

Advance Policy Questions for Robert Daigle
Nominee for Director of Cost Assessment and Program Evaluation

Department of Defense Reforms

The National Defense Authorization Act for Fiscal Year 2017 included the most sweeping reforms since the Goldwater-Nichols Department of Defense Reorganization Act of 1986.

Do you support these reforms?

Yes. I am familiar with these reforms from my time as a member of the House Armed Services Committee staff and believe they will encourage innovation and agility in DOD's acquisition system.

What other areas for defense reform do you believe might be appropriate for this Committee to address?

During the past 2 years, Congress has provided new authorities for rapid prototyping and maturation of technology outside of acquisition programs of record. I believe these reforms will help DOD more quickly address emerging threats and take advantage of new technological opportunities, while improving adherence to program cost and schedule estimates.

Duties

What is your understanding of the duties and functions of the Director of Cost Assessment and Program Evaluation?

I understand CAPE is responsible for providing unbiased Independent Cost Estimates for all major acquisition programs; ensuring that program cost and schedule estimates are properly prepared and considered in DOD's deliberations on major acquisition programs; providing guidance and oversight for Analyses of Alternatives (AoA) to ensure that DOD considers the full range of program and non-materiel solutions; and leading or participating in various other analyses to inform DOD decisions. Additionally, the Director of CAPE is responsible for leading the development of improved analytical skills and competencies within the cost assessment and program evaluation workforce of DOD. The Director also serves as a key advisor to the Secretary and Deputy Secretary of Defense, especially for programmatic development of DOD's Future Years Defense Program.

What recommendations, if any, do you have for changes in the duties and functions of the Director of Cost Assessment and Program Evaluation, as set forth in section 139a of title 10, United States Code, or in Department of Defense regulations pertaining to functions of the Director of Cost Assessment and Program Evaluation?

At this time, I have no recommendations for changes in the duties of the Director of CAPE. If confirmed, I would evaluate and recommend to the Committee any modifications to such duties and responsibilities that may be appropriate.

Qualifications

The Director of Cost Assessment and Program Evaluation is the principal advisor to the Secretary of Defense and other senior officials of the Department of Defense to provide independent analysis and advice, ensure the cost estimation and cost analysis processes of the Department of Defense provide accurate information and realistic estimates of cost for the acquisition programs of the Department of Defense, and execute other duties as directed by the Secretary of Defense.

What background and experience do you have that you believe qualify you for this position?

My career has been devoted to quantitative analysis, including almost 10 years evaluating defense programs, budgets, and costs. I worked for almost 6 years in CAPE, starting in the Cost Assessment team evaluating manpower requirements, personnel costs, and cost estimates of information technology programs. I served as the Director's special assistant, conducting special projects and helping manage the agenda for the Deputy Secretary of Defense's senior advisory group. I then led CAPE's Program Resources and Information Systems Management Division, which supports CAPE-wide data services, manages the programming phase of the PPBE process, and produces the Future Years Defense Program.

Currently, I lead Chairman Thornberry's defense reform team on the House Armed Services Committee (HASC). I have worked collaboratively with the Senate Armed Services Committee staff, Department of Defense leadership, and other key stakeholders on the major acquisition reforms that Congress has passed during the past 2 years. I joined HASC after 2 years as the Executive Director of the Military Compensation and Retirement Modernization Commission, which in 2015 completed the most thorough independent assessment of military compensation, retirement, and quality of life programs in over 40 years. The Commission was deemed to be highly successful, with Congress wholly or partially adopting 13 of the Commission's 15 recommendations.

When not working for the Federal government, I have conducted quantitative analysis in the financial sector, primarily on performance and risk measurement in support of state and local pension systems. I have a Master of Arts in Security Studies from Georgetown University's School of Foreign Service, a Masters of Business Administration from Columbia Business School, and Bachelor of Arts degrees in Economics and Mathematics from the University of Vermont. I served for 2 years in the U.S. Army and was discharged honorably as an E-4 (a set of experiences that continues to shape my policy work today).

Major Challenges and Priorities

If confirmed, what broad priorities will you establish?

If confirmed, my first priority as the Director of CAPE would be to continue the tenet of providing independent and objective analysis to support decision making by the Secretary and Deputy Secretary of Defense.

