STATEMENT OF

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COMMANDER

UNITED STATES NORTHERN COMMAND

AND

NORTH AMERICAN AEROSPACE DEFENSE COMMAND

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

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Chairman Skelton, Congressman McHugh, and distinguished Members of the Committee:

Homeland defense is the preeminent mission of U.S. Northern Command (USNORTHCOM) and North American Aerospace Defense Command (NORAD). Our Commands are vigilant in protecting our citizens from threats that exist in the air, space, land, maritime, and cyberspace domains. As we look to the future, our aim is to secure our environment by deterring and, if necessary, defeating those who threaten our way of life. Today, it is my honor to report on the state of the Commands.

Our Missions—Protecting What You Value Most

USNORTHCOM and NORAD are separate Commands; neither is subordinate to the other. However, the Commands have complementary missions, operate within a common security environment, and share an integrated headquarters staff. USNORTHCOM is committed to the defense of the United States and NORAD, a bi-national command, is committed to the air defense of both the United States and Canada.

USNORTHCOM anticipates and conducts homeland defense and civil support operations within its assigned area of responsibility to defend, protect, and secure the United States and its interests. The USNORTHCOM area of responsibility encompasses North America, Bermuda, the Gulf of Mexico, the Straits of Florida, the Caribbean region inclusive of the U.S. Virgin Islands, British Virgin Islands, Puerto Rico, the Bahamas, Turks and Caicos Islands and surrounding waters out to approximately 500 nautical miles. We execute an active, integrated, layered defense that allows us to rapidly deploy military assets needed to defend the United States.

USNORTHCOM provides assistance in support of civil authorities during natural and man-made disasters and pandemic events. Incidents begin and end locally, and most are wholly managed at the State or local level; however, some incidents require Federal support. When requested and approved by the Secretary of Defense or directed by the President, Federal military forces will contribute to Federal support. On behalf of DOD, USNORTHCOM employs forces at the request of civil authorities when approved by the Secretary of Defense or the President. That said, USNORTHCOM does not wait for that call to action. Sweeping improvements in pre-event coordination with interagency partners, the National Guard, and the Reserves have led to an anticipatory, forward-leaning operational sequence for expeditious DOD support when requested by civil authorities.

NORAD, a bi-national Command formed by a partnership between the United States and Canada, provides aerospace warning, aerospace control and maritime warning for North America. For more than 50 years, NORAD has defended the skies of the United States and Canada. Across our two countries, armed fighters are on alert and ready to fly air patrols to identify and intercept suspect aircraft. NORAD ensures U.S. and Canadian air sovereignty through a network of alert fighters, tankers, airborne early warning aircraft, and ground-based air defense assets cued by interagency and defense surveillance radars.

USNORTHCOM and NORAD work together in defending our nation's airspace. While NORAD provides aerospace warning and aerospace control, USNORTHCOM is responsible for air operations, such as evacuation and movement of people and high-value cargo via military airlift, within our assigned area of responsibility. In addition, USNORTHCOM has the capability to accept control of U.S. air defense alert aircraft to conduct unilateral operations, as required and directed.

Homeland Defense is Our Number One Priority

Ground-Based Midcourse Defense. USNORTHCOM is responsible for directing missile defense operations within our area of responsibility and Hawaii, to protect the homeland from potentially hostile acts. During 2008, we enhanced our missile defense capabilities with the incorporation of the Sea-Based X-Band Radar.

USNORTHCOM is very active in the Missile Defense Agency's ground and flight testing programs to ensure the tests are operationally sound. USNORTHCOM missile defense crews are trained and routinely exercised to ensure we meet the high standards required to defend the nation.

To fully ensure USNORTHCOM can perform our missile defense mission as assigned, our focus is threefold. The first is sustainability and reliability of the current Ground-Based Interceptor fleet. Secondly, USNORTHCOM requires realistic training simulations that accurately depict Ballistic Missile Defense System operational behavior. In order to train as we fight, we must develop operationally viable Tactics, Techniques, and Procedures for new capabilities. We continue to work closely with the Missile Defense Agency and U.S. Strategic Command on this issue. Lastly, we need a more robust architecture that enables day-to-day operations to continue concurrently with ongoing research and development activities. The Missile Defense Agency's CTTO and STO (Concurrent Test, Training, and Operations and Simultaneous Test and Operations) will help bridge the gap between operational capability and Research, Development, Test, and Evaluation activities.

The Colorado Army National Guard and the Alaska Army National Guard are integral parts of our nation's Ground-Based Midcourse Defense system. The 100th Missile Defense Brigade at Schriever Air Force Base in Colorado and the 49th Missile Defense Battalion at Fort

Greely in Alaska are under our operational control as USNORTHCOM defends the homeland from long-range ballistic missile threats. DOD has cooperative agreements with the States of Colorado and Alaska for manning this homeland defense mission with their Army National Guard units. When National Guardsmen enter a Ground-Based Midcourse Defense site or otherwise commence operational duties, their duty status automatically transfers from Title 32 to Title 10. Command and control of these National Guardsmen requires designation of dual-status commanders when performing their missile defense mission for USNORTHCOM.

Operation NOBLE EAGLE. Since the attacks of September 11th, NORAD has supported the air defense of the United States and Canada through Operation NOBLE EAGLE with airspace surveillance, a ready alert force, and the unique National Capital Region Integrated Air Defense System. Over 50,000 sorties have been flown in support of Operation NOBLE EAGLE, with the Air National Guard conducting more than 70 percent of these sorties. In support of NORAD's missions, Air National Guard units have been successfully employing instantaneous Title 10 orders for several years. These orders allow an individual to volunteer, with the consent of the governor, to be federalized for specific missions prior to execution.

