



U.S. TRANSPORTATION COMMAND'S (USTRANSCOM) SUPPORT
TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

GRADUATE RESEARCH PROJECT

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Abstract

The Federal Emergency Management Agency has been tasked by the Robert T. Stafford Disaster Relief and Emergency Assistance Act to act as lead agency in handling natural disasters and recovery operations in the United States, Puerto Rico, and Guam. Although they do not handle all aspects of emergency response, they manage the actions and control the checkbook for all relief operations declared by the President of the United States.

During such events, the military has historically been called upon for assistance. Whether the military is providing airlift of relief supplies or moving military equipment to support relief operations, United States Transportation Command (USTRANSCOM) is usually involved.

This research project analyzes the process and relationship between FEMA and USTRANSCOM during these operations. It details the procedures implemented during past operations and evaluates the differences between actual and written procedures. It also compares the costs associated with using USTRANSCOM versus the use of commercial lift. This paper will also analyze when and where it is most appropriate for USTRANSCOM to participate.

U.S. TRANSPORTATION COMMAND'S (USTRANSCOM) SUPPORT TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)

I. Introduction

Since USTRANSCOM was established by the Goldwater-Nichols Act in 1986, it has supported FEMA with airlift and on occasion, some sealift. Because of the unique and quick reaction airlift capability that USTRANSCOM possesses, this is generally considered a necessity. The process, however, has not always been a smooth one. Individuals from the FEMA staff to the crews flying the airlift missions characterize the process as confusing and inconsistent. Because of this, research on the relationship between FEMA and USTRANSCOM was needed to determine when and how best these two agencies work together.

Background

The FEMA process is a complicated one. Because of the involvement of so many agencies during relief operations, who does what, when, and where is often difficult to determine. When the military and its unique processes get involved, it just adds to the confusion. Over the years the military has supported FEMA in such operations as Hurricanes Floyd and Dennis, Tropical Storm Allison, and, Typhoon Pongsonga (Director of Military Support, 2003). As always, the job gets done and the view from the outside looking in paints a job well done. Although Americans will support their own

people at any cost, the confusion and inefficiencies in the system could be costing the taxpayer a lot more than required.

During the most recent recovery operations in Guam for Hurricane Pongsonga, there was so much confusion in the movement of cargo that a FEMA representative had to be deployed to Hawaii to help solve the problems. Although that is common in the military, it is not normal for FEMA. Written procedures were either not followed or did not cover the needs of the situation.

Problem Statement

The purpose of this research project is to analyze the current relationships and procedures between FEMA and USTRANSCOM. It will look at written policies as well as normal agency actions while providing disaster recovery operations. The first question will be if FEMA should work with USTRANSCOM at all. If the answer is yes, then the next question is when should they work together and what processes they should follow to provide the best, most efficient and most cost effective support for recovery operations.

Research Objectives

The research objectives are to answer the questions listed in the problem statement above. In order to accomplish this, information will be gathered, researched, and analyzed on how USTRANSCOM and FEMA (to include Director of Military Support

(DOMS) and Department of Transportation (DOT)) interact when acquiring airlift assets for military support to civil authorities. After pulling the information together, the processes will be defined and each organization's responsibilities established. How these organizations might work together better will be proposed, and avenues for improved efficiency will be suggested.

Scope and Limitations

There are multiple organizations that are involved in disaster relief operations. The military also interacts with these agencies in many different ways. This project will focus on the interaction between FEMA and USTRANSCOM when FEMA is acquiring airlift assets for disaster relief operations. Where other agencies are a part of this relationship, their involvement in the process will be included in the research. This research will not delve into the relationships between other military organizations inside or outside of USTRANSCOM such as the Air Force, the Air National Guard, or the Army Core of Engineers.

The information that is passed to the aircrews flying the relief missions is often incorrect or confusing. This project will only cover how the information passes between USTRANSCOM and FEMA, internal information sharing issues between USTRANSCOM and AMC or any other inter-service issues will not be discussed. If this part of the process proves to be smooth and efficient, then future research should be done to investigate what internal processes are broken.

Summary

Due to the reduced budget limitations and limited amount of airlift available to the United States, it is crucial that all federal agencies not only complete their mission successfully, but do so efficiently and cost effectively as well. Although one paper cannot cover the entire process from requesting federal assistance to the aircrews, it will summarize the decision and execution processes that occur between FEMA and USTRANSCOM. Through the research of the many documents governing these actions, this project will educate those unfamiliar with proper procedures and point out areas of possible improvements.

II. Literature Review

This review of the literature focuses on research previously done on FEMA's use of transportation through USTRANSCOM. It also addresses how other agencies use USTRANSCOM.

USTRANSCOM's mission is to "provide air, land, and sea transportation for the DOD, both in time of peace and time of war" (United States Transportation Command, 2000). This mission is executed through its Transportation Component Commands (TCCs), Military Traffic Management Command (MTMC), Military Sealift Command (MSC), and Air Mobility Command (AMC). FEMA is allowed by law to use USTRANSCOM assets when appropriate. By the authority of Title 31, Subtitle II, Chapter 15, Subchapter III, Sec. 1535 – Agency Agreements "The Economy Act", (United States Congress, 1999) the head of an agency or major organizational unit within an agency may request the assistance of another agency or major organizational unit if it meets the following requirements: 1) there is availability, 2) it is in the best interest of the United States Government, 3) the providing agency can provide the assistance or contract out for it, and 4) the head of the agency decides the assistance cannot be provided by contract as conveniently or cheaply by commercial enterprise.

Other agencies use USTRANSCOM assets as well. Agencies such as the United States Agency for International Development (USAID) and the Federal Bureau of Investigation (FBI) have used USTRANSCOM to acquire military or military contracted transportation in the past. When the evidence was found in Tacoma, Washington dealing with the sniper in Washington D.C. in 2002, the FBI requested and used the service of

USTRANSCOM to transport evidence to FBI Headquarters in Quantico, Virginia for evaluation on October 24th, 2002 (Avila, 2003).

USAID's mission is to support long-term and equitable economic growth and advance U.S. Foreign policy through agriculture and trade, global health assistance, conflict prevention, and humanitarian assistance. In order to accomplish their mission, they often have to depend on USTRANSCOM's assets. Although USAID is an independent federal government agency, it receives overall guidance from the Secretary of State. Based on the USAID Policies and Procedures Automated Directives System (ADS), a large portion of USAID is for procurement and contracting, the main function of the agency. They only turn to USTRANSCOM when they absolutely have to because they know how to work the commercial sector. Because these agencies are either experts in procurement or do not use it often enough, they will not be addressed in this project. (United States Agency for International Development, 2003)

The main user of USTRANSCOM is the DOD. By order of the Department of Defense Directive Number 5158.4, USTRANSCOM is the DOD single manager for transportation (except for Service-unique or theater-assigned transportation assets) (Department of Defense, 1993(a)). This means DOD customers use USTRANSCOM as their first, and often only, source of transportation. The opposite is true for Federal Agencies such as FEMA. DOD Directive 3025.1 states that DOD resources should only be applied for disaster relief operations after civil resources have been exhausted, or their resources cannot meet the requirement. (Department of Defense, 1993(b)) Because of the difference in procedures, the focus of this project will not address DOD use of

USTRANSCOM except when gathering data on special assignment airlift mission requests, where FEMA and DOD are similar.

USTRANSCOM manages air, land, and sea transportation, but FEMA does not use it for all three. Trucks move the majority of FEMA's assets because the travel distances are usually short and it is usually the quickest and cheapest way (Bertino, 2002(b)). They coordinate this portion of their movements directly through a GSA contractor, not through USTRANSCOM. FEMA does not use ships very often because the nature of their mission is to respond quickly to save lives and prevent further damage (United States Congress, 2000). Because of the factors discussed, this project only addresses the process FEMA uses in acquiring airlift services from USTRANSCOM during natural disaster response operations.

Little research has been done on the Federal Emergency Management Agency with the exception of their dealings with nuclear, biological, and chemical attack recovery operations (Anderson, 2000; Larsen, 2001; Robinson, 2001; Allgood, 2002). The FEMA process does not involve USTRANSCOM so little of these dealings can be generalized to this project. Two research projects dealing specifically with both FEMA and USTRANSCOM though, do appear in the literature.

Merchant (1998) studied the interaction between FEMA and the Air Force and Air Force contracted personnel at the disaster sites. Although it addresses how the military works with FEMA at disaster locations, such as coordinating assets and job distribution, it does not cover any of the transportation issues from the higher headquarters level.

Research has also examined how the DOD should respond to natural disasters, chemical, biological, radiological, nuclear, and high-yield explosive situations and

researched an alternative response process such as the military leading the response effort rather than FEMA (Robinson, 2001). Robinson (2001) limited her evaluation to the alternative response process and did not cover the interaction between FEMA and USTRANSCOM, concentrating instead on how military troops (not airlift assets) get involved.

Based on the review of literature of the interaction between FEMA and USTRANSCOM, it is apparent there is still a need to evaluate FEMA's use of USTRANSCOM's services and evaluate the efficiency of their interaction. Because FEMA uses USTRANSCOM frequently enough to evaluate, but not often enough to have a trained force dealing with the issues 24/7, it is a subject that bears further evaluation.

III. Methodology

Based on the guidance of Yin (1989), this project best fit the case study method of research. Yin states “in general, case studies are the preferred strategies when “how” or “why” questions are being posed, when the investigator has little control over the events, and when the focus is on a contemporary phenomenon within some real-life context” (Yin, 1989). This project asked the questions 1) why does FEMA work with USTRANSCOM, 2) how are they supported to work with USTRANSCOM, 3) how do they work with USTRANSCOM in reality, and 4) how does that difference, if any, affect the effectiveness and efficiency of the organizations. The investigator cannot control any of the events and the issue is contemporary with real-life context. Therefore, this research project met all the requirements for using a case study.

