

STATEMENT OF
GENERAL VICTOR E. RENUART, JR., USAF
COMMANDER
UNITED STATES NORTHERN COMMAND
AND
NORTH AMERICAN AEROSPACE DEFENSE COMMAND
BEFORE THE
HOUSE ARMED SERVICES COMMITTEE
18 MARCH 2010

Chairman Skelton, Congressman McKeon, distinguished members of the Committee, thank you for this opportunity to report on the posture, challenges, and future direction of North American Aerospace Defense Command (NORAD) and U.S. Northern Command (USNORTHCOM). Every day, the Commands' Soldiers, Sailors, Airmen, Marines, Coast Guardsmen, National Guardsmen, Reservists and civilians defend the United States and Canada from external threats and aggression—protecting our citizens, national power, and freedom of action. Due to their efforts, North America enjoys continued security and freedom.

HOMELAND DEFENSE IS OUR HIGHEST PRIORITY

NORAD and USNORTHCOM are inextricably linked Commands that have complementary missions and work closely together to protect our homelands. Incorporating an integrated headquarters staff, our Commands have forged an indispensable partnership operating within a common security environment, and together are dedicated to defending the United States and Canada. The synergies that exist between these two Commands enable us to conduct our missions with a sense of urgency in the face of very real threats.

USNORTHCOM is responsible for homeland defense, sustaining continuous situational awareness and readiness to protect the United States against a range of symmetric and asymmetric threats in all domains. USNORTHCOM's Area of Responsibility (AOR) includes air, land, and sea approaches and encompasses the continental United States, Alaska, Canada, Mexico, Saint Pierre & Miquelon (French Territory off the northeast coast of Canada), The Bahamas, Puerto Rico, the U.S. Virgin Islands, and three British Overseas Territories: Bermuda, Turks and Caicos Islands, and British Virgin Islands, as well as the surrounding water out to approximately 500 nautical miles, the Gulf of Mexico and the Straits of Florida. USNORTHCOM is also responsible

for leading the Department of Defense's (DOD) efforts for theater security cooperation with Canada, Mexico, and Caribbean nations within the USNORTHCOM AOR.

Day to day, we are focused on deterring, preventing, and defeating attacks against the United States. We also stand ready to support primary agencies, when directed by the President or Secretary of Defense (SecDef), in responding quickly to natural and man-made disasters. To accomplish our civil support mission, we stay close to our Federal partners to anticipate and plan for how and when the DOD can assist in preventing and minimizing loss of life, suffering, and property damage. We continually assess threats to our security, improve our homeland defense and civil support plans and capabilities, and strengthen relationships with our mission partners. We work diligently to ensure our nation's military is ready and immediately accessible to support our fellow citizens when called upon.

NORAD is the bi-national U.S. and Canadian command charged with the missions of aerospace warning, aerospace control, and maritime warning for North America. Aerospace warning includes the detection, validation, and warning of attack against North America—by aircraft, missiles, or space vehicles—through mutual support arrangements with other commands. Aerospace control includes ensuring air sovereignty and air defense of the airspace of the United States and Canada. The renewal of the NORAD Agreement in May 2006 added the maritime warning mission, which entails a shared awareness and understanding of the activities conducted in U.S. and Canadian maritime approaches, maritime areas, and internal waterways.

INTELLIGENCE ACTIVITIES

To perform our missions, we rely on the sharing of intelligence among Federal, State, and local agencies. USNORTHCOM's Joint Intelligence Operations Center (JIOC-North)

coordinates the acquisition, analysis, and fusion of intelligence, counterintelligence, and appropriate DOD-related law enforcement information for the USNORTHCOM AOR, and shares that information with organizations at the national, State, and local levels. JIOC-North maintains a dual focus on monitoring both non-state and nation-state threats to North America.

In countering transnational terrorism, we continue to rely on our established connections within the intelligence and Federal law enforcement communities, seeking as much legally appropriate information as possible. USNORTHCOM maintains liaison officers with the National Counterterrorism Center, the Federal Bureau of Investigation's (FBI) National Joint Terrorism Task Force, and the Department of Homeland Security's (DHS) Office of Intelligence and Analysis. Beginning in 2009, DHS's Office of Intelligence and Analysis placed a liaison officer with JIOC-North. In the wake of the Fort Hood shootings in November 2009, we established a daily terrorism and force protection information sharing group to improve the manner in which potential threats are identified, assessed, and acted upon. We perform our intelligence activities with a focus on safeguarding the civil rights and civil liberties of U.S. citizens and adhering to appropriate statutes and DOD regulations.

HOMELAND DEFENSE OPERATIONS—PROTECTING WHAT AMERICANS VALUE MOST

USNORTHCOM may be known best for leading the DOD response to disasters in our AOR; however, we remain vigilant in our number one responsibility, homeland defense, as we monitor an average of 12-20 potentially dangerous events each day. Through our operational missile defense program and our maritime and air defense activities, USNORTHCOM maintains a high state of readiness to respond as necessary against man-made threats.

Ballistic Missile Defense. USNORTHCOM is responsible for ballistic missile defense operations within our AOR and other areas as directed to protect the homeland, allies, friends, and other national interests from potentially hostile acts. Our ability to carry out this mission continues to mature. The Ballistic Missile Defense System has been in nearly continuous operations since 2006 against potential threats to the defended area. Although it is a Missile Defense Agency (MDA) asset, the Sea-Based X-Band radar capability has also been included in our operational baseline during heightened threat periods since 2008.

Our missile defense crews are trained and our procedures are continuously validated and exercised, so that we can meet the high standards required to defend the nation. Furthermore, USNORTHCOM is active in the ground and flight testing programs to ensure the tests are more operationally realistic. Our immediate challenge is balancing a real-time defensive capability with requirements of MDA's Research, Development, Test, and Evaluation activities.

USNORTHCOM is working closely with the other Combatant Commands to develop a Global Force Management Plan to address the Phased Adaptive Approach and improved capabilities to defend the homeland. This effort will assess operational planning, force structure, and budgetary implications to better meet global ballistic missile defense requirements. We are working with MDA to ensure that the Phased Adaptive Approach includes upgraded sensor systems with real-time discrimination capability; improved deployable and fixed-site interceptors; enhanced command and control systems that provide a common operating picture across the strategic, operational and tactical levels; and an additional Fire Control node at Fort Greely, AK. MDA's Concurrent Test, Training, and Operations and Simultaneous Test and Operations, with the additional Fort Greely equipment, will bridge the gap between operational capability and Research, Development, Test, and Evaluation activities.