In the National Capital Region, NORAD continues to improve robust air and ground-based air defense systems. Working closely with the Federal Aviation Administration and the Transportation Security Administration, the National Capital Region airspace has been codified by rule to protect our nation's Capital. This interagency effort meets one of NORAD's long-term goals to secure the skies over Washington. In addition to the alert fighters at Andrews Air Force Base, the U.S. Coast Guard provides NORAD with alert helicopters to intercept low-and-slow aircraft in the National Capital Region.

NORAD provides tailored air defense for designated National Special Security Events. Recently, NORAD completed support of the 2008 Democratic and Republican National Conventions and the 2009 Presidential Inauguration. Working with our interagency partners, NORAD provided continuous air defense of the National Capital Region during the event.

Northern Sovereignty Operations. In 2008, the resurgence of Russian Long Range Aviation flights on NORAD's northern flank continued at the heightened pace initiated in 2007. In 2008, pairs of TU-95 Bear-H aircraft flew into the Air Defense Identification Zone on seven separate occasions. All but one of these flights were unannounced. These bomber aircraft were detected and identified by fighters from the Alaskan and Canadian NORAD Regions, with critical support from U.S. E-3 surveillance aircraft and air-to-air refueling aircraft. While foreign aircraft never violated U.S. or Canadian airspace, expectations for continued activity and growing international interest in the north demand sustained vigilance and allocation of resources. NORAD remains vigilant to ensure no unauthorized, unwanted or unknown aircraft enter North American airspace.

U.S.-Canadian cooperation in northern air operations is the embodiment of the intent of the NORAD agreement. In 2008, Canada relied heavily on our U.S. aerial refueling tankers to deploy fighters to Forward Operating Locations and extend their patrols; E-3 AWACS supported operations on both sides of the U.S.-Canada border to expand surveillance; and fighter aircraft of both nations met the needs of each tactical situation.

In the future, pursuit of natural resources and the potential increase in traffic of northern waterways will demand increased air and maritime surveillance, security, and defense in the Arctic Region. A bi-national evaluation is underway to improve the quality and coverage of northern surveillance systems; and Canada is investigating the expansion of facilities at Resolute

Bay, which may provide a more northern Forward Operating Location than any currently available. Collectively, we will remain vigilant and continue to monitor the Arctic approaches to the North American continent.

Southern Sovereignty Operations. During September 2008, NORAD's integrated air defense assets in and around the Continental United States and Canada detected and identified a pair of Russian Tu-160 Blackjack heavy bombers participating in Russian Air Force activity transiting over the Atlantic on their way to/from Venezuela. Russian air assets at no time violated U.S. or Canadian airspace. This NORAD operation, in concert with similar responses by our NATO allies, demonstrates our continued vigilance and readiness to defend North American air sovereignty.

Aircraft Recapitalization. Our ability to maintain air sovereignty in the future is at risk. Legacy fighters are aging and will be stressed to maintain reliability and capability as we move into the 2013-2025 timeframe. Recapitalizing the fighter, tanker, and airborne early warning aircraft will remain a challenge given DOD's post-9/11 long-term mission requirements.

NORAD's ability to accomplish its missions will be impacted if legacy fighters retire without a designated replacement being fielded in adequate numbers to maintain NORAD's air defense response capability.

The tradeoff between modernization of legacy airframes and transformation to fifth generation aircraft could limit efforts to keep pace with emerging challenges. Currently, legacy fighters, tankers, and airborne early warning aircraft adequately meet all aspects of the Air Sovereignty Alert mission. Recapitalization of legacy aircraft is critical to the future success of the NORAD mission set.

At this time, the Elmendorf AFB F-22s are tasked with air sovereignty alert missions and future Hickam Air National Guard F-22s should expect similar taskings. F-22s are also key participants in Operation NOBLE EAGLE sorties from Langley Air Force Base. The F-35 will play an even larger part in our homeland defense mission due to their increased numbers and widespread bed down locations of the aircraft they will be replacing. In light of this, I fully support the current Air Force program for the F-35. Program numbers will be reviewed in the upcoming Quadrennial Defense Review.

Civil Support Operations—Supporting Americans in Crisis

CBRNE Consequence Management. Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive (CBRNE) incidents will pose a great challenge to the security of the American people for the foreseeable future. A terrorist attack on U.S. soil, an accidental CBRNE incident, or one caused by a natural disaster could create catastrophic conditions likely to overwhelm response capabilities of civil authorities. As a result, the Secretary of Defense has established a requirement for three CBRNE Consequence Management Response Forces (CCMRFs) to be trained and ready to respond to requests from civil authorities. The DOD, through USNORTHCOM, currently has one CCMRF trained and ready to support the Federal response to a CBRNE incident. USNORTHCOM will have a second CCMRF in 2009 and a third CCMRF by 1 October 2010. Each CCMRF is designed to provide robust command and control and consequence management capabilities that include aviation, medical, and general logistics support.

On 1 October 2008, the Secretary of Defense assigned CCMRF 1 forces to the Commander, USNORTHCOM. In September 2008, prior to mission assumption, CCMRF 1

participated in a Command Post Exercise at Fort Stewart, Georgia during Exercise VIBRANT RESPONSE to verify operational capability. The assigned CCMRF will participate in USNORTHCOM-sponsored joint exercises, and conduct unit training to sustain CCMRF readiness and requirements, as well as follow-on missions.

While CCMRF 1 is comprised mainly of active duty forces, the second and third CCMRFs will be comprised predominately of Reserve and National Guard forces. We are working closely with the U.S. Joint Forces Command, the National Guard Bureau, the military Services and the States on sourcing solutions, training, equipment, readiness, and exercise of those forces identified to fulfill CCMRF requirements.

