



# Department of Defense Accomplishments (2009-2016)

**Taking the Long View, Investing for the Future**

**Secretary Ashton Carter**

Cabinet Exit Memo | January 5, 2017

# A Record of Progress

As this Administration took office in early 2009, the country had just experienced another deadly year in Iraq and Afghanistan. The Department of Defense (DoD) was therefore necessarily focused on large-scale counterinsurgency operations to defeat extremist networks in those countries. In the years since, this Administration effectively adjusted its defense strategy, shifting from a focus on irregular warfare and counterterrorism to a return to full-spectrum combat readiness and directing a responsive and versatile military that can prevail across the full spectrum of operations. This shift was accompanied by an \$800 billion reduction in planned future defense spending, following the 2011 Budget Control Act and subsequent automatic sequestration spending caps. The combination of these two circumstances has led to the pursuit of a smaller yet more technologically advanced and capable military that is ready for the threats of today and the challenges of tomorrow.

Today, the Department must prepare for and meet five major, unique, and rapidly evolving challenges. We're managing historic change in the Asia-Pacific – the single most consequential region for America's future. We're countering the prospect of Russian aggression and coercion, especially in Europe. In the face of North Korea's continued nuclear and missile provocations, we're improving our nuclear and conventional deterrent capabilities. We're checking Iranian aggression and malign influence in the Gulf, and protecting our friends and allies in the Middle East. And we're conducting an aggressive global campaign against terrorists and other violent extremists, while accelerating the certain and lasting defeat of the Islamic State of Iraq and the Levant (ISIL), destroying its parent tumor in Iraq and Syria, and everywhere else it metastasizes around the world – even as we help protect our homeland and our people.

We don't have the luxury of choosing among these challenges – we have to address them all. At the same time, we must contend with an uncertain future – ensuring that we continue to be ready for challenges we may not anticipate. America is today the world's foremost leader, partner, and underwriter of stability and security in every region across the globe, as we have been since the end of World War II. But even as we continue to fulfill this enduring role, it's also evident that we're entering a new strategic era. Today's security environment is dramatically different – more diverse and complex in the scope of its challenges – than the one we've been engaged with for the last 25 years, and it requires new ways of thinking and new ways of acting. As the world changes and complexity increases, we'll have to change, too – how we invest, how we fight, how we operate as an organization, how we attract and nourish talent, and how we balance risk across the many competing threats the Department faces.

The Department has faced this new strategic era while dealing with significant impediments presented by Congress, including budget uncertainty, the first government shutdown in a generation, the repeated denial of reform proposals to make the defense enterprise more efficient, and efforts to micromanage the organization of the Department. Despite this, the Department has been able to manage its strategic priorities during eight consecutive years that began with continuing resolutions, albeit at increasing levels of programmatic risk. Nonetheless, one thing is certain: America's men and women in uniform stand ready to meet the challenges of today and tomorrow, whatever they might be.

Below I highlight some of their many accomplishments of the past eight years, and the steps we need to take from here to build on this progress.

# Adjusting to Strategic Change

## Operationalizing the Rebalance to the Asia-Pacific Region

In a region home to nearly half the world's population and nearly half the global economy, for 70 years the United States has helped underwrite a stable security environment that allowed the people, economies, and countries in the Asia-Pacific to rise and prosper. The region has made remarkable progress in this time, and that progress continues today. But not all change has been constructive – tensions in the South China Sea, North Korea's continued provocations, and the dangers of violent extremism felt worldwide all pose challenges to the region's stability and prosperity. Early in President Obama's tenure, he made a strategic decision to increase focus on the Asia-Pacific, recognizing its vital importance to America's political, economic, and security interests. In support of this rebalance, DoD has realigned forces in the region to be more geographically distributed, operationally resilient and politically sustainable, while also increasing investments in capabilities and technologies to counter the growing anti-access/area-denial (A2/AD) challenge in the Western Pacific.

To do so, we are positioning 60 percent of our Navy and overseas Air Force assets in the Asia-Pacific region, including some of our most advanced capabilities. For instance, over the past eight years, DoD has deployed a Terminal High Altitude Area Defense (THAAD) battery to Guam; introduced additional ballistic missile defense-capable ships into Japan; replaced CH-46 helicopters in Okinawa with more capable MV-22 Osprey aircraft; established air-ground task force capabilities in multiple locations across the Pacific; introduced a continuous bomber presence in the region to bolster partner nations; and strengthened the capabilities of U.S. Air Force and Army forces in the Republic of Korea. We have also focused on building similar security capabilities in our many friends and allies. We've done this through recent efforts like the five-year \$425 million Maritime Security Initiative, which has increased training, exercises, personnel support, and maritime domain awareness in the South China Sea and elsewhere.

The United States favors the development of an inclusive and principled security network that is open to all that seek to preserve and strengthen the rules and norms that have undergirded regional stability for the past 7 decades. We have invested in strengthening and modernizing our alliances: revising bilateral defense guidelines with Japan; moving to a conditions-based approach to the transition of wartime operational control with South Korea; establishing a rotational deployment of U.S. Marines in Australia; signing an Enhanced Defense Cooperation Agreement with the Philippines; and establishing closer defense ties with India, including by naming it a Major Defense Partner and establishing the Defense Technology Trade Initiative. We have supported multilateral forums, bolstering our ties with the Association of Southeast Asian Nations (ASEAN) and investing in strengthening trilateral ties, including through the Defense Trilateral Talks with Japan and Korea, and the Security and Defense Cooperation Forum with Japan and Australia. And we have also regularized military-to-military contacts with China at all levels, concluding two risk reduction confidence-building measures in an effort to improve transparency and reduce the risk of unintended incidents. Finally, over the course of this Administration, we have deepened our level of military-to-military engagement with Taiwan and executed over \$14 billion in arms sales to strengthen its defenses.

America is a Pacific nation, and the future of the Asia-Pacific region is closely intertwined with our own. Looking ahead, the next Administration should continue to pursue additional force posture opportunities, forge closer partnerships with and among countries across the region, and look to protect and strengthen existing alliances and partnerships. Our investments must continue to protect our competitive edge in the region by extending the technological military superiority the U.S. and the world have relied upon for decades. Tensions in the South China Sea must be managed, as must the consequences of North Korea's continued provocative actions. At the same time, the next Administration should continue to promote high-standards trade and investment, which will deepen partnerships in the Asia-Pacific region and underscore our strategic advantage in the region.

