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**EDUCATION IN ACTION: EDUCATING USNORTHCOM'S
CRITICAL STAKEHOLDERS AT THE AWAY GAME**

by

Steven Osterholzer

September 2008

Thesis Advisor:
Second Reader:

Lauren Wollman
Stan Stupinski

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**EDUCATION IN ACTION: EDUCATING USNORTHCOM'S CRITICAL
STAKEHOLDERS AT THE AWAY GAME**

Steven E. Osterholzer, Major, United State Army, USNORTHCOM
Masters of Public Administration - City University of New York, 2003
Masters in Public Relations - University of Oregon School of Journalism, 2005

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September 2008**

Author: Steven Osterholzer

Approved by: Dr. Lauren Wollman
Thesis Advisor

Dr. Stan Stupinski
Second Reader

Harold A. Trinkunas, Ph.D.
Chairman, Department of Homeland Security and Defense

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ABSTRACT

This thesis is a customizable strategy to educate United States Northern Command's Critical Stakeholders utilizing a Mobile Education & Training Team, educating key stakeholder personnel at their location. After providing background on the United States Northern Command (NORTHCOM) and discussing why it is important for stakeholders to have an understanding of the unit's missions, organizations, capabilities and limitations, the thesis poses a research question: *"How can NORTHCOM change its outreach and education policies and practices to more effectively educate its key interagency stakeholders, at the stakeholder location, in order to improve response efforts during a crisis?"* Stakeholders are identified ("WHO to Educate"), a customizable education package is presented ("WHAT to Educate"), several delivery options are discussed ("HOW to Educate"), and several courses of action are considered regarding Educator Options ("WHO Should Educate"). A methodology called the Military Decision Making Process (MDMP) is utilized to assist in identifying the most effective courses of action, developing evaluation criteria, ranking each course of action utilizing those criteria, and using a quantifiable system to determine the most effective courses of action. These chapters are augmented with a discussion on developing and implementing measures of effectiveness, along with recommended areas for future study.

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I. INTRODUCTION

The great aim of education is not knowledge, but action.

— Herbert Spencer (1820-1903)

A. BACKGROUND

United States Northern Command (NORTHCOM) was established on October 1, 2002, to provide command and control of Department of Defense Homeland Defense efforts and to coordinate Defense Support of Civil Authorities. As stated on the official NORTHCOM webpage, “NORTHCOM defends America’s homeland — protecting the nation’s people, national power, and freedom of action.”¹

NORTHCOM has two missions:

Conduct operations to deter, prevent, and defeat threats and aggression aimed at the United States, its territories and interests within the assigned area of responsibility.

As directed by the President or Secretary of Defense, provide Defense Support of Civil Authorities (DSCA) including consequence management operations.²

NORTHCOM’s civil support mission includes domestic disaster relief operations that occur during fires, hurricanes, floods and earthquakes; when tasked by the Department of Defense, they provide support to a designated Lead Federal Agency, commanding and controlling active-duty military forces (Title 10 Forces). NORTHCOM works in coordination with the National Guard, but does not normally control National Guard forces, which are under direct control of the governors (Title 32 Forces).

¹ United States Northern Command, “NORTHCOM Home Page,” <http://www.northcom.mil/> [accessed August 16, 2007].

² Ibid.

This support function is a result of the processes outlined in the National Response Framework. The Framework requires that, in order to use Title 10 forces in executing its Civil Support mission, three criteria generally must be met. Stated succinctly, NORTHCOM provides support to civil authorities only when *requested* by civil authorities, when *directed* by the president or the secretary of defense, and — when Title 10 forces do respond — they are in *support* of civil authorities. They are *not* the lead organization; their role is to provide requested capabilities in support of local, state, and other federal organizations. Typical support include air transportation, chemical and biological teams, and medical support. Legislation authorized this mission, whereas NORTHCOM’s homeland defense mission is authorized by the Constitution.

B. IMPORTANCE

NORTHCOM is the federal military’s primary organization for executing DSCA operations, working in times of crisis with many organizations at the local, state, and federal level. If NORTHCOM is to provide timely, well-coordinated support, these organizations must possess a basic understanding of the National Response Framework, NORTHCOM’s organizational structure, missions, capabilities, limitations, and a general timeline for response during times of crisis.

Being a relatively new Combatant Command, the missions, organization, and capabilities/limitations of NORTHCOM are not well understood by critical stakeholder partners. For example, a GAO Report that examined the military’s response to Hurricane Katrina found that

. . . a lack of understanding exists within the military and among federal, state, and local responders as to the types of assistance and capabilities that DoD might provide in the event of a catastrophe, the timeliness of this assistance, and the respective contributions of the Title 10 and National Guard forces.³

³ United States Government Accountability Office, “Hurricane Katrina: Better Plans and Exercises Need to Guide the Military’s Response to Catastrophic Natural Disasters,” *Statement for the Record to the Subcommittee on Terrorism, Unconventional Threats and Capabilities, Committee on Armed Services, House of Representatives, GAO-06-808T*, <http://www.gao.gov/new.items/d06808t.pdf> [accessed December 12, 2007].

Other sources of evidence to support this claim are two studies published in the *Journal of Homeland Security and Emergency Management*, which revealed a significant lack of knowledge about the role of the Title 10 military. An example that demonstrates a lack of understanding about the role of NORTHCOM are statements made by Representative Abercrombie (Democrat, Hawaii) before the House Armed Services Committee in March 2007, where he expressed frustration and confusion over what NORTHCOM does. These examples and others are fully discussed in the Literature Review portion of this paper.

To execute a timely and effective response, officials from local, state, and other federal organizations must be the recipients of a well-synchronized education strategy that teaches them the operational basics of Defense Support of Civil Authorities and how NORTHCOM will interface with their organization. The importance of this issue cannot be overstated. Critical organizations that are ignorant about NORTHCOM and have misperceptions about its roles and responsibilities, will likely waste valuable time during an emergency, possibly resulting in more casualties and physical destruction.

While the Command has an effective engagement strategy to educate critical stakeholders when they travel to the Command's Headquarters in Colorado Springs, minimal effort has been expended to execute an effective education program at the stakeholders' location. While a training plan is in place to educate stakeholders at their location (which calls for regionally-based Defense Coordinating Officers to travel and conduct the training), a lack of sufficient personnel, coupled with the tremendous geographical area these personnel are expected to cover, results in a program that does not sufficiently meet the needs of NORTHCOM's stakeholders. This existing program will be further discussed in Chapter VI: "Who" Should Educate?"

Additionally, other educational programs are focused on DSCA education, but these programs are not targeted specifically for NORTHCOM's stakeholders, nor do they focus specifically on how Title 10 troops controlled by NORTHCOM will interface with civilian organizations. For example, U.S. Army North (ARNORTH) conducts a five-day course — entitled "DoD Defense Support of Civil Authorities" — approximately a dozen times per year at locations around the country. This course is designed primarily

for DoD audiences, such as Pacific Command, Transportation Command, etc. While the course is effective in providing a thorough understanding of DSCA concepts and operations, only one of the nine courses scheduled for 2009 is designed specifically for interagency organizations (March 2009, in Emmetsburg, Maryland).⁴ NORTHCOM oversees a new DSCA-centric program called The Joint Task Force Commander's Training Course, which instructs and certifies the recently created Joint Task Force within each state's National Guard. The Naval Postgraduate School's Center for Homeland Defense and Security conducts MET (Mobile Education Team) Seminars, which are intensive half-day education programs focused on Homeland Security. Targeted at state governors and his/her Homeland Security Staff, these programs are designed to "help strengthen U.S. capability to prevent, deter, and respond to domestic terrorist attacks, and to build the intergovernmental, interagency, and *civil-military* cooperation that Homeland Security requires."⁵ These programs are a good start at educating several stakeholders about the fundamentals of DSCA. The overall level of DSCA education needs to be greatly expanded, however, in both scope and depth; these programs either do not reach the majority of NORTHCOM's stakeholders or lack the detail that stakeholders need (stakeholders need in-depth training on DSCA well beyond a "familiarization").

The educational strategy of relying on stakeholders to come to the Headquarters has two significant drawbacks. First, it relies on the stakeholders' motivation, energy, and time commitment to travel to Colorado Springs, Colorado. This poses a significant time and financial investment for these organizations. A second drawback is that the visitors who travel to the headquarters are typically the most senior leaders of these stakeholder organizations. While it is important that they understand the role of NORTHCOM, the middle managers and action officers will directly interface

⁴ ARNORTH, "DSCA Phase II Schedule," *ARNORTH J7 Home Page*, <http://www.usarnorth.org/public/spd.cfm?spi=events> [accessed May 23, 2008].

⁵ Naval Postgraduate School, "MET Seminars," *Center for Homeland Defense and Security Web Page*, <http://www.chds.us/?met> [accessed May 23, 2008].

with NORTHCOM during a crisis. Rarely are these middle managers able to come to NORTHCOM; therefore, the officials who most need the education often receive very little.

There are several reasons NORTHCOM's critical stakeholders do not currently possess a fundamental understanding about who NORTHCOM is and how it operates in supporting civil authorities. The primary reason is that the command is relatively new; NORTHCOM was born as a direct result of the attacks of 9/11. Prior to 9/11, the mission of supporting civil authorities was executed by a variety of military organizations. The creation of NORTHCOM significantly changed the previous ways of doing business.

A second reason was the creation of the National Response Plan (NRP) in 2005, rewritten and renamed in early 2008 as the National Response Framework (NRF). The 2005 plan significantly altered the way the military supports civil authorities. For example, prior to the NRP, there was no formal request and approval process between federal agencies such as FEMA and DoD. The process and format for each instance that military assistance was requested changed each time, with requests sometimes going directly to military units and sometimes to the Pentagon.

A third reason that critical stakeholders do not possess a fundamental understanding of NORTHCOM is due to a lack of time and finances to travel to NORTHCOM headquarters. The author has the benefit of first-hand interaction with critical stakeholders. As the Command Briefer for NORTHCOM, the author briefs officials from critical stakeholder organizations on an almost daily basis. One of his primary duties is to educate the literally hundreds of organizations visiting the headquarters. This includes senators, governors, senior officials from FEMA and DHS, and local/state first responders from around the country. The overwhelming feedback from these key leaders is that they were previously uneducated about DSCA and NORTHCOM, and that their increased understanding will facilitate improved relationships and a more coordinated response during a time of crisis. In short, the author has repeatedly received feedback from hundreds of leaders involved in

Consequence Management Operations. Almost unanimously, they have voiced the opinion that their organizations need to be better educated in how the Title 10 military will support their operations.

A fourth reason for the lack of understanding is the lack of differentiation between Title 10 and Title 32 forces. There are distinct differences between the two when it comes to organization, missions, authorities, and capabilities. The average person on the street is not able to tell the difference between a National Guard soldier and an Active Duty soldier. A strong argument can be made that they do not need to differentiate; during a crisis, they should simply see a soldier who is helping them during their time of crisis. Unfortunately, the author has also seen this lack of understanding carried over to the leadership of critical stakeholder organizations. On numerous occasions, the author has heard stakeholders express confusion between these two forces, during briefings, exercises, and real-world events such as Hurricane Katrina.

1. Research Question

How can NORTHCOM change its outreach and education policies and practices to more effectively educate its key interagency stakeholders at the stakeholder location in order to improve response efforts during a crisis?

2. Significance of Research

This research will be significant in several ways. First, it will advance the body of literature concerning the level of knowledge about DSCA and the Title 10 military. By consolidating existing research and focusing it in support of an actionable strategy to improve overall knowledge levels about how the military supports civil authorities, the paper will advance both the quality and quantity of related literature as a whole. Secondly, this paper will aid future research efforts in that it is a groundbreaking look as to how NORTHCOM can best educate its critical stakeholders. If the resulting strategy is implemented, future researchers can evaluate the effectiveness of the programs and make recommendations to further improve the process, perhaps applying it to other areas where a lack of knowledge exists.

Two immediate consumers will directly benefit from this thesis: critical stakeholders and NORTHCOM. The critical stakeholders will benefit during a future crisis. By better understanding the DSCA process, how military assistance is requested, and the capabilities and limitations of active duty military, they will be able to facilitate a more effective, quicker response than they would prior to this thesis. NORTHCOM will directly benefit in that when it receives requests for assistance from critical stakeholders, these requests will come quicker and — with the capabilities it can provide — correctly identified. In other words, instead of the critical stakeholders requesting capabilities that are vague and unsupportable in a delayed fashion, NORTHCOM will receive detailed, supportable requests in a timely fashion. The ultimate consumer, however, will be the American people. Through the improved education and interaction between NORTHCOM and critical stakeholders, the American public will receive what it both demands and deserves: that their military come to their aid quickly during their time of greatest need.

C. METHODOLOGY

The end result of this thesis will be a recommended strategy to educate critical stakeholders about NORTHCOM at the stakeholder location. Simply put, this thesis will identify the stakeholder organizations that need to be educated, construct an educational package that is able to be customized, recommend an effective method for delivering the information package, identify which personnel are most effective in executing the training at the stakeholder location, suggest possible measures of effectiveness, and suggest some related areas for further research.

A critical component of this thesis is the methodology used to objectively analyze and evaluate different options for these areas. Given that the target audience for this thesis is the senior leadership of NORTHCOM, the author has selected a methodology well understood and utilized by the military. It is called MDMP – The Military Decision Making Process.

MDMP is defined as “a planning tool that establishes procedures for analyzing a mission, developing, analyzing, and comparing courses of action against criteria of

success, selecting the optimum course of action, and producing a plan or order.”⁶ It is found in published Army doctrine Field Manual *FM 5-0, Army Planning and Orders Production* and is taught and exercised at such military academia institutions as the Command and General Staff College, the National Defense University, and the Army War College. It is a structured process utilized at nearly every echelon of staff planning that assists military staffs on the best way to accomplish an assigned mission.

MDMP consists of five distinct steps: 1) Receive the Mission, 2) Conduct Mission Analysis, 3) Develop Courses of Action, 4) Analyze the Courses of Action, and 5) Compare the Courses of Action. Through the course of this thesis, the author has essentially executed these same steps. This methodology proves to be as equally successful in developing an effective educational strategy as it is for selecting the most effective option in destroying a military target.

The core of this thesis is the application of these five steps to the problem of selecting a strategy to effectively educate NORTHCOM’s critical stakeholders.

D. THESIS STRUCTURE

This thesis is structured as follows:

Chapter I: INTRODUCTION

In this introductory chapter, the author provided a brief background about NORTHCOM, its importance in responding to emergencies, and defined the problem statement. A narrow and precise research question was identified, an explanation of the significance of this research, a brief description of existing educational programs, and an overview of the MDMP methodology to be utilized, were all provided.

Chapter II: LITERATURE REVIEW

This chapter will discuss a thorough review of scholarly articles and studies that are relevant to helping to frame the argument. It will identify research conducted on the topic, along with a brief academic discussion about MDMP.

⁶ U.S. Army, *FM 5-0, Army Planning and Orders Production* (U.S. Army Doctrine Center, Ft. Leavenworth, KS, 2003), glossary.

Chapter III: CRITICAL STAKEHOLDERS (“Who” To Educate)

A clear definition of what a critical stakeholder is and identification of those organizations is crucial in devising a comprehensive and effective education strategy. While no formal definition of a critical stakeholder exists at NORTHCOM, the author defines its stakeholders as “the organizations and agencies that NORTHCOM will conduct intense collaboration with during times of crisis to facilitate timely and coordinated military support of civil authorities.”