2008 Hurricane Response Operations. According to the National Oceanic and Atmospheric Administration 2008 Hurricane Season Recap, there were 16 named storms, of which eight became hurricanes and five became major hurricanes (Category 3 or higher). There were a record six consecutively-named storms, from Dolly to Ike, which made landfall on the United States coastline. The majority of DOD support occurred in the short timeframe of August and September as a result of the hurricane stream of Gustav, Hanna, and Ike. This severe impact to several States resulted in civilian agency requests for Defense Support of Civil Authorities operations by DOD. USNORTHCOM's support to the Federal Emergency Management Agency was extremely successful across all areas. Here are just a few vignettes:

In August 2008, through a collaborative effort between USNORTHCOM and U.S. Transportation Command, DOD and National Guard personnel evacuated 723 critical care patients out of Louisiana during the aeromedical evacuation effort for Hurricane GUSTAV. During Hurricane IKE, DOD and National Guard personnel moved another 400 patients out of Beaumont, Texas. In crisis situations such as these, hospitals release many of their less serious

cases, but it is a more complex challenge to move the seriously ill and injured. We worked aggressively and quickly to ensure the right capabilities were in place to move patients to the appropriate receiving hospitals.

Immediately after Hurricane IKE made landfall, USNORTHCOM conducted an Incident Awareness and Assessment mission using the U.S. Navy's Global Hawk system to demonstrate its usefulness for support of civil authorities. The unmanned aircraft took off with a mission set of 299 locations and was dynamically re-tasked during the mission to add imagery requirements from the Department of Homeland Security, U.S. Customs and Border Protection, the Federal Emergency Management Agency, and the U.S. Coast Guard. The radar imaging sensor was used to cut through the prevalent cloud cover. These medium-resolution images were sufficient for general damage assessments to infrastructure. Conducted in accordance with applicable laws and DOD regulations intended to protect the civil liberties of American citizens, these missions provided vital situational awareness for DOD forces planning Defense Support of Civil Authorities operations. The DOD made the imagery available to the wider interagency hurricane response forces via dissemination on the Homeland Security Information Network, thus, enabling DOD to plan better and provided added benefit for our partners.

Our goal for the 2009 Hurricane Season focuses on anticipating Federal and State requirements to ensure timely and efficient DOD assistance. We are working closely with the Joint Chiefs of Staff to improve USNORTHCOM authorities and capabilities in the Joint Staff Defense Support of Civil Authorities Execute Order. We continue to engage our Federal, State, and local partners to enhance DOD augmentation of civilian disaster response efforts.

Additionally, we are identifying gaps and seams in mass fatality management between current mortuary affairs capabilities in DOD and local, State, and Federal capabilities. Our

activities have been geared toward integrating efforts that will enhance civil-military understanding and collaboration.

Our mission remains to ensure DOD is prepared to support a timely and effective response to catastrophic conditions. We continue to work with the Department of Health and Human Services, Office of the Assistant Secretary for Preparedness and Response to develop a mass fatality concept of operations in accordance with the National Response Framework's Emergency Support Function #8—Public Health and Medical Services. These efforts will develop fatality management awareness, prevention, preparedness, and recovery operations strategies among Federal, State, local, tribal, territorial, and non-governmental agencies/associations.

Additionally, we have consulted with Scotland Yard in London, England, to ascertain how the British plan and prepare for mass fatality incidents. Closer to home, we partnered with the New York City Office of Chief Medical Examiner on a regional mass fatality management plan, which leverages the expertise and assets currently existing in the New York City metropolitan area to ensure maximum coordination among relevant stakeholders.

Wildland Firefighting. During wildland firefighting operations, DOD, through USNORTHCOM, supports the National Interagency Fire Center and the Federal Emergency Management Agency. USNORTHCOM provides a variety of capabilities including Modular Airborne Fire Fighting System (MAFFS)-capable C-130s, rotary wing aircraft capable of water bucket operations, ground crews for fire fighting operations, and incident awareness and assessment capability. There are a total of eight MAFFS; six are National Guard assets and two are assigned to Reserve units. The new MAFFS II capability will be used by the C-130H/J aircraft beginning this year and will provide greater capability to distribute fire suppression

retardant. I am particularly pleased that the C-130Js of the California Air National Guard have been added to the MAFFS fleet this year.

USNORTHCOM is also working with the National Guard Bureau to create a trained cadre of National Guard ground fire fighters that is pre-identified and ready pre-fire season to rapidly respond around the country.

Civil Support Operations. Beyond disaster response, USNORTHCOM provided DOD support to five National Special Security Events over the past year: The President's 2008 State of the Union Address, 2008 Democratic and Republican National Conventions, the 2008 G-20 Global Financial Summit, and the 2009 Presidential Inauguration. For each of these events, USNORTHCOM provided unique Secretary of Defense-approved DOD capabilities to enhance the security of the event.

Support to Law Enforcement Agencies. Through our subordinate unit, Joint Task Force North (JTF North), we continue to sustain important relationships with Federal law enforcement agencies and National Guard counterdrug task forces engaged in securing our nation's borders against drug traffickers and their associated activities. JTF North collaborates with operational-level leaders in U.S. Customs and Border Protection; Immigration and Customs Enforcement; U.S. Coast Guard; Drug Enforcement Administration; Federal Bureau of Investigation (FBI); Bureau of Alcohol, Tobacco and Firearms; National Guard Bureau; and State Joint Force Headquarters leadership in the States where JTF North operates. These relationships foster timely and responsive military support to law enforcement and provide greater interagency synchronization to deter and prevent drug trafficking and associated transnational threats.

JTF North coordinated 55 missions in support of Federal law enforcement agencies during fiscal year 2008. In accordance with applicable law and DOD policy for supporting law enforcement's counterdrug efforts, JTF North employed joint air, ground, and maritime sensors along the nation's southwest and northern borders and coasts; conducted detection and monitoring of suspected trafficking threats; provided for information and intelligence sharing among law enforcement agencies; supported the U.S. Border Patrol's requests for enhanced tactical infrastructure along the southwest border; and provided Federal law enforcement with other support such as transportation, tunnel detection capabilities, and basic military skills training.

