

DEPARTMENT OF THE AIR FORCE  
PRESENTATION TO THE SUBCOMMITTEE ON READINESS  
COMMITTEE ON ARMED SERVICES  
UNITED STATES HOUSE OF REPRESENTATIVES

SUBJECT: FISCAL YEAR 2019 ENERGY, INSTALLATIONS AND ENVIRONMENT  
BUDGET REQUEST

STATEMENT OF: THE HONORABLE JOHN W. HENDERSON  
ASSISTANT SECRETARY OF THE AIR FORCE FOR  
INSTALLATIONS, ENERGY AND ENVIRONMENT

APRIL 18, 2018

NOT FOR PUBLICATION UNTIL RELEASED  
BY THE COMMITTEE ON ARMED SERVICES  
UNITED STATES HOUSE OF REPRESENTATIVES

## Executive Summary

Air Force installations are critical, integral components to support the priorities of the Air Force to build a more lethal and ready force, strengthen alliances and partnerships, and deliver greater, more affordable performance with the right size and mix of agile capabilities to compete, deter, and win. Ready and resilient Air Force installations send a strategic message to our adversaries and allies, signaling commitment to our friends and a credible deterrent to our foes that we can defend the homeland, own the high ground, and project power anywhere, and any time in partnership with our allies.

The Air Force Fiscal Year 2019 President’s Budget (FY19 PB) request for infrastructure, totaling \$8.88 billion, is displayed below in Table 1. Numbers include Air Force, Air Force Reserve, and Air National Guard and exclude OCO.

**Table 1**

	<b>FY18 PB<sup>1</sup></b> <b>(million \$)</b>	<b>FY18</b> <b>Enacted</b> <b>(million \$)</b>	<b>FY19 PB<sup>1</sup></b> <b>(million \$)</b>	<b>% Change from</b> <b>FY18 PB</b>	<b>% Change from</b> <b>FY18 Enacted</b>
<b>MILCON<sup>2</sup></b>	\$1,964	\$2,043	\$1,906	-3%	-7%
<i>New Weapon Systems</i>	805	668	887	10%	33%
<i>Existing Mission</i>	767	903	494	-36%	-45%
<i>CCMD</i>	219	204	230	5%	13%
<i>Program Support</i>	173	268	295	71%	10%
<b>FSRM</b>	3796	3934	3364	-11%	-14%
<i>FS</i>	2737	2737	2946	8%	8%
<i>RM</i>	1058	1197	418	-61%	-65%
<b>Facility Operations</b>	2400	2400	2451	2%	2%
<b>Demolition</b>	21	21	30	41%	42%
<b>Housing</b>	403	403	396	-2%	-2%
<i>O&amp;M</i>	318	318	317	0%	0%
<i>Construction</i>	85	85	78	-8%	-8%
<b>BRAC</b>	54	54	53	-2%	-2%
<b>Environmental</b>	703	762	680	-3%	-11%
<i>Environmental Quality</i>	409	409	383	-6%	-6%
<i>Environmental Restoration</i>	294	353	297	1%	-16%
<b>Total</b>	<b>\$9,341</b>	<b>\$9,617</b>	<b>\$8,879</b>	<b>-5%</b>	<b>-8%</b>

**Note 1:** Automated Budget Interactive Data Environment System (ABIDES) Data

**Note 2:** Base only

As in FY18, the FY19 PB continues to reflect a delicate balance across capability and capacity demands. In the FY19 PB, the requirements associated with National Defense Strategy priorities to restore readiness and modernize, in order to build a more lethal force, continue to necessitate difficult choices across the portfolio. Consequently, the Air Force has chosen to accept risk in the infrastructure accounts in order to accelerate modernization and restore full readiness by allocating resources to high priority warfighting requirements by deferring infrastructure sustainment, restoration, modernization, and recapitalization needs.

In an effort to minimize these impacts, we are developing an Installation Health Assessment tool to assist us in establishing predictive metrics for facility conditions and better-targeting limited facility sustainment, restoration, and modernization (FSRM) funds to the most critical projects in a timely manner. Additionally, we are looking at ways to reform how we currently do business by finding economies of scale in this portfolio to significantly reduce the cost and time required to procure these types of projects and expand our overall capacity to deliver them when funds are available.