This chapter will identify “Who” needs to be educated about NORTHCOM, as well as how they will interact with NORTHCOM during an emergency. There are approximately two hundred total stakeholder organizations to be educated, which is a reasonable number of organizations to educate. NORTHCOM’s Interagency Directorate has already identified the vast majority of these stakeholders; this chapter provides the reader with background information on stakeholders already formally identified and provides justification for several new ones. Generally, these stakeholders will be educated en masse, with briefings given to many people at one time, versus one-on-one briefings.

Chapter IV: EDUCATIONAL PACKAGE (“What” To Educate)

This chapter will identify the kinds of information that are most critical for an organization to receive. It will include a discussion on how to analyze a stakeholder’s informational needs, the development process to create a customizable education package, and identification of critical topics.

Chapter V: DELIVERY OPTIONS (“How” To Educate)

Once the topics and information to educate stakeholders has been identified, the next logical step is to analyze and select the most effective means to deliver that information. This chapter will begin with a brief discussion on effective educational methods, a description of three potential Courses of Action (COAs), and an analysis of the pros and cons for each of the COAs. This will be followed by the identification and definition of Evaluation Criteria that will be used to measure the effectiveness of each COA, a prioritization of those Criteria, and a discussion and ranking of each COA

utilizing the Evaluation Criteria. Finally, a COA Evaluation Matrix will be used to determine the most effective COA, using the information previously discussed in the chapter.

Chapter VI: EDUCATOR OPTIONS (“Who” Should Educate)

This chapter will focus on exactly who should conduct the training at the stakeholder location. It will be similar to the previous chapter in that it will identify and define three COAs, along with an analysis of the pros and cons for each. Evaluation Criteria will be identified and defined, prioritized, and each COA will be discussed and ranked for its relative strength or weakness concerning each Evaluation Criterion. A COA Evaluation Matrix will be used to help determine which of the COAs best answers the question of “Who” should educate.

One of the considerations that must be taken into account when considering implementing any new program is cost. This paper will conduct an extensive cost analysis for both Chapters V and VI (“How” to Educate and “Who” Should Educate). The most expensive strategy to implement has a cost of just under \$400,000 per year to execute. This consists almost entirely of travel costs for the NORTHCOM educators, which NORTHCOM will pay. While this is significant, it is important to keep it in perspective. NORTHCOM’s 2009 approved budget is \$171.9 million; the overall cost percentage to execute the most expensive educational strategy option is less than 1/2 of one percent of the total NORTHCOM budget.⁷ This is a relatively small investment for a potentially very large payoff.

⁷ Lee Ann Taliaferro, NORAD and USNORTHCOM Budget Analyst, interviewed by author, written notes, NORAD and USNORTHCOM Headquarters, Colorado Springs, CO, March 12, 2008.

Chapter VII: MEASURES OF EFFECTIVENESS

A critical component of this recommended strategy is assessing its effectiveness. Several assessment tools will be discussed, including those that can be used to measure how well critical stakeholders are being educated about NORTHCOM.

Chapter VIII: POTENTIAL FOR FUTURE STUDY

This paper is the first comprehensive analysis on creating a comprehensive strategy for educating NORTHCOM's critical stakeholders at their location. There is great potential for further study in this area; the author will suggest several topics worthy of further research regarding the education of NORTHCOM's critical stakeholders.

Chapter IX: STRATEGY SUMMARY

The author's analysis will be summarized in a short, succinct chapter that clearly outlines this paper's recommended strategy to educate critical stakeholders effectively and at their location.

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II. LITERATURE REVIEW

A thorough review of scholarly articles and studies reveals that this is a relatively new area of study. A small body of academic literature exists that specifically analyzes the importance of the military educating critical stakeholders on Defense Support of Civil Authorities. Just as importantly, the author could not find any evidence, be it academically rigorous or of questionable value, that argues that critical stakeholders such as Emergency Managers are sufficiently educated about the DSCA process. Although the information is relatively small in volume, it is sufficiently detailed and academically rigorous to be considered critical evidence that NORTHCOM needs to better educate critical stakeholders to facilitate an effective response.

First is a GAO Report written in the wake of Hurricane Katrina, one of several reports that analyzed how the military responded to the crisis. This report found that "... a lack of understanding exists within the military and among federal, state, and local responders as to the types of assistance and capabilities that DoD might provide in the event of a catastrophe, the timeliness of this assistance, and the respective contributions of the Title 10 and National Guard forces."⁸

Two academic studies published in the *Journal of Homeland Security and Emergency Management* are significant in their findings. (During the initial study, DSCA was known as "MACA: Military Assistance to Civil Authorities." The term officially changed to DSCA during the study. To avoid confusion amongst the participants, the authors retained the name MACA during the survey process. The authors alternated between the two terms in both papers; the current term of "DSCA" is used for the purposes of this thesis).

In 2004, an exploratory study of Emergency Managers (EMs) at the local level (city and county) looked at how well prepared they are to work with military authorities

⁸ United States Government Accountability Office, "Hurricane Katrina."

during times of emergency.⁹ The authors conducted an extensive quantitative written survey of 361 local EMs in five states. The surveys focused on answering four questions, of which three are relevant for this thesis:

(1) To what degree do local EMs understand the DSCA process?

(2) To what extent do local EMs believe that the DSCA process will be implemented effectively?

(3) What are the local EMs' views of how effectively the military will work with EMs during DSCA? ¹⁰

The study revealed several important findings:

- Less than the majority of the local EMs believed they had a strong understanding of various aspects of the DSCA process.
- Less than the majority believed that the military would communicate effectively, provide the assistance needed, or respond in a timely manner.¹¹

Several write-in answers illustrate how great the need is for DSCA education at the EM level:

There is no outreach to emergency managers at the local level from NORTHCOM regarding use of military assets in major events....the entire move to NORTHCOM and its impact on DSCA is not clear to most civilian emergency managers — even at the State Level.

It is obvious to me from this survey that I have much to learn and would appreciate any training that could be offered.

Truthfully, I am not very familiar with DSCA, but would appreciate the opportunity to learn more.

Please provide me all the information you can on DSCA.

⁹ John Grosskopf, John Milliman, and John Paez, "An Exploratory Study of Local Emergency Managers' Views of Military Assistance/Defense Support to Civil Authorities (MACA/DSCA)," *Journal of Homeland Security and Emergency Management* 3, no. 1 (2006, 2004), <http://www.bepress.com/jhsem/vol3/iss1/2/> [accessed May 2, 2007].

¹⁰ Ibid.

¹¹ Ibid.

In summary, the study suggests that “a new and significant effort needs to be made on education efforts for EMs on DSCA. Research needs to be conducted on both what is the appropriate content of information on DSCA, as well as the most effective delivery method (e.g., trainings, websites, presentations, etc.) of DSCA outreach programs.”¹²

A follow-on study conducted in 2006 by the same authors focused on “ways to improve the education and training programs for local EMs on the DSCA process.”¹³ This second study focused on four questions:

- (1) What are the primary ways that local EMs have learned about DSCA?
- (2) What are the local EMs’ views of the effectiveness of the DSCA education and information they received?
- (3) What factors are related to local EMs’ view of the effectiveness of the MACA education they have received?
- (4) What are the EMs’ recommendations on how future DSCA education and training programs can be improved?¹⁴

This study consisted of both qualitative analysis (interviews with twenty-two EMs at various levels) and quantitative analysis (seventy-two written surveys from six states). The study revealed some important findings:

- The most effective teaching methods were ones based in interpersonal communication.
- Less than 20% felt that they had received effective education/information on the purpose and process of DSCA.

Some telling statements resulted from both the interviews and write-in answers on the surveys:

¹² Grosskopf, Milliman, and Paez, “An Exploratory Study.”

¹³ Ibid.

¹⁴ John Grosskopf, John Milliman, John Paez, “Emergency Managers Views on Improving Defense Support/Military Assistance to Civil Authorities (DSCA/MACA) Education Programs,” *Journal of Homeland Security and Emergency Management* 3, no. 2 (2007), <http://www.bepress.com/jhsem/vol2/iss2/6> [accessed May 9, 2007].

We have had only one briefing in the five years that I have been Public Safety Director for my County that explained DSCA and the resources, capabilities, etc. that the military can provide. I would urge a more visible and detailed informational briefing to emergency managers.

Today, very few county officials know about or can access the DSCA process. Emergency managers should be provided with specific information regarding the program and how to access the system.

TELL US WHAT RESOURCES THEY HAVE AND HOW TO BEST ACCESS THEM. (Caps by the survey respondent.)¹⁵

One of the results of this study is particularly important to Chapter V: “How” to Educate. Several vehicles or methods are available to deliver the NORTHCOM education, which will be discussed later in this paper. However, this report’s finding that “the most effective teaching methods were ones based in interpersonal communication” is consistent with the feedback the author has gotten from delivering educational briefings to stakeholder personnel who travel to the NORTHCOM Headquarters — that personal interaction is the most effective method for education on NORTHCOM. This interaction most easily facilitates extensive Q&A and further discussion on points of interest. This is consistent with the philosophy of the NORTHCOM Commander, General Gene Renuart. He consistently stresses the importance of personal interaction with stakeholders, often quoted as saying, “The time to exchange business cards for the first time is not at the scene of a disaster.”¹⁶

In summary, the study concluded that “the majority of EMs do not believe that they have received effective DSCA education and that interpersonal methods were most positively related to having received effective DSCA education.”¹⁷

A final important document concerning the general lack of understanding about NORTHCOM is a transcript of Congressional Testimony that occurred on March 21, 2007. The NORTHCOM Commander, Admiral Timothy Keating at the time, was

¹⁵ Grosskopf, Milliman, and Paez, “Emergency Managers Views.”

¹⁶ Gene Renuart, multiple speeches as heard by the author, March 2007, until publishing date of this thesis.

¹⁷ Renuart, multiple speeches.

testifying before the House Armed Services Committee. Representative Neal Abercrombie (Democrat, Hawaii) has been a congressman for sixteen years and, for the past several years, has been on the House Armed Services Committee. He is the Chairman for the Subcommittee on Air & Land Forces. By virtue of his position, he should possess a fundamental understanding of United States Northern Command's missions and operations. What follows is the transcript excerpt from an exchange between Representative Abercrombie and Admiral Keating:

ABERCROMBIE:

Admiral Keating, I'm doing my best to try and figure out just what it is, 4.5 years later, that the Northern Command does. Who is in charge of what? I've read through your testimony. I've gone through the staff preparation on mission and organization . . .

I see a lot of words in here about homeland defense, referring to a concerted national effort to secure the homeland from threats and violence, as differentiated from homeland defense, referring to military protection of the United States, civil support areas, called C.S., in the area of homeland defense, with the DoD as the lead agency.

Are you or are you not in charge of civil support defense of the United States? And, if you are, who is subordinate to you, and what is the reporting hierarchy?

KEATING:

I would answer the question, Congressman that I am not in charge of civil support homeland defense. I am tasked by the Secretary of Defense and the President for defending the homeland and providing defense support to civil authorities. And I think the words matter here and the distinction is important.

ABERCROMBIE:

*I think so, too. I can't figure out what you do. As far as I can tell, you have a group of people, approximately five hundred because these budgets all disappear into joint task forces and all kinds of integrated team efforts. I can't even find — I'm doing my best to try and figure out where all your budget is. **What precisely do you do?**"¹⁸*

¹⁸ Neil Abercrombie, Timothy Keating, "Congressional Testimony before the House Armed Services Committee, March 21, 2007," Resourced through the Legislative Liaison office at United States Northern Command [June 15, 2007].

This testimony by a senior member of Congress suggests that legislators, who fundamentally need to understand NORTHCOM in order to write effective legislation. This testimony is valuable because it is a succinct example of the lack of understanding about NORTHCOM within the highest levels of our government.

A. MILITARY DECISION-MAKING PROCESS

The military decision-making process (MDMP) has long-established roots as the military's primary methodology utilized in developing and selecting a course of action to accomplish the mission. It can be traced back in formal military doctrine as early as the 1940s with the U.S. Military publishing U.S. Army Field Manual FM 101-5: "Staff Officers' Field Manual: The Staff and Combat Orders." ¹⁹

The heart of MDMP is consistent with Dr. Henry Mintzberg's Strategic Control Model, called "The Rise and Fall of Strategic Planning." This model focuses on identifying courses of action and selecting one of them through its evaluation against a defined set of criteria, a non-linear model that involves emergent factors and feedback loops. ²⁰ In the words of Colonel Christopher Paparone, a then-PhD candidate selected to instruct at the Army College, "In the end, the Military Decision-Making Process serves as a valuable tool for coordinating intuition with analysis, task with purpose, plans with operations, and the present with the future." ²¹

B. LITERATURE REVIEW CONCLUSION

Sufficient literary evidence exists to suggest that NORTHCOM's critical stakeholders, such as emergency managers at the state and local level, do not possess a functional understanding of NORTHCOM operations, capabilities, or methods to request assistance from the U.S. military. A report from the Government Accountability Office — academic studies published in peer-reviewed journals and testimony before the House Armed Services Committee — clearly indicates that NORTHCOM's critical stakeholders need to be better educated in order to facilitate a coordinated, effective response.

¹⁹ Christopher Paparone, "U.S. Army Decision-making: Past, Present, and Future," *Military Review*, July/August 2001, www.au.af.mil/au/awc/awcgate/army-usawc/cmd-decis-mkg.pdf [accessed May 19, 2008].

²⁰ Ibid.

²¹ Paparone, "U.S. Army Decision-making."

III. CRITICAL STAKEHOLDERS (“WHO” TO EDUCATE)

If NORTHCOM is to successfully educate its critical stakeholders, it is important to first define what a critical stakeholder is. Despite thorough research within the Command, the author could not locate a formal definition of “critical stakeholder.” The author, therefore, offers the following definition, based upon his real-world operational experience and academic knowledge gained through his education at the Center for Homeland Defense and Homeland Security:

Critical stakeholders are the organizations and agencies that NORTHCOM will conduct intense collaboration with during times of crisis to facilitate timely and coordinated military support of civil authorities.

In other words, NORTHCOM’s critical stakeholders are those organizations that *must* be educated about the processes that lead to DoD support, the capabilities and limitations of that support, and perhaps most importantly, what their organization needs to do in order for NORTHCOM to support them in a timely and effective manner. They are the customers, the end-users of NORTHCOM’s “service.”²²

NORTHCOM has an Interagency Directorate, a division that involves sixty other organizations. Forty-five of these organizations have full-time liaisons stationed at the headquarters, with the remaining fifteen being on an “as needed” basis. They are not DoD employees; they are employees from their parent organization and their job is to assist in coordinating resources and operations during times of crisis. While some of these organizations are reflected on the following chart that summarizes NORTHCOM’s critical stakeholders, NORTHCOM routinely works with numerous other organizations that do not have liaisons in the Interagency Department. For example, it is critically important that each state’s Emergency Operations Center be educated about NORTHCOM, as they will directly interface with them during times of crisis. There is no representation, however, of the fifty state EOCs within the Interagency Directorate.

²² Lauren Wollman, CHDS faculty, interviewed by author, written notes, Naval Postgraduate School, Monterey, CA, April 2008.

