STATEMENT OF

GENERAL TERRENCE J. O'SHAUGHNESSY, UNITED STATES AIR FORCE

COMMANDER

UNITED STATES NORTHERN COMMAND

AND

NORTH AMERICAN AEROSPACE DEFENSE COMMAND



BEFORE THE SENATE ARMED SERVICES COMMITTEE 26 FEBRUARY 2019

Chairman Inhofe, Ranking Member Reed, and distinguished members of the Committee,
I am honored to appear today as the Commander of United States Northern Command
(USNORTHCOM) and North American Aerospace Defense Command (NORAD)—two
complementary but distinct commands.

USNORTHCOM is the Geographic Combatant Command laser-focused on defending our homeland from an increasingly assertive set of competitors who are committed to holding the United States at risk in multiple domains. USNORTHCOM is also responsible for defense support of civil authorities (DSCA) and theater security cooperation (TSC) within our area of responsibility. Nested under the broader homeland defense mission, DSCA and TSC play a critical and visible role in protecting our citizens and enhancing security for the United States and our international partners.

NORAD is the bi-national U.S.-Canadian command that deters, detects, and, if necessary, defeats air threats to the United States and Canada while also providing aerospace warning and maritime warning. The six decades of NORAD's unmatched experience and shared history are proving more vital than ever as we face the most complex security environment in generations. This unique and longstanding command serves as both a formidable deterrent to our adversaries and a clear symbol of the unbreakable bond between the United States and Canada.

USNORTHCOM and NORAD are driven by a single unyielding priority: defending the homeland from attack. Revisionist powers Russia and China have changed global strategic dynamics by fielding advanced long-range weapons systems and engaging in increasingly aggressive efforts to expand their global presence and influence, including in the approaches to the United States and Canada. Our competitors currently hold our citizens and national interests

at risk, and we must anticipate attacks against our defense and civilian infrastructure in the event of a conflict. As a result, it is clear that the homeland is no longer a sanctuary.

These shifting global military and political dynamics will be with us for the foreseeable future. Our competitors have fielded weapons systems and employed new methods in a concerted effort to exploit perceived vulnerabilities and erode our strategic advantage. The successful defense of our homeland today relies more than ever on constant vigilance by USNORTHCOM and NORAD, tightly coupled with a reinvigorated emphasis on close integration with our fellow combatant commands, the intelligence community, and our allies and partners. Collectively, these dynamics reinforce the importance of nuclear deterrence to our national security, given that nuclear deterrence backstops all U.S. military operations and diplomacy across the globe.

The threats facing our nation are not hypothetical; our competitors' reach is now global, and they are conspicuously undermining international norms and standards of behavior while possessing the capability to strike targets in North America with both nuclear and advanced non-nuclear weapons launched from well beyond our territory. In light of this reality, the homeland defense mission is more essential than ever, and USNORTHCOM and NORAD must be energized, proactive, and determined to actively shape our strategic environment. Together with our Department of Defense (DOD), interagency, and international partners, we have taken active measures to ensure the homeland defense enterprise is globally integrated, well-exercised, and positioned to take quick, decisive action to protect our interests and preserve the ability to project all of the elements of our national power. And, should deterrence fail, USNORTHCOM and NORAD stand always ready to defeat any threat to our nations.

Our collective ability to confront these challenges is dependent on a national commitment to protecting and defending the homeland. Budget stability and predictability are essential underpinnings of this commitment, and I ask for the committee's support of the President's budget for FY20—and specifically for relief from the budget caps directed in the Budget Control Act of 2011. A return to sequestration will devastate total force readiness and delay or terminate modernization efforts that are necessary to maintaining our strategic and technological advantage. Simply put, sequestration will make it impossible for USNORTHCOM and NORAD to advance necessary homeland defense efforts and shape our changing national security environment as articulated in the National Defense Strategy.

Threat

Russia:

Russia has posed a nuclear threat to North America for over half a century, but has only recently developed and deployed capabilities to threaten us below the nuclear threshold. Russia continues to hone and flex its offensive cyber capabilities, and its new generation of air- and sealaunched cruise missiles feature significantly greater standoff ranges and accuracy than their predecessors, allowing them to strike North America from well outside NORAD radar coverage.

