

Advance Policy Questions for John Henderson
Nominee for Assistant Secretary of the Air Force for Installations, Environment, and
Energy

Department of Defense Reforms

The National Defense Authorization Acts for Fiscal Year 2017 and 2018 included the most sweeping reforms since the Goldwater-Nichols Department of Defense Reorganization Act of 1986.

Do you support these reforms?

Yes.

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

I have no recommendations for additional defense reforms at this time.

Duties and Qualifications

What is your understanding of the duties and functions of the Assistant Secretary of the Air Force for Installations, Environment, and Energy (ASAF(IE&E))?

My understanding of the duties and functions of this position is that the Assistant Secretary of the Air Force for Installations, Energy, and the Environment assists the Secretary of the Air Force in formulating policy and procedures for effective management of the Air Force energy programs, real property, strategic basing initiatives, housing and other facilities; environmental protection; and safety and occupational health for both military and civilian personnel.

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

After serving in the Army for over 23 years on active duty as a Corps of Engineers Officer, I possess a breadth of leadership, technical, and combat experiences that have exposed me to many of the areas which are managed by this position. I served in multiple countries leading thousands of U.S. Service Members and Army Civilians to accomplish tough missions and solve complex problems of National significance in support of our Armed Forces and defense of our Nation. Specific qualifications include professional engineer licensure, and multiple positions of leadership of increasing responsibility combined with extensive experience in construction and engineering management, facilities recapitalization and sustainment, environmental remediation and operational energy programs, DoD real estate and real property management, federal water resources management, federal acquisition regulations, programming and budget, supervision of federal employees, operations, and planning.

For example, I served as the Commander of the Omaha District, U.S. Army Corps of Engineers during my last active duty assignment. As District Commander, I oversaw an annual program of more than \$1.5 billion dollars spread over 2500 civil works, military construction, and interagency projects in nine states, environmental restoration projects in 41 states, and operational energy projects at DoD installations world-wide. I led a team of over 1,300 Army professionals who operated the six main stem dams and their associated hydropower plants on the Missouri River and 21 tributary dams for congressionally-authorized purposes; remediated hazardous, toxic and radioactive waste for DoD and the Environmental Protection Agency; supervised regulatory compliance in support of the Clean Water Act; delivered federal real estate services, and provided engineering and construction services in direct support to 11 Air Force Bases and four Army Installations.

I possess a master's degree in civil engineering from the South Dakota School of Mines and Technology and am a graduate of the U. S. Army War College Fellowship Program where I was assigned to the Massachusetts Institute of Technology's National Security Studies Program.

Do you believe that there are actions you need to take to enhance your ability to perform the duties of the ASAF(IE&E)?

Yes...if confirmed, the first actions that I would take to enhance my abilities include:

- get to know members of our staff to promote a climate of trust, respect, and transparency in order to build a strong team that will consistently accomplish tough missions
- build a productive, transparent, and open relationship with the Congress to ensure the priorities of U. S. Citizens are considered in our policies and actions
- become more familiar with the status, condition, and utilization of Air Force infrastructure by spending time with Airmen and their families
- learn Department of Defense and Air Force business processes and procedures in order to effectively transition on to the team, support the priorities of the Secretary of the Air Force and the Chief of Staff of the Air Force, and pursue opportunities to operate more effectively in support of our mission and service members

If confirmed, what duties and functions do you expect that the Secretary of the Air Force would prescribe for you?

If confirmed, I would expect the Secretary rely upon my experience to assist her in developing and implementing programs supporting her priorities to always lead and support the joint force in defending our homeland, ensure the Air Force is always able to answer the Nation's call and win, restore readiness, cost-effectively modernize, drive innovation, develop exceptional leaders, and strengthen our alliances.

In my opinion, the most important aspect of supporting these priorities from the perspective of Installations, Environment, and Energy is ensure that our bases are fully ready to serve as power projection platforms in support of our National Defense Strategy and provide a safe, healthy environment for our Airmen and their Families to thrive.

Major Challenges and Priorities

In your view, what are the major challenges that confront the ASAF(IE&E)?

Many significant challenges confront the next Assistant Secretary of the Air Force (Installations, Environment, and Energy). Chief among them is ensuring our installations and infrastructure enables the Air Force's mission now and in the future in a rapidly evolving security environment compounded with inadequate and unpredictable funding. Enhancing readiness while controlling cost is a challenge in any environment, and I understand the Air Force has had to make difficult budgetary choices in current and past years, and took risk in installation accounts.

In view of the growing cyber and physical threat to our energy supplies, the Air Force will continue to be challenged to assure reliable and resilient energy to achieve its missions. Ensuring that we have reliable and resilient operational energy sources at our installations is absolutely critical. The threats for disruption are increasing and need to be mitigated in order to support our National Defense Strategy. This is especially true for the Air Force which is DoD's largest consumer of energy and, in large part, uses CONUS installations as our contingency bases from which we fight our Nation's wars

Responsible environmental management, especially in light of emerging contaminant issues, while conducting its part of the Nation's defense will certainly be a major concern for the Air Force, its people and the communities it serves. Specifically, one of our most significant challenges is the remediation of perflourinated compounds and other emerging contaminants to ensure the safety and health of all who live and work at our bases and our communities. The Air Force must continue leading the way to be stewards of our environment while also balancing operational requirements. We must find alternatives to emerging contaminants, remediate contaminated sites, and work with community partners to assure the health and safety of those who serve, and those whom we serve.