## **Introduction**

Ready and resilient Air Force installations are critical, integral components to support the priorities of the Air Force to build a more lethal and ready force, strengthen alliances and partnerships, and deliver greater, more affordable performance with the right size and mix of agile capabilities to compete, deter, and win. Installations, comprised of both built and natural infrastructure, serve as the power projection and readiness-building platforms for the Air Force's enduring core missions. Ready and resilient Air Force installations send a strategic message to our adversaries and allies, signaling commitment to our friends and a credible deterrent to our foes that we can defend the homeland, own the high ground, and project power anywhere, and any time in partnership with our allies.

The total Air Force Fiscal Year 2019 President's Budget (FY19 PB) request for infrastructure totals \$8.88 billion. This funds military construction (MILCON), facility sustainment, restoration and modernization, housing, legacy Base Realignment and Closure cleanup and our environmental programs. As in FY18, the FY19 PB attempts to balance demands for the capability and capacity needed to restore readiness and increase lethality. This balance is essential to ensuring we are best postured to field a ready force today while concurrently modernizing for tomorrow, an imperative in a dangerous world with violent extremism and increasingly capable near-peer aggressors. Consequently, the Air Force has chosen to accept risk in the infrastructure accounts in order to allocate resources to high priority warfighting readiness and modernization requirements. Unfortunately, deferring these investments will likely increase sustainment and restoration costs over the long-term.

## **Military Construction**

The dynamic global posture and advanced weapon systems required in today's complex security environment demand that our limited military construction budget prioritize efforts to provide infrastructure for new weapon system bed down, acquire research, development, test and evaluation infrastructure, and support Combatant Commander priorities. Thus the FY19 PB funds only our most critical, degraded existing-mission infrastructure.

### *New Mission Infrastructure*

The FY19 PB request continues the work to modernize our fleet and increase our lethality. This includes infrastructure investment in Air Force weapons system acquisition and modernization programs, including the F-35A, KC-46A, MQ-9 and Presidential Aircraft Recapitalization programs. Achieving initial and full operational capacity depends not only on the acquisition of the aircraft themselves, but also on delivery of the necessary hangars, maintenance and training facilities, airfields, and fuel infrastructure. Included in our MILCON budget is funds for KC-46 flying training unit infrastructure and depot maintenance capability at two locations, the Formal Training Unit (FTU) at Altus Air Force Base, Oklahoma, and the depot maintenance activity at Tinker Air Force Base, Oklahoma. Also included is infrastructure to bed down the F-35A at four locations, Eglin Air Force Base, Florida, Luke Air Force Base, Arizona, Eielson Air Force Base, Alaska, and Royal Air Force (RAF) Lakenheath, United Kingdom; and in preparation for the Presidential Aircraft Recapitalization, funding for the second increment of the hangar and maintenance complex and relocation of the hazardous cargo pad and explosive ordnance disposal range at Joint Base Andrews, Maryland. Finally, our new mission MILCON budget also includes projects at three locations, Creech Air Force Base, Nevada, Shaw Air Force

Base, South Carolina, and Holloman Air Force Base, New Mexico. These facilities will increase the capacity and resilience of the MQ-9 platform and the Airmen who operate them.

*Research, Development, Test & Evaluation Infrastructure*

Our ability to innovate and modernize depends on our Research, Development, Test and Evaluation infrastructure. Thus, in the FY19 PB, we fund the construction of new, state-of-the-art laboratory space at the Massachusetts Institute of Technology's Lincoln Laboratory – a Federally Funded research and development center focused on solving problems with direct national security implications. Additionally, our budget includes requests for a Cyber Test facility at Eglin Air Force Base, Florida, postured for FY19 execution, and two other projects to establish Joint Simulation Environment capabilities at Edwards Air Force Base and Nellis Air Force Base. Lastly, given the National Defense Strategy's call to “accelerate our modernization programs and devote additional resources...to solidify our competitive advantage,” the Air Force is excited to leverage new authorities to meet our current and future research, development, and test range infrastructure needs.

