

## Expand NORAD to Improve Security in North America

James Jay Carafano, Ph.D., Jena Baker McNeill, Ray Walser, Ph.D., and Richard Weitz, Ph.D.

**Abstract:** The North American Aerospace Defense Command (NORAD) has repeatedly adapted to meet a range of national security concerns. First created to confront the growing Soviet bomber threat, NORAD's mission has been expanded to provide aerospace and maritime warning for North America. However, U.S. and Canadian security interests do not end at the U.S.—Mexico border. To enable NORAD to better fulfill its mission, the United States and Canada should invite Mexico to join NORAD. Mexican participation would greatly enhance NORAD's aerial and maritime surveillance capabilities in North America and help to build a common strategic vision across North America.

The North American Aerospace Defense Command (NORAD) is a binational American and Canadian military command that provides aerospace and maritime warning for North America. Established in 1958 to confront the growing Soviet bomber threat, NORAD has repeatedly adapted to the evolving security environment. The command's unique design reflects the countries' shared values and common security challenges, while respecting the sovereignty of both nations. Contemporary security concerns have refocused NORAD's mission to incorporate internal and maritime threats, with both countries evaluating "opportunities for enhanced military cooperation."

NORAD should now adapt further by expanding both its membership and its range of functions. The United States and Canada should invite Mexico to join

## **Talking Points**

- America and Canada have had a long and constructive defense partnership based on mutual respect and interests that has strengthened and protected the sovereignty of both nations.
- NORAD is a binational American and Canadian military command that provides aerospace and maritime warning for North America.
- U.S. and Canadian security interests do not end at the U.S.—Mexico border. Increased cooperation is needed to address a wide range of security issues facing North America, ranging from trade to cyber security and terrorist threats to the growing influence of drug cartels.
- The U.S. and Canada should formally invite Mexico to join NORAD. Including Mexico could greatly enhance NORAD's aerial and maritime surveillance in North America, address common threats and concerns, and help to build a common strategic vision among North American countries that respects and strengthens national sovereignty.

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NORAD. Bringing Mexico into NORAD would greatly enhance NORAD's aerial and maritime surveillance capabilities in North America and help to build a common strategic vision among North American countries that respects and strengthens the sovereignty of each nation while addressing common threats and concerns.

### **NORAD's History**

The U.S. and Canada have had a long and constructive defense partnership based on mutual respect and interests that has strengthened and protected the sovereignty of each nation. Contemporary military cooperation between the United States and Canada began in response to Japanese and German military conquests during World War II. On August 18, 1940, U.S. President Franklin Delano Roosevelt and Canadian Prime Minister William Lyon Mackenzie King established the Permanent Joint Board on Defense (CANUS).2 The board met periodically to coordinate the defense of North America. After World War II, CANUS created the Military Cooperation Committee, a continuously operating organization that worked to implement the Basic Security Plan by planning how best to coordinate U.S. and Canadian efforts.

In response to the growing threat from Soviet long-range bombers and a Soviet atomic bomb test in 1949, the two countries developed a three-tiered radar defense line across North America to detect any planes entering North American airspace.<sup>3</sup> In 1951, the two countries first built the Pinetree Line, a line of linked radar stations along the 50th parallel, just north of the U.S.—Canada border. This system rapidly became outdated, and Canada and the United States constructed the Mid-Canada Line (the McGill Fence) in 1957 and 1958, 300 miles north of the Pinetree Line along the 55th parallel. These radars were less vulnerable to jamming and pro-

vided additional warning and response time. Finally, after further improvements in Soviet bomber technology called into question the ability of the Pinetree Line and Mid-Canada Line to ensure adequate early warning, the Canadian and American governments built the Distant Early Warning (DEW) Line along the 70th parallel. The U.S. Air Force (USAF) operated the American components, and the Royal Canadian Air Force operated the Canadian components. The U.S. also established the Continental Air Defense Command (CONAD) with a four-star USAF general as its commanding officer. CONAD expanded the mission of the existing USAF Air Defense Command to include Canadian territory.