The following chart portrays the primary stakeholders formally identified by NORTHCOM's Interagency Directorate (which are the majority of the organizations listed here) and adds several additional organizations (such as state EOCs) that need to be recipients of an effective NORTHCOM Education Strategy—they are the “WHO to Educate.” A description of the organization and their relationship with NORTHCOM follows the chart:²³

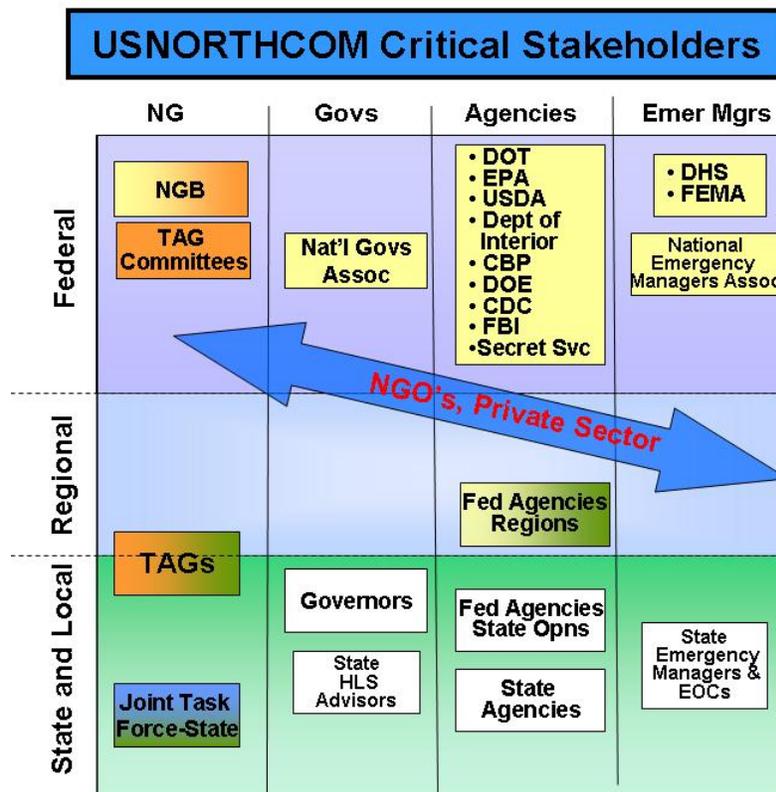


Figure 1. USNORTHCOM Critical Stakeholders (After: USNORTHCOM slide)

²³ USNORTHCOM's Interagency Directorate, obtained by the author from USNORTHCOM'S Interagency Directorate, May 2007, Colorado Springs, CO.

Approximately two hundred total critical stakeholder organizations need to be educated:

- Twenty Federal
- Fifty TAG/JTF-State
- Fifty Governors/State Homeland Security Advisors
- Fifty State EOCs
- Thirty (approx.) NGOs/Private Sector

It is important to understand that the education of personnel from these organizations will generally be conducted in mass training sessions in conference or training rooms, not in one-on-one situations. A few exceptions, such as governors or state homeland security advisors, are possible; generally, however, personnel from an organization will be educated en masse.

A. ORGANIZATIONS/REASONS

Stakeholders are divided up into three levels (state and local, regional, and federal), and then identified by category (National Guard (NG), Governors (Govs), Agencies, and Emergency Managers (EMs)).

The National Guard Bureau: The National Guard is critical in providing assistance to state and local officials. Though NORTHCOM does not directly control these forces (they are under the control of the governor), it is critical that they understand NORTHCOM's roles, capabilities, restrictions, and operating procedures. Doing so will increase the likelihood of obtaining a complementary and synergistic effect. As "Citizen Soldiers," they will likely be the first military personnel on the streets during a crisis, with Title 10 soldiers rolling in later to provide support. It is critical that the National Guard at the state and federal level understands who NORTHCOM is and how efforts will be integrated.

The Adjutant Generals (TAGs): The state TAG is the senior National Guard officer within each state. While the governor is the formal commander of a particular state's National Guard assets, the TAG is his/her senior military advisor. It is critical that

the TAGs understand the missions and roles that NORTHCOM will execute if requested by the state; the timelines and force compositions that may possibly arrive within their state; and, most importantly, how NORTHCOM will execute its missions in its assigned support role.

Joint Task Force - State: Each State National Guard has been funded by Congress to establish a Joint Task Force-State, whose mission is: “Provides command and control of all state military assets deployed in support of civil authorities or a specific incident and facilitates the flow of information between the Joint Force Headquarters — State (JFHQ-State) and the deployed units.”²⁴ This is the “interface” that NORTHCOM will have when working with a state’s National Guard.

National Governors’ Association (NGA): The mission of the National Governors’ Association, which is the bipartisan organization of the nation’s governors, is to “promote visionary state leadership, share best practices, and speak with a unified voice on national policy.”²⁵ This organization presents a unique opportunity to educate many governor staffers and officials in one setting about how NORTHCOM will support the states during a time of crisis.

State Governors: These officials are critical for two reasons:

1. They are the commander of their State National Guard, an organization that NORTHCOM will work with in supporting their operations.

2. To utilize Title 10 military troops, the state governor must act in accordance with the National Response Framework. Title 10 troops must generally be requested by the governor; they therefore must understand the request process, the capabilities, and the legal restrictions of what the Title 10 military can and cannot do (for example, Title 10 troops are not empowered with arrest authority — per the Posse Comitatus Act, this power is normally only vested in the State National Guard). While it may not be practical

²⁴ The National Guard, “The National Guard’s Role in Homeland Defense,” <http://www.ngb.army.mil/features/HomelandDefense/jtf/index.html> [accessed March 5, 2008].

²⁵ National Governors’ Association, “National Governors’ Association Mission Page.” <http://www.nga.org/portal/site/nga/menuitem.cdd492add7dd9cf9e8ebb856a11010a0/?jsessionid=HPxs184WWS4TIGnhMg2cTDFHkGbyjkhFJTcLzPzDQTryyFqMKRs!1069532038> [accessed March 5, 2008].

for the governor to undergo a comprehensive training program, it is practical that senior members of his or her staff undergo an extensive period of training. NORTHCOM senior leaders generally engage the governors themselves through office calls and visits to the NORTHCOM headquarters.

State Homeland Security Advisors: In 2006, the National Governors' Association created a Homeland Security Advisor position within each state.

The nation's state homeland security advisors are charged with the critical mission of protecting the residents of their state 365 days a year. These men and women are on the front lines every day and have a wealth of expertise and knowledge that should be part of any national dialogue about America's security.²⁶

As advisors to the governor and other agencies within a state, it is critical that NORTHCOM educate the State Homeland Security Advisors on how it will support the state during times of crisis.

National Agencies: The following agencies could, potentially, have significant interaction with NORTHCOM during times of crisis and, therefore, need to be educated as to how NORTHCOM will support their organization:

- Department of Transportation (DOT)
- Environmental Protection Agency (EPA)
- Department of Agriculture (USDA)
- Department of the Interior
- Customs and Border Protection (CBP)
- Department of Energy (DOE)
- Department of Health and Human Services (DHHS)
- Centers for Disease Control (CDC)
- Federal Bureau of Investigation (FBI)

²⁶ Mike Huckabee, "NGA Creates State Homeland Security Advisory Council," *National Governors' Association Webpage*, <http://www.nga.org/portal/site/nga/menuitem.6c98a9ebc6ae07eee28aca9501010a0/?vgnnetoid=07926c96dfb8b010VgnVCM1000001a01010aRCRD> [accessed March 5, 2008].

Department of Homeland Security (DHS): DHS is a critical coordinator of federal support (minus the military) in responding to consequence management operations. Though their primary mission is to lead a unified national effort to secure America, two of their strategic goals directly relate to supporting Americans after a man-made or natural disaster:

- Response — Lead, manage and coordinate the national response to acts of terrorism, natural disasters, or other emergencies.
- Recovery — Lead national, state, local and private sector efforts to restore services and rebuild communities after acts of terrorism, natural disasters, or other emergencies.²⁷

These strategic goals are in close alignment with NORTHCOM's mission of providing Defense Support of Civil Authorities. While NORTHCOM does not habitually work with all agencies that comprise the Department of Homeland Security, such as the Federal Law Enforcement Training Center, several of its organizations, such as FEMA and the Secret Service, are major stakeholders for NORTHCOM.

Federal Emergency Management Agency (FEMA): While under the umbrella of DHS, NORTHCOM works so closely with FEMA that it deserves a dedicated effort. Normally, the lead agency has the overall responsibility for coordinating/executing consequence management operations. Their formal mission statement is aligned with NORTHCOM's mission of supporting civil authorities in times of need:

The primary mission of the Federal Emergency Management Agency is to reduce the loss of life and property and protect the Nation from all hazards, including natural disasters, acts of terrorism, and other man-made disasters, by leading and supporting the Nation in a risk-based, comprehensive emergency management system of preparedness, protection, response, recovery, and mitigation.²⁸

²⁷ Department of Homeland Security, "Strategic Plans," <http://www.dhs.gov/xabout/strategicplan/index.shtm> [accessed June 25, 2007].

²⁸ Federal Emergency Management Agency, "About Us," <http://www.fema.gov/about/index.shtm> [accessed June 5, 2007].

Secret Service: Besides having the high-profile responsibility of protecting the president and other high-level leaders, the Secret Service also is the lead federal agency for several national Special Security events such as the Summer '08 Republican and Democratic National Conventions. NORTHCOM provides unique capabilities in support of these events, such as decontamination and explosive ordnance disposal teams.

National Emergency Managers Association (NEMA): NEMA is the professional association of and for state emergency management directors. NEMA's mission is to:

1. Provide national leadership and expertise in comprehensive emergency management.
2. Serve as a vital emergency management information and assistance resource.
3. Advance continuous improvement in emergency management through strategic partnerships, innovative programs, and collaborative policy positions.²⁹

State EMs/Operations Centers (EOCs): As the state's primary nerve center for coordinating recovery operations/consequence management, state EOCs are critical in that NORTHCOM "plugs into" them. NORTHCOM plugs into state EOCs through defense coordinating officers (DCOs are discussed in greater depth later in this paper), who have the responsibility for advising EOC leaders as to what capabilities the Title 10 military can provide while acting as NORTHCOM's liaison.

Non-Governmental Organizations (NGOs): NGOs abound within the United States; during times of crisis, NORTHCOM will likely have to coordinate with large NGOs, such as the American Red Cross. Like governmental organizations, it is important that large NGOs be familiar with how NORTHCOM will operate during times of emergency.

The Private Sector: Large corporations, such as Wal-Mart and Home Depot, have extensive, well-coordinated distribution systems that can be of tremendous assistance during an emergency. The private sector could deliver basic life-support items such as ice, water, food, batteries, blankets, etc. This is an area of expansion for NORTHCOM. Given their potential usefulness during an emergency, they too must be educated about how NORTHCOM supports civil authorities.

²⁹ National Emergency Management Association, "NEMA Home Page," <http://www.nemaweb.org/> [accessed June 25, 2007].

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IV. EDUCATIONAL PACKAGE (“WHAT” TO EDUCATE)

Now that the critical stakeholders have been identified, the next logical step is to identify exactly what kinds of information are most critical for each organization to receive. The author has termed this as the “WHAT” to educate, meaning the *educational package* that is of maximum benefit for a particular organization. Education packages must be able to be customized, allowing flexibility as to both the amount of time it takes to educate the stakeholders and what subjects should be taught. There needs to be an educational framework that allows for individual blocks of instruction to be assembled, depending upon which blocks are most beneficial for a particular stakeholder in the time that is available.

Education packages must be customizable for the following reasons and in the following ways:

Time: Educational packages must be tailored to reflect the varying degrees of time that organizations are able to dedicate. Some organizations may be able to allocate two days to receiving an in-depth block of instruction, while other organizations may only be able to allocate a few hours. Educational packages must therefore be tailored to reflect the time that a particular stakeholder has to receive its NORTHCOM education.

Needs: Education packages must be tailored to reflect the differing needs of various stakeholders. While all stakeholders will certainly need to understand several blocks of instruction that are common to all organizations, different stakeholders will have different educational needs based upon their operations with NORTHCOM. For example, a city EOC such as in Chicago and Customs & Border Protection (CBP) are both critical stakeholders of NORTHCOM. Both of these organizations could find themselves being supported by NORTHCOM, such as in the case of a terrorist chemical attack in Chicago or a mass migration of illegal aliens from Cuba. Both organizations need to be educated in an area that is common to both: the process for requesting military assistance. While both need to have some knowledge about NORTHCOM that is common to both organizations, the expected type of support from NORTHCOM is

radically different. The Chicago EOC would want to know what kind of chem/bio response team support they could expect from NORTHCOM, being interested in the numbers/sizes of units that could respond, what their capabilities are, what type of equipment they would utilize, and what type of response timeline they should expect. CBP, on the other hand, would not likely be interested in NORTHCOM's chem/bio response teams. One of their focus areas would likely focus on imagery support and the response of the U.S. Navy. They would want to know what type of naval assets could possibly be utilized, expected timelines of naval response, and what legal provisions and restrictions are in effect that determine what the Navy can and cannot do.

It is therefore critical that the education package is tailored to reflect the time and needs of different stakeholders. A "curriculum" type of package structure must be utilized, with pre-made "*off the shelf*" briefings and forum discussions that can easily be put together to formulate an effective package that meets the needs of the stakeholder in the allotted time. This education package is called the NORTHCOM Curriculum.

A. THE NORTHCOM CURRICULUM

The results of the previously-discussed study by Grosskopf, Milliman, and Paez, which analyzed how EMs feel that DSCA education could be improved, revealed six important guidelines to be considered in determining the NORTHCOM Curriculum. According to the study, the education content of the education should include:

- Describe the process involved in DSCA
- Educate EMs on how to request military assistance
- Educate EMs on what assistance the military can provide
- Address communication issues
- Clarify funding implications
- Customize DSCA education ³⁰

Blocks of instruction or "classes" that focus on delivering information about NORTHCOM in specific areas utilizing a concise format are the key to an effective

³⁰ Grosskopf, Milliman, and Paez, "Emergency Managers Views."

educational package. Briefings and lectures on a variety of subjects can be assembled to form an agenda that is effective for a particular stakeholder. A good analogy to help understand this concept is a college student earning their Undergraduate Degree at “NORTHCOM University.”

Most universities require that their students take certain “core courses” during the initial phases of their education, and then branch out into their “elective courses.” The core courses are subjects that are important for all students to know; they are a common body of knowledge that is critical for the student to build a good foundation upon before they branch out into their electives. The electives are courses in their specialized areas of study, providing them the skills and knowledge that is unique to their area of interest. Whereas all students will find the core courses relevant and important, different students have different elective requirements based upon need.

At “NORTHCOM University,” all of the critical stakeholders are the students. They are students that need to be educated on a body of NORTHCOM knowledge that is common to all stakeholders (“core courses”), and they need to be educated on NORTHCOM areas that are unique to their particular field (“elective courses”). It is critical for a university student to be able to tailor his or her educational package to meet their individual needs; in the same way, it is important that the critical stakeholders are able to have an educational package that is tailored specifically to meet the needs of their organization. The “NORTHCOM University Curriculum” is one that consists of both core courses and electives, with NORTHCOM officials working together with stakeholders in choosing blocks of instruction (“classes”) that are to be executed in the allotted time. This creates a “curriculum” that is tailored to be the most effective in meeting the educational needs of differing stakeholders.

