



Gen Renuart observes airborne communications capabilities that joint services can provide to USNORTHCOM, Federal agencies, and local law enforcement agencies

USNORTHCOM (Gail Braymen)

# Creating Shared Situational Awareness

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In January 2007, the Department of Defense (DOD) released its new information-sharing strategy, paving the way for ongoing innovation in efforts to promote and bolster information-sharing.<sup>1</sup> Awareness of the urgency of the information-sharing imperative has largely arisen from shortcomings made apparent by domestic incidents. Fittingly, the unique missions and areas of responsibility of the North American Aerospace Defense Command (NORAD) and U.S. Northern Command (USNORTHCOM) have created an exceptional testing ground for innovations on the information-sharing front. Specifically, the binational nature of NORAD, the combined headquarters of the two commands, and the defense support of civil authorities (DSCA)<sup>2</sup> role of USNORTHCOM create situations in which information-sharing is inherently vital to mission success.

NORAD and USNORTHCOM have approached the information-sharing challenge through aggressive communications, coordination, and engagement strategies that exist within and across the joint, multinational, and interagency domains. This article articulates the imperatives within NORAD and USNORTHCOM strategies, goals, and objectives; places these imperatives within a conceptualization of information-sharing as an integral component of force transformation and network-centric warfare; and discusses the work of the NORAD and USNORTHCOM Public Affairs, Interagency Coordination (IC), and Theater Security Cooperation (TSC) divisions in promoting information-sharing within and between the commands and with external partners.

A critical look at these initiatives should unearth ongoing lessons that will provide a fertile layer of knowledge upon which to base similar efforts throughout the other geographic



U.S. Air Force fighter enforces flight restriction zones over Cape Canaveral for NASA space shuttle launch  
NORAD

and functional combatant commands, DOD, and the broader defense and security community. Ultimately, this serves as a direct contribution to one of the eight objectives laid out in the *National Security Strategy of the United States*: to transform America's national security institutions to meet the challenges and opportunities of the 21<sup>st</sup> century.

**Multidimensional Challenge**

Both the 9/11 Commission Report and the Weapons of Mass Destruction Commission Report<sup>3</sup> have emphasized the need for information-sharing and specifically intelligence-sharing. Much effort has been directed at reorganization within the Intelligence Community, spurred by the Intelligence Reform and Terrorism Prevention Act of 2004<sup>4</sup> and Executive Order 13388 (Further Strengthening the Sharing of Terrorism Information to Protect Americans).<sup>5</sup> Within DOD, much of the emphasis has been on technological capabilities of networks and the Global Information Grid, while less consideration has been given to how organizational approaches to communication, coordination, and engagement may facilitate information-sharing. In short, great strides have been made toward access to information, but less has been done to ensure actual collaboration.

In December 2006, NORAD and USNORTHCOM issued a shared strategic guidance document to ensure unity of effort within and between them. The nature of this strategy sets a precedent for information-sharing that is heralded throughout the goals and objectives laid out for the two commands. The concept of teamwork is laced throughout the document and is prominently stated in the goal of NORAD to “be a model for international cooperation” and the goal of USNORTHCOM to “improve unity of effort with our interagency and international partners.” NORAD, in fact, is a binational command with combined/joint U.S. and Canadian forces components. The commander, General Victor Renuart, USAF, also commands USNORTHCOM and oversees a largely combined headquarters staff, which further necessitates international cooperation as Canadian NORAD staff work alongside American NORAD and USNORTHCOM staff. Additionally, the Homeland Defense and DSCA roles

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of U.S. Northern Command necessitate strong coordination with a proliferation of civilian partners in a domestic arena that has traditionally been isolated from military responsibilities.