Since 2015, Russia has employed its new air- and sea-launched cruise missiles against antiregime targets in Syria, providing real-world training for Russian crews and demonstrating its
growing precision-strike capabilities to the West. In a parallel effort, Russia has implemented a
modernization program for its heavy bombers that will ensure their ability to perform nuclear
and non-nuclear deterrence and strike missions in the coming decades.

Russian heavy bombers such as the Tu-95MS BEAR and Tu-160 BLACKJACK continue to conduct regular air patrols in the international airspace along the coastlines of other countries to underscore Russia's capabilities. Russian bomber crews are demonstrating increasing proficiency in their flight activities, developing a new generation of air crews capable of employing this highly visible implement of Russian deterrence and messaging in peacetime, crisis, and war.

Patrols by Russian military aircraft off the coasts of the United States and Canada have grown increasingly complex in recent years. NORAD fighter aircraft routinely intercept Russian military aviation missions inside the U.S. and Canadian Air Defense Identification Zones, and there is no indication that Russian leadership intends to reduce the number of these missions in the near future.

In addition to its highly capable cruise missiles that enable its anti-ship and land-attack missions, Russia has introduced the Severodvinsk-class guided missile submarine, which is armed with advanced land-attack cruise missiles and is much quieter and more lethal than previous generations of Russian attack submarines. Russia's growing non-nuclear capabilities provide Moscow a range of options to dissuade an adversary from escalating and to terminate a conflict on terms favorable to Moscow, increasing the potential for miscalculation or opportunistic actions.

Russia has demonstrated a willingness to conduct disruptive cyberattacks and cyber-enabled influence operations against its competitors, as it demonstrated during the 2016 election cycle in the United States. In a crisis or conflict, we would expect Russia to conduct cyber operations against critical infrastructure in an attempt to compel de-escalation.

In the Arctic, Moscow is planning to deploy surface vessels armed with the modular KALIBR-NK cruise missile system that will offer highly precise land-attack capabilities and

introduce a new cruise missile threat from our northern approaches. Separately, Moscow continues to bolster its military defenses in the Arctic with the deployment of a K-300P Bastion coastal defense cruise missile system on the New Siberian Islands, significantly increasing Russia's ability to defend and control a large stretch of the Northern Sea Route.

Finally, Russia is developing multiple weapon systems specifically designed to circumvent U.S. missile defenses and hold our homeland at risk. This includes the Intercontinental Ballistic Missile (ICBM)-delivered AVANGARD hypersonic glide vehicle, which was highlighted in a speech by Vladimir Putin in March 2018 and is expected to become operational in the next few years, complicating our missile warning mission.

China:

China is pursuing a comprehensive military modernization program that includes a rapid expansion of its strategic nuclear capabilities while working to improve the survivability of its nuclear forces and increase their ability to ensure a credible second-strike capability. Over the last decade, China has supplemented its modest silo-based ICBM force with dozens of road-mobile ICBMs capable of delivering multiple independently targetable reentry vehicles that could significantly increase the number of survivable warheads available for a retaliatory strike. During that same timeframe, China operationalized its first class of ballistic missile submarines, adding a second leg to its strategic deterrent. China maintains its longstanding no-first-use nuclear policy, but its growing nuclear, conventional, and cyber capabilities are significant.

China's military strategy and ongoing People's Liberation Army (PLA) reforms reflect the abandonment of its historically land-centric mentality, as evidenced by emerging doctrinal references to strategies that would move potential conflicts away from Chinese territory, suggesting that PLA strategists envision an increasingly global role for their military.

On the economic front, China plans to invest heavily in infrastructure projects in Asia, Europe, Latin America and the Caribbean, and Africa through its Belt and Road Initiative in a major effort to develop stronger economic ties with other countries and shape their interests to align with China's, simultaneously seeking to deter confrontation or international criticism of China's approach to sensitive issues.

In the cyber domain, Chinese leaders view computer network operations as a low-cost deterrent that demonstrates capabilities and resolve to an adversary and allows them to manage the escalation of a conflict by targeting critical military and civilian infrastructure. Ongoing military reforms are aimed at accelerating the incorporation of information systems that enable forces and commanders to carry out missions and tasks more effectively.