*Combatant Command Infrastructure*

This budget request includes funding to address Combatant Command requirements in U.S. Central Command (USCENTCOM), U.S. Pacific Command (USPACOM), U.S. Strategic Command (USSTRATCOM), and U.S. Northern Command (USNORTHCOM). These investments set the stage for future investment across our Future Years Defense Plan (FYDP).

We remain committed to efforts initiated by the U.S. European Command (USEUCOM) in FY15 to reassure North Atlantic Treaty Organization Allies and partners in Europe of the United States' commitment to our security and territorial integrity. The FY19 European Deterrence Initiative (EDI) MILCON program builds on FY18 efforts to set deterrence

conditions in the European theater, and it continues our support for the joint, allied team to quickly respond to any and all aggressive actors in the region. The FY19 EDI MILCON Overseas Contingency Operations investment continues the USEUCOM Commander's FY17 and FY18 efforts to improve infrastructure and enhance prepositioning options for airfields, training, and storage areas in Bulgaria, Estonia, Germany, Hungary, Iceland, Latvia, Lithuania, Luxembourg, Norway, Poland and Slovakia, while expanding the program in Germany, Norway, Slovakia and the United Kingdom. It also includes construction and planning and design funding to support future efforts in the European theater.

Recognizing tensions in the Asia-Pacific region are high and our presence is crucial to long-term regional stability, our FY19 budget request includes infrastructure investments in four countries and territories in the Pacific, including our Pacific Divert initiative in the Commonwealth of the Northern Marianas to enhance our partnerships and regional resilience in support of Asia-Pacific Stability Initiatives. Our budget request also includes construction, planning, and design funding in support of power projection facilities at our hubs in Central Command, investments that will ensure the necessary infrastructure is in place to continue prosecuting operations against the Islamic State and other state and non-state violent extremist organizations in the region, and infrastructure investments that will continue to strengthen our Nation's Nuclear Command, Control and Communications network. Lastly, the Air Force is responsible for providing globally positioned infrastructure to support geographically dispersed operations, infrastructure that does not always fit neatly into one or more of the geographic combatant commander's area of responsibility. For this reason, our FY19 budget includes funds for study, planning, and design of infrastructure in these global seams, with specific

concentration on infrastructure needed to enable effective response across multiple Combatant Commands in adjacent areas of responsibility.

*Existing Mission Infrastructure*

Our budget request includes funds to address our most urgent military construction existing-mission recapitalization needs, including over \$100 million for Air National Guard and Air Force Reserve projects.

**Facility Sustainment, Restoration and Modernization**

In FY19, the Air Force requests funding for Facilities Sustainment, Restoration and Modernization (FSRM), that is approximately 11 percent less than our FY18 PB request (including the Consolidated Appropriations Request). Facilities Sustainment, funded at 80 percent of the OSD modeled requirement, is approximately eight percent higher than the FY18 budget, while Restoration and Modernization is 61 percent lower. Through the application of asset management principles, the Air Force's remarkably constrained FY19 FSRM request continues to focus limited resources on "mission critical, worst first" facilities, prioritizing requirements with the highest consequence and probability of failure. The Air Force continues to accept risk across the FSRM portfolio. In an effort to mitigate this risk, we are developing an Installation Health Assessment tool to assist us in establishing predictive metrics for facility conditions and better-targeting limited FSRM funds to the most critical projects in a timely manner. Additionally, we are looking at ways to find economies of scale in this portfolio in order to significantly reduce the overhead cost and time required to procure these types of projects and expand our overall capacity to deliver them when funds are available.



## **Housing**

To ensure that we are postured to continue taking care of our Airmen and their families, the FY19 President's Budget requests needed funds for military family housing operations and maintenance, and military family housing construction. There is no better way for us to demonstrate our commitment to service members and their families than by providing quality housing on our installations. With 32 housing projects at 63 bases, and an end-state of 53,239 homes, the Air Force family housing is privatized at nearly all stateside locations, including Alaska and Hawaii. We are now focused on long-term oversight and accountability of this portfolio. In FY19, we will be responsible for managing approximately 15,200 government-owned family housing units at our overseas installations. Our Family Housing Operations and Maintenance request funds our efforts to sustain and improve adequate government-owned units, and our Family Housing Construction request improves 130 government-owned single family and duplex units on Kadena Air Base in Okinawa, Japan and corrects neighborhood parking deficiencies at Royal Air Force Lakenheath, United Kingdom. Combined, these Operations and Maintenance and Military Construction funds will ensure we continue to support the housing needs of our Airmen, their families, and the Army, Navy and Marine Corps teammates we house overseas.