### **A Strong and Balanced Strategic Approach to Deter Russia**

Early in this Administration, DoD established a Defense Working Group with Russian counterparts to promote the "reset" of U.S.-Russian relations. This period of engagement yielded several breakthroughs, including the successful negotiation and ratification of the New START Treaty, the use of the Northern Distribution Network to support Operation Enduring Freedom in Afghanistan, and increased information-sharing to counter terrorist organizations.

Following Russia's illegal annexation of Crimea in 2014, the United States mobilized the international community in support of Ukraine. Since that point, DoD has taken a series of measures aimed at deterring further aggressive Russian actions and defending U.S. and allied interests. Under Operation Atlantic Resolve, we have also increased joint multi-national exercises in frequency and scale, and improved regional infrastructure. We created the European Reassurance Initiative (ERI), funding approximately \$800 million in FY 2016 to support enhanced U.S. force posture through rotational deployments, preposition equipment and materiel, and further develop the capability and resilience of our NATO allies and partners. To further reinforce our allies and build our deterrence posture, we requested \$3.4 billion for ERI in FY 2017, more than quadrupling our prior year request. Led by the United States, NATO recently agreed to establish an enhanced forward presence, including positioning four battalion-sized battlegroups in the Baltic states and Poland. In addition, the United States has worked to help build the capacity of Ukraine's forces, with DoD leading efforts to enhance Ukraine's internal defense capabilities through training programs and the provision of equipment.

To provide the defense resources vital to ensuring transatlantic security for the future, DoD secured a NATO Summit commitment to set concrete goals for defense spending on specified Alliance capability priorities; 24 NATO allies are now meeting, or on a path to meet, this goal. The United States must remain engaged with NATO – an alliance of principled and like-minded members backed by strength – to ensure continued progress and to deter and defend against Russian aggression in Europe.

### **Deterring North Korea**

North Korea poses a longstanding challenge in the Asia-Pacific region, where it remains dangerous both to us and our allies – that's why our forces on the Korean Peninsula remain ready. We have invested in capabilities necessary to deter North Korean provocation and aggression, ensure our forces on the Korean Peninsula remain ready and capable to "fight tonight," if necessary, and defend against threats emanating from North Korea against the United States and our allies. This includes threats posed by North Korea's nuclear and missile programs, against which DoD is fully capable of defending the U.S. homeland. Our

position has been, and remains, that North Korea must abide by its international obligation to abandon its nuclear and missile programs and stop its provocative behavior.

DoD also remains fully capable of fulfilling U.S. treaty commitments to our allies in the event of a North Korean attack, and we're working with our Republic of Korea allies to develop a comprehensive set of alliance capabilities to counter the growing North Korean ballistic missile threat. Together with South Korea, we have improved readiness and upgraded our capabilities. And in response to North Korea's series of ballistic missile test launches earlier this year, including its satellite launch using ballistic missile technology and multiple launches of medium- and intermediate-range ballistic missiles, the United States and the Republic of Korea made an Alliance decision to deploy a THAAD system to the Korean Peninsula by the end of 2017.

### **Checking Iran's Malign Influence While Strengthening Regional Friends and Allies**

The Middle East presents a kaleidoscope of challenges, but amid this region's complexity and uncertainty, we have interests of great importance: to deter aggression; to bolster the security of our friends and allies; to ensure freedom of navigation in the Gulf; to check Iran's malign influence; and to deescalate regional sectarian tensions, which fuel regional conflicts.

The Joint Comprehensive Plan of Action (JCPOA), which verifiably prevents Iran from obtaining a nuclear weapon, is an important step, and one that would not have occurred absent U.S. leadership. To strengthen the U.S. negotiation position, DoD developed advanced military capabilities to provide options should Iran choose to walk away from its commitments. The International Atomic Energy Agency (IAEA) has confirmed that Iran is complying with its commitments, and it is in our interest to maintain the agreement to check Iran's nuclear ambition. But despite this historic agreement, Iran and its proxies still present serious security challenges. Iran supports the Assad regime in Syria, backs Hizballah in Lebanon, and is contributing to disorder in Yemen.

As a result, DoD has maintained a robust regional force posture ashore and afloat, including tens of thousands of U.S. personnel and our most sophisticated ground, maritime, and air and ballistic missile defense assets. Through the process of Summits and follow-up meetings launched at Camp David in May 2015, we have extended unprecedented offers of security assistance and training to the Gulf Cooperation Council (GCC) countries aimed at helping develop their capabilities to address asymmetric threats, such as terrorism, cyber threats, and maritime challenges. We have also sold more than \$100 billion in arms to our Gulf partners. For instance, the State Department in November 2016 informed Congress of its intent to sell F/A-18 fighter aircraft to Kuwait and F-15 fighter aircraft to Qatar valued at a combined \$30 billion. These sales will provide tens of thousands of jobs in the United States and will enhance Qatar and Kuwait's capability to provide for their national defense, increase their interoperability with U.S. forces, and allow them to take a larger share of regional security responsibilities. Finally, NATO has improved missile defense to meet the near-term threat to European allies and deployed forces in light of the increasing proliferation of ballistic missiles and against threats emanating from outside the Euro-Atlantic area.

We have also maintained an ironclad commitment to Israel's qualitative military edge, including by providing Israel with some of our most advanced capabilities. Since FY 2010, the United States has provided over \$21.75 billion in Foreign Military Financing (FMF) to Israel, the most to any country worldwide. Beyond FMF, since 2008 the United States has also invested over \$3 billion in joint development and

procurement of multilayered missile defense architecture for Israel, including over \$1 billion for Iron Dome batteries and interceptors, which have saved countless lives. In 2016, the United States and Israel finalized a \$38 billion 10-year security assistance memorandum of understanding, the largest such package in our nation's history, which includes an unprecedented \$5 billion commitment in missile defense assistance. Continued partnership between our two nations must be a priority for the next Administration.