Operation NOBLE EAGLE. Operation NOBLE EAGLE began immediately after the 9/11 attacks and continues today to protect and defend the United States and Canada with airspace surveillance, ready alert forces, and the U.S. National Capital Region (NCR) Integrated Air Defense System. Air National Guardsmen and Air Force Reservists have flown more than 80% of the more than 55,000 Operation NOBLE EAGLE missions.

The security and defense of the NCR against terrorist air threats is one of our highest priorities. NORAD works closely with DHS, the Federal Aviation Administration (FAA), and the U.S. Coast Guard (USCG) to ensure the skies over the NCR are protected. We are prepared to provide a rapid, reliable response as incidents unfold. As part of the NCR Integrated Air Defense System, NORAD and the USCG provide air patrol and alert aircraft to counter fast- and slow-moving air threats that may penetrate the NCR Air Defense Identification Zone.

NORAD also provides tailored air defense for National Special Security Events (NSSE) in the United States and similar events in Canada.

We are implementing a “risk assessment” model as recommended in the GAO-09-184 report “Actions Needed to Improve Management of Air Sovereignty Alert Operations to Protect U.S. Airspace.” This risk assessment will enhance NORAD’s ability to determine and apply appropriate requested levels and types of units, personnel, and aircraft.

Northern Sovereignty Operations. During 2009, NORAD launched fighter aircraft on 14 occasions in response to TU-95 Bear and TU-160 Blackjack aircraft not on international flight plans that penetrated North America’s Air Defense Identification Zone. Because these flights did not violate U.S. or Canadian airspace, they were not considered threats to national sovereignty. The response was a means of identifying unknown aircraft operating in relative proximity to U.S. and Canadian sovereign airspace. In 2009, for the first time, a NORAD representative was

included at the annual U.S.-Russia Prevention of Incidents over the High Seas staff talks. We anticipate continued NORAD and Russian Long Range Aviation dialog in 2010 to reduce the ambiguity of Russian military flights near our borders and promote safe flight operations within international airspace. NORAD operations in Alaska will remain a key avenue for positive interaction with Russian military counterparts during the reset of relationships between our nations; continued support for military-to-military engagement opportunities is essential to maintain this professional dialog.

Maritime Domain Awareness. Maritime Domain Awareness is the comprehensive understanding of the global maritime domain as it relates to the security, safety, economy, and environment of the homeland.

In the fall of 2008, a Russian Surface Action Group, led by a KIROV class cruiser, transited the USNORTHCOM AOR en route to participate in a naval exercise with Venezuela and a port visit in Cuba. Additionally, in the summer of 2009, we were involved with monitoring the activity of a Russian support ship and a pair of nuclear-powered Russian submarines patrolling covertly off our Eastern seaboard. Although these vessels were not considered a threat to our homeland, their presence off the coast of the United States cannot be ignored and requires naval assets to be in a readiness posture to respond in any way necessary to defend the homeland, if required.

USNORTHCOM has aggressively pursued interagency and partner-nation cooperation for Maritime Domain Awareness. USNORTHCOM has partnered with Mexico to better integrate regional efforts by initiating the development of an automated identification system architecture, which will contribute to increased information exchange and Maritime Domain Awareness. This will have a positive impact on our combined capability to combat illicit traffic.

USNORTHCOM is the Operational Manager for two Joint Capability Technology Demonstrations, which transitioned to Programs of Record in 2009. These complementary programs—Maritime Automated Super Track Enhanced Reporting and Comprehensive Maritime Awareness—automatically fuse maritime-related intelligence to allow joint and interagency analysts to provide decision-makers, planners, and operators the capability to rapidly evaluate and respond to potential maritime threats. These programs are fully operational and are employed in the NORAD and USNORTHCOM Command Center, as well as the Navy's maritime operations centers.

As the Arctic emerges as an area of increased activity, USNORTHCOM has taken steps to evaluate DOD's ability to maintain Maritime Domain Awareness in the region. To establish this foundation, USNORTHCOM has commissioned a surveillance study with the intent of identifying current capabilities to determine where gaps exist. The study will be completed in the fall of 2010.

NORAD Maritime Warning. The NORAD maritime warning mission continues to evolve as NORAD planners work in close coordination with Canadian and interagency partners. Collaboration on several planning documents with these many organizations established and reaffirmed formal and informal relationships required for bi-national and bilateral maritime operations.

The past year's accomplishments and ongoing efforts have resulted in enhanced bi-national information sharing and comprehensive understanding of the maritime domain among our mission partners. We worked aggressively to address gaps and seams documented in an internal Information Sharing Architecture study that identified barriers to achieving full mission capability status. The study further identified critical steps and processes necessary to

close these gaps within the NORAD maritime warning mission. We have also moved forward in the development of a shared bi-national common operating picture of the maritime domain. We continue to be challenged in a constrained environment to match the Canadian manpower commitment to this important mission area.

Maritime Homeland Defense. Commander, USNORTHCOM (CDRUSNORTHCOM) is the operational commander responsible for Maritime Homeland Defense within the AOR. Commander, U.S. Fleet Forces Command is under the operational control of CDRUSNORTHCOM for Maritime Homeland Defense. Maritime threats, particularly asymmetric maritime threats in close proximity to the homeland, require defensive capabilities ready to respond on extremely short notice. USNORTHCOM is developing a short-notice maritime response concept of operations that will provide an anti-ship defeat capability for short-range emergent threats leveraging U.S. interagency and partner-nation capabilities.

USNORTHCOM faces a wide spectrum of maritime vulnerabilities that warrant a comprehensive analytic study of “Short-Notice Maritime Response” to identify Maritime Homeland Defense capability gaps from a whole-of-government perspective. The nation's ability to respond to a maritime threat in the USNORTHCOM AOR requires the full integration of DOD maritime operations with those of interagency partners and, where appropriate, international partners, anchored on the principle of unity of effort. To respond to a maritime threat within the USNORTHCOM AOR, the nation depends on synchronized security efforts at the operational level along the approaches to and within the United States. The capability to intercept vessels of interest beyond their ability to impact population centers, critical infrastructure, and key resources, and the ability to respond quickly to maritime indications and warning are essential to protecting the United States from external threats and aggression. In sum, a whole-of-government approach

is required to leverage USNORTHCOM maritime partner capabilities and resources.

Mine Countermeasure Contingency Operations. The Maritime Operational Threat Response (MOTR) Plan outlines roles and responsibilities that enable the U.S. Government to respond quickly and decisively to threats against the United States and its interests in the maritime domain. In accordance with the MOTR Plan, USNORTHCOM is responsible for Mine Countermeasure (MCM) operations in U.S. waters. In 2009, in order to consolidate logistics and maintenance infrastructure, the Navy completed the homeport shift of all surface MCM forces (minesweeping vessels) to San Diego, CA, and all Aviation MCM forces (mine sweeping helicopter squadrons) to Norfolk, VA. In May 2009, an experiment conducted in the port of Corpus Christi, TX confirmed that surveys and port folders completed prior to a mining incident can significantly reduce the time required to mitigate the mining threat and restore port operations.

