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HOMELAND DEFENSE

U.S. Northern Command Has a Strong Exercise Program, but Involvement of Interagency Partners and States Can Be Improved



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Why GAO Did This Study

U.S. Northern Command (NORTHCOM) exercises to test preparedness to perform its homeland defense and civil support missions. GAO was asked to assess the extent to which NORTHCOM is (1) consistent with Department of Defense (DOD) training and exercise requirements, (2) involving interagency partners and states in its exercises, (3) using lessons learned and corrective actions to improve preparedness, and (4) integrating its exercises with the National Exercise Program (NEP). To do this, GAO reviewed NORTHCOM and NEP guidance and postexercise documentation, assessed NORTHCOM compliance, and compared DOD and NEP exercise requirements.

What GAO Recommends

GAO is making recommendations to DOD to direct NORTHCOM to consistently involve the states in planning, executing, and assessing exercises and improve oversight of corrective actions. GAO is also recommending that DOD define when NORTHCOM should use NEP planning and documentation requirements. DOD agreed or partially agreed with the recommendations and cited ongoing and future efforts to satisfy the recommendations' intent. DOD did not fully address a recommendation on training to NORTHCOM staff on specific state emergency management structures. GAO believes such training would benefit NORTHCOM personnel in advance of a crisis and for exercise planning.

View [GAO-09-849](#) or key components. For more information, contact Davi M. D'Agostino, (202) 512-5431, dagostinod@gao.gov.

HOMELAND DEFENSE

U.S. Northern Command Has a Strong Exercise Program, but Involvement of Interagency Partners and States Can Be Improved

What GAO Found

NORTHCOM's exercise program is generally consistent with the requirements of DOD's Joint Training System, but its exercise reporting is inconsistent. Since the command was established in 2002, NORTHCOM has conducted 13 large-scale exercises and generally completed exercise summary reports within the required time frame. However, those reports did not consistently include certain information, such as areas needing improvement, because NORTHCOM lacks guidance that specifies exercise reports' content and format, potentially impacting its ability to meet internal standards for planning and execution of joint exercises, and to compare and share exercise results over time with interagency partners and states.

Nineteen federal agencies and organizations and 17 states and the District of Columbia have participated in one or more of the seven large-scale exercises that NORTHCOM has conducted since September 2005. However, NORTHCOM faces challenges in involving states in the planning, conduct, and assessment of its exercises, such as adapting its exercise system and practices to involve other federal, state, local, and tribal agencies that do not have the same practices or level of planning resources. Inconsistencies with how NORTHCOM involves states in exercises are occurring in part because NORTHCOM officials lack experience dealing with states and do not have a consistent process for including states in exercises. Without such a process, NORTHCOM increases the risk that its exercises will not provide benefits for all participants, impact the seamless exercise of all levels of government, and potentially affect NORTHCOM's ability to provide civil support capabilities.

NORTHCOM has a systematic lessons learned and corrective action program to improve preparedness, but gaps remain with collecting and sharing lessons with agency and state partners and managing corrective actions. Access to the system NORTHCOM uses for managing exercise observations is limited for non-DOD participants, and DOD believes that the Department of Homeland Security's system is not adequately protected from unauthorized users. NORTHCOM's mitigation steps have not resolved the issues. In addition, about 20 percent of the corrective actions tracked by NORTHCOM were being closed prematurely due to gaps in oversight. Closing issues prematurely increases the risk that issues will reoccur and limits the knowledge gained and value of the exercise.

NORTHCOM has taken steps to integrate its exercises with the NEP, but guidance is not consistently applied. NORTHCOM has participated in several NEP exercises and is leading its first major NEP exercise in the fall of 2009. However, NORTHCOM has used DOD's Joint Training System planning and documentation requirements rather than DHS's requirements, because NEP guidance is not clear on what exercise planning standard should be used and DOD guidance does not address the issue. The states we visited use NEP guidance. Differences between NEP and DOD guidance could affect the ability of all participants to develop effective working relationships.

Contents

Letter		1
	Results in Brief	6
	Background	11
	NORTHCOM's Exercise Program Is Consistent with DOD's Joint Training System, but Exercise Reporting is Inconsistent	26
	Interagency Partners and States Have Participated In NORTHCOM's Exercises, but Challenges Remain with Including States in Planning, Conducting, and Assessing Exercises	32
	NORTHCOM has a Systematic Lessons Learned and Corrective Action Program, but Gaps Remain	42
	NORTHCOM Has Taken Steps to Integrate Its Exercises with the National Exercise Program, but Guidance Is Not Consistently Applied	51
	Conclusions	58
	Recommendations for Executive Action	60
	Agency Comments and Our Evaluation	61
Appendix I	Scope and Methodology	67
Appendix II	Comparison of DOD's Joint Training System with DHS's Homeland Security Exercise and Evaluation Program	71
Appendix III	Comments from the Department of Defense	75
Appendix IV	GAO Contact and Staff Acknowledgments	80
Related GAO Products		81

Tables

Table 1: Major Documents Related to the National Exercise Program and NORTHCOM	22
Table 2: Large-Scale NORTHCOM Exercises Since 2002	27
Table 3: Interagency Partner and State Participation in Large-scale NORTHCOM Exercises Since 2006	33
Table 4: Emergency Management Structures of the States We Visited	38
Table 5: Number of Observations Input into Lessons Learned Management System for Large-Scale Exercises Since 2006	43
Table 6: NORTHCOM Participation in National Level and Tier II Exercises Since 2007	52
Table 7: Comparison of Areas of Application between DOD's Joint Training System and DHS's Homeland Security Exercise Evaluation Program	55
Table 8: Comparison of DOD Joint Training System and Homeland Security Exercise and Evaluation Program	71

Figures

Figure 1: NORTHCOM's Area of Responsibility	14
Figure 2: Pathways for Requesting Military Assistance for Incident Response	16
Figure 3: DOD's Joint Training System	19
Figure 4: National Exercise Program and U.S. Northern Command Exercise Program Time line: Major Events and Milestones (2001-2009)	21
Figure 5: Description of NEP Tiers	23
Figure 6: Homeland Security Exercise and Evaluation Program Tool Kit	25
Figure 7: NORTHCOM Lessons Learned and Corrective Action Process	45

Abbreviations

DOD	Department of Defense
DHS	Department of Homeland Security
FEMA	Federal Emergency Management Agency
JLLIS	Joint Lessons Learned Information System
NEP	National Exercise Program
NORTHCOM	U.S. Northern Command

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United States Government Accountability Office
Washington, DC 20548

September 9, 2009

Congressional Requesters

The U.S. homeland continues to face complex and dynamic threats and vulnerabilities from terrorism and other catastrophic incidents, including natural disasters, industrial accidents, infrastructure failures, and infectious diseases.¹ These incidents can produce devastating consequences as observed during the September 11, 2001, terrorist attacks and in the aftermath of Hurricane Katrina, which required an effective and coordinated national effort, with shared goals and responsibilities for protecting and defending the homeland. The complexity of national-level coordination makes preparing for an incident all the more crucial.² According the Quadrennial Defense Review, unified interagency efforts among the Department of Defense (DOD), Department of Homeland Security (DHS), and other federal, state, and local agencies are required to address threats to the homeland.³ Exercises play an instrumental role in preparing these agencies to respond to an incident by providing opportunities to test plans, improve proficiency, assess capabilities and readiness, and clarify roles and responsibilities.⁴ Short of performance in actual operations, exercises provide the best means to assess the effectiveness of organizations in achieving mission preparedness. Exercises also provide an ideal opportunity to enhance preparedness by collecting, developing, implementing, and disseminating lessons learned and verifying corrective action taken to resolve previously identified issues.⁵

¹Homeland Security Council, *National Strategy for Homeland Security* (Washington, D.C.: October 2007), 1, 9, 13.

²GAO, *National Preparedness: FEMA Has Made Progress, but Needs to Complete and Integrate Planning, Exercise, and Assessment Efforts*, [GAO-09-369](#) (Washington, D.C.: Apr. 30, 2009).

³DOD, *Quadrennial Defense Review Report* (Washington, D.C.: Feb. 6, 2006), 87.

⁴An exercise is a training event where scenarios are enacted to assess training proficiency and identify lessons learned to improve preparedness. Exercises range from tabletop computer simulations to the full-scale deployment of personnel and equipment.

⁵U.S. Northern Command, *Commander's Training Guidance for FY09-10* (Colorado Springs, Colo.: Apr. 8, 2008), A-20.

Following the September 11 terrorist attacks, DOD realized the need for a more integrated civilian and military response capability for any future attack on the homeland. In response, DOD established the U.S. Northern Command (NORTHCOM) to provide and manage homeland defense and civil support. These two activities are among DOD's contribution to homeland security. DHS is the lead federal agency for homeland security, which is a national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur.⁶ DOD is the lead federal agency for homeland defense—defined as the protection of U.S. sovereignty, territory, domestic population, and critical defense infrastructure against external threats and aggression against the United States.⁷ Civil support is defense support of civil authorities—such as DHS or another federal agency or state—for domestic emergencies and for designated law enforcement and other activities.⁸ NORTHCOM differs from other combatant commands in that, in addition to Canada and Mexico, its area of responsibility includes the 48 contiguous states, Alaska, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.

Numerous local, state, tribal, and federal agencies and organizations—including DOD, DHS, and the Federal Emergency Management Agency (FEMA)—have jurisdiction over or can coordinate resources within the homeland and, therefore, may be involved in the response to an incident. According to the National Defense Strategy, a whole-of-government approach is only possible when every government department and agency understands the core competencies, roles, missions, and capabilities of its partners and works together to achieve common goals.⁹ Ensuring an effective response to an incident will require that federal departments and agencies, states, and local governments conduct integrated disaster response planning and test these plans by exercising together.¹⁰ To achieve its goal of being ready to execute joint operations and ensure a seamless operating environment, NORTHCOM's training goals include maximizing exercise participation with federal, state, and local agencies

⁶DOD, *Strategy for Homeland Defense and Civil Support*, 5.

⁷DOD, *Strategy for Homeland Defense and Civil Support*, 5.

⁸DOD, *Strategy for Homeland Defense and Civil Support*, 5-6.

⁹DOD, *National Defense Strategy* (Washington, D.C.: June 2008), 17-18.

¹⁰Defense Science Board, *Unconventional Operational Concepts and the Homeland* (Washington, D.C.: March 2009), 37, 48, 50.

and National Guard units.¹¹ NORTHCOM uses long-established DOD practices for training and exercises to test and enhance the preparedness of its personnel and forces to perform its homeland defense and civil support missions. As a result, DOD has more experience than other federal agencies in terms of the scope and range of its exercises and the robustness of the process for conducting them. DOD's goal is to improve the homeland defense and consequence management capabilities of its interagency partners by leveraging this comparative advantage through shared training and exercises.¹²

The National Exercise Program (NEP) was established in April 2007 under the leadership of the Secretary of Homeland Security to prioritize and coordinate the various federal, regional, and state exercise activities and serves as the principal mechanism for examining the preparation and efficiency of the federal government to respond to an incident.¹³ The NEP includes a series of national exercises projected on a 5-year exercise schedule and has established a four-tier system to determine the relative priority of interagency participation in each exercise. DOD and other federal agencies, states, and local organizations participate in these national-level exercises. FEMA administers the NEP and has developed Homeland Security Exercise and Evaluation Program guidance to provide standardized policy, methodology, and terminology for exercise design, development, conduct, evaluation, and improvement planning.

In our previous work following Hurricanes Katrina and Rita, we identified a need to improve, among other things, the nation's disaster response capabilities. Overall, capabilities are built upon the appropriate combination of people, skills, processes, and assets. Ensuring that needed capabilities are available requires effective planning and coordination in conjunction with training and exercises in which the capabilities are realistically tested and problems identified and subsequently addressed in partnership with other federal, state, and local stakeholders.¹⁴ Specific to

¹¹U.S. Northern Command, *Commander's Training Guidance for FY09-10*, A-4.

¹²DOD, *Quadrennial Defense Review Report*, 26-27.

¹³DHS, *National Exercise Program Implementation Plan* (Washington D.C.: Apr. 11, 2007). DHS issued a revised Implementation Plan in June 2008.

¹⁴GAO, *Homeland Security: Observations on DHS and FEMA Efforts to Prepare for and Respond to Major and Catastrophic Disasters and Address Related Recommendations and Legislation*, [GAO-07-835T](#) (Washington, D.C.: May 15, 2007).

DOD, we reported that prior to Hurricane Katrina, disaster plans and training exercises involving DOD were insufficient, and did not incorporate lessons learned from past catastrophes to fully delineate the military capabilities that could be needed to respond to a catastrophic natural disaster. Moreover, disaster plans had not been tested and refined with a robust exercise program. As a result of the inadequate plans—and the lack of realistic exercises to test those plans—a lack of understanding existed within DOD and among federal, state, and local responders as to the types of assistance and capabilities that DOD might provide, the timing of this assistance, and the respective contributions of the active-duty and National Guard components. We recommended that DOD establish milestones and expedite the development of detailed plans and exercises to fully account for the unique capabilities and support that the military is likely to provide to civil authorities in response to an incident.¹⁵ In addition, we recently found that although FEMA has developed plans, guidance, and systems to design exercises, gather lessons learned, and track corrective actions to implement the NEP, it faces challenges in ensuring that the exercises are carried out in accordance with Homeland Security Exercise and Evaluation Program guidance. We recommended, among other things, that FEMA establish a program management plan and better ensure that exercises follow Homeland Security Exercise Evaluation Program guidance, for example, by revising its grant monitoring guidance to include a checklist of specific requirements for states that receive grant funds.¹⁶

In order to better understand NORTHCOM's efforts to effectively prepare for its homeland defense and civil support missions, we were asked to review NORTHCOM's exercise program. This review is the final part of a broader congressional request to review NORTHCOM's efforts to plan and coordinate its homeland defense and civil support missions. We have issued two previous reports in support of that request.¹⁷ For this report, our objectives were to determine the extent to which (1) NORTHCOM's

¹⁵GAO, *Hurricane Katrina: Better Plans and Exercises Needed to Guide the Military's Response to Catastrophic Natural Disasters*, [GAO-06-643](#) (Washington, D.C.: May 16, 2006).

¹⁶[GAO-09-369](#).

¹⁷GAO, *Homeland Defense: U.S. Northern Command Has Made Progress but Needs to Address Force Allocation, Readiness, Tracking Gaps, and Other Issues*, [GAO-08-251](#) (Washington, D.C.: Apr. 16, 2008); and *Homeland Defense: Steps Have Been Taken to Improve U.S. Northern Command's Coordination with the States and the National Guard Bureau, but Gaps Remain*, [GAO-08-252](#) (Washington, D.C.: Apr. 18, 2008).

exercise program is consistent with DOD training and exercise requirements; (2) NORTHCOM involves relevant interagency partners and states in planning, conducting, and assessing exercises; (3) NORTHCOM is using lessons learned and corrective actions during exercises to improve mission preparedness; and (4) NORTHCOM is integrating its exercises with the NEP.

In conducting this review, we generally focused our scope on NORTHCOM's large-scale exercises¹⁸ conducted since Hurricane Katrina made landfall in August 2005. To determine the extent to which NORTHCOM's exercise program is consistent with DOD exercise requirements and includes relevant exercise partners, we reviewed exercise documentation for all 13 large-scale exercises the command performed since it was established in 2002; evaluated NORTHCOM's compliance with requirements established in DOD guidance; and assessed the level of interagency and state participation in NORTHCOM's large-scale exercises. We also interviewed Office of the Secretary of Defense, Joint Staff, NORTHCOM, FEMA, FEMA regional offices, and state officials with knowledge of and experience with NORTHCOM's exercise program. We selected a nongeneralizable sampling of states based on the extent to which they have participated in major NORTHCOM exercises since Hurricane Katrina and the varying scenarios of the exercises. The states we selected played a major role in NORTHCOM exercises by having a portion of the exercise conducted in their state and having various state agencies and officials participate. States we selected include Arizona, California, Michigan, Oregon, Rhode Island, and Washington. We also met with Nevada officials who participated in a NORTHCOM exercise prior to Hurricane Katrina—Determined Promise 03—to provide context to the extent that changes may have been made to NORTHCOM's exercise program and help develop our state selection methodology. To determine the extent to which NORTHCOM is using lessons learned during exercises to improve mission preparedness, we reviewed DOD, NORTHCOM, and DHS's NEP guidance for lessons learned. Based on this guidance, we assessed the management of all unclassified exercise observations and issues identified from its last 6 large-scale exercises by determining each record's status (open or closed), type (issue or lesson learned), and disposition after NORTHCOM staff have acted on these records. Finally, to

¹⁸Large-scale exercises train and evaluate actual forces deployed in a field environment under simulated scenarios. NORTHCOM generally conducts two large-scale exercises annually.

determine the extent to which NORTHCOM is integrating its exercises with the NEP we reviewed DOD and DHS guidance regarding the NEP and how DOD and its subordinate commands are required to or should participate. We conducted our review between June 2008 and September 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Results in Brief

NORTHCOM's exercise program is generally consistent with the overall policies and practices of DOD's Joint Training System, but the way it reports on exercises is inconsistent. DOD and NORTHCOM guidance require that the command establish an exercise program consistent with the Joint Training System and complete postexercise documentation within an established time frame.¹⁹ NORTHCOM has developed a comprehensive exercise program consistent with DOD's Joint Training System, conducted 13 large-scale exercises since it was created in 2002, and generally completed exercise summary reports within the required time frame. However, those reports did not consistently include certain information; for example, only 5 of the 11 exercise summary reports included an identified section on lessons learned. DHS currently has a template for exercise documentation that includes guidance on content and format; however, NORTHCOM does not follow this template and neither DOD nor NORTHCOM has similar guidance that specifies content and format. Without a consistent record of what occurred during an exercise, NORTHCOM cannot ensure that it has met internal standards for planning and execution of joint exercises, compare exercise results over time, and share lessons learned with interagency partners and states. We are recommending that NORTHCOM's Commander establish criteria for the format and content of postexercise documentation.

Interagency partners and states have participated in NORTHCOM exercises, but NORTHCOM faces challenges involving interagency partners and states in planning, conducting, and assessing exercises.

¹⁹Chairman of the Joint Chiefs of Staff, *Joint Training Manual for the Armed Forces of the United States*, 3500.03B (Washington, D.C.: Aug. 31, 2007), A-1; U.S. Northern Command, *Operations: Exercise Program*, Instruction 10-156 (Colorado Springs, Colo.: June 2, 2008).

NORTHCOM guidance requires that NORTHCOM maximize exercise participation with interagency partners and states to achieve preparedness goals and ensure a seamless operating environment.²⁰ Seventeen federal agencies and organizations and 17 states and the District of Columbia have participated in one or more of the seven large-scale exercises that NORTHCOM has conducted since September 2005. We found that the states we visited derived benefits from their participation in these exercises. For example, officials from 3 states told us this was their first opportunity to interact with federal military forces. However, we found that challenges remain which have resulted in inconsistencies in the way that NORTHCOM involves the states in its exercises. One of DOD's challenges is adapting its exercise system and practices to accommodate the coordination and involvement of other federal, state, local, and tribal agencies that do not have the same kinds of practices or level of planning effort. NORTHCOM also faces the challenge of balancing its training objectives with those of state agencies and organizations, particularly given the limited resources and funding states have available to exercise. While state and local governments seek to exercise their first responder capabilities before having their resources overwhelmed and needing to seek federal assistance, NORTHCOM's goal is to exercise its capability to provide support to civil authorities when local, state, and other federal resources are overwhelmed. As a result of this challenge, officials from 5 states told us that all of their needs were not fully met during the exercises, for example, due to large-scale, unrealistic scenarios that overwhelmed the states' resources before they had the opportunity to exercise their training objectives. Inconsistencies with how NORTHCOM involves states in planning, conducting, and assessing exercises are occurring in part because NORTHCOM officials lack experience in dealing with the differing emergency management structures, capabilities, and needs of the states. Inconsistencies are also occurring because NORTHCOM has not established a process for including states in exercises, such as consistent procedures for requesting state involvement in exercises through DHS/FEMA or the National Guard Bureau. Without an informed and consistent process, NORTHCOM increases the risk that its exercises will not provide benefits for all participants, impacting the seamless exercise of all levels of government and potentially affecting NORTHCOM's ability to provide support to civil authorities. We are recommending that (1) DOD work with DHS to establish guidance and procedures for requesting state participation and involving states in

²⁰U.S. Northern Command, *Commander's Training Guidance FY 09-10*, A-4.

planning, executing, and assessing exercises and (2) NORTHCOM's Commander develop a training plan for NORTHCOM staff on state emergency management structures and relevant issues related to working with civilian state and local emergency management officials.

