

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

SUBJECT: TOTAL FORCE READINESS

STATEMENT OF: LIEUTENANT GENERAL SCOTT RICE  
DIRECTOR AIR NATIONAL GUARD  
HEADQUARTERS, U.S. AIR FORCE

AND

LIEUTENANT GENERAL MARYANNE MILLER  
CHIEF OF AIR FORCE RESERVE  
HEADQUARTERS, U.S. AIR FORCE

AND

MAJOR GENERAL SCOTT WEST  
DIRECTOR OF CURRENT OPERATIONS,  
DEPUTY CHIEF OF STAFF FOR OPERATIONS  
HEADQUARTERS, U.S. AIR FORCE

March 22, 2017

NOT FOR PUBLICATION UNTIL RELEASED  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

## **INTRODUCTION**

Since our establishment 70 years ago, the United States Air Force has secured peace throughout the full spectrum of hostilities with a decisive warfighting advantage in, through, and from air, space, and cyberspace. Without pause, we deliver global combat power by deterring and defeating our nation's enemies, while supporting joint and coalition forces at the beginning, middle, and end of every operation. Though the intrinsic nature of warfare remains unchanged, the character of war—and the approach joint forces must take to address new and changing threats—must continually evolve.

As the nation plans to counter the national security challenges posed by Russia, China, Iran, North Korea, and Violent Extremist Organizations, controlling and exploiting air, space, and cyberspace remains foundational to joint and coalition success. Today's 660,000 active duty, guard, reserve, and civilian Airmen meet these challenges by deterring threats to the U.S., assuring our allies, and defeating our adversaries 24/7/365. We provide unwavering homeland defense and operate a robust, reliable, flexible, and survivable nuclear enterprise, as the bedrock of our national security.

This steadfast watch, however, comes at a price. Conducting continuous, worldwide combat operations since 1991 has taken a toll on our Airmen, equipment, and infrastructure and the overall readiness of our Air Force. While the Bipartisan Budget Act (BBA) of 2015 provided some space to improve readiness and continue modernization efforts, your Air Force needs ongoing Congressional support to ensure we continue to strengthen America's military to win today's fight, while building the Air Force our nation needs to meet tomorrow's challenges.

## **ALWAYS THERE**

Your Air Force has been globally engaged for the last 26 years in combat operations. We relentlessly provide **Global Vigilance, Global Reach, and Global Power** for the nation...we're always in demand...and we're always there...in every domain. Though our end strength has decreased by 38% since 1991, we have experienced significant growth across several mission areas.

Our Airmen provide joint forces with **Global Vigilance** using real-time multi-domain platforms and sensors integrated across our global intelligence and command and control networks to find, fix, and finish a range of hostile targets simultaneously around the world. Without fail, the Total Force flies 60 combat lines of persistent attack remotely piloted aircraft (RPA) per day...the unblinking eye supporting combatant commanders around the globe. Through our Intelligence, Surveillance and Reconnaissance (ISR) capabilities, we provided warfighters over 6,000 intelligence products per day used to identify enemy targets and trigger 70% of Special Operations Forces assaults on terrorists.

In securing our networks and digital infrastructure, 2016 saw Air Force cyber operators block more than 1.3 billion attempted malicious connections – an average of more than 40 per second. Meanwhile, our space operators provide relentless and reliable interconnectedness, global positional awareness, global missile warning, and battlefield situational awareness for our joint forces.

Nearly every three minutes a mobility aircraft departs on a mission, providing **Global Reach** and access, projecting power through a network of airfields in 23 countries and 77 locations, while providing critical aerial refueling capability. In 2016, our aeromedical professionals evacuated over 5,700 patients and provided emergency medical care resulting in a

98% survival rate. Your Air Force provides unrelenting ability to maneuver, sustain, and recover personnel and assets...at home, abroad, and with our allies and partners.