If confirmed, how would you address those challenges?

The Air Force currently has a strong team of professionals who are working through solutions sets for these challenges. If confirmed, I will work closely with the Congress, the Secretary of the Air Force, the Chief of Staff of the Air Force, our DoD and sister service counterparts, as well as other governmental and non-governmental organizations to further enhance their work and find common-sense, enduring solutions to address these challenges.

What do you consider to be the most significant problems in the performance of the functions of the ASAF(IE&E)?

I am not aware of any significant problems in the performance of the functions of the Assistant Secretary of the Air Force for Installations, Environment, and Energy.

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

While I am not aware of any significant problems at this time, if confirmed, I will conduct an initial assessment of Air Force programs within the Assistant Secretary of the Air Force for Installations, Environment and Energy portfolio during the first 90 days, evaluate the risks, and prioritize any pressing problems that will require focused attention in consultation with Air Force and DoD leaders.

If confirmed, what broad priorities would you establish in terms of issues that must be addressed by the ASAF(IE&E)?

If confirmed, I will establish priorities consistent with those of the President of the United States, the Secretary of Defense and the Secretary of the Air Force. In broad terms, I will assist the Secretary of the Air Force to focus on readiness, modernization, innovation, leadership and alliances so that the Air Force remains lethal and ready when the nation calls. I will lead the Air Force in ensuring mission assurance through energy assurance, seek to allocate funding to develop the right infrastructure at the right time at the right cost to support the mission of the Air Force, our Airmen and their families, and work closely with Members of Congress, state and local officials, and the public to provide responsible environmental management when considering projects and processes.

Do you have any specific plans to help improve the quality of life for Air Force families who are under considerable strain as a result of repeated deployments?

I have not had an opportunity to review all the areas within my responsibilities that could affect Airmen's quality of life. However, I clearly recognize the pressures repeated deployments have placed on our Air Force families, and am certainly aware of the impacts that facility conditions, housing quality, and safety and health concerns have on the quality of life of our Airmen and their families, and by extension, their decisions to stay in the Air Force. If confirmed, I will assist the Secretary of the Air Force to examine the Air Force's housing policies and community partnership initiatives to ensure they are addressing the needs of Airmen and their families. Additionally, I will habitually seek feedback from our Airmen and their families directly.

The ASAF(IE&E) has responsibility for, among other things, enhancing energy security, construction and maintenance of installations, family housing, and environmental protection.

In the competition for resources inherent in the Defense Department budget process, how do you believe funding for these various responsibilities should be balanced?

I am not in a position at present to comment on the relative funding priorities of these programs. Although they would certainly compete for the same limited resources, the development of these programs must be done in conjunction with each other. All of these programs must work hand-in-hand to further the strategic vision and goals of the Secretary of the Air Force. If confirmed, my previous professional experience with budgeting processes, military decision-making process,

and developing strategies within limited capital budgets has prepared me to execute thoughtful, open, transparent processes for budget-allocation decision-making.

Relations with Congress

What are your views on the state of the relationship between the Office of the ASAF(IE&E) and the Senate Armed Services Committee in particular, and with Congress in general?

It is my impression that the AF IE&E staff maintains a strong and productive relationship with the staff and members of this committee, along with members of Congress.

If confirmed, what actions would you take to sustain a productive and mutually beneficial relationship between Congress and the ASAF(IE&E)?

Strong relationships between the Congress and the Air Force are critical to ensuring and maintaining the strong air and space power needed to defend our nation. If confirmed, I will make it a primary goal to stay proactively engaged with members of Congress, Committee Members and Staff to ensure a strong and mutual crossflow of information.

Military Construction

If confirmed, what would be your highest priorities for allocating military construction (MILCON) funding for the Department of the Air Force over the next several years?

If confirmed, I will work to ensure that allocation of funds for military construction are aligned with the Secretary's priority of restoring readiness to the force in order improve lethality. I will work to ensure that those top priorities receive appropriate military construction funding. I understand the Air Force MILCON budget has taken risk in recent years as the Secretary of the Air Force and Chief of Staff of the Air Force were forced to make difficult funding decisions. If confirmed, I will work closely with the Air Force's leadership team to thoughtfully, openly, and transparently make decisions about capital allocation that best supports the mission while ensuring MILCON funds are used effectively to address the backlog of mission critical projects deferred due to constrained and unpredictable budgets over the past several years.

Construction Cost Premiums

Are you familiar with "A Report on Construction Unit Costs Characterizing the MILCON Cost Premium" provided for the U.S. Army Corps of Engineers, which states, "The premium has been determined to be as high as 35% for some MILCON facility types"?

Yes.

Do you agree with the report's findings?

I am familiar with the April 2013 Cost Premium study and agree with many of its findings. The Federal government, whether by law or policy, does place unique requirements on DoD MILCON projects that do not apply to the private sector (e.g., security enhancements, detailed specifications, laborious contracting review processes). These additional requirements add a financial burden to DoD when executing a MILCON project.

If confirmed, will you look at the various factors and come back to the Committee with recommendations for actions that should be taken to reduce that premium?

Yes. I look forward to reviewing the current DoD response to the findings in the study and I will work with DoD design and constructions agencies and the Congress to determine additional opportunities to reduce that cost premium.

STRATCOM HQ

As the Commander for the Omaha District of the U.S. Army Corps of Engineers, you were the effective program manager of the new STRATCOM HQ facility—a project that is significantly over cost and over schedule.

What happened, what organizations and individuals are responsible for the overruns, and what lessons have you learned from this project?