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In 1957, a joint military study group proposed an integrated military command system, which was named Air Defense Canada-United States (ADCANUS). U.S. President Dwight D. Eisenhower and Canadian Prime Minister John Diefenbaker quickly approved the proposal and announced the system on August 1, 1957. USAF General Earle E. Partridge, ADCANUS's first commander, changed the organization's name from the awkward ADCANUS to the North American Air Defense Command with its easily pronounceable acronym NORAD.<sup>3</sup> NORAD became operational on September 12, 1957. Control of air defenses was centralized into an integrated command, ensuring rapid response while acknowledging the nature of the binational relationship. As the first line of defense for the homeland, NORAD assumed command amid an escalating Cold War.



<sup>1.</sup> General Victor E. Renuart Jr., "The Enduring Value of NORAD," *Joint Force Quarterly*, Issue 54 (3rd Quarter, 2009), p. 93, at http://www.ndu.edu/press/lib/images/jfq-54/23.pdf (June 17, 2010).

<sup>2.</sup> Ogdensburg Declaration, joint statement of the Prime Minister of Canada and the President of the United States, August 18, 1940, at http://www.lexum.umontreal.ca/ca\_us/en/cts.1947.43.en.html (June 17, 2010).

<sup>3.</sup> Renuart, "The Enduring Value of NORAD," p. 93.

<sup>4.</sup> Joseph T. Jockel, Canada in NORAD, 1957–2007: A History (Kingston, Ontario: McGill-Queen's University Press, 2007), p. 11.

<sup>5.</sup> Ibid., p. 25.

However, the 1957 agreement caused some concerns, mostly among Americans, who feared that the failure to require cooperation of forces would result in lax Canadian preparation and slow mobilization in times of crisis because Canada could avoid political loss and physical damage by letting the United States shoulder the burden of warfare. General Partridge pushed for a formal agreement that would require joint cooperation in a crisis, but the U.S. Joint Chiefs of Staff believed full formal cooperation would cause more harm than good because it would require integrating Canadian civilian authorities. Partridge, the Joint Chiefs, and the Canadians agreed on a compromise policy of joint consultation during a crisis.

NORAD was established with a U.S. commander with a Canadian deputy. While the commander has operational control over forces allocated to NORAD, all other aspects of command and organization fall to the national components of NORAD. Neither country is obligated to place its forces on alert or to mobilize if the other country's commander orders it. The commander must also follow general defense plans outlined by the two governments, consult with both governments on long-term decisions, and obtain their permission before releasing important information to the public. The two governments provide the funding for necessary headquarters, facilities, and forces.

The main NORAD headquarters is near Colorado Springs, Colorado. The U.S. has NORAD regional headquarters in McCord Air Force Base, Washington; Rome, New York; and Elmendorf Air Force Base, Alaska. The Canadian NORAD Region headquarters is at Canadian Forces Base, Winnipeg. Each country pays for the construction, operation, and development of its own headquarters. <sup>7</sup>

#### After the Cold War

Since the end of the Cold War, NORAD has evolved to address a range of national security concerns. The National Defense Authorization Act, Fiscal Year 1989, 8 requires the military to aid law enforcement agencies in combating drug trafficking in the United States, and the Canadian element of NORAD agreed to participate. In 1991, the antismuggling mission was made official, and NORAD's radar systems and interception procedures were shifted from defense against bombers and missiles to policing against small passenger planes piloted by smugglers, primarily small planes transporting cocaine from South America.<sup>9</sup> As a result, NORAD balloon-mounted radars have been placed mostly along the southern U.S. border. Meanwhile, North American air defenses were reduced after the Soviet bomber threat waned. "All the nuclear air defence weapons and all the fixed surface-to-air defence weapons are gone. Most of the radar sites have been closed."10