With our fighters, bombers, RPAs, and Intercontinental Ballistic Missiles (ICBMs), the Air Force provides conventional and nuclear **Global Power** that can strike an enemy on short notice anywhere in the world. In Iraq and Syria, the Air Force led 65% of the more than 17,000 coalition airstrikes since 2014. We delivered decisive firepower supporting joint, special operations, and coalition ground forces to defeat and degrade ISIS in order to regain critical territory. All the while, our Airmen continue to provide two legs of the nuclear triad, resource 75% of the Nuclear Command, Control, and Communications framework, deter our adversaries, and connect the President to strategic options.

Stitched together, the fabric of our Air Force weaves multi-domain effects and provides the strongest blanket of protection and ability to project America's full range of combat capabilities. Make no mistake, your Air Force is always there.

## **READINESS IN A CHANGING WORLD**

However, being "always there" comes at a cost to our Airmen, equipment, and infrastructure; we are now at a tipping point. Sustained global commitments combined with continuous fiscal turmoil continue to have a lasting impact on readiness, capacity, and capability for a full-spectrum fight against a near-peer adversary. In 2013, sequestration abruptly delayed modernization and reduced both readiness and the size of the Total Force.

We entered FY14 expecting a corresponding decrease in both operations and overall funding. Instead, FY14 began with increased operations, a government shutdown and fiscal planning focused on a second year of sequestration. Compounding the fiscal austerity, 2014 presented enormous geopolitical challenges to the U.S. including ongoing operations in Iraq and

Afghanistan, the rapid rise of ISIS, Russia's annexing of Crimea, and Chinese island-building in the South China Seas. The combination of decreased funding and increased military operations required the Air Force to make tradeoffs that adversely affected readiness. In FY16 and FY17 budgets, we made necessary adjustments to balance near-term readiness with future modernization. However, due to continuous combat operations, reduced manpower, an aging fleet, and inconsistent funding our readiness suffered.

Instead of rebuilding readiness for near-peer conflicts, your Air Force is globally engaged in operations against lesser-equipped, but still highly lethal enemies. This requires Airmen to serve at home and abroad to underpin joint force success, but at the expense of full-spectrum readiness.

Your Air Force needs permanent relief from the BCA caps, predictable funding, and sufficient end strength to recover full-spectrum readiness. We will continue to innovate, transform, and improve how we maximize our resources. However, we can't do this by ourselves, we still need your help in providing stable, predictable funding giving us the ability to provide a predictable path to modernizing our capabilities at the pace required to fight and win against any threat.

## **STATE OF AIR FORCE READINESS**

**We are America's first and most agile responder to crisis and conflict, underwriting every joint operation.**

To meet the full requirements of our Defense Strategic Guidance and current operation plans, we require 80 percent of our combat squadrons to be full-spectrum ready. We define full-spectrum readiness as the right number of Airmen, properly led, trained and equipped, to

accomplish our Air Force mission in support of joint forces in both contested and uncontested environments.

We measure full-spectrum readiness through our five levers of readiness: critical skills availability, weapons system sustainment, training resource availability, flying hour program, and operational tempo. The following sections highlight key areas where Congressional support is needed in order to balance our five levers of readiness.

## **PEOPLE**

Airmen are our greatest resource and our Air Force needs sufficient end strength to meet national security requirements. Manpower shortfalls in key areas remain the number one issue limiting readiness and is our top priority. At the start of 2016, our end strength stood at 311,000 active duty Airmen, down from more than 500,000 during Desert Storm—a 38 percent decrease. We appreciate your support to build the force up to about 321,000 in 2017, yet we will remain stretched to meet national security requirements.

We are currently working with the Secretary of Defense to develop the FY18 Presidential Budget to address manning shortfalls in key areas. We must increase our Active Duty, Guard and Reserve manning levels in key skill areas to meet the emerging mission requirements while continuing to support enduring combat operations. Our Total Force model (incorporating our active duty, guard, reserve, civilians, and our contracted capabilities), not only recognizes the value of an integrated team, but helps guarantee capabilities for today and tomorrow's fight. We are developing plans to address shortfalls in a number of key areas, including critical career fields such as aircraft maintenance, pilots, NC3, ISR, cyber, and battlefield Airmen.