My professional assessment is that a factor in the cost and schedule growth was from the government's deliberate decision to award this project at 85% of full scope in order to stay within the programmed funds available due to the operational imperative of this project. Since the lowest proposal initially was nearly \$200M over the programmed amount, the primary facility scope of work was reduced through amendments to the solicitation that deleted the fourth floor and five structural bays (171,000 square feet), with updates to the design to occur after contract award. This required the construction team to continually address the myriad of deferred design changes through hundreds of contract modifications during construction, contributing in part to cost and schedule growth throughout the life of the project. Since I was not assigned as the Omaha District Commander during the design development and acquisition phases of the project, I am not in a position to speculate as to who was responsible for making these decisions.

In addition, the contractor indicated that it experienced schedule delays during construction due to a shortage of critical skilled labor, subcontractor underperformance on foundation work and ductwork installation, and setbacks due to a fire and flooding inside the structure. Through all of this, the prime contractor, Kiewit-Phelps Joint Venture, has worked with the government to address these challenges and keep the project moving toward completion while minimizing impacts to USSTRATCOM's overall timeline for this facility to be fully operational.

I think the primary lessons we can take from this project to improve our MILCON delivery throughout DoD include:

1. Ensure requirements are well understood and established prior to the start of the design, and then minimize work-scope changes during performance to prevent unintended cost escalation.
2. Ensure that cost estimates are keeping pace with required/approved design changes.
3. The government must maintain a well-documented, independent, and fully updated assessment of the contractor's resource-loaded schedule at all times.

Did you issue an unsatisfactory interim rating on the contractor's performance?

No. My team chose to defer the issuance of a rating in the Contractor Performance Assessment Reporting System (CPARS) until we had the facts to back up our unsatisfactory assessment of construction quality and schedule. At the time the CPARS was due, we had just initiated an independent technical investigation in order to establish factual findings as to the root cause of multiple quality issues with lined ductwork and the subsequent impacts to the schedule.

This project is hardly unique as other major Corps-managed projects are struggling, including the hospital at Fort Bliss, the Aegis BMD site in Poland, and several others.

If confirmed, what will you do to hold government employees and contractors accountable for failure to deliver projects on time and on budget?

If confirmed, my focus will be to ensure Air Force projects are completed on time and on cost. Where that does not occur, I will ensure comprehensive review of the processes, people and contractor actions to correct and improved performance. Additionally, my experiences in working on multiple MILCON projects well-positions me to intuitively and proactively identify and address challenges early in the project delivery process before they are manifested in post-award cost and schedule overruns.

Remote Locations

The cost of construction in remote locations is particularly expensive. When these locations are designated as accompanied tours, this cost is magnified with the requirements for support facilities such as schools, larger hospitals, and family housing units. For example, the Department of Defense is looking to build a 5-bed hospital at Guantanamo Bay for \$250 million—or \$50 million per bed. The Army is proposing to build 52 single family homes for 18 military personnel, as well as for civilian personnel and contractors, on Kwajalein for \$1.3 million per home. Meanwhile, we do not have the resources necessary to maintain force structure, keep F-18s operational, or replace critical munitions.

If confirmed, what will you do to reduce the cost of construction at remote locations?

If confirmed, I will work in partnership with the other Military Departments and construction agents to review the factors that drive requirements and costs at remote locations. Our goal should be to seek opportunities to leverage emerging technologies and construction techniques to

create efficiencies and ensure the Department is incorporating the best lifecycle cost decisions for construction of facilities in remote locations.

Diego Garcia

On June 22, 2017, the UN General Assembly adopted a resolution at the instigation of Mauritius seeking an advisory opinion of the International Court of Justice (ICJ) on the sovereignty of the Chagos Archipelago, which the United Kingdom (UK) administers as the British Indian Ocean Territory (BIOT). The resolution passed sending the issue to the International Court of Justice seeking an advisory opinion on the matter and whether the UK should surrender the Chagos Archipelago to Mauritius. The Archipelago includes Diego Garcia, which is home to U.S. military assets in the Indian Ocean.

Are you familiar with U.S. assets on Diego Garcia?

I understand that Diego Garcia hosts a U.S. Navy Support Facility that provides logistical support to operational forces in the Indian Ocean and Persian Gulf and is also an important strategic base for the Air Force.

Do you believe there exists a suitable replacement site for these assets?

Without an understanding of the Department's revisions to our Nation's Defense Strategy, I am unable provide an opinion on the availability of a suitable replacement at this time. If confirmed, I will work with other DoD organizations to ensure the strategic basing of Air Force infrastructure effectively supports global operational requirements.

What would be the cost and strategic impacts of relocating U.S. assets from Diego Garcia?

I don't currently have access to information that would allow me to fully answer this question. If confirmed, I will work to ensure that cost implications are considered as part of the Air Force's strategic basing decision processes.

Base Realignment and Closure

The Department of Defense has requested another Base Realignment and Closure (BRAC) round.

Do you believe another BRAC round is necessary? If so, why?

I think BRAC could help the Air Force reposition forces to maximize their military value and operational effectiveness. If confirmed, I'd want to have sufficient time after the issuance of the National Defense Strategy to analyze our posture and base capacities to determine if there are changes where a BRAC would help put us in a better, more sustainable position in order to support our strategy.

If Congress were to authorize another BRAC round, what is your understanding of the responsibilities of the ASAF(IE&E) in formulating BRAC recommendations and implementing the decisions of the BRAC Commission?