The imperative to share information at NORAD and USNORTHCOM fits squarely within the broader goals of force transformation and network-centric warfare. The four major tenets of network-centric warfare as elucidated by the Department of Defense are the following: a robustly networked force improves information-sharing; information-sharing improves the quality of information and shared situational awareness; shared situational awareness enables collaboration and self-synchronization and enhances sustainability and speed of command; and these, in turn, increase mission effectiveness. These tenets address efforts taken across all dimensions of the information environment conceived as a continuum ranging from physical to informational to cognitive.<sup>6</sup>

DOD efforts aimed at improving the Global Information Grid address the first tenet primarily within the physical terminus of the information environment, but additional attention is needed for enhancing the continuum from information access to collaboration. At NORAD and USNORTHCOM, this begins with outreach efforts aimed at the public and civilian stakeholders both within the domestic environment and abroad. This lays the foundation on which formal information-sharing relationships and collaborative processes can be erected with civilian and military stakeholders.

The objective of all these efforts is to achieve shared situational awareness as indicated in the tenets of network-centric warfare and information superiority.<sup>7</sup> The Joint Operations Concepts document states, “The power of superiority in the information domain mandates that the United States fight for it as a first priority even before hostilities begin.”<sup>8</sup> This means taking steps to enhance information-sharing across all dimensions, culminating in shared situational awareness within the cognitive component of this conceptualization of information.

**Communication as Force Multiplier**

The first step on the path to shared situational awareness is public communication, which lays the groundwork for building specific working relationships with collaborative partners. The delicate nature of civil-military interaction necessitates a different approach than that taken by geographic combatant commands whose areas of responsibility encompass



Secretary of Transportation Mary E. Peters tours site of I-35 bridge collapse over Mississippi River with defense coordinating officer

U.S. Navy (Joshua Adam Nuzzo)

multiple foreign nations and limited opportunity for interaction with the U.S. citizenry. The constraints of operating on domestic soil amidst American citizens, as well as the challenges of cooperation with international allies with whom we enjoy longstanding “special relationships,” necessitate a robust approach to public affairs to get the message out. Myriad civilian stakeholders must be informed of the NORAD and USNORTHCOM missions so that relationships can be established and the process of information-sharing initiated, cultivated, and continually improved.

At the core of this mission is the responsibility to implement DOD Principles of Public Information, which maintain that information shall be made “fully and readily available” and cite the need for planning and coordination in order to “expedite the flow of information to the public.”<sup>9</sup> Furthermore, doctrine dictates that the duty to inform includes the responsibilities to tell the truth, provide timely information, practice security at the source, provide consistent information at all levels, and tell the DOD story. While upholding these doctrinal principles, public communication at NORAD and USNORTHCOM aims at building and maintaining relationships with key audiences throughout the area of responsibility. These target audiences include the American public, the international public and stakeholders, internal audiences, and adversary forces.

The North American media environment is likely the most intense in the world, requiring an aggressive public communication strategy. Assertive communications are necessary to transmit the NORAD and USNORTHCOM message over the din of competing messages, and there are a number of challenges confronting such a strategy. At the forefront is the need to tailor the message in innovative ways to facilitate communication across a large and diverse audience. There must be a varied array of products in order to communicate across different media. Initiatives within the NORAD and USNORTHCOM Public Affairs Department to address the realities of a constantly evolving media environment include a Web site that is updated daily, weekly podcasts on current issues ranging from hurricanes to pandemic influenza to home safety and preparedness, and an emphasis on the need for communication in other languages, especially to reach the vast number of U.S. and Mexican stakeholders for whom Spanish is the primary language.