To apply the case study method, this project was built upon Yin’s (1989) distinguishing features of 1) problem definition, 2) design, 3) data collection, 4) data analysis, and 5) composition and reporting. The problem definition has already been discussed in the introduction. This statement led to the selection of a case study methodology with the data for the cases gathered from interviews with past participants as well as evaluation of historical records.

The design phase provided guidance for this research. It laid out the way data was collected, the way it was analyzed and how it was composed and reported. It used Yin’s (1989) five necessary components of the design phase including 1) a study question, 2) its propositions, if any, 3) its unit(s) of analysis, 4) the logic linking the data to the propositions, and 5) the criteria for interpreting the findings. The study questions—1)

why does FEMA interact with USTRANSCOM, 2) how should and how do they work with USTRANSCOM, and 3) how does it affect the performance of the organizations, and had been previous outlined in the problem definition phase.

The second step involves developing possible study propositions. The following propositions were developed for this project.

1. USTRANSCOM has unique assets that FEMA needs
2. The military will use its assets to help save lives and prevent disaster
3. FEMA/DOT does not have knowledge and/or training to use civilian airlift
4. USTRANSCOM does not know FEMA operations and procedures well enough to properly liaise
5. FEMA uses USTRANSCOM when not necessarily needed, spending too much money and squandering critical airlift assets

These questions focused the data collection phase of the case study.

The third component was to define the unit(s) of analysis. This involved defining what a case is. This project had different units of analysis based on the study question being addressed. The first two questions asked were why and how FEMA and USTRANSCOM should interact. The units of analysis to answer these questions were publications on FEMA and USTRANSCOM operations to include regulations, executive orders, memorandums of agreement, plans, and directives. The third question asked was how FEMA and USTRANSCOM do interact. To answer this question, interviews, observations, and after action reports were the qualitative units of analysis and the quantitative units of analysis were measured in units of disaster relief efforts such as hurricane responses. How these data were collected for these cases and how they were compared is addressed later.

Logic linking the data to the propositions involved pattern matching each of the qualitative cases to evaluate the differences. The quantitative cases were analyzed by

comparing how they were accomplished with how they could have been accomplished commercially. The fifth and final component was determining the criteria for interpreting the findings. The cost was the criteria used to determine the findings.

Based on the case study designed, the theory that drove the data collection and data analysis was that FEMA is authorized to use USTRANSCOM in certain situations and if all guidance is followed, USTRANSCOM assets will be used in the most effective and efficient manner. The rival theory statement was that the complexity, lack of training, and amount of organizations involved in the process prevent effectiveness and efficiency.

The first step in data collection was to research documents to include regulations, plans, procedures, instructions, after action reports, and laws concerning FEMA and USTRANSCOM. This research led to documents covering the Department of Military Support (DOMS) procedures when interacting with FEMA and USTRANSCOM. Although the Department of Transportation (DOT) is involved in this process as well, their role was covered in the FEMA documentation.

Step two in data collection involved interviewing individuals from FEMA, USTRANSCOM, and DOMS who had experience working with the other agencies. Personnel from the FEMA logistics branch were chosen because they were directly involved in acquiring transportation for FEMA movement requirements. Although the operations personnel request the materials to be transported, they only deal with the logistics branch and the Department of Transportation (DOT) when an emergency has been declared.

Because the situations and experience of each individual were so different, a survey was not possible and an open-ended interview was more applicable. Individuals

interviewed had the purpose of the project explained to them and were allowed to expand on their own personal experiences. Once the interview was started, follow up questions were asked an effort to address the study propositions. Although direct observations would have greatly increased the validity to this project, there was not an opportunity due to the timing of the relief efforts and the research time limitations.

To collect disaster relief event data, the first search was at the Joint Operations, Planning and Execution (JOPES) shop at United States Joint Forces Command (USJFCOM). Until 1 October 2002, USJFCOM was the unified command tasked to fill military requirements by building the time phased force deployment data (TPFDD) for disaster relief efforts in the United States, Puerto Rico, and Guam (Batten, 2003). Even though that mission now falls under United States Northern Command (USNORTHCOM), the historical data are kept at USJFCOM (Batten, 2003).

The JOPES shop could only provide data back to 2001. TPFDDs prior to 2001 were inaccurate and not a valid source of data. Unfortunately, the only TPFDDs since 2001 were for non-airlift requirements. It was not applicable to this project because the only TPFDDed materials were moved via ground (Batten, 2003).

The search then went to the FEMA logistics branch who requests and/or tracks the transportation except when a Deployed Federal Office (DFO) is up and running. Again, no data was found. The DOT (deployed to the DFO) personnel did provide FEMA a summary of information for the typhoon relief effort in Guam for Typhoon Pongsona from 10 – 23 December, 2002 where FEMA only used commercial lift, but it did not contain details of requirements, weight, or time frame (Bertino, 2002(b)). Totals of moved cargo from older relief efforts were not available.

Folders of requests for assistance (RFAs) from DOMS from each relief operation were evaluated to collect information on as many applicable cases as possible. DOMS had summary files by year of movement requests back to 1997. Only those requests initiated by FEMA were reviewed. Complete folders of bigger and more recent movements were available as well as Special Assignment Airlift Mission (SAAM) summaries from 2001, 2002, and 2003. Although not all amounts of passengers, weights, or costs of each mission were listed, there was enough information to use as a starting point for researching JOPES again and also search through the Global Transportation Network (GTN).

Plan identification numbers (PIDs) collected from DOMS (for Hurricane Lenny and Tropical Storm Allison) were not available in JOPES. The JOPES PID listing was reviewed from the Pacific Air Forces (PACAF) website but neither 699DA/DR (Hurricane Lenny) nor 21DRD/DRR (Tropical Storm Allison) were still in the JOPES database (Director of Military Support, 2003).

Because no other information could be found, the project focused on the seven SAAM missions that had shown up in the DOMS records. The first six already had passenger and cargo information. The last three were entered into GTN for a mission search. Unfortunately, GTN does not store data older than 90 days. However, historical records should have had the data in question. Unfortunately, this data was also unobtainable. In order to make comparisons, the three remaining missions each were assigned the planning factor loads, obtained from Air Force Pamphlet 10-1403, from a C-5, C-141, and C-17 respectively. This gives a broad comparison with the possible military airlift but was only based on generic data.

Analysis of the cases was accomplished in two parts. Initially written guidance was compared to the interviews and after action reports collected. This assumes that the written guidance is the correct procedure. Differences between the written and the actual procedures were documented and analyzed.

Secondly, the cost of military or military contracted airlift to the equivalent airlift was compared to equivalent capability that could have been contracted directly from the civilian airlines. Using the published rates for missions from FY03, the amount of money spent (in FY03 dollars) was compared to the rates of FEMA acquiring the same type aircraft through commercial channels (in FY03 dollars). FY03 airlift rates for special assignment airlift missions (SAAMs) were found on the AMC financial management website (Air Mobility Command Financial Management, 2002). The flight times were retrieved from the baseops website and used to calculate the total cost per mission. In order to get a true picture of the cost, it was important to add in the pre-positioning and de-positioning time. The total time is charged to the customer even though the customer cannot choose which base the aircraft will be sourced from (Air Mobility Command Financial Management, 2002). This was accomplished by using an aircraft from the closest active duty base to use in the flight time calculations. Although it is possible that another mission could be added to the beginning or end of the mission, reducing the cost to the initial customer, it cannot be expected.

The commercial rates were acquired by requesting quotes from carriers and transportation brokers that normally work with FEMA. These companies agreed to provide the data with the understanding that their names not be included in the documentation. The commercial carriers used Los Angeles, California as the origin for

all their aircraft. On any given day, this could be closer or farther away but this was the standard agreed upon for some consistency in the rates. The commercial rates also included the build and break of cargo (a service not included in the military rates). If data had been collected for cargo that could only have been moved on military airlift (for example oversized or sensitive cargo), that data would have been removed from the comparison. The assumption was made that the ratio of rates from civilian to military would be the same in FY03 as it was in the years the mission were accomplished. World events would obviously have an affect on commercial rates, but could not be captured in this analysis.

Another assumption made was that civilian companies were available within 24 hours of the airlift request. Although USTRANSCOM publishes in the Memorandum of Agreement with FEMA a minimum of 96 hours to process a request, they have the ability to reprioritize and redirect current missions or use alert aircraft to meet immediate requests (Federal Emergency Management Agency, 1999(b)). Therefore, the overall assumption was made that airlift could be acquired within a 24-hour period through either military or commercial means.

Yin's (Yin, 1989) theories were used again, this time to evaluate how these limitations might have affected this project. For both the qualitative and quantitative portions, the biggest affect is upon the number of cases to sufficiently support this study. Yin (1989) states that a 95 to 99 percent confidence interval is desired and the greater certainty lies with the larger number of cases. This research project, with only third party interviews and nine missions to cost compare with, limits the certainty of the results. The

lack of information, however, strongly supports the fact that more data needs to be tracked.

IV. Data Collection, Results and Analysis

This chapter is organized to present each case study. The first cases covered include the written documentation including such items as regulations, instructions, laws, and plans. Interviews and after action reports are covered next followed by the quantitative data collected. The results are then analyzed as stated in the methodology.

Cases

Public Law 99-433: The Goldwater-Nichols Act.

This public law, commonly referred to as the Goldwater-Nichols Act of 1986, directed and established joint military operations. It directed the President of the United States, through the Secretary of Defense, to establish unified and specified combatant commands to perform military missions and prescribe their force structure (United States Congress, 1986). The Chairman of Joint Chiefs of Staff (CJCS) was tasked to review their missions, responsibilities, and force structure at least every two years and make any recommended changes to the President (United States Congress, 1986). Once established, the President is the only one authorized to make additions, subtractions, or changes to these combatant commands.