If confirmed, my second priority would be to explore ways to improve CAPE's process of developing cost estimates through information technology and data management. For example, I understand that one challenge to developing better estimates of operating and support costs is availability of detailed maintenance cost data on legacy systems. In support of these efforts, my third priority would be to strengthen relationships throughout the Office of the Secretary of Defense (OSD), the Joint Staff, the military departments, and Congressional oversight committees. Last, but not least, CAPE comprises a team of highly talented and experienced professionals. Supporting and maintaining this talent must be a priority for the next CAPE Director.

In your view, what are the major challenges, if any, you would confront if confirmed as Director of Cost Assessment and Program Evaluation?

DOD faces major challenges for increasing the lethality of our force while recovering readiness strained during the last decade-and-a-half of conflict. Meanwhile, nuclear modernization, missile defense, space capabilities, cyber capabilities, and science and technology investments represent competing demands for funds. The primary challenge for the Director of CAPE will be to ensure the Secretary and Deputy Secretary of Defense have a comprehensive set of options for programs, investment profiles, and force structures that are informed by independent, thorough, and insightful analysis.

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

Timelines to address these challenges will be compressed because of the timelines related to the FY18 President's Budget and the FY19-23 programming cycle. If confirmed, I would immediately review the results of the 60-day readiness review directed by the President, and would participate in the development of the new National Defense Strategy. Based on the review and strategy, I would recommend changes to the FY19-23 programming guidance, as necessary. I would then manage the programming phase of the PPBE process to independently analyze Service POM submissions to support Secretary of Defense resource decisions to improve the capacity and lethality of the force.

Relations with Congress

What are your views on the state of the relationship between the Director of Cost Assessment and Program Evaluation and the Senate Armed Services Committee in particular, and with the Congress in general?

I believe the relationship between the Director of CAPE and Congress in general and the Senate Armed Services Committee in particular is good. Based on my experience at HASC, CAPE has productive interactions with Congress and consistently provides insightful, objective analysis. I would welcome the opportunity to continue to strengthen these relationships should I be confirmed.

Should the Director of Cost Assessment and Program Evaluation be authorized to have more direct and independent communications with the Congress, similar to the Director of Operational Test and Evaluation?

Based on my experience, CAPE already has the authority to have direct and frank communications with Congress, within appropriate bounds of pre-decisional, proprietary, or otherwise classified information. Mandating additional direct communications with Congress may reduce the organization's overall effectiveness as a trusted, independent advisor to the Secretary of Defense.

If confirmed, what actions would you take to sustain a productive and mutually beneficial relationship between the Congress and the Director of Cost Assessment and Program Evaluation?

If confirmed, I would actively work to ensure a strong relationship between CAPE and Congressional oversight committees. I would ensure CAPE's staff responds to Congressional requests completely and promptly, again within the bounds of pre-decisional, proprietary, or otherwise classified information, and I would make the tracking of these requests and responses a priority for the CAPE leadership and front office staff.

Defense Funding and Force Sufficiency

What specific recommendations would you provide the Secretary of Defense to review and potentially reduce the size and scope of the defense-wide and service accounts to maximize available resources for the fielding of combat power?

I do not have any recommendations at this time. I understand that CAPE has been actively involved with DOD's past several rounds of efficiencies, but I have not had the opportunity to review that work myself. If confirmed, I would review the processes and methodologies used to date and make recommendations for improvements, as appropriate.

Strategy-Based Defense Resource Allocation

Throughout the decade of the 1950s, and early into the 1960s, the Department of the Air Force received a disproportionately higher share of the defense budget as compared to the other services due to the development and fielding of expensive nuclear forces such as ICBMs, bombers, fighters, and tankers, and the associated nuclear command and control infrastructure. However, for the last several decades, and notably since the 1986 Goldwater-Nichols Department of Defense Reorganization Act, the services' annual base budgets remained roughly proportional independent of significant changes in defense strategy.

Do you believe the services should continue to receive proportionate shares of the total defense budget irrespective of changes in defense strategy?

Available resources should be allocated to the highest strategic priorities, and the Service shares of the total defense budget should be consistent with the defense strategy. If confirmed, I would work to ensure DOD's resources are programmed accordingly.

If the new administration enacts a new National Security Strategy and new National Defense Strategy that indicate a need for disproportionate allocation of

defense resources to one service over another to successfully implement the strategy, will you advocate for such disproportionality despite strong parochial service views? CAPE's role has always been to provide the Secretary of Defense with a balanced defense budget that is aligned with strategy, taking into consideration, but not captured by, Service views. If confirmed, I would remain committed to this tradition.