Anti-Terrorism and Force Protection (AT/FP). USNORTHCOM protects DOD assets in our AOR by executing a comprehensive all-hazards approach to the AT/FP mission that provides DOD personnel (active duty, reservists, civilians, and family members), assets, facilities, installations and infrastructure protection from the full spectrum of threats in order to ensure mission accomplishment. USNORTHCOM has established theater policy, standards, and training, and verifies program execution and compliance through an exercise program and AT Program Reviews. We also integrate operational protection efforts with DHS to create a synchronized defense strategy for the AOR.

USNORTHCOM supports new processes and technologies that sustain the force protection mission. During the past year, we participated in a pilot program, with the Office of the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs, to identify a suspicious activity reporting and sharing capability for the DOD. The unclassified FBI

eGuardian system is anticipated to be the DOD suspicious activity reporting system when designated by the Deputy SecDef. The eGuardian system will share potential terrorist threats, terrorist events, and suspicious activity information with State, Local, Tribal, Federal Law Enforcement Agencies, State Fusion Centers and the FBI Joint Terrorism Task Forces. The eGuardian system will provide a continuous law enforcement force protection threat information sharing environment to identify emerging threats to DOD.

Critical Infrastructure Protection/Critical Resource Protection. The Secretary of the Department of Homeland Security is responsible for coordinating the national effort to enhance the protection of critical infrastructure and key resources (CI/KR) in the United States. The DHS Secretary serves as the Principal Federal Official to lead, integrate, and coordinate implementation of CI/KR protection efforts among Federal departments and agencies, State and local governments, and private sector. USNORTHCOM continues outreach with DHS and infrastructure sector partners to ensure effective critical infrastructure information sharing for the execution of its missions.

As assigned by the SecDef, Combatant Commands act to prevent or mitigate the loss or degradation of DOD-owned critical assets within their AOR. For non-DOD owned critical assets, Combatant Commands act to prevent or mitigate the loss or degradation only at the direction of the SecDef, with the exception of responding to a time-critical event that requires specific actions by military forces to prevent significant damage to mission-critical infrastructure.

USNORTHCOM retains DOD Critical Infrastructure Protection (CIP) focus in three areas:

- 1) Area of Responsibility or those DOD assets that are owned, leased or managed by DOD; 2) Area of Influence to include the Defense Industrial Base; and 3) Area of Interest that is non-DOD assets that are critical to sustaining U.S. military operations.

CIVIL SUPPORT–HELPING THOSE IN NEED

When directed by the President or SecDef, USNORTHCOM supports the primary agency, typically DHS, in responding to natural and man-made disasters by conducting operations to save lives, reduce suffering, and protect the infrastructure of our homeland. The Department of State may request DOD support in response to requests from other countries within and outside the USNORTHCOM AOR. DOD is prepared to support primary agencies with military-unique capabilities such as fixed- and rotary-wing airlift, search and rescue teams, mobile medical facilities, communications infrastructure, and catastrophic planning expertise.

A key component of USNORTHCOM's support is Incident Awareness and Assessment to provide critical imagery for local responders. Military aircraft over disaster sites provide Full Motion Video and still imagery to give responders on the ground their first look at affected areas. At the request of the primary agency, USNORTHCOM is prepared to provide a variety of aircraft and satellites to gather photos and video that allow Federal, State, and local response assets to quickly respond to situations. We conduct these Incident Awareness and Assessment activities while simultaneously safeguarding the civil liberties of American citizens and adhering to appropriate statutes and DOD regulations.

CBRNE Consequence Management. Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) incidents pose a great and foreseeable challenge to the security of the American people. A terrorist attack on U.S. soil or an accidental CBRNE incident could create catastrophic results that would likely exceed the response capabilities of civil authorities. As a result, DOD established a requirement for CBRNE Consequence Management Response Forces (CCMRF) to be trained and ready to respond to requests from civil authorities to save lives, help mitigate pain and suffering, and reduce property damage.

A CCMRF is a brigade-sized task force that operates under the authority of Title 10 of the United States Code. CCMRFs are self-sustaining and may be tailored to any CBRNE event. A CCMRF is composed of Army, Air Force, Marine and Navy units with unique CBRNE training and equipment, as well as general purpose units trained to operate in a CBRNE environment. CCMRF capabilities include event assessment, robust command and control, comprehensive decontamination of personnel and equipment, hazardous material handling and disposal, medical support, air and land transportation, aerial evacuation, mortuary affairs, and general logistical support for extended operations. The CCMRF augments the consequence management efforts of State and local first responders, National Guard forces, and Federal agencies by providing complementary and unique capabilities when the effects of a CBRNE event exceed their capabilities.

In November 2009, USNORTHCOM and Army North (ARNORTH), USNORTHCOM's Army Component Command, conducted the VIBRANT RESPONSE 10.1 Field Training Exercise (VR 10.1 FTX), the first full-scale, full-deployment exercise for a CCMRF, confirming the CCMRF's capability to deploy to and support a catastrophic CBRNE Consequence Management event from a standing alert status. VR 10.1 FTX involved a simulated Improvised Nuclear Device detonation at Muscatatuck Center for Complex Operations near Camp Atterbury, IN. This challenging scenario is one of the 15 National Planning Scenarios established as a common interagency baseline, and the exercise set the stage for CCMRF 10.1 to fulfill its assignment through the remainder of FY10.

Joint Task Force Civil Support (JTF-CS), a USNORTHCOM subordinate command, plans and integrates DOD support to the designated primary agency for domestic CBRNE consequence management operations. When approved by the SecDef and directed by CDRUSNORTHCOM,

JTF-CS deploys to the incident site and executes timely and effective command and control of designated DOD forces, providing support to civil authorities to save lives, prevent injury and provide temporary critical life support. Some typical JTF-CS tasks include incident site support, casualty medical assistance and treatment, displaced populace support, mortuary affairs support, logistics support, and air operations.

The FY08 National Defense Authorization Act (NDAA), Section 1082, as amended by the FY10 NDAA, Section 1034, directed DOD to establish an advisory panel to carry out an assessment of the capabilities of DOD to provide support to U.S. civil authorities in the event of a CBRNE incident. This advisory panel was sworn in on 15 September 2009 and will submit their report with recommendations to Congress within 12 months. USNORTHCOM hosted the Advisory Panel's second meeting at our Headquarters on 23 November 2009 in closed session for classified command mission briefings and discussions. The Command will continue to engage with the Advisory Panel throughout its efforts and we look forward to assisting them in additional research and insight into the Department's CBRNE consequence management mission sets.