### **Countering Terrorists and Other Violent Extremists**

Over the past eight years, our men and women in uniform have remained vigilant to protect American lives and interests from the terrorist threat, with U.S. forces deployed around the globe to deny violent extremist organizations sanctuary. We have worked with partner nations to increase their counterterrorism capability and capacity, establishing the Counterterrorism Partnerships Fund (CTPF) to help them with the flexibility and resources required to deter and defeat terrorist threats as they evolve. We have taken direct action, when there is actionable intelligence, to capture known terrorists, or conduct strikes against terrorists in defense of our people and partners, including successful targeted operations in 2011 against Osama bin Laden, the mastermind of the 9/11 attacks, and in 2016 against Mullah Akhtar Mansur, the leader of the Taliban. We've also undertaken numerous high-risk hostage rescue operations, such as the rescue of Captain Richard Phillips from the *Maersk Alabama* in April 2009.

At the same time, we have also focused on rebuilding our own capabilities taxed by years of war. For instance, since FY 2008, DoD has increased the base budget for Special Operations by \$1.7 billion and added 15,000 personnel, growing SOF forces by 25 percent and expanding the capabilities of an already elite, rapidly deployable force. Our men and women are executing the counterterrorism mission every day around the globe, and below I describe their progress. In addition, as part of post-9/11 intelligence reform efforts, including the creation of the Director of National Intelligence and the significant organizational modernization of key intelligence agencies such as Central Intelligence Agency (CIA), National Security Agency (NSA), National Geospatial Intelligence Agency (NGA), and Defense Intelligence Agency (DIA), the Intelligence Community and the military have invested in developing unprecedentedly sophisticated, agile and integrated operational capabilities.

#### [Iraq and Syria](#)

When President Obama took office, the United States had 140,000 military personnel in Iraq. He directed his national security team to undertake a comprehensive review of our strategy, with the goal of transitioning full responsibility to an Iraq that is sovereign, stable, and self-reliant. By late 2011, we had drawn our forces down as we transitioned from Operation Iraqi Freedom to Operation New Dawn. Since that time, we have worked with the Government of Iraq to take the fight to terrorists who threaten our country, while also maturing the long-term bilateral security relationship between our two nations.

Unfortunately, we continue to face a terrorist threat, and in recent years the terrorist group ISIL began to advance and gain territory across Iraq and Syria. In August 2014, the President directed DoD to take targeted military action to degrade and ultimately defeat ISIL – working by, with and through local partners. Since that time, DoD has spearheaded the assembly of a 68-member coalition to implement Operation Inherent Resolve (OIR) and to develop and support military capabilities of partner nations to defeat ISIL.

Following the Paris attacks in November 2015, we significantly accelerated the OIR campaign, with a broad appeal for increased contributions from existing members and new contributions by others, including from NATO. At least 34 countries, including the Government of Iraq, have provided forces or significant basing in support of the campaign. Today this coalition continues to achieve results on the battlefield, pressuring ISIL in Mosul and wherever it seeks refuge in Iraq. I hope that the next Administration will keep up the pace of this counter-ISIL military campaign, but they must also ensure that Iraqi Security and Kurdish forces are able to sustain their gains and that reconciliation and effective governance continue. It must be local forces who deliver ISIL a lasting defeat, because only they can secure and govern the territory by building long-term trust within the populations they liberate.

In Syria, what began as peaceful protests against the repressive regime of Bashar al-Assad has turned into a tragic and brutal civil war. At the President's direction, DoD has supported the moderate Syrian opposition and Syria's neighbors, Jordan, Lebanon, Turkey, and Iraq – enabling local, motivated forces with a global coalition wielding a suite of capabilities – ranging from airstrikes, special forces, cyber tools, intelligence, equipment, mobility and logistics, training, advice and assistance. Early on, to reduce the threat of further chemical attack in Syria, DoD developed and employed a mobile capability to eliminate the most dangerous materials within Syria's declared chemical weapons stockpile, destroying 600 metric tons of materials in only a matter of months. DoD-supported local Syrian counter-ISIL forces have cleared ISIL from over 30 percent of the territory the terrorist organization once controlled in Syria. At the same time, DoD is also committed to addressing the humanitarian crisis caused by the Syrian conflict – in FY 2015 alone, DoD provided more than three million relief items as part of a lifesaving assistance program.

Unfortunately, Russian support for the Assad regime and Russia's entry into the civil war has made the situation in Syria more dangerous and violent, and potentially more prolonged. While the choice to intervene was Russia's to make, and the consequences will be its responsibility, the next Administration must hold Russia to account in its promise to combat terrorism and end the civil war.

### *Ensuring Long-Term Stability in Afghanistan*

As President Obama took office in 2009, the situation in Afghanistan had deteriorated, with the Taliban beginning to control additional swaths of territory while engaging in devastating attacks of terrorism across the country. Twice in 2009, he directed increased reinforcements to Afghanistan to disrupt, dismantle, and defeat Al Qaeda and its extremist allies. Since then, DoD has worked closely with our Afghan partners to reduce the terrorist threat and give the Afghan people the opportunity to succeed.

We have made significant gains. We assisted the Afghan government in establishing, enabling, and equipping the Afghan National Defense and Security Forces (ANDSF), which today total more than 350,000 personnel. In April 2014, Afghanistan held a presidential election and produced a government consistent with its laws and constitution. And by the end of 2014, the ANDSF's increasing capability allowed for them to take the lead in providing security, and the United States shifted to a train, advise, assist mission, ending our combat mission in Afghanistan.

Today the United States has fewer than 10,000 military personnel in the country, but we continue to lead the way in international support for Afghanistan, leading a coalition of 41 allies and partners. The Bilateral Security Agreement and Status of Forces Agreement negotiated by this Administration provide the foundation for a long-term and enduring relationship between the United States and NATO with the

Government of the Islamic Republic of Afghanistan. At the 2016 Warsaw NATO Summit, the international community committed to funding the sustainment of the ANDSF through 2020. My hope is that the next Administration will lead the way in advancing this relationship, because the Afghan people will need the partnership of the United States for many years to come.

### *Defeating the Global Terrorist Threat*

The terrorist threat is continually evolving, changing focus and shifting location, requiring us to be flexible, nimble, and far-reaching in our response. Accordingly, the Department is leveraging the existing security infrastructure we've already established in Afghanistan, the Middle East, East Africa, and Southern Europe, so that we can counter transnational and transregional terrorist threats like ISIL and others in a sustainable, durable way going forward.