Similarly, our renewed focus on the investment strategy for dormitories will sustain the Department of Defense goal of 90 percent adequate dormitory rooms for permanent party unaccompanied Airmen, while continuing to support Airmen in formal training facilities. The FY19 PB Family Housing Construction request includes two dormitories supporting the F-35 bed down. The first is a student training dormitory at Eglin Air Force Base, Florida, and the second a dormitory at Royal Air Force Lakenheath, United Kingdom.

## **Base Realignment and Closure (BRAC)**

The FY19 PB request funds environmental restoration efforts at former installation locations previously closed through the Base Realignment and Closure (BRAC) process. Our BRAC cleanup program focuses on protecting human health and the environment through projects that address legally enforceable requirements and transfer acreage and achieve beneficial reuse of property. The Air Force has transferred more than 98% of BRAC acreage; we plan to complete transfer of the final seven acres of BRAC 2005 properties in the next year, and expect to complete transfer from all previous BRAC rounds by 2024. Even with the cost of environmental clean-up, closing 40 Air Force installations through five BRAC rounds has resulted in billions in net savings. Furthermore, BRAC provides the opportunity to look across the enterprise and strategically reposition forces to improve lethality, readiness, and efficiency. After reviewing the new National Defense Strategy, the Air Force will assess its required force structure and posture to define future infrastructure requirements.

## **Air Force Community Partnership Program**

In an effort to “make every dollar count,” we continue to leverage our highly successful Air Force Community Partnership (AFCP) program. This program cultivates “win-win” partnerships between our installations and local communities. It taps into the intellectual capital and innovative spirit of installation and community leaders, to find creative ways to simultaneously accomplish the Air Force mission while enhancing the communities surrounding our bases. The program continues to serve as an invaluable forum for fostering relationships and promoting ways to obtain shared value with our community partners. With 62 installations and

communities now participating in the program, we have implemented more than 300 partnership agreements, generating more than \$51 million in Air Force benefits and \$24 million in community benefits. Installations and communities participating in the AFCP Program now have a well-structured framework and process to develop mutually beneficial partnerships with minimal guidance and oversight. This year, we plan to further expand the program by bringing in more installations and communities, and focusing on initiatives with Air Force-wide applicability. Community partnerships function as an important tool to help minimize the cost of our installations, enhance mission effectiveness, and promote quality of life for Airmen and their families. However, they are not a substitute for the large-scale return on investment opportunities historically achieved through the BRAC process.

## **Installation Energy**

### *Mission Assurance through Energy Assurance*

Installation energy is a constraining resource that often requires long, complex, interdependent, and vulnerable logistics tails. Energy resilience can have a significant impact on how the Air Force engages across the full spectrum of operations. To accomplish nearly all of its operational and training missions, the Air Force must ensure reliable and resilient power; without it, our Airmen cannot fly, fight and win. The overarching vision for the Air Force's energy program is "Mission Assurance through Energy Assurance," focused on securing the ability to perform its warfighting mission, even in the face of disruptions to traditional energy sources, while simultaneously optimizing energy productivity through technology and process improvements.

The Air Force focus on achieving mission assurance through energy assurance entails promoting distributed generation and storage capabilities to reduce single point vulnerabilities, evolving to a scenario where the national electric grid serves as the backup, instead of the primary source of electricity at Air Force installations. Consistent with the National Security Strategy, the Air Force is “committed to supporting energy initiatives that will attract investments, safeguard the environment, strengthen our energy security, and unlock the enormous potential of our shared region.” For the Air Force, this means prioritizing projects which improve our energy resilience, followed by those projects which only result in cost savings or renewable project development where the power is going to the electric grid, as opposed to the installation.