Counter-Tunnel Initiative. More than 99 cross-border tunnels have been identified by U.S. law enforcement agencies, in many cases with DOD support. While illegal drugs constitute the vast majority of illicit cargo transported through these tunnels, they could also be used to smuggle terrorists and Weapons of Mass Destruction into the country.

USNORTHCOM is examining enhanced tunnel detection capabilities with the lead Federal partner, the Department of Homeland Security, other Combatant Commands, and international partners. Among these enhanced capabilities are seismic-acoustic and linear fiber-optic sensors, other technologies, and robotics. The U.S. Army Engineer Research and Development Center (ERDC) is the technical lead for these capability development efforts. ERDC has worked on tunnel detection in Iraq and provided subject matter expertise to USNORTHCOM in support of U.S. law enforcement agencies.

Northern Border Security Operations. During fiscal year 2008, USNORTHCOM, through JTF North, conducted twelve counterdrug/counter-narcoterrorism missions along the northern border including aviation reconnaissance, ground-based radars, mobile training teams

and intelligence analysis support. During fiscal year 2009, USNORTHCOM has nine counterdrug/counternarcoterrorism missions scheduled through JTF North. These missions, in support of U.S. Customs and Border Protection and the U.S. Coast Guard, will employ aviation reconnaissance, ground and maritime radars, and mobile training teams in Washington, Vermont, Montana, and New York against illicit trafficking along the northern border. In all these operations, JTF North works with Canadian law enforcement and military via U.S. law enforcement agencies, as well as the U.S.-Canada Integrated Border Enforcement Teams. JTF North also participates in military-to-military activities to foster greater security cooperation between the United States and Canada to improve our collective security situation along our northern border.

The National Guard and Reserves—Vital Components of Our Nation's Defense

The National Guard and Reserve forces are fundamental to the total force and essential to our homeland security and defense. USNORTHCOM is committed to working with all stakeholders to implement the Secretary of Defense's 24 November 2008 direction in response to recommendations in the Final Report of the Commission on the National Guard and Reserves.

USNORTHCOM seized the opportunity and responsibility to advocate for the Reserve Component in support of homeland defense and civil support missions. Leveraging opportunities to fix National Guard and Reserve shortfalls is critical to the success of the USNORTHCOM and NORAD missions. In an environment of constrained budgets and multiple priorities, we need to determine where these requirements converge and give equal deference to materiel and non-materiel solutions alike.

USNORTHCOM is a strong advocate for Reserve Component resourcing for the capabilities needed by National Guard and Reserve forces in support of USNORTHCOM missions. In each of our annual Integrated Priority Lists and Program Objective Memorandum submissions to the DOD, USNORTHCOM and NORAD advocate for and support National Guard and Reserve capability shortfalls. We also advocate for and support National Guard Bureau efforts to validate key initiatives such as Joint CONUS Communications Support Environment and Beyond Line of Sight communications for our Air Sovereignty Alert fighters.

In June 2008, USNORTHCOM hosted the second Reserve Component Advocacy Conference wherein over 50 senior leaders discussed how best to advocate for the capabilities needed by Guard and Reserve forces in support of USNORTHCOM missions. We are advocating for change to DOD policies that allow for more collaborative planning to ensure proper resourcing for National Guard and Reserve units' equipment, personnel, and training for homeland defense and civil support operations.

Since testifying last year, we have successfully partnered with the National Guard in support of several planned and unplanned civil support and homeland defense events. Every operation strengthens our ability to collaborate effectively and I am proud to report that while we still have work to do, our relationship with the National Guard continues to mature and has never been better. Today, my senior leaders meet regularly with their National Guard Bureau counterparts to identify and resolve issues in advance of an emergency. Additionally, our action officers coordinate daily on a variety of deliberate and crisis action planning requirements. Our watch centers are in constant communication with one another to ensure shared awareness. Finally, USNORTHCOM and the National Guard Bureau partner to conduct training and exercises for all State Joint Force Headquarters Joint Task Force Commanders and their staffs.

USNORTHCOM directly supports the National Guard Bureau initiative to establish the Defense Readiness Reporting System in all 54 States and territories. This is a five-year effort and once completed, asset availability, capabilities, and readiness information will be available to Commander, USNORTHCOM and NORAD for all homeland defense and civil support operations. To date, initial assessments are complete in 45 of the 54 States and territories and are currently visible in the Defense Readiness Reporting System.

It is notable that nearly 10 percent of USNORTHCOM's current full-time military manpower is drawn from the Reserve Component. This is the highest percentage of Reserve Component manning of the ten combatant commands. We have benefited from the full-time National Guard and Reserve expertise and look forward to full manning of our authorized full-time positions. I am very pleased to have ten flag officers from the National Guard and Reserves among my 21 total flag leaders in Headquarters NORAD and USNORTHCOM and our subordinate commands.

Plans—The Foundation of our Response

USNORTHCOM's homeland defense and civil support plans are vital to the nation's ability to deter, prevent and defeat threats to our security, and support civil authorities when called upon by the President or Secretary of Defense. They provide a template for USNORTHCOM responses and are continuously updated to reflect evolving national security requirements. NORAD's plans similarly ensure timely, effective responses to threats to the security of the United States and Canada.

With regard to homeland defense and civil support, the Department of Homeland Security and the interagency community use the 15 National Planning Scenarios as a vehicle to

shape nation-wide planning efforts for terrorist attacks and natural disasters. USNORTHCOM plans, such as Concept Plan 3501, Defense Support of Civil Authorities, address all of the National Planning Scenarios that may require USNORTHCOM support.

With the recent development of the Department of Homeland Security's Integrated Planning System, there is now a formal process to link and integrate Federal plans across departments and agencies and in the future with State governments and local partners. Leveraging the Integrated Planning System will allow USNORTHCOM planners to gain fidelity on Federal planning, refine potential support requirements, and advocate for essential capabilities and resources.