The dynamic nature of the information battlespace highlights the importance of con-

stant evaluation and reinforcement, and the NORAD and USNORTHCOM public affairs program uses a variety of technologies to measure the prevalence and saturation of the commands’ message. This enables measurement of the success of dissemination efforts. An important component of this process is to identify strengths on which to build, one being the credibility that comes from the U.S. military. For decades, the military has resided at the top of rankings on public confidence in leadership and institutions; while the Iraq war has taken its toll on recent rankings, polls show that credibility remains a dominant strength of the military.<sup>10</sup>

Similarly, it is important to identify the issues at the forefront of public opinion and determine means to connect the message to those issues. Since the standup of USNORTHCOM, terrorism has been a top issue, providing an opportunity to capitalize on the salience of the NORAD and USNORTHCOM mission as it relates to defending the homeland. An example occurred during the North Korean missile tests of 2006, during which the Public Affairs Department coordinated with the State Department to provide commentary to news coverage of the event. This enabled USNORTHCOM to simultaneously get name recognition, remind audiences of its mission, and reassure them of its vigilance.

The commands also conduct an aggressive face-to-face outreach strategy that involves appearances where representatives can shake hands and exchange business cards to facilitate relationships. The strategic outreach component of the Public Affairs Division conducts a traveling display program where representatives are sent to numerous trade conferences, such as those held by the International Association of Emergency Managers and the National Sheriffs’ Association. This component is also responsible for coordinating the hundreds of internal and external speaking engagements conducted by staff members of the commands. The aim is to ensure that the entire body speaks with one voice and includes key messages in all interaction with the public. In 2006, for example, over 300 speaking engagements were conducted throughout 30 states and 7 countries, resulting in direct communication with approximately 53,000 people.

The importance of these engagements rests in the relationship-building opportunities created with key stakeholders.<sup>11</sup> These outreach programs are often followed up with a newsletter disseminated to key stakehold-

ers to keep them abreast of the NORAD and USNORTHCOM mission, capabilities, and opportunities for collaboration, laying the groundwork for the efforts of the Interagency Coordination Directorate.

### Horizontal Engagement

The enabling efforts of public affairs facilitate and reinforce the efforts of the IC Directorate at NORAD and USNORTHCOM. Never before has a geographic combatant command been charged with coordinating its activities with such a diverse array of civilian agencies. The necessity of horizontal engagement with key stakeholders, each with its own mission, responsibilities, and organizational culture, presents difficulties to the traditionally hierarchical U.S. military. Nevertheless, the imperative to confront this challenge is addressed in the National Defense Strategy, which identifies the need to increase the capabilities of our international and domestic partners.<sup>12</sup> The efforts within NORAD and USNORTHCOM are symptomatic of a growing external reality as we are increasingly finding the dissolution of hierarchical relationships and the emergence of collaborative and horizontal relationships in their stead. The overarching imperative of IC is to facilitate these horizontal relationships and

Operators watch skies over North America from 21 Aerospace Control and Warning Squadron Operations Center at Canadian Forces Base North Bay



22 Wing/Canadian Forces Base North Bay (Kevin Mac Aulay)

information-sharing among and between DOD and myriad Federal, state, and local agencies. These relationships can then be called on to mount a coordinated response to threats.

At the core of the IC role is the provision of an interagency context to combatant command decisions as well as giving the same context to NORAD and USNORTHCOM staff and the corresponding DOD perspective to external agencies. One way this is done is through the biweekly Joint Interagency Coordination Group (JIACG) meetings, which are based on current issues (fire season, intelligence, hurricanes) and in which agency representatives along with NORAD and USNORTHCOM participants meet to exchange information and open lines of communication. Additionally, the IC Directorate operates a battle cell that runs 24/7 during exercises and contingencies and includes interagency representatives and military liaison officers. Another important role of IC is to anticipate requests for NORAD and USNORTHCOM assistance through the National Response Plan framework.<sup>13</sup> This involves capabilities-based assessment in order to determine what assets are available, which will likely be needed, and how the gap can be filled.