The chain of command for each combatant command comes from the President to the Secretary of Defense, then directly to the commander (United States Congress, 1986). Neither the CJCS nor any of the other component chiefs of staff has authority over any combatant commander. If the President or the Secretary of Defense chooses, they may

direct the CJCS to be their communication portal to the combatant commanders. (United States Congress, 1986)

Although the Goldwater-Nichols Act directed the President to establish the combatant commands, it did address matters to be considered during the initial review. It stressed the “creation of a unified combatant command for transportation missions which would combine the transportation missions, responsibilities, and forces of the Military Traffic Management Command, the Military Sealift Command, and the Military Airlift Command” (United States Congress, 1986). In order to allow this to be done, it repealed the prohibition against consolidating functions of the Military Transportation Command—Section 1110 of the Department of Defense Authorization Act, 1983, Public Law 97-252; 96 Stat. 747. (United States Congress, 1986)

This law allowed for, and basically directed, the creation of the United States Transportation Command. Military Traffic Management Command (MTMC), Military Sealift Command (MSC), and Air Mobility Command (AMC) were made the three specified commands directed to carry out the mission of USTRANSCOM. Because of the Goldwater-Nichols Act, USTRANSCOM was established and is the key organization for obtaining military transportation support. (United States Congress, 1986)

USTRANSCOM Handbook 24-2: Understanding the Defense Transportation System.

This handbook provides information to USTRANSCOM customers on how the Defense Transportation System (DTS) works and what future initiatives USTRANSCOM is planning. It defined the DTS as

the worldwide transportation infrastructure that supports the Department of Defense (DOD) in peace and war. As single manager for defense

transportation, the Commander in Chief of USTRANSCOM possesses combatant command and control of three Transportation Component Commands and all transportation assets of the military departments except those that are Service unique or theater assigned. (United States Transportation Command, 2000)

Primary guidance for USTRANSCOM comes from Joint Pub 4-01, DOD

Directive 5158.4, and DOD Regulation 4500.9. (United States Transportation Command, 2000)

USTRANSCOM's mission is to "provide air, land, and sea transportation for the DOD, both in time of peace and time of war" (United States Transportation Command, 2000). This mission is executed through its Transportation Component Command's (TCC's), MTMC, MSC, and AMC. The customers determine the transportation requirements that USTRANSCOM fulfill. In the list of customers, FEMA is named a direct bill payer under the classification of Federal Agencies. For airlift services, FEMA would be a direct bill payer for Special Assignment Airlift Missions (SAAMs). (United States Transportation Command, 2000)

SAAMs accomplish pickup and delivery from origin to destination where AMC channels do not exist. AMC fills these missions based on number of passengers, type of cargo, urgency, and sensitivity. The rates are charged based on the AMC Rate Guide for that particular year and can be found at <https://amcpublic.scott.af.mil/fm/rates.htm>.

USTRANSCOM has established the Joint Mobility Control Group (JMCG) to provide efficient transportation services to DTS customers. They are composed of eight elements: USTRANSCOM's Movement Control Center (MCC); command center elements of the three TCCs; the Joint Traffic Management Office (JTMO); Joint Intelligence Center for Transportation (JICTRANS); the Global Patient Movement

Requirements Center (GPMRC); and the Joint Operational Support Airlift Center (JOSAC). Some of these agencies should interact with FEMA when certain requests are made. (United States Transportation Command, 2000)

USTRANSCOM uses the Global Transportation Network (GTN) for in-transit visibility (ITV). It tracks “the identity, status, and location of DOD unit and non-unit cargo, passengers, patients, forces, and military and commercial airlift, sealift, and surface assets from origin to destination” (United States Transportation Command, 2000). This computer program should provide historical data on operations when USTRANSCOM supported FEMA.

This handbook also provides a summary of public laws that govern USTRANSCOM in some fashion. It lists The Denton Amendment to 10 USC, 2551 and states that it allows the Secretary of Defense to transport non-military supplied goods for humanitarian relief for no charge if done on a space available basis. It also mentions DOD Regulation 4515.13, Air Transportation Eligibility. (United States Transportation Command, 2000)

Understanding the basic organization and operations of USTRANSCOM is crucial to researching the interaction between FEMA and USTRANSCOM. This Handbook provides the initial background information and other reference documents for further research in understanding the way USTRANSCOM works.

DOD Directive 4500.9: Transportation and Traffic Management.

This directive prescribes general DOD transportation and traffic management policies (Department of Defense, 1989). It directs that

the DOD shall maintain and operate in peacetime only those owned or controlled transportation resources needed to meet approved DOD

emergency and wartime requirements that cannot be met from commercial transportation sources. Those transportation resources shall be used during peacetime as efficiently as possible to provide essential training for operational personnel and to meet logistic needs consistent with fostering the development of military-useful commercial capabilities. (Department of Defense, 1989)

This is the essence of why USTRANCOM exists. If commercial transportation could cover all military requirements, there would not be a need for the airlift assets in the US Air Force inventory.

The Secretary of Defense, or designee, has final decision authority to commit military resources to support the military assistance to safety and traffic (MAST) program. However, the Secretary of the Army is directed to serve as the DOD Executive Agent for this program, and is authorized to implement policy, plan, and task DOD Components having resources to be used to support MAST. (Department of Defense, 1989)

In reference to non-DOD use of DOD transportation, this directive is very specific. It requires DOD transportation resources to be used only if it does not impair the DOD mission. It must also meet one of the five criteria: 1. emergency, 2. lifesaving nature, 3. specifically authorized by statute, 4. in direct support of the DOD mission, or 5. requested by the Head of an Agency of the Government. If requested by an Agency Head, justification must be provided that it is in the best interest of the United States Government and that commercial government is either not available or can't meet the specifications of the movement request. (Department of Defense, 1989)

Directive Number 5158.4:

This directive implements section 113 and chapter 6 of Title 10 of the United States Code, establishing United States Transportation Command. It does not further research the topic of this project except to confirm “the mission of the Commander in Chief [now

Combatant Commander] of the United States Transportation Command shall be to provide air, land, and sea transportation for the Department of Defense, both in time of peace and time of war” (Department of Defense, 1993(a)).

DOD Directive 3025.1: Use of Military Resources During Peacetime Civil Emergencies within the United States, its Territories, and Possessions.

This directive covers the policy and responsibilities of the Department of Defense (DOD) when responding to major disasters or emergencies in accordance with the Stafford Act. It designates the Secretary of the Army as the DOD Executive Agent for Military Support to Civil Authorities (MSCA). It focuses on the assignment and allocation of DOD resources during peace, war, or transition to war when supporting civilian authorities. (Department of Defense, 1993(b))

As the DOD Executive Agent, the Secretary of the Army acts for the Secretary of Defense by developing planning guidance, plans, and procedures for MSCA in accordance with DOD Directive 3025.1. It also has the authority to task the DOD Components to plan for and commit DOD resources, based upon requests for MSCA. MSCA includes support during civil emergencies or attack and response to civil defense agencies but does not include military assistance for civil law enforcement. The DOD Components are required to respond to taskings via this Directive. (Department of Defense, 1993(b))

Dependent on the priorities of the President and the Secretary of Defense, all DOD resources are potentially taskable for MSCA. However, civil resources must be applied first, DOD can only assist if the requirements are beyond the capabilities of the civil authorities, specialized DOD capabilities be used efficiently, and in general, military

operations will have priority over MSCA, unless otherwise directed by the Secretary of Defense. When DOD plans force structure and budget, it must acknowledge that the National Guard forces have the primary responsibility for providing military assistance to civil authorities and that DOD Components cannot procure or maintain any supplies, equipment, or materials for the exclusive use in providing MSCA. This directive also tasks the Military Services to ensure all Active or Reserve personnel assigned or attached to FEMA are trained and employed to enhance DOD capabilities for MSCA.

(Department of Defense, 1993(b))

During immediate response procedures (imminently serious conditions resulting from any civil emergency or attack requiring immediate action by military commanders), when time does not permit prior approval from higher headquarters, this directive authorizes military commanders to take necessary action to respond to requests of civil authorities. This Directive also allows the DOD Executive Agent to direct DOD Components to respond to an emergency even when the President has not declared it a national emergency with the approval of the Secretary or Deputy Secretary of Defense. This covers the uses of DOD transportation resources as well. (Department of Defense, 1993(b))

Directive 3025.1 establishes a single headquarters element, named the “Directorate of Military Support (DOMS)”, under the Secretary of the Army. This Directorate issues the orders as the representative of the Secretary of the Army and carries out the roles and responsibilities of the DOD Executive Agent as defined in this Directive. (Department of Defense, 1993(b))

Title 31: Agency Agreements.

This law authorizes the head of an agency or major organizational unit within an agency to request goods and/or services from another agency if the following terms are met:

1. amounts are available
2. it is in the best interest of the government (determined by head of requesting agency)
3. the agency filling the request can do so itself or by contract
4. the requesting agency head cannot obtain the goods and/or services as cheaply or conveniently by commercial contract

Payment by appropriated funds is required for reimbursement if this law used as the authorization for a request. (United States Congress, ????)

Public Law 106-390: Robert T. Stafford Disaster Relief and Emergency Assistance Act.

This act was written because of two main factors. Congress found and declared that 1) disasters often cause death, human suffering, loss of income, and property loss and damage and 2) they often disrupt the functioning of the government and communities, adversely affecting individuals and families. Because of these findings, the federal government must be able to provide an orderly and continuing means of assistance, aid, and emergency services to state and local governments in carrying out their responsibilities to alleviate suffering, reconstruct and rehabilitate devastated areas. The functions of the President under this Act, with certain exceptions, were delegated to the Director of FEMA. (United States Congress, 2000)

This Act defines emergency as

any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and

safety or to lessen or avert the threat of a catastrophe in any part of the United States. (United States Congress, 2000)

It also defines major disaster as

any natural catastrophe (including any hurricane, tornado, storm, high water, winddriven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of States, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby. (United States Congress, 2000)

Any reference to the United States means the fifty states, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. Any state reference also includes these same territories as well as any state of the United States. (United States Congress, 2000)

Under Section 304, *Reimbursement of Federal Agencies*, it states that Federal agencies may be reimbursed for expenditures under this Act from funds appropriated for the purposes of this Act. This allows for the Agency Agreements, under Title 31 to be applied to disaster relief. However, under Section 402, *General Federal Assistance*, the Act authorizes the President to “direct any Federal agency, with or without reimbursement, to utilize its authorities and the resources granted to it under Federal law to assist State and local assistant efforts” (United States Congress, 2000). This allows Federal agencies, under the direction of the President, the ability to assist even when funds are not available. Assistance authorized is assistance essential to meeting immediate threats to life and property resulting from a major disaster (United States Congress, 2000).