USNORTHCOM civil support planners work closely with their counterparts at the National Guard Bureau. In addition to formal coordination at every stage of plan development, and regularly scheduled meetings conducted with web-based conferencing tools, USNORTHCOM and National Guard Bureau planners have begun meeting during planning conferences every six months. In December 2008, National Guard Bureau planners, and several State National Guard planners, met to discuss the status of USNORTHCOM plans and National Guard Bureau initiatives. In February 2009, interagency planners attended the USNORTHCOM Civil Support and Homeland Defense Planners Conference where USNORTHCOM component planners presented their supporting plans to USNORTHCOM overarching strategic plans. These meetings foster the working relationships that are so vital to synchronize our national response in times of crisis.

In September 2008, I signed our USNORTHCOM Theater Campaign Plan, a first for the Command. This campaign plan synchronizes day-to-day operations, placing strong emphasis on three focus areas: anticipating threats to our continental security, improving our homeland

defense and civil support plans and capabilities, and strengthening relationships with our mission partners, including the interagency community, Canada Command and the Mexican military.

Interoperable Communications

USNORTHCOM communications efforts are focused on ensuring a prompt, coordinated response with our mission partners in the Department of Homeland Security, Federal Emergency Management Agency, the National Guard, States, and local organizations. In partnership with the Federal Emergency Management Agency and the National Guard, we maintain a combined total of 25 Deployable Cellular-Based Suites which include cellular towers, satellite communications connectivity, Land Mobile Radio interfaces, and ancillary devices for emergency responders. Several of these systems were deployed during Hurricane IKE and supported the response efforts in Galveston, Texas. We have also worked to upgrade DOD Satellite Communications Facilities within the United States. These upgrades enable DOD units to provide much sought after Internet and telephone connections to civil authorities during a crisis.

Exercises

Each year, USNORTHCOM and NORAD sponsor two large-scale exercises (ARDENT SENTRY and VIGILANT SHIELD) and participate in over 30 smaller regional, State, and local exercises, along with exercises with Canada, such as exercises in preparation for the Vancouver 2010 Olympics. We continually review lessons learned from past exercises and real-world events (such as Hurricanes GUSTAV and IKE) and take corrective action by incorporating identified best practices. These actions are an integral part of our exercise program.

Over the last several years we have collaborated closely with the Joint Staff, the Office of the Secretary of Defense, the Department of Homeland Security, other Federal departments and agencies, and States to develop and refine the National Exercise Program. Our civil support exercises are now fully integrated with the National Exercise Program and are often linked with the Tier I National Level Exercise and several Tier II or III Federal-level exercises, mutually supporting our own exercise objectives and those of our partners in the Federal government, State and regional organizations, local and tribal governments, and the private sector.

In conjunction with the National Guard Bureau, USNORTHCOM sponsors VIGILANT GUARD, a joint regional exercise program for the 54 State National Guard Joint Force Headquarters and their Joint Task Forces and Field Units, to improve command and control and operational relationships with internal, regional civilian, Federal, and other military partners. The VIGILANT GUARD team works side-by-side with our NORAD and USNORTHCOM exercise planners to coordinate and synchronize our training efforts. Two of the four annual VIGILANT GUARD exercises are linked with major NORAD and USNORTHCOM exercises, like ARDENT SENTRY and VIGILANT SHIELD, or the annual National Level Exercise.

To date, 14 VIGILANT GUARD exercises have been conducted, with participation from 39 States and territories (representing more than 8000 National Guardsmen) and scores of Federal, State, and local level government agencies and first responders. The VIGILANT GUARD program exemplifies the successful partnership among uniformed defenders of the homeland—NORAD, USNORTHCOM, and the National Guard Bureau—and helps assure the American public that we are ready for the mission.

Partnerships

Canada. The NORAD bi-national defense agreement is a tremendous example of the closeness and richness of our defense relationship with Canada. The bilateral relationship between USNORTHCOM and Canada Command also continues to mature. On 14 February 2008, I joined my counterpart, Lieutenant-General Dumais from Canada Command, in signing the United States-Canada Civil Assistance Plan. The Civil Assistance Plan is the framework under which military forces of one nation support the military forces of the other nation to provide timely, effective, and efficient support to their respective civil authorities.

Since then, the Civil Assistance Plan has been used once during real-world operations and several times during exercises. Following the appropriate exchange of diplomatic notes, we successfully executed this plan during the 2008 hurricane season when a Canadian C-17 aircraft assisted us with aeromedical evacuation operations during Hurricane GUSTAV. As we look to the future, the Civil Assistance Plan provides a framework for collaborative planning, training, and exercises in preparation for events such as the Vancouver 2010 Olympics.

Last year I reported that USNORTHCOM, NORAD, and Canada Command initiated a study to examine future roles, missions, and relationships for the three Commands, with a desired end state of strengthening North American defense and security while enhancing the valued relationship between Canada and the United States. The study continues, and we have made significant progress in maturing our relationships and promoting enhanced military cooperation among the Commands, including work on a proposed framework which will assist in clarifying how the three Commands operate and interact, highlight fundamental relationships, and underscore individual command responsibilities concerning mutual support and cooperation.

In an effort to advance our partnership with Canada Command toward enhanced continental defense and security, our Commands are also jointly developing various plans to provide a strategic framework for the bilateral defense and security of the United States and Canada, building on the existing U.S.-Canada Basic Defense Document and NORAD Agreement. These plans will, if required and authorized by our respective governments, provide a bilateral construct for employing the military forces of the United States and Canada in coordinated or combined operations, when not already covered by the NORAD Agreement.