Response to Haiti Earthquake. USNORTHCOM is supporting U.S. Southern Command's (USSOUTHCOM) response and support for Haiti Earthquake relief efforts. USNORTHCOM and our components contributed more than 170 people. Air operations experts from Air Forces Northern (AFNORTH), assisted USSOUTHCOM by transforming the 601st Air Mobility Division's Regional Air Movement Control Center into the Haiti Flight Operations Coordination Center to control the smooth flow of aircraft into Port-au-Prince Airport. AFNORTH's Emergency Preparedness Liaison Officers, Air Force Reserve officers assigned to respond to natural and man-made disasters in the United States, were onsite at facilities set up in the Southeast Region to support Haitian earthquake relief efforts. ARNORTH's Defense

Coordinating Officer/Element worked closely with Federal, State, tribal and local officials to determine which DOD capabilities can assist in mitigating the effects of the Haiti disaster.

Cyber Operations. NORAD and USNORTHCOM continue to rely on data systems, the Internet, and networked commercial and military infrastructure to accomplish our missions. Cyber threats to these infrastructures include nation-state actors, terrorists, and criminal organizations, and are increasing in sophistication and occurrence. These cyber threats pose potentially grave damage to the ability of NORAD and USNORTHCOM to conduct aerospace, maritime, and homeland defense, as well as DSCA missions. Our dependence on critical information systems leaves us vulnerable to potentially pervasive and sustained cyber attacks from global actors.

The Commands partner with U.S. Strategic Command (USSTRATCOM), the military Services, DOD Agencies, DHS, and other Federal agencies to share cyber threat and related information, reduce cyberspace vulnerabilities, and defend against information infrastructure attacks. Efforts such as the U.S. Government's plans to increase information sharing with the private sector, and its migration to trusted Internet connections for the government and military networks, will help promote situational awareness and reduce vulnerabilities.

In 2009, USNORTHCOM, along with DHS, USSTRATCOM, and other mission partners, developed a plan tailored to provide rapid assistance to DHS and other Federal agencies for cyber-related events. This DOD cyber support would fall under our DSCA mission area and be provided in a similar fashion as hurricane relief, wildfire support, and responses to other national disasters. USNORTHCOM is also conducting an analysis of providing a cyber response under our homeland defense responsibilities.

H1N1 Operations. USNORTHCOM is executing Phase 1 of our Pandemic Influenza response plan. As part of our response, we identified five Regional Joint Task Force (RJTF) Headquarters. The RJTFs, along with USNORTHCOM subordinate commands, continue to prepare to assist the primary agency. To date, USNORTHCOM has not received any requests from the primary agency for DOD capabilities.

In addition, USNORTHCOM is the DOD lead for globally synchronizing military efforts to minimize contamination and prevent further spread of pandemic influenza. The DOD Global Synchronization Plan for Pandemic Influenza provides guidance to all the Geographic Combatant Commands, Functional Combatant Commands, Services and DOD Agencies to assist in development of regional plans addressing operations in a pandemic influenza environment. Our efforts are focused on ensuring our military remains combat ready while taking care of interagency actions to keep military families safe at home.

Support to the 2010 Vancouver Olympics. The 2010 Winter Olympics began on 12 February 2010 in Vancouver, British Columbia. The Canadian Minister of Public Safety and Emergency Preparedness was charged with overall security for the Games and delegated the Royal Canadian Mounted Police (RCMP) as the lead agency for this task. At the same time, the Minister formally requested Canadian Department of National Defence assistance for the RCMP. As a result of this request, the Canadian Chief of Defence Staff, General Walter Natynczyk, tasked CDRNORAD with the aerospace warning, aerospace control, and maritime warning for this event.

Inland Search and Rescue (SAR) Coordinator. In addition to defending our freedom, our lives, and our territory, SAR is a priority mission for USNORTHCOM. On 4 November 2009, the SecDef designated CDRUSNORTHCOM as the U.S. Inland SAR Coordinator, which made USNORTHCOM responsible for civil SAR involving the inland portion of the 48 contiguous states.

USNORTHCOM stands ready to coordinate the full spectrum of SAR, from normal SAR, such as searching for a lost hiker, to responding to catastrophic incidents, such as a large-scale earthquake, through our Rescue Coordination Center (RCC). The RCC is our key node for inland SAR and is under the purview of USNORTHCOM's Service Component Command, AFNORTH. In addition, our Joint Personnel Recovery Center at Tyndall AFB, FL, allows us to have experts in place for routine SAR missions and to have those same experts at AFNORTH lead the way for a catastrophic incident SAR mission. The FY11 President's Budget request for recapitalization of the Air Force's current rotary-wing SAR capability supports the continued viability of our SAR mission. Full funding of this FY11 request keeps us on a path to continue providing SAR support to American citizens in those critical early hours of a crisis when aerial life support is a no-fail mission.

SUPPORT TO LAW ENFORCEMENT AGENCIES

JTF-North Operations. Joint Task Force North (JTF-North), a USNORTHCOM subordinate command, provides military support to Federal law enforcement agencies to assist in the identification and interdiction of transnational threats within and along the approaches to the United States. During FY09, JTF-North coordinated 61 missions in support of Federal law enforcement agencies. In accordance with DOD policy for supporting law enforcement counterdrug efforts, JTF-North employed joint air, ground, and maritime sensors along the nation's Southern and Northern borders and coasts; conducted detection and monitoring of suspected trafficking threats; provided for information and intelligence sharing among law enforcement agencies; supported Customs and Border Protection's (CBP) request for enhanced tactical infrastructure along the Southwest border; assisted with building planning capability within CBP; and provided Federal law enforcement with other support such as transportation,

tunnel detection capabilities, and basic military skills training.

At the request of DHS Assistant Secretary Alan Bersin, JTF-North provided support to the Alliance to Combat Transnational Threats, a multi-agency operation, in the State of Arizona. JTF-North facilitated intelligence and operational planning, and provided sensor capabilities during execution of this intelligence-driven operation.

Through JTF-North's missions and activities, USNORTHCOM continues to sustain important relationships with Federal law enforcement agencies in securing our nation's borders against drug traffickers and their associated activities. Robust collaboration exists today between JTF-North and operational-level leaders in CBP, Immigration and Customs Enforcement, Drug Enforcement Administration, and the FBI.

Counternarcotics (CN) Programs. USNORTHCOM's CN Program is an integral part of the defense and security of our nation. We continue to build USNORTHCOM's capabilities and establish coordinated efforts supporting our partner agencies and partner nations to address the illicit narcotics trafficking threat to the homeland.