The successful terrorist attacks of September 11, 2001, greatly altered NORAD operations. During the attacks, the U.S. Federal Aviation Administration was notified of terrorist hijackings of four planes, but failed to warn NORAD in time. 11 The attacks prompted a major increase in air defense over American cities, culminating in Operation Noble Eagle. NORAD's role in security also increased with its involvement in Operation Noble Eagle to include monitoring and interception of flights, city and critical infrastructure air patrols, and controlling the airspace over Washington, D.C.<sup>12</sup> From September 11, 2001, through 2008, NORAD monitored 2,700 unknown aircraft and directed more than 45,000 defensive sorties under Noble Eagle. 13

- 6. North American Aerospace Defense Command, "About NORAD," at http://www.norad.mil/about/CONR.html (June 17, 2010).
- 7. D. Fraser Holman, NORAD in the New Millennium (Toronto: Irwin Publishing, 2000), p. 89.
- 8. Public Law 100–456.
- 9. Holman, NORAD in the New Millennium, p. 83.
- 10. Joseph T. Jockel, "Saving NORAD: Should Ottawa Seize the Obama Moment?" University of Calgary, School of Public Policy Briefing Papers: Focus on the United States, Vol. 2, Issue 3 (September 2009), p. 4, at http://policyschool.ucalgary.ca/files/publicpolicy/Jockel%20FINAL%20web.pdf (June 17, 2010).
- 11. Dan Eggen, "Aviation Officials Cleared in Probe," The Washington Post, September 3, 2006.
- 12. Renuart, "The Enduring Value of NORAD."



NORAD's inability to detect and confront aerospace threats on 9/11 and Canada's refusal to participate in missile defense have resulted in the de facto combination of NORAD with the newly created U.S. Northern Command (NORTHCOM). 14 As part of the post-9/11 reorganization of the federal government, NORTHCOM was created with an area of responsibility that includes the United States and its territories, Canada, Mexico, and adjacent bodies of water. Under the current arrangement, the commander of NORTHCOM is also the U.S. commander of NORAD, while the deputy commander of NORAD is still a Canadian officer. Even so, NORAD and NORTHCOM are separate commands that work closely together with civil defense partners to "deter, detect, prevent and defeat threats." <sup>15</sup> Canada Command (CANADACOM), NORTHCOM's

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counterpart, has a strong relationship with both American commands and has worked closely with them to understand each other's roles and responsibilities. The commands have been emphasizing coordination of intelligence, cooperation in training exercises, and overall preparedness.

Maritime warning responsibility was added to NORAD's mandate in 2006, and the NORAD agreement was made permanent, ending the need to renegotiate it every five years. In 2008, the U.S. commander of NORTHCOM/NORAD and the Canadian commander of CANADACOM signed a

joint civil assistance plan that further integrates the U.S. and Canadian militaries by permitting them to aid each other in the event of a natural disaster or terrorist attack. <sup>17</sup>

NORAD's current mission is to provide aerospace and maritime warning and control for North America.

Aerospace warning includes the monitoring of man-made objects in space, and the detection, validation, and warning of attack against North America whether by aircraft, missiles, or space vehicles.... Aerospace control includes ensuring air sovereignty and air defense of the airspace of Canada and the United States. <sup>18</sup>

The maritime warning mission, which was added in May 2006, "entails a shared awareness and understanding of the activities conducted in U.S. and Canadian maritime approaches, maritime areas, and inland waterways." Complementary to NORAD, NORTHCOM 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." This arrangement allows for coordination between Canadian and U.S. militaries through NORAD, while keeping control of actual combatant forces under each country's military command designated for homeland defense (CANADACOM and NORTHCOM).