As a general rule, during the immediate aftermath of an emergency or major disaster, the Governor of the State affected may request the President to direct the Secretary of Defense to utilize DOD resources to assist in the emergency work essential preservation of life and property. This work, however, may not exceed 10 days. This allows a 10-day grace period for the President to use DOD resources to work to save life and property and without declaring an emergency or major disaster. Once a declaration is made, the President can direct any Federal agency, with or without reimbursement, to support State and local emergency assistance efforts. (United States Congress, 2000)

Executive Order 12127: Federal Emergency management Agency.

This document orders Reorganization Plan No. 3 of 1978 (43 FR 41943) effective and orders the transfer of functions and the abolition of agencies and offices described the Reorganization Plan to be accomplished. It allowed for the orderly activation of FEMA. It was effective as of Sunday, April 1, 1979. (President of the United States, 1979(a))

Executive Order 12148: Federal Emergency Management.

This order basically transfers all emergency management authority vested in the President of the United States that was previously delegated to another agency or organization head, to the Director of FEMA. It also directs the FEMA Director to manage all emergency planning and assistance to include civil defense and civil emergency functions. It defines civil emergency as any “accident, natural, man-caused, or wartime emergency or threat thereof, which causes or may cause substantial injury or harm to the population or substantial damage to or loss of property” (President of the United States, 1979(b)). Within the extent authorized by law, this document also directs the Secretary of Defense to provide the FEMA Director with support for civil defense

programs for program development and administration, technical support, research, communications, transportation, intelligence, and emergency operations. All Executive agencies are ordered to cooperate with and assist the Director in the performance of his or her functions. (President of the United States, 1979(b))

Another important facet of this executive order is that specifically delegates all functions vested in the President by the Robert T. Stafford Disaster Relief and Emergency Assistance Act to the Director of FEMA. The only exceptions are that of the President's authority to declare a major disaster or emergency, the ability to decide to repair, reconstruct, restore, or replace Federal facilities, and the authority over food coupons and distribution. Presidential declaration of a major disaster or emergency is crucial to the entire FEMA process as well as the delegated authority of the rest of the Stafford Act to the FEMA Director. (President of the United States, 1979(b))

Executive Order 12656: Assignment of Emergency Preparedness Responsibilities.

This directive was issued because “our national security is dependent upon our ability to assure continuity of government, at every level, in any national security emergency situation that might confront the Nation” (President of the United States, 1988). A national security emergency, as referred to in this document, is “any occurrence, including natural disaster, military attack, technological emergency, or other emergency, that seriously degrades or seriously threatens the national security of the United States” (President of the United States, 1988). Congress directed the development of a plan to respond to such events and provided the funds to accomplish it. This Order does not apply to natural disasters or other disasters that can be responded to by local or State government, individuals, or Federal agencies. (President of the United States, 1988)

This does not directly apply to the purpose of this project except to note that the military is tasked to be involved in the planning of national emergencies that go beyond the scope of Federal agencies as well as ensure military preparedness and readiness to respond. (President of the United States, 1988)

Federal Response Plan: Basic Plan.

The purpose of the Federal Response Plan (FRP) is to outline how the Federal Government implements the Robert T. Stafford Disaster Relief and Emergency Assistance Act when assisting local and state governments. It describes the responsibilities of 27 Federal Departments, including the Department of Defense, once the President declares a major disaster or emergency. The FRP covers all states, including any state of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. FEMA is tasked to lead in developing and maintaining the FRP. (Federal Emergency Management Agency, 1999(a))

The FRP is organized into six basic parts: the Basic Plan, the Emergency Support Function (ESF) Annexes, the Recovery Function Annex, the Support Annexes, the Incident Annexes, and the Appendices. The Basic Plan, the Transportation ESF, and the Logistic Support Annex are the portions of the FRP applicable to this research project. This section will finish the review of the Basic Plan and the Transportation ESF and Logistics Support Annex will be reviewed in their own section of the Literature Review.

Policy states that no direct Federal assistance is authorized prior to Presidential declaration. However, if “an incident poses a threat to life and property that cannot be effectively dealt with by the State or local governments, FEMA may request the

Department of Defense (DOD) to utilize its resources prior to a declaration to perform any emergency work “essential for the preservation of life and property” under the Stafford Act” (Federal Emergency Management Agency, 1999(a)).

Even when a Federal disaster is declared, it is still required that the internal local and State resources should be used first, to the maximum extent possible. If a State exhausts its own resources or just doesn't have the resources needed, Federal assistance may be provided. Should two or more different agencies or locations need the same limited resource, the Emergency Support Team (EST) and/or the Catastrophic Disaster Response Group (CDRG) at FEMA Headquarters will resolve the issue. These agencies will also handle all requests for unmet State needs. (Federal Emergency Management Agency, 1999(a))

Under the concept of operations for the Emergency Support Functions (ESFs), it states “ESFs are expected to support one another in carrying out their respective missions” (Federal Emergency Management Agency, 1999(a)). This is very important when transportation is involved. If none of the ESFs cover the required assistance, FEMA may directly task any Federal agency to assist in the disaster operation. (Federal Emergency Management Agency, 1999(a))

The concept of operation for military support states, “DOD will normally provide support only when other resources are unavailable, and only if such support does not interfere with its primary mission or ability to respond to operational contingencies” (Federal Emergency Management Agency, 1999(a)). This support will only be provided upon request and must be accompanied by a Request for Federal Assistance (RFA), unless the military is allocating resources under its own funding authority or under

immediate response. Such requests must be submitted through the Director of Military Support (DOMS), the representative for the DOD executive agent for military assistance to civil authorities (MACA). The Defense Coordinating Officer (DCO) is then appointed and takes over this job with DOMS oversight. The DCO validates requirements for military support, forwards mission assignments to the appropriate military organization, and assigns liaison officers to ESFs. These are the DCO's responsibilities regardless of the rank of other officers assigned to the Disaster Field Office. The DOMS role is detailed in further depth under the DOD Directive 3025.1. (Federal Emergency Management Agency, 1999(a))

The Emergency Support Team (EST) is responsible for coordinating and tracking all the assets deployed in support of the disaster recovery operation. It also tracks the status of the operations and serves as the center of information at the headquarters level. They help resolve policy issues and resource support conflicts. The Movement Control Center (MCC) assists the EST in their responsibilities by coordinating the acquisition of transportation capacity and maintaining visibility over their movements. The MCC falls under the ESF#1 which is covered in more detail under ESF#1, the Transportation Annex. (Federal Emergency Management Agency, 1999(a))

The Federal Response Plan also lays out the activation and declaration procedures. The Governor of the State in need requests assistance from the FEMA Regional Director who forwards the request to FEMA Headquarters. The Headquarters then forward the request, along with its recommendation to the White House. If the President deems the request valid, he declares it a major disaster and officially appoints a Federal Coordination Officer (FCO) to run the recovery operations. FEMA then designates the

types of assistance and areas eligible to receive the assistance. (Federal Emergency Management Agency, 1999(a))

The planning of the Federal Response Plan, including review and revision, related annexes, and supporting operational procedures, falls under the responsibility of FEMA. The primary agencies tasked to prepare and coordinate the delivery of disaster assistance must also take the lead in preparing and maintaining their specific ESF annex. The ESF Leaders Group (ESFLG) addresses all working level FRP planning and implementation strategies, as well as other interagency resolutions. (Federal Emergency Management Agency, 1999(a))

Federal Response Plan: Emergency Support Function #1 Transportation Annex.

Emergency Support Function (ESF) #1's purpose is two-fold. It provides assistance to agencies and governments at all levels with transportation capacity following a major disaster or emergency as well as provides coordination between response operations and restoration of the transportation infrastructure. (Federal Emergency Management Agency, 1999(a))

Although ESF#1 has multiple functions, only two apply to the research of this project. It processes and coordinates requests for transportation from organizations eligible under the FDR, including requests for military transportation. Also, ESF#1 operates national and field Movement Coordination Centers (MCCs) for obtaining transportation services and providing transportation asset visibility in and out of the disaster area. (Federal Emergency Management Agency, 1999(a))

All ESFs should attempt to coordinate their own transportation with pre-disaster contracts. ESF#1 should only be used if those avenues have been exhausted. Although

directly coordinated movements by other ESFs are authorized and encouraged, it is still imperative that other ESFs advise ESF#1 (and the MCC if activated) of all transportation movements arranged directly. This allows resources to be tracked and reception plans to be executed. (Federal Emergency Management Agency, 1999(a))

“When a disaster occurs, the Secretary of Transportation will appoint a DOT Crisis Coordinator to manage the overall DOT/ESF#1 response” (Federal Emergency Management Agency, 1999(a)). At the national level, the Department of Transportation (DOT) Headquarters Crisis Management Center (CMC) conducts ESF #1. The DOT Crisis Coordinator provides guidance and direction to those assigned to the EST at FEMA Headquarters. DOT will establish the Movement Coordination Center (MCC) in the EST at the request of the EST Director. The MCC is tasked to coordinate the acquisition of transportation capacity and maintain visibility over validated transportation requests for assistance from inception through delivery to a mobilization center. (Federal Emergency Management Agency, 1999(a))

At the regional level, the Regional Emergency Transportation Coordinator (RETCO) is responsible for transportation activities within his or her region. The RETCO activates the regional ESF#1 to include representatives to the Regional Operations Center (ROC), Emergency Response Team (ERT), and field MCC. (Federal Emergency Management Agency, 1999(a))

The DOT, as the primary agency for this annex, must provide staffing to and manage the MCC(s). The DOD, as a support agency, must assist in restoring the transportation infrastructure, provide organic military transportation capacity from USTRANSCOM to move essential resources and assist in the contracting for civilian airlift, and assist in the

development and support the execution of time-phased force deployment lists (TPFDLs) for high-priority response resources. USTRANSCOM is also required to provide a liaison officer to the MCC. (Federal Emergency Management Agency, 1999(a))

FEMA, another support agency, is tasked to “initiate transportation actions prior to MCC activation, keep DOT informed of early transportation actions, and assume responsibility for closeout of actions after the headquarters and field MCCs deactivate” (Federal Emergency Management Agency, 1999(a)). They also supervise the development of the time-phased force deployment lists (TPFDLs) and provide personnel to the MCC(s). (Federal Emergency Management Agency, 1999(a))

Federal Response Plan: Logistics Management Support Annex.