Mexico. Our relationship with Mexico has never been better and continues to strengthen every day. Over the past year, we have advanced our relationship from one of introductions and orientation visits to one of open, frequent, and frank discussions on how we can improve our collective security from common threats. The government of Mexico is engaged in a difficult campaign against organized violent criminal networks that claimed over 5,000 lives in 2008. Your support of the Merida Initiative and DOD Counternarcotics Programs is helping to build the Mexican military's ability to counter threats to our mutual security. We especially thank Congress for approving our request for critically needed equipment under fiscal year 2008 Section 1206 authority. This enabled us to coordinate the first U.S. military equipment support to Mexico since the Command was activated in 2002. This equipment, all of which is non-lethal, includes personal protective equipment, digital media forensics equipment, night vision devices, and equipment needed to board suspect vessels at sea. We are now finalizing the requirements for delivery of transport helicopters and maritime surveillance aircraft to the Mexican military under the Merida Initiative.

USNORTHCOM has teamed with the Department of State, the U.S. Geological Survey, Agency for International Development, Federal Emergency Management Agency, and the

Environmental Protection Agency to execute Building Partnership Capacity and Humanitarian Assistance programs within our area of responsibility. One example of our efforts includes cooperation exhibited by Mexico's first acceptance of large-scale, DOD-provided civil material assistance consisting of 100,000 personal protective ensembles from the Defense Security Cooperation Agency excess property program. Because Mexico is our neighbor and disasters do not respect national boundaries, we are focused on developing and improving procedures to respond to potentially catastrophic events such as pandemic influenza outbreak, mass exposure to dangerous chemical and materials, and natural disasters. It is important to note that some of our international partners in these endeavors include domestic agencies such as Proteccion Civil in Mexico, who is responsible for consequence management response.

USNORTHCOM representatives recently participated in a Western Hemisphere Institute for Security Cooperation (WHINSEC) Board of Visitors curriculum review; the first such participation by USNORTHCOM. Our review helped ensure WHINSEC training supports Mexican efforts against Drug Trafficking Organizations while simultaneously emphasizing human rights. In both areas, WHINSEC has performed superbly in support of our Theater Campaign Plan. Last year, Admiral Stavridis and I wrote a letter of support to Congress expressing the importance of safeguarding the privacy of WHINSEC students and staff.

Caribbean Islands, The Third Border. The 2008 Unified Command Plan shifted the USNORTHCOM and U.S. Southern Command boundaries in the Caribbean. USNORTHCOM's area of responsibility now includes Puerto Rico and the U.S. Virgin Islands and the sovereign islands of the Bahamas, and two dependencies of the United Kingdom (the Turks and Caicos and British Virgin Islands).

Admiral Stavridis and I proposed this change for a number of reasons. First, it simplifies the homeland defense and civil support missions with Puerto Rico and the Virgin Islands. Second, because the Bahamas are just 90 miles from the United States and considering its close relationship with our Federal interagency partners as well, we enhanced our capabilities in this critical sector.

As we have with Canada and Mexico, we will develop a theater engagement strategy for our "Third Border" with the Bahamas, Puerto Rico, the U.S. Virgin Islands, the Turks and Caicos, and the British Virgin Islands. Our strategy will build on existing relationships established by U.S. Southern Command and the Joint Interagency Task Force South to strengthen our nation's counterterrorism and counternarcotics capabilities in the Caribbean.

Interagency Community. For USNORTHCOM to be successful in protecting the United States and its interests, we must support other agencies in working toward common objectives and building the capacity of partners. Our USNORTHCOM and NORAD Interagency Coordination Directorate and the Commander's Joint Interagency Coordination Group integrate and synchronize information and activities among multiple civilian, Federal, State, and private sector organizations. This interagency Group is comprised of full-time professionals representing 40 agencies resident at USNORTHCOM Headquarters or in the local area. Some of the Federal departments and agencies represented are the Department of State; the Department of Homeland Security (including the Federal Emergency Management Agency), U.S. Customs and Border Protection, the Transportation Security Administration, and U.S. Coast Guard; Department of Health and Human Services; Department of Transportation; Federal Aviation Administration; Central Intelligence Agency; Federal Bureau of Investigation; U. S. Geological Survey; and U.S. Army Corps of Engineers.

USNORTHCOM's planning and operations staffs collaborate with our interagency partners to integrate and synchronize plans, security and emergency response activities. We host an informal Interagency Planner Synchronization Working Group at the national level on a bi-weekly basis. This type of collaboration has enabled us to execute a "whole-of-government" approach to planning, and has significantly improved cross-agency collaborative planning between the Department of Homeland Security, Federal Emergency Management Agency, the Department of Health and Human Services, Centers for Disease Control and Prevention, U.S. Army Corp of Engineers, Office of the Secretary of Defense, the Joint Staff, National Guard Bureau, USNORTHCOM and component command planning staffs. We continue to see this collaborative effort expand as additional agencies choose to join.

USNORTHCOM's Joint Intelligence Operations Center North invests heavily in the Intelligence Community networks established to improve analysis and warning of international terrorist threats to North America. Working with the Defense Intelligence Agency, we have assigned a senior terrorism analyst to work in the National Counterterrorism Center Defense Intelligence Unit. The Defense Intelligence Unit serves as a critical information-sharing advocate for all Commands and DOD stakeholders. Defense Intelligence Unit analysts work within the National Counterterrorism Center with full access to both widely disseminated and more sensitive Intelligence Community information on terrorism.

We also continue to grow our critical information-sharing partnership with the FBI. The focal point for this relationship is our intelligence liaison officer assigned to the FBI's National Joint Terrorism Task Force. Additional analyst-to-analyst collaborative efforts regarding specific threats of mutual concern are robust and growing. In a step that will immeasurably benefit our preparedness and collaboration on shared threats, the FBI embedded one of their

experienced terrorism analysts within USNORTHCOM's Joint Intelligence Operations Center North Terrorism Analysis Division in February 2009.