These “blocks of instruction” or “courses” are, to a large degree, already in place. When organization representatives come to the headquarters, they fill out a Distinguished Visitor Request Form. An important section of this form is where visitors state their “purpose of the visit.” Between the background information provided on the organization and their stated purpose for visiting the Command, the NORTHCOM leadership selects the agenda for the visit. Briefings already exist for the vast majority of

“curriculum courses,” from which the leadership is able to assemble and coordinate briefers on the topics of most relevance to the visitor. These briefings are approved at the very highest level of NORTHCOM leadership, meaning that these existing briefings contain the key messages and important points that are critical to communicate to the stakeholder. The briefings outlined in this chapter have been reviewed by a NORTHCOM Training & Education Division senior official, who concurred that these subjects would be appropriate for this type of education strategy.³¹

The educational strategy outlined in this paper essentially duplicates this process and customizes it more formally for the stakeholder. Through the implementation of this strategy, stakeholders are able to have a great degree of influence as to what education they will receive on the material of their choice.

1. Developing the Curriculum

Decisions regarding Core and Electives would be determined jointly, and ahead of time, between NORTHCOM and Stakeholder officials. This would be executed telephonically using the Stakeholder Curriculum Development Form.

2. Stakeholder Curriculum Development Form

The intent of this form is to identify the level of knowledge about DSCA and develop the curriculum that will be executed at the stakeholder location. This form would be filled out approximately one month prior to the training. The NORTHCOM Training & Education Division POC would contact the stakeholder POC, sending that POC the form. The stakeholder POC would coordinate internally with senior leadership to identify what blocks of instruction would be of most value. A telephonic conversation between the stakeholder POC and the NORTHCOM Training & Education POC would ensue, finalizing the Education Curriculum.

Information obtained from the form would then be utilized by NORTHCOM personnel to tailor/modify the training to be administered to that particular stakeholder.

³¹ Houston Polson, NORAD and USNORTHCOM Training and Exercises Directorate, interviewed by author, written notes, NORAD and USNORTHCOM Headquarters, Colorado Springs, CO, May 2008.

If an organization had a particular need that is unique and not normally covered in the training, NORTHCOM personnel could then tailor the training to fill that particular need.

An example is the National Interagency Fire Center (NIFC) in Idaho, whose official mission is “to serve as a focal point for coordinating the national mobilization of resources for wildland fire and other incidents throughout the United States.”³² This body consists of components from several stakeholder organizations. One area of their education that is not part of the standard education package (core courses) would be a portion focusing on military assets that can be utilized for firefighting. The military has the MAFFS, “Modular Airborne Fire Fighting System.”³³ This is a fire system inside a C-130 cargo aircraft that dispenses large amounts of fire retardant. In the case of a large-scale fire, such as the ones experienced in California in October 2007, aircraft under the control of NORTHCOM would be deployed from North Carolina, Wyoming, Colorado, and California. NIFC personnel would receive training specifically tailored for their organization, focusing on the request procedures, response timelines, and equipment considerations required to employ the MAFFS.

3. Core Courses

Core courses are blocks of instruction or subjects that all stakeholders must fundamentally understand if they are to work effectively with NORTHCOM. All stakeholders would receive the core courses, which take approximately five hours to deliver.

The majority of these core courses are already fully developed; they are the series of briefings that visitors from critical stakeholder locations receive when they travel to the NORTHCOM Headquarters in Colorado Springs. During the time that they spend at NORTHCOM headquarters, they normally receive briefs from a Subject Matter Expert

³² National Interagency Fire Center, “NIFC’s Mission,” http://www.nifc.gov/about_nifc/tour.htm [accessed December 17, 2007].

³³ Fire & Aviation Management, “Modular Airborne Firefighting Systems,” *U.S. Forest Service*, http://www.fs.fed.us/fire/aviation/fixed_wing/maffs/index.html [accessed December 17, 2007].

(SME) in several areas. These briefings form the heart of the core courses; SMEs present the information at the stakeholder's location.

What follows is a brief description of these core courses:

Bi-Command Brief: (one hour) Provides a “big picture” overview of NORAD and NORTHCOM in regards to the following areas:

- Missions
- Area of Responsibility
- NORTHCOM and the National Guard
- Capabilities
- Spectrum of Operations
- Command and Control Architecture
- National Response Framework
- Interagency Coordination
- Training & Exercises

National Response Framework/DSCA Procedures: (one hour) Provides an overview of the National Response Framework with the primary focus being on how Title 10 military forces become involved in supporting Civil Authorities. Stakeholders are likely already familiar with the National Response Framework; these briefings will emphasize the fact that Title 10 forces must be requested by civil authorities, they must be directed by the President or Secretary of Defense, and that the role of the Title 10 military is to support other agencies that are in the lead. This brief will also explain the fundamental differences between Title 10 and Title 32 forces concerning Command and Control, Law Enforcement Authority, and organizational structure.

Request for Assistance Process: (one hour) Provides instruction on how critical stakeholders can request military support:

- Types of Typical Assistance
- Request Process

- Pre-Scripted Mission Assignments (“Fill in the Blank” forms utilized to expedite requests)
- Approval Procedures
- General Timelines for Response
- Funding Issues

Plans Brief: (thirty minutes) Provides an overview of the set of NORTHCOM plans, which cover a wide range of support situations (hurricane, wildfire, mass evacuations, chemical/biological response, civil disturbances, etc.). Briefings on specific plans could be covered in detail during the follow-on “electives” phase of instruction.

Interagency Brief: (thirty minutes) Effective coordination with critical stakeholders is possibly the most important element in NORTHCOM, providing a timely and effective response. This brief discusses NORTHCOM’s Joint Interagency Coordination Group (JIACG). The JIACG consists of sixty different organizations with which NORTHCOM has an habitual relationship. This includes governmental organizations, such as FEMA, USDA, EPA, etc., and several non-government agencies, such as the Red Cross. Forty-five of the sixty organizations have full-time liaisons permanently assigned to the Headquarters, with the remaining fifteen being available on a reach-out basis. In the event of an emergency, these liaisons come together to facilitate effective coordination between the military and their parent organization. This brief serves to give an overview of the philosophy, structure, and operational procedures of the JIACG.

Operations: (thirty minutes) This brief provides an overview of the spectrum of Civil Support Missions that NORTHCOM is typically called upon to support. Examples include planned events such as the launch and recovery of the Space Shuttle, State of the Union Addresses, and the 2008 Republican and Democratic Conventions. Of particular relevance to many of these critical stakeholders are NORTHCOM operations supporting unplanned events. These can be man-made, such as a terrorist attack, or natural disasters such as a hurricane, flood, or wildfire. Follow-on elective briefings can focus more in-depth on operations most relevant to a particular stakeholder.

Training & Exercises: (thirty minutes): Many of the extensive exercises that NORTHCOM executes focus on the Civil Support mission. This briefing would focus on the different types of exercises that NORTHCOM executes or participates in, and on what opportunities are available for participation by other agencies. Of particular relevance would be a discussion about the many Table Top Exercises that NORTHCOM hosts. These are particularly valuable for non-DoD agencies that typically do not have the funding, time, or manpower that DoD enjoys. Involvement in these Table Top Exercises can be of significant benefit for these critical stakeholders.

4. Electives

While all critical stakeholders need to understand the fundamental information in the core courses, each stakeholder has needs and focus areas that are unique to that organization. The following briefings, while not applying to all stakeholders, may be of significant interest to several stakeholders. The NORTHCOM Education Curriculum Officer and Stakeholder official should discuss which of the following briefings would be of most benefit for that organization. Each briefing would take approximately forty-five minutes to conduct. Briefings, to the fullest extent possible, should be tailored to meet stakeholder requirements:

- CBRNE Response Capabilities (Chemical/Biological, Radiological/Nuclear/High-Yield Explosives)
- Unmanned Aerial Vehicle Operations
- Theater Security Cooperation with Mexico
- NORTHCOM Counternarcotics/CounterDrug Activities
- NORTHCOM Intelligence Activities
- Medical Emergency Preparedness and Response
- Information Sharing Capabilities
- Deployable and Interoperable Communications
- Common Operational Picture
- Maritime Domain Awareness
- Impact of Posse Comitatus
- Pandemic Influenza Operations

If a specific area — one that is important for a stakeholder to understand — is not addressed, efforts should be made to create a NORTHCOM brief that will address the stakeholders' questions and concerns.

The Stakeholder Curriculum Development Form should be completed at least thirty days prior to the scheduled training. This will allow time for briefings tailored to meet the needs of a stakeholder and allow the NORTHCOM educators time to learn about the stakeholder's organization (background, operations, and anticipated questions).

See the Appendix for the Stakeholder Curriculum Development Form.

5. Roundtable Discussions

It is important that the aforementioned briefings are held at the beginning of the education session; they contain the critical information that stakeholders will need to know, if and when they must work with NORTHCOM. Each briefing should include time for questions and answers. If sufficient time is available after the briefings, a roundtable discussion is recommended.

The concept of a roundtable discussion is fairly simple; this is where NORTHCOM educators and selected stakeholder officials sit down to a roundtable discussion about the topics of most relevance to the stakeholder. Whereas the briefings are designed to be a one-way "push" of information to the stakeholder, the roundtable discussion provides a mechanism for NORTHCOM officials to get input and feedback. This dialogue will facilitate NORTHCOM officials to "take back" the concerns of the stakeholder, with potential recommendations on how to improve coordination between the two organizations.

The amount of time allotted to the roundtable discussion will vary according to the time available for the session. Ideally, approximately two hours will allow for a full discussion of relevant issues.

6. “Leave Behind” Educational Products

Several educational products will remain with the stakeholder organization upon completion of the session. These will be critical as reference materials for future emergencies, as well as for educating officials who were unable to attend the training. Educational products will consist of the following:

NORTHCOM Handbook: A thorough check of the NORTHCOM Headquarters revealed that there is no NORTHCOM Handbook, an easy-to-use reference that is given to critical stakeholders. Stakeholders could use this handbook during an emergency to quickly review critical information, saving time and eliminating confusion.

The handbook should contain the following as a minimum:

- Brief summary on the National Response Framework w/regard to military forces
- Brief summary on the Request For Forces Process
- Pre-Scripted Mission Assignments
- Brief summary on Posse Comitatus

Copies of Briefs: A bound hardcopy of all presented briefs will be left with the stakeholder organization. Briefs will include detailed notes pages.

Briefing DVD: All briefings will be videotaped at NORTHCOM Headquarters and turned into a professional-quality DVD. Stakeholder officials who were unable to attend the training would be able to watch the recorded briefings.

7. Online Forum Discussions

NORTHCOM has an extensive unclassified online “portal” or website that has controlled access. An effective means for hosting a DSCA-related discussion and answering questions posed by critical stakeholders is the establishment of an online forum discussion. Similar to the online forum utilized by the Center for Homeland Defense and Security program, this online platform allows for registered users to post questions about DSCA topics, discuss relevant articles, and engage in online debates.

This online forum could conceivably advance the DSCA body of knowledge beyond the DoD parameters, as stakeholders could utilize the forum to discuss non-DoD-related issues, as well as those involving the military. Though the online forum could include organizations that have not received the training, it would be most beneficial for those stakeholders who have received the NORTHCOM education. This would enhance the relationship building and information sharing that many civil support leaders consider key to an effective, timely response.

Additionally, the online forum is an effective method of updating stakeholders as changes occur. NORTHCOM educators could post updates to the forum when the information that stakeholders received on policies, operations, or methods during training has changed. An example of this is Prescribed Mission Assignments, or “PMAs.” PMAs are forms jointly constructed by FEMA and NORTHCOM, which serve to streamline the request for military assistance through the use of “fill in the blank” support requests. NORTHCOM and FEMA have identified the most common types of assistance that is requested by the military and have created these forms so that requesters may quickly and easily request assistance, providing the critical information that NORTHCOM needs to support in a timely manner. Examples include aviation support, medial services, chem/bio response teams, etc. In May of 2007, there were approximately fifteen PMAs in existence. As of May 2008, twenty-six PMAs were in existence. These additional PMAs could be posted on the online forum. The online forum is an effective way of pushing this new information to stakeholders in a quick and accurate manner.

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V. DELIVERY OPTIONS (“HOW” TO EDUCATE)

Once the educational package, or the “What to Educate,” has been determined, the next logical step is to identify the most effective means by which the material can be delivered. The author calls this issue of delivery means the “How to Educate.”

The author has identified three COAs regarding the method by which NORTHCOM should educate critical stakeholders. These are:

1. Online Training & Resource
2. Video Teleconference (VTC) Training
3. Traveling Subject Matter Experts (SMEs)

This portion of the paper will consist of the following for each COA:

- Description
- Pros & Cons
- Identification & Definition of Evaluation Criteria
- Prioritization of Evaluation Criteria
- Discussion and ranking of each COA utilizing Evaluation Criteria
- COA Evaluation Matrix

A. ONLINE TRAINING AND RESOURCE

This education-delivery option would call for the construction of an extensive website available for critical stakeholders from their location. NORTHCOM education officers would engage critical stakeholders via phone and email and encouraged to visit the website. The website would be password-protected from the public.

The website would consist of the following components:

Taped Briefings: The aforementioned briefings would be videotaped at NORTHCOM Headquarters and would be posted on the website for viewing.

Resources: Numerous unclassified documents would be posted to the website. These would include the significant number of NORTHCOM plans (such as how NORTHCOM would react to a CBRNE event, Pandemic Influenza, Hurricane Response, etc.).

Points of Contact: An extensive list of phone number and email addresses would be maintained on the website so that stakeholders know whom to contact for information.

Chat: A real-time chat framework would be incorporated into the website. While it is not practical for a knowledgeable NORTHCOM officer to be dedicated to the website 24/7, the NORTHCOM end of the chat could be the Communications Support Center. This is a communications “Help Desk” which assists NORTHCOM personnel by troubleshooting problems with Blackberries, computers, cell phones, and pagers. It is manned 24/7. Stakeholders could chat in real time about questions that they have. While the communications support personnel would likely not know the answer to the question, an extensive “who to contact” list would be supplied to them to help direct the question to the proper SME. They would act as a “chat operator” to direct questions to the appropriate person.

It is important that stakeholders receive immediate answers to their questions via the chat session, as opposed to simply asking a question in an email or being told in the chat session that “someone would get back to them.” Each directorate within NORTHCOM (Personnel, Intelligence, Operations, Logistics, Plans, Communications, Training, and Finance) generally has a representative on duty twenty-four hours a day, stationed in the Command Center. The Communications Support personnel could receive the question from the stakeholder in real time, call the proper SME and inform them that they have a chat question, and then activate a chat window on their computer that would allow the stakeholder to chat directly with the SME in real time. During a large-scale crisis such as a hurricane, a team of SMEs could be stationed 24/7 to handle the large number of chat requests.

B. VIDEO TELE-CONFERENCE (VTC) TRAINING

This education-delivery option calls for a VTC to be coordinated for a date and time that is supportable by both NORTHCOM and the critical stakeholder, preferably an eight-hour block. Stakeholder officials would then be briefed in real time by NORTHCOM SMEs, facilitating an opportunity for questions and answers in a discussion format. NORTHCOM education coordinators would work with the critical

stakeholders prior to the session to jointly fill out the Stakeholder Curriculum Development Form to determine what briefings should be given. SMEs would then be coordinated to give the briefings via VTC from the NORTHCOM Headquarters.

