since the inception of the S2T2 concept, the Air Force has collaborated with OSD, the other Services, and Defense Agencies to define, develop, and mature the S2T2 concept into a useful tool. This is an ongoing effort. In its current state, the S2T2 effort has been useful in validating known areas of concern such as the industrial base supporting solid rocket motors and fuzes. I look forward to the continued development of the S2T2 effort and its eventual maturation.

Small Business Innovation Research (SBIR) Program

What do you see as the major successes and challenges facing the Air Force SBIR program?

Successes and challenges exist for the Air Force SBIR program. In terms of success, the Air Force Small Business Innovation Research (SBIR) Commercialization Readiness Program (CRP) established a successful process to mature SBIR developed technologies to acceptable readiness levels for Air Force customers. Using this process, transition plans have been implemented in the last several years between innovative small businesses and customers, with 43 producing technologies now in the hands of the warfighter. One example of a program is enhanced communication via an ultra-light, man portable, collapsible antenna which reduces acquisition costs by $40 million over five years and support costs by 90-percent. This technology has also been utilized domestically during Hurricane Sandy and recent tornado events.

Challenges remain with matching Air Force acquisition and sustainment programs to high risk technologies typically at the technology and manufacturing readiness levels of 4

or 5. Program Managers are under tight budgets and schedule constraints, and they are more inclined to avoid risk and seek out higher readiness technologies at the 7 or 8 levels. Although maturation is the strength of the Air Force SBIR Commercialization Readiness Program, it remains difficult to convince program managers to align future program dollars to a technology that is still maturing.

What steps would you take if confirmed to ensure that the Air Force has access to and invests in the most innovative small businesses?

I believe the current call and response process where the Service solicits proposals to address capability gaps can be augmented by a more proactive, aggressive search process to seek out those small businesses that may be new startups or unfamiliar with the SBIR program. Enhancing the visibility of the SBIR program and our communication channels among stakeholders will serve to enhance our effectiveness in delivering cutting edge capabilities to our warfighters.

In my current position, I am planning to conduct a Small Business Roundtable next month, which for the first time will put Program Executive Officers, major defense contractors, and SBIR and other Small Business representatives together discussing priorities, budgets, concerns, and communication improvements to enhance our access and ability to invest in most innovative Small Businesses. Several targeted Industry Days are planned this year to seek out small businesses that have innovative solutions and capabilities for our mission needs.

If confirmed, I will continue to maintain a strong partnership with our Air Force Small Business team and ensure our Program Executive Officers focus their efforts to achieve our objectives with our Small Business partners within industry.

What steps would you take if confirmed to ensure that successful SBIR research and development projects transition into production?

If confirmed, I believe successful transition requires far better communication between the supply and demand entities involved. The warfighter end user must be central in articulating the demand via the Major Commands, PEOs, laboratories, and the small business community. We have the tools, including a network of transition agents, to facilitate the development of innovative solutions, and I intend to ensure that the demand function is well-articulated and to industry. The targeted Industry Day approach previously mentioned is one such effort, as are the multi-party roundtables.

Technical Data

Do you believe that the Air Force has been as aggressive as it should have been in (1) securing ownership of technical data in connection with items and processes associated with major weapon systems that it procures when doing would best serve the Government's interests and (2) asserting ownership rights over this data in a

manner sufficient to ensure competition for the production and maintenance of these systems over their lifecycle?

What steps if any will you take if confirmed to ensure that the Air Force obtains the technical data rights that it needs to avoid being locked into unnecessary sole-source follow-on production and sustainment to incumbents to the detriment of the taxpayer and the warfighter?

In the past, the Air Force abrogated its rights to data through Total System Responsibility agreements for a number of our major weapons systems. However, for the past several years several improvements have been made. The Air Force has been prudently pursuing its deliverables and data (license) rights requirements in the best interests of the government, seeking "license rights" vice "ownership" of contractor developed technical data.

If confirmed, I will continue efforts to actively implement the Defense Department's Better Buying Power focus area of open systems architecture enforcement and effective management of data rights in order to ensure competition and lower lifecycle costs. I will also continue efforts to actively secure the required deliverables and data (license) rights as appropriate in order to promote new strategies to compete sustainment and modernization efforts that were previously sole source to the original contractor.