Advanced Threat Technologies:

Defending the United States and Canada against long-range weapons systems capable of striking targets in the homeland is a major focus of both USNORTHCOM and NORAD. Russian aircraft and submarines are now armed with long-range cruise missiles designed to evade radar detection, while both Russia and China are developing and testing maneuverable hypersonic glide vehicles. In the cyber domain, our adversaries continue their non-stop efforts to penetrate defense and civilian networks. Collectively, these advanced technologies could be capable of creating strategic effects with non-nuclear weapons, potentially affecting national decision making and limiting response options in both peacetime and crisis.

North Korea:

After decades of research and development activity marked more by failure than success, North Korea's ICBM program turned the corner in 2017 when North Korea successfully flight-tested multiple ICBMs capable of ranging the continental United States and detonated a

thermonuclear device, increasing the destructive yield of its weapons by a factor of ten.

Following these successes, Kim Jong Un declared the completion of his nuclear ICBM research and development program, implying the production and deployment of these systems would soon follow.

Kim Jong Un developed these strategic weapons to deter the U.S. from overthrowing his regime, and he almost certainly has plans to use them against our Homeland should a conflict erupt on the Peninsula. Meanwhile, North Korea's cyber capabilities continue to grow, as does the country's willingness to employ them during peacetime, as North Korea demonstrated by its cyber attacks on Sony Pictures in 2014.

Iran:

Iran is not yet able to strike the United States with strategic weapons, and its leaders have declared a unilateral 2000 kilometer range restriction that limits its missile force to threatening only regional targets in the Near East. Iran's SIMORGH space launch vehicle has yet to successfully place a satellite in orbit, but its most recent launch in January 2019 demonstrated continued progress on long-range missile technologies. Although we have no information to indicate that Iran intends to test and deploy an ICBM, the SIMORGH would be capable of ICBM ranges if configured for that purpose, and progress on the vehicle could enable Iran to field an ICBM in as a little as a few years if its leaders chose to pursue that objective.

However, Iran has the largest ballistic missile arsenal in the region and has expended significant resources on its space launch and civil nuclear capabilities that could enable it to develop a nuclear-armed ICBM relatively quickly if its leaders chose to do so. In the meantime, Iran retains the ability to conduct attacks abroad via covert operations, terrorist proxies, and its growing cyber capabilities. Iran considers disruptive and destructive cyberspace operations as a

valid instrument of statecraft and a means of imposing costs on its adversaries, even during peacetime.

Violent Extremist Organizations:

The terrorist threat to our homeland has grown more diffuse, typified by simple attacks inspired from afar and carried out by individuals or small networks that are difficult to detect and interdict. Foreign terrorist groups remain committed to attacking the United States, either directly or by inspiring homegrown violent extremists to act in their stead. Despite their territorial losses, the Islamic State and their counterparts in al-Qa'ida remain highly adaptive foes committed to attacking the United States.

Commercial aviation persists as a preferred target, probably because of the potential for large numbers of casualties, economic damage, and widespread media coverage generated by such attacks. I am concerned that terrorists could also continue to pursue 9/11-style fly-and-crash attacks or the use of unmanned aerial systems against soft targets. Meanwhile, terrorists continue to target U.S. military personnel both on and off base, compounding our force protection challenges.

Defending the Homeland

Homeland defense is USNORTHCOM's essential mission and the number one priority of the DOD per the 2018 National Defense Strategy. In light of the complex and significant threats to our homeland, USNORTHCOM and NORAD take assertive, proactive measures each day to shape our strategic environment, deter aggression, and ensure that we are always ready to defeat any adversary should deterrence fail. As the Commander of USNORTHCOM and NORAD, I view everything the commands do through the lens of homeland defense, and I am committed to

ensuring that each of our missions help to preserve decision space and maintain the ability for our national leaders to project power and exert influence in the best interest of our nations.

In pursuit of their own perceived national and ideological interests, our competitors have developed advanced capabilities and demonstrated their intent to hold our homeland at risk in multiple domains and along numerous avenues of approach to North America. In light of that reality, we simply do not have the luxury of waiting for others to act before we formulate a response. Instead, USNORTHCOM and NORAD work constantly to shape our theater while making it obvious to potential adversaries that they will face overlapping dilemmas and extraordinary costs should they choose to challenge us. This active and continuous enterprise requires strong relationships and close coordination with our fellow combatant commands, the military Services, the U.S. Federal interagency community, and our international allies and partners.