USNORTHCOM's CN efforts support Law Enforcement Agencies through information collection, analysis, fusion, and sharing, as well as theater security cooperation and partnership programs. These efforts are closely coordinated among the USNORTHCOM staff and subordinate commands.

In addition to our Southwest border, there are ongoing efforts with our Canadian partners along our 5,000 mile long Northern border. This U.S.-Canadian cooperation has uncovered and is addressing widespread illicit narcotics trafficking in our shared land, air, and sea domains that does not currently exhibit the level of violence as on our border with Mexico, but nevertheless remains a serious transnational threat to the United States. Illicit trafficking also poses a threat to

The Bahamas, Virgin Islands and Puerto Rico, which are now in the USNORTHCOM AOR.

Accordingly, we are exploring how to better coordinate CN efforts with USSOUTHCOM in this region.

USNORTHCOM has also made tremendous strides in supporting national CN efforts by the Office of National Drug Control Policy (ONDCP) and the Interdiction Committee (TIC) as part of their coordination with DOD. TIC membership consists of 17 agencies and commands led by a chairman appointed by the ONDCP Director. TIC provides advice to ONDCP on activities and threats posed by all illicit drug trafficking that threatens the United States and its interests in the Western Hemisphere. USNORTHCOM is now represented quarterly as a TIC participant with JTF-North.

Counter-Tunnel Initiative. USNORTHCOM is working with DHS, other Combatant Commands, and coalition partners to explore, map, and characterize illicit subterranean structures. Among these enhanced capabilities are seismic-acoustic and linear fiber-optic sensors, robotics, and other technologies. The U.S. Army Corps of Engineers, Engineer Research and Development Center, is the technical lead for this initiative and continues to work in support of multiple Combatant Commands to solve this difficult problem. Within the past year, DOD support has resulted in the preemptive interdiction of two unfinished tunnels on the Southwest border. The Southwest border is a perfect test-bed for this capability. Results of this initiative benefit all Combatant Commands and help our interagency partners in their border security mission.

THE NATIONAL GUARD AND RESERVES—OUR PARTNERS

National Guard and Reserve forces are critical to USNORTHCOM's ability to carry out our

assigned homeland defense and civil support missions. As such, USNORTHCOM advocates for National Guard and Reserve capabilities in support of the Command's mission. In each of our annual Integrated Priority List and Program Objective Memorandum submissions to the DOD, we advocate for and support resolution of National Guard and Reserve capability concerns. We further advocate for changes to DOD policies that allow for more collaborative planning to ensure proper resourcing for National Guard and Reserve units' equipment, personnel and training for civil support operations. We also advocate for and support key issues such as equipment modernization in the Weapons of Mass Destruction Civil Support Teams.

We recognize the National Guard as a fundamental partner in the Total Force and essential to the security and defense of our nation. The Air National Guard provides the bulk of NORAD's operational force for Air Sovereignty Alert missions, and is developing additional capabilities in support of domestic requirements. The Army National Guard provides all of the manning at our Ground-Based Interceptor sites in support of missile defense requirements. Additionally, the Army National Guard provides the bulk of personnel for ground-based air defense capabilities protecting the National Capital Region.

The National Guard has made a significant investment in personnel assigned to USNORTHCOM. In fact, USNORTHCOM has the largest concentration of Title 10 National Guard officers in a joint organization outside of the National Guard Bureau. There are over 50 full-time National Guard authorizations in USNORTHCOM HQ; however, only 39 of those positions are filled. In addition, Guard general officers serve in nominative positions as my USNORTHCOM Deputy Commander, Director of Operations, and one Deputy Director of Plans and Policy. Our ongoing partnerships with the National Guard have increased our ability to coordinate and integrate joint and interagency operations. While we still have work to do, I am

pleased to report our collaboration with the National Guard has never been better, and the experience gained by Guard members serving throughout USNORTHCOM ensures we have a strong foundation for enhancing this relationship as these servicemembers progress through their careers.

PLANS—THE CORNERSTONE OF OUR SUCCESS

USNORTHCOM's homeland defense and civil support plans are vital to our Nation's ability to deter, detect and defeat threats to our security, and assist civil authorities when called upon by the President or SecDef. Our plans are modified as threats, observations, and lessons learned from exercises and real-world operations dictate.

On 2 November 2009, the SecDef established a Civil Support Plan category of DOD plans that may be shared with State, local, tribal, and other Federal authorities that play a mission-critical role in the development, review or execution of the plans. This Civil Support plan category of DOD plans contains seven USNORTHCOM plans.

The USNORTHCOM Theater Campaign Plan provides the framework for all of our planning efforts and is the primary means by which we synchronize day-to-day operations for homeland defense, civil support, and theater security cooperation activities. The operations and activities outlined in the campaign plan place strong emphasis on anticipating threats, improving our homeland defense and civil support capabilities, and strengthening relationships with our mission partners, at home and in the North American region. We continually assess the campaign plan to evaluate our progress toward achieving the long-term goals and objectives outlined in national and DOD strategies.

THEATER SECURITY COOPERATION

Our top theater security cooperation priority is to build the capacity of allies and partners to help create an environment in North America that is inhospitable to terrorism.

USNORTHCOM's long-range vision focuses on establishing a comprehensive defense architecture where the United States works with its international partners to deter, prevent, and if necessary, defeat mutual threats. To achieve this, we plan, execute, and assess theater security cooperation programs, events, and activities with The Bahamas, Canada, and Mexico to support national and Command goals and objectives. This requires us to direct theater security cooperation activities toward improving partner-nation defense capacities, using a capacities-based planning approach, to promote regional cooperation and enhanced interoperability.

The focus for our efforts is on building partner capacities with The Bahamas and Mexico and on enhancing coordination and interoperability with Canada. Our goal is to strengthen homeland defense through mutually beneficial partnerships in the AOR that counter terrorism, trafficking of WMD and illicit narcotics and other transnational and irregular threats and their consequences, while contributing to national security objectives.

We have worked over the past year with the Department of State, U.S. Agency for International Development, the U.S. Geological Survey, FEMA and the Environmental Protection Agency to strengthen those relationships to further North American security and prosperity. Recent, ongoing, and planned initiatives include building relationships and capabilities and creating enduring partnerships that result in enhanced safety and security along our common borders and within the region. Activities have focused on developing and improving procedures to prepare for and respond to potentially catastrophic events such as pandemic influenza outbreak,

mass exposure to dangerous chemicals and/or materials, and natural and/or man-made disasters.

Canada. The relationship among NORAD, USNORTHCOM and Canada Command is a tremendous example of the strong and mutually beneficial military-to-military ties between our nations. I reported last year that we had signed the Canada-United States Civil Assistance Plan, which is the framework for forces from one nation providing support to forces of the other nation for timely, effective, and efficient support to their respective civil authorities. We used the Civil Assistance Plan in our deliberate planning process, as the U.S. Government responded to requests from the Government of Canada for USNORTHCOM support to Canada Command when they supported Royal Canadian Mounted Police security efforts for the 2010 Olympic Games in Vancouver.