The Air Force energy program relies on both direct investment and third-party financing. Direct investment typically comes through FSRM funding, and third-party financing vehicles include Energy Savings Performance Contracts (ESPC) and Utility Energy Service Contracts (UESC). In total, the Air Force awarded 16 ESPC and UESC projects totaling \$470.2 million between Calendar Years 2002 and 2017. To take advantage of existing expertise, the Air Force has also partnered with the Defense Logistics Agency (DLA) and the U.S. Army Corps of Engineers (USACE) to expand its ability to identify and execute third- party performance contracts.

The Air Force continues to explore innovative funding solutions. Our recently introduced Energy-as-a-Service initiative is a groundbreaking concept, especially for the Federal Government. Through this initiative, the Air Force will identify effective, synergistic, and economical means to satisfy energy supply, efficiency, reliability, and resilience requirements. It aims to leverage the capabilities of local utilities and energy solution providers, through

consolidated agreements that assign overall responsibility to invest in, operate, manage, and modernize Air Force energy systems. The Air Force is currently evaluating Request for Information (RFI) responses from industry to explore the potential of this new concept that will break from existing paradigms to help the Air Force achieve its energy vision.

## **Operational Energy**

Air Force Operational Energy breaks barriers by connecting Airmen with technology, data, and innovative thinking to develop and champion energy-informed solutions for the Air Force. Through technology and process improvements, we aim to create an energy optimized Air Force that maximizes combat capability for the war fighter. With operational energy comprising approximately 81 percent of the overall Air Force energy bill, improving how aircraft and aircrews use aviation fuel can generate a significant capability increase.

To improve operational energy performance, the Air Force is requesting operational energy related funding in the FY19 PB, while planning to continue leveraging prior-year Congressional adds. For example, the \$6 million add in the FY18 budget supports collaborative projects which enable work with both major defense companies and small businesses to develop innovative technologies with the highest potential to establish or enhance warfighter capabilities.

To achieve our vision of maximizing combat capability by optimizing operational energy, the Air Force Operational Energy office is organized along four lines of effort: Current Operations, Logistics and Sustainment, Future Operations, and Strategic Engagement.

Current operations analysis focuses on maximizing combat capability by improving enterprise-wide data collection and conducting analysis to leverage an improved understanding of the relationship between mission and fuel use. Key initiatives include stakeholders across the

Air Force enterprise working to develop a fuel data collection strategy and implementation plan, and developing information systems and software applications to address outdated aerial refueling planning tools. For example, the tanker planning tool “Jigsaw” transitioned tanker scheduling for the Al Udeid Combined Air Operations Center from whiteboards to a digital format. Jigsaw has already demonstrated a two percent efficiency increase and scheduling algorithms planned for FY18, optimizing tanker support for combat operations and building an interface to communicate with the Master Air Attack Plan, are projected to further increase efficiency five to ten percent. “Galactic,” a suite of applications for 618th Air Operations Center planners, will address shortfalls in current planning tools enabling planners to develop air refueling mission plans that optimize tanker tasking and routing, bringing not only operational energy efficiencies, but also maximizing the combat and training effectiveness of the each tanker aircraft. Numerous other analyses supporting current operations are underway, including cost of weight analysis to identify inefficiencies introduced by carrying excess fuel, validation of the hypothesis that aerial refueling at speeds closer to receiver max range airspeed can reduce fuel consumption and flight time, saving fuel, increasing fighter aircraft service life, increasing maintenance intervals, and conserving fighter hours for more productive operations like training and combat, and Line-Oriented Efficiency Analyses (LOEA) where subject-matter experts research the operation and maintenance of aircraft to recommend changes or best practices to optimize fuel use while maximizing capability and readiness. LOEAs producing significant efficiencies were performed on E-3, RC-135, and C-5 platforms, and a C-17 LOEA is planned for FY18.

Logistics and Sustainment analysis focuses on improving Integrated Life Cycle Management processes across the Air Force logistics enterprise and fuel supply chain. Examples

include (1) improving engine sustainment processes (e.g. engine washes) and better leveraging new methods for inspection and rework of engine compressor sections to ensure overhauled legacy engines deliver optimized engine performance through the utilization of 21<sup>st</sup> century technologies, (2) conventional and alternative fuel and fuel additive testing, evaluation, and certification to improve resiliency of the jet fuel supply chain, and (3) unprecedented levels of “energy-play” in war game scenarios, i.e., comprehensive analysis of constraints to ensure adequate consideration of 2<sup>nd</sup> and 3<sup>rd</sup> order operational effects of adversaries efforts to target fuel supply chains.