The diverse threats arrayed against the United States and Canada challenge our defenses in a number of domains and along multiple avenues of approach. The men and women of USNORTHCOM and NORAD work around the clock to monitor those approaches and are ready to respond at a moment's notice should our adversaries chose to challenge our defenses.

Ballistic Missile Defense:

USNORTHCOM continues to prioritize our mission to defend the United States against potential intercontinental ballistic missile (ICBM) attacks from North Korea and Iran, should Iran develop that capability. I remain cautiously optimistic that the ongoing negotiations will lead North Korea to abandon its nuclear weapons and ICBM programs. But, in the meantime, I continue to emphasize the necessity of fielding improved discriminating radars, a more

survivable sensor network, and improving the reliability and lethality of our interceptor fleet in order to remain well ahead of North Korea or Iran's capability to strike the defended area.

I am confident in the ability of the Ground-based Midcourse Defense System to defend the United States against ICBMs fired from North Korea or Iran, if Iran develops an ICBM, but that confidence is contingent on our continued pursuit of system-wide enhancements to outpace our adversaries' rapid technological advancements.

The success of the Ballistic Missile Defense mission is also dependent on strong cooperation between USNORTHCOM as the supported warfighting command and the technical experts of the Missile Defense Agency (MDA). The MDA Director, Lt Gen Sam Greaves, is an outstanding partner, and I am grateful to him and the entire MDA team for their dedicated support of this enormously complex, no-fail mission. I fully support MDA's plans to field the Long-Range Discriminating Radar, Homeland Defense Radar-Hawaii, and Pacific Radar, along with the Redesigned Kill Vehicle and a selectable 2- or 3- stage interceptor booster.

Additionally, I believe we must pursue space-based sensors to detect and track advanced threats from Russia and China. Each of these improvements to our sensor network and interceptor fleet will help to ensure our ability to defend the United States against an ICBM attack now and into the foreseeable future.

Going forward, advanced technologies such as space-based sensors and directed-energy missile defense weapons systems show significant promise—and will, in fact, become a necessity in the foreseeable future in order to defend the homeland against a rapidly developing missile threat. At present, I believe the DOD is striking an effective balance between ensuring our ability to defend against current and near-term threats while simultaneously investing in the research and development of advanced technologies capable of defeating future threats. This

vision for meeting anticipated requirements is well articulated in the recently published Missile Defense Review, and I fully support the plan for defending the homeland.

Arctic Northern Approaches:

It has become clear that defense of the homeland depends on our ability to detect and defeat threats operating both *in* the Arctic and passing *through* the Arctic. Russia's fielding of advanced, long-range cruise missiles capable of flying through the northern approaches and striking targets in the United States and Canada has emerged as the dominant military threat in the Arctic, while diminished sea ice and the potential for competition over resources present overlapping challenges in this strategically significant region. Meanwhile, China has declared that it is not content to remain a mere observer in the Arctic and has taken action to normalize its naval and commercial presence in the region in order to increase its access to lucrative resources and shipping routes.

I view the Arctic as the front line in the defense of the United States and Canada, and as the DOD Advocate for Arctic Capabilities and the Combatant Commander responsible for defending the approaches to the homeland, I constantly assess the changing environmental and strategic conditions throughout the region—across borders and operational boundaries—in an ongoing, active, and collaborative effort to mitigate the risks associated with increased civilian and military presence in the northern approaches to North America.

The effort to rapidly adapt to the evolving strategic landscape and associated challenges in the Arctic includes a deliberate and ongoing effort to fully assess our collective missions and associated requirements in the region. As one key example of those ongoing assessments, in 2018, USNORTHCOM planners conducted a Homeland Defense Mission Analysis for the Arctic Region. This comprehensive, classified assessment of our capability to operate in the far north

revalidated a number of known capability gaps in the region and provided an updated overview of current and future requirements.