NORTHCOM has a systematic lessons learned and corrective action program to improve preparedness, but gaps remain with collecting and sharing lessons with agency and state partners and managing corrective actions. DOD and NORTHCOM guidance requires that NORTHCOM identify lessons learned during the course of normal operations, exercises, and real-world events; share valid observations and findings as widely as possible; and track them until the corrective actions are verified during subsequent events or exercises.²¹ NORTHCOM uses DOD's Joint Lessons Learned Information System (JLLIS), an automated tool for managing and tracking observations, and a corrective action process to manage issues requiring action for resolution. Access to this system is limited for non-DOD participants, and DOD believes that DHS's system is not adequately protected from potential unauthorized users. NORTHCOM has taken steps to address these issues, such as placing a template on NORTHCOM's restricted access portal to provide a venue for non-DOD officials to record exercise observations, but these efforts have not been successful. Because NORTHCOM is not fully involving other federal agencies and states in its lessons learned process, it is missing opportunities to learn lessons from an exercise. For example, officials from two states did not provide NORTHCOM with observations from exercises because they did not attend the command's postexercise reviews for varying reasons, such as limited resources. As a result, NORTHCOM risks the reoccurrence of these issues. We also found that about 20 percent of the corrective actions tracked by NORTHCOM were being closed prematurely because, under existing procedures, NORTHCOM exercise directorate officials do not have oversight over issues that are resolved within other directorates or are not giving long-standing issues the sustained management attention to ensure resolution. A NORTHCOM official told us that they do not have the staff necessary to oversee the actions on records handled within the other directorates. Closing issues requiring corrective actions prematurely could increase the risk that they could reoccur and limits the knowledge gained

²¹Chairman of the Joint Chiefs of Staff, *Joint Lessons Learned Program*, Instruction 3150.25D (Washington, D.C.: Oct. 10, 2008), A-1 and A-6; U.S. Northern Command, *Commander's Training Guidance FY 09-10*, A-4, A-8, A-20, A-2-8; U.S. Northern Command, *Lessons Learned Program and Corrective Action Board Process*, Instruction 16-166 (Colorado Springs, Colo.: Mar. 16, 2009), 2.

and value of the exercise. We are recommending that (1) NORTHCOM's Commander establish and publicize procedures for non-DOD exercise participants to submit observations, (2) the Chairman of the Joint Chiefs of Staff direct the Joint Staff to work with DHS to either resolve information assurance issues so that combatant commands can post Exercise Summary Reports with lessons learned on DHS's Lessons Learned Information Sharing system or establish an alternative method to systematically collect and share lessons learned, and (3) the Chairman of the Joints Chiefs of Staff direct the Joint Staff to revise the joint lessons learned operating instruction to include procedures to ensure that corrective actions are implemented and verified in a subsequent exercise or operation before being closed.

NORTHCOM has taken steps to integrate its exercises with the NEP, such as participating in several NEP exercises, including combining two of its large-scale exercises with NEP exercises. However, NORTHCOM has not consistently applied NEP planning and documentation requirements, because NEP guidance is unclear on the extent to which federal agencies should follow NEP requirements and DOD guidance does not specifically address this issue. NEP guidance provides policies and tools for the design, planning, conduct, and evaluation of exercises—known as the Homeland Security Exercise and Evaluation Program.²² FEMA requires that entities, such as states, receiving homeland security grant funding for their exercises use Homeland Security Exercise and Evaluation Program tools, such as reporting templates. We reviewed NEP guidance, such as the Implementation Plan, and found it does not clearly state the extent to which federal agencies are required to follow the Homeland Security Exercise and Evaluation Program planning and documentation guidance. As a result of this unclear guidance, we found that agency officials have varying interpretations of the requirements. A DOD and a Joint Staff official told us that NEP guidance does not require agencies to use the Homeland Security Exercise Evaluation Program even for NEP exercises; therefore, NORTHCOM uses the Joint Training System as the basis for planning, conducting, and assessing exercises. FEMA officials told us that federal agencies should use the Homeland Security Exercise Evaluation Program for exercises that require some level of interagency participation,

²²DHS, *National Exercise Program Implementation Plan* (Washington, D.C.: June 20, 2008).

so that consistent approaches are used by the various participants.²³ Neither DOD nor NORTHCOM guidance specifically addresses this issue.²⁴ We recognize that DOD and NORTHCOM must meet their own mission and exercise requirements and the Joint Training System may be best suited for NORTHCOM's exercises; however, all of the states we visited use Homeland Security Exercise and Evaluation Program guidance. We found that having differing sets of guidance makes exercise development more difficult and potentially limits the benefits for participating states. Further, inconsistent approaches to the development and content of postexercise documentation may affect the ability of organizations to fully learn lessons identified in exercises.²⁵ We believe that achieving national preparedness requires a whole-of-government approach and is a shared responsibility among federal, state, and local governments and organizations and an integration of their various standards, policies, and procedures into the national system.²⁶ In the absence of clear NEP guidance on this issue, DOD should ensure that its components clearly understand when use of NEP planning and reporting guidelines is appropriate. We are recommending that the Secretary of Defense and the Joint Staff provide specific guidance that defines the conditions under which the combatant commands should follow the Homeland Security Exercise and Evaluation Program planning and documentation requirements or the DOD's Joint Training System should be modified for those civil support exercises.

DOD provided written comments on a draft of this report and provided technical comments which we incorporated into the final report as appropriate. DOD agreed or partially agreed with all our recommendations and described actions it is taking or plans to take to implement them. DOD

²³FEMA officials stated that federal departments and agencies should be held accountable for meeting key Homeland Security Exercise Evaluation Program requirements, but that FEMA lacks the authority to ensure compliance. While we recognize that FEMA's role is generally to coordinate, guide, and support, we believe that FEMA's expanded leadership role under the Post-Katrina Act of 2006 provides FEMA opportunities to instill a shared sense of responsibility and accountability on the part of all agencies. [GAO-09-369](#). The Post-Katrina Act was enacted as Title VI of the Department of Homeland Security Appropriations Act, 2007, Pub. L. No. 109-295, (2006).

²⁴NORTHCOM guidance states the Vigilant Guard Program should use Homeland Security Exercise and Evaluation Program formats to encourage civilian agency participation. U.S. Northern Command, *Commander's Training Guidance: Fiscal Year 2009-2010*, p. A-18.

²⁵Defense Science Board, *Unconventional Operational Concepts and the Homeland*.

²⁶[GAO-09-369](#).

generally agreed with the recommendation to work with DHS to establish guidance and procedures for requesting state participation and involving states in planning, executing, and assessing exercises. DOD agreed that better coordination for interfacing with state officials can be achieved. However, DOD noted that NORTHCOM is the primary training audience for its exercises and that the recommendation should also be addressed to an interagency exercise planning committee. We noted NORTHCOM's considerable efforts to involve state and interagency exercise partners. However, we believe that the effective involvement of and interaction with state and other federal partners is a critical component of improving and maintaining NORTHCOM's preparedness for providing support to civil authorities regardless of whether it is a strictly NORTHCOM-sponsored exercise or an event conducted under the National Exercise Program. Therefore, developing procedures to improve coordination with the states can only assist DOD and all its interagency and state partners. We also noted that the interagency exercise planning committee is one venue at which DOD can effectively coordinate with its interagency partners. Although DOD agreed with the recommendation on a training plan for NORTHCOM staff and discussed current and future NORTHCOM training efforts, its response did not address the need for NORTHCOM staff to be provided more thorough training on specific emergency management organizations and structures of each state. We continue to believe that such training is needed since it is an important element of preparedness for exercises and for actually providing civil support in the event of a major incident. A summary of DOD's comments and a summary of our response to these comments follow the Recommendations for Executive Action section of this report. DOD's written comments are reprinted in appendix III. DHS also reviewed a draft of this report and provided technical comments, which we incorporated into the final report as appropriate.

Background

The U.S. homeland continues to face an uncertain, complex security environment with the potential for terrorist incidents and natural disasters which can produce devastating consequences. Ensuring an effective response will require that federal departments and agencies, states, and local governments conduct integrated disaster response planning and test these plans by exercising together.

Training and Exercises

Exercises play an instrumental role in preparing the nation to respond to an incident by providing opportunities to test emergency response plans, evaluate response capabilities, assess the clarity of established roles and

responsibilities, and improve proficiency in a simulated, risk-free environment.²⁷ Short of performance in actual operations, exercises provide the best means to assess the effectiveness of organizations in achieving mission preparedness. Exercises provide an ideal opportunity to collect, develop, implement, and disseminate lessons learned and to verify corrective action taken to resolve previously identified issues.²⁸ Sharing positive experiences reinforces positive behaviors, doctrine, and tactics, techniques, and procedures, while disseminating negative experiences highlights potential challenges in unique situations or environments or identifies issues that need to be resolved.²⁹ According to the National Response Framework, well-designed exercises improve interagency coordination and communications, highlight capability gaps, and identify opportunities for improvement.³⁰ There are various types of exercises ranging from tabletop exercises that involve key personnel discussing simulated scenarios in informal settings to a full-scale exercise, including many agencies, jurisdictions, and disciplines and a “boots on the ground” response, such as firefighters decontaminating mock victims.

Military Mission and Organization

DOD established the Office of the Assistant Secretary of Defense for Homeland Defense and Americas’ Security Affairs to oversee homeland defense activities for DOD, under the authority of the Under Secretary of Defense for Policy, and, as appropriate, in coordination with the Chairman of the Joint Chiefs of Staff. This office develops policies, conducts analysis, provides advice, and makes recommendations on homeland defense, defense support of civil authorities, emergency preparedness, and domestic crises management matters within the department. The assistant secretary assists the Secretary of Defense in providing policy directions to NORTHCOM and other applicable combatant commands to guide the

²⁷ A training event focuses primarily on improving individual or collective ability to perform, such as academic or field training. An exercise focuses primarily on evaluating capability or an element of capability, such as a plan or policy. Necessary training should take place prior to an exercise.

²⁸ U.S. Northern Command, *Commander’s Training Guidance for FY09-10*, A-20.

²⁹ U.S. Northern Command, *Lessons Learned Program and Corrective Action Board Process*, Instruction 16-166 (Colorado Springs, Colo.: Mar. 16, 2009), 2.

³⁰ The framework is a guide to how the nation conducts all-hazards response and is intended to capture specific authorities and best practices for managing incidents that range from the serious but purely local, to large-scale terrorist attacks or catastrophic natural disasters. DHS, *National Response Framework* (Washington, D.C.: January 2008).

development and execution of homeland defense plans and activities. This direction is provided through the Chairman of the Joint Chiefs of Staff.

The Chairman of the Joint Chiefs of Staff, as principal military advisor to the President and Secretary of Defense, has numerous responsibilities relating to homeland defense and civil support, including providing advice on operational policies, responsibilities, and programs. Furthermore, the Chairman of the Joint Chiefs of Staff and the Joint Staff are responsible for formulating joint training policy and doctrine.³¹ The Joint Staff assists the Chairman by facilitating implementation of the Chairman's joint training programs, including the Joint Training System, Chairman's sponsored exercise program, and joint exercise program.

NORTHCOM

NORTHCOM is the military command responsible for planning, organizing, and executing DOD's homeland defense and civil support missions within its area of responsibility—the continental United States (including Alaska) and territorial waters (see fig. 1).³² Homeland defense is the protection of U.S. territory, sovereignty, domestic population, and critical defense infrastructure against external threats and aggression. DOD is the primary federal agency responsible for homeland defense operations, such as air defense, and NORTHCOM is the combatant command responsible for commanding and coordinating a response to a homeland defense incident.³³ To carry out its homeland defense mission, NORTHCOM is to conduct operations to deter, prevent, and defeat threats and aggression aimed at the United States.

³¹Chairman of the Joint Chiefs of Staff, Instruction 3500.01E, *Joint Training Policy and Guidance for the Armed Forces of the United States* (Washington, D.C.: May 31, 2008).

³²DOD, *Strategy for Homeland Defense and Civil Support*, 8.

³³Homeland defense is considered DOD's portion of the broader area of homeland security. DHS is the lead primary federal agency for homeland security issues, which is a concerted national effort to prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and minimize the damage and recover from attacks that do occur. Homeland Security Council, *National Strategy for Homeland Security*, 3; DOD, *Strategy for Homeland Defense and Civil Support*, 5.

Figure 1: NORTHCOM's Area of Responsibility



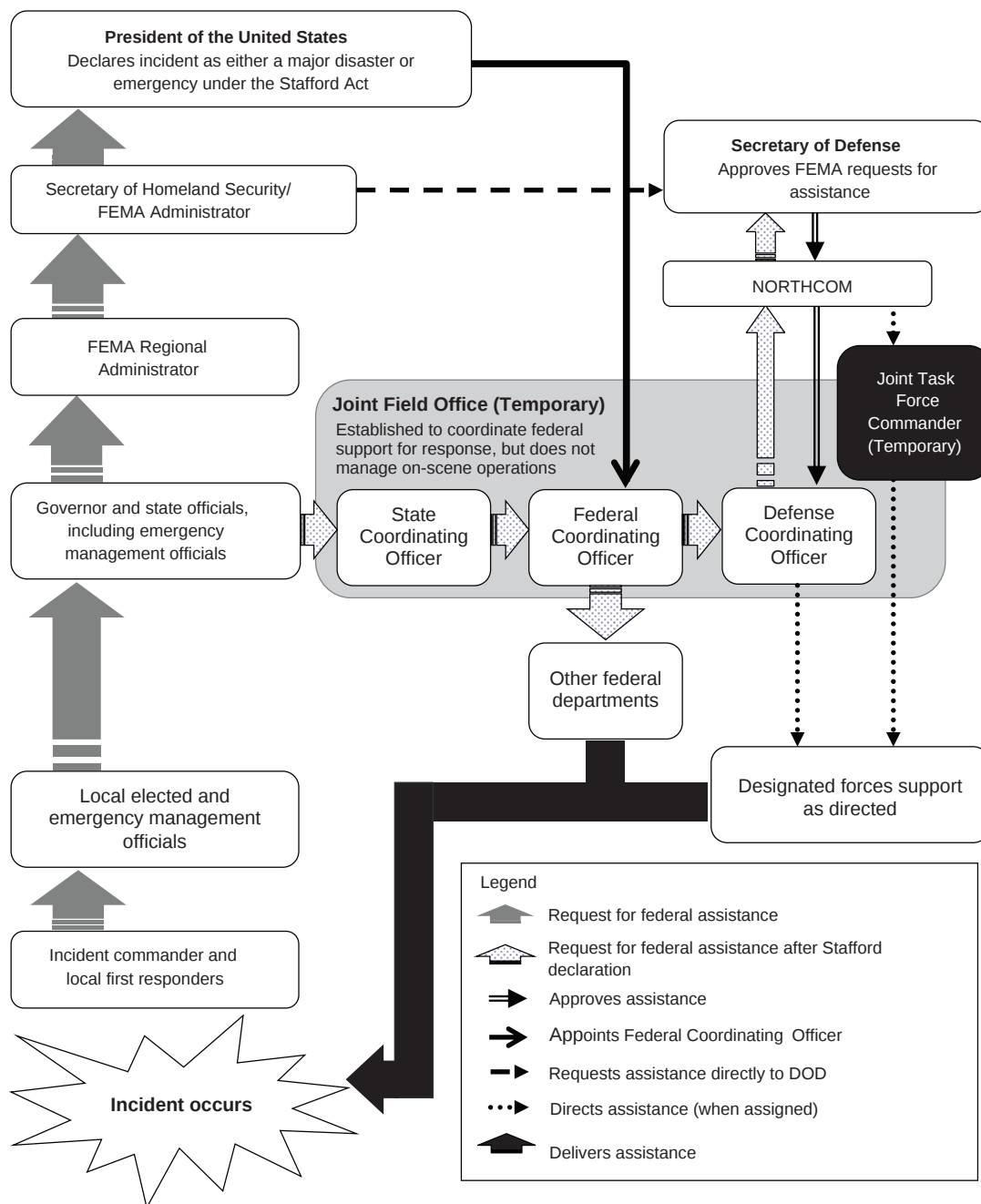
Sources: GAO analysis; Map Resources (map).

NORTHCOM's second mission is civil support or defense support of civil authorities. Civil support is DOD support to U.S. civilian authorities, such as DHS, for domestic emergencies, both natural and man-made, and includes the use of DOD personnel—federal military forces and DOD's career civilian and contractor personnel—and DOD agency and component resources. Because these missions are complex and interrelated, they require significant interagency coordination. Civil support missions include domestic disaster relief operations for incidents such as fires, hurricanes, floods, and earthquakes. Such support also includes counterdrug operations and management of the consequences of a terrorist incident employing a weapon of mass destruction. DOD is not the primary federal agency for such missions (unless so designated by the

President) and thus provides defense support of civil authorities only when (1) state, local, and other federal resources are overwhelmed or unique military capabilities are required; (2) assistance is requested by the primary federal agency; and (3) NORTHCOM is directed to do so by the President or the Secretary of Defense.³⁴ See fig. 2 for the pathway for requesting DOD and NORTHCOM assistance during an incident.

³⁴DHS, *National Response Framework*; Joint Chiefs of Staff, Joint Pub. 3-28, *Civil Support* (Washington, D.C.: Sept. 14, 2007).

Figure 2: Pathways for Requesting Military Assistance for Incident Response



Source: GAO analysis of DOD and DHS documentation.

NORTHCOM conducts or participates in exercises to improve readiness to perform its assigned missions. The command annually conducts 2 large-scale exercises³⁵—Ardent Sentry and Vigilant Shield—and participates in over 30 smaller command, regional, state, and local exercises. Each Ardent Sentry and Vigilant Shield training event emphasizes one of the key missions while at the same time including elements of the other. Ardent Sentry emphasizes the civil support missions; Vigilant Shield the homeland defense missions. The basis for NORTHCOM's exercises is DOD's Joint Training System. NORTHCOM's Training and Exercise Directorate is responsible for planning and executing joint training, exercises, and education programs to ensure NORTHCOM is prepared to accomplish its assigned missions.

DOD's Joint Training System

Due to the need to prepare for and conduct military operations to defend the United States and fight the nation's wars, DOD has developed an established, authoritative, time-tested process for planning, conducting, and evaluating exercises in order to test and improve preparedness to meet its wide range of critical missions.³⁶ NORTHCOM uses DOD's Joint Training System as the basis to design, develop, and conduct exercises.³⁷ The Joint Training System provides an integrated, requirements-based method for aligning training programs with assigned missions consistent with command priorities, capabilities, and available resources. The joint system consists of four phases beginning with the identification of critical capabilities required based on assigned missions, proceeding through the planning and scheduling of training events, the execution and evaluation of required training, and assessing training proficiency against required capability (see fig. 3). This process is designed to ensure that an organization's training program is linked to the Joint Mission Essential

³⁵For purposes of this report, large-scale exercises are those involving multiple agencies and organizations, venues, and events, such as NORTHCOM's Vigilant Shield and Ardent Sentry exercises.

³⁶DOD established the Joint Training System in fiscal year 1994. GAO, *Military Training: Actions Needed to Enhance DOD's Program to Transform Joint Training*, [GAO-05-548](#) (Washington, D.C.: June 21, 2005) 3, 19.

³⁷The documents that provide the written framework for the Joint Training System are Chairman of the Joint Chiefs of Staff, Instruction 3500.01E, *Joint Training Policy and Guidance for the Armed Forces of the United States* (Washington, D.C.: May 31, 2008); Manual 3500.03B, *Joint Training Manual for the Armed Forces of the United States* (Washington, D.C.: Aug. 31, 2007); and Manual 3500.04E, *Universal Joint Task Manual* (Washington, D.C.: Aug. 25, 2008).