As we drew down active duty manpower in recent years, we have relied more heavily on our civilian Airmen. Our civilians make up 26% of our Total Force—of which, 94% are in the

field, providing vital mission support through weapons system maintenance, sustainment, engineering, logistics, security, intelligence, and medical functions. Currently, our civilian workforce has over 8,000 vacancies. At the historical attrition rate, vacancies in the civilian workforce may grow to almost 13,000 over the next four months.

In the aircraft maintenance field, the active component is short approximately 3,400, the Air National Guard is short 1,600 and the Air Force Reserve is short 1,500 full-time aircraft maintainers. Because of this shortage, we cannot generate all of the training sorties needed for our aircrews. The same pool of maintainers keeping our existing aircraft flying at home and in combat, must simultaneously support fielding new platforms. Due to an ongoing shortage of active and reserve component aircraft maintainers, we will continue to fund contractors to fill the gap at select non-combat A-10, F-16, and C-130 units. This allows us to strike a balance between meeting today's demand while modernizing for the future.

We also face a pilot shortage crisis across all disciplines, most acutely in the fighter community. The Air Force has the world's finest pilots who enable an incomparable duality of global mobility and combat lethality. As airlines continue hiring at aggressive rates, they draw away experienced pilots from both active and the reserve components. Without a healthy pool of pilots, we will lack the ability to provide airpower to the nation.

Pilots are strategic national assets and the pilot crisis extends beyond the Air Force and military. To address this national challenge, the "Air Force -Airline Collaboration", formally known as the National Pilot Sourcing Forum has increased efforts to effectively utilize and train an adequate number of pilots to meet our nation's pilot demand signal.

However, Air Force pilot retention has declined for five straight years. We ended FY16 at 723 *fighter* pilots below requirement and 1,555 *total* pilots short across all mission areas.

Similarly the Air National Guard is 887 pilots short and the Air Force Reserve is 445 pilots short. Pilot training and retention are priorities across the Total Force. The increased end-strength provided in the FY17 NDAA will allow us to increase the training pipeline and better fill our under-manned units, which is vital to our recovery. We are grateful for your support to increase the pilot bonus, and we will continue to ensure our retention programs are appropriately sized and utilized.

## **NUCLEAR DETERRENCE OPERATIONS**

We require additional resources to invest in our nuclear capabilities and infrastructure that are the bedrock of our national security. While our nuclear forces remain safe, secure, and effective, we require significant investment to ensure robust, reliable, flexible, and survivable nuclear readiness and deterrence well into the future.

On average, our B-52 bombers are 55 years old and our nuclear facilities are now over 50 years old, with many facility systems operating well past their 20-year designed life span. Currently, all of our weapons storage areas are operating with waivers and deviations from our high standards. Although these storage areas are uncompromised—they remain safe and secure—we must recapitalize this infrastructure to address the recommendations identified in our Nuclear Enterprise Reviews for facility and weapons sustainment.

Meanwhile, we must continue to invest in modernization of our air- and ground-based nuclear weapons delivery platforms. The B-2 and B-52 require upgrades and we must ensure one of our main acquisitions priorities, the B-21 bomber, proceeds on schedule. In addition, our ICBMs, which provide the US with a stabilizing and responsive strategic deterrent capability, are being maintained and operated well beyond their planned operational life-cycles and face significant sustainment challenges. The Ground-based Strategic Deterrent (GBSD)

recapitalization program, which will replace the ICBM fleet, must proceed as planned in order to ensure the ground leg of the nuclear triad remains credible and effective in the decades ahead. Our nuclear command, control, and communications (NC3) system ensures the authorized employment and termination of nuclear weapon operations under all threats and scenarios. Accordingly, NC3 must be modernized to support accompanying nuclear capabilities.