As confirmed by our Mission Analysis, civil and military operations in the Arctic continue to be impeded by limited communications capability, harsh environmental conditions, and vast distances between population centers. Improving communications and domain awareness in the region are among my top priorities for the region, and the DOD and the military Services have demonstrated their support of those requirements through investment in programs such as the Multi User Objective System (MUOS)—a satellite-based communications network that significantly expands the ability of U.S. and Canadian assets to operate in the far north.

To detect and track potential airborne threats, to include Russian long-range bombers and cruise missiles, USNORTHCOM and NORAD both rely on radar systems such as the North Warning System (NWS), a network of aerospace surveillance radars in northern Canada. In August 2018, NORAD, working in close coordination with USNORTHCOM, the Canadian NORAD Region, and the U.S. Navy's Naval Air Warfare Center, conducted an operational assessment of the NWS against representative targets, and the data collected from the test will inform the design for the air domain defense of the United States and Canada for years to come.

And, in recognition that the number of military and civilian activities in Alaska and the Canadian Arctic will only continue to grow, USNORTHCOM is working hand-in-glove with the U.S. Air Force and the National Guard Bureau (NGB) to procure additional Arctic Sustainment Packages (ASPs) for use by the Alaska National Guard. Each ASP is a palletized, air-droppable shelter kit that provides shelter, heat, and other life support capability for several weeks in Arctic environments in the event that weather or other environmental factors delay a rescue operation.

The ability of the joint force to fight and win in the extreme cold and isolation of the far north increasingly depends on placing specialized technology in the hands of military personnel who routinely train and operate in the region. Fortunately, there are units and DOD installations who are already well positioned to share that expertise. Essential experience resides in the units stationed in the far north—from the airborne brigade and fighter wings stationed in Alaska to the LC-130 Skibird pilots and crewmembers of the New York Air National Guard, we have a solid foundation to build on as we continue to increase Arctic experience across the force.

The military Services have committed to building on that that foundational experience and expertise through a number of efforts that will further the ability of the joint force to operate, fight, and win in the far north. In a key example, between 3,000 and 5,000 personnel will participate in the next iteration of USNORTHCOM's premier Arctic exercise, ARCTIC EDGE 2020, more than doubling the number of troops who participated in 2018. Arctic Edge 2020 will take advantage of the vast training area and unmatched training opportunities afforded by the Joint Pacific Alaska Range Complex (JPARC) and will integrate personnel and platforms from all four Services—to include ground, air, and cyber operations. This deliberate evolution sends the clear signal that USNORTHCOM, strongly supported by the Services, is fundamentally committed to expanding the ability of the joint force to defend our Arctic approaches and our vital interests in the region.

Air Domain:

Variants of the advanced cruise missiles that could fly through our northern approaches also present a threat along our coasts. Russian Severodvinsk-class submarines are capable of firing low radar cross section cruise missiles against critical targets along our coasts. This emerging threat requires advanced capabilities to ensure surveillance, detection, identification,

targeting, and destruction to protect the homeland and key strategic targets in the United States and Canada.

The Homeland Defense Design will be a phased approach to employ advanced detection and tracking technologies to defeat a cruise missile attack against the homeland. However, the rapidity of our competitors' development of advanced cruise missile technology demands a continued, aggressive, and focused commitment to ensure our ability to defeat a cruise missile attack.

In addition, small unmanned aerial systems (UAS) continue to present challenges to safety and security within U.S. airspace. NORAD has the capability to address larger UAS, but systems that are readily available in the commercial marketplace are difficult to detect and track due to their small size and relatively slow speeds. While we work to enhance our ability to detect, and—if necessary—neutralize potential threat UAS in the national airspace, the authorities provided by the FY19 Federal Aviation Administration Reauthorization Bill that extend counter-UAS authorities to the Department of Justice and the Department of Homeland Security (DHS) reflect the need for a whole-of-government approach to address the potential security challenges presented by this rapidly emerging technology.

As with emerging military cruise missile technologies, the proliferation of small UAS requires us to consider new approaches for how best to defend the homeland. We cannot address these new capabilities with outdated technology or with old ways of thinking, and I look forward to working with the Committee to develop innovative technology and strategies to ensure that we are capable of outpacing the threat.