We are committed to combatting ISIL's metastases everywhere they emerge around world. In Libya, the U.S. military provided support to the Government of National Accord and its aligned forces as they ejected ISIL from Sirte. In Yemen, we have conducted counterterrorism strikes against Al Qaeda in the Arabian Peninsula (AQAP), in order to protect Americans, thwart its destabilizing effect on Yemen and deny it a haven from which to plan future attacks on the United States and our allies. Elsewhere in Africa, we have worked to enable African partners to reduce drastically the amount of territory controlled by Boko Haram, ISIL-West Africa, and Al Shabaab, including by providing advisory support, sharing intelligence, and implementing more than \$460 million in train and equip programs funded primarily through the CTPF. In East Africa, DoD worked with the Department of State to build the capacity of troop-contributing countries in the African Union Mission in Somalia (AMISOM). As a result, AMISOM was able to push Al Shabaab out of Mogadishu and provide security space for a Somali government to take hold. The United States also negotiated the renewal of an agreement to ensure U.S. access to Camp Lemonnier in Djibouti for the next 30 years, enabling continued support for counterterrorism and capacity-building efforts in the region. We have redoubled efforts to work with countries in the region to deal with emerging crises, through efforts like the African Peacekeeping Rapid Response Partnership, which builds the capacity of East African militaries to deploy peacekeepers rapidly in response to emerging conflict.

While significant progress has been made, to counter the movement of foreign fighters and ISIL's attempts to relocate or reinvent itself, the United States and our coalition must endure and remain engaged militarily in the years to come.

### *Establishing an Alternative to the Detention Facility at Guantanamo*

I remain convinced that the responsible closure of the detention center at Guantanamo Bay will benefit our national security. DoD has reduced the detainee population by nearly 75 percent, from 242 detainees in January 2009 to 59 today. To do so safely, we have developed a robust review process, which allows detainees to be transferred while keeping America safe by ensuring steps are taken to prevent reengagement. However, there are individuals remaining at the detention facility whom it would not be safe to transfer. For this reason, in February 2016 the White House submitted a plan to Congress for the permanent closing of the detention facility at Guantanamo and an appropriate, secure, alternative location for housing those detainees in the United States. The next Administration should act to continue this progress and achieve the responsible closure of the Guantanamo detention facility.

### Promoting Transparency in U.S. Actions

In the midst of these and other global operations, the Department has made great efforts to promote transparency, consistent with our national security interests, particularly in communicating the legal and policy bases for our operations. Senior leaders have articulated the legal frameworks for our operations in a variety of public addresses covering such topics as the scope of the 2001 and 2002 Authorizations for Use of Military Force, counterterrorism operations, and the law of armed conflict as applied to targeting. Also, in 2015, the Department released the first ever Department-wide Law of War Manual, a significant public statement of the Department's views on the law of armed conflict which will inform public debate and international discussions on these issues for years to come.

In addition, since 2014, the Department has been making available public information about U.S. airstrikes in Iraq and Syria and has also released information on the outcome of counterterrorism operations in Libya, Somalia, and Yemen. The Department has issued regular public reports regarding civilian casualties and engaged in public dialogue focused on reducing these incidents.

The Department also played a lead role in preparing the recently published "Report on the Legal and Policy Frameworks Guiding the United States' Use of Military Force and Related National Security Operations." That Report seeks to consolidate prior articulations of existing legal and policy positions in this area and to make public, to the extent feasible and consistent with the need to protect classified information, legal and policy frameworks that guide the U.S. Government's counterterrorism operations and other uses of military force. The Report addresses many different topics, including overseas lethal operations, capture operations, and interrogation, detention, and prosecution of terrorism suspects.

### **Maintaining a Safe, Reliable and Effective Nuclear Deterrent**

In this emerging strategic environment, nuclear deterrence remains a foundational mission of the Department of Defense. In the nuclear enterprise, the Department is committed to executing the President's guidance to provide a safe, secure, and effective nuclear deterrent, while reducing the role of nuclear weapons in our national security strategy. In 2010, DoD committed through the New START Treaty to reduce the size of U.S. strategic forces to the lowest level since the early days of the Cold War. Since June 2013, DoD has been implementing President Obama's nuclear employment guidance, which aligns U.S. nuclear employment planning with today's strategic environment by focusing planning on only those objectives and missions that are necessary for deterrence in the 21st century. DoD is also implementing a host of recommendations to improve the health of the nuclear enterprise, such as increasing manpower; funding equipment, vehicles, and maintenance; and investing in technological efforts that improve sustainment of the force. Many of these recommendations emerged from a comprehensive internal and external reviews of DoD's entire nuclear enterprise that Secretary Hagel initiated after a series of safety and personnel-related incidents in 2014.

Investing in our nuclear forces and supporting infrastructure is essential for maintaining a safe, secure, and effective deterrent. In addition, the United States has begun, and must continue, to invest in a modern physical infrastructure – consisting of the national security laboratories and a complex of supporting facilities – and a highly capable workforce with specialized skills needed to sustain the nuclear deterrent. To ensure the security and reliability of our nuclear arsenal, DoD is working together with the Department of Energy's National Nuclear Security Administration (NNSA) to refurbish aging weapons. To that end,

the NNSA has begun a series of life extension programs for our nuclear arsenal, beginning with the W76 submarine-launched ballistic missile warhead and continuing with the B61 gravity bomb. At the same time, DoD has also begun the process of recapitalizing our aging nuclear triad. We initiated the program to build the Columbia-class nuclear ballistic missile submarine to replace the Ohio-class submarine. We selected a designer for the B-21 Raider long-range strike bomber, which will ensure that the United States maintains a penetrating bomber. We are developing the Long-Range Standoff (LRSO) cruise missile, which replaces the aging air-launch cruise missile. Taken together, the new penetrating bomber armed with an effective standoff missile will continue to provide an adaptable, recallable, flexible, and highly visible force to extend deterrence, demonstrate resolve, and signal commitment to allies and partners, even as adversaries continue to modernize their air defenses. We are continuing production of the F-35 Joint Strike Fighter which will be updated in Block IV to assume the role of dual-capable aircraft and provide the U.S. and Allies a 21st century capability. Finally, we've begun the replacement of the land-based Intercontinental Ballistic Missile, the Ground-Based Strategic Deterrent, to continue to provide a stabilizing and responsive deterrent capability.