C. TRAVELING SUBJECT MATTER EXPERTS

This education-delivery option calls for NORTHCOM Subject Matter Experts to travel to the stakeholder's location to present the information in a face-to-face format. NORTHCOM Education Coordinators would work with the critical stakeholders prior to the session to jointly fill out the Stakeholder Curriculum Development Form to determine what briefings should be given, along with a date for the training. Briefings would then be given in person, allowing an interpersonal communication platform to be established for both the briefings and the follow-on roundtable discussion, time permitting.

D. PROS AND CONS

There are several pros and cons to each of the delivery methods:

1. Online Training and Resource

Pros

- Low cost due to no travel.
- Able to educate multiple stakeholders simultaneously.
- On-demand Training: stakeholders able to access information at their convenience.
- Education Repeatability: stakeholders able to access training and resources multiple times. (May undergo initial training and then “refresher training” several months later).
- Allows for access to the most updated training available.

Cons

- Lack of interpersonal communication that is critical to relationship building.
- High degree of initiative required by stakeholder (must “pull” NORTHCOM information, rather than having it “pushed” to them).

- Inability to customize briefings for individual stakeholder — since the briefings will be taped and put on the web for all stakeholders to access, the briefings must be standardized, applicable to all stakeholders. The operations briefing that CBP watches will be the same briefing that Health & Human Services watches. These organizations have different areas of interest.

2. Video Tele-Conference (VTC) Training

Pros

- Low cost due to no travel.
- Some degree of interpersonal communication.
- Briefings can to be tailored for a particular audience.

Cons

- Technical Support Requirements: not all stakeholders may have VTC capability. If they do have the technical capability to conduct a VTC, the facility may be in a small executive office or room with limited seating (limits number of people being trained).
- Lack of face-to-face interaction: While the VTC option allows for more interpersonal communication than the Online Training option, it does not allow for the relationship building that often occurs when discussions happen face to face. Repeatedly, interagency leaders focus on the importance of building relationships with other agencies in advance of an emergency. These relationships are built primarily through personal contact, not through a discussion on a VTC screen.

3. Traveling SMEs

Pros

- *High degree of Personal Interaction:* Since this option calls for NORTHCOM and stakeholder personnel to physically spend time together, this option has a high degree of personal interaction. This personal contact, be it through questions during a briefing or roundtable discussions, facilitates critical relationship building through personal contact.
- Large number of stakeholder personnel receiving the training. A 1-day “NORTHCOM Workshop” at the stakeholder location would likely result in a large number of personnel being educated (compared to a VTC).
- Briefings can be customized for a particular stakeholder.

Cons

- High Travel Costs.
- Requirement to Reengage: Once the training has been conducted, it will be required for NORTHCOM personnel to revisit the organization in the future. This is due to updated information and new stakeholder personnel.
- High degree of Coordination: Both NORTHCOM and stakeholder personnel would have to deconflict meetings/operations to ensure that well-qualified NORTHCOM personnel are able to travel to the stakeholder's location at a time when officials from both parties are available.

E. EVALUATION AND SELECTION

Three options have been presented for consideration regarding the educational delivery method: Online Training, VTC, and Traveling SMEs. An evaluation technique will now be utilized to determine the best method for training NORTHCOM's critical stakeholders at their location.

Since this thesis is directed towards the senior leadership of NORTHCOM, the author has selected an evaluation tool that they are familiar with: the Military Decision Making Process (MDMP).

MDMP is defined as, "A planning tool that establishes procedures for analyzing a mission, developing, analyzing, and comparing courses of action against criteria of success and other, selecting the optimum course of action, and producing a plan or order."³⁴ A structured process assists military staffs on the best way to accomplish an assigned mission. There are five distinct steps. Through the course of this thesis, the author has essentially executed all five steps:

1. Receive the Mission: Develop an effective strategy to educate critical stakeholders at their location.

2. Mission Analysis: Identify critical stakeholders ("Who to Educate") and the educational package ("What to Educate").

³⁴ U.S. Army, *FM 5-0, Army Planning and Orders Production* (U.S. Army Doctrine Center, Ft. Leavenworth, KS, 2003), glossary.

3. *Develop Courses of Action:* In this chapter, several delivery options (“How to Educate”) have been described. These are Online Training, VTCs, and Traveling SMEs.

4. *Analyze the Courses of Action:* Analysis of the pros and cons for Online Training, VTCs, and Traveling SMEs.

5. *Compare the Courses of Action:* This portion of the thesis will now compare the three COAs by rating their effectiveness against weighted evaluation criteria.

F. COMPARISON METHOD

This comparison method consists of several steps. The first step is determining the evaluation criteria, which are the criteria by which each method will be evaluated for its relative strength or weakness. This portion will include definitions for each criterion. Evaluation criteria will then be prioritized and be assigned “weights,” or relative values. Some evaluation criteria are more important than others are. This prioritizing has established “weights,” or levels of importance that are important in determining the best course of action.

Each COA will then be ranked 1, 2, or 3, in order of their relative strength for each evaluation criterion, with 1 being the strongest and 3 being the weakest. It is possible for there to be a tie between COAs concerning their ranking. Each COA will be given a score or point value by multiplying the criterion weight by its relative ranking of 1, 2, or 3. The scores will be totaled, and the strongest COA will be identified by its total score. A COA Comparison Evaluation Matrix and a detailed explanation of the process are presented at the conclusion of this chapter.

In the military, the commander’s experience and subjective judgment is of critical importance. Though rare, if the staff executes the process correctly, a commander may override the recommended COA, instead choosing an alternate COA based upon his/her experience. This is where the “art” of military tactics comes into play, versus the “science” of the comparison technique.

G. EVALUATION CRITERIA

The following evaluation criteria are used to assess the strengths and weaknesses of each of the three COAs. A definition is presented (either sourced or author-developed) along with a brief discussion for each of the evaluation criteria. While other factors certainly apply to a minor degree, the following four criteria are deemed the most critical:

1. Interpersonal Communication: Though many definitions exist, an applicable one is “all aspects of personal interaction, contact, and communication between individuals or members of a group.”³⁵ Effective interpersonal communication depends on a variety of interpersonal skills including listening, asserting, influencing, persuading, empathizing, sensitivity, and diplomacy. Important aspects of communication between people include body language and other forms of nonverbal communication.³⁶

2. Cost: Defined as “the financial cost per year to educate critical stakeholders at their location.”

3. Technical Support Availability: Defined as “the availability of technical support required to execute the training, to include both hardware and software.”

4. Customization: Defined as “the degree to which delivered information can be customized to meet the needs of individual stakeholders.”

H. CRITERIA PRIORITY

The author has determined that Evaluation Criteria should be ranked in the following order:

1. Interpersonal Communication

2. Customization

³⁵ BNET Business Directory. “Definition of Interpersonal Communication,” <http://dictionary.bnet.com/definition/interpersonal+communication.html> [accessed February 22, 2008].

³⁶ Ibid.

3. Technical Support Availability

4. Cost

The criteria order reflects the priority in the author's view only, with substantial and defensible justification provided in the following paragraphs as to why these criteria are ranked in the order shown. Before the Evaluation portion of MDMP begins, however, the unit's commander typically rank orders the criteria according to what he or she believes is the relative importance of each. As the author has done here, the staff will conduct research and will make recommendations to the commander concerning the order of the criteria. Ultimately, the priority order is decided upon by the commander. This is normally determined as a blend of the current situation and the commanders' intuition — again, being a case where the “art” of war meets with the “science” of war. In the case of this education strategy, the NORTHCOM commander will ultimately determine the criteria priority. The commander may agree with the justification of the order presented here, in which case the results of this chapter's evaluation will be selected. If the commander alters the priority order, a potentially different COA may be determined as being the most effective (the author has executed the comparison process utilizing different criteria priority. In the majority of cases, the end results are the same; however, there is at least one situation where a different criteria priority resulted in a different COA being selected as the most effective). For the purposes of this paper, the criteria have been prioritized as listed, with credible and substantial justification.

I. CRITERIA PRIORITY JUSTIFICATION AND COA EVALUATION

1. Interpersonal Communication

Interpersonal Communication is judged to be the most important criterion in evaluating each COA for several reasons. First is direct feedback from stakeholders in the previously referenced study of emergency managers by Grosskopf, Milliman, and Paez, where their study focused on “ways to improve the education and training programs for local EMs on the DSCA process.” It concluded that “the majority of EMs do not believe that they have received effective DSCA education and *that interpersonal methods*

*were most positively related to having received effective DSCA education.*³⁷ The second reason that interpersonal communication is deemed the most critical of the four criteria is the philosophy of the NORTHCOM Commander, General Gene Renuart. In many meetings, briefings, and speeches regarding the importance of relationship-building and interpersonal communication, he is often quoted as saying, “The time to exchange business cards for the first time between stakeholders is not at the site of the emergency; it is critical that relationships be built prior to the emergency.”³⁸ Interpersonal communication is essential to this relationship building.

Discussion: Of the three COAs, the Traveling SMEs option clearly has the highest level of interpersonal communication due to NORTHCOM personnel physically meeting with the critical stakeholders at their location. While the VTC option does have a degree of interpersonal communication due to the real-time interaction between briefer/audience, the fact that interaction happens on a screen and not in the same room renders its level of interpersonal communication less than that of Traveling SMEs. The Online Training COA clearly has the lowest level of interpersonal communication, as there is no face-to-face interaction between the two parties.

2. Customization

The ability to customize the delivered information is ranked second of the four criteria, due to the importance of providing an individual stakeholder with the specific information the organization requires. The answers to the same question may differ dramatically between two stakeholders. Take a question about the time it would take for debris-removal equipment to arrive — such as bulldozers — following a major hurricane. Suppose that the same question is posed by emergency managers in Houston, Texas, and emergency managers on St. Thomas, U.S. Virgin Islands (for which NORTHCOM is responsible regarding DSCA). The answers would be very different. Bulldozers needed in Houston could be trucked in, with large numbers of them being readily available at Ft. Hood Texas, just several hours drive away. Contrast this answer to the one given to

³⁷ Grosskopf, Milliman, and Paez, “Emergency Managers Views.”

³⁸ Renuart, multiple speeches.

officials on St. Thomas, where the nearest military bulldozers would be flown in from a considerable distance. This is a clear example of how briefs need to be tailored for each stakeholder.

Discussion: The Traveling SMEs and VTC options both allow the same degree of tailoring information to meet a Stakeholder's need. SMEs traveling to the stakeholder location and those briefing from NORTHCOM Headquarters via VTC will already know ahead of the visit what the concerns/interests are of the stakeholder via the Education Curriculum Development Form. Briefings and discussions can be tailored to address those concerns. For the purposes of the evaluation matrix (to be discussed shortly), both of these options will receive the same score. The Online Training option clearly has the lowest ability to customize information. Briefings would be recorded and placed online for access by all stakeholders. These briefings would, by necessity, be more "generic" or "overarching" than briefings designed specifically for a particular stakeholder.

3. Technical Support Availability

The availability of technical support is ranked third of the four criteria. This criterion includes the hardware and software required to support the training. This factor is clearly of most importance to the VTC course of action, as VTC capability that allows large numbers of officials at the stakeholder location to be educated may simply not be available.

Discussion: The Traveling SME option scores highest in this category, as it requires virtually no technical support or equipment to execute the training. Technical support/equipment would likely be limited to a laptop computer with a Proxima projector, which NORTHCOM personnel could bring with them in the rare instance where a stakeholder does not have this equipment. The Online Training option is ranked second of the three COAs; the hardware and software required to execute to build and maintain a website is minimal and already adequately exists at NORTHCOM Headquarters. The VTC option requires the most technical support to execute the training, requiring extensive hardware and software along with trained VTC technicians.

4. Cost

The fourth and last criterion in order of importance is Cost. While the financial cost involved in educating critical stakeholders cannot be discounted, it is not as critical as the previous three criteria. The educating of NORTHCOM's critical stakeholders will, through improved coordination and decreased response time, help to save lives and mitigate suffering. The cost of this education strategy, while some may possibly consider significant, pales in comparison to the expected benefits. It is quite difficult to argue that one should balance the travel costs of a COA compared to the potential saving of human life. As previously stated, the most expensive COA to implement is just under \$400,000 (a detailed cost analysis is included in Chapter VI), consisting primarily of travel expenses for paid by NORTHCOM. This is just 1/2 of 1 percent of the 2009 NORTHCOM budget.³⁹ While the NORTHCOM Commander will ultimately have to weigh the benefits of the program verses other priorities, the very small percentage of the overall budget — balanced against the enormous benefit of educating stakeholders — makes this program a small investment with a very high payoff. It directly supports one of his priorities of building relationships and “telling the NORTHCOM story.”

Discussion: The Online Training option and VTC COAs are tied for having the lowest costs. NORTHCOM already has an extensive computer system design team in place; it is focused on building and maintaining the various internal information portals within the Command. These same techs would assume the mission of building/maintaining an online education website as part of their duties within a normal duty day. The VTC option has no additional cost involved. NORTHCOM and most other agencies purchase “VTC time” through commercial carriers for a fixed rate, regardless of the amount of time actually conducting a VTC. The hardware/software for conducting a VTC already exists (it is assumed that a stakeholder would not decide to install VTC capability due to the NORTHCOM Education Program — they either have the equipment or they do not). The Traveling SMEs option clearly has the highest cost of the three COAs. Future portions of this paper will discuss estimated travel costs for NORTHCOM

³⁹ Taliaferro, interviewed by author.

officials based upon different education team packages. It is safe to say, however, that this is the most expensive of the three COAs to execute.

J. COA EVALUATION MATRIX

The COA Evaluation Matrix is a tool commonly used by military staffs to assist the Commander in making a decision. The staff identifies several courses of action, defines Evaluation Criteria that are ranked and weighted, rank orders the three COAs for each Evaluation Criterion, multiplies the weight of the Evaluation Criterion by the rank scores, and the numbers are totaled to identify which COA is the strongest. This process will now be explained, with regards to determining which educational method is most effective in educating NORTHCOM’s critical stakeholders.

Below is the COA Evaluation Matrix to determine the most effective educational method. A detailed explanation follows below the matrix:

| Criteria w/ weight | Online Training COA | VTC COA | Traveling SME's COA |
|---------------------------------|---------------------|-----------|---------------------|
| Interpersonal Communication [4] | 3 (12) | 2 (8) | 1 (4) |
| Customizing [3] | 3 (9) | 1.5 (4.5) | 1.5 (4.5) |
| Tech Support Availability [2] | 2 (4) | 3 (6) | 1 (2) |
| Cost [1] | 1.5 (1.5) | 1.5 (1.5) | 3 (3) |
| TOTAL SCORE | 26.5 | 20 | 13.5 |

Figure 2. COA Evaluation Matrix: "How to Educate"

The left-hand column consists of the Evaluation Criteria with an accompanying weight. Assigning a weight to each criterion is a method to reflect that not all evaluation criteria are equal in importance. The criteria are rank ordered, with Interpersonal Communication being more important than Customization, Customization is more important than Tech Support Availability, with Cost being the least important of the criteria. The justification for this priority was explained in the discussion portion of the evaluation criteria. The weight for each criterion is shown in brackets, with the most important criterion having the heaviest weight.

The next three columns concern the three COAs: Online Training, VTC, and Traveling SMEs. These three were rank-ordered from best (with a score of 1) to worst (with a score of 3) for each criterion. The weight of those criteria is then multiplied by the ranking to give each COA a weighted score for that criterion, shown in parenthesis.