Southern Approaches:

The threats to our nation from our southern border are not military in nature, but they are significant and deadly. The flow of illegal narcotics into the United States continues to inflict a heavy toll on our citizens, as clearly demonstrated by the 72,000 Americans who were killed by drug overdoses in 2017. USNORTHCOM is proud of our role in the counter narcotics fight in support of Federal law enforcement and our military partners in Mexico and The Bahamas as they battle transnational criminal organizations that have inflicted such harm on both sides of the border.

USNORTHCOM personnel actively collaborate with partners throughout the U.S. interagency and in Mexico to illuminate the networks used by the cartels to transport drugs, victims of human trafficking, and other illicit goods in a strategic effort to strike at the heart of these massive and well-financed criminal enterprises.

On the U.S. side of our southern border, USNORTHCOM's subordinate element Joint Task Force North (JTF-N) supports U.S. Federal law enforcement efforts to interdict narcotics shipments into the United States. Employing military personnel, unique technologies, and specialized skill sets developed in contingency operations overseas, JTF-N provides critical support to Federal law enforcement interdiction missions operations.

Theater Security Cooperation

USNORTHCOM's theater security cooperation mission pays enormous dividends for our defense of the homeland as well as for our relationships with our international partners. These collaborative efforts with our international partners seek to sustain our strategic advantage in the

Western Hemisphere while always seeking to strengthen our regional security and reinforce our defense in depth throughout the region.

In particular, USNORTHCOM's relationship with the Mexican military is strong.

USNORTHCOM supports Mexico's efforts to expand its role as a regional defense and security leader. The ties between USNORTHCOM and our Mexican military partners are close at every level of leadership and continue to grow thanks to concerted efforts by commanders on both sides of the border. I am proud of the fact that every Mexican Marine has trained with a U.S. Marine, just as I am honored to share close relationships with the Mexican Secretary of National Defense (SEDENA), General Luis C. Sandoval Gonzalez, and the Secretary of the Navy (SEMAR), Admiral Jose Rafael Ojeda Duran. I am proud to work with partners who share our commitment to regional stability and security throughout North America.

The Bahamas remains a willing partner with whom the United States enjoys a deep and long-standing bi-national relationship, and our shared theater security cooperation focus is improving The Bahamas' air and maritime domain awareness. In 2018, the United States provided the first maritime surveillance system to The Bahamas and secured funding for two more systems that will be networked with existing surveillance assets, generating a significant increase to The Bahamas' maritime surveillance capacity. The Bahamas remains a strong partner in the defense of North America as they invest heavily in new capabilities that will make them a more significant contributor to our shared defense and security.

Finally, Canada continues to be our indispensable partner in reinforcing the defense and security of our countries. USNORTHCOM's security cooperation activities with Canada are extensive and reflect many years of shared effort and common cause with our allies to the North. In June 2017, Canada announced a new approach to defense investment that will provide

significant benefit to the common defense of our nations. This approach, titled "Strong, Secure, Engaged," acknowledges the significant shifts in the global strategic environment and commits accordingly to an active and renewed NORAD partnership and investments that will directly benefit the security of both our nations.

In a military-to-military context, the tri-command partnership between USNORTHCOM, NORAD, and the Canadian Joint Operations Command is of tremendous importance to all three commands. The bond between these organizations reflects the cooperative approach we share with our Canadian partners as we work together to outpace the threats arrayed against the United States and Canada, maintain a credible deterrent, and take steps forward together to ensure the combined defense of our nations.

Defense Support of Civil Authorities

USNORTHCOM's mission to provide defense support of civil authorities provides military personnel and assets to support Federal law enforcement and disaster relief agencies in times of need. In the nine months since I assumed command, USNORTHCOM has supported DHS, the Federal Emergency Management Agency (FEMA), U.S. Customs and Border Protection, and the National Interagency Firefighting Center during hurricane relief operations, wildland firefighting missions, interagency collaboration to ensure that our elections were free from cyber interference, and presidentially-directed efforts to secure our southern border. For each of these events, USNORTHCOM rapidly delivered military-unique capabilities and skilled personnel to augment and enable our Federal partners.