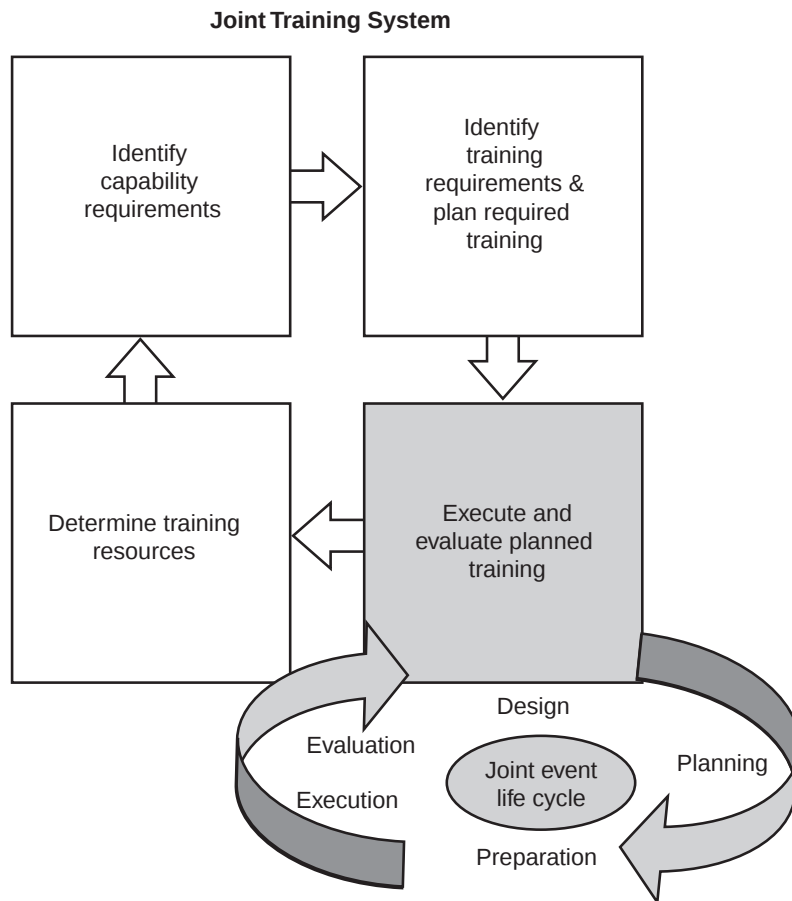
Task List,³⁸ the personnel executing the tasks are properly trained, and shortfalls in training are identified and corrected in order to improve readiness. The Joint Training Information Management System is an automated system specifically designed to assist users in managing elements of each of the four phases of the Joint Training System.³⁹ During the execution phase, commanders and directors focus on executing and evaluating planned training events, which can be accomplished through academic training, exercises, or a combination of these activities.⁴⁰ During the execution stage of the Joint Training System, the Joint Event Life Cycle provides a five-stage methodology for joint-event development design, planning, preparation, execution, and evaluation. For example, DOD components prepare for the execution of an exercise by conducting five conferences, such as the Concept Development Conference where exercise and training objectives are discussed and scenarios developed. Activities for the Joint Event Life Cycle are managed through the Joint Training Information Management System.

³⁸The Joint Mission Essential Task List outlines those tasks that are essential to a combatant command's ability to perform assigned missions. The list is a key element in readiness assessment and reporting.

³⁹Specifically, the Joint Training Information System provides the joint community with an integrated software capability to identify, collect, analyze, store, and disseminate the data required to execute the Joint Training System.

⁴⁰Joint exercises have been characterized by some form of multiechelon, computer-assisted exercises which embody complex simulation. These may be either a field training exercise, command postexercise, or a tabletop exercise.

Figure 3: DOD's Joint Training System



Source: DOD.

Evaluating lessons learned and identifying issues for corrective actions are fundamental components of DOD's training and exercise process. The Chairman of the Joint Chiefs of Staff provides policy, direction, and guidance for DOD's Joint Lessons Learned Program.⁴¹ The objectives of this program are to collect and analyze observations from exercises and real world events; disseminate validated observations and findings to appropriate officials; identify and implement corrective actions; and track corrective actions until reobserved in a subsequent exercise or event to

⁴¹Chairman of the Joint Chiefs of Staff, *Joint Lessons Learned Program*, 3150.25D, C-1.

ensure that the issue has been successfully resolved. Combatant commands, including NORTHCOM, execute lessons discovery, knowledge development, and implementation activities scaled to meet the command's requirements while supporting and feeding into the Chairman's Joint Lessons Learned Program by identifying lessons applicable across combatant commands and the services.

The National Exercise Program

The NEP was established in April 2007 under the leadership of the Secretary of Homeland Security to prioritize and coordinate federal, state, and local exercise activities and serves as the principal mechanism for examining the preparation of the federal government to respond to an incident and adopting policy changes to improve such preparation.⁴² The day-to-day staff-level coordination of the NEP is managed by the NEP Executive Steering Committee—a working group of the White House's Domestic Readiness Group Exercise and Evaluation Sub-Policy Coordination Committee—and is chaired and facilitated by FEMA's National Exercise Division. The steering committee is also responsible for framing issues and recommendations for the full coordination committee on exercise themes, goals, objectives, scheduling, and corrective actions.⁴³ Figure 4 illustrates the major events and milestones of the NEP and NORTHCOM's exercise program and table 1 provides information on related major documents.

⁴²DHS, *National Exercise Program Implementation Plan*.

⁴³Other steering committee members include DOD, the Office of the Director of National Intelligence, the Federal Bureau of Investigation, and the Departments of State, Justice, Energy, Transportation, and Health and Human Services.

Figure 4: National Exercise Program and U.S. Northern Command Exercise Program Time line: Major Events and Milestones (2001-2009)

	2001			FEMA
9/11 Terrorist attacks	2002			
	2003	NORTHCOM Established • United Defense 03 Exercise • Determined Promise 03 Exercise	DHS Established	FEMA merges with DHS
Homeland Security Presidential Directive 8 issued	2004	• United Defense 04 • Determined Promise 04	• National Planning Scenarios Issued • National Response Plan Published	
	2005			
Hurricane Katrina	2006	• Vigilant Shield 06 Exercise • Ardent Sentry 06 Exercise		
Post Katrina Act enacted	2007	• Vigilant Shield 07	National Exercise Program (NEP) Charter signed • Revised Homeland Security Exercise and Evaluation Program Guidance published	FEMA reorganizes
			National Exercise Program Implementation Plan approved • Ardent Sentry 07 • National Preparedness Guidelines published	
			National Level Exercise 1-08 (Top Officials 4 + Vigilant Shield 08) • National Response Framework published	
Joint Chiefs of Staff Lessons Learned Instructions issued	2008		National Level Exercise 2-08 (Ardent Sentry 08)	
		• NORTHCOM exercise guidance issued • Vigilant Shield 09		
DOD NEP Instruction issued	2009			

Source: GAO Analysis of DOD and DHS documentation.

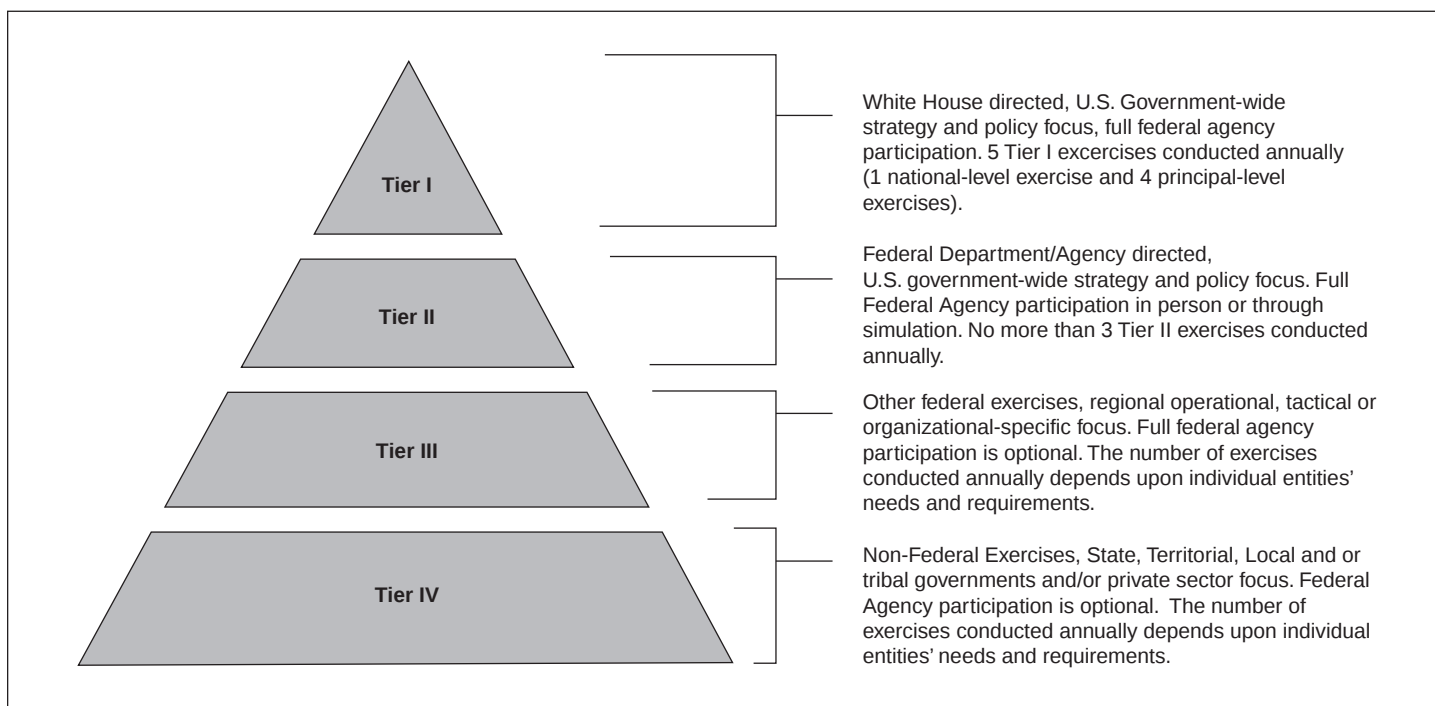
Table 1: Major Documents Related to the National Exercise Program and NORTHCOM

Title	Description
Homeland Security Presidential Directive-8	Requires the development of the national preparedness goal; preparedness priorities; an assessment system; a training and exercise program; a system to collect, analyze, and disseminate information from exercises, training events, and actual incidents; equipment standards; and a federal response capability inventory.
National Response Framework	Establishes a comprehensive, national, all-hazards approach to domestic incident response. Replaced the National Response Plan.
National Preparedness Guidelines	Establishes a vision for national preparedness and provide a systematic approach for prioritizing preparedness efforts across the United States
National Planning Scenarios	Provides planning tools that represent a minimum number of credible scenarios depicting the range of potential terrorist attacks and natural disasters and related impacts facing the United States They form a basis for coordinated federal planning, training, and exercises.
U.S. North American Aerospace Defense Command (NORAD)-NORTHCOM Instruction 10-156	Establishes the NORAD and NORTHCOM exercise program, provides an overview of the exercise program, describes the principal NORAD and NORTHCOM-sponsored exercises, and outlines the process for scheduling, planning, execution, and afteraction review of exercises.
Chairman of the Joint Chiefs of Staff Instruction 3150.25D	Codifies the Joint Lessons Learned Information System as the DOD system of record for the Joint Lessons Learned Program.
DOD Instruction 3020.47	Establishes policy, assigns responsibilities, and provides instructions for DOD participation in the National Exercise Program.

Source: DOD and DHS.

The NEP includes a series of national exercises projected on a 5-year exercise schedule. These exercises are organized into four tiers with each tier reflecting different requirements for interagency participation (see fig. 5).

Figure 5: Description of NEP Tiers



Source: FEMA.

FEMA administers the NEP and maintains the Homeland Security Exercise and Evaluation Program—a capabilities and performance-based exercise program—to provide standardized policy, methodology, and terminology for exercise design, development, conduct, evaluation, and improvement planning. DHS maintains policy and guidance for this program.⁴⁴

Similar to DOD's Joint Training System, the Homeland Security Exercise Evaluation Program uses an exercise life cycle with five phases: foundation, design and development, conduct, evaluation, and improvement planning. This program also provides document templates for exercise planning and evaluation and a collection of interactive, on-line systems for exercise scheduling, design, development, conduct, evaluation, and improvement planning, referred to as the Homeland

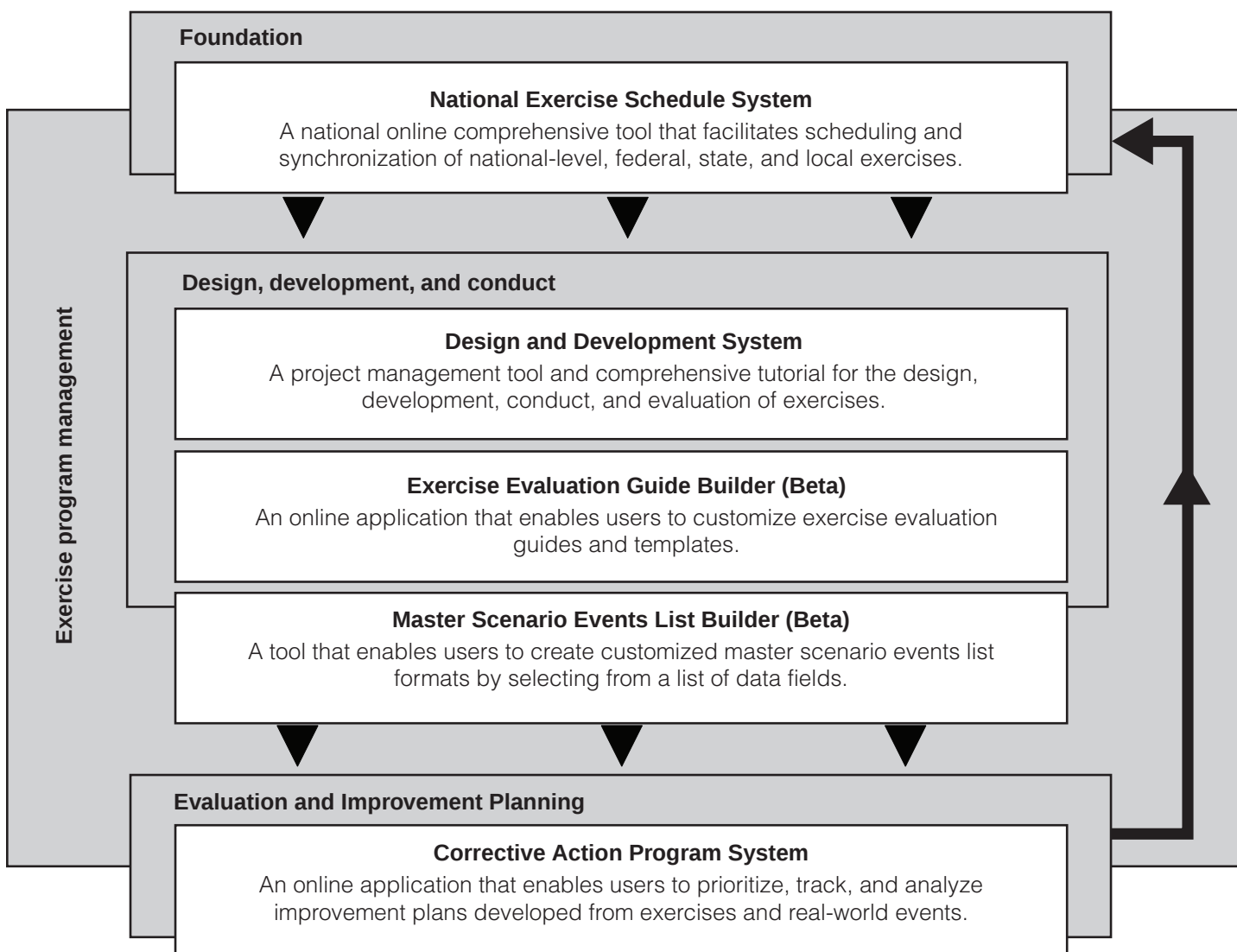
⁴⁴DHS, *Homeland Security Exercise and Evaluation Program*, Volumes 1-5 (Washington, D.C.: February 2007).

Security Exercise Evaluation Program Tool Kit (see fig. 6).⁴⁵ FEMA also has additional resources to support exercises. For example, exercise stakeholders can access FEMA's Lessons Learned Information Sharing system, an interagency Web site for posting lessons learned and sharing best practices, to learn about promising practices that could facilitate exercise activities.⁴⁶

⁴⁵https://hseep.dhs.gov/pages/1001_Toolk.aspx.

⁴⁶<https://llis.gov>.

Figure 6: Homeland Security Exercise and Evaluation Program Tool Kit



Source: GAO analysis of FEMA documentation.

NORTHCOM's Exercise Program Is Consistent with DOD's Joint Training System, but Exercise Reporting is Inconsistent

NORTHCOM's Exercise Program is Consistent with DOD's Joint Training System

NORTHCOM's Commander's Training Guidance requires that NORTHCOM establish a training and exercise program consistent with the Joint Training System and establishes that training efforts and resources will be focused on two large-scale exercises annually.⁴⁷ The Joint Training System requires, among other things, that an organization's training objectives be linked to its Joint Mission Essential Task List and include the use of the Joint Events Life Cycle for planning, conducting, and assessing exercises.⁴⁸ We found that NORTHCOM has developed a comprehensive exercise program consistent with DOD's Joint Training System. For example, NORTHCOM uses the Joint Training Information Management System to link training objectives with its Joint Mission Essential Task List. NORTHCOM officials enter information on task performance of exercise participants into the Joint Training Information Management System to evaluate the extent to which the command is trained based on performance requirements in the Joint Mission Essential Task List.⁴⁹ NORTHCOM also uses the Joint Training Information Management System to manage the Joint Events Life Cycle for its large-scale exercises, including planning exercise milestones and developing a time line that

⁴⁷U.S. Northern Command, *Commander's Training Guidance for FY 09-10*, A-11.

⁴⁸The Joint Events Life Cycle provides a sequence of the inputs, process steps, and outputs necessary to execute any size exercise. This process consists of five stages including design, planning, preparation, execution, and evaluation. A series of planning conferences provide discrete breakpoints between each stage. Chairman of the Joint Chiefs of Staff, *Joint Training Manual for the Armed Forces of the United States*, E-6.

⁴⁹NORTHCOM is given an overall rating in the system for the command's current status of "trained", "needs practice," or "untrained" for each Joint Mission Essential Task. U.S. Northern Command, *Memorandum on NORAD and USNORTHCOM Joint Training Plan FY08-09*(Colorado Springs, Colo.: July 30, 2007, A-32-A-35; Chairman of the Joint Chiefs of Staff, *Joint Training Manual for the Armed Forces of the United States*, F-5-F-6.

allows exercise planners to see where they are in the event life-cycle process. For example, NORTHCOM holds five planning conferences for each exercise, including a concept development conference, where exercise and training objectives are discussed and scenarios developed.⁵⁰ We also found that NORTHCOM has conducted 13 large-scale exercises since it was created in 2002, generally including 2 exercises each year (see table 2). Vigilant Shield is held in the fall and focuses primarily on NORTHCOM's homeland defense mission, and Ardent Sentry is generally conducted in the spring and focuses on defense support of civil authorities.

Table 2: Large-Scale NORTHCOM Exercises Since 2002

Exercise	Dates	Scenarios
Ardent Sentry 09	June 18-24, 2009	- Flooding along Mississippi River - Domestic terrorist organization releases foot and mouth disease at 4-H expo - Anthrax released into the food supply - Train derailments in Iowa and Kansas resulting in chemical releases - Domestic terrorist organization launches attack against a Wyoming Air Force Base - U.S. and Canadian maritime incidents
Vigilant Shield 09	Nov. 12-18, 2008	- Earthquake along San Andreas Fault - Homeland defense vignettes associated with mission areas
Ardent Sentry 08	May 1-8, 2008	- Category 4 hurricane strike and terrorist threat affecting National Capital Region - Accidental VX nerve gas release in Oregon - Multiple terrorist attacks in Washington to exercise both response to chemical weapons attack and specific defense support of civil authorities capabilities
Vigilant Shield 08	Oct. 15-20, 2007	- Series of exploded radiological dispersal devices - Aircraft accidents - Reverse no-fly list - Deployment of a command assessment element
Ardent Sentry 07	April 30 - May 17, 2007	- Critical infrastructure protection - Maritime operations - Detonation of a 10-kiloton improvised nuclear device in Indiana - Category III hurricane impacting the New England area

⁵⁰Chairman of the Joint Chiefs of Staff, *Joint Training Manual for the Armed Forces of the United States*, E-6-E-12.