If confirmed, would you support a comprehensive roles and missions review to effectively and efficiently provide appropriate combat capability to our combatant commanders, while limiting redundant capabilities to that required for military necessity?

Yes. If confirmed, I would support any review the Secretary of Defense or the Congress directs.

Department of Defense Planning, Programming, Budgeting, and Execution System

The Department of Defense's Planning, Programming, Budgeting, and Execution (PPBE) process was created in the 1960s by Secretary of Defense Robert McNamara. While the process has undergone some changes in the intervening decades, it remains essentially intact.

Do you believe the PPBE process needs to be reformed? If so, how?

I do not have any recommendations to reform the PPBE process at this time. If confirmed, I would work with other stakeholders to ensure that the PPBE process best supports the efficient and effective allocation of taxpayer dollars to the highest national security priorities of DOD.

What flexibility needs to be incorporated into Defense Department policies and regulations to allow for more agile programming and budgeting to help the Department take advantage of emerging technologies or deal with emerging threats?

I believe the acquisition reforms passed by Congress during the past 2 years will help DOD take advantage of emerging technologies. If confirmed, I would welcome the opportunity to help the Secretary of Defense develop implementation guidance for those reforms.

Prior to 2009, the PPBE system prescribed an alternate year process for developing the Department's annual Program Objective Memorandum (POM) that details the five-year Future Years Defense Plan (FYDP). This alternate year process mandated that only new start programs and major resource allocation shifts be implemented in even years of the POM, where odd years could only make limited changes to the plan as an amended POM (APOM).

What are your views on the pros and cons of returning to a two-year alternating POM development process in the PPBE system?

In theory, a two-year alternating POM development process allows leadership to institutionalize decisions more fully by preventing a zero-based reworking every year.

However, it also constrains opportunities to adapt to new situations and emergent threats, concepts, and priorities, which is at odds with the need for DOD acquisition to be more agile. In practice, based on my previous experience at CAPE, the two-year alternating process is complicated to implement and difficult to enforce.

What changes should be made to the Congressional authorization and appropriations process to create a system agile and responsive enough to account for the fast-pace changes we are experiencing in the global threat environment, as well as the rapid pace of technological change?

I have no recommendations at this time. If confirmed I would be happy to analyze this issue further and work with Congressional defense committees to consider if changes would be helpful.

Cost Assessment Practices

When formulating the independent cost estimate for the Air Force's Ground Based Strategic Deterrent (GBSD) program to replace the aging Minuteman III intercontinental ballistic missile fleet, the Office of Cost Assessment and Program Evaluation (CAPE) provided a cost estimate that was tens of billions of dollars higher than the Air Force's service cost position. CAPE then modified its cost estimate to reflect a range of total costs, ranging from a "low" estimate to a "high" estimate. The Under Secretary of Defense for Acquisitions, Technology, and Logistics at the time, Frank Kendall, then directed the acquisition program baseline to be funded at the CAPE "low" estimate, rather than the higher independent cost estimate amount.

In your opinion, what factors caused the extreme difference in the cost estimates calculated by CAPE, and the non-advocate cost assessment reflected in the Air Force's service cost position?

I am not intimately familiar with this independent cost estimate report. It is my understanding that differences between the CAPE and Service cost estimates were primarily due to different assumptions used by each office and a lack of comparable historical data. This underscores the importance of collecting data, since future cost estimates will be based on cost data collected today.

Do you believe the decision to set the GBSD acquisition program baseline, and therefore program funding, at the CAPE "low" estimate meets the spirit and intent of the 2009 Weapons System Acquisition Reform Act requirement for major defense acquisition programs to be funded at the higher of the independent cost estimate or the service cost position?

It is my understanding the estimates in this unique case were not bounds for potential costs for the program, but rather illustrated the cost variance that resulted from changing key assumptions. It is my understanding that the technical baseline for the program to be acquired were not well known at the time of this particular estimate, that comparability of historical cost data therefore was difficult to determine, and that updated cost estimates are expected after DOD has more refined technical details. I believe that conducting

objective cost estimates with the best available information, then updating those cost estimates as data improves, is consistent with the intent of WSARA.

Would you recommend continuing the practice of calculating cost estimate “ranges” as opposed to a set cost estimate amount?

If confirmed, I would promote CAPE’s standard practice of calculating expected costs for a program and explaining risk factors within that cost estimate.

What actions would you take to increase the fidelity of independent cost estimates for major defense acquisition programs?