In September 2018, Hurricane Florence provided USNORTHCOM the first opportunity to execute the Commander of USNORTHCOM's expanded role as the DOD Synchronizer for

defense support of civil authorities. The consolidation of the DOD effort under one Synchronizer enabled significantly improved coordination and collaboration across the entire spectrum of the DOD response and consolidated the responsibility for collecting and delivering timely and accurate information to the Secretary of Defense. In addition, the DOD Synchronizer role increased the coordination and information exchange amongst the DOD agencies with major roles in the response, to include the National Guard Bureau, the Defense Logistics Agency, the U.S. Army Corps of Engineers, and U.S. Transportation Command (USTRANSCOM).

USNORTHCOM support of hurricane relief operations had barely ended last fall, when, in response to requests for assistance from DHS and U.S. Customs and Border Protection, the Command was directed by the Secretary of Defense to deploy active duty military personnel and equipment to support Federal law enforcement operations along the southern border of the United States. Beginning in October 2018, this operation has demonstrated the close partnership between USNORTHCOM and our Federal law enforcement partners, as well as the outstanding support provided by each of the military Services and the Joint Staff in response to a USNORTHCOM request for forces.

Within hours of notification, Airmen, Soldiers, Sailors, and Marines from installations across the United States were on the move to support our DHS partners, and they have performed their assigned tasks with extraordinary professionalism and skill. From laying over 70 miles of concertina wire to reinforce existing border obstacles, flying support missions, delivering medical care, and providing security, the USNORTHCOM border support mission has improved our nation's border security while providing our forces with training and real-world experience that will serve them well in both peace and conflict.

Every mission presents unique challenges, and each is dependent on collaboration, strong partnerships, and close relationships throughout the Federal interagency and between the active and reserve component. In a key demonstration of the strong collaboration between the components in the combined response to Hurricane Florence, North Carolina and South Carolina established Dual Status Commanders and successfully integrated National Guard and Title 10 personnel and assets in a wide variety of rescue and recovery operations.

I am proud of the great partnership demonstrated by USNORTHCOM and the National Guard Bureau before and during each of those responses. My friend and wingman Gen Joe Lengyel and the citizen Airmen and Soldiers he leads are a tremendous group of professionals who proved time and again their selflessness and readiness to respond whenever and wherever needed.

While hurricane relief operations may have been the most visible DSCA mission for the Command over the last several years, USNORTHCOM serves as the designated DSCA synchronizer for the DOD in a variety of other efforts. In a notable example of innovative interagency collaboration, prior to the 2018 midterm election season, USNORTHCOM partnered with U.S. Cyber Command (USCYBERCOM) to determine how best to provide DOD cyber support to the DHS-led mission to secure the elections infrastructure. The partnership between USCYBERCOM, USNORTHCOM, the National Guard Bureau, and DHS was groundbreaking, and each of the agencies involved learned a number of important lessons for future interagency efforts.

Interagency cooperation in the defense of our critical cyber infrastructure will remain an enduring necessity as networks throughout the United States continue to weather near-constant attacks and infiltration attempts. In light of this need, I am grateful to the Congress for its strong

support for the establishment of the DHS Cyber Infrastructure Security Agency (CISA). Although CISA was only established in November 2018, it is already clear that we have an energized, high-level interagency partner dedicated to our shared mission to address and mitigate cyber threats against civilian networks and critical infrastructure. Within weeks of its establishment, CISA assigned a senior liaison officer to the USNORTHCOM headquarters to work alongside the rest of our whole-of-government team, and I look forward to many years of close collaboration with our newest partner in the defense of our nation's vital interests.

Whenever our assistance is requested by our Federal partners, USNORTHCOM relies on the military Services to provide trained and ready personnel and assets whenever and wherever needed. As we saw firsthand in the days before Hurricane Florence made landfall in September 2018 and in the initial stages of our support to U.S. Customs and Border Protection along the southern border, the Joint Staff and all four of the military Services worked around the clock to identify, source, and deploy the personnel and equipment necessary to fulfill all anticipated requests for support from our Federal partners.

Due to the unhesitating support of the Joint Staff and each of the Service Chiefs, the requested forces were on station and ready to execute their support missions in a matter of hours and days following notification. In both scenarios, the remarkable men and women of our armed forces were ready to deploy on short notice and executed their assigned missions thanks to their training, professionalism, and discipline. USNORTHCOM will continue to work closely with the Joint Staff and the Services to exercise our response forces in anticipation of future needs, and I am grateful to the Committee for your ongoing support of the Services' modernization and readiness requirements.