Future Operations analysis guides acquisition policy to ensure Air Force acquisition stakeholders address Operational Energy requirements associated with new and major modification programs, via Energy Key Performance Parameter and the Energy Sustainability Analysis. Future Operations analysis is closely integrated with Air Force Research Laboratories activities to ensure the most promising transition technologies are prioritized. Key initiatives include, but are not limited to, microvanes, finlets, active winglet systems, adaptive flaps, and flight computerized optimization of control surfaces (PEAK Seeking Trim). Of these, microvanes and finlets (aft drag reduction initiatives) hold the greatest promise for immediate impact to the fleet with their low procurement cost, easy installation, and significant reduction in overall energy demand. For example, microvanes on the C-17 reduce aft drag and return a 1% gain in efficiency; fleet wide this equates to savings of more than \$10M per year. Other analyses target innovations for the airframe and power plant, such as lightweight modular armor plating, or synthetic lightweight cargo tiedowns to replace steel chains onboard cargo aircraft. Lightweight tiedowns can save 1,000 pounds per aircraft, increasing mission payload, or reducing fuel cost, as well as the wear on aircraft engines and structures.

Strategic engagement capitalizes on education and training opportunities, and a broad strategic communications strategy, to promote operational energy efficiencies. This includes strategic communications plans, key messaging, and a renewed mission and vision which focus specifically on operational energy initiatives.

## **Environmental Stewardship**

To meet our obligations to protect human health and the environment, the FY19 PB includes funding for Environmental Quality programs, including environmental compliance, environmental conservation, and pollution prevention, Environmental Restoration for cleanup of current installations, including munitions sites and sites closed during previous BRAC rounds, and funds to implement a conservation strategy to ensure all aspects of natural resources management are successfully integrated into the Air Force mission.

### *Environmental Quality*

With this request, the Air Force ensures a resilient natural infrastructure and maintains sound environmental stewardship by funding compliance with environmental laws. Through our standardized and centralized requirements development process that prioritizes the environmental quality program, we minimize risk to the mission, our Airmen and surrounding communities, and the natural infrastructure. This is a balanced, resource limited approach, adequate to ensure the Air Force has ready installations and continued accessibility to the natural infrastructure needed to support the installations and ranges we rely on every day, and will continue to rely on in the future, to train and operate.

The environmental compliance program focuses on regulatory compliance for our air, water and land assets. Examples of compliance efforts include more detailed air quality



assessments to analyze environmental impacts from Air Force activities, protecting our groundwater by improving management of our underground and above ground storage tanks, hazardous waste management and disposal, and ensuring environmental plans and permits are compliant and up-to-date.

Efforts in pollution prevention include maximizing the diversion of solid waste from landfills to reduce the volume and cost of disposal, while averting contamination of our natural infrastructure, recycling used oil, fluorescent light bulbs and spent solvents, and as supporting our hazardous materials (HazMat) pharmacies to effectively reduce and safely manage the use of hazardous materials. We continue to protect the health of our Airmen and the environment by making investments to minimize hazardous materials usage and hazardous waste disposal through the demonstration and validation of new technologies such as the robotic laser de-painting process on aircraft. Leveraging technologies like the robotic laser minimize negative environmental impacts and risks to Airmen, while enhancing the Air Force mission.

We remain firmly committed to a robust environmental conservation program. Prior appropriations have allowed the Air Force to invest in conservation activities on our training ranges and provide direct support to mission readiness. The conservation program in FY19 builds on past efforts to continue habitat and species management for 125 threatened and endangered species on 53 Air Force installations. This year's budget request also provides for continued cooperation and collaboration with other agencies, like the U.S. Fish and Wildlife Service, to provide effective natural resources management and safeguard military lands from wildfire hazards. Furthermore, the FY19 budget will further the Air Force's implementation of tribal relations policy to ensure the unique trust relationship that the U.S. government currently

shares with tribes continues, and it will provide opportunities to communicate aspects of the Air Force's mission that have the potential to affect tribes.