Crucially, the IC Directorate is larger than similar efforts under way at other

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combatant commands and houses around 60 agency representatives. This physical proximity to interagency mission partners facilitates relationship-building and promotes trust and increased situational awareness. One sign of the success of IC efforts is the value that partner agencies place on these relationships, as shown by the fact that many agencies are using their own funds to send representatives to NORAD and USNORTHCOM. They recognize the increased information-sharing and situational awareness that arise from access to the vast resources available to DOD. Closely related is the potential for advocacy on the part of NORAD and USNORTHCOM on behalf of its smaller mission partners. By housing representatives, the commands learn the constraints that their interagency partners operate under (especially budgetary) and can bring to bear their greater resources to ensure that partners are adequately equipped for mission success. In the event of a contingency, these mission partners will arrive at the scene first, and the DSCA role of USNORTHCOM will be greatly facilitated if networks and relationships already exist from the lowliest first responder up to the Secretary of Defense.

**Engaging Allies**

A final piece to information-sharing is military-to-military engagement. Security cooperation in North America is characterized by the central role of the U.S. effort to establish domestic security from transnational terrorism. Due to the importance of the United States in defining new security requirements,

a central theme of future North American military engagement is that it will be instigated either because of heightened U.S. security concerns or in response to these concerns by Canada or Mexico. The underlying challenge is to engage the three nations in such a way that Canadian and Mexican responses complement U.S. concerns.

Canadian security cooperation is longstanding and robust, as witnessed by the binational nature of NORAD, while Mexican cooperation is proceeding slowly but steadily (albeit from an almost nonexistent base). At the core of the National Security Strategy is an emphasis on strengthening alliances, and the core of the strategy for the Western Hemisphere “begins with deepening key relationships with Canada and Mexico, a foundation of shared values and cooperative policies that can be extended throughout the region.”<sup>14</sup>

Although implementation remains uneven, post-9/11 policy in the United States markedly prioritizes securing U.S. borders and controlling illegal immigration. The most important demonstration of this policy shift is the reorganization of the relevant Federal agencies—U.S. Customs and Border Protection, Immigration and Customs Enforcement, and Citizenship and Immigration Services—into the Department of Homeland Security. Agencies with important supporting roles, such as the Coast Guard and the Transportation Security Administration, are also housed in Homeland Security. In addition to the Homeland Security Act of 2002 initiating this reorganization, the USA PATRIOT Act of 2001, Enhanced Border Security Act, and Visa Entry Reform Act of 2002 further underlined the primacy of security for U.S. policy.

With regard to Mexico, the U.S. prioritization of border security has repoliticized the longstanding issue of illegal immigration. Since 9/11, it has become increasingly clear that this matter can no longer be ignored. Pressure has emerged on both sides to reach a long-term policy consensus. Mexican agencies continue to cooperate with the United States on issues related to drug control and narcotics trafficking, but many Mexican policymakers passively support the flow of migration to the United States, which has the dual benefit of easing domestic unemployment and creating a multibillion dollar flow of remittances back to Mexico. The Mexican neglect of its northern border is contrasted by the strong security on its southern border, where it departs over 100,000 illegal aliens annually.<sup>15</sup>



Mexican Ministry of Health, Canadian Department of Foreign Affairs, and U.S. Department of Homeland Security representatives at Tri-National Pandemic Influenza Conference hosted by USNORTHCOM

USNORTHCOM (Gail Brayman)

These trends seemingly work against efforts to improve security cooperation in the post-9/11 world, but they have been countered by continued negotiation toward increased economic integration, building on the North American Free Trade Agreement. These negotiations serve as a potential vehicle for improving security cooperation.

Indeed, the Security and Prosperity Partnership (SPP) of 2004 aims to couple cooperation on security and economic issues. This is a logical approach because progress toward economic integration will be greatly hindered by disjointed security policies. It is also pragmatic because economic integration has widespread political support in all three countries, and the bundling of security with the economy helps move the issue forward.