## **Next Step for NORAD**

While NORAD has grown into a relevant post—Cold War military organization, it has not fully real-

- 13. Thomas P. Veale, Guarding What You Value Most: North American Aerospace Defense Command, Celebrating 50 Years (Washington, D.C.: U.S. Government Printing Office, 2008), p. 42.
- 14. Ibid.
- 15. Admiral Timothy J. Keating, statement before the Committee on Armed Services, U.S. House of Representatives, March 21, 2007, at <a href="http://www.dod.gov/dodgc/olc/docs/TestKeating070321.pdf">http://www.dod.gov/dodgc/olc/docs/TestKeating070321.pdf</a> (June 17, 2010).
- 16. Renuart, "The Enduring Value of NORAD."
- 17. Carl Ek, "Canada–U.S. Relations," Congressional Research Service Report for Congress, May 12, 2009, p. 10, at http://opencrs.com/document/96-397/2009-05-12/download/1013 (June 17, 2010).
- 18. North American Aerospace Defense Command, "About NORAD."
- 19. Ibid.
- 20. General Victor E. Renuart Jr., statement before the Committee on Armed Services, U.S. House of Representatives, March 18, 2010, pp. 2–3, at http://armedservices.house.gov/pdfs/FC031810/Renuart\_Testimony031810.pdf (June 17, 2010).



ized its potential. Virtually all transnational threats to the United States—from terrorism to international criminal gangs and cartels to environmental threats, such as the ongoing oil spill response in the Gulf of Mexico—have the potential to span North America. U.S. and Canadian security interests do not stop at the U.S. border with Mexico, necessitating increased security cooperation across national borders. This cooperation must be effective and respect the sovereignty and security interests of the partner nations. NORAD fits this requirement well.

Over the past decade, the United States has done much to promote intergovernmental cooperation with Mexico and has included Mexico in trilateral programs with Canada. Defense ties between the United States and Mexico are stronger than ever,

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exemplified by the U.S. Department of Defense's role in building Mexican capacity for counternarcotics operations and in other areas. <sup>21</sup> This relationship could be formalized by Mexico joining NORAD, a move that would greatly enhance NORAD's aerial and maritime surveillance in North America and help to build a common strategic vision among North American countries.

Addressing the wide range of threats confronting America's security interests in North America will require NORAD's involvement. Umar Farouk Abdulmutallab's failed attempt to blow up a U.S.-bound jetliner was al-Qaeda's most recent effort to cause mass casualties in America. <sup>22</sup> In addition, threats to energy, communication, and computer

networks persist. Malicious third parties can attack the United States through vulnerable intermediaries, such as Canada, which offers a huge backdoor into the U.S. computer networks. Much of the infrastructure of the two nations—from railroads to aviation to pipelines and electrical systems—is inextricably intertwined. Canada is also America's largest trading partner, accounting for many links in U.S. supply chains.

NORAD and NORTHCOM have partnered with a number of agencies—including the U.S. Defense Security Cooperation Agency, U.S. Department of Homeland Security, and U.S. Strategic Command—to protect U.S. networks. This cooperation will help NORAD to secure U.S. systems against potential attack, but NORAD does not currently have a lead cyber-security role.<sup>23</sup>

The United States needs to deepen cooperation with its North American partners on cyber security. Both the Canadian and U.S. economies depend on a secure and functioning cyberspace. Computer systems and infrastructure in both countries are linked and a substantial amount of bilateral trade is conducted through the Internet. Since cyber terrorists and criminals can operate from anywhere, integration of cyber-security efforts is essential to protect computer infrastructure. Integration is especially necessary for Canada because its 200 law enforcement and 2,500 military personnel dedicated to cyber security are insufficient to prevent cyber attacks effectively. Through NORAD, Canada and the United States could coordinate cyber security with the various military commands and civilian agencies.<sup>24</sup> Cooperation with Mexico as its economy and cyber infrastructure develop is also vital, as the U.S. and Mexican governments acknowledged by creating the Working Group on Cyber-Security in 2004.<sup>25</sup>

<sup>24.</sup> James Carafano, "What's the Big Idea: O Canada! Quelling Cybersecurity Threats," *The Washington Times*, December 10, 2009, p. A4, at http://www.washingtontimes.com/news/2009/dec/10/oh-canada-quelling-cybersecurity-threats (June 17, 2010).