Finally, we must modernize our nuclear weapons stockpile, by continuing to support the B-61 nuclear bomb life extension program, while investing in the development of the Long-Range Standoff weapon as a survivable air-launched cruise missile providing credible standoff attack options and holding heavily defended targets at risk. Though we are grateful for modest relief of spending limitations that allow us to address a scrutinized priority list of nuclear modernization efforts, we will still need to invest in foundational nuclear capabilities and infrastructure.

## **SPACE**

Underwriting every joint operation across the globe is our ability to operate within the space domain at the time and place of our choosing. But our freedom of action in, through and from space can no longer be taken for granted. Our potential adversaries have had a front row seat to the many successes achieved by our space integration into joint warfighting and, unfortunately, they are rapidly developing capabilities to deny us space superiority. In the not too distant future, our potential adversaries will have the capability to hold all of our military space capabilities at risk.

Space is a warfighting domain. The paradigm for space operations has shifted from a force enabler/enhancer to an integrated warfighting capability. As the Nation's lead service for space, we require your support to build more resilient and agile Air Force space systems. This

means supporting investment requests for capabilities to defend our space assets, while maintaining a cycle of continuous upgrades in each generation of spacecraft to ensure systems are fully ready when called upon by the joint warfighter and can continue to operate in an increasingly contested environment.

Maintaining assured access to space remains one of our top priorities. We are working to mature and advance our Launch Service Agreement strategy to develop affordable, sustainable launch capabilities that will eliminate dependence on foreign rocket propulsion systems.

We are also developing Space Situational Awareness and Battle Management Command and Control (BMC2) capabilities, which underpin our efforts to integrate space into full spectrum joint operations. Investments in space situational awareness capabilities, such as Space Fence, ground-based radar and optical systems and on-orbit surveillance capabilities, like the Geosynchronous Space Situational Awareness Program (GSSAP) [our geosynchronous orbit “neighborhood watch”], enables critical battlespace awareness in space and the unprecedented ability to characterize the space operational environment.

Similarly, investments in the Joint Interagency Coalition Space Operations Center (JICSPOC) and the Joint Space Operation Center (JSpOC) Mission System (JMS) provide the decision superiority and data we need to deter attack, and, if necessary, defend our capabilities and freedom to operate in space. Lastly, space systems provide mission-critical services and capabilities to support our joint forces in theater and around the globe, every day. Continuing to modernize and replenish our missile warning, nuclear command and control, satellite communication and Global Positioning System constellations ensures we will have resilient, mission-assured capability to support daily joint operations.

Finally, we need to continue integrating our organizations and capabilities across both the DoD and the Intelligence Community, while improving training for our space force and cultivating an enduring cadre of space operators and acquirers. We must normalize and operationalize the space domain by maturing our tactics, techniques and procedures and “train like we fight,” in space, just as we would in any other domain to ensure we are fully prepared to deal with today’s adversaries and emerging technology.

## **CYBERSPACE**

Cyberspace capabilities are essential to joint operations. The Air Force remains committed to providing 39 fully operational Cyber Mission teams by the end of FY18. Our cyber teams are conducting defensive cyber operations in support of combatant commanders daily, therefore we must commit to a robust and resilient cyber enterprise.

Today, the Air Force cyber enterprise lacks sufficient numbers of trained cyber forces to meet the ever-increasing demands. Additionally, the increasing frequency of malicious cyber activity targeting our cyber infrastructure and weapon systems, from state and non-state actors, continues to tax the limited personnel and tools to effectively defend critical assets and preserve freedom of movement in cyberspace where actions happen at the speed of light. Adequate and consistent resourcing over time will enable us to obtain and maintain cyber superiority in this highly dynamic environment.

We need to continue modernizing and developing offensive and defensive cyberspace tools and measures to harden current infrastructures while integrating cyber security into every new capability to counter cyberspace adversaries. This will ensure Air Force and joint force mission assurance—command and control, weapon system cyberspace defense, information dominance, and integrating offensive cyberspace effects into multi-domain operations.