Exercise	Dates	Scenarios
Vigilant Shield 07	Oct. 16-27, 2006 and Dec. 4-15, 2006	• Crash and explosion of plane carrying nuclear weapons • Maritime attacks/events • Rogue aircraft and North American Air Defense Command Air and Strategic Threat events • Strategic Ballistic Missile Defense Force Protection • Defense against cyber attacks
Ardent Sentry 06	May 8-18, 2006	• Hurricane strike on New Orleans, Louisiana • Explosion of a railcar carrying phosgene • U.S. and Canadian Infrastructure attack • Chemical attack • Radiological incident • Avian flu pandemic outbreak scenario
Vigilant Shield 06	Nov. 1-10, 2005	• Chemical scenario • Critical infrastructure protection of a nuclear power plant • Biological scenario • Ballistic missile defense threat • Aerospace defense
Ardent Sentry 05	Apr. 4-9, 2005	• Exercise deployment and employment of Joint Task Force-Civil Support in support of FEMA Region I mission assignment requests in a chemical response • Response to a biological event • Protection of critical infrastructure (nuclear power plant)
Determined Promise 04	Aug. 5-10, 2004	• Simultaneous terrorist air events (hijacked aircraft, aircraft with terrorists on watch list, low-altitude defense and swarm attack by business jet aircraft) • Explosion of container with radiological dispersal device in Long Beach, California harbor • Train derailment and chemical spill • Multiple sarin, mustard, and chlorine gas attacks in Virginia • Maritime intercept operations • Attack by unmanned aerial vehicles with high-explosive warheads fired from oil platform • Cyber security event • Ballistic missile defense
Unified Defense 04	Feb. 19-25, 2004	• Air threats to Alaska, Canada, and the United States • Category IV+ hurricane in Corpus Christi, Texas • Nuclear detonation in Texas • Quick reaction force deployments to Texas and Alaska • Transportation security and U.S. Coast Guard incidents in Alaska • Maritime intercept operations events • Ballistic missile defense threat

Exercise	Dates	Scenarios
Determined Promise 03	Aug. 18-28, 2003	• Terrorist attack of a biological weapon of mass destruction in Clark County, Nevada • Wildfires in the western United States • 2003 World Gymnastics Championship in California • Ongoing operational plan load-out operations • Sustained, diverse maritime events • Air threat to Alaska • High-interest vessel threat • Strategic infrastructure threats in the northwest United States • Category III hurricane in the southeast United States • Train derailment in Kentucky • Shipping and security issues in Alaska
Unified Defense 03	Feb. 6-13, 2003 ^a	• National special security event - Super Bowl • Joint Task Force-Civil Support held in strategic reserve for State of the Union Address and Super Bowl • Nuclear threat along southwest U.S. border • Border surveillance • Threat to port • Consequence management in northeast United States • Natural disaster in Alaska

Source: GAO analysis of NORTHCOM documents.

^aUnified Defense 03 started late due to the Columbia Shuttle disaster and ended early due to a level Orange alert in the Homeland Security Alert System.

NORTHCOM's Documentation of Exercises Is Generally Timely but Inconsistent

NORTHCOM guidance outlines the postexercise documentation required to be completed for each exercise, including quick look, after-action, and exercise summary reports; provides a time line for the completion of these documents; and includes general direction that these documents follow the same focus areas as the collection management plan—the source document from which exercise analysts identify, examine, and recommend emerging issues and trends.⁵¹ We found that NORTHCOM has generally completed exercise summary reports for its exercises; however, neither NORTHCOM nor Joint Forces Command officials could locate an exercise summary report for Unified Defense 03.⁵² In addition,

⁵¹U.S. Northern Command, *Operations: Exercise Program*, Instruction 10-156 (Colorado Springs, Colo.: June 2008), 20.

⁵²While NORTHCOM was unable to provide exercise summary or quick-look reports for United Defense 03, they did provide pre-exercise briefings. NORTHCOM officials told us that the exercise started late due to the Columbia shuttle disaster and ended early due to a level Orange alert in the Homeland Security Alert System.

postexercise documentation is not consistently included on NORTHCOM's portal or the Joint Training Information Management System. NORTHCOM guidance issued in June 2008 provides a time line for the completion of postexercise documents and has been applicable to 2 subsequent exercises—Ardent Sentry 08 and Vigilant Shield 09. According to the 2008 guidance, the exercise summary report is to be submitted to the NORTHCOM Commander within 90 days of completing an exercise.⁵³ The Ardent Sentry 08 and Vigilant Shield 09 exercise summary reports were issued 99 days and 92 days, respectively, after the completion of each exercise. Overall, we reviewed exercise summary reports for 11 of NORTHCOM's large-scale exercises that have taken place since 2003. Seven of the 11 exercise summary reports were issued within 100 days. Four of the reports were issued later than 100 days, and 1 of NORTHCOM's earlier reports was issued in less than 30 days.

NORTHCOM guidance states that exercise summary reports should provide the official description of the exercise, identify significant lessons learned, and be targeted toward a national audience.⁵⁴ Guidance also requires that exercise summary reports follow the same focus areas as the collection management plan—the source document from which exercise analysts identify, examine, and recommend emerging issues and trends.⁵⁵ We found that NORTHCOM's exercise summary reports generally included an executive summary, training objectives, and the exercise's major scenarios and events, but did not consistently include lessons learned, exercise strengths and weaknesses, or clear recommendations. The exercise summary reports that included a section on lessons learned lacked details. For example, 6 of the 11 exercise summary reports we reviewed included an identified lessons learned section, and just 1 of these 6 reports—Unified Defense 04—provided additional information on lessons learned beyond identifying the title of each observation and the status of the observation in the lessons learned management system. As

⁵³U.S. Northern Command, *Operations: Exercise Program*. The instruction, issued in June 2008, also requires exercise quick look reports be issued within 30 days after the completion of an exercise. The instruction is only applicable to Ardent Sentry 08 and Vigilant Shield 09, as the post-exercise documents for these reports were issued after June 2008. Post-exercise documents for all other exercises reviewed by GAO were issued prior to June 2008.

⁵⁴U.S. Northern Command, *Operations: Exercise Program*, 20.

⁵⁵U.S. Northern Command, *Operations: Exercise Program*, 20.

discussed later in this report, access to this system is required in order to obtain any additional information on the lesson learned.⁵⁶

We also found that NORTHCOM exercise summary reports have not followed the same focus areas as collection management plans.⁵⁷ For example, none of the seven exercise summary reports for NORTHCOM exercises conducted since Hurricane Katrina in 2005 reported on the information identified in the collection management plans' focus areas. Inconsistencies in exercise documentation may be occurring because DOD and NORTHCOM guidance do not require a standard format or specific content for postexercise documentation. Although NORTHCOM uses other methods to document exercises, such as the Joint Training Information Management System, this system does not include a complete record of each exercise. For example, the Joint Training Information Management System does not include the lessons learned from an exercise. In addition, access to this system is generally limited to DOD officials. Recognizing the need for a complete and consistent record of each exercise, DHS's Homeland Security Exercise Evaluation Program provides a template for exercise documentation, including format and content.⁵⁸ NORTHCOM used this template for National Level Exercise 2-08, but does not use the template for its own exercises.⁵⁹ Despite differences in the requirements and complexities of NORTHCOM's and DHS' exercise programs, the lack of a complete and consistent record of each exercise lessens the extent to which NORTHCOM can ensure it has trained to key focus areas. Further, it deprives the command of a key source of historical information upon which to base current and future assessments of exercises and a

⁵⁶ Access to JLLIS is restricted in order to safeguard sensitive information because of concerns that adversaries may be able to exploit any weaknesses contained in those records. For users to access the unclassified portion of the JLLIS they must have a DOD Common Access Card, a card reader, and appropriate computer software prior to requesting access.

⁵⁷ Collection Management Plans are generally linked to the Joint Mission Essential Tasks and exercise objectives. Focus areas include a wide range of operations, such as coordinating and integrating regional interagency activities and coordinating consequence management in theater. U.S. Northern Command, *Operations: Exercise Program*, 20.

⁵⁸ DHS, *Homeland Security Exercise Evaluation Program, Volume III: Exercise Evaluation and Implementation Plan*, (Washington, DC: February 2007), A-1 – B-2.

⁵⁹ U.S. Northern Command, *North American Aerospace Defense Command and United States Northern Command National Level Exercise 2-08: 1-8 May 2008 Exercise Summary Report*, (Colorado Springs, Colo.: Aug. 15, 2008)1-25.

consistent venue for sharing lessons learned with interagency partners and states.

Interagency Partners and States Have Participated In NORTHCOM's Exercises, but Challenges Remain with Including States in Planning, Conducting, and Assessing Exercises

Federal Agencies and States Have Participated in NORTHCOM Exercises

NORTHCOM recognizes the importance of exercising with key partners in all its missions and that, in order to achieve its goal of being trained and ready to execute joint operations and ensure a seamless operating environment, NORTHCOM should maximize exercise participation with federal, state, and local agencies and National Guard units.⁶⁰ NORTHCOM has included interagency partners, such as DHS, FEMA, and the U.S. Coast Guard, and several states in its large-scale exercises (see table 3). We found that 17 civilian federal agencies and organizations have participated to varying degrees in one or more of the seven large-scale NORTHCOM exercises that have occurred since Hurricane Katrina made landfall in August 2005. Seventeen states have participated in NORTHCOM exercises since that time, and 8 of these states—Arizona, California, Connecticut, Indiana, Michigan, Oregon, Rhode Island, and Washington—played a major role by having a portion of the exercise conducted in the state and

⁶⁰U.S. Northern Command, *Commander's Training Guidance for FY09-10*; Chairman of the Joint Chiefs of Staff, *Joint Training Manual for the Armed Forces of the United States*, CJCSM 3500.03B (Aug. 31, 2007).

having various state agencies and officials participate.⁶¹ For example, Indiana and Rhode Island played major roles in Ardent Sentry 07 for the detonation of a 10-kiloton improvised nuclear device and category III hurricane impacting the New England region, respectively. Both states established emergency operating centers and exercised large numbers of state emergency management personnel.

Table 3: Interagency Partner and State Participation in Large-scale NORTHCOM Exercises Since 2006

Exercise	Other federal agencies and organizations	States
Vigilant Shield 06	• Department of Homeland Security • Other federal organizations in the areas of homeland defense and defense support of civil authorities^b	• Connecticut • New Jersey
Ardent Sentry 06	• Coast Guard Sector Detroit District 9 • Department of Energy • Department of Health and Human Services • Department of Homeland Security • Department of Justice • Department of State • Department of Transportation • Environmental Protection Agency • Federal Aviation Administration • Federal Bureau of Investigation • FEMA • Transportation Security Agency • U.S. Coast Guard/Atlantic Area • U.S. Department of Agriculture	• Arizona - Division of Emergency Management - Joint Terrorist Task Force - Tactical Intelligence Center • Maine • Michigan - Detroit Metropolitan Airport - State Emergency Operation Center - State Police - Service Emergency Preparedness Liaison Officer - St. Clair County Regional Response Team - Wayne County

⁶¹We visited all of these states except for Connecticut and Indiana. We visited Indiana during a review of NORTHCOM's planning and interagency coordination in the spring of 2007. We also met with Nevada officials who participated in Determined Promise 03. The remaining 9 of the 17 states played lesser roles in the exercises.

Exercise	Other federal agencies and organizations	States
Vigilant Shield 07	• Department of Energy • DHS National Interagency Simulation Cell • Department of Justice • Department of Transportation • FEMA • DHS Principal Federal Official • U.S. Coast Guard • Department of Agriculture • Environmental Protection Agency • Federal Bureau of Investigation • Department of Health and Human Services • DHS Immigration and Customs Enforcement • National Geospatial Intelligence Agency • DHS Transportation Security Administration • National Security Agency • Veterans Administration	• Arizona - Pima County Emergency Management - Tucson Police and Fire • Washington, DC • Alaska
Ardent Sentry 07	• DHS-National Operations Center • FEMA • FEMA Region I • FEMA Region II • FEMA Region X • Federal Bureau of Investigation • U.S. Coast Guard Pacific Area	• Indiana - Department of Homeland Security - Indianapolis, Indiana - Marion County, Indiana • Rhode Island • Connecticut • Massachusetts • Vermont • New Hampshire • Maine • New York • Ohio • Illinois • Alaska
National Level Exercise 1-08/Vigilant Shield 08	• FEMA • DHS-National Operations Center • FEMA Regions IX and X • U.S. Coast Guard Pacific Area	• Oregon - City of Portland • Arizona - City of Phoenix • Guam^a
National Level Exercise 2-08/Ardent Sentry 08	• Department of Homeland Security • FEMA National Exercise Division • Other federal organizations in the areas of homeland defense and defense support of civil authorities^b	• Washington, DC • Oregon • Washington

Exercise	Other federal agencies and organizations	States
Vigilant Shield 09	- FEMA Region IX - Other federal organizations in the areas of homeland defense and defense support of civil authorities^b	California
Ardent Sentry 09	- Dept of Energy - Dept of Health and Human Services - Dept of Homeland Security - Environmental Protection Agency - Federal Aviation Administration - Federal Bureau of Investigation - FEMA Region VII - FEMA Region VIII - U.S. Coast Guard Operational Command - FEMA National Response Coordination Center	- Iowa - Dept of Agriculture - Dept of Health - Dept of Public Safety - Homeland Security & Emergency Management Division - Iowa State Emergency Operations Center - City of Des Moines Fire Dept. - City of Des Moines Police Dept. - Kansas - Dept of Emergency Management - Dept of Health/Environment - Dept of Agriculture - Dept of Animal Health - Dept of Transportation - Highway Patrol - Nebraska - Missouri - Wyoming

Source: GAO analysis of NORTHCOM exercise documents.

^aThe US territory of Guam is in U.S. Pacific Command's area of responsibility.

^bExercise summary reports for Ardent Sentry 08 and Vigilant Shield 06 and 09 indicate that other federal organizations in the areas of homeland defense and defense support of civil authorities participated in the exercises, but the reports do not provide specific names of organizations and we were unable to identify these organizations in the Joint Training Information Management System.

State emergency management and National Guard officials told us that they participated in NORTHCOM exercises because they wanted to better understand the (1) capabilities that NORTHCOM could bring to the response to an incident and (2) command and control issues of the troops in a state when NORTHCOM is involved. We previously reported that states' participation in NORTHCOM exercises helps to build relationships and improve coordination.⁶² Officials from all of the states we met with

⁶² [GAO-08-252](#).

told us that they derived benefits from their participation in these exercises. For example, state emergency management officials from three states told us that first-hand interaction with federal military forces and the opportunity to observe the federal response to an incident was beneficial. In addition, two state emergency management and National Guard officials told us that NORTHCOM officials were professional, well-trained, and helpful. Further, officials from five states told us that NORTHCOM provided beneficial resources, such as funds for travel to attend exercise planning conferences and contractor staff to help state officials prepare exercise scripts and injects.⁶³ Finally, officials from two states told us that the benefits of working with NORTHCOM included gaining an understanding of the resources and capabilities that NORTHCOM can provide, as well as understanding how NORTHCOM coordinates its response through FEMA.

NORTHCOM is also attempting to include states in exercises through the Vigilant Guard Program. The goal of the Vigilant Guard Program is to enhance National Guard and State emergency management agency preparedness to perform their homeland defense and Defense Support to Civil Authorities roles and responsibilities. It focuses on State Guard Joint Force Headquarters coordination with the state emergency management agency and Joint Task Force-State operations and involves multiple states and agencies. The program began in September 2004 and included one exercise in fiscal year 2005. Now the plan is to conduct four exercises annually. NORTHCOM was given management responsibility for the Vigilant Guard exercises in 2007, although the National Guard Bureau retains responsibility for budgeting for these events. Two of the four annual Vigilant Guard exercises are to be linked to major combatant command exercises, usually NORTHCOM's Ardent Sentry and Vigilant Shield. States hosting a Vigilant Guard exercise determine the objectives for these events, and NORTHCOM provides support. Separate planning begins for these Vigilant Guard exercises prior to the related planning meetings for any linked NORTHCOM exercise. NORTHCOM's Ardent Sentry 09 is linked with a Vigilant Guard exercise in Iowa with scenarios including a train derailment and a chemical spill, an epidemic outbreak, and terrorism incident.

⁶³ Injects are pieces of information presented to the training audience during an exercise in a manner similar to real-world operations to guide the training audience toward the accomplishment of the training objectives.

NORTHCOM Faces Challenges Involving Interagency Partners and States in Planning, Conducting, and Assessing Exercises

A key element to developing effective working relationships with all states is a well-thought out and consistent process for including the states in planning, conducting, and assessing exercises. Without such a process, states may be unwilling to participate in future NORTHCOM exercises, impacting the seamless exercise of all levels of government and potentially affecting NORTHCOM's ability to provide support to civil authorities. We found that challenges remain which have resulted in inconsistencies in the way that NORTHCOM involves the states in its exercises. One of DOD's challenges is adapting its exercise system and practices to accommodate the coordination and involvement of other federal, state, local, and tribal agencies that do not have the same kinds of practices or level of planning effort. Differences in exercise culture stem from differences in missions, experience, authority, scope, and resources available to DOD, interagency partners, and states. DOD has an established, authoritative, time-tested process for planning, conducting, and evaluating exercises in order to test and improve preparedness to meet its wide range of critical missions. Within DOD, training and exercises are considered a vital component of its overall mission of defending the national interests and significant resources are devoted to these activities. In contrast, DHS, as the lead for interagency homeland security efforts, is a new agency and has faced challenges since it was created due to frequent reorganization and not being fully staffed.⁶⁴ DHS and other civilian agencies and state and local governments have day-to-day missions and responsibilities that may take priority over exercises and often do not have the resources or experience to participate in or conduct exercises. For example, DOD exercises often are conducted 24 hours a day, 7 days a week and may last a week or more to enhance the realism of the exercise, while civilian agencies generally participate 8 hours per day, usually—according to NORTHCOM officials—during normal business hours, and do not exercise longer than a few days. Therefore, DOD exercises are generally longer in duration, more resource intensive, and involve more participants than other federal and state exercises. Furthermore, DOD views itself as the last line of defense and often exercises until resources are exhausted to fully assess capabilities and identify areas needing improvement. Civilian agencies and states may prefer not to exhaust resources during an exercise in order to avoid appearing unprepared for an incident and the associated political controversy.

⁶⁴Defense Science Board, *Unconventional Operational Concepts and the Homeland*, viii, xiii, 38.

Another challenge that NORTHCOM faces is exercising with the various states and territories within its area of responsibility considering the legal and historical limits of the constitutional federal-state structure. The states have a wide range and type of civilian state agencies responsible for emergency management, some of which are headed by the Adjutant General of the state, who also heads the military department or National Guard, and others are completely separate entities (see table 4).

Table 4: Emergency Management Structures of the States We Visited

State	Exercise(s)	Emergency management structure
Arizona	Ardent Sentry 06 Vigilant Shield 07	The Adjutant General is the director of the Department of Emergency and Military Affairs, which is a state agency combining Arizona's Army and Air National Guard with Joint Military Programs and Emergency Management.
California	Vigilant Shield 09 Determined Promise 4	- The California Emergency Management Agency is a Governor's cabinet-level agency that is led by a Secretary who reports to the Governor. - The Adjutant General is the head of the California State Military Department under which the National Guard operates.
Michigan	Ardent Sentry 06	- The Civilian Emergency Management and Homeland Security Division is located in the State Police Department. - The Adjutant General is the director of the Department of Military and Veteran Affairs under which the National Guard operates.
Nevada	Determined Promise 03	- The Division of Emergency Management is part of the Department of Public Safety (which also includes the Highway Patrol and State Fire Marshall). - The Adjutant General is the head of the Nevada Office of the Military which is also known as the National Guard.
Oregon	Vigilant Shield 08 National Level Exercise 1-08	The Oregon Office of Emergency Management operates administratively under the Adjutant General and the Oregon Military Department. The Adjutant General also directs, manages, and supervises the Oregon National Guard. The Office of Emergency Management's operations, however, are kept separate from those of the Oregon National Guard.
Rhode Island	Ardent Sentry 07	The Adjutant General heads the Emergency Management Agency and the National Guard. These offices are co-located with the National Guard playing a supporting role to the Emergency Management Agency.
Washington	Ardent Sentry 08 National Level Exercise 2-08	The Adjutant General heads the Military Department which houses the Washington Emergency Management Division, National Guard, Air National Guard, and State Guard.