The nuclear enterprise will continue to require sustained focus, attention, and resources from the next Administration. Because many of these programs were deferred, recapitalization of all three legs of the Triad must take place nearly simultaneously. Over the next two decades, I expect the total cost of nuclear modernization to be approximately \$270 billion. Although this presents a long-term affordability challenge for DoD, I believe we must fund the enterprise to ensure that our nuclear deterrent continues to provide the President options and remains as safe, secure, and reliable as it is today. We must also continue to work with our NATO allies to ensure that as long as nuclear weapons exist, the alliance will maintain the appropriate mix of capabilities, to include nuclear weapons, to protect its members.

### **Strengthening our Missile Defense**

Given North Korea's aggressive pursuit of the capability to delivery ballistic missile attacks against the homeland, U.S. forces and allies and partners, we've made the important decision to strengthen and improve our missile defense capabilities –particularly to counter the A2/AD challenge of increasingly precise and increasingly long-range ballistic and cruise missiles being fielded by several nations in multiple regions of the world. Instead of spending more money on a smaller number of more traditional and expensive interceptors, we're funding a wide range of defensive capabilities that can defeat incoming missile raids at much lower cost per round, and thereby impose higher costs on the attacker.

We're investing in improvements that complicate enemy targeting, harden our bases, and leverage gun-based point defense capabilities. We're also committed to improving our homeland and theater defense systems, and those of our partners. For instance, we are working to increase the number of deployed Ground-Based Interceptors (GBIs) in Alaska from 30 to 44, and deployed an additional radar to Japan. We have also fielded multiple theater missile defense platforms, increasing the number of DDG-51 AEGIS destroyers capable of conducting missile defense, and procuring the PAC-3/MSE interceptor to give the Patriot Air Defense System longer reach. And we continue to expand missile defense cooperation with allies and partners around the globe, including by deploying four DDG-51s to Rota, Spain; and stationing THAAD batteries in Guam and the Middle East while working to conclude other THAAD deployments in concert with allies and partners such as South Korea.

## Promoting Peacekeeping and Humanitarian Assistance

In addition to preparing for emerging and evolving threats, throughout this Administration, the Department has continued and strengthened our commitment to providing humanitarian support for nations in need. Over the past eight years alone, DoD has provided more than \$1 billion in support of U.S. interagency foreign disaster response to more than 30 disasters worldwide. For instance, after an earthquake and subsequent tsunami that struck Japan in April 2011, U.S. military forces and assets were deployed to affected areas within 24 hours; 24,000 personnel, 189 aircraft, and 24 Navy vessels were ultimately involved in relief efforts. Similarly, in Africa, DoD provided \$465 million and committed more than 2,000 military personnel on the ground to fight the Ebola epidemic in 2015, setting up a 25-bed hospital and 10 Ebola treatment units and providing the logistic backbone for the response that saved hundreds of thousands of lives. In 2014, after rigorous study by DoD, the Administration announced that the U.S. would cease to produce or acquire anti-personnel landmines, and that we would discontinue the use of antipersonnel land mines everywhere in the world except the Korean peninsula, policies that are paving the way for the U.S. to eventually accede to the Ottawa convention. DoD also responded to the President's direction to enhance U.S. support to UN peacekeeping, working to double the number of U.S. staff officers serving in UN peacekeeping operations, providing training to UN staff and participating nations, and providing enabling technology and equipment. Moving forward, I hope the Department will continue to work with partner nations to increase the potential of peace operations, and will contribute when disaster strikes and friends and partners are in need.

## Seizing Opportunities for the Future

### Enhancing Conventional Deterrence

Despite the reduction of \$800 billion in planned spending over FY 2012-2021 following the caps imposed by the Budget Control Act in 2011, the Department has made the investments necessary to ensure we can credibly deter any adversary conventionally. The starting point for this effort is the Third Offset Strategy, which is aimed to strengthen our military competitive edge and to bolster U.S. conventional deterrence, and primarily driven by Chinese and Russian military developments and actions. This is a program of programs with unclassified and classified elements that has the goal of maintaining the Joint Force's conventional overmatch well into the future via technological, organizational, and conceptual innovation.

In the maritime domain, we have refocused on lethality in high-end conflict while continuing to grow the battle fleet. Our investments reflect an emphasis on payloads over platforms, and the ability to strike from sanctuary quickly so that no target is out of reach. We've maximized our undersea advantage, investing in important munitions, continually improving our Virginia-class attack submarines, and rapidly prototyping unmanned undersea vehicles in multiple sizes and payloads to ensure we continue to have the most lethal undersea and anti-submarine force in the world. To bolster the lethality of our surface fleet, we are maximizing production of our most modern and capable missiles, and we've reversed the precipitous decline in the size of the Navy by adding 30 additional ships to the planned battle fleet compared to the number in 2008, an 11 percent increase.

To ensure the U.S. military's continued air superiority and global reach, we have made important investments in several areas, from hypersonics to a wide range of versatile munitions. We're investing in

stealthy, fifth-generation fighter capability by modernizing the F-22 and buying the F-35 Joint Strike Fighter -- and since we established a new program baseline for the F-35 program in 2011, the program has delivered over 175 aircraft, on time and at decreasing cost. And we've invested in unmanned aircraft. Since 2008, the Air Force has nearly doubled its remotely piloted aircraft enterprise to 60 combat lines with more than 1300 pilots, who now outnumber pilots in manned aircraft. To put the unmanned enterprise on more sustainable footing, we've created a pipeline for new pilots and maintainers. We have initiated the B-21 bomber, which will provide a penetrating capability against emerging surface to air defenses even while meeting cost targets set in 2009, and have procured the KC-46A air refueling tanker to ensure our fighters, bombers, and cargo planes can reach all around the world even while holding to its original fixed price contract. To prepare for the next generation of tactical air capability we also funded the Aerospace Innovation Initiative.