The TSC division of the Policy and Plans Directorate at NORAD and USNORTHCOM is charged with engaging Canadian and Mexican military counterparts and applying the engagement strategy arising from executive level guidance and trilateral initiatives such as the SPP. This engagement involves developing relationships with military counterparts in the Mexican army (*Secretaria de La Defensa Nacional*, or SEDENA) and navy (*Secretaria de Marina*, or SEMAR). Accomplishments on this front include the housing of a SEMAR liaison officer within the Policy and Plans Directorate on-site at NORAD and USNORTHCOM headquarters and the July 2007 Senior Executive Dialogue sponsored by the Center for Hemispheric Defense Studies at the National Defense University in cooperation with the TSC division, in which Mexican congressmen, general officers, flag officers, and senior civilian agency representatives held informal discussions with the NORAD and USNORTHCOM commander and directors.

In concert with relationship-building is the aim to develop partner capacity through foreign military sales, foreign military finance, and bilateral training and exercises. Again, cooperation with Canada is superb and longstanding, but collaboration with Mexico is impeded by a lack of formal agreements and technological interoperability, which are themselves impeded by the sanctions placed on Mexico under the American Service-Members' Protection Act (ASPA).<sup>16</sup> The act allows for sanctions cutting foreign military aid to nations that do not sign a bilateral immunity agreement protecting U.S. Servicemembers from prosecution by the International Criminal Court in The

Hague. A central role of the TSC division is to advocate for the removal of these impediments.

The imperative of border control necessitates combined training but requires formal agreements that are not yet in place, so thus far SEMAR and SEDENA have only sent observers to USNORTHCOM exercises. Until the ASPA sanctions are lifted, only counterdrug military assistance can be provided to Mexico, so much emphasis is placed on supporting and formalizing counterdrug efforts initiated through the USNORTHCOM Joint Task Force-North, which provides DOD resources to law enforcement agencies to support counterdrug activities and address transnational threats, support inter-agency synchronization, and promote intelligence and information-sharing. A subset of these activities is directed at TSC with Mexico and Canada. Ultimately, these efforts may culminate in a level of Mexican engagement that follows in the footsteps of the unprecedented cooperation that exists with Canada.

Throughout these efforts, certain themes of success arise that can be taken away and applied to similar efforts throughout the defense and security community. These include the need to avoid being reactive and instead aggressively seek out partnerships and collaboration, the importance of proximity and interaction to build trust and shared situational awareness, and the need to formalize security cooperation at the bilateral level to facilitate the flow of information and cooperation with external partners.

While setbacks abound, the experience of the North American Aerospace Defense Command and U.S. Northern Command shows that threats to the homeland do not respect borders between nations, agencies, or publics, and the way to counter these threats is by developing an adaptive ability to cooperate through common effort and understanding. **JFQ**

#### NOTES

<sup>1</sup> Department of Defense (DOD), *DOD Information Sharing Strategy* (Washington, DC: The Pentagon, May 4, 2007), available at <[www.defenselink.mil/cio-nii/docs/InfoSharingStrategy.pdf](http://www.defenselink.mil/cio-nii/docs/InfoSharingStrategy.pdf)>.

<sup>2</sup> Department of Defense, *Strategy for Homeland Defense and Civil Support* (Washington, DC: The Pentagon, June 2005), available at <[www.defenselink.mil/news/Jun2005/d20050630homeland.pdf](http://www.defenselink.mil/news/Jun2005/d20050630homeland.pdf)>.

<sup>3</sup> Commission on the Intelligence Capabilities of the United States Regarding Weapons of Mass Destruction, *Report to the President of the United*

*States* (Washington, DC: n.p., March 31, 2005), available at <[www.wmd.gov/report/wmd\\_report.pdf](http://www.wmd.gov/report/wmd_report.pdf)>.

<sup>4</sup> House of Representatives, Intelligence Reform and Terrorism Prevention Act of 2004, Report 108-796, 108<sup>th</sup> Cong., 2<sup>d</sup> sess., December 7, 2004, available at <[http://a255.g.akamaitech.net/7/255/2422/13dec20041150/www.gpoaccess.gov/serialset/creports/pdf/108-796/108-796\\_intel\\_reform.pdf](http://a255.g.akamaitech.net/7/255/2422/13dec20041150/www.gpoaccess.gov/serialset/creports/pdf/108-796/108-796_intel_reform.pdf)>.