Source: GAO analysis of NORTHCOM documents and information provided by states.

Working with states has been the responsibility of the National Guard and is relatively new for a federal military command like NORTHCOM. NORTHCOM officials face challenges in dealing with the various civilian agencies, differing emergency management structures, capabilities, and needs of the states. For example, for Ardent Sentry 08 (linked with National Level Exercise 2-08), NORTHCOM planned a scenario involving a

chemical bomb attack in Seattle, Washington without consulting the state health department or civil support team—the agencies responsible for responding to a chemical or biological attack. State officials told us that NORTHCOM invited the health department to participate once state officials informed them that they should be involved, but that the scenario was already locked in without the input of this key participant. DOD officials told us that they rely on FEMA regional offices to provide information on state agencies. However, we believe that NORTHCOM officials should have determined if all relevant agencies were included in the exercise when directly interacting with state officials during the scenario development and other planning conferences, before the scenarios were locked in. Washington emergency management officials told us that this affected the realism of the exercise.

NORTHCOM also faces challenges in balancing its training objectives with those of state agencies and organizations. State and local governments seek to exercise their first responder capabilities before having their resources overwhelmed and needing to seek federal assistance. On the other hand, NORTHCOM seeks to exercise its capability to provide support to civil authorities when local, state, and other federal resources are exhausted. This necessarily requires scenarios that exceed the states' capabilities and that stress DOD capabilities. Officials from four of the seven states we interviewed told us that NORTHCOM's exercise scenarios appeared unrealistic, overwhelmed their states too soon during the exercise, or did not allow states to fully exercise their own training objectives.⁶⁵ For example, the scenario for Ardent Sentry 06 included multiple improvised explosive devices detonating over a 4-day period in various sites, such as the City of Detroit, St. Clair and Wayne Counties, Michigan, and Windsor, Ontario, Canada with over 14,000 fatalities and a simultaneous pandemic flu outbreak in Michigan.⁶⁶ State emergency management officials told us that such a large number of casualties would overwhelm state resources almost immediately, and therefore precluded

⁶⁵Creating an exercise scenario event that is believable is critical to engaging participants in a level of play and experiential learning that will be long lasting. Defense Science Board, *Unconventional Operational Concepts and the Homeland*, 55.

⁶⁶U.S. Northern Command, *Northern American Aerospace Defense Command and United States Northern Command Ardent Sentry 06 Exercise Summary Report* (Colorado Springs, Colo.: Sept. 27, 2006), 4-6.

fully exercising training objectives for state and local responders.⁶⁷ Officials from these states told us that because they did not have the opportunity to exercise their own training objectives, they believed NORTHCOM was using them as a training tool.⁶⁸ A NORTHCOM official told us that NORTHCOM needs the states to participate in exercises and, therefore, will be flexible to accommodate other organizations' training objectives; however, NORTHCOM ultimately has its own objectives to exercise. Officials from five of seven states noted that, for example, they face budget and staffing limitations, and playing a major role in a NORTHCOM exercise often requires establishing a state emergency operations center with numerous staff and agencies involved. Given the expansive scenarios NORTHCOM uses to guide its exercises and the perception of half of the states we visited that this limits the benefits to them, we believe that the states may be less likely to expend scarce resources to participate in future NORTHCOM exercises.

Inconsistencies with how NORTHCOM involves states in planning, conducting, and assessing exercises is occurring in part because NORTHCOM officials lack experience dealing with the various state agencies and emergency management structures. Inconsistencies are also occurring because NORTHCOM has not established an informed, consistent process for including states in its exercises. One aspect of this process is the way that NORTHCOM requests state participation in its exercises. Currently, NORTHCOM has various processes for requesting that other federal departments and agencies participate in its exercises, such as making the request through the Joint Staff. FEMA officials told us that requests for state participation in NORTHCOM exercises should be made through FEMA's regional offices. However, because NORTHCOM does not have an established process for requesting state participation, officials from the states we visited told us that NORTHCOM officials made requests informally and in a variety of ways, including through the National Guard Bureau, the state's National Guard, or FEMA's regional

⁶⁷State emergency management officials told us that they attended planning meetings with NORTHCOM and raised their concern about the scenarios, but NORTHCOM officials made the decision to use the scenario anyway in order to meet their own training objectives. As a result, these officials told us that several other states dropped out of the exercise for this scenario during the planning stages.

⁶⁸The Defense Science Board recently reported that national exercises typically focus on a top-down approach where the supporting organizations are training aids to the senior-level players, instead of a bottom-up approach focusing on an integrated and layered response. Defense Science Board, *Unconventional Operational Concepts and the Homeland*, xv.

offices.⁶⁹ In some cases, such as when the state emergency management agency and state National Guard have a close working relationship, this method has been effective for NORTHCOM. However, in other cases, this method has led to more limited exercises. For example, emergency management officials from one state told us that NORTHCOM does not have full state representation if it only exercises with the state National Guard. In that case, NORTHCOM therefore misses out on interaction with other key state emergency management officials and responders and affects the realism of the exercise.

Another aspect of the lack of a consistent process for requesting state participation is potentially missing the opportunity to leverage the existing expertise of the National Guard Bureau and defense coordinating officers located in each of the 10 FEMA regional offices. As we previously reported, the National Guard Bureau and defense coordinating officers have knowledge and experience in dealing with states in their region and may be a valuable resource for NORTHCOM officials during the planning and conduct of exercises.⁷⁰ The three defense coordinating officers with whom we met told us that they participate in NORTHCOM exercises, but currently their role does not involve requesting state participation on behalf of NORTHCOM or providing state-specific information to NORTHCOM exercise officials. Without an informed and consistent process for including the states in planning, conducting, and assessing its exercises, NORTHCOM increases the risk that its exercises will not provide benefits for all participants, impacting the seamless exercise of all levels of government and potentially affecting NORTHCOM's ability to provide support to civil authorities.

⁶⁹In some cases, NORTHCOM's coordination with the National Guard has been inconsistent. For example, National Guard officials from one state told us that it is unclear whether communication with NORTHCOM should occur directly or through the National Guard Bureau.

⁷⁰Defense Coordinating Officers are senior-level military officers who provide liaison support and serve as a point of contact for federal, state, and local agencies requiring DOD support during an incident. [GAO-08-252](#).

NORTHCOM has a Systematic Lessons Learned and Corrective Action Program, but Gaps Remain

NORTHCOM Has a Systematic Lessons Learned and Corrective Action Process

DOD and NORTHCOM guidance requires that NORTHCOM identify observations during the course of normal operations, exercises, and real-world events; capture the detail required to fully understand the problem; and share valid lessons learned and issues as widely as possible.⁷¹ NORTHCOM has been identifying observations, lessons learned, and needed corrective actions from its exercises and operations since the command was created in 2002. NORTHCOM collects and tracks observations through the Joint Lessons Learned Information System (JLLIS)—the automated official DOD system for managing and tracking exercise observations and recording lessons learned.⁷² As of April 2009, DOD exercise participants input 94 observations into JLLIS during NORTHCOM's most recent large-scale exercise, Vigilant Shield 09. Table 5 shows the observations entered into JLLIS or its predecessor for NORTHCOM's major exercises since 2006.⁷³

⁷¹Chairman of the Joint Chiefs of Staff, *Joint Lessons Learned Program*, Instruction 3150.25D, A-1 and A-6; U.S. Northern Command, *Commander's Training Guidance FY 09-10*, A-4, A-8, A-20, A-2-8; U.S. Northern Command, *Lessons Learned Program and Corrective Action Board Process*, 2.

⁷²The Joint Staff develops joint lessons learned policy and serves as the program manager for JLLIS.

⁷³JLLIS became the system of record in October 2008. Prior to that NORTHCOM's lessons learned system was the Advanced Lesson Management System.

Table 5: Number of Observations Input into Lessons Learned Management System for Large-Scale Exercises Since 2006

NORTHCOM exercise	Unclassified observations^a	Classified observations	Total observations per exercise
Vigilant Shield 09	75	19	94
Ardent Sentry 08 (National Level Exercise 2-08)	46	0	46
Vigilant Shield 08 (National Level Exercise 1-08)	34	0	34
Ardent Sentry 07	113	4	117
Vigilant Shield 07	95	12	107
Ardent Sentry 06	54	2	56
Vigilant Shield 06	12	1	13

Source: Joint Lessons Learned Information System.

Note: This includes active records on the Non-Secure Internet Protocol Router Network as of April 9, 2009; and on the Secure Internet Protocol Router Network (classified and unclassified) as of May 4, 2009.

^aIncludes unclassified active records from the Secure Internet Protocol Router Network.

The philosophy and approach of NORTHCOM's Lessons Learned Program have been largely the same since NORTHCOM published its first instruction for the program in 2003,⁷⁴ although the requirement to re-observe corrective actions in a subsequent exercise or operation before closing them was not established until 2005.⁷⁵ We found that NORTHCOM generally has a systematic lessons learned and corrective action program, based on clear procedures and a regular process. Observations are assigned to an office of primary responsibility within NORTHCOM and categorized as either a lesson learned—a positive finding—or an issue which requires corrective action. NORTHCOM's intent is to manage and resolve issues requiring corrective action at the lowest organizational level possible. This responsibility is generally within NORTHCOM's various directorates, component commands, or a Joint Task Force.⁷⁶ Issues may be closed at the directorate level without external approval or oversight.

⁷⁴U.S. Northern Command, *Lessons Learned Policy and Guidance*, Operating Instruction 36-104, (Colorado Springs, Colo.: Oct. 1, 2003).

⁷⁵Chairman of the Joint Chiefs of Staff, Instruction 3150.25B, *Joint Lessons Learned Program*, A-2 –A-3 (Washington, D.C.: February 15, 2005).

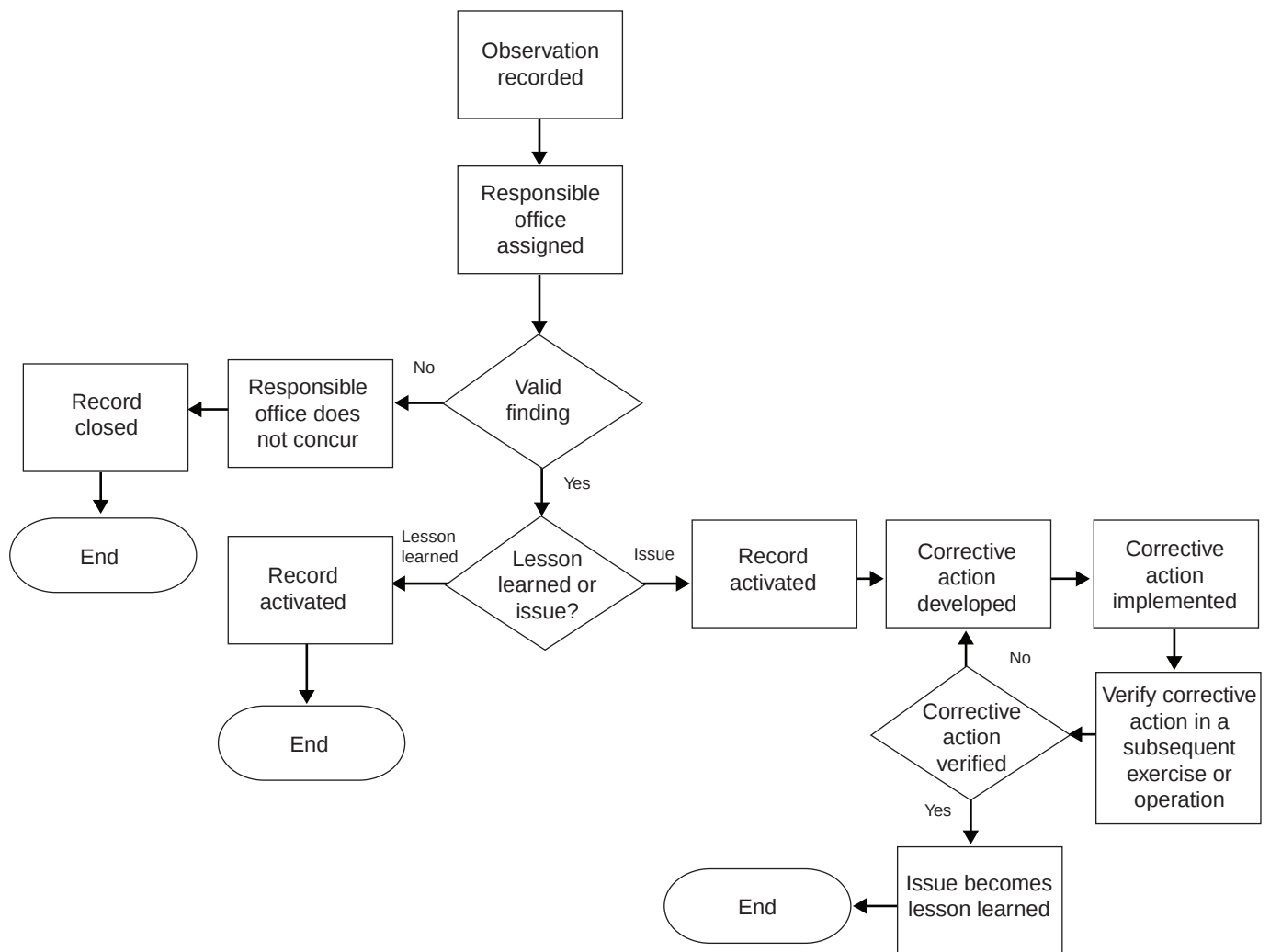
⁷⁶Those component commands, such as Army Forces North or Air Force North, may also have a lessons learned program of their own.

Broader scope or more sensitive issues requiring the involvement of more than one directorate or subcommand go into the formal corrective action board process for review, tracking, and approval as necessary.⁷⁷ This formal process includes two boards—the Corrective Action Board and the Executive Corrective Action Board—to review and resolve issues.⁷⁸ Figure 7 illustrates the flow of NORTHCOM's lessons learned and corrective action process.

⁷⁷The Corrective Action Board process is intended to provide a means for addressing commandwide issues and ensuring these issues are tracked, resolved, and verified.

⁷⁸The Corrective Action Board Working Group is chaired by the head of the Joint Training and Exercises Directorate, and includes representatives from each NORTHCOM directorate and subordinate command and reviews issues requiring extensive coordination across directorates and subordinate commands or action by an organization(s) external to NORTHCOM. The Executive Corrective Action Board is chaired by NORTHCOM's Chief of Staff and comprised of the heads of the directorates and subcommands and reviews sensitive issues requiring decisions by senior leaders or actions of organizations outside of NORTHCOM, such as the Joint Staff. For example, lessons learned that are shared with DHS are reviewed by the Executive Corrective Action Board before they are forwarded to the Joint Staff.

Figure 7: NORTHCOM Lessons Learned and Corrective Action Process



Source: GAO analysis of NORTHCOM guidance.

Gaps Remain with Collecting Observations From and Sharing Lessons Learned with Interagency Partners and States

JLLIS was intended to make lessons learned more widely available; however, we found that non-DOD exercise participants have limited access to this system, which presents challenges for NORTHCOM in collecting observations from and sharing lessons learned with interagency partners and states.⁷⁹ Joint Staff and NORTHCOM officials told us that only a small number of interagency staff and no state representatives currently have access to JLLIS and therefore are not able to directly input exercise observations or review NORTHCOM's lessons learned through this system.⁸⁰ DOD officials told us that access to JLLIS is restricted in order to safeguard sensitive information because of concerns that adversaries may be able to exploit any weaknesses contained in those records. On the other hand, NORTHCOM officials told us that most of the observations collected from exercises are unclassified, and we found this to be true for more than 90 percent of the observations from NORTHCOM's six most recent exercises. The vast majority of the observations we reviewed are listed as unclassified and few records indicate they have a "For Official Use Only" restriction. For users to access the unclassified portion of the JLLIS they must have a DOD common access card, a card reader, and appropriate computer software prior to requesting access. Special security arrangements must be made for granting JLLIS access to civilian federal officials who do not possess common access cards but have other federally issued personal identification verification cards. These officials cannot access JLLIS because they also lack the appropriate software to operate the personal identification verification cards within the system. In an attempt to address this gap and gather more input from non-DOD exercise participants, in April 2008 NORTHCOM officials placed a Word document template on its internet portal to provide a venue for non-DOD exercise participants to record exercise observations. Any observations provided in this format would be input by NORTHCOM Joint Training and Exercise

⁷⁹NORTHCOM has a process for sharing lessons learned from National Level Exercises that are applicable to the interagency to DHS through the Joint Staff. Thus far, NORTHCOM has provided three issues requiring corrective action from National Level Exercise 2-08 conducted in May 2008.

⁸⁰Joint Staff officials told us that about 10 Department of State officials have access to JLLIS, and DHS and Department of Energy officials have requested access for some of their staff. Other departments and agencies, such as the Federal Bureau of Investigation and Department of Health and Human Services, have received briefings about JLLIS, but have not requested access. The Joint Staff official also told us that his office does not have enough staff to support a large number of non-common access card users requesting JLLIS access, and granting access would be a lengthy process due to the software and security requirements that must be addressed.

Directorate officials into JLLIS. However, NORTHCOM's portal requires the same DOD-issued card to gain entry.⁸¹ In addition, NORTHCOM's lessons learned manager told us no one has submitted observations using the template since it was put on the portal. This may be because the command has not actively publicized how to access the template and underscored the value to the command of obtaining observations from interagency partners and states. In response to our inquiries in May 2009, NORTHCOM's lessons learned manager told us that the command is in the process of adding a link to DHS's Homeland Security Information Network so that interagency partners and states will be able to submit lessons learned which can subsequently be transferred to JLLIS by NORTHCOM officials.⁸²

In addition to collecting observations using JLLIS, NORTHCOM can obtain lessons learned from interagency partners and states during postexercise meetings. NORTHCOM conducts a review called a Hotwash within hours of completing the exercise so that exercise participants can discuss observations that significantly impacted their mission and recommend emergent themes for discussion during a subsequent review known as the facilitated after-action review. This review, generally held 7 days after the exercise is completed, provides an opportunity to present major issues to senior leaders and obtain the Commander's guidance for resolution. However, the extent to which interagency and state officials are attending and participating in NORTHCOM's postexercise meetings is unclear. Based on NORTHCOM's documentation, only two states (out of the last six major exercises) participated in a Facilitated After Action Review—California in Vigilant Shield 09 and Alaska in Ardent Sentry 07. Officials from three states in addition to California told us that they participated in the after-action meeting for the exercises they participated in, but they may have participated in the regional or national-level meeting rather than NORTHCOM's.⁸³ Officials from two of the seven states we met with told us that they did not attend NORTHCOM's postexercise reviews for the

⁸¹NORTHCOM's lessons learned manager told us that those without cards that have a valid need for access to the portal must work with NORTHCOM's Help Desk staff to register for an account.

⁸²DHS's Web-based Homeland Security Information Network facilitates information sharing and collaboration between federal, state, local, tribal, private sector, and international partners involved in homeland security.

⁸³Depending on the exercise, for example if it is linked to a national level or regional exercise, multiple Facilitated After Action Reviews may take place.

exercises in which they participated at least partly due to staffing and budget limitations.