It is my understanding the Secretary of Defense would establish principles for a BRAC round and the Secretary of the Air Force would develop complementary, Air Force specific objectives. If confirmed as the Assistant Secretary, I would be responsible for developing recommendations supporting those objectives. Upon approval of BRAC Commission recommendations, I would be responsible for timely implementation within the budget authorized and appropriated to the Air Force.

If confirmed and if Congress were to authorize another BRAC round, how would you go about setting priorities for infrastructure reduction and consolidation within the Department of the Air Force?

If confirmed, and if the Congress authorized another BRAC round, I would follow the guidance of the Secretary of Defense and the Secretary of the Air Force to achieve the established objectives for that BRAC round. I would first consider the operational needs of the Air Force to accomplish our missions, and look ahead to the threat driven installation requirements of the future. Only then could we determine whether the opportunity exists to reduce infrastructure without limiting the long term interests of the Air Force.

If confirmed and if Congress were to authorize another BRAC round, what is your understanding of the responsibilities of the ASAF(IE&E) in working with local communities with respect to property disposal?

Air Force installations and personnel rely heavily on their local communities to sustain their missions, and I take the Air Force's responsibility to those communities very seriously. If confirmed as the Assistant Secretary, I would ensure that communities impacted by base closures have access to resources necessary to redevelop the base property to industrial, commercial, recreational, and/or residential developments. Additionally, I would ensure the Air Force addressed its environmental cleanup responsibilities associated with base closure and property conveyance.

It has been noted repeatedly that the 2005 BRAC round resulted in major and unanticipated implementation costs and saved far less money than originally estimated.

What is your understanding of why such cost growth and lower realized savings have occurred?

It's my understanding the Air Force completed all of its BRAC 2005 responsibilities on time and within budget.

It is also my understanding cost growth in BRAC 2005 stemmed from deliberate decisions to transform DoD through realignment, to upgrade DoD infrastructure enabling the return of overseas force structure to the US, and to bring medical and research facilities up to modern

standards. While prior BRAC rounds focused on base closures and the generation of savings, it is my understanding that many of the BRAC 2005 actions were focused on these type of transformational and modernization actions.

How do you believe such issues could be addressed in a future BRAC round?

If confirmed, I will seek to improve the quality of decision-making analysis that is done prior to the development of BRAC recommendations, so the Defense Department and the Congress can make well-informed decisions with the support of rigorous analysis and validated data.

Overseas Facilities

Do you believe the Department of the Air Force currently maintains excess infrastructure overseas? If so, how would you seek to address this issue?

I understand that the Department of Defense conducted an assessment in 2014 that showed there is excess infrastructure in Europe, and is in the process of implementing European Infrastructure Consolidation actions to reduce expenses through mission consolidation onto fewer bases. If confirmed as Assistant Secretary, I look forward to working with the Combatant Commands as our security strategy evolves in Europe to ensure we have a sustainable overseas footprint that is robust enough to support wartime surge requirements.

Investment in Infrastructure

Witnesses appearing before the Committee in the past have testified that the military services underinvest in both the maintenance and recapitalization of facilities and infrastructure compared to private industry standards. Decades of underinvestment in Department of Defense installations has led to substantial backlogs of facility maintenance activities, created substandard living and working conditions, and made it harder to take advantage of new technologies that could increase productivity.

If confirmed, what recommendations would you have for restoring and preserving the quality of our infrastructure?

If confirmed, I will closely examine the way the Air Force manages its facilities and infrastructure and will work with the Secretary of the Air Force and the Chief of Staff of the Air Force to make sure our infrastructure supports the warfighter.

If confirmed, how do you plan on addressing the facility funding shortfall?

I will work with appropriate entities in the Department to determine appropriate funding levels – and then budget to those levels.

How do you believe the difficult budget environment will affect the Air Force's facility modernization efforts going forward in light of other competing priorities?

I am aware that Base Operating Support (BOS) and Facilities Sustainment, Restoration, and Modernization (FSRM) accounts are traditionally sources to fund other operational priorities. Continued underfunding of these accounts has a detrimental long-term effect on facility conditions thereby decreasing overall readiness and quality of life, while significantly increasing the overall long-term cost for operating and maintaining these facilities.

Base Operating Support

What is your understanding of the base operating support requirements of the Department of the Air Force?

My understanding is BOS requirements of the Department of the Air Force are critical to the overall mission readiness. BOS funding finances installation activities that support operations, critical training, facilities infrastructure maintenance, public safety, and family programs for both active and reserve components.

In your view, is the Department of the Air Force receiving adequate funding for base operating support?

I have not had an opportunity to review BOS funding in detail. If confirmed, I will review Air force processes for setting BOS and FSRM funding levels and provide an objective assessment to the Secretary of the Air Force of the impact to readiness and operations as a result of funding levels.

How might the Department of the Air Force distribute base operating funds to best ensure sound investment of constrained resources?

If confirmed, I am committed to learning the methods and processes in place across the Department to guide investment decisions and distribution of resources, and will work to determine if there are opportunities to improve the effective use of constrained resources to meet the most urgent mission requirements.

Family Housing and Privatization

In recent years, the Department of Defense and Congress have taken significant steps to improve family housing. The housing privatization program was created as an alternative approach to speed the improvement of military family housing and relieve base commanders of the burden of managing family housing. If confirmed, you will have a key role in decisions regarding military family housing.

What are your impressions of the overall quality and sufficiency of Air Force family housing both in the United States and abroad?