NORAD and USNORTHCOM continue to develop our relationships with Canada Command. This past year, we concluded a comprehensive Tri Command Study that examined future roles, missions and relationships to increase North American defense and security while enhancing the valued relationship between Canada and the United States. The Tri Command Study identified several initiatives to further integrate and synchronize our operations and created a Framework for Enhanced Military Cooperation among NORAD, USNORTHCOM, and Canada Command that highlights fundamental relationships and underscores individual command responsibilities for mutual support and cooperation.

Mexico. USNORTHCOM leads Theater Security Cooperation and Building Partnership activities with Mexico to promote specific U.S. security interests and support the development of Mexican military capabilities for self-defense and coordinated operations. Our military-to-military relationship with Mexico is growing stronger, with full respect for Mexican sovereignty and a shared responsibility for countering the transnational illicit trafficking activity

affecting our nations.

As one essential element of the U.S. whole-of-government approach, USNORTHCOM's most significant contribution is in strengthening the operational capacity of the Mexican Army, Air Force, and Navy. Our engagement goes beyond providing hardware and the associated training; it also focuses on developing the ability to analyze and share the information that will allow the Mexican military to conduct operations against the drug trafficking organizations to systematically dismantle them. We are committed to a long-term military partnership with Mexico that is beneficial to both nations.

USNORTHCOM works in partnership with the Mexican military to support its efforts to increase capacities and execute its current strategy to counter Mexico's security threats. The level of communication, interchange, cooperation, and training exchanges between U.S. and Mexican armed forces has increased dramatically over the last two years and represents a historic opportunity for long-term strategic improvement of the U.S.-Mexico security partnership.

Through our Theater Security Cooperation Plan and activities, USNORTHCOM plays a significant role in supporting the Mexican military and improving the security situation in Mexico through the execution of the following programs:

- The Mérida Initiative: \$415.5 million appropriated in FY08 and FY09 Foreign Military Financing funds to purchase aircraft (up to eight Bell 412 helicopters, up to five Sikorsky UH-60M helicopters and up to four CASA aircraft) to improve the Mexican military's ability to deploy rapid-reaction forces quickly in support of police operations against drug cartels, and to conduct maritime surveillance in an effort to deny the use of the eastern Pacific and western Caribbean to transnational criminal organizations, including drug traffickers and potential terrorists. In addition, funding will procure ion scanners to help detect illicit drugs.

USNORTHCOM's actions are in coordination with efforts to build up the capabilities of Mexico's civilian law enforcement entities by the U.S. Department of State and other agencies.

- Section 1206 assistance: \$14.0 million for equipment such as Night Vision Goggles, Rigid-Hull Inflatable Boats, personal protective equipment, digital media forensics, tactical communications equipment, and specialized training.
- Section 1004 counterdrug support: \$18.0 million for pilot training, specialized skills training, and intelligence training.
- Overseas Humanitarian Disaster Assistance and Civic Aid: \$3.0 million in FYs 08-10 for hazardous materials response, flood early warning and emergency management training.
- Facilitated training support in the areas of Night Vision Goggle maintenance, Explosive Ordnance Disposal/Hazardous Material team training, and Aviation Training. Additionally, our service components are actively engaged with their Mexican counterparts in subject matter exchanges and sharing lessons learned from our experiences in the areas of civil-military relations and urban operations.

I have engaged with senior officers in the Mexican armed forces over the past few months who have expressed an interest in more detailed discussion and training in the areas of military justice and operational law (and inherent human rights issues) and administrative law. As a result, we are developing Subject Matter Expert Exchange and Mobile Training Team events (in conjunction with the Defense Institute for International Legal Studies) in order to enhance respect for the rule of law and human rights within the Mexican armed forces. For example, USNORTHCOM attorneys and attorneys from the Mexican armed forces have already participated in conferences designed to develop curricula for the professional development of military attorneys. Additionally, senior attorneys from the Mexican armed forces have visited

various U.S. military entities to get a first-hand view of how the U.S. military is organized and trained for the administration of military justice and for conducting operations in compliance with domestic and international law.

USNORTHCOM continues to support the Department of State's "Beyond Mérida Initiative." USNORTHCOM has partnered with the Mexican military in support of disrupting the capacity of organized crime to operate and institutionalizing capacity to sustain the rule of law, thus helping to build strong and resilient communities on both sides of the border.

We will continue to work proactively with our mission partners and with the Mexican military to achieve the joint goals of the United States and the Government of Mexico. It is important to recognize that while we are currently working with Mexico to develop and strengthen its military's capability to defeat the drug trafficking organizations, our long-term goal is to establish an enduring relationship—built upon trust and confidence—so that we can cooperate in the future on other mutual security issues.

The Bahamas. On 17 December 2008, Theater Security Cooperation responsibility for The Bahamas was transferred from USSOUTHCOM to USNORTHCOM. This Unified Command Plan transfer enhances our homeland defense mission through our partnership with the Royal Bahamas Defence Force (RBDF), and strengthens our civil support missions with Puerto Rico and the U.S. Virgin Islands. This past year, my staff coordinated closely with USSOUTHCOM and RBDF staffs to ensure smooth planning and execution of this shift in mission and responsibilities. We have developed a comprehensive Bahamas engagement plan as part of our Theater Campaign Plan that will enhance the U.S.–Bahamian relationship and integrate The Bahamas as a participant in the President's Caribbean Basin Security Initiative.

Western Hemisphere Institute for Security Cooperation (WHINSEC). USNORTHCOM

representatives participated in the WHINSEC Board of Visitors in June and December of 2009.

We worked closely with the WHINSEC staff to ensure their curriculum is fully compliant with U.S. Code and supportive of human rights. I have tasked WHINSEC to provide human rights training to the Mexican armed forces in the upcoming months; however, I continue to believe that open disclosure of the names of all WHINSEC graduates intrudes upon students' privacy and, more importantly, would assist drug trafficking organizations or terrorist groups to target the best and the brightest graduates from Latin America.

INTEROPERABLE COMMUNICATIONS

For mission success, our communications activities are focused on ensuring DOD interoperability with our DHS, State and local partners to rapidly and effectively share information to ensure a prompt, coordinated response in the aftermath of a disaster.

In partnership with the Defense Information Systems Agency, each year we sponsor the VITAL CONNECTION Communications Exercise (VCCE), which provides a realistic, controlled environment for DOD and its partners to train and collaborate on communications systems and capabilities that facilitate effective and efficient interoperability.