The Logistics Support Annex covers how FEMA logistics functions work under the Federal Response Plan (FRP) (Federal Emergency Management Agency, 1999(a)). The information provided in this literature review focuses on the transportation function of logistics support.

Logistics management is defined by FEMA as “the process of planning, preparing, implementing, and evaluating all logistics functions that support an operation or activity” (Federal Emergency Management Agency, 1999(a)). In order for it to be effective, it must be “executed in a unified manner in order to reduce costs, ensure appropriate support actions, and decrease delivery time” (Federal Emergency Management Agency, 1999(a)). The transportation management function is tasked to prioritize, order, source, and track all the movement needed to support the relief operations. While doing this, the personnel need to consider time sensitivity, appropriateness and cost efficiency. (Federal Emergency Management Agency, 1999(a))

Because disasters are not predictable, FEMA Headquarters Logistics Division must maintain the capability to provide rapid response and full logistics services. It is tasked to ensure agency readiness to deliver critical resources, participate in planning, and assume open actions and closeout responsibilities. Once other agencies are up and running to provide logistics services, the headquarters function will complement ESF operations. Because logistics management is continuous, the participation of the headquarters in the initial and final aspects of the operations is critical. (Federal Emergency Management Agency, 1999(a))

When a disaster relief operation first kicks off, the logistics function must establish communications and coordination among other federal agencies, and begin planning for the movement of goods. If ESFs #1 or #7 have not been activated yet, the FEMA logistics elements must execute their roles until they are activated. Throughout the entire operation, however, logistics personnel must track the movement of assets and analyze requisitions to determine cost-effective and timely means to meet requirements. (Federal Emergency Management Agency, 1999(a))

After closeout of an operation, FEMA Headquarters Logistics Division will revise documents, collect and file paperwork, develop and assign tasks to improve activities for the next event and even meet with other Federal logistics providers to develop a corrective action plan to improve cost-effectiveness and efficiency. (Federal Emergency Management Agency, 1999(a))

Federal Response Plan: Financial Management Support Annex.

This annex covers the financial processes for FEMA under the Federal Response Plan. Expenditures come from the Federal Disaster Relief Fund (DRF), which provides

reimbursement to Federal agencies for performing work or providing a service under a mission assignment issued by FEMA. The FEMA Chief Financial Officer (CFO) oversees all financial operations for disaster funding. Important to this project is that the CFO ensures expeditious processing of the reimbursement requests from the Emergency Support Function (ESF) primary agencies and that he or she applies proper financial principles, policies, regulations, and management of DRF appropriated funds. (Federal Emergency Management Agency, 1999(a))

The basically means that FEMA holds the checkbook for all Federally declared disasters, no matter what agency is providing the recovery assistance. This only applies to agencies acting under the Stafford Act, however. Once a mission assignment is given, the ESF primary agency can request reimbursement up to the funding limitation included in the assignment. The reimbursement request must include support documentation for the expenses. This annex does not address funding limitations for assistance from the military but since each ESF is responsible to approve and file for reimbursement for all agencies that support their mission, the military must fall under the limitation of that same mission assignment. (Federal Emergency Management Agency, 1999(a))

Briefing: Director of Military Support (DOMS) Military Assistance to Civil Authorities (MACA).

This briefing was developed to provide information to Senior Planners for the Secretary of Defense and the Director of Military Support role as the action agent for the Secretary of the Army for Military Support to Civil Authorities (MSCA) and Military Assistance to Civil Authorities (MACA). It states the Secretary of the Army Executive Agency responsibility for domestic MSCA is based on the precept of civilian control,

from the President of the United States to the Secretary of Defense. It stems from the Goldwater-Nichols Act. (Avila, 2002)

There are several governing principles for the DOD providing MSCA. First, the DOD support system must remain accountable and not breach the chain of command. The DOD must remain in a supporting role to the lead civilian agencies and emphasize the natural role of the DOD such as mass mobilization or logistical support. Resources should not be purchased by the DOD that do not directly support the military mission and the existing legislative authorities governing MSCA are generally adequate. In other words, the DOD is not seeking any new missions. (Avila, 2002)

The organizational chart shows the DOMS Director reporting directly to the Secretary of the Army (SecArmy) while receiving guidance and coordinating with the Special Assistant for Military Support and Office General Counsel who also report to the SecArmy. The SecArmy then reports directly to the Secretary of Defense. (Avila, 2002)

In order to receive any assistance from the DOD, a Lead Federal Agency must submit a request for assistance (RFA) to DOMS. This RFA must be in letter format and contain certification that all other resources have been exhausted. These provide legal authority and funding. If the military supports others without one, they are doing it at their own cost. (Avila, 2002)

One thing this briefing stresses is that the Lead Federal Agency is always in charge and the DOD fills the support role. The DOD is a key player, however, due to its unique capabilities such as transportation, medical logistics, Emergency Ordinance Disposal (EOD), and aviation. (Avila, 2002)

Memorandum of Agreement: Memorandum of Agreement (MOA) Between United States Transportation Command, Federal Emergency Management Agency, and the Department of Transportation.

This MOA establishes the roles, responsibilities, and relationships between USTRANSCOM, FEMA, DOT and DOMS. It uses the Federal Response Plan as the guide to ensure USTRANSCOM provides the most economical use as well as best support possible to FEMA and DOT during an emergency situation. It was built on the assumptions that it covers only those emergencies declared by the President, that USTRANSCOM may have unique assets needed, and the declared disaster will be of high national level interest resulting in consideration of use of special category alerted aircraft. (Federal Emergency Management Agency, 1999(b))

USTRANSCOM has agreed to provide transportation resources to move emergency life saving personnel and equipment if requested by FEMA through a Request for Federal Assistance and approved by the DOD. The goal is for USTRANSCOM to provide initial transportation until ESF#1 can acquire commercial transportation. USTRANSCOM does require 96-hour notification on a routine basis but can be reduced depending on the alert status during relief operations. (Federal Emergency Management Agency, 1999(b))

USTRANSCOM also has agreed to provide a Liaison Officer (LNO) for airlift coordination to the Movement Coordination Center (MCC) Emergency Support Team (EST) at FEMA Headquarters and to the ESF#1 Transportation coordination element in the affected region when requested by FEMA or DOMS. This individual must be able to flight follow and track passengers and cargo throughout the DOD transportation system. An LNO or Director of Mobility Forces (DIRMOBFOR) will also be provided to the

Disaster Field Office (DFO) to coordinate USTRANSCOM air operations and assets for the relief effort. (Federal Emergency Management Agency, 1999(b))

USTRANSCOM will make recommendations as to the best aerial port of embarkation (APOE) and coordinate the use of Air Mobility Command's (AMC's) bases whenever possible. They will also provide transportation assets (both military and commercial) to move passengers and cargo as identified by either the EST of the DFO and validated for movement by DOMS or the Defense Coordinating Officer (DCO) as well as place requested aircraft on alert status if validated by the same. (Federal Emergency Management Agency, 1999(b))

An annual Disaster Response Transportation Planning Conference will be hosted by USTRANSCOM prior to the onset of the hurricane season. Training and assistance to FEMA personnel will also be given in load planning, pallet preparation, cargo preparation, cargo preparation, documentation and manifesting aircraft, loading and the preparation of Shipper Declarations of Hazardous Goods. (Federal Emergency Management Agency, 1999(b))

FEMA will ensure that all ESF's comply with the Federal Response Plan, especially for ESF's to procure transportation assets through ESF#1 only. They will also publish an initial 72-hour cargo priority list and daily list thereafter. All requests for military transportation will be done properly through use of a RFA through DOMS and reimbursement will be provided for transportation used or alert aircraft (regardless of use). (Federal Emergency Management Agency, 1999(b))

Space will be provide by FEMA for the DIRMOBFOR with the DCO, the USTRANSCOM LNO in the EST, a 24-hour POC will be posted at each on-load

location, and all pre-stocked supplies and equipment will be entered into the disaster planning Time Phased Force Deployment Data (TPFDD) and kept updated. FEMA personnel will participate in the annual Disaster Response Transportation Planning Conference hosted by USTRANSCOM and provide periodic training (funded by USTRANSCOM) to USTRANSCOM personnel who may be involved in disaster response programs. (Federal Emergency Management Agency, 1999(b))

DOT will coordinate and direct the Movement Coordination Center (MCC), coordinate and resolve any conflicts for transportation requests, forward all USTRANSCOM requests to DOMS, ensure realistic required delivery dates, ensure request for support match the published FEMA cargo priority lists, and coordinate personnel and equipment onload locations with USTRANSCOM to maximize efficiency. As soon as possible, DOT will also incorporate ESF#1 procured transportation assets into the flow of transportation. (Federal Emergency Management Agency, 1999(b))

Summary: The Air Mobility Command 1998 Historical Highlights.