My family and I lived in military housing, both on Army Posts and Air Force Bases, throughout my career, and we experienced first-hand the transition to privatized housing. Our experience was positive overall, and we saw progressive improvement in the quality and availability of housing

for the Soldiers and Airmen that served with us over the years. The initial information that I have reviewed on this topic indicate that our experience is not unique, with Air Force-wide occupancy rates that are above 95% and very good resident satisfaction ratings that are at all-time highs. While this is good, there is always room for improvement as I am acutely aware of the impact quality housing has on the morale and retention rates for our military families. If confirmed, I'll work to ensure that we follow through with our commitment to provide safe, well maintained, high quality housing for our Airmen and their Families.

What are your views regarding the privatization of family housing?

I believe the use of the housing privatization authorities was an important and necessary tool to revitalize a large inventory of inadequate homes. If confirmed, I will work with the private developers to ensure the long-term viability of the privatized housing program.

What is your view of the structure and general goals of the Department of the Air Force's current housing privatization program?

I understand the Air Force met its planned privatization goal at the end of Fiscal Year 2013. I am also aware of some issues with the long-term financial viability of a handful of projects that may require restructuring. If confirmed, I will work to ensure the continued success of the Air Force's housing privatization program.

Do you believe the housing program should be modified in any way? If so, how?

I have not had an opportunity to review the housing program in detail to determine if it should be modified in any way, but if confirmed, I will closely examine the program to ensure the highest quality living conditions for our service members and their families.

Environmental Restoration

The Department of the Air Force's environmental restoration budget remains a significant part of the Air Force's overall environmental program budget.

What do you see as the main priorities for cleanup within the Department of the Air Force program?

I understand the Department of the Air Force's priorities for clean-up follow priorities established by the Department of Defense which are to clean up sites which pose the greatest threat to safety, human health, and the environment first. If confirmed, I will work to ensure that those priorities are implemented in the Air Force.

What will you do to ensure that adequate funding is requested and received so that cleanups under the Installation Restoration Program and under the Military Munitions Remediation Program continue apace?

If confirmed, I will advocate for the funds required to support Air Force and DoD priorities, and to meet DoD performance goals.

Encroachment on Military Installations

Encroachment by commercial and residential development on military installations can negatively impact Air Force operations at military airfields, training ranges, and the development of new facilities.

What do you see as the main constraints on the Department of the Air Force's ability to use its facilities, including training ranges?

There are a number of encroachment factors that can constrain military missions. A few of the significant encroachment challenges include development growth, commercial aircraft traffic, endangered species, and available frequency spectrum. If confirmed, I will work with federal, state and local stakeholders to identify constraints and develop solutions that meet the military requirements.

If confirmed, what policies or steps would you take to balance the trade-off between energy development and the impact on operations and training?

If confirmed, I will work closely with federal, state, and local governments as well as the energy developers to identify methods to access to new sources of energy that do not negatively impact the Air Force mission.

How can the Department of the Air Force address the issues of encroachment around its bases in the United States, particularly with respect to encroachment caused by residential development?

I believe the most effective way to address incompatible development is to be an active participant in local community development and planning to prevent negative impacts to military operations and training.

One significant issue for the Air Force has been the potential interference with aircraft radars of wind farms installed around military installations and ranges.

If confirmed, what would you propose as objectives and goals to address this issue?

If confirmed, I will promote new energy production methods that are compatible with Air Force operations. In areas where conflicts do arise, I will work with federal, state, and local governments as well as the energy developers to identify ways to mitigate impacts while maintaining the Air Force mission.

What is your understanding of the Air Force's ability to receive information and plans from potential developers in a timely and effective manner?

I understand that there is a DoD process in place for the Services to receive confidential information from developers early in their planning processes. If confirmed, I look forward to learning the details of the current process and working to improve the relationship between developers and the Air Force.

Environment

If confirmed, will you comply with environmental regulations, laws, and guidance from the Environmental Protection Agency?

Yes.

If confirmed, will you make the same level of investment for the Defense Department's Environmental Research Programs?

If confirmed, I will support the Department of Defense's Environmental Research program to ensure it is supporting mission capabilities while improving environmental performance and reducing costs.

If confirmed, will you work with the Department of Interior and the U.S. Fish & Wildlife Service to find cooperative ways to ensure military readiness and protect the environment on and around U.S. military installations?

Yes.

Emerging Contaminants

In your view, what are the main challenges the Department of the Air Force faces with the identification, remediation, and cleanup of emerging contaminants?

In my view, the main challenge facing the Air Force with regard to emerging contaminants is the science and therefore full understanding of the level of risk for any emerging contaminant is often unknown or still in development. There is a need for sound science to understand the potential human and environmental impacts to accurately define risk, communicate that risk to the public and integrate the necessary clean-up actions into our overall program to eliminate unacceptable risk.

What challenges are you aware of specifically related to the environmental cleanup and restoration activities of per- and polyfluoroalkyl substances (PFAS) contamination in drinking water, ground water, and other sources at National Guard and Reserve locations and nearby communities?

I am aware of the PFAS issue and the various policy and legal aspects affecting numerous functions which used materials containing PFAS. If confirmed, I will work with the OSD staff and other federal agencies to address the complex challenges of the issue and the impacts.

The conference agreement for the National Defense Authorization Act for Fiscal Year 2018 authorizes the Secretary of Health and Human Services, acting through the Centers for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry in consultation with the Department of Defense, to commence a study on the human health implications of PFAS contamination in drinking water, ground water, and other sources.