United Efforts to Defend the Homeland

USNORTHCOM's defense of the homeland would not be possible without cooperation, collaboration, and a fundamental commitment to mission success across a remarkable interagency and intergovernmental enterprise. Over 27 unique Federal agencies, from DHS to the Federal Aviation Administration and the Federal Bureau of Investigation, have permanently-assigned liaisons and representatives in our USNORTHCOM and NORAD headquarters in Colorado Springs. Nearly 150 Canadian military personnel are assigned to NORAD billets in our headquarters, and we are proud to host two permanently assigned Mexican military liaison officers, along with liaison officers and representatives from a host of DOD agencies and commands to include the Defense Threat Reduction Agency (DTRA), the Defense Intelligence Agency, and U.S. Strategic Command. National Guard personnel are also fully integrated into our headquarters staff and maintain a full-time office specifically dedicated to coordinating actions between our headquarters and the National Guard Bureau. The National Guard continues to be an essential and integral part of our USNORTHCOM and NORAD team.

Our command's integration with the U.S. interagency community is a requirement for success, which is why those interagency representatives are not simply assigned to the headquarters; they are truly integrated members of the USNORTHCOM team. Whenever possible, they are invited to participate in command briefings and updates, and I rely on their subject matter expertise and professional judgment on a daily basis as we work hand in glove to address the challenges and threats facing the command.

The commitment to cooperation shared by each of our interagency partners has contributed immeasurably to the broader USNORTHCOM mission. For example, during the 2018 hurricane season, DTRA provided around-the-clock modeling support that located all of

the hazardous material production and storage facilities in the storms' paths and allowed our planners to develop well-researched plans to mitigate potential impacts if the sites were damaged.

Our collective ability to meet threats head on and to provide a rapid, effective response in the wake of natural and manmade disasters is absolutely dependent on constant communication, routine interagency exercises, and close working relationships between each and every one of the civilian and military professionals who strive each day to keep our nation and our citizens safe from harm.

From USNORTHCOM's components and subordinates to NORAD, which has served as the absolute gold standard for international collaboration for over 60 years, and our locktight relationship with FEMA, we work every day to exercise the interagency and inter-DOD processes required to ensure that we are always ready to deliver the right assets in the right place at the right time to meet whatever mission we are assigned. To ensure USNORTHCOM and our interagency partners are ready at a moment's notice in the event of a crisis, we conduct regular command-led exercises in each of our mission sets, such as ARDENT SENTRY for DSCA and VIGILANT SHIELD for homeland defense.

Finally, I would like to make special note of USNORTHCOM's support to the state funeral of former President George H. W. Bush in December 2018. The men and women of USNORTHCOM's Joint Task Force – National Capital Region, under the superb leadership of MG Mike Howard, demonstrated exemplary professionalism and decorum throughout a three-day program in Texas and Washington, DC. The flawless execution of this mission was made possible by many months of rigorous planning, close communication with President Bush and his family, coordination with dozens of Federal, state, and local agencies, and multiple rehearsals

to ensure no detail was overlooked. USNORTHCOM's support of this historic event was both a profound honor for all involved and a conspicuous example of the no-fail nature of all USNORTHCOM missions.

Conclusion

Today and every day, the men and women of USNORTHCOM and NORAD are standing watch over our homeland. These dedicated professionals work around the clock surveilling our skies, monitoring our oceans, and ensuring that we are always ready to counter a staggering range of threats to our homeland, ranging from intercontinental ballistic missiles and long-range bombers to lethal opioids and cyberattacks. The strategic and technological innovation that will be required to defend our nation in the coming years depends entirely on the quality and experience of our people.

Today and always, our people are our strength, and I am proud to lead the outstanding Airmen, Sailors, Soldiers, Marines, and civilians of USNORTHCOM and NORAD. While the threats facing our nation can be daunting, I have absolute confidence in our ability to meet any challenge and defeat any adversary because of the dedicated professionals I am honored to lead. We Have the Watch.