This document is a summation of the events that Air Mobility Command (AMC) took part in during 1998. AMC is the air component to USTRANSCOM and usually the major USTRANSCOM player when supporting FEMA. The summary described times throughout 1998 when AMC flew USTRANSCOM directed missions in support of FEMA. (Air Mobility Command Office of History, 1999)

From 2-7 July, AMC flew 10 C-5 and 2 C-141 missions for Operation PHOENIX FLAME. The efforts were in support firefighters battling wildfires that burned over 200,000 acres of Florida. (Air Mobility Command Office of History, 1999)

From 21 September through 12 October AMC provided extensive airlift support to relief operations from the devastation of Hurricane Georges in Puerto Rico, the Dominican Republic, and the Virgin Islands. Over 190 missions were flown from multiple onload locations in the Continental United States (CONUS) to Roosevelt Roads Naval Air Station (NAS). Not only were airlift assets involved in this operation, but USTRANSCOM also deployed a tanker airlift control element to control the aircraft operations at Roosevelt Roads NAS. (Air Mobility Command Office of History, 1999)

From 6 November through 11 December AMC did support hurricane relief operations but they were for Hurricane Mitch hitting El Salvador and Guatemala. Although this document does not specify, because these areas were outside FEMA's areas of responsibility, the support should not have been in support of FEMA. Further research should be done to verify who directed that airlift support. (Air Mobility Command Office of History, 1999)

Department of Military Support (DOMS). Information gathered from notes and documentation kept in the office.

The following incidents were shown as times when FEMA requested transportation from USTRANSCOM.

1. Tropical Storm Allison, Houston, TX
2. A search and rescue (SAR) exercise
3. A mobile emergency response support (MERS) detachment movement,
4. Hurricane Jose (supporting Puerto Rico and Virgin Islands)
5. Hurricane Lenny (supporting Puerto Rico and Virgin Islands)
6. Hurricane Debby (supporting Puerto Rico and Virgin Islands)
7. Oklahoma Tornado Disaster Relief
8. Hurricane Bret, Austin, TX – 22 Aug 99
9. Hurricane Dennis, Raleigh, NC – 28 Aug 99
10. Hurricane Floyd, FL, GA, SC, NC, and VA – 14 Sep 99
11. Typhoon Paka, Guam and Northern Mariana's – 18 Dec 97

(Director of Military Support, 2003)

Unfortunately, not all requests were accompanied by detailed data. In fact, only items one through three had enough data worth noting, which is summarized below and in the FY01 SAAM Spreadsheet discussion (Avila, 2001).

For Tropical Storm Allison, FEMA made 31 requests for military support to include two USAF fixed wing aircraft with associated crew, 162 Army personnel, Disaster Medical Teams (DMATs), a DCO and DCE, command and control for military elements, and airlift support (Director of Military Support, 2003). RFA # 50-10972 was initiated by ESF#8 Health and Medical Support and requested the DOD provide four DMATs and one Medical Support Team (MST) to deploy to Tulley Stadium in Houston, Texas. Four million dollars was authorized for expenses in this mission assignment (Emergency Support Function 8, 2001).

RFA # 50-10985 was the follow-on request by ESF#1 for the DMATs that needed military transportation (Emergency Support Function 1, 2001). The request was to provide transportation for two DMATs to Houston, Texas; one from Pope AFB, North Carolina and the other from Kirtland AFB, New Mexico. The appropriated funds for this mission were limited to \$700,000. (Emergency Support Function 1, 2001)

Per the DOMS data sheets recorded during Tropical Storm Allison (2001), these two transportation requests were supported by SAAM 6001 (mission number AJM600101161) from Kirtland AFB to Houston, Texas and SAAM 6002 (mission number AJM600201161) from Pope AFB to Houston Texas. There is no record of a Plan Identification Number (PID) being assigned to a Combatant Commander for these taskings. A message did go out on 10 June, 2001 from USCINCFJCOM/J3 creating PID

21DRD and tasking the Air Education and Training Command (AETC) to provide a 25-bed hospital capability (personnel and equipment) to the Houston area (United States Commander in Chief Joint Forces Command J3, 2001). There was no record of transportation provided by the DOD for this tasking. Once in a TPFDD, however, USTRANSCOM could have moved the package without DOMS knowing or AETC could have tasked one of their locations close enough to Houston that transportation assistance was not necessary. (Director of Military Support, 2003)

As noted in the e-mail referred to below from Region Two Operations Center (R2-DOD-ROC), there was a request for DMATs to support relief efforts for Hurricane Lenny in November 1999 (Region Two Department of Defense Regional Operations Center, 1999). A message was sent from USCINCFJCOM establishing PID 699DA for the military tasking but there is no other record of airlift used (United States Commander in Chief Joint Forces Command J3, 1999).

Spreadsheet: FY01 SAAM Spreadsheet.

This spreadsheet summarizes all the special assignment airlift missions that were flow by the DOD in support of civil authorities. These missions were tasked to USTRANSCOM from DOMS who received an RFA from a Federal agency. The following are the SAAMs that were requested by FEMA:

Table 1: SAAM Missions

REF MSN #	DATE	SAAM #	PASSENGERS	CARGO	FROM	TO	NOTES
1	NOV-00	6001	62	None	KRIV	KNUQ	
2	NOV-00	6002	62	None	KNUQ	KRIV	
3	NOV-00	6003	62	None	KIKR	KNUQ	
4	NOV-00	6004	62	None	KNUQ	KIKR	
5	NOV-00	6005	62	None	KLSV	KNUQ	
6	NOV-00	6006	62	None	KNUQ	KLSV	
7	JUN-00	6001	35	122,000	KIKR	KHOU	Simulated C-5 Planning Weight
8	JUN-00	6002	35	40,000	KPOB	KHOU	Simulated C-141 Planning Weight
9	SEP-01	6007	26	90,000	KBKF	KSWF	Simulated C-17 Planning Weight

(Secretary of the Air Force, 1998; Avila, 2001)

Region Two-Department of Defense-Regional Operations Center: Hurricane Lenny FEMA R2 DMATS Airlift

This document was e-mail from the Regional IV Regional Operations Center to DOMS indicated an RFA would be generated to the DOD for airlifting four DMAT teams from Cincinnati, OH, Hurlburt Field, FL, MacDill AFB, FL, and Andrews AFB, MD to St Croix. The first three locations required movement for 35 passengers and five 463L pallets. Andrews AFB required airlift for an 18-wheel truck and 65 passengers. (Region Two Department of Defense Regional Operations Center, 1999)

Memorandum: After Action Issue – Mission Assignment Sub-tasking 1378-TX. Texas.

This is a memorandum for the FEMA Headquarters Operation Center Director concerning an event that occurred during Tropical Storm Allison on June 9, 2001. On

that day, FEMA Region VI tasked ESF#8 Health and Medical Support to provide four Disaster Medical Assistance Teams (DMATs) to Houston for flood response. (Barnes, 2001)

The report states that the DOD refused to transport the DMATs off of the mission assignment number given to the primary tasked agency, the United States Public Health Service (USPHS). It also states that ESF#8 “arranged for DOD to provide transportation of the DMATs” (Barnes, 2001). Because the DOD is a supporting agency, it falls under the rules of the Federal Response Plan (FRP) to be sub-tasked by an agency carrying out a primary mission assignment. All sub-taskings are supposed to be executed off of that primary mission assignment number. (Barnes, 2001)

Barnes (2001) says the DOD refused to work off of this primary mission assignment number and insisted that a separate number be issued before transporting the cargo. Based on the request for assistance rules that DOMS follows, the coordination of movement by ESF-8 could not have been done unless the DOD already accepted the mission assignment number. There is no indication that the proper coordination with the DOD (through DOMS) was accomplished.

After Action Report: Typhoon Pongsonga After Action Report.

Mr. Bertino, a FEMA Logistics Manager, worked at FEMA Headquarters for the beginning of the disaster relief effort and then forward deployed to Hawaii (Hickam AFB) as the FEMA LNO. He stated that the USAF was moving cargo but no one in FEMA understood how it was being moved. While cargo was getting on USAF airlift aircraft, ESF#1 was scheduling that same cargo on other aircraft. Although Mr. Bertino did not know exactly how the cargo was getting manifested on the USAF aircraft he did

know USAF personnel were building the pallets to make it airworthy voluntarily. They were also using transportation control numbers (TCNs) not properly associated with the cargo in order for the system to accept the cargo and get on to channel missions.

Although this got the mission accomplished, it forced the USAF to add on channel missions for backlogged cargo and resources were wasted when additional airlift was scheduled by ESF#1 for cargo that was already moved. (Bertino, 2002(a))

Mr. Bertino also noted that FEMA did not provide a single point of contact or proper guidance to the USAF. FEMA did not allow enough lead time to the contractor booking the transportation and as a result the 747s contracted to move items from San Francisco to Guam were only 52 percent full. When outsized cargo needed transportation, the type of aircraft needed was not specified in the request to the contractor. (Bertino, 2002(a))

He emphasized that lead time to the contractor or airlift validator is crucial. A FEMA single point of contact to the airlifting agency would greatly assist in eliminating confusion. The user, in this case FEMA, must set the priority of the cargo to be shipped and should also be palletizing the cargo. (Bertino, 2002(a))

Interview with Lt Col Dave Monismith, USTRANSCOM/J3

Lt Col Dave Monismith (2003), USTRANSCOM Officer in Charge of Operations, said that the USTRANSCOM liaison has no formal guidance or even any type of written documentation for the liaison to use when deployed to FEMA. Although one person may be designated the LNO, another individual may go when the time comes. There is no formal guidance or even any type of written documentation for the liaison to use when deployed to FEMA. JFCOM has pre-established PIDs that they use but they will only be used if the Execution Order (EXORD) mandates that it be captured in JOPES. If not in

JOPES, the requirements will be coordinated via phone and e-mail. TRANSCOM will look at the requirements and then pass them to the Tanker Airlift Control Center (TACC). TACC will evaluate the feasibility for airlift and tell USTRANSCOM who will in-turn, validate for air. Lt Col Monismith referred me to Commander Pasch, DSN 836-5814, in the USJFCOM Joint Operations Center who would know about the TPFDD process. Commander Pasch then forwarded me to the USJFCOM JOPES office where the TPFDD research was done as described in the methodology. (Monismith, 2003)

Interview with Maj Michael Avila, DOMS Army Watch Officer.