What is your view of the PFAS issue and do you commit your support to conducting the human health study?

To fully address the health implication of PFAS, I understand the Air Force supports a national health study conducted by the Agency for Toxic Substances and Disease Registry as required by the NDAA. If confirmed, I will ensure appropriate Air Force support to the Agency for Toxic Substances and Disease Registry and the DoD.

Earlier this year, GAO found that the Defense Department has improved its reporting on the cost of environmental cleanup for installations closed under the BRAC process, but recommended that the Department include estimates of cleaning emerging contaminants in future reports to Congress and develop a process for collecting and sharing lessons learned on environmental cleanup. In the report accompanying the Committee-passed National Defense Authorization Act for Fiscal Year 2018, the Committee directs the Department to implement GAO's recommendation to share lessons learned from environmental remediation among the military services to promote the redevelopment of closed military bases.

Do you agree with GAO's findings and commit to implementing its recommendations as directed by the Committee?

Yes.

Water Strategy and Technology Roadmap

While there has been much attention placed on the cyber vulnerabilities of energy use and the fragility of the electric grid, a secure and reliable supply of water is essential to the Department of Defense's ability to perform its critical missions on its installations and in support of operational deployments. The report accompanying the Committee-passed National Defense Authorization Act for Fiscal Year 2018 directs the Department, in coordination with the military departments and combatant commands, to submit a technology roadmap to address capability gaps for water production, treatment, and purification and a comprehensive water strategy addressing research, acquisition, training, and organizational issues.

Do you share the view that the Department of the Air Force will continue to face long-term challenges related to its water requirements, coupled with the increased

potential for security risks and destabilization impacts requiring the Department's response around the globe?

Yes.

Do you commit to delivering in a timely manner to the congressional defense committees the required comprehensive water strategy and technology roadmap related to water?

Yes

Energy Policy

If confirmed, what would be your responsibilities for setting and implementing energy policy within the Department of the Air Force?

If confirmed, I will oversee implementation of the energy program throughout the Air Force. My responsibilities would include working with the Secretary and the Under Secretary of the Air Force, the other Assistant Secretaries, and the Air Force Chief of Staff and Vice Chief of Staff to develop overarching energy policy and provide oversight within the Air Force to ensure energy priorities and goals are addressed.

What do you see as the key elements of the Department of the Air Force's energy strategy?

I understand the key elements of the Air Force energy strategy are improving resiliency, optimizing demand, and assuring supply; and I agree with those focus areas.

What is your understanding of the energy conservation goals within the Department of Defense and the Department of the Air Force?

My understanding is the Air Force should continue to work to reduce its energy requirements while focusing its attention on assuring resilient energy for the readiness and lethality of the force.

Do you believe any of the energy conservation goals negatively impact the Department of the Air Force?

No.

Recently, there has been concern with the Department of Defense's ability to sustain critical operations in the event of an energy disruption. If confirmed, what steps would you take to ensure that Department of the Air Force installations have energy resiliency and mission assurance in the event of a power outage?

If confirmed, I will work with Air Force and Combatant Command leaders to identify critical operations which may be negatively impacted by energy disruptions, and improve the energy resilience where those operations are located.

The threat of commercial grid disruption is growing. If confirmed, what steps would you take to ensure critical military infrastructure has assured access to energy?

If confirmed, I will work with federal, state, local and industry partners to ensure critical military infrastructure has assured access to the energy it needs.

How can the Department of the Air Force better integrate energy security and resilience within MILCON and the development of combat platforms?

The military construction program priorities should fall in line with overall Air Force priorities, and energy resilience should be included as a factor in project evaluation. If confirmed, I will work to ensure that those top priorities receive appropriate military construction funding.

What is your definition of energy security and mission assurance?

Based on my experience, energy security is an end state where the Air Force has assured access to the energy it needs for critical missions, while mission assurance are actions taken to better ensure mission accomplishment.

If confirmed, what energy goals and policies will you promote for the Department of the Air Force for investments and initiatives that provide direct and tangible benefit to the warfighter or less cost for the Department?

If confirmed, I will work to ensure the Air Force has the energy it needs to power critical operations in the face of potential long-term outages in the most cost-effective way possible.

Third-Party Financed Projects

The Department of Defense and the military services have upgraded its infrastructure and taken advantage of third-party financing mechanisms and authorities to pursue distributed energy projects that improve installation resilience, increase readiness and mission assurance, and offer long-term cost savings.

Do you support the Department of the Air Force continuing these efforts?

Yes.

Do you believe that the Department of the Air Force should pursue ways to expand the scope of third-party financing to include additional investments that could improve energy resilience and mission assurance?

Yes. I believe that the Department should leverage existing authorities to include Energy Savings Performance Contracts (ESPC) and Utility Energy Services Contracts (UESC) and the enhanced use lease (EUL) authority among others when it is in the best interests of the Air Force and supports mission requirements. If confirmed, I will look into other authorities that may exist to allow the Department to expand the scope of third-party financing.

In your view, how can the Department of the Air Force pursue and prioritize resilience in its third-party financed distributed energy projects and leverage payment in-kind options for capabilities like black-start ability in the event of grid outages, cyber-secure microgrids, additional feeder lines, islanded operations, and other assets?

In my view, the Department has both the ability and the compelling need to use all funding avenues to include third-party financed projects to enhance mission assurance in the event of a full range of disruption scenarios. If confirmed, I would ensure that necessary policies are in place to best leverage third-party financing to provide the Department with the maximum flexibility to provide the capabilities.