DOD liaison officers from USNORTHCOM, the Joint Staff, and the National Guard Bureau are assigned to Headquarters, Federal Emergency Management Agency to facilitate information sharing, coordination, and planning efforts for contingency response. These postings help to maintain effective coordination of plans and activities, enhance exchange of knowledge and advice, and facilitate effective relationship building. We maintain visibility of the Federal Emergency Management Agency's logistical preparations and Defense Logistics Agency-sourced deliveries. This improves situational awareness, helps reduce the need for short-notice airlifts, and improves our ability to anticipate and rapidly respond to emerging requirements during defense support of civil authorities missions.

USNORTHCOM has assigned Defense Coordinating Officers, supported by Defense Coordinating Elements, to each of the ten Federal Emergency Management Agency Regions to ensure close coordination in planning and operations. USNORTHCOM and the Federal Emergency Management Agency also co-sponsor an annual Federal Coordinating Officer–Defense Coordinating Officer Conference designed to maintain and enhance civil-military understanding and support for disaster response planning activities.

USNORTHCOM has made considerable progress in developing appropriate planning relationships between the Department and Private Sector/Non-Governmental Organizations (PS/NGO) entities (business, non-profit, non-governmental, faith-based, and academia). We teamed recently with the Federal Emergency Management Agency Private Sector office to co-host a first ever "Public/Private Sector Collaboration in Disaster Preparedness and Response" Conference. This conference significantly enhanced DOD and USNORTHCOM collaboration

with PS/NGOs who own or manage some 85% of our nation's critical infrastructure and play a major part in disaster response. It's important to note that we are not attempting to take over or direct the Private Sector; however, we do believe we should be an active member of the overall preparedness and response community.

In coordination with the Federal Emergency Management Agency and the National Guard Bureau, USNORTHCOM continues the deliberate development of relationships with State governments and organizations that represent constituencies. As a primary example of our State engagement efforts, we have teamed with the Federal Emergency Management Agency and the National Guard Bureau to develop and execute internal and tailored training for requested States. We continue to work in partnership with the National Guard Bureau, with State Adjutants General, and State Joint Force Headquarters to identify gaps and shortfalls, specific all hazard events, and other critical issues. Our State engagement outreach also includes the Adjutants General Association of the United States and National Governors Association.

U.S. Coast Guard. The operational relationship between USNORTHCOM and the U.S. Coast Guard provides a flexible, time-critical response, and immediate access to the full spectrum of capabilities and forces to ensure maritime security and defense of the United States. USNORTHCOM and the U.S. Coast Guard coordinate for operations in multiple national defense mission areas: maritime intercept operations, rotary wing air intercept operations, mine countermeasures operations, maritime security and defense, counterdrug operations, migrant interdiction, theater security cooperation, and military environmental response operations.

U.S. Coast Guard personnel are fully integrated within the USNORTHCOM staff, and the USNORTHCOM staff is fully engaged with U.S. Coast Guard Pacific and Atlantic Area Commands in maritime planning and execution.

Enhancing our Capabilities

United States-Canada Defense Surveillance Gapfiller Strategy. USNORTHCOM and NORAD lack adequate real-time, persistent, multi-domain surveillance and command and control capabilities for North American defense. Wide Area Surveillance capability is critical to development of an Integrated Air and Missile Defense of the Homeland; however, existing surveillance assets are inadequate and aging.

Gapfiller is the USNORTHCOM and NORAD Family-of-Systems strategy to improve command and control and wide area surveillance of the North American continent and enable the engagement and defeat of missiles prior to impact in the homeland. Current gaps in the Joint Engagement Sequence (i.e., kill chain) leave our countries vulnerable to attacks in multiple domains. To address these gaps, we are conducting two technology demonstrations.

Gapfiller will integrate currently disparate Command and Control surveillance systems including those of other agencies and will integrate an advanced surveillance capability for initial improvement of homeland defense and security initiatives. Doing so will provide ground truth information to DOD, the Department of Homeland Security, and other civilian organizations.

The second effort is a Technology Risk Reduction Initiative for the Next Generation Over-the-Horizon Radar. Leveraging existing U.S. and Australian collaboration, this Technology Risk Reduction Initiative should greatly improve our ability to surveil the approaches to the homeland. The command and control JCTD will provide the Over-the-Horizon Radar picture to all mission partners. Together, these initiatives lay the foundation for improved integrated wide area surveillance around North America and a coherent, shared

operational picture that allows us to detect, respond to, and prevent asymmetric attacks against the homeland.

Unmanned Aircraft Systems (UAS). During 2008 in response to requests from U.S. law enforcement agencies, USNORTHCOM employed UASs along the U.S. southwest border. A Global Hawk was employed during the Southern California Wildfires to provide State and local officials with imagery to assist in firefighting efforts. As previously stated, USNORTHCOM employed a Global Hawk to obtain pre- and post-landfall imagery of coastal areas in the path of Hurricane GUSTAV.

USNORTHCOM is fully engaged with the UAS community through our membership on the Joint UAS Center of Excellence Advisory Council and our participation on the Policy Board for the Federal Aviation UAS Subgroup. We are eager to team with our partners at the Department of Homeland Security as they expand their UAS operational capabilities to achieve synergy with our homeland defense and homeland security efforts. We will be hosting a National Summit for UAS stakeholders this spring to help determine the best way forward on employing UAS capabilities in the National Airspace.

Arctic Policy. The law of the sea, as reflected in the 1982 Convention on the Law of the Sea, is the foundation of the extensive international legal framework that applies to the Arctic Ocean. Although all other nations bordering the Arctic are parties to the Convention, the United States has yet to join the treaty. Becoming party to the Convention would protect and advance U.S. interests in the Arctic by bolstering 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.

The State Department leads U.S. Arctic policy and, together with a number of Federal agencies, implements the policy through the Arctic Council and bilaterally with other Arctic states. National Security Presidential Directive-66 and Homeland Security Presidential Directive-25 (NSPD-66/HSPD-25) advocate for increased United States regional presence, maritime domain awareness, freedom of navigation, and the ratification of 1982 Convention on the Law of the Sea. NSPD-66/HSPD-25 also states that the United States "is prepared to operate either independently or in conjunction with other states" to safeguard its Arctic interests. Through NORAD, we have an opportunity to work closely with Canada in enhancing aerospace and maritime domain awareness in the Arctic. There is also potential for significant bilateral cooperation with Canada, through collaboration with Canada Command.