In 2009, there were four venues where DOD, State, and local first responders developed and refined their techniques and procedures to improve interoperability in the event of a natural disaster or national emergency.

USNORTHCOM continues to partner with FEMA and the National Guard in the employment of Deployable Cellular-Based Suites, which include cellular towers, satellite communications connectivity, Land Mobile Radio interfaces, and ancillary devices to improve

interoperability and service to emergency responders. USNORTHCOM procured four additional Incident Awareness and Assessment/Full Motion Video communications suites through the Combatant Commander Initiative Program that are positioned within AFNORTH Headquarters and Air Combat Command Communication Squadrons to provide enhanced Incident Awareness and Assessment/Full Motion Video capabilities to incident commanders. These suites provide additional capability to enhance situational awareness during disasters and emergency events for both incident on-scene commanders and our national leadership.

EXERCISES, TRAINING AND EDUCATION

NORAD and USNORTHCOM continue to derive exceptional training value from our participation in the National Exercise Program (NEP). In 2009, we participated in each of the Tier I and Tier II NEP exercises, including the National Level Exercise in July that represented the capstone event for the first-ever New Administration Transition Training program.

Our own two major exercises, ARDENT SENTRY 09 (AS 09) in June 2009 and VIGILANT SHIELD 10 (VS 10) in November 2009, represented extraordinary training opportunities with scores of Federal, State, local, tribal, non-government organizations, private sector, and multi-national partners.

In AS 09, we ran agro-terror and other asymmetric exercise incidents in Iowa and three surrounding States, a Deployable Homeland Air and Cruise Missile Defense scenario off the coast of Oregon, and a nuclear weapon accident/incident vignette in Wyoming, all while simulating loss of the use of our primary operations facility and having to move to an alternate location.

In VS 10, we linked to the main Canadian exercises supporting preparation for the 2010 Vancouver Winter Olympics (including how we would provide civil support if requested), and

simultaneously conducted an earthquake exercise in upstate New York. Each of these major exercises was linked to a VIGILANT GUARD exercise, the series we conduct in support of State National Guard Headquarters and Joint Task Forces.

In 2010, we will again participate in the National Level Exercise, and ARDENT SENTRY 10 will further exercise our civil support mission. We will also practice our homeland defense missions in VIGILANT SHIELD 11, linked to USSTRATCOM's exercise GLOBAL THUNDER 11. We are also continuing a series of Pandemic Influenza exercises in preparation for future DOD-wide and U.S. Government-wide Pandemic Influenza exercises.

All in all, we annually conduct or participate in approximately 50 exercises of varying type, length, and complexity, to maintain our readiness across diverse NORAD and USNORTHCOM mission sets detailed in over ten Concept Plans. We engage our training partners at every level of Federal, State, tribal, and local government to employ the most comprehensive and realistic scenarios.

The newest complement of our civil support series of training courses is our DSCA Senior Executive Seminar. Hosted in our Headquarters, this two-day seminar provides a great opportunity for me to meet with State Governors and The Adjutants General (TAGs) (ranging from one to five at a time), for them to receive capabilities briefs from various staff Directorates regarding DSCA operations, and orient themselves to USNORTHCOM's missions.

PARTNERSHIPS

Working with our mission partners is essential to ensuring the American people receive assistance during times of need, whether at the international, interagency, or State and local level. Our nation's Governors take very seriously their role as Commanders in Chief of their State and

we respect that authority. Our job is to support our nation's Governors in responding to emergency situations and threats in their States.

States and Territories. In an effort to understand each State's risks and capabilities and in order to anticipate the best response for DOD requested assets, I participated in the initial meeting of the congressionally-directed Council of Governors and have also separately engaged with Governors, Lieutenant Governors, various state Directors of Emergency Management and the TAGs. Since taking command, I have met with a total of 27 State Governors and/or Lieutenant Governors. I have also met individually with 37 different States' TAGs and have addressed all 54 TAGs at various National Guard senior leader conferences. The most recent conference was the 2010 National Guard Bureau/USNORTHCOM Hurricane Planning Workshop, 18-22 January 2010, in Tampa, FL, where several hundred representatives from 30 States and for the first time senior officials from DHS and FEMA addressed hurricane emergency response preparedness. Next year, we plan to expand the scope of the planning conference to include all hazards. These engagements strengthen the relationships between the State and DOD, improve mutual understanding of the critical balance each State must maintain between its requirements and resources to ensure support of the State's civil authorities during a major disaster, crisis, or NSSE; enhance sharing of information and lessons learned from previous responses to disasters and events; and support the State's understanding of NORAD and USNORTHCOM and our missions.

NORAD and USNORTHCOM provide a training and exercise program that actively engages the States and Territories. The VIGILANT GUARD Joint Regional Exercise Program is sponsored by USNORTHCOM and executed in conjunction with the NGB. Four VIGILANT GUARD (VG) exercises are conducted each year, and when feasible, two are linked to NORAD

and USNORTHCOM-sponsored exercises (VG Iowa with ARDENT SENTRY 09 and VG New York with VIGILANT SHIELD 10). All VG exercises include some degree of local/county government participation.

Interagency Community. NORAD and USNORTHCOM have strong relationships with many non-DOD Federal Agencies and Departments. Agency representatives and USNORTHCOM liaison officers provide an established reach-back capability to their parent organizations. These relationships provide the essential interagency context during operations planning and execution, while also providing the DOD's perspective to external agencies.

Private Sector. Our Private Sector Engagement Team has worked closely with DHS, particularly FEMA, to support a comprehensive outreach program to non-profit and non-governmental organizations (NGO), businesses, academia, faith-based organizations, and public-private partnerships throughout the country. The tremendous capabilities, resources, and willingness of the private sector and NGO community are essential to successful disaster response. Achieving unity of effort is our goal.

CHALLENGES

We are aggressively tackling impediments to our efforts to improve air and maritime domain awareness, interagency information sharing, and consequence management operations. As we move forward with these efforts and others this year, we solicit and appreciate your continued support.

Aircraft Recapitalization. Legacy fighters, tankers, and airborne early warning aircraft in use today adequately meet all aspects of the Air Sovereignty Alert mission; however, recapitalization of these legacy aircraft is critical to the future success of the NORAD mission set.

Legacy fighters are aging and will be stressed to maintain reliability and capability as we move into the 2015-2030 timeframe. Recapitalizing the fighter, tanker, and airborne early warning aircraft will remain a challenge, given the DOD's post-9/11 long-term mission requirements. NORAD's mission readiness will be affected if Air Sovereignty Alert aircraft are not recapitalized in accordance with the FY11 President's Budget Request.