CAPE policy should enforce consistent methodologies, enhance risk analysis, identify roles and responsibilities, and improve education and training for cost estimating across the weapon system life cycle. Consistent cost estimating methods across departments, coupled with a trained work force employing those methods, reduces review time, reconciliation, and associated rework which can save schedule time for acquisition programs and reduce costs. Furthermore, up-front focus on data access, quality, and consistency improves both the fidelity and timeliness of cost estimates. If confirmed, I would also assess the potential for data standardization to enable development and use of more automated cost estimating tools.

Do you see any negative repercussions of requiring program funding to be set at the higher of the independent cost estimate or the service cost position?

Requiring program funding to be set at the higher of the independent cost estimate or the service cost position can have opportunity costs. While such a practice can in some cases reduce risk for a given program, it also reduces funds available to other procurement programs. This is a difficult tradeoff that is best left to the judgement of the acquisition executive on a case-by-case basis.

Program Evaluation

Section 139a(d)(5) of title 10, United States Code, makes the Director of Cost Assessment and Program Evaluation responsible for the “Review, analysis, and evaluation of programs for executing approved strategies and policies, ensuring that information on programs is presented accurately and completely, and assessing the effect of spending by the Department of Defense on the United States economy.” Section 139a(d)(7) also makes the Director responsible for “Assessments of alternative plans, programs, and policies with respect to the acquisition programs of the Department of Defense.”

What is your view of the significance of independent review, analysis, and evaluation of programs, and assessments of alternative programs, to the effective management of the Department of Defense?

Independent analyses and evaluation of programs are critical in identifying underlying risk in programs sometimes not seen in the Service position—whether cost, schedule or performance risk. I believe that identifying these risks and offering the means to mitigate them best supports DOD leadership in making informed acquisition and resourcing decisions.

Do you see the need for any changes or improvements to the organization, process, or methodology used by the Department for such review, analysis, and assessments?

I am not aware of the need to make any changes or improvements to the process or methodology at this time. It is possible that additional decision support will be necessary, either via new staff or a reorganization of missions within existing staff. If confirmed, I would review the process and methodology and make recommendations for improvements, as appropriate.

In your view, does the Director of Cost Assessment and Program Evaluation have the staffing, authority, access to information, and resources needed to carry out this function?

If confirmed, I plan to evaluate the need for changes to CAPE's staffing, authority, access to information, and resources in order to fully comply with CAPE's statutory responsibilities.

How do you believe that the Director of Cost Assessment and Program Evaluation should interact with service acquisition executives, program executive officers, program managers, and other program officials in preparing independent evaluations of major defense acquisition programs?

If confirmed, I would welcome the opportunity to build strong, mutually-beneficial relationships with acquisition executives, program managers, and other program officials. While it is important for CAPE analyses to remain firmly independent and objective, collaboration between CAPE and the military departments is the best means of ensuring access to data and a broad understanding of methodologies, assumptions, and alternatives.

What role should the Director of Cost Assessment and Program Evaluation play in assessing and evaluating management, business, and organizational functions, initiatives, and activities within the Defense Department?

Management, business, and organizational functions within DOD are programs like any other, and it is the Director of CAPE's role to assess whether those programs are funded consistent with the best available information and the Secretary of Defense's guidance. In addition, through CAPE's role as an independent analyst for the Secretary of Defense, CAPE has in the past conducted analyses of cross-cutting initiatives such as headquarters drawdowns and IT efficiencies – and will likely be called on to do so again.

Acquisition Issues

The National Defense Authorization Acts for Fiscal Years 2016 and 2017 made many changes to defense acquisition processes, including reinserting service chief influence and accountability into acquisition processes.

Do you support the acquisition reform provisions in these National Defense Authorization Acts?

Yes. I believe they will foster innovation and agility in DOD's acquisition system.

What roles do you see for developmental planning, prototyping, and experimentation for fielding of future defense capabilities?

Prototyping can be an important mechanism to experiment with new technologies before committing to long-term acquisition programs of record. Such activities can also mature technologies outside of programs of record, which in turn makes programs of record more likely to meet cost, schedule, and performance goals. Coupled with open systems architecture and developmental planning, prototyping provides an engine of innovation to deploy capabilities to warfighters quickly and to ensure that DOD weapon systems retain their technological edge. If confirmed, I would look forward to working with stakeholders across DOD to implement the innovation-supporting reforms in the recent NDAA's.

Do you agree the services should exploit non-developmental or commercial off-the-shelf solutions to meet defense requirements? Would this help put capabilities into the hands of our warfighters more quickly?