As trustee for more than 9 million acres of land including forests, prairies, deserts, wetlands, and coastal habitats, the Air Force is very aware of the important role natural resources play in maintaining our mission capability. To maintain military readiness, the Air Force needs realistic test and training environments, which in themselves are ecosystems. Quite simply, if we don't maintain the ecosystems we use to test and train, we will not be able to maintain military readiness. We continue to utilize proactive ecosystem management principles and conservation partnerships with other federal and state agencies to minimize or eliminate impacts on the training mission. We are challenged that as a result of our proactive natural resources management practices, coupled with the restricted access our mission sometimes requires, our installations are quickly becoming the last bastion of habitat for many species currently threatened by the increased development outside installation boundaries.

The Air Force remains firmly committed to responsible environmental stewardship, ensuring compliance with legal requirements, mitigating mission impacts, and reducing risk to our natural infrastructure. We will continue to honor our environmental management practices to ensure the sustainable management of the resources needed to test and train to fly, fight, and win now and into the future.

#### *Environmental Restoration*

The Air Force remains focused on completing investigations and establishing remedial actions to reduce risk to human health and the environment in a prioritized manner. Ultimately, we seek to make real property available for mission use at our installations, and facilitate community property transfers and reuse at our closed installations.

The Air Force has made significant progress managing this complex program area, with more than 13,500 restoration sites at our active and closed installations (more than 8,300 active and almost 5,300 BRAC). The environmental restoration program (ERP) is on-track to achieve a “response complete status” at 85 percent of ERP sites by the end of FY18 and, 91 percent by the end of FY21.

The new regulatory focus on Emerging Contaminants poses a significant risk management challenge to the Air Force environmental program. Regulatory, Congressional and other requests for information on environmental sampling, mitigation, response actions, and the public health implications of emerging contaminants are on the rise. Characterizing the extent of Air Force environmental releases of emerging contaminants such as PFOS/PFOA, assessing the potential risk and impact to human health and the environment, initiating response actions, and implementing appropriate mitigation measures drive unforeseen, chemical- and site- specific environmental liabilities and program costs, and crosses over Federal agency areas of responsibility. The Air Force response to releases of emerging contaminants from its facilities is a deliberate, science- based and data- driven process that is focused on protection of human health and the environment. It is conducted in accordance with the Defense Environmental Restoration Program, is consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the Safe Drinking Water Act, and is carried out in cooperation with appropriate Federal regulators, city and state officials and other stakeholders. On PFOS/PFOA health matters, we are coordinating with the Agency for Toxic Substances and Disease Registry (ATSDR) to address potential PFOS/PFOA public health risks and appropriate Air Force actions. The Air Force supports ATSDR efforts to conduct a nationwide PFOS/PFOA health assessment which includes both non-DoD and DoD communities.

While we will not compromise on the protection of the public, our Airmen and civilian workforce and their families, neither can we endlessly absorb the operational and financial risks of attempting to work with a myriad of unregulated emerging contaminants without some level of certainty that the cost of controlling exposure will have a commensurate public health and operational benefit.

## **Conclusion**

The Air Force again made hard strategic choices while preparing this budget request. We continue to work diligently to strike a delicate balance between capability and capacity, aiming to both improve readiness and modernize to ensure a ready force today and a capable high-end force tomorrow. Our FY19 PB request includes MILCON to support Combatant Command and new weapon system requirements while also investing existing-mission facilities and our research, development, test and evaluation infrastructure. We plan to continue the dialogue on right-sizing our installations footprint to ensure we set the proper course for enabling the Defense Strategy, thereby addressing our most pressing national security issues.

In spite of the fiscal challenges, we remain committed to our Service members and their families. Privatized housing at our stateside installations and continued investment in Government housing at overseas locations will provide our families with modern homes to improve their quality of life now and into the future. We also maintain our responsibility to provide dormitory campuses that support the needs of our unaccompanied Service members. Finally, we continue to carefully scrutinize every dollar we spend. Our commitment to continued efficiencies and right-sized installations will ensure maximum return on the Nation's investment in its Air Force installations.