To ensure our ground forces have the capabilities to counter emerging threats and the demonstrated ability to deter and if necessary fight and win a full-spectrum conflict, we are providing our Army, Marine Corps, and special operations forces with greater lethality in several forms. The Marines have now fielded in large numbers the revolutionary tilt-rotor MV-22 Osprey, the Army has initiated its Armored Multi-Purpose Vehicle, and both have started producing the Joint Light Tactical Vehicle, the replacement for the Humvee.

### **Addressing Emerging Threats in Cyber, Space, and Electronic Warfare**

In the areas of cyber, space, and electronic warfare, our reliance on technology has given us great strengths, but also led to vulnerabilities that potential adversaries are eager to exploit. The Department of Defense has three missions in cyberspace – to defend our networks, systems, and information; to help defend the nation and our interests from cyberattacks of significant consequence, working with other departments and branches of government; and to provide options that can augment our other military systems. Over the last eight years, we have made tremendous organizational improvements in cyber policy. DoD established Cyber Command as a sub-unified command in 2010; named a Principal Cyber Advisor in 2014; and established all 133 teams of the Cyber Mission Force in 2016. In fact, in the last four years, DoD has increased its budget request for cyber activities by almost 50 percent, from \$4.6 billion to \$6.8 billion. We have built major military partnerships for cooperation in cyberspace with key partners and allies around the globe. Together, we've integrated offensive cyber operations into the counter-ISIL fight, targeting ISIL's Internet messaging and recruitment operations. And we've moved to a culture of accountability in cyberspace, instituting a DoD-wide cybersecurity scorecard and improving knowledge about practical ways to defend against cyber intrusions. Under the auspices of the Defense Digital Service, DoD created "Hack the Pentagon," the government's first-ever bug bounty program. Most recently, we established its first vulnerability disclosure policy, providing guidance that encourages outside researchers to disclose vulnerabilities on DoD websites in a safe, secure, and legal way. Given the increasing severity and sophistication of the threats we see in cyberspace, I hope that the next Administration will continue these and other efforts to strengthen defensive cyber capabilities.

While at times in the past space was seen as a sanctuary, new and emerging threats make clear that's not the case anymore, and we must be prepared for the possibility of a conflict that extends into space. Under the Administration's National Space Security Strategy, DoD is meeting the challenges of an increasingly contested space domain. As the threat in space has matured, we have countered it with more than \$22 billion in investments to defend and improve the resiliency of our assets in space and put potential

adversary space systems at risk, helping ensure the advantages of space are available for U.S. forces in the future. Organizationally, we created the Joint Interagency Space Operations Center (JICSpOC) to integrate our space operations with other agencies. We designated the Secretary of the Air Force as the Principal DoD Space Advisor, strengthening the leadership of the space enterprise by sharpening authorities and responsibilities. The next Administration must ensure that we can provide capabilities like reconnaissance, the Global Positioning System (GPS), and secure communications that enable our operations in other domains, and must ensure and defend these capabilities against aggressive and comprehensive space programs of others.

### **Raising the Bar on Readiness**

Even as we have made these investments in force structure, we are bringing our forces to a higher standard of readiness after many years where they were single-mindedly focused on the fights in Iraq and Afghanistan. While as recently as in 2010 over 50 percent of the Army had deployed in the previous four years, in the last six years we have capitalized on reduced operational demand in Iraq and Afghanistan to reset the entire force to meet a higher standard, ready for both fighting today's conflicts and standing ready to deter, and if necessary, fight and win against advanced adversaries. In the Department's budget requests since 2013, the sequester year, we have heavily prioritized readiness – funding readiness accounts to their maximum executable level, investing in training ranges and infrastructure, and sending more units to large-unit training to improve the collective skills needed to prosecute modern wars.

### **Building the All-Volunteer Force of the Future**

While we have the finest fighting force in the world today, we can't take that for granted in the 21st century. We have to earn it again and again, starting with our most enduring advantage – our people.

Over the past eight years, DoD has focused on caring for a force stressed by 15 years of continuous combat. We have supported our wounded warriors, to whom our commitment is and must remain as strong as ever, and renewed our enduring pledge to support the families of the fallen, whose loved ones made the ultimate sacrifice on behalf of our country. We have demonstrated renewed resolve to combat the preventable problem of suicide, developing a Strategy for Suicide Prevention to synchronize prevention efforts and invigorating efforts to share information and evidence-based best practices with the Department of Veterans Affairs (VA). We have prioritized the eradication of sexual harassment and assault from our ranks, supporting survivors and working to eliminate retaliation. We have invested in a more agile and responsive electronic healthcare management system to provide state of the art support to our healthcare professionals, and we worked with the VA to meet interoperability requirements for the transition of electronic medical records between our two departments. We redesigned our approach to our transitioning military personnel, focused on a comprehensive Transition Assistance Program and proactive career readiness planning. And we supported the direct hiring of more than 30,000 Reserve Component members, helping lower the post 9/11 veteran unemployment rate from 12.1 percent in 2011 to 4.0 percent today.

To attract a new generation of talent, DoD launched "Force of the Future," a series of initiatives aimed at shaping the force for the 21<sup>st</sup> century. We created on-ramps and off-ramps, expanding programs like the Secretary of Defense Corporate Fellowship program to allow military personnel to gain new skills, and creating opportunities for individuals outside DoD to contribute to our mission, such as through the Defense Digital Service, which is described in greater detail below. We've also focused on improving

retention by supporting military families, expanding maternity and paternity leave, extending childcare hours on bases, and offering more flexibility in change of station moves. Supported by the First Lady's Joining Forces initiative, DoD's Military Spouse Employment Partnership has grown to more than 300 employer partners employing more than 100,000 military spouses over the past five years. We are also implementing a landmark reform of military retirement benefits, the largest since World War II, providing every service member who serves at least three years (over 85 percent of military personnel) access to government-funded retirement savings that were previously available to only a small percentage of the force.

We're focused on talent management for our military personnel so that we can better compete for talent in the 21<sup>st</sup> century, proposing more flexibility in our merit-based system for promotion and establishing an Office of People Analytics. We are also implementing talent management programs for our civilians, such as direct hire opportunities for college students and expanding scholarship-for-service in science and technology fields. And we're focused on communicating the value of military life, expanding our geographic and demographic recruiting access, returning ROTC programs to the Ivy League and similar institutions of higher education, and reinvigorating our ROTC programs overall to ensure we keep attracting the same high-quality participants.