Nuclear Command, Control and Communication Systems

Some elements associated with the acquisition of Nuclear Command, Control and Communications (NC3) systems are fragmented between two Air Force acquisition organizations - Space Systems (SAF/AQS) and Global Power Systems (SAF/AQP). The primary result of this fragmentation is the Family of Advanced Beyond Line of Site Terminals (FAB-T), which are to be installed in command post and airborne platforms. SAF/AQS has oversight of the procurement while the actual implementation in nuclear command and control platforms is found in SAF/AQP. This mismatch between acquisition programs (and requirements) has been documented in a recent General Accountability Office Report "Space Acquisitions – DOD Needs More Knowledge Before It Commits to Producing Satellite Terminal Critical to Nuclear Mission", GAO-14-24SU, December 2013. The primary outcome of this mismatch is that the Air Force cannot install the FAB-T terminals its airborne platforms, principally the B-2 and B-52 aircraft but also Navy E-6B aircraft as well, causing a cascade of cancelled programs associated with these aircraft that were to use the FAB-T systems.

Have you read this GAO report?

Yes.

Do you agree with its findings?

I agree with the GAO's recommendations to develop and approve a risk mitigation plan to address remaining FAB-T cost, schedule, and performance risks, and to direct the FAB-T program to establish agreements with user platform organizations. However, I disagree with the recommendation to delay production decisions.

Where you agree what will you do to correct the deficiencies found in the report?

The DOD initiated an updated risk mitigation plan for FAB-T in July 2013 that addresses the risks noted in the GAO report. The FAB-T program office continues to execute a risk mitigation process that involves leadership, stakeholders, and the contractor. If confirmed, I will remain committed and will work with the Program Executive Officer and FAB-T Senior Materiel Leader to manage the key risks on this critical program.

Additionally, the FAB-T Program Office will formally produce Memorandums of Agreement with each platform program office to further stabilize terminal and platform requirements. These agreements will be finalized following the production contract award to simplify the process for each platform.

Where you disagree, please explain why.

The Department believes that programmatic actions taken to date have reduced program risk to an acceptable level and support the current acquisition strategy. While we appreciate the GAO concerns over manufacturing and technology readiness, the Department is confident that the winning bidder of the FAB-T production contract will be ready to deliver the system. Based on over ten years of working on the Boeing development contract, the government has an in-depth understanding of the design and its readiness for production. Raytheon already has three other AEHF terminals currently in production. Delaying the down-select decision to a production vendor will jeopardize critical national leadership command and control capabilities and add significant cost, effectively negating the savings created through healthy competition.

Do you agree the matching of requirements and acquisition for nuclear command, control and communications is fragmented, as evidenced by the two acquisition organizations (SAF/AQS and SAF/AQP) responsible for the program?

No. Matching requirements and acquisition is a fact of life for all acquisition programs. This often must occur across Program Executive Officers and Major Commands; however, there are robust requirements and acquisition processes in place that ensure key interfaces and program interrelationships are properly managed and integrated at all levels. As with all SAF/AQ Capability Directorates, these two staff acquisition organizations (SAF/AQS and SAF/AQP) understand these processes in detail, and work across the acquisition and requirements communities to ensure this integration occurs.

What lessons do you think can be learned from the FAB-T program and applied to future nuclear command and control acquisition programs?

The lessons from the FAB-T program apply not only to NC3 programs but to all acquisition programs. They include: 1) program and requirements instability increase system cost and delay the schedule; 2) competition can be an effective tool to lower technical and schedule risk, and overall program costs; and 3) life cycle costs drive the ultimate affordability of these systems in the context of other requirements that also must be met.

If confirmed, are you committed to fixing this acquisition problem and once confirmed will you brief the congressional defense committees on plans to fix this structural acquisition problem?

While I disagree the SAF/AQ organizational structure was a contributing factor to the problems the Air Force faced on FAB-T, if confirmed I will work in cooperation with the USD (AT&L) and Congress to continue to apply the lessons learned from FAB-T and other programs to improve all aspects of the acquisition process.

Congressional Oversight

In order to exercise its legislative and oversight responsibilities, it is important that this Committee and other appropriate committees of the Congress are able to receive testimony, briefings, and other communications of information.

Do you agree, if confirmed for this high position, to appear before this Committee and other appropriate committees of the Congress?

Yes.

Do you agree, if confirmed, to appear before this Committee, or designated members of this Committee, and provide information, subject to appropriate and necessary security protection, with respect to your responsibilities as the ASAALT?

Yes.

Do you agree to ensure that testimony, briefings and other communications of information are provided to this Committee and its staff and other appropriate Committees?

Yes.

Do you agree to provide documents, including copies of electronic forms of communication, in a timely manner when requested by a duly constituted

Committee, or to consult with the Committee regarding the basis for any good faith delay or denial in providing such documents?

Yes.