Yes, when such COTS products meet military requirements, they can quickly and cost-effectively put capabilities into the hands of our warfighters.

How can the Department better access and integrate commercial and military technology to remain ahead of its potential adversaries?

The new authorities for experimentation and rapid prototyping that Congress has passed in the last 2 years will help DOD better access and evaluate the military utility of commercial technologies. Furthermore, non-traditional approaches like the Strategic Capabilities Office, the Services' rapid capabilities offices, and DIUx are highlighting the potential to rapidly integrate new sources of commercial and military technology into defense systems. If confirmed, I look forward to helping implement the new authorities, as well as working with the non-traditional organizations and the new Under Secretary for Research and Engineering, to identify additional opportunities.

What major shortfalls do you see in the Department's ability to estimate program, development, procurement, and life-cycle costs? What steps will you take to address these shortfalls?

I understand that the most significant shortfall in DOD's ability to estimate costs is the availability of data on actual costs incurred for programs as a basis for developing cost estimates. I understand this to be particularly true as it relates to detailed actual costs for operating and support of legacy systems. While CAPE has consistently worked to improve the quality and timeliness of the cost data, I understand there is still much to be accomplished. If confirmed, I would continue to seek improvements in this area.

What additional acquisition-related reforms do you believe the Committee should consider?

I believe that Congress and DOD should consistently strive to streamline processes, which includes periodic reviews of the effectiveness of statutes, policies, and regulations. Establishment of the Section 809 Panel on Streamlining and Codifying Acquisition is a good first step, and I look forward to their recommendations.

Acquisition Process

What is your understanding of the role of the Director of Cost Assessment and Program Evaluation in the acquisition process?

It is my understanding that the Director of CAPE plays multiple key roles in the acquisition process. The Director is responsible for providing guidance and oversight for Analyses of Alternatives to ensure that DOD considers the full range of program and non-materiel alternatives that could provide the needed military capabilities, as quickly as possible, at the lowest possible cost. The Director is also responsible, throughout the entire acquisition process, for ensuring that program cost and schedule estimates are properly prepared and considered in DOD's deliberations on major acquisition programs.

What is your view of the significance of sound, unbiased cost estimating throughout the acquisition process?

Independent, rigorous, unbiased cost and schedule estimates, paired with thorough risk assessments, are essential for effective acquisition decision making and oversight. Achieving the goal of reducing cost and schedule growth in DOD's portfolio of acquisition programs requires that good cost estimates be available and considered throughout the acquisition process.

What is your understanding of the role of the Director of Cost Assessment and Program Evaluation in the requirements and resource-allocation processes?

The Director is an advisor to the Joint Requirements Oversight Council for assessing the resource requirements and programmatic risk of a desired capability. The Director is the principle advisor to the Secretary and Deputy Secretary of Defense for the programming phase of the PPBE process and provides objective cost, schedule, and performance analyses to inform resource tradeoff decisions.

Do you see the need for any additional processes or mechanisms to ensure coordination between the budget, acquisition, and requirements systems of the Department of Defense and ensure that appropriate trade-offs are made between cost, schedule, and performance requirements early in the acquisition process?

In the FY17 NDAA, Congress passed legislation requiring a new process to be co-chaired by the Deputy Secretary of Defense and the Vice Chairman of the Joint Chiefs of Staff to establish affordability goals and fielding targets for major defense acquisition programs. If confirmed, I would welcome the opportunity to help implement that provision, which will improve coordination early in the acquisition process. Furthermore, the Director of CAPE currently works closely with the DoD Comptroller, the Joint Staff, and the Under Secretary of Defense for Acquisition, Technology, and Logistics to ensure coordination between the budget, acquisition, and requirements systems of DOD. If confirmed, I would continue to foster these relationships.

What role do you see for the Director of Cost Assessment and Program Evaluation in controlling cost growth on the Department's major defense acquisition programs?

From evaluating the sufficiency of Analyses of Alternatives to conducting Independent Cost Estimates at major milestones or Nunn-McCurdy breaches, the Director of CAPE is responsible for ensuring that major defense acquisition programs are subject to rigorous independent analysis. In addition, if confirmed, I would support a more continuous involvement of CAPE in following and tracking program performance, updating cost and schedule estimates, and evaluating new program risks as they are identified.