As an All-Volunteer Force, DoD must be able to draw from 100 percent of America's population, focusing purely on a person's willingness and ability to serve our country. We can no longer afford to allow barriers unrelated to a person's qualifications to prevent us from recruiting and retaining those who can best accomplish the mission. In 2012, then-Secretary Panetta directed a review of the remaining gender-based barriers to service, and after receiving the results of that review, I ordered that the military Services open all positions and units, including those involving combat, to women without exception. As a result, 213,000 positions and 52 military occupational specialties are now open to men and women alike who meet Service standards. In December 2010, President Obama signed into law legislation providing for the repeal of "Don't Ask, Don't Tell," allowing gay men, lesbians and bisexuals to serve openly in uniform, and in 2013 DoD made the same benefits available to all military spouses, regardless of sexual orientation. This year, we lifted DoD's ban on transgender service members, setting standards for medical care and outlining responsibilities for Military Services and commanders to develop and implement guidance, training and specific policies in the near and long-term.

We have made great strides, but changes to the force require a long-term implementation process. Moving forward, the Department must continue to proceed in a measured and responsible way that ensures the success of individual service members and preserves the unit effectiveness, readiness, cohesion, and quality of the All-Volunteer Force.

### **Acquisition Reform: Driving Smart and Essential Technological Innovation**

Today's competition is global, with other countries trying to catch up with the advances the United States has enjoyed for decades in areas like precision-guided munitions, stealth, cyber, and space. As we have in the past, DoD must invest to ensure America pioneers and dominates the technological frontiers related to military superiority. DoD is therefore pursuing new technology development to maintain our military's technological superiority. How we do this is important, because while the Cold War arms race was characterized mostly by strength, with the leader simply having more, bigger, or better weapons, this era

of technological competition is uniquely characterized by an additional variable of speed, such that leading the race now depends on who can out-innovate faster than everyone else. It's no longer just a matter of what we buy; what also matters is how we buy things, how quickly we buy them, whom we buy them from, and how quickly and creatively we're able to upgrade them and repurpose them to be used in different and innovative ways to stay ahead of future threats.

In order to meet the urgent demands of ongoing conflicts, DoD has focused on increased agility within the acquisition system. In 2010, we established the Warfighter Senior Integration Group, which is designed to bring together and bring to bear the full weight of DoD's senior leadership on addressing our most critical operational needs, particularly in Iraq and Afghanistan. And we established a "fast lane" to rapidly field cutting-edge, much-needed capabilities. Overall, including efforts that pre-date this Administration, the Department fielded over 25,000 mine-resistant ambush-protected vehicles and 144 aerostat balloons equipped with cameras to help monitor the security of our forward operating bases, along with a variety of counter-IED equipment. Since its establishment, this group has expedited funding and the delivery of critical technologies and capabilities to U.S. and Coalition forces.

To meet the challenge of higher end threats, each military Service has since established a rapid acquisition organization modeled on the Air Force, and these are collectively beginning to pay dividends to the warfighter. And in 2012, I also created the Strategic Capabilities Office (SCO) to quickly demonstrate advanced innovative technologies and reimagine existing DoD, intelligence community, and commercial systems by giving them new roles and game-changing capabilities to confound potential opponents. Since that date, SCO has repurposed the SM-6 missile from air defense to anti-ship capability; demonstrated the swarming capability of surveillance microdrones; and is currently working on developing a cross-domain capability for the Army Tactical Missile System. These are just a few of their projects, and they are both innovative and rapid – with several projects already transitioned to the military Services.

Across the broader acquisition enterprise we have focused on strengthening our buying power, improving industry productivity, and providing affordable capability to our warfighters. Since 2010, the Department has introduced three iterations of Better Buying Power initiatives, a program to continuously improve the performance of the entire defense acquisition system. Since implementing this program, we have seen a significant decline in the number of critical Nunn-McCurdy cost breaches, from a high of 7 in 2009 to 1 per year at present. Similarly, the growth of contracted costs for major programs has dropped from 9 percent in 2011 to a new 30-year low of 3.5 percent today. One of our first legislative accomplishments was the passing of the Weapons System Acquisition Reform Act of 2009, and I am pleased to report the legislation has achieved the outcomes we hoped for. Where the Services' cost estimates used to diverge on average from independent estimates by more than 7 percent, in the last seven years they are within 3 percent of each other. This greater rigor is reflected in the acquisition outcomes described above. Early on, we also cancelled or truncated troubled and unaffordable weapons platforms, including the Future Combat System, combat search and rescue helicopter, and the VH-71 Presidential helicopter, and made the hard choices to end programs that were no longer affordable including production of the C-17 aircraft and the alternate engine program for the Joint Strike Fighter. These decisions to cut underperforming acquisition programs left the defense program in better health, and have allowed the Department to pursue a realistic modernization program despite a constrained defense budget – investing in and operationalizing our security by leveraging advances in cyber, space, electronic warfare, neuroscience, biotechnology, robotics,

artificial intelligence and autonomous learning systems, human-machine collaboration, advanced materials, data analytics, and other areas.

Staying ahead also requires leveraging the capability of current and emerging technologies, including commercial technologies wherever appropriate. When I began my career, most technology of consequence originated in America, and much of that was sponsored by the government, especially DoD. Today, not only is much more technology commercial, it is also global. That's why we're investing in building and rebuilding bridges with America's vibrant, innovative technology community and forging more connections with our commercial technology base.

We're doing that through efforts like the Defense Innovation Unit Experimental (DIUx), which identifies and does business with companies outside the traditional defense orbit; encouraging the adoption of Other Transactions Authority to partner with commercial firms; and through a pilot program with the independent, non-profit startup backer In-Q-Tel, leveraging its venture capital model to help find innovative solutions for some of our most challenging problems. We established the Defense Digital Service, which brings in talent from America's vibrant, innovative technology community for a time to help solve some of our most complex problems, from speeding development of next-generation GPS to modernizing the Defense Travel System.