Maj Avila (2003) stressed that the role of DOMS is to turn the civilian authority required by the constitution into an execute order for a combatant commander. In most cases, that combatant command will be USNORTHCOM. In discussing the transition of DOMS to JDOMS (now under the CJCS), he stated the role would be the same. The main difference would be that they would be acting under the authority of the Assistant Secretary of Defense for Homeland Defense. (Avila, 2003)

With the transition of personnel, Maj Avila also pointed out that a transportation expert who understands the transportation system, preferably a USAF person, would be beneficial, to help the office to understand what happened after the RFA passes through JDOMS and see the big picture and their role within it. Questions that were asked about TPFDDs, PIDs, or contingency operations of the military assistance could not be answered by Maj Avila because he was unqualified to answer them. (Avila, 2003)

When asked about the amount of incomplete data on file in DOMS, Avila stated that DOMS receives and processes all RFAs throughout the year unless a DCO has been appointed. Once a DCO is in place however, they work the RFAs and are supposed to

keep DOMS informed. However, that is usually not done. Because the DCO is a temporary position, the records from each different operation are either kept in that person's office somewhere or discarded at the end of the operation. (Avila, 2003)

Major Avila also added that there were issues with USTRANSCOM moving military items that were not first run through ESF#1 as described in the FRP (1999(a)). In one such example he described the military providing some vaccine based on a RFA. FEMA already had airlift shuttles running back and forth to the disaster area but USTRANSCOM moved the items themselves, wasting airlift because the items were on a TPFDD and needed moved. No one allowed ESF#1 to schedule the transportation.

Interview with Mr. Kurt Bertino, FEMA Logistics Manager.

In discussions with Mr. Bertino concerning USTRANSCOM's role with FEMA currently and in the future, many points were highlighted. Mr. Bertino stated in all of the discussion they have had with their military validators recently they have stated the DOD operations tempo is way too high to count on any military airlift for disaster relief efforts. He said there are no archives of shipping records because they were never documented completely in the first place. When a disaster relief effort begins, FEMA logistics fill the transportation requirements until DOT is up and running. This happens at the headquarters until the region takes over. When an effort begins to shut down, the control moves back in the other direction. Because no one until controls the process, no central database of records are kept. The regions do not work directly for the headquarters so there is no requirement to forward their records. FEMA holds the checkbook for all disaster relief efforts. They are now considered consequence management. (Bertino, 2002(b))

He also explained that an RFA begins with the project officer, the one needing the assistance. The RFA is then forwarded to the Mission Assignment Coordinator, the Comptroller and finally the Federal Approving Officer. Once approved, it is sent to DOMS for DOD approval and tasking. (Bertino, 2002(b))

Department of Homeland Security Act of 2002.

The portion of this Act that applies to this project is the establishment of the Department of Homeland Security. Part of this Department's primary mission is to "carry out all functions of entities transferred to the Department, including acting as a focal point regarding natural and manmade crises and emergency planning" (United States Congress, 2002). The Under Secretary for Emergency Preparedness and Response is responsible for ensuring the effectiveness of this emergency response. (United States Congress, 2002)

FEMA was directed to now fall under this new Department, reporting through the Under Secretary for Emergency Preparedness and Response, but still retains its role under the Robert T. Stafford Act (United States Congress, 2000) and the status of lead agency for the Federal Response Plan (Federal Emergency Management Agency, 1999(a)). The Act also directed FEMA to revise the FRP to incorporate the new Department. (United States Congress, 2002)

Homeland Security Presidential Directive/HSPD-5: Management of Domestic Incidents.

The purpose of this directive is to "enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system" (Office of the Press Secretary, 2003). It builds off of the previously published

Homeland Security Act of 2002, which established that the Secretary of Homeland Security is the principal Federal official for domestic incident management and is responsible for preparing for, responding to, and recovering from terrorist attacks, major disasters, and other emergencies in the United States. (Office of the Press Secretary, 2003)

It recognizes as policy that the Secretary of Defense shall provide military support to civil authorities for domestic incidents if directed by the President or it is consistent with military readiness and appropriate under the circumstances and the law. The Secretary of Defense maintains command and control over the military forces assisting in civil support and must work with the Secretary of Homeland Security to establish appropriate relationships and mechanisms for cooperation and coordination between their two departments. (Office of the Press Secretary, 2003)

This document tasks the Secretary of Homeland Defense to develop, submit, and administer a National Incident Management System (NIMS). For interoperability and compatibility among all levels of government, NIMS must include a core set of concepts, principles, terminology, and technologies. A common theme for collecting, tracking, and reporting incident information is also crucial to NIMS. (Office of the Press Secretary, 2003)

The Secretary of Homeland Defense is also tasked to develop, submit for review to the Homeland Security Council, and administer a National Response Plan (NRP). This new plan will incorporate existing Federal emergency and incident management plans (with the proper adjustments under the new organization) as either integrated components of the NRP or as supporting operational plans. An initial NRP with an implementation

plan was tasked to developed and published by April 1, 2003, with a national system of standards to implement the NIMS no later than June 1, 2003. Also by June 1, 2003, all supporting Federal agencies must make initial revisions to their own existing plans in accordance with the initial version of the NRP. (Office of the Press Secretary, 2003)

Memorandum: Implementation Guidance Regarding the Office of the Assistant Secretary of Defense for Homeland Defense.

This memorandum announces the appointment of the first Assistant Secretary of Defense for Homeland Defense (ASD(HD)). This position will supervise the homeland defense activities of the DOD under the authority, direction and control of the Under Secretary of Defense for Policy (USD(P)). It “will oversee HD activities, develop policies, conduct analyses, provide advice, and make recommendations of HD, support to civil authorities, emergency preparedness and domestic crisis management matters within the DOD” (Deputy Secretary of Defense, 2003). This person will serve as the DOD Domestic Crisis Manager and represent the DOD on all HD related matters with designated Lead Federal Agencies, the Executive Office of the President, the Department of Homeland Security, and other agencies as appropriate. (Deputy Secretary of Defense, 2003)

Termination of the Secretary of the Army serving as the interim DOD Executive Agent for Homeland Security was effective upon release of this document. Also terminated were the DOD Executive Agent assignments for Military Support to Civil Authorities (from DOD Directive 3025.1) and Military Assistance for Civil Disturbances (from DOD Directive 3025.13). Those duties and authorities associated with the DOD Executive Agent were delegated to the ASD(HD). The authority, personnel, and

associated resources of Office of the Special Assistant for Military Support was transferred from the Army to the Office of the ASD(HD) and the functions and associated resources of the Office of the Director of Military Support (DOMS) was transferred from the Army to the Chairman of the Joint Chiefs of Staff (CJCS). The ASD(HD), however, will exercise policy oversight of DOMS on behalf of the Secretary of Defense. As follow up, the ASD(HD) is directed to update the DOD Directives that are associated with the new position. (Deputy Secretary of Defense, 2003)

Reason for Relationship

The first question this project asked was why does FEMA work with USTRANSCOM. Although many informal reasons exist for this relationship, the first and foremost is the capability that USTRANSCOM possesses. Although the commercial sector has increasing capability in recent years, the amount of aircraft, size of aircraft, specialized crews and speed of response can only be found at USTRANSCOM.

Documented Process

How should FEMA work with USTRANSCOM? This question was answered through researching the regulations, laws, and directives guiding all the organizations involved in the process. Based on the data, the process starts off with a natural or manmade disaster within the United States or one of its territories. Local and state governments are required by law to respond to disasters in their areas and use resources

in their possessions to do so. If the response requires more than the local or state government can provide, the state governor can request the President of the United States to declare the area a disaster area. This allows FEMA Headquarters to assist until the regions are up and running. The headquarters fill in whenever the region is not up and running (usually at the beginning and end of disaster relief operations) and will get involved whenever allocation of resources is up for debate. (United States Congress, 2000)

USTRANSCOM gets involved when FEMA or one of the ESFs do not have or cannot get transportation for resources they need moved. ESF#1 tracks and schedules all transportation for FEMA during a disaster (Federal Emergency Management Agency, 1999(a)). All requests are supposed to start with them. If a shuttle or contracted transportation is not available, they turn to the military. They make their request through DOMS on a RFA. They are authorized to do this through the Stafford Act (United States Congress, 2000) and Title 31, Agency Agreements (United States Congress, 1999). If DOMS approves the transportation support, then they put it into a SAAM request, validate it and forward it to USTRANSCOM. (Avila, 2002)

If efforts require significant assistance from the military, a DCO and DCE may be requested and take over the roles of DOMS as the approvers of military requests while they are active. A USTRANSCOM LNO can also be sent to FEMA Headquarters or the active region to provide guidance and mission tracking. (Federal Emergency Management Agency, 1999(a); Federal Emergency Management Agency, 1999(b))

Current Process

How does USTRANSCOM currently work with FEMA? This question was answered from gathering information from people involved in the process, after action reports and notes from within the organizations. Unfortunately, as noted earlier, there were not any opportunities to directly observe a disaster relief effort due to the time limitations of this project.

The two biggest differences found between the documented and current process is the initiation of military assistance and the transportation request to USTRANSCOM. First, as stated, the President of the United States must declare a disaster before the military should react in any capacity. Although a commander is authorized to spend his or her own funds to save lives, this should only be in extreme cases (Department of Defense, 1993(b)). In discussing events with involved parties (Bertino, 2002(b); Avila, 2003), it was apparent that in the past the military often reacted before being asked. The events of September 11th were an example. This did appear to be a rare event due to the increased operations tempo of USTRANSCOM (Bertino, 2002(b)). Once the operations tempo decreases, however, this could again become a problem.

The second difference occurs when the military supports relief efforts other than transportation. Major Avila (2003) stated the military provided multiple medical supplies including various vaccines and then automatically moved it following the TPFDD process during Typhoon Chata'an in July 2002. This wasted airlift and money because ESF#1 already had shuttles in place to provide the same service. Other examples occurred during the last two typhoon relief efforts in Guam. The amount of cargo requiring movement was never controlled and how it was going to be moved was not

clear either. Observers personally witnessed cargo being placed onto planes that were not scheduled for FEMA (Bertino, 2002(b)). The USAF personnel went above and beyond what they were supposed to do to get the job done.