An example of this is the “Tech Support Availability” criterion. This criterion was ranked third in importance, as previously explained. It therefore has a weight of 2 (shown in brackets). Of the three COAs, the traveling SME option was ranked first (score of “1” in black), online training ranked second (score of “2” in black) and VTC is ranked third (score of “3” in black). The criterion weight of 2 is then multiplied by the score of each COA to determine the weighted score for each COA regarding “Tech Support Availability.” This weighted score is shown in parenthesis. This process is repeated for each evaluation criterion. In situations where the COAs were tied in ranking (for example, the discussion portion of the cost criterion showed that the costs to implement the online training COA and the VTC COA were essentially the same), then those COAs received the same score of 1.5.

All weighted scores are then added for each COA. The COA that has the lowest overall score is determined to be the best of the three COAs. The result of this process shows that the traveling SMEs COA has a total score of 13, the VTC COA has a score of 20, and the online training COA has a total score of 26.5.

For this situation, the evaluation matrix reveals that the traveling SMEs COA is the one best suited for educating critical stakeholders at their location. This is consistent

with common sense: this COA was ranked or tied as being strongest for three of the four evaluation criteria, to include the most important criterion of interpersonal communication. Therefore, the course of action where NORTHCOM subject matter experts physically travel to critical stakeholder locations is determined to be the most effective method of “How to Educate.”

VI. EDUCATOR OPTIONS (“WHO” SHOULD EDUCATE)

Up to this point, this paper has identified the critical stakeholders that need to be educated (“Who to Educate”), the subject matter/curriculum that should be taught (“What to Educate”), and the most effective method of delivering this education (“How to Educate”). The next logical step is to determine who are the most effective NORTHCOM officials to deliver this educational package, in person, at the stakeholder location.

The author has identified three courses of action regarding who from NORTHCOM should educate critical stakeholders. These are:

1. Defense Coordinating Officers (DCOs)
2. Mobile Education & Training Teams (METTs)
3. NORTHCOM State Education Liaisons (State Liaisons)

Similar to the process of selecting the best COA to deliver the information (“How to Educate”), this portion of the paper will consist of the following for each COA:

- Description
- Pros & Cons
- Identification & Definition of Evaluation Criteria
- Prioritization of Evaluation Criteria
- Discussion and ranking of each COA by Evaluation Criteria
- COA Evaluation Matrix

A. DEFENSE COORDINATING OFFICERS

NORTHCOM’s current educational outreach strategy essentially relies on the use of defense coordinating officers (DCOs) to educate critical stakeholders within their assigned area. This is the “status-quo” COA. A defense coordinating officer is an active-duty Army colonel who reports to the NORTHCOM Commander. During an emergency, such as a large natural disaster or terrorist attack, the DCO and a small staff will deploy

to the Joint Field Office as the Department of Defense link to the federal response. During an emergency, the DCOs primary responsibility is to facilitate effective coordination between the Title 10 military and the supported agency such as FEMA, coordinating requests for military support such as chemical/biological teams, transportation, and medical support.⁴⁰ Recent examples include the utilization of DCOs during the Fall 2007 California wildfires, where they helped to coordinate the use of military firefighting aircraft, and the Summer 2007 Minnesota Bridge Collapse, where Navy dive teams helped to recover remains of the victims.⁴¹

During “non-crisis times” when they are not deployed during an emergency, one of the responsibilities of the DCO is to travel to critical stakeholder locations within his assigned FEMA region to educate personnel about how NORTHCOM will interface with their organization to support them during times of crisis. They are not “embedded” in any particular organization; rather, they are responsible for coordinating with all critical stakeholders within their region.

There are ten DCOs, one permanently assigned to each of the ten FEMA Regions. These officers are located in a major city, such as Seattle, Oakland, and Chicago. The geographical area that the DCO is responsible for is quite large; FEMA Region VIII, for example, encompasses Montana, Colorado, North Dakota, South Dakota, Utah and Wyoming. Together these states combine for a total of a staggering 477,800 square miles.⁴² The one DCO and his small staff are responsible for this entire area.

The DCO does indeed educate critical stakeholders when he visits them; however, much of the time is focused on building relationships; office calls with senior leaders, attending meetings, and participating in exercises. Education is just one facet of their responsibilities; it is not their exclusive responsibility, of which they can focus 100 percent of their attention.

⁴⁰ United States Army North. <http://www.arnorth.army.mil/> [accessed February 15, 2008].

⁴¹ United States Northern Command, “NORTHCOM Home Page.”

⁴² MSN, “MSN Encarta Home Page,” [http://encarta.msn.com/encyclopedia_761573010/United_States_\(Overview\).html](http://encarta.msn.com/encyclopedia_761573010/United_States_(Overview).html) [accessed February 14, 2008].

B. MOBILE EDUCATION AND TRAINING TEAM

This COA calls for the development of a mobile education and training team (METT), which is a small team of approximately five SMEs from the NORTHCOM Headquarters who travel extensively to stakeholder locations to conduct a series of educational training sessions. While the program could certainly expand into having several METTs, this study recommends that an initial fielding of one team be considered as a “field trial” or prototype, one that could have improvements made to before expanding the number of METTs.

This team would consist of military officers who have been assigned to NORTHCOM ideally for at least a year and have been involved in at least one major training exercise that focuses on interagency operations (such as NLE-02-08) or a major real-world crisis such as Hurricane Katrina. The METT would ideally consist of a senior colonel as the team leader, with the remaining four officers coming from key directorates within NORTHCOM: Operations, Plans, Intelligence, Training & Exercises, and Logistics. One additional officer would be trained to fill in for members going on vacation or unable to travel due to family emergencies or other reasons. As direct representatives of the commander, these officers would be handpicked as some of the best and brightest officers within the Command.

A METT assignment means that the education of NORTHCOM’s critical stakeholders becomes this officer’s full-time job. These officers would be assigned to the team for a six-month period, as this would preclude these traveling officers from being “dated” by virtue of being away from the Command for so much time. By bringing in “new blood” every six months, the stakeholders benefit from gaining the latest information, as well as preventing the METT officers from becoming “burned out” from constantly being on the road.

Each of these officers would be responsible for briefing and maintaining designated briefings that comprise the Education Package. They would focus on becoming experts in their respective briefing areas, as well as gaining valuable experience through extensive periods of question and answers. The NORTHCOM’s

Education Curriculum Coordinator would work with the stakeholders and then the METT members to tailor briefings as necessary before the visit.

C. NORTHCOM-STATE EDUCATION LIAISONS

A third COA for who should conduct the NORTHCOM education at the stakeholder location is the establishment of a NORTHCOM-State Education Liaisons. This COA calls for NORTHCOM to allocate personnel billets and funding for fifty officers within the National Guard, with one slot designated for each state. Simply stated, this program would mean that fifty officer positions allocated to NORTHCOM would be filled by a National Guard Officer within each State National Guard.

The function of the NORTHCOM-National Guard Liaison would be to act as an educator for the critical stakeholders residing in his or her state. The officer's focus would be on executing the previously discussed Education Package for the critical stakeholders that physically has offices within their state's boundaries.

The concept of the military embedding officers within other organizations is not new. Indeed, NORTHCOM has a handful of officers at the Headquarters of DHS, FEMA, and several others. However, this program differs radically due to the number and type of officers involved in this type of program. It is a difference in both size and scope.

Each State National Guard would receive an authorization of one of NORTHCOM's personnel billets to be filled by a full-time National Guard officer. This is an officer who is a National Guard officer in every way, the only difference being that — instead of executing military duties during the traditional “one weekend a month, two weeks during the summer”— this officer works full time in military duties. Every state has a number of these full-time National Guard officers, normally working in plans or operations. The officer's pay and allowances would be drawn from the Title 10 DoD budget as opposed to the National Guard budget.

This officer would be nominated by each State Guard headquarters and approved by NORTHCOM officials. Officers would then spend a minimum of two months at

NORTHCOM Headquarters, undergoing an intense education in Operations, Training, Plans, Intelligence, and Logistics. This would give them a relatively solid base of knowledge about how NORTHCOM operates. The officer would be permanently assigned to the State Joint Task Force Headquarters, a congressionally mandated organization that serves to coordinate National Guard operations for the State. A solid relationship between NORTHCOM and these State Joint Task Force Headquarters already exists, as DoD charged NORTHCOM to train and certify these organizations.

The officer's primary function would be to identify and work with NORTHCOM's critical stakeholders within that state, overseen by NORTHCOM's Education Curriculum Coordinator. State Education Liaisons would execute essentially the same plan as a METT. They would travel to stakeholder locations within their state and deliver the education package, tailoring it as necessary to meet the needs of the stakeholder.

So why choose the State National Guard in which to embed a liaison officer in for all fifty states? The National Guard is an ideal organization for several reasons. First, the billet authorization structure required for this program already exists. Secondly, each State National Guard has The Adjutant General (TAG), a two-star general who advises the governor on all military issues. This is a valuable conduit to the governors, facilitating their education as well as the Guard itself. Third, the State National Guard Headquarters is nearly always located in the same city as the state capital; since many other critical stakeholders also have offices in that city, it facilitates an ability to "walk down the street" to visit these other organizations. Finally, by virtue of habitually supporting civil authorities in response to floods, ice storms, tornadoes, etc., the State National Guard has established relationships with their critical stakeholders, which are often critical stakeholders for NORTHCOM. By embedding a NORTHCOM liaison into the State National Guard structure, NORTHCOM is able to tap into well-established relationships.

D. PROS AND CONS

There are several pros and cons to each of the three COAs:

1. DCOs

Pros

- No impact on Command (no loss of subject matter experts from Headquarters).
- Same officers that will educate the stakeholders will coordinate with in an emergency.
- No additional personnel requirements from existing structure.

Cons

- Extremely large number of organizations responsible for within their region.
- Other duties of attending meetings, office calls, and participating in exercises precludes complete focus on education.
- One officer required to conduct all the training on-site (can talk “big picture” about all areas but lacks NORTHCOM experience to answer the detailed questions.
- “Generalists vs. Specialists.”
- Away from the Headquarters: not actively involved in day-to-day operations.

2. METT

Pros

- Provides subject matter expertise by experts in their respective fields.
- Valuable personal relationships develop vs. “cold calls” during a future emergency.
- Complete focus on education—no other responsibilities.
- Low number of officers required to resource.
- Centralized control and coordination.

Cons

- Significant impact on command with SMEs out of the headquarters.
- National focus: large number of stakeholders to educate.

- Requirement to train new METT members every six months.

3. NORTHCOM-State Education Liaisons

Pros

- Large number of educators equals decrease in number of stakeholders in assigned area for better “coverage.”
- Subject Matter Expertise: intimate knowledge of their state’s operations.
- Improved relationship between NORTHCOM and State National Guard.
- Established network between State National Guard and stakeholders.
- No loss of SMEs working outside the Command.

Cons

- Reduction of officers working at NORTHCOM to due billet reallocation.
- Lack of intimate knowledge/experience about NORTHCOM.
- High cost due to travel expenses.
- Decentralized control by NORTHCOM.
- Lack of consistency in delivered information due to fifty different educators.

E. EVALUATION CRITERIA

The following evaluation criteria will be utilized to assess the strengths and weaknesses of each of the three COAs. A definition is presented (author-developed), along with a brief discussion for each of the evaluation criteria. While other factors certainly apply to a minor degree, the following five criteria are deemed the most critical:

1. Subject-Matter Expertise: Defined as *“the knowledge level/experience regarding NORTHCOM in the areas of Intelligence, Operations, Logistics, Plans, and Training & Exercises.”*

2. Personnel Sourcing: Defined as *“the probability that a COA could be resourced to execute the program as described.”*

3. Education- Focused: Defined as *“the degree to which the officers executing the program focus exclusively on education compared to fulfilling other activities.”*

4. Cost: Defined as *“the financial travel costs per year to execute the COA.”*

5. Area of Operations: Defined as “*the geographical size of an educator’s Area of Responsibility as measured in square miles.*”

F. CRITERIA PRIORITY

The author has determined that the Evaluation Criteria should be prioritized as follows:

1. Education-Focused
2. Subject-Matter Expertise
3. Personnel Sourcing
4. Cost
5. Area of Operations

As with the criteria priority in Chapter V, the above order reflects the priority in the author’s view only, with substantial and defensible justification provided in the following paragraphs as to why these criteria are ranked in the order shown. It will ultimately be the NORTHCOM Commander who will determine the criteria priority. The Commander may agree with the justification of the order presented here, in which case the results of this chapter’s evaluation will be selected. If the Commander alters the priority order, a potentially different COA may be determined as being the most effective (the author has executed the comparison process utilizing different criteria priority. In the majority of cases, the end results are the same; however, there are situations where a different criteria priority resulted in a different COA being selected as the most effective).

For the purposes of this paper, the criteria have been prioritized as listed, with credible and substantial justification.

G. CRITERIA PRIORITY JUSTIFICATION AND COA EVALUATION

1. Education-Focused

Given both the importance of educating critical stakeholders and the large number of stakeholders, it is absolutely critical that the personnel be dedicated full-time to this

important education mission. Educating critical stakeholders must be a high priority, not an “additional duty” that competes with an official’s time with attending meetings and participating in exercise.

Discussion: The METT COA is the strongest of the three with regards to being focused solely on education. Simply put, educating critical stakeholders is *WHAT THEY DO*...full time, dedicated to this mission. NORTHCOM-State Education Liaisons, as the only NORTHCOM representative within the State’s National Guard system, would likely be pulled into other missions of the state. This COA is ranked number 2. While still centrally focused on education, there is a high likelihood of “mission-creep,” with that liaison becoming involved in other NORTHCOM issues such as mission support, planning conferences, and exercises. The same can be said for the DCOs, which is ranked third of the COAs. This officer’s primary duty is coordination and relationship building. They are extensively involved in conducting office calls and exercises; the fact that there are only ten of them versus fifty liaisons in the NORTHCOM-State COA means a reduction in the amount of total time dedicated to training stakeholders within a particular region.

2. Subject-Matter Expertise

In order for this program to be effective, it is essential that the officials conducting the training be experienced and knowledgeable in their field. Over the course of a day’s training, stakeholder officials are likely to ask many detailed questions regarding how NORTHCOM will support their particular organization. Educators must possess a detailed understanding about the Command’s plans, operations, logistics, and exercises in order to fully answer questions and provide quality training. A “generalist” who has a solid overview of the command but lacks sufficient knowledge/experience to answer detailed questions would be unable to fully educate stakeholders at levels deep enough to provide real benefit.

Discussion: Of the three COAs, the METT option is the strongest COA concerning Subject-Matter Expertise for several reasons. Unlike the DCO and NORTHCOM-State Education Liaison COAs, this COA calls for the educators to be

officers who physically work in the Headquarters on a daily basis, working NORTHCOM real-world issues each and every day. Secondly, this COA raises the number of educators on-site at the Stakeholder location from one to approximately six. This allows for more interaction and opportunities for relationship building, especially in a roundtable discussion forum. Having several educators as opposed to one also allows a “division of responsibility:” instead of one officer being responsible for teaching all of the material, briefings would be divided up so that each instructor would have a handful of briefings to focus on, as opposed to all of them. Third, the team would consist of one officer from each of NORTHCOM’s major divisions: Intelligence, Operations, Logistics, Plans, and Training & Exercises. This allows for a greater breadth and depth of experience within the educating body, as well as a greater breath of real-world experiences in supporting civil authorities.