We've also led the way for the President's Manufacturing USA initiative, establishing six Manufacturing Innovation Institutes (MIIs) over the past four years, focused on emerging technologies that hold strategic promise for both DoD and commercial industry, including digital manufacturing, photonics, and flexible hybrid electronics. Moving forward, DoD has plans to open two additional institutes focused on advanced tissue bio-fabrication and robotics in manufacturing environments, committing nearly \$500 million in DoD funding for the MII program and achieving over \$1 billion in matching funding from non-federal sources. DoD has also invested in our own DOD Research, Development, Test, and Evaluation (RDT&E) enterprise, the network of laboratories and engineering centers that help make our military the most innovative in the world. In FY 2017 alone, DoD is proposing to spend nearly \$72 billion on research and development – for context, more than double what Intel, Apple and Google spent on R&D last year combined.

These investments and reforms will be the work of many more years, as we identify best practices in human capital, collaboration, and acquisition mechanisms and modify our core operations to exploit current technology tools, innovation methods, and communities of practice to better engage with the issues and opportunities raised by emerging technologies. It is my hope that the next Administration will continue this outreach – because just like GPS and the Internet later went on to yield great benefits for not just our security but also our society, the investments we're making in some of these fields along with our partners in the technology industry will lead to incredible advances that today we can only imagine. The next Administration can also build on our progress in acquisition management by continuing to implement, monitor, and track the performance of acquisition organizations and programs and by strengthening the acquisition workforce. Throughout the Administration we have worked hard to build an acquisition culture of cost consciousness, professionalism, and technical excellence. It is clear from measured results that these efforts have paid huge dividends to the Department and the nation.

## The Imperative of Reform

## Reforming the DoD Enterprise

We have an obligation to the taxpayer to ensure that every defense dollar is spent wisely and responsibly. That's why reforming the DoD enterprise is so important, and why DoD has been embarked on a reform path for much of the last eight years – from improving how we're organized so we can best respond to the challenges and opportunities of the future security environment, to continuing to improve our acquisition and enterprise-wide business and audit practices, to reducing excess infrastructure and overhead, to modernizing the military healthcare system.

In 2011, President Obama challenged federal agencies to identify efficiencies in major administrative areas through the "Campaign to Cut Waste." DoD exceeded the campaign's 20 percent goal by cutting 33 percent in targeted areas compared to our FY 2010 baseline – resulting in approximately \$8 billion in cost avoidance. As of the third quarter of FY 2016, our travel spending is down by an estimated 20 percent, printing reduced by 23 percent, and advisory services funding was cut by 36 percent. Other areas where DoD found efficiencies included reducing employee IT devices, tightening executive fleet services, better defining and controlling permissible conference attendance, and eliminating extraneous promotional items. Beginning in 2009, we reduced the number of senior executives and general and flag officers, and have been working with Congress to trim management headquarters staffs by 25 percent. In 2011, we eliminated a Combatant Command, closing Joint Forces Command and integrating some of its functions into the Joint Staff. In more recent years, we've proposed changes to the commissary system while being careful to preserve savings for patrons. We've also proposed cost-saving reforms to TRICARE, adjustments that will save billions while still providing the benefits our service members deserve. We acted to consolidate Cold War-era infrastructure in Europe, putting U.S. forces in Europe on a more sustainable and ready posture, and we sought authority to conduct another round of base closures and realignments to further reduce outdated and costly infrastructure here at home.

Lastly, the Department also remains committed to holding ourselves accountable for every taxpayer dollar. Over the last eight years, preparations have been made to allow us to begin an annual DoD-wide full financial statement audit. In 2008, only eight percent of total budgetary resources and 26 percent of assets were under audit; today those numbers are 87 and 40 percent, respectively. In a similar commitment to transparency, this Administration also fully funded its known Overseas Contingency Operations costs in each of our budget requests, clearly identifying wartime costs while reducing uncertainty for our warfighters and the readiness impacts on forces at home.

I appreciate the support received from Congress for some of these efforts to become more efficient – for instance, through statutory changes that enabled reform of the military retirement system. However, in other areas where DoD has continually submitted much-needed reforms to strengthen the efficiency and capability of our force –including by consolidating healthcare systems and improving incentives, shedding excess infrastructure, and divesting lower-priority legacy platforms – these have been repeatedly denied, either in whole or in part, at a cost for both taxpayers and our troops. This poses a real problem, because every dollar Congress denies us in reform is a dollar we can't invest in security we need to deter and defend against today's and tomorrow's threats. I hope that with the focus on reform we've recently seen in the defense committees in Congress, we can continue to work together on reform in the future.

## Support to Interagency Priorities

The Department published a Climate Change Adaptation Roadmap, focused on acknowledging and managing the risks inherent in climate change - both its nature as an instability accelerant in many parts of the world and the danger it poses to our own enterprise such as sea-level rise and flooding at coastal bases or drought in the southwest. As described in the President's memorandum on Climate Change and National Security, the impacts of climate change may increase the frequency, scale, and complexity of future missions, including defense support to civil authorities, while at the same time undermining the capacity of our domestic installations to support training activities. Our actions to increase energy and water security, including investments in energy efficiency, new technologies, and renewable energy sources, will increase the resiliency of our installations and help mitigate these effects. Already, the Department has reduced energy usage at contingency bases by 30 percent, is on track to meet its commitment of 3 gigawatts of renewable energy purchases at our bases by 2025, and has executed more than \$1.8 billion in Energy Savings Performance Contracts.

The Department contributed to the success of the American Recovery and Reinvestment Act of 2009 in creating and saving jobs to bring the country out of recession and strengthening the foundation for long-term economic growth. DoD invested in nearly 4,500 Recovery Act infrastructure projects at 650 DoD Active, Reserve, and National Guard sites in all 50 states, two territories, and the District of Columbia. These investments stimulated the nation's economy and supported energy conservation, training, and operational requirements, while achieving national security goals, expanding energy research capabilities, and constructing two new world-class hospitals for our military community.

## Conclusion

It has been the highest honor of my lifetime to lead this great Department and to serve the American people. Our men and women in uniform without a doubt represent the greatest fighting force the world has ever known, and I am mindful every moment of the day that they are carrying out their noble mission in each and every time zone of the globe. While the next Administration will continue to be challenged by an evolving security environment, I am confident that our military is up to the task of protecting our nation in the years ahead. The President-elect can count on them to continue to execute all their duties with the excellence our citizens know they can expect; may God continue to bless them, and continue to bless the United States of America.