## **COMBAT AIR FORCES**

Our average age of Air Force aircraft is 27 years old. If aircraft required license plates, 54% of our platforms would qualify for antique designation in the state of Virginia. The ability to fly, fight, and win with aging aircraft is made possible by remarkable Airmen in an all-volunteer force. Modernization can no longer be delayed...it is the capability and capacity for a high-end fight. Today's modernization is tomorrow's readiness.

To continue to provide unrelenting air superiority and global precision strike, we cannot accept a less than ready force. We have an ever-growing demand signal, our Air Force requires sufficient combat air forces capacity to keep pace. In addition to our other recapitalization efforts, we must also continue to procure the F-35 to counter rapidly advancing near-peer threats.

To ensure our Airmen are ready to face any emerging or future threat, we need to provide our Airmen with advanced threat testing, training, and associated technology. Our forces must have access to realistic test and training ranges and investment in computer-aided live, virtual, and constructive (LVC) infrastructure. LVC capability provides opportunities to test and train against the world's most capable threats, reduces costs, and supports full-spectrum readiness. Finally, we must have sufficient munitions to counter current threats, while developing advanced munitions to counter future threats.

## **INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE (ISR)**

The Air Force ISR enterprise is often the first in the fight and the last to leave...providing continuous coverage of global threats and targets...from the earliest surveillance of the battlespace, to long after weapon impact. However, Combatant Commander's demand for continuous ISR presence is insatiable and ever growing, and our ISR enterprise is strained.

Over the past 15 years we grew the RPA enterprise 1,200%...and today we support 60 continual combat lines of persistent attack RPAs. Within current constraints, we are committed to improving quality of life and work for our Airmen, and are prioritizing investments to create a dedicated launch and recovery MQ-1/9 squadron, increase training, and restore two MQ-9 operations squadrons. Additionally, we are training enlisted operators to fly the RQ-4 Global Hawk and funding a strategic basing initiative to eventually fly RPAs at new locations on schedule.

However, our ISR enterprise still needs help. We have more than 7,000 Airmen working around the clock in our Distributed Common Ground System. These Airmen supported over 29,000 ISR missions, analyzed more than 380,000 hours of full motion video and disseminated 2.6 million images to our warfighters in the last year alone, attempting to quench the insatiable demand for ISR. They have operated at these surge levels for over a decade with no forecasted decline in the near future.

To meet the needs of combatant commanders, the RPA force requires additional Airmen to achieve a healthy and sustainable force. Moreover, we continue to pursue emerging ISR Cyber and Space capabilities. We must also recapitalize our C2ISR platforms, such as our E-8C JSTARS aircraft, which provides a unique combination of airborne C2, communications, and high-fidelity moving-target surveillance capability. The joint and coalition's demand for Air Force ISR will only continue to grow in the foreseeable future and we must be prepared to meet their demand.

## **INFRASTRUCTURE**

We project airpower from a network of globally positioned bases, and we must focus on maintaining these bases as part of our strategic force posture. However, our infrastructure,

particularly our installations in the continental U.S., are in excess of our operational needs. This is an inefficient arrangement with aging and underused facilities consuming funds that should be prioritized for readiness and modernization.

Budget pressures have repeatedly delayed investments in aging infrastructure such as test and training ranges, airfields, facilities, and even basic infrastructure like power and drainage systems. Our infrastructure problem has only been exacerbated by the funding caps imposed under the BCA. Every year we delay infrastructure repairs affects operations and substantially increases improvement costs. It is time for another round of Base Realignment and Closure (BRAC) to allow us to reinvest funds in higher priority areas across the Total Force.

## **CONCLUSION**

Since 1947, the Air Force has relentlessly provided America with credible deterrence and decisive combat power in times of peace, crisis, contingency, and conflict. However, our relative advantage over potential adversaries is shrinking and we must be prepared to win decisively against any adversary. We owe this to our nation, our joint teammates, and our allies. The nation requires full-spectrum ready air, space, and cyber power, now more than ever. America expects it; combatant commanders require it; and with your support, Airmen will deliver it.