Financial Management and Auditability

The Department of Defense and the services remain unable to achieve a clean financial statement audit. The Department also remains on the Government Accountability Office's list of high risk agencies and management systems for financial management and weapon system acquisition. Although audit-readiness has been a goal of the Department for decades, it has repeatedly failed to meet numerous congressionally directed audit-readiness deadlines.

What is your understanding and assessment of the Department of Defense's efforts to achieve a clean financial statement audit?

While there is clearly more to accomplish, I am encouraged by what I have observed in my role on the HASC. Recent efforts by Comptroller have substantially enhanced emphasis and progress towards this important requirement. Financial system modernization and integration, as well as improved processes and procedures, have gone a long way to moving closer to achieving this requirement.

Especially for the purposes of cost control and program evaluation, what benefits will accrue to the Department of Defense once it is able to achieve and maintain a clean financial audit statement?

I understand that the primary goal of a clean audit is improved financial management through better internal controls and improvements to financial systems. However, audit readiness will benefit DOD by providing more reliable and assured information on whether programs are achieving objectives and outcomes and the cost for achieving them. Further, it will support the goal of the PPBE process by more tightly coupling or integrating accounting information into an effective feedback loop for the next programming and budgeting cycle.

If the Department of Defense improves its internal controls and achieves a clean audit, do you expect it will help improve the ability to control acquisition costs and estimate costs of development, procurement, and sustainment of systems and services? Why?

Accurate and timely cost data are essential for the development of thorough and timely cost estimates. Through improved quality and visibility of program cost data, a clean audit therefore will further DOD's ability to control acquisition costs.

What impediments may hinder the Department's ability to achieve a clean audit and how would CAPE help to address them?

Based on my experience, both in the public and private sectors, I understand that the

variety of data structures and systems being used across DOD can be a potential impediment to achieving a clean audit. If confirmed as the Director of CAPE, I would work to implement and enforce enterprise-wide data structures to support an audit, especially in cost reporting where CAPE has statutory authority.

How can CAPE efforts to improve data collection and analysis contribute to broader efforts to improve financial management in the Department of Defense?

By improving availability and transparency of data, CAPE can provide relevant stakeholders baseline facts, enabling the assessment of long-term costs and performance of programs from a common, consistent, agreed-upon basis. CAPE can also provide common data structures to support analytic processes, which would help integrate data from multiple DOD financial management systems.

Data

What is your assessment of the Defense Department's ability to efficiently collect data on its systems and processes to inform analysis and decision making?

It is my understanding that DOD's ability to collect data on its systems and processes has been improving, although there is certainly room for more work to be done.

What initiatives will you undertake to improve the Department's use of data in its processes?

If confirmed, I would work with the Deputy Chief Management Officer (DCMO), Comptroller, and other stakeholders to develop, maintain, and enforce enterprise-wide common data structures and systems to enable better DoD-wide data analysis and reporting.

What are the barriers that prevent the Department from collecting the data it needs to analyze and improve its processes and programs? How will you work to overcome those barriers?

DOD faces challenges with legacy data systems, inconsistent data coding and tagging, and limited analytics resources. In some cases, cultural barriers further restrict the free flow of data throughout DOD. I understand that CAPE has had some success addressing these challenges in cost reporting data, although there is still more to be done. If confirmed, I would welcome the opportunity to work with stakeholders across DOD to identify additional opportunities for improvement in data transparency and consistency, as a building block to development of more automated decision-making tools.

In what areas do you feel that better use of data will significantly improve the Department's mission execution or management processes?

Better use of data can substantially improve almost any of DOD's mission execution or management processes. For example, improved collection and structuring of operating and support cost data would improve CAPE's ability to produce quality and timely cost estimates. It would also inform engineering tradeoff decisions early in the acquisition process, as well as provide a feedback loop into DOD's supply chain management

processes. If confirmed, I would seek areas that could quickly deliver results to DOD's mission execution or management processes.

F-35 Joint Strike Fighter

The F-35 Joint Strike Fighter Program, the largest and most expensive acquisition program in Department of Defense history, was formally initiated as a program of record in 2001, and subsequently adjusted to a total planned buy of 2,443 aircraft for the United States. The program has not yet completed the System Development and Demonstration (SDD) phase, now projected for an additional seven-month delay and up to an additional \$1 billion in cost overruns. The full rate production decision is not due at least until 2019, 18 years after its inception. At currently projected annual procurement rates, the last delivery of F-35 variants is now planned for after 2040.