NORTHCOM has also attempted to share lessons learned with other federal agencies and states by using FEMA's lessons learned sharing system. For example, NORTHCOM has posted six reports onto FEMA's lessons learned system, including four recent exercise reports and two reports from operations in 2008.⁸⁴ However, with one exception, the documents that NORTHCOM has made available on this system (1) include only lists of observations and, in some cases, record-tracking numbers from JLLIS and previous lessons learned systems, and (2) lack detailed information on individual lessons learned and corrective actions.⁸⁵ Joint Staff and NORTHCOM officials told us that they do not post detailed information on the unclassified Lessons Learned Information Sharing system Web site, because it is not adequately protected from the potential for unauthorized access to records. As a result, the security of the information cannot be assured. According to these officials, if an adversary nation or terrorist group gained access to this information, it may be possible for them to identify weaknesses in NORTHCOM's operations that can be exploited. In a recent exercise summary report NORTHCOM stated that it will post lessons learned, best practices, and reports that may benefit their non-DOD mission partners in FEMA's Lessons Learned Information Sharing system, which the report describes as a secure, restricted-access information system.⁸⁶ Because security concerns are preventing NORTHCOM from openly sharing all its unclassified lessons learned with its interagency partners and the states, the information NORTHCOM does provide may be of limited value for helping its partners improve the nation's disaster responsiveness. Because NORTHCOM is not fully involving other federal agencies and states in its lessons learned process, it is missing opportunities to learn lessons from an exercise. For example, officials from two states did not provide NORTHCOM with lessons learned from exercises because they did not

⁸⁴NORTHCOM reports posted on FEMA's Lessons Learned Information Sharing system include exercise summary reports for National Level Exercise 1-08 (Vigilant Shield 08), and Ardent Sentry 2007; two copies of the Quick Look Report for National Level Exercise 2-08; NORTHCOM Support for 2008 Hurricane Season Operations Summary Report; and NORTHCOM Support for 2008 Political Conventions Operations Summary Report.

⁸⁵We found one document where details were provided on 12 observations.

⁸⁶U.S. Northern Command, *National Level Exercise 2-08 Exercise Summary Report* (Colorado Springs, Colo.: Aug. 15, 2008), 16.

attend the command's post exercise reviews. As a result, NORTHCOM risks the reoccurrence of potential problems that were not identified in its process.

NORTHCOM Faces Challenges Managing Corrective Actions

DOD and NORTHCOM guidance requires that issues requiring corrective actions be tracked and remain open until the solutions are completed and verified as effective—through training, operations, or exercises.⁸⁷ We found that NORTHCOM directorates and subcommands are closing some issues prematurely, without confirming that corrective actions were made or verifying in a subsequent exercise or operation that the corrective action is effective. We reviewed unclassified records in JLLIS from NORTHCOM's previous six large-scale exercises and found at least 77 of the 375 records or about 20 percent required corrective actions but were either closed prior to completing the corrective action or closed without verifying the effectiveness of the corrective action.⁸⁸ For example, an observation was made during Ardent Sentry 07 that NORTHCOM did not have a process for addressing a foreign nation's offer of military-to-military assistance in a major disaster. The issue was validated and the corrective action developed, but the issue was closed by the originating organization before the corrective action could be verified or reobserved in a subsequent exercise.⁸⁹ The record was closed even though the Executive Corrective Action Board directed that it remain open until an exercise of suitable scope to require significant military support was developed.⁹⁰ Another example of a record being closed without verification or re-observation is an observation made during Ardent Sentry 07 raising concerns that NORTHCOM personnel could arrive to assess a disaster site

⁸⁷Chairman of the Joint Chiefs of Staff, Instruction 3150.25D, *Joint Lessons Learned Program* (Washington, D.C.: Oct. 10, 2008), A-8; U.S. Northern Command, *Lessons Learned Program and Corrective Action Board Process*, Instruction 16-166 (Colorado Springs, CO: Mar. 16, 2009), 14; Prior Chairman of the Joint Chiefs of Staff guidance also required that corrective actions be tracked and remain open until the solutions are completed and verified.

⁸⁸We reviewed active records from NORTHCOM's large-scale exercises that were conducted between May 2006 and November 2008 for Ardent Sentry 2006, 2007, and 2008 and Vigilant Shield 2007, 2008, and 2009.

⁸⁹The corrective action included a set of checklists and processes added to the command's battle staff operating procedures.

⁹⁰The scenarios developed for NORTHCOM's next two applicable major exercises were not of sufficient scope to induce another nation, other than Canada, to offer military assistance.

without alerting state officials they would be coming. As a result, NORTHCOM developed a new Command Assessment Element Concept of Execution⁹¹ in July 2007 to promote better command and control and situational awareness; however, the issue was closed before the procedure could be observed in a subsequent exercise or operation to verify effective resolution.

These issues are likely being closed without verification or re-observation, because NORTHCOM Training and Exercise Directorate officials do not have oversight over the disposition of open issues that are resolved within directorates or are unable to give long-standing issues the sustained management attention needed to ensure resolution. NORTHCOM's lessons learned manager told us that the command does not have the staff necessary to oversee the actions on records handled within the other directorates. In addition, while the checkbox format in JLLIS makes it easy to see whether an issue is open, awaiting verification, or closed, entries made in JLLIS regarding corrective actions required, implementation date, and plan for verification are primarily in a narrative format, which may make the review and oversight process more time consuming. Without sufficient oversight, NORTHCOM cannot ensure that corrective actions are verified and reobserved in a subsequent exercise or operation before the issue is closed, so that the command knows the solution is effective. We recognize that such oversight should be addressed without significantly stressing NORTHCOM's staff. However, if NORTHCOM does not ensure that corrective actions are fully resolved, it increases the risk that these issues may occur again, possibly during crucial, real-world situations. This lack of oversight, coupled with the lack of a well-thought out and consistent process for including the states in assessing exercises as discussed earlier in this report, further limits the knowledge gained and value of the exercise for all participants.

⁹¹The Command Assessment Element is a team supporting NORTHCOM's commander by providing situational awareness from a disaster or incident site.

NORTHCOM Has Taken Steps to Integrate Its Exercises with the National Exercise Program, but Guidance Is Not Consistently Applied

NORTHCOM Has Participated in National Exercises and Taken Steps to Integrate with the NEP

Since the NEP Charter was approved in January 2007, NORTHCOM has participated in the major national exercise held under the NEP and taken steps to integrate its exercises into the national program.⁹² NEP guidance requires that heads of departments and agencies actively participate in tier I exercises and recommends participation in tier II exercises either through the National Exercise Simulation Center or as determined by agency leadership.⁹³ Departments or agencies can participate in the NEP by combining an existing exercise with a NEP exercise, taking part in a tier II exercise sponsored by a different department or agency, or requesting to lead a tier II exercise to obtain greater interagency participation and support. DOD guidance requires that components participate in or lead planning efforts of NEP exercises as appropriate given the scenario or as tasked by the Assistant Secretary of Defense, Homeland Defense and America's Security Affairs or the Chairman of the Joint Chiefs of Staff.⁹⁴ NORTHCOM's training guidance specifies the NEP exercises in which the command plans to participate during the following 2 fiscal years.⁹⁵ NORTHCOM combined two of its large-scale exercises—Vigilant Shield 08 and Ardent Sentry 08—with major national exercises

⁹²For the purpose of this report, we are defining major national exercises as operations-based NEP exercises involving the deployment of personnel or forces to conduct operations from the federal, state, and local levels.

⁹³DHS, *National Exercise Program Implementation Plan*.

⁹⁴DOD, *DOD Participation in the National Exercise Program*, Instruction 3020.47, (Washington, D.C.: Jan. 29, 2009), 10.

⁹⁵The command's Joint Training Plan, which includes the commander's training guidance, is revised and updated annually. U.S. Northern Command, *Commander's Training Guidance for FY 09-10*.

and has taken part in two additional exercises sponsored by other departments (see table 6). For example, National Level Exercise 1-08, a tier I exercise, and NORTHCOM's Vigilant Shield 08 were conducted October 15 -20, 2007, in parallel with Top Officials 4⁹⁶ and several other exercises.⁹⁷ These exercises were linked together by the use of common scenarios and objectives intended to test existing plans, policies, and procedures to identify planning and resource gaps and develop corrective actions to improve preparedness against a weapons of mass destruction attack.

Table 6: NORTHCOM Participation in National Level and Tier II Exercises Since 2007

Exercise and tier	Date	Main scenario	Primary sponsor/lead	Description of NORTHCOM participation
National Level Exercise 1-08 (I)	October 2007	Radiological dispersal device attack	FEMA	Linked Vigilant Shield 08 to exercise
National Level Exercise 2-08 (II)	May 2008	Hurricane, terrorist chemical attack, accidental chemical release	FEMA	Linked Ardent Sentry 08 to exercise
Diablo Bravo (II)	July 2008	Nuclear weapons incident	Department of Energy/ National Nuclear Security Administration	Provided initial DOD response support for Department of Energy
Empire 2009 (II)	June 2009	Radiological dispersal device Attack	National Nuclear Security Administration	Provided Defense Coordinating Officer support

Source: GAO analysis of DHS and NORTHCOM documentation.

Note: We limited the scope of our finding to major national exercises sponsored at the federal level and planned after National Level Exercise 1-08, the first major exercise conducted under the NEP.

NORTHCOM officials told us that they generally would like to participate in NEP exercises to achieve the benefits of exercising with interagency partners, but in some cases it is not beneficial to do so. For example, the officials told us NORTHCOM decided not to combine Ardent Sentry 09

⁹⁶The Top Officials exercise, better known as TOPOFF, is the nation's terrorism preparedness exercise involving officials at every level of government and representatives from the international community and private sector. Sponsored by DHS, TOPOFF 4 shared the same radiological dispersal device scenario in Vigilant Shield 08 and included more than 100 organizations.

⁹⁷National Level Exercise 1-08 included Global Lightning 08 at U.S. Strategic Command, Positive Response 08-1 for the Chairman, Joint Chiefs of Staff, Blue Flame in the United Kingdom, Pacific Challenge in Australia, a U.S. Southern Command Response Cell due to Able Warrior 08-1 date change, and an unnamed exercise at U.S. Pacific Command.

with National Level Exercise 09—a tier 1 exercise scheduled for July 2009—because the objectives and scenarios for the exercises did not meet their training needs. Although NORTHCOM officials will conduct Ardent Sentry 09 separately, they are using the National Exercise Simulation Center—FEMA’s newly established training and exercise facility—to provide a test run for the center’s use in National Level Exercise 09.⁹⁸

DOD and NORTHCOM have taken steps to integrate exercises with the National Exercise Program, including posting the command’s exercises on DHS’s National Exercise Schedule, successfully applying to lead a tier II exercise, and publishing guidance on integration with the NEP. The NEP Implementation Plan recommends that federal departments and agencies post exercises on the NEP’s National Exercise Schedule so that exercises and planning meetings can be synchronized across the federal government.⁹⁹ NORTHCOM has posted its annual Ardent Sentry and Vigilant Shield exercises for the first 4 of 5 fiscal years on the national schedule, while FEMA’s National Exercise Division has posted exercises for the first 3 fiscal years. As of June 2009, neither the Joint Staff nor any other combatant commands have posted exercises on the national schedule. In addition, NORTHCOM recently requested and was granted approval to lead Vigilant Shield 10 as a tier II exercise scheduled for November 2009. Vigilant Shield 10 should have greater interagency participation than it would have received as a tier 3 exercise, since federal departments and agencies will be required, at a minimum, to participate in the National Exercise Simulation Center. As of May 2009, the participants of Vigilant Shield 10 include the DHS and the Departments of Justice, Energy, Transportation, Health and Human Services, and Veteran Affairs; the Joint Chiefs of Staff and U.S. Joint Forces Command; and other government and nongovernment organizations.¹⁰⁰ This exercise will be the first time that NORTHCOM will share planning responsibilities with FEMA’s National Exercise Division. This exercise will also be linked to a

⁹⁸FEMA’s National Exercise Simulation Center opened on January 12, 2009, to provide a national, shared facility to train and exercise and improve coordination for all-hazards preparedness. The goal was to pool resources, maximize efficiency, and provide sustained exercise and training support to all participants.

⁹⁹FEMA officials told us that only tier 1 and 2 exercises are required to be included in the national schedule, but encouraged the inclusion of Tier 3 exercises.

¹⁰⁰The list of participating departments or agencies may change as the planning for Vigilant Shield 10 progresses.

Canadian government an exercise to demonstrate its readiness for the 2010 Olympics in Vancouver.

NORTHCOM Has Not Consistently Applied NEP Guidance

NEP guidance includes policies and tools for the design, planning, conduct, and evaluation of exercises—known as the Homeland Security Exercise and Evaluation Program, which creates a common exercise policy and consistent terminology for exercise planners and serves as the foundation of NEP exercises.¹⁰¹ FEMA requires that entities, such as state and local governments, receiving homeland security grant funding for their exercises adhere to specific Homeland Security Exercise Evaluation Program guidance for exercise program management, design, conduct, evaluation, and improvement planning.¹⁰² We reviewed key program documents, such as the Implementation Plan, and found that this guidance is unclear about the extent to which federal agencies should use the Homeland Security Exercise Evaluation Program. For example, the Implementation Plan states that the NEP does not displace a preexisting exercise program, and none of the NEP guidance requires that federal agencies use the Homeland Security Exercise Evaluation Program. However, the Implementation Plan states that the Homeland Security Exercise Evaluation Program will serve as the doctrinal foundation for NEP exercises.

FEMA officials told us that federal agencies should use this program when participating in tier I and tier II exercises so that the various exercise participants have consistency when planning, conducting, and assessing exercises. We found that NORTHCOM generally has used DOD's Joint Training System guidance for planning NEP exercises, defining capabilities, and reporting exercise results.¹⁰³ NORTHCOM officials told us that the Joint Training System is consistent with the NEP and served, in part, as the basis for the Homeland Security Exercise and Evaluation

¹⁰¹This plan was revised in June 2008, but has not been formally approved by the current administration. However, FEMA officials told us that they intend to execute the NEP using the latest revision of the plan. DHS, *DRAFT National Exercise Program Implementation Plan* (Washington, D.C.: June 20, 2008).

¹⁰²[GAO-09-369](#), p. 35.

¹⁰³NORTHCOM officials told us that they have used Homeland Security Exercise Evaluation Program guidance in one case when they drafted the exercise plan for NLE 2-08, because their state and local exercise partners were required to use this guidance.

Program.¹⁰⁴ We found that these sets of guidance have similar processes but use different methods for defining the tasks and capabilities that are performed and validated in an exercise. The primary differences between these sets of guidance are that (1) DOD's task list, which serves as the basis for its exercises, includes tasks that are specific to military missions, such as troop movements and sealifts; (2) DHS guidance provides more detailed criteria for the postexercise documentation, such as content and format; and (3) DHS's planning cycle is generally shorter—9 to 15 months versus 12 to 18 months for DOD. (See table 7.) See app. II for a more detailed comparison.

Table 7: Comparison of Areas of Application between DOD's Joint Training System and DHS's Homeland Security Exercise Evaluation Program

Areas of application	Joint Training System	Homeland Security Exercise Evaluation Program
Methods for defining tasks and capabilities	- Derived from Joint Mission Essential Task Lists. - Users may also develop tasks using the Universal Joint Task List.	- Derived from Target Capabilities List or Universal Task List. - Users may also develop tasks using the Universal Task List.
Reporting requirements	- Issue a Quick Look Report and an Executive Summary Report. - No detailed guidelines on content for either report. - No detailed guidelines on content found in the required Quick Look or Exercise Summary Report.	- Issue a Quick Look Report and an After Action Report/Improvement Plan. - Provides detailed guidelines on content for both reports, including templates. - Provides detailed guidelines on content for both the required Quick Look Report and the required After Action Report/Improvement Plan.
Planning cycle	- Uses the Joint Event Life Cycle, has five stages: design, planning, preparation, execution, and evaluation. - Intended to be flexible and can be modified to any type of event. Can span a period of 12 to 18 months for exercises.	- Uses the Homeland Security Exercise Evaluation System's Exercise Cycle, employs five phases: foundation, design and development, conduct, evaluation, and improvement planning. - Intended to be adaptable to any type of exercise. Can span a period of 9 to 15 months.
Lessons learned/corrective actions systems	Joint Lessons Learned Information System manages and tracks Lessons Learned and corrective actions.	- FEMA's Lessons Learned Information Sharing System manages and disseminates lessons learned. - DHS's Corrective Action Program system manages corrective actions.

Source: GAO analysis of DOD and DHS documentation.

¹⁰⁴NORTHCOM's training guidance for fiscal years 2008-2009 stated that the command will adhere to the guiding principles of the Homeland Security and Exercise Evaluation Program, but this reference has been removed from guidance for fiscal years 2009-2010.

According to both the Homeland Security Exercise and Evaluation Program and Joint Training System guidance, it is important to link tasks and capabilities with exercise objectives to ensure that participants exercise or train as they would perform in a real-world event. The Homeland Security Exercise and Evaluation Program recommends using DHS's Target Capabilities List or the Universal Task List to formulate the tasks and capabilities that underlie the objectives for an exercise.¹⁰⁵ These lists describe the capabilities government entities need and tasks they are expected to perform to prevent, protect against, respond to, and recover from incidents of national significance. In contrast, NORTHCOM derives its tasks and capabilities from the Universal Joint Task List to formulate Joint Mission Essential Tasks. According to NORTHCOM guidance, the command is required to include in its exercises the Joint Mission Essential Tasks associated with its Joint Training Plan, which is updated annually.¹⁰⁶ These tasks are identified by joint force commanders as most essential to their assigned or anticipated missions with priority given to their wartime missions and describe their priority wartime requirements. We found that DOD's operating instruction for participation in the NEP does not provide guidance on how DOD components should incorporate tasks and capabilities derived from sources recommended by the Homeland Security Exercise and Evaluation Program when participating in NEP exercises.¹⁰⁷ The primary differences between DHS' and DOD's lists are that DOD's task lists generally incorporate more descriptive metrics and criteria to assess performance and include tasks that are specific to military missions, such as troop movements and sealifts. In some cases, state National Guards officials have had to translate DOD task lists into DHS tasks lists when working with their civilian partners and vice versa.

We also found that neither DOD's nor NORTHCOM's guidance for developing postexercise reports includes the same degree of specificity recommended in the Homeland Security Exercise Evaluation Program. For example, both sets of exercise guidance require postexercise reports; however, the Homeland Security Exercise Evaluation Program provides templates and guidance for these documents, including requiring an improvement plan to clearly outline the corrective actions needed, which

¹⁰⁵DHS, *Homeland Security Exercise and Evaluation Program, Volume 1: HSEEP Overview and Exercise Program Management* (Washington, D.C.: February 2007).

¹⁰⁶U.S. Northern Command, *Operations: Exercise Program*, pp. 4-5.

¹⁰⁷DOD, *DOD Participation in the National Exercise Program*, Instruction 3020.47, 7-8.

are not included in DOD's or NORTHCOM's guidance. In addition, NORTHCOM's exercise summary reports for National Level Exercise 1-08 and 2-08 did not contain all information recommended by the Homeland Security Exercise Evaluation Program. For example, NORTHCOM did not include the recommended analyses regarding the capabilities and tasks tied to the exercises' objectives.

As stated above, we reviewed NEP guidance such as the Implementation Plan and found it does not clearly state the extent to which federal agencies are required to follow the Homeland Security Exercise and Evaluation Program. As a result of this unclear guidance, we found that agency officials have varying interpretations of the requirements. For example, a DOD and a Joint Staff official told us that NEP guidance does not require agencies to use the Homeland Security Exercise Evaluation Program even for NEP exercises. Therefore, NORTHCOM uses the Joint Training System rather than the Homeland Security Exercise and Evaluation Program as the basis for planning, conducting, and assessing exercises. However, officials from FEMA's National Exercise Division told us that all participating agencies should use the Homeland Security Exercise and Evaluation Program guidance for tier I and tier II NEP exercises.¹⁰⁸ FEMA officials stated that federal departments and agencies should be held accountable for meeting key requirements, but that FEMA's authority is limited to guiding, supporting, and coordinating with, but not directing other federal departments and agencies to comply with guidance. As we have previously reported, we believe that FEMA's expanded leadership role under the Post-Katrina Act provides FEMA opportunities to instill a shared sense of responsibility and accountability on the part of all agencies.¹⁰⁹

Neither DOD nor NORTHCOM guidance specifically addresses the extent to which DHS's Homeland Security Exercise and Evaluation Program planning and documentation requirements should be followed.¹¹⁰ We recognize that NORTHCOM and DOD must meet their own mission and

¹⁰⁸ According to FEMA officials, since tier I and II exercises are interagency exercises, the Homeland Security Exercise and Evaluation Program should be used because it was designed for the interagency community.

¹⁰⁹ [GAO-09-369](#).