Energy Resilience

The threat of severe weather and events such as the 2013 sniper attack on PG&E's Metcalf Substation, successful cyber-attacks on Ukraine's electrical grid in 2015 and 2016, and the loss of power at Incirlik Air Base during the July 2016 coup attempt have put a focus on our need to improve installation energy resiliency in the event of a commercial grid outage.

Are you committed to investing in energy efficiency, distributed generation, and microgrids to improve energy resilience and mission assurance?

Yes.

What is your definition of energy resilience?

Based on my experience, energy resilience is an organization's ability to withstand, respond to, or recover from a disruption in energy supplies.

Section 2805 of the National Defense Authorization Act for Fiscal Year 2017 gave the Defense Department new authority to plan and fund military construction projects directly related to energy resiliency and mission assurance, and to help address and mitigate against incidents like Incirlik, not to mention secure microgrids to help prevent cyber-attacks.

If confirmed, will you commit to using section 2805 to support mission critical functions, address known energy vulnerabilities with projects that are resilient and renewable, and commit to at least \$150 million per year through the FYDP?

If confirmed, I will commit to using section 2805 to support mission critical functions. At this time, however, I am not in a position to commit to funding levels for the Air Force.

Operational Energy

In his responses to the advance policy questions from this Committee, Secretary Mattis talked about his time in Iraq, and how he called upon the Department to “unleash us from the tether of fuel.” He stated that “units would be faced with unacceptable limitations because of their dependence on fuel” and resupply efforts “made us vulnerable in ways that were exploited by the enemy.”

Do you believe this issue remains a challenge for the Department of the Air Force?

Yes.

If confirmed, what will you do to unleash the Department of the Air Force from the tether of fuel?

If confirmed, I would work to improve combat capabilities by emphasizing energy efficiency initiatives associated with flying operations and building installation energy resiliency at U.S., overseas, and forward operating bases.

If confirmed, what priorities would you establish for Department of the Air Force investments in and deployment of operational energy technologies to increase the combat capabilities of warfighters, reduce logistical burdens, and enhance mission assurance on our installations?

As I understand it, the Air Force is the largest consumer of operational energy in the Department. If confirmed I would recommend continuation of current investments in a range of materiel and non-materiel initiatives to address aircraft fuel consumption.

What is your view of the current staffing of operational energy plans and programs of the Department of the Air Force?

I do not have access to enough information at this point in time to make an informed assessment of the current Air Force operational energy staffing. If confirmed, I will ask for an update on Air Force operational energy requirements and assess the capability of the current staffing and resources to meet those requirements.

If confirmed, what role, if any, do you expect to play in ensuring that the operational energy planning and program functions of the Department of the Air Force have sufficient staff of appropriately qualified and trained personnel to carry out their duties and responsibilities?

If confirmed, I will work to fully understand the requirements and resources available and ensure we are making wise resourcing decisions that affect the operational energy mission.

Do you think that the Department of the Air Force is currently doing an adequate job of coordinating operational energy planning and programming?

I do not have access to enough information at this point in time to make this assessment currently. If confirmed, I'll evaluate the adequacy of our requirements to coordinate operational energy planning and programming.

Battlefield energy command and control systems can provide commanders the information they need to extend operational reach.

Do you believe that it should be a priority for the Department of the Air Force to leverage advancements in data analytics and associated technologies to improve commanders' visibility of fuel consumption by the force?

Yes.

Energy and Acquisition

Secretary Mattis told the Committee that the Department of Defense's acquisition process should explore alternate and renewable energy sources that can relieve the dependence of deployed forces on vulnerable fuel supply chains and increase the readiness and reach of the force.

Do you agree with Secretary Mattis?

Yes.

In confirmed, what steps would you take to reduce energy related vulnerabilities and increase the reach of the deployed force?

If confirmed, I will support a range of energy initiatives, particularly related to reducing the logistical burdens of energy supply at forward locations through advanced research and development.

How can our acquisition systems better incorporate the use of energy in military platforms?

I think when we develop the requirements for our various systems and facilities, we should challenge the private sector through contract incentives to find more resilient and sustainable methods to more efficiently provide energy for these procurements.

Energy Resilience in the Fight Against the Islamic State of Iraq and Syria (ISIS)

Back in July 2016 after a coup attempt, the Turkish government cut off power to Incirlik Air Base, which is the primary platform for launching coalition airstrikes in the

fight against ISIS. For roughly a week, deployed units had to operate off backup generators, which is expensive and not the preferred method of operation given the demanding tempo of sorties against ISIS.

If confirmed, specifically how will you address and make energy resilience and mission assurance a priority for the Department of the Air Force, to include acquiring and deploying sustainable and renewable energy assets to improve combat capability for deployed units on our military installations and forward operating bases?

If confirmed, I will make mission assurance and energy resilience a priority to ensure that the Air Force has the energy it requires where and when it needs it. I am aware that the Air Force recently issued its overarching policy for energy projects. One of the priorities is to make sure critical missions and capabilities continue to have the energy to function. If confirmed, I will continue to support this effort.

To what extent, if any, are title 10 training exercises and wargames dealing with energy outages? If not, why?

I understand that adversary attacks on fuel storage and resupply systems are currently being factored into training exercises, operational plans, and wargames.

Do you believe that war games conducted by the Air Force should model the impact of fuel and other energy-related constraints and threats such as cyberattacks on the commercial electric grid?