The author has determined that the DCO and NORTHCOM-State Education Liaison COAs are ranked the same behind the METT COA concerning strength of providing Subject Matter Expertise. These two COAs are quite similar in several ways. Both programs result in the educators coming from locations where they are not working within the NORTHCOM Headquarters on a day-to-day basis. Both programs call for one officer to be at the stakeholder location for the training, a reduction of educators from six to one. This has the same results for both COAs: one officer being responsible for all of the information (inability to “specialize” in one area, unlike the METT COA), limited relationship-building opportunities, and a lack of operational experience in one of the primary areas of education. Additionally, these officers do not work within the Headquarters; in a future emergency a stakeholder would have to “cold call” a NORTHCOM official, as opposed to possibly calling a contact that he or she has previously met. These two COAs therefore receive the same ranking when it comes to Subject-Matter Expertise.

3. Personnel Sourcing

In order for a COA to be implemented, it must be supportable with regards to personnel. With the current Global War on Terror, there is a tremendous strain upon the

military's personnel system. Each and every billet or authorization is of great importance; much like the budget battles within the military, there are tremendous debates and arguments about how organizations should be manned. This criterion is important due to the ability of each COA being resourced in a timely and realistic manner. While all three COAs can be physically resourced through the military's personnel system, there are varying degrees of difficulty with regards to sourcing the required officers.

Discussion: The DCO COA is the strongest of the three, simply by virtue that these positions already exist and are manned. The METT COA is rated second of the three COAs in terms of Personnel Requirements. While sourcing a METT will require approximately six officers from NORTHCOM's current pool of officers, no additional personnel billets or slots from the military's personnel system is required. These officers would be taken "out of hide" for six months, with their responsibilities being reassigned to other officers within their department for the duration of their METT assignment. It is important to remember that these officers would "rotate" every six months, meaning that their department would not permanently lose that officer. It is not abnormal for an officer to be gone for several months at a time due to military education requirements. With approximately fifteen hundred personnel being assigned to the command, taking six mid-grade officers out of the Headquarters should not be considered a major issue. The NORTHCOM-State Education Liaison COA presents tremendous challenges with regards to personnel. In order for this plan to be executed, fifty active-duty slots currently assigned to NORTHCOM would have to be reallocated to positions for state-level liaisons embedded with the National Guard. Due to current operations in Iraq and Afghanistan the priority for personnel is overseas. Discussions with several senior NORTHCOM personnel officials all concluded that — due to this overseas requirement — it is simply not feasible for NORTHCOM to be allocated fifty additional slots from DoD. The billets would have to come from NORTHCOM's current authorizations. It is the opinion of NORTHCOM's personnel officers that NORTHCOM's senior leadership would reject this course of action; taking fifty officers billets permanently out of the

headquarters is deemed too excessive in a time when NORTHCOM is competing with other Combatant Commands to be resourced properly. This COA, therefore, is rated as the weakest of the three.

4. Cost

The cost to execute these COAs consists almost entirely of travel expenses incurred to conduct training at the stakeholder's location. While the financial cost of executing these COAs is important like nearly all decisions involving money, the Cost Evaluation Criteria is not as important as the three previous criteria. NORTHCOM's 2009 approved budget is \$171.9 million, of which travel costs come out of this budget.⁴³ Given the cost estimates below for each COA, the overall cost percentage to execute these education programs compared to the overall budget is very small. For example, a COA cost of \$400,000 is less than 1/2 of 1 percent of the total NORTHCOM budget. It is therefore important to keep the following costs in perspective concerning the overall budget.

Discussion: Of the three COAs, the METT option has the lowest cost, followed by the DCOs, with the NORTHCOM-State Education Liaison COA being the most expensive. Approximate costs of the program should be considered for planning purposes.

METT: To conduct a basic cost analysis, it is assumed that the METT is comprised of five officers who will travel/conduct education five days a week. The planning concept is that they will fly to a stakeholder's city on Monday and conduct training at two stakeholder locations during the week. This is assuming a one-day training session, executed on Tuesdays and Thursdays, with Wednesday being reserved for travel to the Thursday's location (ideally within driving distance) and Friday being a travel day to return back to NORTHCOM Headquarters. This could be modified to include three one-day training sessions if the three stakeholders are located within the same city.

⁴³ Taliaferro, interviewed by author.

Approximate travel costs for a week of METT training are as follows:

| <u>CATEGORY</u> | <u>COST</u> |
|---|------------------|
| * Airfare: \$1,000 per officer x 5 officers | \$5,000 |
| * Lodging: \$70 per night x 5 officers x 4 nights | \$1,400 |
| * Meals: \$30 per day x 5 officers x 5 days | \$750 |
| * Rental Van: \$50 per day x 5 days | \$250 |
| * Misc. | \$100 |
| TOTAL COST PER WEEK | \$7,500 |
| <u>Number of weeks per year conducting training</u> | <u>X 50</u> |
| TOTAL ANNUAL COST OF THE METT | \$375,000 |

DCOs: The DCO COA is considered to have the second lowest cost. For planning purposes, it is assumed that a DCO will be traveling four days a week, with the fifth day being in the central office. The DCO will travel approximately thirty weeks of the year, with the remainder spent at home station, vacation, or deployed to an exercise or real world event.

Basic planning figures are as follows for each of the ten DCOs:

| <u>CATEGORY</u> | <u>COST</u> |
|---|-------------|
| * Airfare: \$1,000 per week | \$1,000 |
| * Lodging: \$70 per night x 3 nights | \$210 |
| * Meals: \$30 per day x 4 days: | \$120 |
| * Rental Car: \$30 per day times 4 days | \$120 |
| TOTAL COST PER WEEK PER EACH DCO | \$1,330 |
| <u>Number of DCOs</u> | <u>x 10</u> |
| TOTAL COST PER WEEK FOR ALL DCO TRAVEL | \$13,300 |
| <u>Number of weeks travel per year</u> | <u>x 30</u> |
| TOTAL ANNUAL COST OF THE DCO COA | \$399,000 |

NORTHCOM-STATE EDUCATION LIAISONS: It is impossible to predict accurate travel costs for this COA, due to the wide disparities between states. For example, the travel costs for a NORTHCOM-State Education Liaison officer in New Hampshire will be tremendously smaller than a Liaison in a very large state such as California or Texas. Liaisons in these two states would generally have to fly to many of their Stakeholder locations due to the size of the state, requiring overnight stays and rental cars. A liaison in a very small state such as New Hampshire, however, would likely be able to drive to the majority of his/her critical stakeholder locations on the same day, requiring reimbursement only for meals and mileage. The significant costs for airfare and lodging would generally not be incurred. In any case, the sheer size of having fifty NORTHCOM liaisons traveling the majority of the time makes it a safe assumption that this COA would be the most expensive; having fifty sets of travel costs, versus five for the METT and ten for the DCOs, would almost certainly result in this COA being the most expensive.

5. Area of Operations

This Evaluation Criteria focuses on the size of the geographical region for which the NORTHCOM instructors are responsible. Simply put, the larger the geographical area, the more critical stakeholders there generally is within that area that needs to be educated.

Discussion: The NORTHCOM-State Education Liaisons COA is ranked as the strongest of the three COAs concerning the Area of Operations criteria. The liaison will focus on all the identified critical stakeholders within the geographical boundaries of his or her state. By contrast, the DCO COA calls for one officer to be responsible for educating all of the critical stakeholders within his FEMA region, which consists of four to nine states. This option greatly increases the geographical area of responsibility compared to the NORTHCOM-State Education Liaison COA. The third and weakest COA for this criterion is the METT COA. By having one education team based out of NORTHCOM Headquarters, they are responsible for all fifty states. The fact that they are focused exclusively on education versus the officers in the other COAs and their extensive travel time (approximately fifty weeks per year) will help to offset this deficiency, but this COA clearly has the largest Area of Operations. Implementing additional METTs in the future would also mitigate this issue.

6. COA Comparison Matrix

The same systematic method of comparing COAs that was used to determine the strongest Education Method will now be utilized to identify the strongest Educator COA. As before, to assist in understanding the methodology, a detailed description is found below the chart:

| Criteria w/ weight | DCO COA | METT COA | NORTHCOM-State Education Liaisons COA |
|------------------------------|------------|-------------|---|
| Education Focused [5] | 3 (15) | 1 (5) | 2 (10) |
| Subject Matter Expertise [4] | 1.5 (6) | 1 (4) | 1.5 (6) |
| Personnel Sourcing [3] | 1 (3) | 2 (6) | 3 (9) |
| Cost [2] | 2 (4) | 1 (2) | 3 (6) |
| Area of Operations [1] | 2 (2) | 3 (3) | 1 (1) |
| TOTAL SCORE | 30 | 20 | 33 |

Figure 3. COA Evaluation Matrix: "Who Should Educate"

The left-hand column displays the Evaluation Criteria with an accompanying weight. Assigning a weight to each criterion is a method to reflect that not all evaluation criteria are equal in importance. In this case the criteria are rank-ordered, with Education-Focused being more important than Subject Matter Expertise, which is more important than Personnel Sourcing, etc. The justification for this priority was explained in the Discussion portion of the Evaluation Criteria. The weight for each criterion is shown in brackets, with the most important criterion having the heaviest weight.

The next three columns concern the three COAs: DCOs, METT, and NORTHCOM-State Education Liaisons. These three were rank-ordered from best (with a score of 1) to worst (with a score of 3) for each criterion, which was explained in the discussion portion for each criterion. The weight of that criterion is then multiplied by the ranking to give each COA a weighted score for those criteria, shown in parenthesis.

All weighted scores are then added for each COA. The COA that has the lowest overall score is determined to be the best of the three COAs. The result of this process shows that the METT COA has a total score of 20, the DCO COA has a score of 30, and the NORTHCOM-State Education Liaison COA has a score of 33.

For this situation, the Evaluation Matrix reveals that the Mobile Education Training Team COA is the one best suited for educating critical stakeholders at their location. This is consistent with common sense: This COA was ranked as being the strongest for three of the five evaluation criteria, to include the two most important criteria of “Education Focused” and “Subject Matter Expertise.” Therefore, the Course of Action that calls for the use of a Mobile Education Training Team is deemed to be the best COA to answer the question of “Who Should Educate?”

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VII. MEASUREMENTS OF EFFECTIVENESS

A critical component of this recommended strategy is assessing its effectiveness. Simply put, how effective would this program be in educating NORTHCOM's critical stakeholders? An assessment tool is necessary, not only to provide quantifiable feedback to NORTHCOM, but to modify the program for future iterations.

An assessment mechanism is necessary to answer the following fundamental questions:

- What is the stakeholder's knowledge level about DSCA and NORTHCOM prior to receiving the training?
- What is the stakeholder's knowledge level about DSCA and NORTHCOM after receiving the training?
- What improvements would make the training more effective and useful?

To answer these three important questions, it is recommended that three separate mechanisms be administered to the Stakeholder Organization:

- Stakeholder Curriculum Development Form: Developed approximately one month before training
- On-Site Survey: Administered at the stakeholder location at the conclusion of training
- Post-Training Survey: Administered approximately six months following the training

The following questions are not intended to serve as a comprehensive survey, but rather to capture the intent of each individual survey. There is a division within NORTHCOM's Training and Exercises Directorate that is proficient in writing and executing surveys, typically administered following major exercises as part of the Lessons Learned process. However, it is important to capture the intent of each of the surveys for the purpose of this paper. What follows in the discussion of the two surveys are some examples of questions that could potentially be utilized as part of each survey.

Stakeholder Curriculum Development Form: This mechanism to assess stakeholder knowledge about NORTHCOM prior to the training has already been discussed in detail.

On-Site Survey: The intent of this survey is to capture immediate feedback at the conclusion of training at the stakeholder’s location. This survey would be in a hardcopy form that would be issued to everyone who went through the training; the NORTHCOM personnel who actually conducted the education session would administer it. By capturing immediate feedback from the session, NORTHCOM would be able to capture outstanding issues and questions, identify areas of the curriculum to improve for future sessions, and consider new areas for the education “Way Ahead” for that stakeholder. This survey also includes the opportunity for attendees to ask a specific follow-up question that was not addressed in the training.

Below are some sample questions for the On-Site Survey:

Core Courses

On a scale of 1 to 5 (1 being low, 5 being high), evaluate what you feel was the quality of the training that you received in:

- Bi-Command Brief ____
- National Response Framework/DSCA Procedures ____
- Request for Assistance Process ____
- Plans Brief ____
- Interagency Brief ____
- Operations ____
- Training & Exercises ____

Elective Courses (This portion of the survey would be customized for each stakeholder to list only the electives that were taught):

- CBRNE Response Capabilities ____
- Unmanned Aerial Vehicle Operations ____
- Theater Security Cooperation with Mexico ____
- NORTHCOM Counternarcotics/CounterDrug Activities ____
- NORTHCOM Intelligence Activities ____

- Medical Emergency Preparedness and Response ____
- Information Sharing Capabilities ____
- Deployable and Interoperable Communications ____
- Common Operational Picture ____
- Maritime Domain Awareness ____
- Impact of Posse Comitatus ____

On a scale of 1 to 5 (1 being low, 5 being high), evaluate what you feel was the quality of the training that you received in:

- Overall familiarity with the National Response Framework: ____
- Overall familiarity with how the Title 10 military supports civil authorities: ____
- The Request for Assistance Process for military support:
 - What organization to contact: ____
 - Who is the point of contact: ____
 - Expected timelines to respond: ____
 - Required paperwork utilized to request: ____
- Difference between Title 10 and Title 32 support: ____
- Capabilities/Restrictions of Title 10 forces: ____

On a scale of 1 to 5 (1 being low, 5 being high): rate the overall teaching effectiveness of the instructor (names inserted here)

- Major John Smith: ____
- Colonel Jane Doe: ____

- If you have constructive feedback for these instructors please provide it here:

— On a scale of 1 to 5 (1 being too short, 3 being appropriate, 5 being too long), please rate how appropriate the length of training was: ____

— What portion of the training did you find the most useful? _____

— What portion of the training did you find the least useful? _____

— Were there any topics not covered that you feel would have been of benefit? If yes, what are they? _____

— Do you have a specific question that you would like to have answered? If yes, please provide both the question and your contact information: _____

(End of survey)

Post-Training Survey: The intent of this survey is to serve as a follow-up to the training to gauge if there have been improvements in interaction between the stakeholder and NORTHCOM. The survey would be web-based and would be conducted approximately six to nine months after the training has been conducted. The results of this survey would serve as a yardstick for progress, assist in refining the educational process for future iterations, and provide indicators to identify potential topics for the next educational session at a particular stakeholder's location.

— Has your organization had interaction with NORTHCOM since the training you received on __ (date)? If yes, what kind of operation/exercise was it?

— If you answered yes to the preceding question, do you feel your organization's interface with NORTHCOM was faster and better coordinated than it was prior to the training? Please provide details:

— Was there an area that was not covered during your training on NORTHCOM that you would like to see covered in future sessions? If so, what are those areas?

VIII. POTENTIAL FOR FUTURE STUDY

This thesis has been the first attempt to develop and implement a comprehensive education strategy for NORTHCOM's critical stakeholders at their location. There is great potential for further research efforts in this area. NORTHCOM is a relatively new organization; like DHS and the homeland security field itself, many opportunities and challenges remain to be explored by future students and professionals within the discipline.