¹¹⁰ NORTHCOM guidance states the Vigilant Guard Program should use Homeland Security Exercise and Evaluation Program formats to encourage civilian agency participation. U.S. Northern Command, *Commander's Training Guidance: Fiscal Year 2009-2010*, A-18.

exercise requirements and the Joint Training System may be best suited for NORTHCOM's exercises; however, all of the states we visited use Homeland Security Exercise and Evaluation Program guidance. We found that having differing sets of guidance, such as DOD's and DHS' capabilities task lists and postexercise documentation requirements, makes exercises more difficult and potentially limits the benefits for participating states. For example, officials from three states we visited told us that using NORTHCOM's exercise planning and reporting requirements rather than Homeland Security Exercise Evaluation Program guidance has made the processes more difficult. Further, the Defense Science Board found that inconsistent approaches to the development and content of postexercise documentation may affect the ability of organizations to fully learn lessons identified in exercises.¹¹¹ We also reported that when other federal entities carry out processes that do not specifically follow the Homeland Security Exercise and Evaluation Program, FEMA managers do not have the necessary data to measure progress, identify gaps in preparedness, and track lessons learned—key objectives of the NEP.¹¹² We believe that achieving national preparedness requires a whole-of-government approach and is a shared responsibility among federal, state, local, and tribal governments and organizations and an integration of their various standards, policies, and procedures into the national system.¹¹³

Conclusions

There is an increasing realization within the federal government that an effective, seamless national response to an incident requires a strong partnership among federal, state, and local governments and organizations, including integrated planning, training, and the exercise of those plans. For DOD, the effective execution of civil support, especially amid simultaneous, multijurisdictional disasters, requires ever-closer working relationships with other departments and agencies and at all levels of government. NORTHCOM's use of DOD's Joint Training System has provided a robust process for planning and conducting exercises to improve preparedness to achieve its homeland defense and civil support missions, and its efforts to involve its interagency partners and the states in exercises have helped to reduce uncertainty about the process for responding to an incident. However, without a consistent record of what

¹¹¹Defense Science Board, *Unconventional Operational Concepts and the Homeland*.

¹¹²[GAO-09-369](#), p. 42.

¹¹³[GAO-09-369](#), p. 68.

has occurred during an exercise that is accessible by all exercise participants, including those from other federal agencies and states, NORTHCOM cannot ensure that it has met internal standards, trained to key focus areas, or compared the goals and results of exercises over time. Further, a key element to developing effective working relationships with all states is a consistent process for including states in planning and executing NORTHCOM's exercises that incorporates state-specific knowledge and information. By coordinating consistently with organizations, like FEMA and NGB, that have knowledge and experience dealing with states, NORTHCOM can improve the value and effectiveness of exercises for all of the participants involved.

Exercises provide an opportunity to enhance preparedness by collecting, developing, implementing, and disseminating lessons learned and verifying corrective action taken to resolve previously identified issues. NORTHCOM's clear procedure for capturing observations in JLLIS and identifying issues needing corrective action has helped to improve its capabilities to complete its missions. However, by not providing federal agencies and states greater access to its lessons learned process, NORTHCOM will lose opportunities to learn valuable lessons from an exercise, particularly observations from the states that could enhance coordination and build more effective interagency relationships. Further, the risk that issues may reoccur will be increased, particularly when interagency partners are not aware of key issues or concerns that might impede the government's overall responsiveness to a natural or man-made disaster. In addition, when corrective actions remain open until fully implemented and verified in a subsequent exercise, NORTHCOM will have greater assurance that issues raised during exercises are being adequately addressed and the corrections are in fact solving the problems identified.

NEP policies and tools for the design, planning, conduct, and evaluation of exercises are intended to create a common exercise policy and consistent terminology for exercise planners across all levels of government to improve the federal government's ability to evaluate national preparedness. The steps DOD and NORTHCOM have taken to integrate exercises with the NEP have helped DHS to prioritize and coordinate federal exercise activities and enhance the federal government's ability to respond to an incident. We recognize that NORTHCOM and DOD must meet their own mission and exercise requirements and the Joint Training System may be best suited to meet the high standards required for NORTHCOM's exercises. However, achieving national preparedness requires shared responsibility among federal, state, and local governments and organizations and an integration of their various standards, policies,

and procedures into the national system. We also recognize that the NEP continues to evolve and become more useful to federal and state partners. However, in the absence of clear guidance from DHS on the extent to which agencies should use Homeland Security Exercise Evaluation Program planning and documentation guidance, DOD should ensure that its components clearly understand when the use of this guidance is appropriate so that both DOD and its exercise partners, such as other federal agencies and states, derive the most benefits from exercises. This, in turn, contributes to the ultimate success of a whole-of-government approach to national preparedness.

Recommendations for Executive Action

To improve NORTHCOM's consistency with exercise documentation, we recommend that the Secretary of Defense direct NORTHCOM's Commander to develop guidance with specific criteria for postexercise documentation, particularly the Exercise Summary Report as the official exercise record, including the content and format to be included in such reports that will allow the results and lessons learned of exercises to be easily reviewed and compared.

To improve NORTHCOM's involvement of interagency partners and states in its exercises, we recommend that

- the Secretary of Defense, in consultation with the Chairman of the Joint Chiefs of Staff, the Commander, U.S. Northern Command, and other relevant combatant commanders, coordinate with the Department of Homeland Security and Federal Emergency Management Agency to develop guidance and procedures for consistently involving state officials in planning, executing, and assessing exercises that incorporate relevant state-specific information, and
- the Secretary of Defense direct NORTHCOM's Commander to develop a training plan for NORTHCOM headquarters staff on state emergency management structures and relevant issues related to working with civilian state and local emergency management officials.

To improve NORTHCOM's involvement of interagency partners and states in its lessons learned and corrective action process and its management of corrective actions, we recommend that the Secretary of Defense direct:

- NORTHCOM's Commander to establish and publicize valid and easily accessible procedures for non-DOD exercise participants to submit observations relevant to NORTHCOM, such as placing a template on

NORTHCOM's publicly accessible Web site or DHS's Homeland Security Information Network, so that NORTHCOM officials have a clear, secure avenue to obtain observations and assess potential lessons that originate with its exercise partners;

- the Chairman of the Joint Chiefs of Staff, in consultation and coordination with DHS, to either resolve information assurance issues so that the combatant commands, including NORTHCOM, can post Exercise Summary Reports with lessons learned and observations from NEP exercises on DHS's Lessons Learned Information Sharing system to make them easily accessible to interagency partners and states or establish an alternative method to systematically collect and share lessons learned; and
- the Chairman of the Joint Chiefs of Staff to revise the joint lessons learned operating instruction to include procedures to ensure that appropriate corrective actions are implemented and verified in a subsequent exercise or operation before being closed and that the reasons for closure are documented. Possible procedures might be adding a verification checkbox on JLLIS's issue management page or requiring that the directorates and subordinate commands within the combatant commands provide a status report when a correction is implemented and reobserved or closed for reasons other than re-observation.

To improve NORTHCOM's ability to work with interagency partners on major national exercises and further achieve the objectives of the NEP, we recommend that the Secretary of Defense revise the instruction on DOD participation in the NEP and/or direct the Chairman of the Joint Chiefs of Staff to revise the operating instruction regarding DOD participation in the NEP to provide the general conditions under which the combatant commands are expected to follow the Homeland Security Exercise and Evaluation Program planning and documentation requirements or the DOD's Joint Training System should be modified for those civil support exercises.

Agency Comments and Our Evaluation

In comments on a draft of this report, DOD generally agreed with the intent of our recommendations and discussed steps it is taking or plans to take to address these recommendations. DOD also provided technical comments, which we have incorporated into the report where appropriate. DHS also reviewed a draft of this report and provided technical comments, which we have incorporated where appropriate.

In response to our recommendation that NORTHCOM develop guidance with specific criteria for postexercise documentation to allow the results and lessons learned of exercises to be reviewed and compared, DOD agreed that such information should be provided in a standardized format that can be easily accessed and understood by authorized organizations which might benefit from such knowledge. DOD cautioned that any actions in response to this recommendation must accommodate constraints regarding classified information. We agree that properly securing classified information is a critical responsibility and believe this can easily be accomplished without undermining the intent of the recommendation, which is to improve the consistency and completeness of formal exercise documentation and thereby its overall value.

In response to our recommendation that DOD coordinate with DHS and FEMA to develop guidance and procedures for consistently involving state officials in planning, executing, and assessing exercises that incorporate relevant state-specific information, DOD agreed that better coordination for interfacing with state officials can be achieved. DOD also pointed out that NORTHCOM continues to expand its efforts to work through defense coordinating officers, existing state National Guard relationships, and FEMA regional headquarters partners to ensure that states are able to benefit from participation in DOD-sponsored exercises. However, DOD also said that while NORTHCOM has continuously engaged and encouraged state participation in NORTHCOM-sponsored exercises, the primary audience for such training is and must remain NORTHCOM. DOD also suggested that our recommendation has applicability to other federal interagency partners and that the issue should be addressed to the Exercise and Evaluation Sub-Interagency Planning Committee as a revision to the National Exercise Program Implementation Plan. As our report indicates, we agree that NORTHCOM has sought to engage and involve the states in its comprehensive exercise program. NORTHCOM plans for and conducts major exercises both inside and outside the construct of the National Exercise Program. Particularly for NORTHCOM-sponsored exercises focused on the command's civil support mission, the effective involvement of and interaction with state and other federal partners is a critical component of improving and maintaining NORTHCOM's preparedness. For NORTHCOM's participation in national-level exercises, the preparedness goals and objectives of all participants are equally important. We believe that in developing procedures to improve coordination with the states, DOD can (1) avoid situations where exercises meant to improve preparedness are not fully coordinated with the necessary partners; (2) capitalize on the structures and organizations it already has in place, such as the defense coordinating officers and

relationships with state National Guard headquarters; and (3) coordinate with DHS and FEMA to improve the military-civilian interface. With regard to the latter, the Exercise and Evaluation Sub-Interagency Planning Committee may indeed be one of the venues at which DOD can effectively coordinate with its interagency partners.

With respect to our recommendation that NORTHCOM develop a training plan for NORTHCOM headquarters staff on state emergency management structures and relevant issues related to working with civilian state and local emergency management officials, DOD agreed and noted that headquarters training is required for all newly assigned NORTHCOM staff. Further, DOD noted that NORTHCOM sponsors three versions of its defense support of civil authorities seminar that are targeted to staff at different seniority levels. We agree that NORTHCOM has continued to improve the level of awareness and training it provides staff on the complexities of providing defense support to civilian authorities in the United States. However, this does not fully address our recommendation. While training on the general procedures of the national response framework, the nature of state-federal government relations, and DOD's proper role in providing military support to civil authorities is invaluable for NORTHCOM staff, we continue to believe that this should be supplemented by the kinds of state-specific information that would provide both exercise officials and all other staff with an understanding of the key differences between states. These differences are possibly as numerous as the number of states and play a role in all routine interactions between the individual states and DOD officials as well as for effective coordination for exercise planning and coordination during a natural disaster or some other no-notice incident requiring defense support to civil authorities.

DOD agreed with our recommendation that NORTHCOM establish and publicize valid and easily accessible procedures for non-DOD exercise participants to submit observations relevant to NORTHCOM, such as placing a template on NORTHCOM's Web site or DHS' Homeland Security Information Network, so that NORTHCOM officials have a clear, secure avenue to obtain observations and assess potential lessons that originate with its exercise partners. DOD indicated that collecting exercise information from all perspectives would provide additional opportunities to improve NORTHCOM's ability to accomplish its mission tasks.

DOD also agreed with our recommendation that it work with DHS to either resolve information assurance issues so that NORTHCOM can post Exercise Summary Reports with lessons learned on DHS' Lessons Learned

Information Sharing system or establish an alternative method to systematically collect and share lessons learned. DOD cautioned that while wide dissemination of information approved for release would be of great benefit to homeland security entities it continues to adhere to the Joint Training System and cannot mandate that DHS alter its Lessons Learned Information System to make accommodations. DOD also noted that it has procedures in place to allow specifically cleared individuals from outside DOD access to information contained in Exercise Summary Reports. We agree that DOD cannot mandate alterations to the Lessons Learned Information System. We also agree that the Joint Training System should remain the chief guidance for the conduct of DOD exercises. However, we continue to believe that in working with DHS on the proper level and mode of information sharing, DOD may be able to improve the dissemination of relevant exercise-related information to all appropriate officials.

DOD agreed with our recommendation that the Chairman of the Joint Chiefs of Staff revise the joint lessons learned operating instruction to include procedures to ensure that appropriate corrective actions are implemented and verified in a subsequent exercise or operation before being closed and that the reasons for closure are documented. DOD indicated that the Chairman of the Joint Chiefs of Staff Instruction 3150.25D could be expanded to provide more guidance and the Joint Lessons Learned Information System could be updated to provide a technological solution to address the issue once the process and procedures are in place. DOD also indicated that the process of verifying corrective action and closing issues will become more effective with the modifications it outlined in response to the recommendation.

In response to our recommendation that DOD revise guidance on DOD participation in the National Exercise Program to provide the general conditions under which the combatant commands are expected to follow the Homeland Security Exercise and Evaluation Program planning and documentation requirements or the DOD's Joint Training System should be modified for those civil support exercises, DOD recognized the importance of ensuring effective interaction with interagency partners for homeland security-related exercises. However, DOD noted that the National Exercise Program Implementation Plan contains language placed there at DOD's insistence that establishes a process to resolve doctrinal differences during exercise planning. DOD indicated that together with provisions in the implementation plan establishing the administration, scope, and hierarchy of multiagency homeland security exercises and the 5-year National Exercise Program schedule, this should address our

recommendation. DOD further noted that The Joint Training System remains the Secretary of Defense's guidance on DOD exercises and that the National Exercise Program Implementation Plan stipulates that individual department or agency exercise programs should not be replaced. We agree that the Joint Training System is and should be DOD's primary guidance for ensuring that DOD components train and exercise according to standards. However, because interagency exercises are becoming an ever larger part of the national preparedness effort, and to the extent that effective exercise planning is bolstered by common procedures, our recommendation is intended to help DOD clarify for its components the circumstances under which the specific planning and documentation requirements for the Homeland Security Exercise and Evaluation Program can be followed without detriment to DOD's high training and exercise standards or compromise of the Joint Training System.

DOD's written comments are reprinted in appendix III.

We are sending copies of this report to the Secretary of Defense, Secretary of Homeland Security, and other interested parties. In addition, the report will be available at no charge on GAO's Web site at <http://www.gao.gov>.

If you or your staff have any questions about this report, please contact me at (202) 512-5431 or dagostinod@gao.gov. Contacts points for our Office of Congressional Relations and Public Affairs may be found on the last page of this report. Key contributors to this report are listed in appendix IV.

A handwritten signature in black ink, reading "Davi M. D'Agostino". The signature is stylized with large, flowing loops and a cursive script.

Davi M. D'Agostino
Director, Defense Capabilities
and Management

List of Requesters

The Honorable Joseph I. Lieberman
Chairman

The Honorable Susan M. Collins
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Bennie G. Thompson
Chairman
Committee on Homeland Security
House of Representatives

The Honorable Kit Bond
United States Senate

The Honorable Patrick Leahy
United States Senate

The Honorable Gene Taylor
House of Representatives

Appendix I: Scope and Methodology

In conducting this review, we generally focused our scope on U.S. Northern Command's (NORTHCOM) large-scale exercises¹ conducted since Hurricane Katrina made landfall in August 2005. To determine the extent to which NORTHCOM's exercise program is consistent with Department of Defense (DOD) training and exercise requirements and includes relevant exercise partners, we evaluated NORTHCOM's compliance with exercise reporting and documentation requirements established in DOD and command guidance. We reviewed available guidance to determine requirements for timing, format, and content. We also compared these requirements with guidance contained in the Department of Homeland Security's (DHS) Homeland Security Exercise and Evaluation Program documentation. We reviewed exercise documentation for all large-scale exercises the command performed since it was established in 2002 to determine the extent to which the command complied with the guidance.

We also performed an assessment of the experiences and level of participation from some interagency organizations and states in NORTHCOM's large-scale exercises. We initially met with Nevada officials who participated in a NORTHCOM exercise prior to Hurricane Katrina—Determined Promise 03—to provide context to the extent that changes may have been made to NORTHCOM's exercise program and help develop our state selection methodology. We selected a nongeneralizable sample of six states based on the extent to which they have participated in major NORTHCOM exercise since Hurricane Katrina and the varying scenarios of the exercises. The states we selected played a major role in NORTHCOM exercises by having a portion of the exercise conducted in their state and having various state agencies and officials participate. States we selected include Arizona, California, Michigan, Oregon, Rhode Island, and Washington. We met with representatives from each state's emergency management organization and state national guard. Because of the methodology selected, the resulting data and information from these state visits could not be projected to make assumptions about the rest of the states and what they may experience exercising with NORTHCOM. We also met with officials from three Federal Emergency Management Agency (FEMA) regional offices that had exercised with NORTHCOM in three of the last six large-scale exercises. We also interviewed officials from the

¹For purposes of this report, large-scale exercises are those involving multiple agencies and organizations, venues, and events, such as NORTHCOM's Vigilant Shield and Ardent Sentry exercises. NORTHCOM generally conducts two large-scale exercises annually.

Office of the Assistant Secretary of Defense for Homeland Security and America's Security Affairs, Joint Staff, and NORTHCOM with knowledge of and experience with NORTHCOM's training and exercise program.

To determine the extent to which NORTHCOM is using lessons learned during exercises to improve mission preparedness, we reviewed DOD, NORTHCOM, and DHS National Exercise Program (NEP) guidance for recording, tracking, and managing lessons learned and assessed NORTHCOM's management of exercise observations and issues identified in several of NORTHCOM's large-scale exercises since Hurricane Katrina in 2005. We interviewed NORTHCOM, Joint Staff, and FEMA officials regarding the various lessons learned management systems, and how interagency and state access to these systems can be accomplished. We also spoke with an official in the General Services Administration regarding the types of federal personal identification verification cards used by DOD and other federal departments and agencies to access government computer systems. In reviewing the management of NORTHCOM's lessons learned program we identified and reviewed all unclassified exercise observations from its last six large-scale exercises that had been activated in NORTHCOM's area of the Joint Lessons Learned Information System (JLLIS). Our review of the records in JLLIS entailed determining each record's status (open or closed), its type (issue or lesson learned), and each record's disposition after NORTHCOM staff have acted on these records to respond to the issues or lessons learned documented. Based on our review, we generally placed these records into one of several categories: open; closed, nonconcur; issue closed with reobservation; issue closed with no reobservation; and lesson learned. In addition we reviewed several records that had been merged with other original records because each related to the same issue; however, the original record for that issue was not part of our universe. Therefore, without reviewing the lead record the merged records lacked sufficient information regarding their disposition and that condition became another category.

Finally, to determine the extent to which NORTHCOM is integrating its training and exercises with the NEP we reviewed DOD, NORTHCOM, and Department of Homeland Security guidance to identify any differences in exercise planning and documentation between DOD's guidance and that for the NEP. We used that analysis to determine under what conditions NORTHCOM should apply standards related to the NEP, and how DOD and its subordinate commands should participate in the NEP tier I or II exercises. We reviewed NORTHCOM documentation from two major national exercises conducted during fiscal year 2008 to determine the

extent to which NORTHCOM employed the guidance from the Homeland Security Exercise Evaluation Program. We determined that national exercises that are operations-based exercises in that they involved the deployment of personnel would be the best candidates for evaluating NORTHCOM's participation in such exercises. We also interviewed state emergency management and National Guard officials from six states that have exercised with NORTHCOM since 2005, to understand the extent to which NORTHCOM is integrating its exercise planning and conduct with the interagency as well as various state governments.