<sup>5</sup> Executive Order 13388, "Further Strengthening the Sharing of Terrorism Information to Protect Americans," October 25, 2005, available at <[www.whitehouse.gov/news/releases/2005/10/20051025-5.html](http://www.whitehouse.gov/news/releases/2005/10/20051025-5.html)>.

<sup>6</sup> Joint Publication 3-13, *Information Operations* (Washington, DC: The Joint Staff, February 13, 2006), I-1 to I-3, available at <[www.dtic.mil/doctrine/jel/new\\_pubs/jp3\\_13.pdf](http://www.dtic.mil/doctrine/jel/new_pubs/jp3_13.pdf)>.

<sup>7</sup> See Nadine B. Sarter and David D. Woods, "Situation Awareness: A Critical but Ill-Defined Phenomenon," *International Journal of Aviation Psychology* 1, no. 1 (1991), 45-57.

<sup>8</sup> Donald H. Rumsfeld, *Joint Operations Concepts* (Washington, DC: The Pentagon, November 2003), 17, available at <[www.dtic.mil/jointvision/secdef\\_approved\\_jopsc.doc](http://www.dtic.mil/jointvision/secdef_approved_jopsc.doc)>.

<sup>9</sup> Joint Publication 3-61, *Public Affairs* (Washington, DC: The Joint Staff, May 9, 2005), II-9, available at <[www.dtic.mil/doctrine/jel/new\\_pubs/jp3\\_61.pdf](http://www.dtic.mil/doctrine/jel/new_pubs/jp3_61.pdf)>.

<sup>10</sup> The military consistently comes in first for public confidence in institutions in separate polls conducted by Gallup and Harris.

<sup>11</sup> Identifying and communicating with key influencers of stakeholder groups is a main thrust of the recent U.S. *National Strategy for Public Diplomacy and Strategic Communication*, available at <[http://uscpublicdiplomacy.org/pdfs/stratcommo\\_plan\\_070531.pdf](http://uscpublicdiplomacy.org/pdfs/stratcommo_plan_070531.pdf)>.

<sup>12</sup> Donald H. Rumsfeld, *National Defense Strategy of the United States of America* (Washington, DC: The Pentagon, March 2005), 15, available at <[www.dami.army.pentagon.mil/offices/dami-zxg/National%20Defense%20Strategy%20Mar05-U.pdf](http://www.dami.army.pentagon.mil/offices/dami-zxg/National%20Defense%20Strategy%20Mar05-U.pdf)>.

<sup>13</sup> The request process for DSCA is detailed in the National Response Plan. December, 2004, 24, available at <[www.dhs.gov/xlibrary/assets/NRP\\_Full-Text.pdf](http://www.dhs.gov/xlibrary/assets/NRP_Full-Text.pdf)>.

<sup>14</sup> George W. Bush, *National Security Strategy of the United States of America* (Washington, DC: The White House, March, 2006), 37, available at <[www.whitehouse.gov/nsc/nss.html](http://www.whitehouse.gov/nsc/nss.html)>.

<sup>15</sup> George W. Grayson, *Mexico's Forgotten Southern Border: Does Mexico Practice at Home What It Preaches Abroad?* Background (Washington, DC: Center for Immigration Studies, July 2002), available at <[www.cis.org/articles/2002/back702.pdf](http://www.cis.org/articles/2002/back702.pdf)>.

<sup>16</sup> Department of State, Bureau of Political-Military Affairs, American Service-Members' Protection Act (Washington, DC: Department of State, July 30, 2003), available at <[www.state.gov/t/pm/rls/othr/misc/23425.htm](http://www.state.gov/t/pm/rls/othr/misc/23425.htm)>.