<sup>21.</sup> Victor E. Renuart Jr., and Biff Baker, "U.S.–Mexico Homeland Defense: A *Compatible* Interface," Institute for National Strategic Studies, *Strategic Forum* No. 254, February 2010, at http://www.ndu.edu/inss/docUploaded/sf%20254\_web.pdf (July 16, 2010).

<sup>22. &</sup>quot;From Shoes to Soft Drinks to Underpants," The Economist, December 30, 2009.

<sup>23.</sup> Renuart, statement, pp. 6-8.

# Backgrounder

The drug cartels in Mexico pose another threat, which creates an additional imperative for deeper North American security cooperation. Drugrelated violence in Mexico, including along the U.S.—Mexico border, has escalated in recent years. Fighting among rival cartels and with the Mexican military and law enforcement forces has created an increasingly unstable security environment for Mexico and the United States. More than 23,000 people have been killed since late 2006, with most of the killings occurring in border towns, such as Ciudad Juarez.

Given the U.S. military's responsibility to monitor air and sea approaches to the United States, NORAD could make significant contributions to counternarcotics efforts through the air and maritime warning portions of its mandate, particularly if NORAD was expanded to include Mexico. The Mérida Initiative, which will increase drug enforcement cooperation among the United States, Mexico, and Central America, is not focused on detecting foreign craft, but rather on improving the resources, training, and methods of the law enforcement agencies responsible for drug control.26 If the Mérida Initiative is to succeed, it must enable Mexican and Central American police agencies to better identify drug smuggling suspects, find evidence against them, and uncover hidden drugs. While the Mérida Initiative is providing surveillance aircraft and detection equipment, it relies heavily on local law enforcement and on human intelligence gathering. An expanded NORAD could provide additional hardware, particularly radar equipment, that would complement efforts already underway. A joint command structure would facilitate intelligence sharing and the exchange of effective practices. Better coordination and interoperability would benefit all countries involved. Mexico's inclusion in NORAD could serve as the basis of a new multinational and

multi-agency partnership for counternarcotics operations in North America.

Drug-related violence in Mexico is not the only security concern. Since 9/11, terrorists have repeatedly demonstrated the ability to launch attacks across national borders. Entry into the United States across the long, porous U.S.—Mexico border is relatively easy. In addition, flights from Mexico would have access to a variety of U.S. targets, including major population centers, nuclear power plants, and dams. Security officials are starting to assess the vulnerabilities beyond the U.S. southern border, which remains an open flank in U.S. defense strategy.

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Information sharing and collaborative planning are essential to addressing this threat. Adding Mexico's military and civil air traffic radar information to the Surveillance Data Network (SDN)<sup>27</sup> would fill gaps in NORAD's current surveillance system.

The United States and Mexico have already joined forces to combat drug cartels, which have steadily increased their power and influence for years. Most recently, Secretary of State Hillary Clinton arrived in Mexico City to announce new measures, which previously would have been seen as incompatible with Mexico's sovereignty. The proposed cooperation would attempt to remove drug gangs through shared intelligence, development spending, and an increased effort to eliminate corruption in the courts and police forces. These operations will include the integration and training of Mexican and American officials. Spending under the

<sup>27.</sup> SDN is part of Network Enabled Operations, which increases interagency information sharing, and joins data from all levels of government. Major Lawrence Spinetta, "Expanding North American Aerospace Defense (NORAD)," *Air and Space Power Journal*, 3rd Quarter 2005, at <a href="http://www.airpower.maxwell.af.mil/apjinternational/apj-s/2005/2tri05/spinettaeng.html">http://www.airpower.maxwell.af.mil/apjinternational/apj-s/2005/2tri05/spinettaeng.html</a> (June 17, 2010).



<sup>25.</sup> K. Larry Storrs, "Mexico's Importance and Multiple Relationships with the United States," Congressional Research Service *Report for Congress*, January 18, 2006, p. 6, at <a href="http://assets.opencrs.com/rpts/RL33244\_20060118.pdf">http://assets.opencrs.com/rpts/RL33244\_20060118.pdf</a> (June 17, 2010).