Yes.

Do you support the J-4's enforcement of the energy supportability key performance parameter in the requirements process?

Yes.

Do you believe the energy key performance parameter is important? If confirmed, will you commit to strengthening the process for assessing the energy performance of future weapons system acquisitions?

Yes. The energy key performance parameter is mandated by statute and Defense Department directives for all new acquisition programs that have an operational energy impact. If confirmed, I will continue the ongoing efforts to strengthen the assessment of energy performance in future weapons system acquisitions.

Non-Tactical Vehicle Transportation Options

Significant cost savings could be achieved through the more efficient use of non-tactical government-owned mobility and transportation on military installations. Notably,

the Defense Department spends roughly \$435 million each year for non-tactical passenger vehicles and light trucks, with a use rate of just 7%. New technologies and approaches could be used to meet Department needs while also improving overall efficiency. The recent Department of Transportation Smart Cities Challenge provides useful insight to innovative approaches that might be beneficial to the Defense Department.

In your view, how can the Department of the Air Force better incentivize military installations to partner with industry and local communities to explore mutually beneficial transportation opportunities like the Smart Cities Challenge?

If confirmed, I will work with Air Force leadership, federal, state, and local agencies, industry, and local communities to identify mutually beneficial transportation opportunities.

Implications of Climate Change

Secretary Mattis stated to the Committee, “where climate change contributes to regional instability, the Department of Defense must be aware of any potential adverse impacts,” “climate change is impacting stability in areas of the world where our troops are operating today,” and “the Department should be prepared to mitigate any consequences of a changing climate, including ensuring that our shipyards and installations will continue to function as required.” The report accompanying the Committee-passed National Defense Authorization Act for Fiscal Year 2018 directs the Department to conduct a comprehensive threat assessment and implementation master plan on the risks and vulnerabilities to Department missions and infrastructure associated with climate-related events.

Do you share Secretary Mattis’s views on climate change?

Yes.

Do you agree that the Department of the Air Force should be prepared to mitigate any consequences of a changing climate?

Yes.

Do you commit to delivering in a timely manner to the congressional defense committees the required comprehensive threat assessment and implementation master plan on the risks and vulnerabilities to Air Force missions and infrastructure associated with climate-related events?

Yes.

What do you see as the national security implications of climate change, if any, for the United States?

I believe changes in climate have the potential to aggravate geo-political conditions that can increase instability in some parts of the world. If confirmed, I will work with the other military departments and DoD to ensure that these potential impacts are addressed as part of our comprehensive threat assessment and implementation master plan on the risks and vulnerabilities to Air Force missions and infrastructure due to climate-related events.

What do you believe will be the impact of climate change, if any, on the Air Force missions?

I believe impacts due to the increasing severity of weather events and sea level rise due to climate change could potentially impact some Air Force installations and their ability to support Air Force warfighting requirements. If confirmed, I will work with the other military departments and DoD to develop a strategy to mitigate the potential impacts to our mission from these threats.

Department of the Air Force Laboratory and Test Center Recapitalization

There has been concern over the adequacy of recapitalization rates of the Department of the Air Force's laboratory facilities and test centers. Historically, Department of the Air Force technical centers, laboratories, and test centers do not appear to have fared well in the internal Department competition for limited military construction and facility sustainment funds.

What metrics would you use to assess the amount of investment in the recapitalization of Department of the Air Force technical centers, laboratories, and test centers to determine its adequacy?

I have not had an opportunity to assess the amount of investment required. If confirmed, I will certainly look into the appearance that Air Force technical centers, labs, and test centers have not fared well in the competition for limited funds and work with the Assistant Secretary of the Air Force for Acquisition to determine the appropriate metrics to assess recapitalization investment levels.

If confirmed, how would you work with the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics and other stakeholders to properly recapitalize the Air Force's technical centers, laboratories, and test centers?

If confirmed, I will work directly with the Assistant Secretary of the Air Force for Acquisition to gain a better understanding of the requirement and ensure the Secretary of the Air Force has the information needed to make informed funding decisions.

Section 2808 Authority

Section 2808 of title 10, United States Code, allows the Secretary of Defense, in the event of a declaration of war or national emergency, to undertake military construction

projects supporting the use of armed forces with otherwise unobligated military construction funds.

What is your assessment of this authority?

My assessment is that this authority is vital to provide construction projects necessary under a national emergency or declaration of war.

From a policy standpoint, what restrictions do you believe are appropriate for the use of this authority?

I am not fully versed in policies regarding this statute. If confirmed, I will ensure the Department is executing any projects under this statute in accordance with applicable guidance.

Do you believe it is appropriate to use this authority outside theaters of armed conflict? If so, in what instances?

Generally speaking, I believe it is appropriate to use this authority outside of theaters of armed conflict. Especially in the case of the Air Force, many of our missions directly supporting theaters of war are actually launched outside of the theater itself. Therefore, there are probably better criteria than just location for when to exercise this authority to include the project's relationship to the war declaration, timing, and need.

Congressional Oversight

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

Do you agree, if confirmed, to appear before this Committee and other appropriate committees of 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 ASAF(IE&E)?

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 this Committee regarding the basis for any good faith delay or denial in providing such documents?

Yes.

Do you agree to answer letters and requests for information from individual Senators who are members of this Committee?

Yes.

If confirmed, do you agree to provide to this Committee relevant information within the jurisdictional oversight of the Committee when requested by the Committee, even in the absence of the formality of a letter from the Chairman?

Yes.