The Senate Armed Services Committee report accompanying S. 1376, the National Defense Authorization Act for Fiscal Year 2016, required the Secretary of Defense to assess the current requirement for the F-35 Joint Strike Fighter total program of record quantity, and then revalidate that quantity or identify a new requirement for the total number of F-35 aircraft the Department would ultimately procure. The Department provided an interim response that stated a reassessment of the total procurement quantity would be provided at a later date.

If confirmed, what will be your role in the reassessment of the F-35 total program procurement quantity, currently established at 2,443 aircraft?

I understand that the Director of CAPE has been tasked to lead the reassessment. If confirmed, I would ensure that the work is completed in a timely manner.

B-21 Long Range Strike Bomber

On October 27, 2015, the Air Force announced the award of the engineering and manufacturing development (EMD) contract for the new B-21 bomber, a program estimated to cost as much as \$80 billion for development and procurement. The National Defense Authorization Act for Fiscal Year 2017 directed enhanced reporting of B-21 program cost, schedule, and performance data to the Government Accountability Office for more frequent assessments and focused oversight.

If confirmed as Director of Cost Assessment and Program Evaluation, what will be your role in the B-21 bomber program to ensure cost, schedule, and performance remain on track?

As with any major acquisition program, CAPE will continue to produce Independent Cost Estimates for the B-21 program. If confirmed, I would also help ensure through the programming phase of the PPBE process that the B-21 program is fully funded to DOD's latest cost estimate. As Director of CAPE, I would ensure that the Air Force and my office continuously assess the program's performance to ensure that DOD's leadership can proactively address any challenges that occur during program execution.

Munitions

Department of Defense munitions inventories, particularly those of precision-guided munitions, have declined significantly due to high operational usage, insufficient procurement, and a requirements system that does not adequately account for the ongoing need to transfer munitions to our allies and operations short of major combat, such as in the current operations in Afghanistan, Iraq, and Syria.

If confirmed, what assessments would you make to support prioritizing munitions funding to ensure the Department has sufficient inventories of munitions to meet combatant commanders' needs?

If confirmed, I would ensure CAPE continues to conduct independent analyses of munitions issues and provides the Secretary of Defense with resourcing options that balance munitions requirements within the total defense program. I also would ensure that these independent analyses include an assessment of munition transfers to allies.

How will you assess how the Department of Defense will adapt to self-imposed Department restrictions on area attack and denial munitions in accordance with the Oslo Process and the Convention on Cluster Munitions?

If confirmed, I would review existing work on the performance of munitions replacement programs and would work with other stakeholders to examine DOD's policy and recommend alternatives as needed.

Space Acquisition

According to a recent study by the Government Accountability Office (GAO), fragmented leadership has undermined the Department of Defense's ability to deliver space capabilities to the warfighter on time and on budget. One repeated cause for concern has been fractured decision-making and many layers of bureaucracy.

Do you believe the existing space acquisition structure is sufficient? If not, what changes do you believe are appropriate?

I do not have any recommendations at this time. Space acquisition, like all DoD acquisition, is undergoing review and changes associated with the acquisition reforms in the FY17 NDAA. If confirmed, I would evaluate the impact of these changes and recommend adjustments, as needed, to improve space acquisition across DOD.

How would CAPE studies and assessments support more competition in the launch of Department of Defense payloads?

I understand that CAPE conducts independent assessments of the launch services market in general, as well as specific acquisition approaches for DoD providers, to support the goals of mission assurance and reasonable prices. Furthermore, CAPE conducts cost estimates and performance assessment on DOD's Evolved Expendable Launch Vehicle program, which is designed to provide reliable launch services for national security space payloads.

The National Defense Authorization Act for Fiscal Year 2017 prohibits the use of Russian rocket engines after December 31, 2022. How would CAPE studies and assessments support the ending of U.S. dependence on the use of Russian rocket engines as soon as possible, perhaps even before December 31, 2022?

CAPE analyses provide independent, objective assessments of alternatives of launch services to inform leadership decisions. If confirmed as the Director of CAPE, I would ensure that CAPE continues to work with the Air Force on this issue both through the acquisition process and through CAPE's role as an independent analyst for DOD.

Department of Defense Information Technology Programs

The Department of Defense's record in successfully developing and deploying information technology systems, according to a 2015 GAO report, "too frequently fail or incur cost overruns and schedule slippages while contributing little to mission-related outcomes" whether for business or operational use. The Defense Integrated Military Human Resources System, the Air Force's Financial Information Resource System (FIRST) and Air Operations Center 10.2 upgrade program, and the Defense Enterprise Accounting and Management System (DEAMS) are but a few examples of failures that represent years of schedule delays and billions of dollars in cost overruns.