<sup>26.</sup> U.S. Government Accountability Office, "Status of Funds for the Mérida Initiative," December 3, 2009, at http://www.casede.org/biblioteca/GAO-IM.pdf (June 17, 2010).

# Backgrounder

three-year Mérida Initiative includes \$1.2 billion for anti-drug efforts and \$331 million for social and infrastructure developments. <sup>28</sup> Cooperation in this area among the United States, Mexico, and Canada has increased because of the North American Free Trade Agreement, especially since 9/11, but it needs to be bolstered by an enhanced NORAD.

Mexico's potential inclusion in NORAD has raised some concerns. One is that transforming NORAD into a trilateral body would undermine the close U.S. relationship with Canada. Unlike the United States and Canada, Mexico is not a member of NATO and its economy and institutions are not as developed as the rest of North America. Because parts of the Mexican government are infiltrated by drug cartels, its participation in NORAD could put sensitive U.S. and Canadian information at risk. Conversely, Mexico may have sovereignty concerns. Additionally, the Mexican Air Force would add little value to NORAD, and the United States and Canada would bear the brunt of the cost of including Mexico in NORAD.

However, the advantages from Mexico joining NORAD are many. Foremost, "Mexican sources of data and intelligence may prove invaluable." NORAD's structure would ensure that the countries involved retain sovereignty over their own combat forces. U.S. intelligence agencies have well-established methods for vetting allied personnel that would reduce the chances of cartels infiltrating joint operations. A unified command structure would allow greater information sharing, particularly on air and sea movements of international narcotics traffickers. <sup>32</sup>

## **Looking Forward**

NORAD is uniquely qualified to become a nerve center that assesses threats and communicates the information efficiently to participating agencies. To realize its potential, the United States should:

- Work with Canada to invite Mexico to join NORAD;
- Continue to expand NORAD's early warning capabilities and situational awareness at sea and in the air to address common concerns, which range from natural and manmade disasters to transnational criminal and national security threats; and
- Ensure that NORAD operations and activities continue to be structured in a manner that respects the national sovereignty of its member states and fosters security in North America.

#### Conclusion

Including Mexico in NORAD is just the beginning of a better multinational effort to make North America safer and more secure. Making NORAD an effective instrument will require more than just adding another member. Effective teamwork will require more training and information sharing. Only through mutual cooperation, enhanced understanding, and increased flexibility can NORAD keep North America safe in the 21st century.

—James Jay Carafano, Ph.D., is Deputy Director of the Kathryn and Shelby Cullom Davis Institute for International Studies and Director of the Douglas and Sarah Allison Center for Foreign Policy Studies, a division of the Davis Institute, at The Heritage Foundation. Jena Baker McNeill is Policy Analyst for Homeland Security and Ray Walser, Ph.D., is Senior Policy Analyst for Latin America in the Allison Center at The Heritage Foundation. Richard Weitz, Ph.D., is Senior Fellow and Director of the Center for Political—Military Analysis at Hudson Institute.

<sup>32.</sup> James Carafano, "Let Mexico Join NORAD," *The Washington Examiner*, December 7, 2009, at http://www.washingtonexaminer.com/opinion/columns/Let-Mexico-join-NORAD-8634584-78643172.html (June 17, 2010).



<sup>28. &</sup>quot;Turning to the Gringos for Help," *The Economist*, March 25, 2010, at http://www.economist.com/world/americas/displaystory.cfm?story\_id=15769779 (June 17, 2010).

<sup>29.</sup> Gordon Giffin, "Thou Must Not Forsake a Beneficial Partnership," The Globe and Mail, June 20, 2008, p. A21.

<sup>30.</sup> Spinetta, "Expanding North American Aerospace Defense (NORAD)."

<sup>31.</sup> *Ibid*.