Unmanned Aircraft Systems (UAS) in the National Airspace. USNORTHCOM is fully engaged with the UAS community through our membership on the Joint UAS Center of Excellence Advisory Council; Office of the Secretary of Defense, Acquisition, Technology & Logistics-led UAS Task Force; and our participation on the Policy Board for the Federal Aviation UAS Subgroup. USNORTHCOM is also an advisory member to the newly formed UAS Executive Committee, co-chaired by the FAA and DOD, which is addressing the numerous national airspace access issues for public users. We are eager to team with our partners in the interagency community as they expand their UAS operations to achieve synergy in our homeland defense and civil support efforts. We continue to work with the FAA on finding the best way forward on employing UAS in the National Airspace outside restricted airspace.

Deployable-Integrated Air Defense System. One of the greatest challenges facing the Commands is the lack of an integrated air and cruise missile defense capability to counter threats from low-flying aircraft, UAS, and cruise missiles. As these threats grow, it becomes increasingly important to develop an integrated air and cruise missile defense system-of-systems to defend the homeland. In the past year, NORAD and USNORTHCOM worked closely with the Joint Air Defense Operations-Homeland Joint Test Team as the operational sponsor in developing tactics, techniques, and procedures for a Deployable-Integrated Air Defense System capability, which could be employed to protect a particular venue or city which may be threatened or at risk.

National Security Implications of Arctic Change. The 1982 Convention on the Law of the Sea is a seminal agreement of the extensive international legal framework that applies to the Arctic Ocean. Global interest in the Arctic region shows no hint of ebbing, evidenced by the summer 2009 transit of two German-owned cargo vessels through the Northern Sea Route, westbound from the Atlantic to the Pacific Ocean. Increased activity necessitates that the United States become party to the Convention in order to protect and advance national interests in the Arctic by enhancing our national security (including the maritime mobility of our Armed Forces), securing U.S. sovereignty rights over extensive marine areas (including the valuable natural resources they contain), and giving the U.S. a seat at the table when rights vital to our interests are debated and interpreted.

To bolster our efforts for the Arctic region, I support the stated desires of our respective U.S. and Canadian civilian defense leadership to reinvigorate the Permanent Joint Board on Defense as highlighted by Secretary of Defense Gates' and Minister McKay's November 2009 Halifax Security Talks.

FUTURE CAPABILITIES

As we investigate existing technologies and capabilities for innovative uses, we are also focusing on emerging technologies to meet our requirements. We urge Congress to support the following initiatives.

Air Domain Awareness. In March 2007, the National Strategy for Aviation Security (NSAS) was published to enhance public safety and economic growth by promoting global aviation security through reducing vulnerabilities. The NSAS states: "Together, the Strategy and seven supporting plans present a comprehensive national effort to prevent hostile or illegal

acts within the air domain, promote global economic stability, and protect legitimate aviation activities.”

To achieve the objectives of the NSAS, the whole-of-government must be committed to the guidance provided within the NSAS and supporting plans to achieve global air domain awareness (ADA). ADA crosses many Departments and Agencies within the government, thus requiring a coordinated approach. Historically, the operational synergism and cost efficiencies associated with the principle of unity of effort have not been completely realized for ADA because neither an interagency governance mechanism nor an information sharing infrastructure has yet been established.

To meet this challenge, NORAD and USNORTHCOM have teamed with DHS and other organizations across the U.S. Government to collaboratively develop solutions and lay the foundation for ADA. The desired end-state is development and implementation of a work plan leading to a joint, interagency, intergovernmental, and multinational ADA governance mechanism, interdepartmental capabilities and resourcing roadmap, and information sharing infrastructure to synchronize the disparate efforts of ADA mission partners.

DHS, NORAD, and USNORTHCOM hosted an Interagency ADA Summit on 13-14 January 2010 bringing together senior leaders from numerous federal agencies. The summit leadership provided guidance to three working groups facilitating development of processes for governance, information sharing, and capabilities and resources. Additional summits are planned at six-month intervals and will bring in participation from industry, State, local, tribal, and international partners.

NORAD and USNORTHCOM Defense Surveillance Gap Filler Strategy. Wide-area surveillance is a key component of Air Domain Awareness and is critical to air and missile defense

of the homeland; however, NORAD and USNORTHCOM lack adequate real-time, persistent, multi-domain surveillance. The NORAD and USNORTHCOM Surveillance Gap Filler Strategy proposes to rectify this problem by providing the Commands with a foundation to develop a family of systems permitting persistent wide-area air and maritime surveillance to enhance defense against threats in the interior of and in the approaches to North America.

The C2 Gap Filler Joint Capability Technology Demonstration will demonstrate a capability that enables efficient, secure, timely and trusted exchange of information resulting in enhanced C2 capabilities for NORAD and USNORTHCOM.

A second effort is the Next Generation Over-the-Horizon Radar (OTHR) Technical Risk Reduction Initiative (TRRI) Phase 1 project. TRRI was developed to minimize the technical risks of building a next generation OTHR prototype while simultaneously raising technical readiness levels of advanced radar technologies. Over-the-horizon radars are proven, wide-area surveillance systems with the ability to detect and track thousands of air and maritime targets at ranges exceeding 1,500 miles from the radar site. When completed, these initiatives will improve wide-area surveillance around North America.

Radar Interference. Comprehensive Air Domain Awareness will not be attained unless we can resolve the growing issue of radar interference. As such, NORAD and USNORTHCOM support the establishment of an interagency process to allow the accurate assessment of existing and future plans for obstructions that potentially disrupt various radars within our area of operations. A formal vetting process is required with the necessary authorities to prevent projects from interfering with the defense of North America, while supporting the expansion of alternative energy sources, such as wind farms. To that end, NORAD has taken the initiative to form a radar obstruction evaluation team to quantify the impacts of proposed wind energy projects in close

proximity to our radars.

Long-Range Radar Sustainment and Future Plans. DHS, NORAD and

USNORTHCOM use long-range radars to detect and monitor non-cooperative targets. Many of these radars are 1950s vintage technology and in some cases are well beyond their life expectancy. To help with the maintenance of these radars, the Service Life Extension Program (SLEP) was approved, has been funded since FY06, and again requested in the FY11 President's Budget. Upgrades to the radars are currently being completed. The goal is to sustain the existing systems another 15-20 years and use modern technology to play an integral part in the SLEP.

FINAL THOUGHTS

NORAD and USNORTHCOM have demonstrated our ability to meet emerging threats to the homeland and support civil authorities in times of crisis. We are committed to remaining strong and reliable partners, working together to protect and defend our nations, people, and way of life.

Our Commands' success depends on the dedication, professionalism and sacrifice of our servicemen and women. We appreciate what the Members of this Committee have done to ensure the men and women of NORAD and USNORTHCOM have the best possible resources to maintain world-class capabilities.