What studies and assessments would you conduct to support changes in Department of Defense efforts to improve development and deployment of major information technology systems?

If confirmed as the Director of CAPE, I would ensure that CAPE continues to work with the stakeholders across DOD to improve development and deployment of major information technology systems. I would also promote studies of commercial IT business models, such as cloud computing, software-as-a-service, and shared services as alternatives to traditional DOD IT acquisition efforts. Business IT programs suffer from similar forces that cause cost and schedule overruns in other major defense acquisition programs, but they also exist within an environment that is rapidly changing in the commercial marketplace. I would look to lessons learned from commercial experiences and recommendations from organization like GAO to inform alternatives for leadership.

How will you study and assess that appropriate business process reengineering is undertaken and accomplished before initiating new business systems, IT program development, and deployment?

If confirmed as the Director of CAPE, I would work closely with the DCMO to provide supporting analysis of business process reengineering when necessary. I also would explore with DCMO ways to track customization of IT products that is pursued in lieu of business process reengineering, as well as the potential for shared services to encourage business process reengineering as an alternative to acquiring new IT products.

What role will CAPE play in assessing the development and deployment of defense business IT systems?

It is my understanding that the Office of the Secretary of Defense, including CAPE, is currently pursuing efforts to redefine how major IT systems are developed and deployed.

If confirmed, I would use CAPE's role as a direct report to the Secretary and lead for Analyses of Alternatives to empower stakeholders to consider alternate approaches.

What role will CAPE play to assess the business processes that these business IT systems support and whether they are sufficiently aligned with best commercial business practices?

If confirmed, I would ensure that CAPE analyzes current business IT approaches relative to commercial practices, such as cloud computing, software-as-a-service, and shared services. I would also explore the potential to speed software acquisition and deployment to weapon systems through commercial software development, testing, and deployment practices. I understand that DOD is evolving its acquisition processes to increase the use of leading commercial strategies like business process reengineering, configuration over customization, and when necessary, agile software development. If confirmed, I would ensure that CAPE supports these efforts.

Industrial Base

How should CAPE consider the health and viability of the industrial base when developing cost estimates?

It is critical for CAPE to incorporate the realities of our industry partners' businesses and the overall health of the industrial base into DOD's cost estimates and investment strategies. We always should encourage industry to be more efficient, but we must also take business base considerations, such as workforce forecasts, into account to ensure our acquisition programs are properly costed and fully funded. It is also important to recognize that the industrial base is changing as DOD engages with non-traditional contractors for access to emerging technologies. In turn, this shifting of the industrial base has implications for competitiveness, price comparisons, and cost estimates.

Science and Technology

What is your understanding and assessment of the role that Department of Defense science and technology programs and organizations have played and will play in developing capabilities for current and future defense systems?

S&T organizations lead the DOD through fundamental technology shifts by anticipating and driving emerging and future requirements and missions. The S&T enterprise provides a sustainable, disruptive advantage for U.S. forces by developing leap-ahead science and making current weapons systems more effective and affordable.

What metrics would you use to judge the value and the investment level in Department of Defense science and technology programs?

Judging the value of S&T investments is a critical and challenging task. Traditional metrics such as numbers of patents and journal publications are important indicators of productivity for those labs that perform basic research, but they do not address Defense-specific concerns such as transferring technology to the warfighter. If confirmed, I would be open to pursuing novel, non-traditional ways to evaluate and balance DOD's research enterprise.

What role can science and technology activities in areas like cost analysis, data analytics, operations research, and others play in developing new tools, techniques, and processes that can be used for the Director of Cost Assessment and Program Evaluation?

Recent advanced computing and mathematical techniques have enabled new approaches in data analytics and operations research that were previously computationally prohibitive. It is my understanding that CAPE has been an early adopter of many of these data analytic techniques, and I believe continued application of these techniques provide the government with better decision-making tools.

How can advanced commercial- and government-developed data collection, management, and analytics techniques and systems be used to support the activities of the Director of Cost Assessment and Program Evaluation?

As the independent advisor to the Secretary of Defense, CAPE's mission is critically dependent on data collection, management and analytics. Advanced commercial and government software systems are key in supporting CAPE's data handling ability. CAPE is continuously assessing new data sources, management techniques, and analytic approaches to better support its key roles in DOD.

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 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 Director of Cost Assessment and Program Evaluation?

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 in a timely manner?

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