Transformational Communications. NORAD requires survivable, protected, and dynamic satellite communications capabilities throughout our area of operations and among all of our assets. At the same time, USNORTHCOM requires dynamic satellite communications for capacity and coverage throughout the entire area of responsibility that will support real-time joint force networking, battle space awareness and land-, air-, and sea-borne command and control, intelligence, surveillance, and reconnaissance. For both Commands, the current and emerging missions within the Arctic region require the expansion of current and planned polar satellite communications capabilities. Our networks must seamlessly bridge with Federal, State, and local agencies. In my view, transformational satellites continue to offer the most viable course of action to satisfy our requirements for high-speed, secure, protected, dynamically-allocated and efficiently-utilized communications.

Biometric Access Control Enterprise. Biometrics is increasingly important in many areas of security. USNORTHCOM plans to capitalize on this technology by fielding a

networked, interoperable, biometrically-enabled installation access control enterprise for military installations in the United States. Biometric access control systems are already in use overseas and we believe now is the time to apply the same vigilance here at home to protect our people, installations, and critical infrastructure from obvious threats.

Deployable Homeland Air and Cruise Missile Defense. One of the more stressing challenges USNORTHCOM and NORAD will face in defense of the homeland in the near future is emerging air threats to include low flying aircraft, cruise missiles, Unmanned Aircraft Systems, and Short and Medium Range Ballistic Missiles. The United States lacks an integrated air and missile defense capable of defending against these threats. As the threat of terrorism looms and the proliferation of advanced asymmetric capabilities grows, it becomes increasingly important to develop a truly integrated air and missile defense system-of-systems tailored to meet the unique needs of the homeland.

In the past year, USNORTHCOM and NORAD have made significant strides toward protecting the homeland against these threats by developing a viable Integrated Air and Missile Defense Concept of Operations. To prepare for future homeland threats, USNORTHCOM and NORAD worked closely with the Joint Air Defense Operations-Homeland Joint Test Team and participated in the Defense of the Homeland Against Asymmetric Missile Attack experiment. As the operational sponsors of Joint Air Defense Operations-Homeland, USNORTHCOM and NORAD assisted in developing Tactics, Techniques, and Procedures for a Deployable Homeland Air and Cruise Missile Defense capability. This mobile capability could be used to protect a particular venue or city which may be threatened or at risk. Participation in the Defense of the Homeland Against Asymmetric Missile Attack experiment provided an excellent opportunity to

test the draft Integrated Air and Missile Defense Concept of Operations and to validate the command and control relationships.

Wind Farm Interference. NORAD faces a unique challenge as the United States seeks greater energy independence. We must continue to work closely with the Department of Energy laboratories and the alternative energy industry to ensure our technologies do not render each other's technology useless. We need to identify mitigation techniques that will allow wind turbines and radars to coexist.

Cyberspace Infrastructure. Cyberspace attacks on our information infrastructure can adversely impact our national security posture. Our opponents in this domain are sophisticated, well-resourced, and persistent. Their objectives are to disrupt operations, deny service, and exploit information and technology. To effectively execute assigned missions, USNORTHCOM and NORAD must ensure the uninterrupted use of the Internet as well as commercial and DOD communications systems. We partner with U.S. Strategic Command, the military Services, DOD Agencies, and the Department of Homeland Security to reduce cyberspace vulnerabilities and defend against information infrastructure attacks. While this partnership is sufficient, more coordination and cooperation is required to ensure we operate effectively during major cyberspace incidents.

Maritime Domain Awareness. The maritime domain enables our nation's growth. In order to ensure freedom of movement for all law abiding entities while identifying threats prior to realization, it is imperative that we have a picture of the maritime domain and its relationship to activities in other domains. Maritime Domain Awareness represents a global challenge requiring focused efforts. USNORTHCOM has a fundamental requirement for maritime domain awareness in order to execute our missions. However, we need to develop a common

operational picture based on a common system architecture between the United States and Canada. This will result in enhanced Maritime Domain Awareness to predict, identify, and intercept vessels of interest as well as enhance and formalize information sharing between partner agencies and departments. In this regard, we will continue to work closely with the U.S. Navy, U.S. Coast Guard, as well as our Canadian and other international partners.

USNORTHCOM has also partnered with U.S. Pacific Command to develop a Maritime Domain Awareness Joint Integrating Concept. It describes how the joint force will conduct future (2016-2028) maritime operations to understand the maritime domain and will help identify requirements to achieve maritime domain awareness. This document will be completed in summer of 2009 and will lead to the development of processes necessary for Maritime Domain Awareness, a key enabler for the range of military options in the maritime domain across the Department of Defense. It will help shape DOD's contribution to global Maritime Domain Awareness.

Finally, Maritime Domain Awareness is a critical enabler for the execution of NORAD's maritime warning mission. A major milestone occurred in November 2008 during Exercise VIGILANT SHIELD when NORAD issued its first series of Maritime Warning Messages which validated procedures and confirmed the ability to provide strategic warning of a maritime threat to the governments of the United States and Canada. Despite this success, seams and gaps in process, policy, documentation, classification and releasability, as well as technical impediments to cross-border information sharing in the maritime domain, persist.

Conclusion.

Today, our team of active duty members, Reserve Forces, National Guardsmen, Canadian service members, and civilians are trained and ready to defend the United States and Canada and support civil authorities in times of crisis. With Congress' sustained support, USNORTHCOM and NORAD will continue to anticipate our nations' needs and be ready to protect and defend our fellow citizens and the freedoms they enjoy.