In addressing our objectives, we reviewed plans and related documents, obtained information, and interviewed officials at the following locations:

- NORTHCOM Headquarters, Peterson Air Force Base, Colorado Springs, Colorado
- Joint Forces Command, Joint Warfighting Center, Suffolk, Virginia
- The Office of the Secretary of Defense, Washington, D.C.
- The Joint Staff, Washington, D.C.
- U.S. Army North, Fort Sam Houston, San Antonio, Texas
- National Guard Bureau, Arlington, Virginia
- Department of Homeland Security, Washington, D.C.
- U.S. Coast Guard, Atlantic Area, Portsmouth, VA
- FEMA's National Preparedness Directorate, Washington, D.C.
- FEMA Region 1, Boston, Massachusetts
- FEMA Region 9, Oakland, California
- FEMA Region 10, Bothell, Washington
- General Services Administration, Washington, D.C.
- Arizona Division of Emergency Management, Phoenix, Arizona
- Arizona National Guard, Joint Force Headquarters, Phoenix, Arizona
- California Emergency Management Agency, Sacramento, California
- California National Guard, Joint Force Headquarters, Sacramento, California
- Michigan State Police, Emergency Management and Homeland Security Division, Lansing, Michigan
- Michigan National Guard, Lansing, Michigan
- Nevada State Division of Emergency Management, Carson City, Nevada
- Nevada National Guard, Joint Force Headquarters, Carson City, Nevada
- Rhode Island Emergency Management Agency, Cranston, Rhode Island
- Rhode Island National Guard, Joint Force Headquarters, Cranston, Rhode Island
- Oregon Military Department, Office of Emergency Management, Salem, Oregon

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- Oregon Military Department, National Guard Joint Force Headquarters, Salem, Oregon
 - Washington Military Department, Emergency Management Division, Camp Murray, Washington
 - Washington National Guard, Joint Force Headquarters, Camp Murray, Washington

We conducted our review from June 2008 to September 2009 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Comparison of DOD’s Joint Training System with DHS’s Homeland Security Exercise and Evaluation Program

We reviewed the time lines and milestones for developing exercises found in the Department of Defense’s Joint Training System and U.S. Northern Command’s (NORTHCOM) implementing guidance and compared them with the Department of Homeland Security’s Homeland Security Exercise and Evaluation Program guidance to determine the similarities and differences between them. We used the guidance associated with operation-based exercises rather than discussion-based exercises to present the full spectrum of Homeland Security Exercise and Evaluation Program processes and planning events.

Table 8: Comparison of DOD Joint Training System and Homeland Security Exercise and Evaluation Program

DOD Joint Training System and NORTHCOM Exercise Program	Homeland Security Exercise and Evaluation Program Guidance
Joint Event Life Cycle NORTHCOM uses the Joint Events Life Cycle to design, plan, and execute exercises. - Consists of 5 stages: design, planning, preparation, execution, and evaluation. - Is a flexible guide that can be modified to apply to various types of events - Can span a period of 12 to 18 months for exercise development.	Homeland Security Exercise and Evaluation Program Exercise Cycle Homeland Security Exercise and Evaluation Program policy and guidance is the doctrine for the development of National Exercise Program exercises. - Employs 5 phases, which are collectively known as the exercise cycle: foundation, design and development, conduct, evaluation, and improvement planning. - Planning time line for the national level exercise will begin approximately 15 months prior to exercise conduct.
Concept Working Group Time frame: 12 to 15 months prior to start of exercise. Purpose: - Commences start of design stage. - Conduct initial planning to develop the candidate scenario setting, determine funding constraints, and define training requirements. - Result in the validation of the exercise purpose, exercise objectives, identification of the training audience, intelligence concepts, draft exercise event flow, planning milestone, and draft initial planning conference agenda.	Concept and Objective Meeting Time frame: Minimum 6 months prior to start of exercise, lasts 2 to 4 hours. Purpose: - Marks the start of the planning process and can be conducted in conjunction with the initial planning conference. - Identify the type, scope, objectives, and purpose of the exercise, as well as help planners identify, among other things, exercise planning team members. - Reach agreement regarding exercise type, scenario, capabilities, tasks, objectives, the target exercise time frame, and the date and time of the next planning conference.

Appendix II: Comparison of DOD's Joint Training System with DHS's Homeland Security Exercise and Evaluation Program

DOD Joint Training System and NORTHCOM Exercise Program	Homeland Security Exercise and Evaluation Program Guidance
Initial Planning Conference Time frame: 10 to 12 months prior to start of exercise, lasts 3 to 4 days. Purpose: • First major planning conference in the Joint Events Life Cycle process. • Identify levels of participation, develop deployment and logistic requirements, validate the exercise milestones, develop outline of the exercise plan and other planning documents, determine modeling and simulation requirements, and develop the mid-planning conference agenda.	Initial Planning Conference Time frame: Minimum 6 months prior to start of exercise, lasts 3 to 6 hours. Purpose: • Begins planning process. • Determine exercise scope by gathering input from the exercise planning team, design requirements and conditions (such as assumptions and artificialities), objectives, extent of play, and scenario variables (such as time, location, hazard selection). • Used to develop exercise documentation by obtaining the planning team's input on exercise location, schedule, duration, and other relevant details.
Mid-Planning Conference Time frame: 7-8 months prior to start of exercise, lasts approximately 3 days. Purpose: • Develop a draft exercise plan, scenario, modeling and simulation architecture, after-action review concept of operations, detailed augmentation requirements. • Update milestones and identify funding issues. In addition, workgroups should have master scenario events lists identified with an understanding of who is responsible for completing one.	Mid-Term Planning Conference Time frame: Minimum 3 months prior to start of exercise, lasts approximately 1 day. Purpose: • Discuss and determine exercise organization and staffing concepts, scenario and time line development, scheduling, logistics, and administrative requirements. • Review draft documentation (such as scenario, exercise plan, controller and evaluator handbook, master scenario events list). • Conduct a walkthrough of the proposed exercise site at the end of the conference.
The Master Scenario Events List Development Conference Time frame: Conducted before, after, or in conjunction with the mid-planning conference. Purpose: • Forum for the initial development of detailed scenario events and the master scenario events list—a detailed narrative description of the exercise scenario in chronological sequence.	The Master Scenario Events List Conference Time frame: Conducted separately or combined with mid-planning conference or final planning conference; length varies from 4 to 8 hours. Purpose: • Focuses on developing the master scenario events list—a chronological list that supplements the exercise scenario with event synopses; expected participant responses; capabilities, tasks, and objectives to be addressed; and responsible personnel.

**Appendix II: Comparison of DOD's Joint
Training System with DHS's Homeland
Security Exercise and Evaluation Program**

DOD Joint Training System and NORTHCOM Exercise Program	Homeland Security Exercise and Evaluation Program Guidance
Final Planning Conference Time frame: 3 months prior to start of exercise. Purpose: • Provide a last check of the status of the planning and preparation for exercise and to finalize, publish, and distribute key exercise plans and documents (such as exercise plan, supporting plans, scenario, after-action review collection management plan, exercise manning status, control plan, exercise battle rhythm, and modeling and simulation status). • Finalize the construct of the exercise with conference representatives.	Final Planning Conference Time frame: Minimum 6 weeks prior to start of exercise, lasts approximately 1 day. Purpose: • Final forum for reviewing exercise processes and procedures. • No major changes to the design or scope of the exercise, or its supporting documentation, should take place. • Ensures that all logistical requirements have been met, all outstanding issues have been identified and resolved, and all exercise products are ready for printing.
Master Scenario Events List Synchronization Conference Time frame: Held shortly after the final planning conference and at least 3 weeks prior to start of exercise. Purpose: All events and implementers are reviewed for timing, realism, and completeness.	See master scenario events list conference above.
Tabletop Exercises and Senior Leadership Seminars Time frame: Prior to start of exercise. Purpose: Tabletop exercises are discussion-based exercises involving key personnel discussing hypothetical scenarios. • Facilitating understanding of concepts and processes, and identifying strengths and shortfalls. • Provide an opportunity to address new or side issues, or work out processes prior to the start of the exercise. Senior leadership seminars provide senior leaders (flag officer, general officer, and senior executive service level) the opportunity to discuss lessons learned from previous exercises and the upcoming exercise.	Tabletop Exercises and Seminars Time frame: Not specified. Purpose: Tabletop exercises involve key personnel discussing hypothetical scenarios in an informal setting. • Used to assess plans, policies, and procedures or to assess the systems needed to guide the prevention of, response to, and recovery from a defined incident. Seminars are informal discussions, unconstrained by real-time portrayal of events and led by a presenter. • Orient participants to, or provide an overview of, authorities, strategies, plans, policies, procedures, protocols, response resources, and/or concepts and ideas.
Event Tests Time frame: Prior to start of exercise. Purpose: Conducted to ensure the modeling and simulation architecture is sufficient to meet exercise requirements.	Exercise Setup Timeframe: Prior to start of exercise. • Exercise planning team assigned to setup should visit the exercise site at least 1 day prior to the event to arrange the room and test audio/video equipment. • On the day of the exercise, planning team members should arrive several hours before start of exercise to handle any remaining logistical or administrative items pertaining to setup, and to arrange for registration.

**Appendix II: Comparison of DOD's Joint
Training System with DHS's Homeland
Security Exercise and Evaluation Program**

DOD Joint Training System and NORTHCOM Exercise Program	Homeland Security Exercise and Evaluation Program Guidance
Communications Exercise	See Exercise Setup above
Time frame: Conducted approximately 2 weeks prior to start of exercise. Purpose: Confirm all exercise NORAD and NORTHCOM staff and external battle staff members have access to and are proficient with all required communications systems and collaborative tools.	
Exercise Execution	Exercise Conduct
Time frame: Start of exercise. - Executed per the exercise plan. - Depending on the exercise, it may only involve the execution of a command post exercise or be greater in scope and involve the simultaneous and/or concurrent execution of other training events.	Time frame: Start of exercise. - Includes setup and wrap-up activities. - For an operations-based exercise, conduct encompasses all operations occurring between the designated start of the exercise and the end of the exercise.
Facilitated After-Action Review	Hot Wash
Time frame: After the end of the exercise. Purpose: A facilitated discussion held at the end of the exercise convened for the benefit of the training audience to examine actions and results during a training event.	Time frame: Maximum 2 hours after end of exercise. Purpose: - Provides opportunity to ascertain the level of satisfaction with the exercise, identify issues or concerns, and propose areas for improvement. - Players complete and submit their Participant Feedback Forms during the hot wash. - All evaluators take notes during play and hot washes for later compilation with other observations from their functional areas.
After-Action Review	Controller and Evaluator Debrief
Time frame: May occur during and after the exercise. Purpose: An informal process designed by a commander or director to provide commanders direct feedback on the accomplishment of selected joint mission-essential tasks, conditions, and standards stated in terms of training objectives for the commander to evaluate training proficiency.	Time frame: Maximum 1 day after end of exercise. Purpose: Exercise planning team leader facilitates this debrief, which provides each controller and evaluator with an opportunity to provide an overview of the functional area he or she observed and to discuss both strengths and areas for improvement.
See facilitated after-action review.	After-Action Conference
	Time frame: 5 weeks after end of exercise, lasts approximately 1 day. Purpose: - Present, discuss, and refine the draft after-action report, and to develop an improvement plan. - Solicit feedback and make necessary changes to after-action report.

Source: GAO analysis of DOD and DHS documentation.

Appendix III: Comments from the Department of Defense



HOMELAND DEFENSE
& AMERICAS' SECURITY AFFAIRS

ASSISTANT SECRETARY OF DEFENSE
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WASHINGTON, D.C. 20301-2600

AUG 11 2009

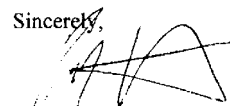
Ms. Davi M. D'Agostino
Director, Defense Capabilities and Management
U.S. Government Accountability Office
441 G Street, N.W.
Washington, DC 20548

Dear Ms. D'Agostino:

This is the Department of Defense (DoD) response to the GAO draft report, GAO-09-849, "HOMELAND DEFENSE: U.S. Northern Command Has a Strong Exercise Program, but Involvement of Interagency Partners and States Can Be Improved," dated July 17, 2009 (GAO Code 351178). DoD concurs with four recommendations, and partially concurs with three recommendations. Our response to the recommendations is enclosed.

Our point of contact for this action is Mr. Johnnie Wauchop, Office of the Assistant Secretary of Defense for Homeland Defense and Americas' Security Affairs (OASD (HD&ASA)), (703) 693-1968, or Johnnie.Wauchop@osd.mil.

Sincerely,


Paul N. Stockton

Enclosure:
As stated



GAO DRAFT REPORT – DATED JULY 17, 2009
GAO 09-849 (351178)

"HOMELAND DEFENSE: U.S. Northern Command Has a Strong Exercise Program, but
Involvement of Interagency Partners and States Can Be Improved"

DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS

RECOMMENDATION 1: The GAO recommends that the Secretary of Defense direct the U.S. Northern Command's (USNORTHCOM) Commander to develop guidance with specific criteria for post-exercise documentation, particularly the Exercise Summary Report as the official exercise record, including the content and format to be included in such reports that will allow the results and lessons learned of exercises to be easily reviewed and compared.

DOD RESPONSE: Partially Concur. DoD agrees that such information, when appropriate and approved for release, should be provided in a standardized format that can be easily accessed and understood by authorized organizations which may benefit from the knowledge acquired through our exercise activities. Any solutions must be able to accommodate constraints regarding classified information.

RECOMMENDATION 2: The GAO recommends that the Secretary of Defense, in consultation with the Chairman of the Joint Chiefs of Staff, the Commander, USNORTHCOM, and other relevant Combatant Commanders, coordinate with the Department of Homeland Security (DHS) and Federal Emergency Management Agency (FEMA) to develop guidance and procedures for consistently involving state officials in planning, executing, and assessing exercises that incorporate relevant state-specific information.

DOD RESPONSE: Partially Concur. DoD concurs that better coordination for interfacing with State officials can be achieved. However, USNORTHCOM must rely on State and local exercise planning representatives to accurately and thoroughly represent their State Emergency Management structure and their training objectives during the 12-month planning process leading up to each exercise. To this end, USNORTHCOM continues to expand its efforts to work through its Defense Coordinating Officers/Elements (DCOs/DCEs), its existing relationships with State National Guard forces, and with FEMA regional headquarters partners to ensure that States are also able to benefit from participating in DoD-sponsored homeland security related exercises.

USNORTHCOM, throughout the history of its exercise program, has continuously engaged and encouraged the participation of State emergency management officials/structures in order to maximize available training opportunities for all stakeholders. Additionally, as noted in the GAO report, there are ample references to the amount of State "play" and the benefits that States have derived from USNORTHCOM-sponsored exercises. Ultimately, however, it must be acknowledged that the primary training audience in any USNORTHCOM-sponsored exercise is USNORTHCOM.

Finally, the GAOs proposed recommendation has applicability to other US Government interagency partners, as well as DoD. As such, the issue should be addressed by the Exercise and

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Evaluation Sub-Interagency Planning Committee as a revision to the National Exercise Program (NEP) Implementation Plan.

RECOMMENDATION 3: The GAO recommends that the Secretary of Defense direct USNORTHCOM's Commander to develop a training plan for USNORTHCOM headquarters staff on State emergency management structures and relevant issues related to working with civilian State and local emergency management officials.

DOD RESPONSE: Concur. Defense Coordinating Officers, who report to USNORTHCOM via U.S. Army North (USARNORTH), are well-versed in their respective States' procedures. Additionally, the headquarters staff training specified in the recommendation, which has been in existence since 2002, is required for all newly assigned USNORTHCOM staff members. The training includes a full discussion of how States request and receive Defense Support of Civil Authorities (DSCA). Further, USNORTHCOM sponsors three versions of its formal DSCA seminar which are described as follows:

- A three phase DSCA course that includes eight hours of online instruction, a one-week classroom seminar, and bi-monthly post-training e-mail updates on DSCA news items.
- A DSCA Executive Seminar offered four times per year and tailored to senior official training audiences in DoD (including the National Guard), interagency organizations, State emergency management agencies, local governments, and non-governmental organizations.
- A soon-to-be available DSCA Senior Executive Seminar, a focused half-day session intended for Governors, State Adjutants General, and State Directors of Emergency Management.

RECOMMENDATION 4: The GAO recommends that the Secretary of Defense direct USNORTHCOM's Commander to establish and publicize valid and easily accessible procedures for non-DOD exercise participants to submit observations relevant to USNORTHCOM, such as placing a template on USNORTHCOM's publicly accessible website or the DHS's Homeland Security Information Network, so that USNORTHCOM officials have a clear, secure avenue to obtain observations and assess potential lessons that originate with its exercise partners.

DOD RESPONSE: Concur. Collecting relevant exercise and training information from all perspectives will undoubtedly provide additional opportunities to improve USNORTHCOM's ability to accomplish its mission essential tasks.

RECOMMENDATION 5: The GAO recommends that the Secretary of Defense direct the Chairman of the Joint Chiefs of Staff, in consultation and coordination with DHS, to either resolve information assurance issues so that the combatant commands, including USNORTHCOM, can post Exercise Summary Reports with lessons learned and observations from the National Exercise Program (NEP) exercises on DHS's Lessons Learned Information

Sharing system to make them easily accessible to interagency partners and states or establish an alternative method to systematically collect and share lessons learned.

DOD RESPONSE: Concur. DoD agrees that such information, when appropriate and approved for release, should be disseminated as widely as possible to those homeland security related entities which may benefit from the knowledge acquired through our exercise activities. Concurrence, however, should not be misconstrued as support for altering or departing from the Joint Training System and its components, specifically the Joint Lessons Learned Information System. Additionally, DoD cannot mandate that DHS alter its Lessons Learned Information System nor require DHS to commit resources to do so. There are procedures in place that allow specifically cleared individuals from outside DoD access to information contained in the Exercise Summary Reports. These manual procedures ensure that only appropriate and authorized information is offered outside the Department.

RECOMMENDATION 6: The GAO recommends that the Secretary of Defense direct the Chairman of the Joint Chiefs of Staff to revise the joint lessons learned operating instruction to include procedures to ensure that appropriate corrective actions are implemented and verified in a subsequent exercise or operation before being closed and that the reasons for closure are documented. Possible procedures might be adding a verification checkbox on the Joint Lessons Learned Information System's (JLLIS) issue management page or requiring that the directorates and subordinate commands within the combatant commands provide a status report when a correction is implemented and re-observed or closed for reasons other than re-observation.

DOD RESPONSE: Concur. Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 3150.25D provides policy and guidance for the Joint Lessons Learned Program and depicts the "revalidation" of issues to ensure lessons have been learned (Figure A-2, Joint Lessons Learned Program Process Overview). This discussion section could be expanded to provide more guidance and the JLLIS could be updated to provide a technological solution to address the issue once the process and procedures are in place.

Regarding internal tracking, JLLIS provides sufficient capability for directors and subordinate commands to effectively manage internal issues. JLLIS Tier I administrators can make local modifications to facilitate this process. The process of verifying corrective action and closing issues will become more effective with the suggested modification, continued education, and further maturation of JLLIS and the Joint Lessons Learned Program.

RECOMMENDATION 7: The GAO recommends that the Secretary of Defense revise the instruction on DOD participation in the NEP and/or direct the Chairman of the Joint Chiefs of Staff to revise the operating instruction regarding DOD participation in the NEP to provide the general conditions under which the combatant commands are expected to follow the Homeland Security Exercise and Evaluation Program planning and documentation requirements or the DOD's Joint Training System should be modified for those civil support exercises.

DOD RESPONSE: Partially Concur. DoD recognizes the importance of ensuring the Department is sufficiently able to interact with our interagency partners at every level regarding the planning and execution of Homeland Security-related exercises. To this end, DoD has fully supported and, when appropriate, has directly assisted in the development of the NEP and its

underlying doctrine, methodologies, and technologies. Evidence of these efforts are readily found in the GAO report where the similarities between DoD exercise methodology and National Exercise Program doctrine are obvious.

The NEP Implementation Plan (I-Plan) clearly delineates how DoD participates in the NEP. Additionally, largely due to DoD's insistence, the I-Plan contains language in paragraph 6.2 establishing processes to resolve doctrinal differences during the initial stages of NEP exercise planning. Further, the NEP I-Plan establishes the administration, scope, and hierarchy of homeland security-related exercises involving multiple interagency entities. Combined with its associated NEP five-year schedule which includes USNORTHCOM homeland security-related exercises, the I-Plan and the five-year schedule appropriately address the GAO's recommendation.

It should be emphasized, however, that the Secretary of Defense retains sole authority for training and equipping the Department of Defense. The Joint Training System, as it is currently administered, constitutes the Secretary's guidance regarding this matter. This position is further reinforced in paragraph 4 of the NEP Implementation plan, which states "The NEP is intended to provide a framework for prioritizing and focusing Federal exercise activities, without replacing any individual department or agency exercise program".

Appendix IV: GAO Contact and Staff Acknowledgments

GAO Contact

Davi M. D'Agostino, (202) 512-5431 or dagostinod@gao.gov.

Acknowledgments

In addition to the contact named above, Joseph Kirschbaum, Assistant Director; Gilbert Kim; David Hubbell; Joanne Landesman; Christopher Mulkins; Erin Noel; Terry Richardson; and Richard Winsor made key contributions to this report.

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