Suggested topics for further exploration as to how NORTHCOM can better educate its critical stakeholders include:

State-Level Education Seminar: As discussed in this paper, the majority of critical stakeholders likely do not have the financial or personnel assets to send large numbers of their action officers/middle managers to NORTHCOM Headquarters. The educational strategy outlined in this paper addressed residence education for these critical stakeholders. However, what about other "tier 2" organizations that, while not requiring the same level of education as these critical stakeholders, would benefit from an exposure to NORTHCOM?

While it is not feasible to educate all of these organizations with an intensive educational session at each location, it is possible for them to send personnel to a one-day education conference within driving distance of their headquarters. NORTHCOM could potentially sponsor a one-day training seminar within each state or centered amongst metropolitan areas that are home to numerous agencies that would benefit from learning how NORTHCOM supports civil authorities. For example, the State of Michigan has several major metropolitan areas within several hours drive of one another. The cities of Detroit, Flint, Ann Arbor, Lansing, Grand Rapids, and Warren are all cities with populations of 130,000 or greater. These cities are home to several organizations that NORTHCOM may interface with during a crisis, including the State Emergency Operations Center, Michigan State Police, the state's chemical/biological response units, engineering and public works, etc. All of these potentially important offices are located

within a three-hour drive of Lansing. While these organizations likely do not have the time or money to fly middle management to NORTHCOM Headquarters in Colorado Springs for several days, it is much more feasible for them to have these officials attend a one-day training seminar within a three-hour drive of their location. These one-day training seminars would be particularly effective for organizations that NORTHCOM does not normally deal with but would benefit from familiarity with NORTHCOM's missions and operations. An example is the Michigan State Police; while the author has not identified them as a critical stakeholder and therefore does not require the intensive education that FEMA or the New York City Emergency Operations Center does, for example, it would be useful for the Michigan State Police to possess at least a basic familiarity with NORTHCOM.

Reexamine studies by Grosskopf, Milliman, and Perez: The two studies cited in this paper, published in *the Journal of Homeland Security and Emergency Management*, essentially surveyed emergency managers' views on Defense Support of Civil Authorities. These studies were conducted in 2004 and 2006. If the strategy outlined in this paper were instituted, it would be useful to repeat the survey in approximately 18-24 months. Utilizing this survey or one similar to it, would serve as a useful mechanism to gauge the effectiveness of the educational program.

Conference Participation: Numerous associations and organizations are dedicated to Emergency Response, many of them hosting annual conferences. This is a yet-untapped opportunity for NORTHCOM to educate critical stakeholders, presenting an outstanding platform for educating many Emergency Response professionals at one time. An example of this is the International Association of Emergency Managers, or IAEM. IAEM is a well-established organization, having been in existence for fifty-six years. They hold an annual conference attended by several thousand emergency managers from around the country. "The IAEM Annual Conference provides a forum for current trends and topics, information about the latest tools and technology in emergency management and homeland security, and advances IAEM committee work. Sessions encourage stakeholders at all levels of government, the private sector, public health and related professions to exchange ideas on collaborating to protect lives and property from

disaster.”⁴⁴ Like many conferences, breakout sessions allow participants to choose from several presentations to attend. IAEM actively encourages organizations associated with Emergency Response to suggest not only topics, but to give presentations. While it would likely be too late to give a presentation at the 2008 Conference in Kansas City, NORTHCOM could familiarize a tremendous number of emergency managers through an hour-long presentation at the 2009 Conference in Orlando, Florida.

Incorporate NORTHCOM Training into Civilian Education Programs: Many civilian colleges and universities offer certificate and bachelor degree programs in Emergency Management. Several universities, such as Drexel University in Philadelphia, offer a master’s degree in Emergency and Public Safety Services. An area worthy of further exploration is the “NORTHCOM Curriculum” and how a version of it could be formally integrated into some of the course material studied in these degree programs. This would result in the next generation of emergency managers having a foundation of knowledge about NORTHCOM, its importance in emergency response, and the general framework for how DoD will respond during times of crisis.

⁴⁴ International Association of Emergency Managers, “IAEM Annual Conference Web Page,” <http://www.iaem.com/events/annual/intro.htm> [accessed December 18, 2007].

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IX. STRATEGY SUMMARY

Through the previous six chapters, the author has conducted an extensive and systematic analysis of the education of NORTHCOM's critical stakeholders at the stakeholder location:

- Chapter III: Critical Stakeholders (“Who” to Educate)
- Chapter IV: Educational Package (“What” to Educate)
- Chapter V: Delivery Options (“How” to Educate)
- Chapter VI: Educator Options (“Who” Should Educate)
- Chapter VII: Measures of Effectiveness
- Chapter VIII: Potential for Future Study

Before the author summarizes the highlights of his findings and recommendations, it is useful to review the research question that served to direct this thesis:

How can NORTHCOM change its outreach and education policies and practices to more effectively educate its key interagency stakeholders at the stakeholder location in order to improve response efforts during a crisis?

A. SUMMARY OF FINDINGS AND RECOMMENDATIONS

Chapter III: Critical Stakeholders (“Who” to Educate)

Intent: Establish definition of NORTHCOM's critical stakeholders, identify who those stakeholders are, and explain their operational relationship with NORTHCOM.

- Author defined critical stakeholders as, “The organizations and agencies that NORTHCOM will conduct intense collaboration with during times of crisis to facilitate timely and coordinated military support of civil authorities.”
- Stakeholders were identified and summarized in the following chart:

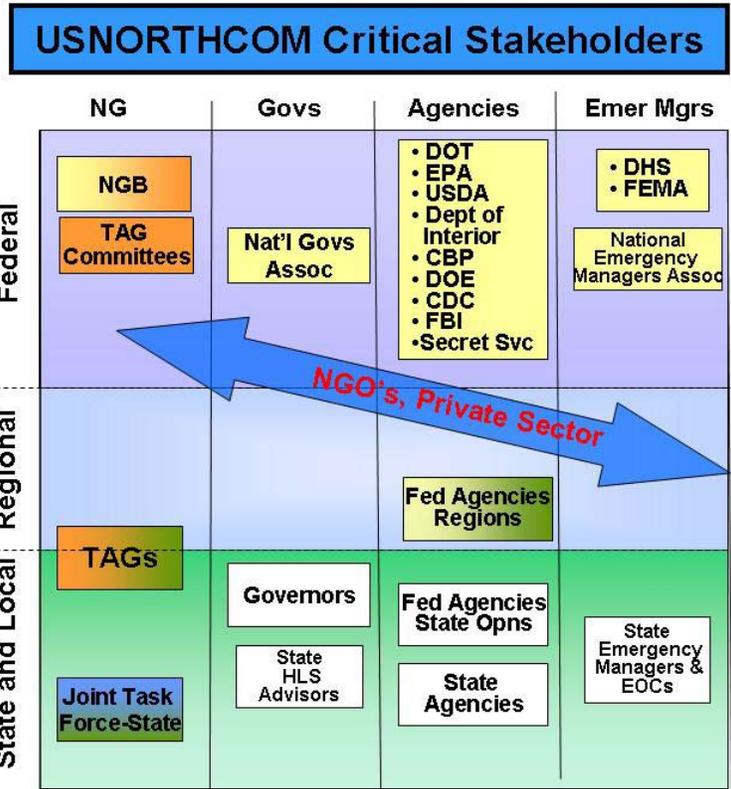


Figure 4. USNORTHCOM Critical Stakeholders (After: USNORTHCOM slide)⁴⁵

- Relationship and importance of these stakeholders was discussed.

Chapter IV: Educational Package (“What” to Educate)

Intent: Construct an effective educational package of NORTHCOM information that is customized concerning both time and content.

- Package content is consistent with findings by Grosskopf, Milliman, and Paez.
- Development of the Stakeholder Curriculum Development Form to identify needs and requirements for each stakeholder.

⁴⁵ USNORTHCOM's Interagency Directorate, obtained by the author from USNORTHCOM'S Interagency Directorate, May 2007, Colorado Springs, CO.

- “NORTHCOM Curriculum” was developed, consisting of “core and elective courses,” along with a roundtable discussion session.
- Core Courses: Blocks of instruction that are common to all stakeholders.
- Electives: Blocks of instruction that are applicable to differing stakeholders.
- “Leave Behind Educational Products” were identified.
- An online forum discussion platform was discussed.

Chapter V: Delivery Options (“How” to Educate)

Intent: Create several options for delivering the educational package, analyze and evaluate those options, and then use a quantifiable method of evaluation to select the most effective delivery option.

- Created and described three COAs: Online Training & Resource, VTC, and Traveling SMEs.
- Discussed the pros and cons of each COA.
- Identified, defined, and prioritized evaluation criteria.
 - Interpersonal Communication
 - Customizing
 - Tech Support Availability
 - Cost
- Ranked each COA concerning strength/weakness for each evaluation criterion.
- Utilized a COA Evaluation Matrix that utilized weighted evaluation criteria and ranking of each COA to determine the most effective delivery option. Process summarized with the following chart:

| Criteria w/ weight | Online Training COA | VTC COA | Traveling SME's COA |
|---------------------------------|---------------------|-----------|---------------------|
| Interpersonal Communication [4] | 3 (12) | 2 (8) | 1 (4) |
| Customizing [3] | 3 (9) | 1.5 (4.5) | 1.5 (4.5) |
| Tech Support Availability [2] | 2 (4) | 3 (6) | 1 (2) |
| Cost [1] | 1.5 (1.5) | 1.5 (1.5) | 3 (3) |
| TOTAL SCORE | 26.5 | 20 | 13.5 |

Figure 5. COA Evaluation Matrix: "How to Educate"

- Result: The Traveling SME Course of Action is the one best suited for educating critical stakeholders at the stakeholder location.

Chapter VI: Educator Options (“Who” Should Educate)

Intent: Create Educator Options, analyze and evaluate those options, and then use a quantifiable method of evaluation to select the most effective educator option to educate critical stakeholders at the stakeholder location.

- Created and described three COAs: DCOs, METTs, and NORTHCOM-State Education Liaisons.
- Discussed the Pros and Cons of each COA.
- Identified, defined, and prioritized Evaluation Criteria:
 - Education- Focused
 - Subject Matter Expertise
 - Personnel Sourcing
 - Cost
 - Area of Operations

- Ranked each COA concerning strength/weakness for each Evaluation Criterion.
- Utilized a COA Evaluation Matrix that incorporated weighted Evaluation Criteria and the ranking of each COA to determine the most effective Delivery Option. Process summarized with the following chart:

| Criteria w/ weight | DCO COA | METT COA | NORTHCOM-State Education Liaisons COA |
|------------------------------|---------|----------|---------------------------------------|
| Education Focused [5] | 3 (15) | 1 (5) | 2 (10) |
| Subject Matter Expertise [4] | 1.5 (6) | 1 (4) | 1.5 (6) |
| Personnel Sourcing [3] | 1 (3) | 2 (6) | 3 (9) |
| Cost [2] | 2 (4) | 1 (2) | 3 (6) |
| Area of Operations [1] | 2 (2) | 3 (3) | 1 (1) |
| TOTAL SCORE | 30 | 20 | 33 |

Figure 6. COA Evaluation Matrix: "Who Should Educate"

- Result: The Mobile Education & Training Team (METT) Course of Action is the one best suited for educating critical stakeholders at the stakeholder location.

Chapter VII: Measures of Effectiveness

Intent: Discuss and develop mechanisms to evaluate stakeholder's level of knowledge, both pre- and post-training, along with evaluating the delivery of the information.

- Developed the Stakeholder Curriculum Development Form to assess stakeholder knowledge prior to the training.
- Developed the On-Site Survey to assess the delivery of the information.
- Discussed the Post-Training Survey to gauge if there have been improvements in interaction between stakeholders and NORTHCOM.

Chapter VIII: Potential for Future Study

Intent: Discuss the importance of and make recommendations for areas of future study regarding the education of NORTHCOM's critical stakeholders.

- Explained why it is important that additional areas of study be considered for future study.
- Suggested several areas for future study:
 - State-Level Education Seminars
 - Reexamine studies by Grosskopf, Milliman, and Perez
 - Educational Opportunities at important conferences
 - Incorporation of NORTHCOM information into formal civilian education programs

B. THESIS SUMMARY

To answer the research question, “How can NORTHCOM change its outreach and education policies and practices to more effectively educate its key interagency stakeholders at the stakeholder location in order to improve response efforts during a crisis?” this thesis concludes the following:

A Mobile Education & Training Team, consisting of subject-matter experts from NORTHCOM Headquarters, should travel to stakeholder locations to execute a customized education package for its critical stakeholders.

APPENDIX: STAKEHOLDER CURRICULUM DEVELOPMENT FORM

The Stakeholder Curriculum Development Form consists of the following questions:

“On a scale of 1 to 5 (1 being low, 5 being high), rate what you feel is your organization’s knowledge level in the following areas:

- Overall familiarity with the National Response Framework: ____
- Overall familiarity with how the Title 10 military supports civil authorities: ____
- The Request for Assistance Process for military support:
 - * What organization to contact: ____
 - * Who is the point of contact: ____
 - * Expected timelines to respond: ____
 - * Required paperwork to request: ____
- Difference between Title 10 (Active-Duty) and Title 32 (National Guard) support: ____
- Capabilities/Restrictions of Title 10 forces: ____
- What is your level of knowledge about NORTHCOM with regards to its:
 - * Missions: ____
 - * Organization: ____
 - * Operations: ____
 - * Plans (hurricanes, wildfires, flooding, civil disturbances): ____
 - * CBRNE Response Forces: ____
 - * Posse Comitatus (Prevents Law Enforcement Operations): ____
 - * Training and Exercises: ____
 - * Interface with NORTHCOM’s Command Center: ____

Core Courses: The following blocks of instruction discuss areas that are generally of interest to all stakeholders.

Please indicate if your organization would like a particular emphasis placed on:

- * Bi-Command Brief: (1 hour) Overview of NORTHCOM ____
- * National Response Framework/DSCA Procedures: (1 hour) Provides an overview of the National Response Framework with the primary focus being on how Title 10 military forces become involved in supporting Civil Authorities ____
- * Request for Assistance Process: (1 hour) Provides instruction on how critical stakeholders request military support ____
- * Plans Brief: (30 minutes) Provides an overview of the set of plans that NORTHCOM has developed that cover a wide range of support situations ____
- * Interagency Brief: (30 minutes) Discusses NORTHCOM's Joint Interagency Coordination Group (JIACG) ____
- * Operations: (30 minutes) This brief provides an overview of the spectrum of Civil Support Missions that NORTHCOM is typically called upon to support.
- * Training & Exercises (30 minutes): Focuses on the different types of exercises that NORTHCOM executes or participates in, and what opportunities are available for participation with other agencies ____

Elective Courses: The following courses can be given following completion of the core courses. Each of these briefings takes approximately 45 minutes to execute. Please mark the courses your agency would like to receive:

- * CBRNE Response Capabilities ____
- * Unmanned Aerial Vehicle Operations ____
- * Theater Security Cooperation with Mexico ____
- * NORTHCOM Counternarcotics/CounterDrug Activities ____
- * NORTHCOM Intelligence Activities ____
- * Medical Emergency Preparedness and Response ____
- * Information-Sharing Capabilities ____
- * Deployable and Interoperable Communications ____

* Common Operational Picture ____

* Maritime Domain Awareness ____

* Impact of Posse Comitatus ____

- Are there any additional areas that you would like the NORTHCOM educators to focus on? (Write-In Answer): _____
- If your organization has previously had interaction with NORTHCOM, when was it? What issues or challenges arose during that time?

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