Qualitative Comparison

The first four study propositions developed in the methodology focused the research in the paper and helped show why this qualitative comparison was necessary. The first proposition was that USTRANSCOM has unique assets FEMA needs. Airlift capability is definitely at a premium in this world and the ability to carry large pieces of cargo is even more limited. The world is changing in that manner, however. The last typhoon in Guam, Typhoon Pongsonga, not a single USTRANSCOM airlift asset was used (Bertino, 2002(a)). This will not always be the case, so the process for FEMA to use USTRANSCOM should be kept in place and kept efficient.

Proposition two was that the military will use its assets to help save lives and prevent disaster. This is a true statement based on DOD Directive 3025.1 (Department of Defense, 1993(b)) and the FRP (Federal Emergency Management Agency, 1999(a)).

The lack of FEMA and DOT knowledge and/or training on how to use civilian airlift was study proposition number three. Mr. Bertino (2002(b)) has an extensive background in airlift and observed that previously, FEMA and DOT (representing ESF#1) used USTRANSCOM instead of commercial lift because it was most convenient. It was also, however, very expensive. FEMA is now are hiring a contractor to schedule all their movements but often times they are having a third party logistician schedule the complete

movement for them which is also expensive. When Mr. Bertino (Bertino, 2002(b)) scheduled a movement himself (without a third party), he said the move was considerably cheaper. If DOT and FEMA could learn these procedures, airlift could be obtained in the fastest and most efficient manner.

The fourth proposition was that USTRANSCOM doesn't know FEMA's operations and processes well enough to advise properly. After physically searching the FEMA office for a USTRANSCOM LNO training or continuity book, the question was posed to USTRANSCOM if one existed at their location. No one from the office that usually provides the LNO thought one existed. Lt Col Monismith (2003) also stated that there wasn't an identified liaison to go to FEMA when the need arose. Instead, whoever was available at the time was sent. The person may not have had any knowledge of FEMA at all.

No existence of a yearly conference hosted by USTRANSCOM could be found, either. The last one that any of the organizational members could remember produced the MOA requiring there to be one. Because most joint tours are no more than three years so yearly conferences on the processes involved are crucial to keeping the personnel involved up to speed.

How does the documented and current processes differ and if they do, how does it affect the effectiveness and efficiency of either organization? In general, the method of declaration and the initial involvement of HQ FEMA are the same. The majority of RFAs are also processed the same as documented. The two biggest differences, however, are the initiation of military assistance in a crisis and when military support beyond transportation is requested. The military has jumped the gun in crisis situations before

the RFA has been initiated by FEMA. This happened on September 11th, 2001 when the military deployed the USS Comfort to New York City prior to any request (Avila, 2003). When military support beyond transportation was requested, the actual transportation requests, at times, failed to process back through ESF#1 before being moved. The military would move their own stuff when ESF#1 had already established shuttles between the same locations. This happened during Typhoon Chata'an when medical supplies were moved by the military when FEMA had aircraft already running the same route (Avila, 2003). Although quick action is sometimes helpful, sending the wrong things or items that are not needed and duplicating transportation efforts is very inefficient.

The ironic portion of this research project is that when USTRANSCOM forced the system to follow established procedures of clearing the transportation request separately through ESF#1, the region running the operation wrote it up in an after action report as a problem (Region Two Department of Defense Regional Operations Center, 1999). Although the paper work may increase slightly, the mission assignment code could have been assigned as a subset of the original request for funding purposes and the process would have ensured that critical airlift assets and money were not wasted.

Quantitative Comparison

The final study proposition guided the research for the quantitative comparison. The proposition was that FEMA uses USTRANSCOM when it wasn't necessary, spending too much money and using up critical airlift assets. As seen in the table below (Table 2),

based on the assumptions discussed in the methodology, the commercial costs vary in comparison to USTRANSCOM rates. Because the commercial rates were based off of a west coast origin, it can be deduced that the missions on the east coast might be considerably cheaper if commercial aircraft could be used from a closer location. This would be provided in the quote before purchasing the transportation where as the total cost from USTRANSCOM is unknown until after the mission is flown. This data, although based off an extremely small sample size, shows that is could possibly save FEMA money by going with commercial airlift whenever possible. Because of time and data limitations, this research does not take into account the rate changes of the commercial sector based on the economy, the state of the world, and customer demand.

Table 2: Flight Times								
REF MSN #	ACFT ORIG BASE	PICK UP LOC	FLT TIME (Hrs)	DEL LOC	FLT TIME (Hrs)	ACFT ORIG BASE	FLT TIME (Hrs)	TOTAL FLT TIME
1 (C130)	KDYS	KRIV	2.3	KNUQ	1.0	KDYS	2.6	5.9
2 (C130)	KDYS	KNUQ	2.9	KRIV	1.0	KDYS	2.1	6.0
3 (C130)	KDYS	KIKR	1.2	KNUQ	2.1	KDYS	2.6	5.9
4 (C130)	KDYS	KNUQ	2.9	KIKR	1.9	KDYS	1.1	5.9
5 (C130)	KDYS	KLSV	2.1	KNUQ	1.1	KDYS	2.6	5.8
6 (C130)	KDYS	KNUQ	2.9	KLSV	1.0	KDYS	1.9	5.8
7 (C5)	KSUU	KIKR	1.9	KHOU	1.6	KSUU	3.6	7.1
8 (C141)	KWRI	KPOB	1.1	KHOU	2.4	KWRI	2.8	6.3
9 (C17)	KCHS	KBKF	3.5	KSWF	3.1	KCHS	1.7	8.3
Σ			20.8		15.2		21.0	57.0

Table 3: Cost Comparison								
REF MSN #	SAAM #	PAX	CARGO (lbs)	FLIGHT TIME (Hrs)	MIL COST (per hour)	TOTAL MIL COST	COMM COST	MIL MINUS COMM
1 (C130)	6001	62	None	5.9	\$4,373	\$25,801	\$19,500	\$6,301
2 (C130)	6002	62	None	6.0	\$4,373	\$26,238	\$19,500	\$6,738
3 (C130)	6003	62	None	5.9	\$4,373	\$25,801	\$33,150	-\$7,349
4 (C130)	6004	62	None	5.9	\$4,373	\$25,801	\$33,150	-\$7,349
5 (C130)	6005	62	None	5.8	\$4,373	\$25,363	\$20,150	\$5,213
6 (C130)	6006	62	None	5.8	\$4,373	\$25,363	\$20,150	\$5,213
7 (C5)	6001	35	125,000	7.1	\$21,602	\$153,374	\$92,150	\$61,224
8 (C141)	6002	35	40,000	6.3	\$13,584	\$85,579	\$81,600	\$3,979
9 (C17)	6007	26	90,000	8.3	\$11,607	\$96,338	\$122,150	-\$25,812
Σ				57		\$489,658	\$441,500	\$48,158

Discussion

Conclusions

Success of Current System

Although the data available for USTRANSCOM's support of FEMA is scarce, there have been many obvious success stories. Although data could not be found on specific military support to FEMA during relief operations, many operations have been supported, saving lives and property. Tropical Storm Allison, Typhoon Pongsonga, and Hurricanes Jose, Bret, Dennis and Floyd are most notable (Director of Military Support, 2003). With USTRANSCOM's unique ability to lift outsized cargo and to quickly respond with aircraft already in the system, the personnel working in both organizations have found ways to make it work. Typhoon Pongsonga is good example where people went above and beyond to get the mission done (Bertino, 2002(b)).

Suggestions for policy/procedure/process improvements

Due to the lack of research data available, the first and foremost recommendation of this project is for FEMA and USTRANSCOM to develop a central database to track military support to civil authorities. The MCC is tasked to coordinate the acquisition of transportation capacity and maintain visibility over validated transportation requests for assistance from inception through delivery to a mobilization center (Federal Emergency Management Agency, 1999(a)). Unfortunately, this goes from FEMA logistics personnel, to either Regional or DOT, (none of whom work for each other) so very little control over how things are handle and the tracking of information is almost impossible

due to no central source. A data summary for each operation, kept at FEMA Headquarters would be helpful in documenting all movement requests to allow for further research to look for the best process or ways to improve. Although the question of states versus federal rights is a delicate subject when it comes to controlling areas after a disaster, there must be a better way to ensure the regions forward the data up to headquarters.

The next recommendation is to educate the FEMA or DOT personnel is acquiring airlift in the most efficient manner. A third party contractor charges for the service the company provides and a contractor providing the service will have a biased view of how the service should be provided to best serve their own company.

The USTRANSCOM LNO should also be familiar with FEMA procedures through some sort of training program or at least a continuity book provided when arriving at FEMA headquarters. It would also be helpful to hold the yearly conference agreed to in the MOA (Federal Emergency Management Agency, 1999(b)).

DOMS should not receive requests from FEMA until all ESFs have been coordinated with, especially ESF#1, transportation. Although this is required by the FRP, it is obviously not understood or being adhered to. An educated USTRANSCOM LNO would add a double check on ensuring the military doesn't move cargo that ESF#1 could have scheduled quicker or more efficiently.

The memorandum of agreement needs to address the responsibility of cargo preparation, onloading and offloading the aircraft. These lines of responsibilities have been very gray in the past.

One item of concern is already being worked on furiously by FEMA logistics. Although FEMA is tasked, with the help of USTRANSCOM, to input their items into

TPFDD, the logic of it does not make sense (Federal Emergency Management Agency, 1999(b)). TPFDDs are used for military items and are built of unit type codes (UTCs) that are military capabilities. To create UTCs for FEMA would be incredibly difficult and not make sense since their cargo will always travel on a SAAM mission, which do not use TPFDDs. In order to get organized, however, FEMA is developing its own database so equipment packages for different disasters and reaction levels can be built. This system is called the National Incident Management System (NIMS). NIMS will be very similar to the complete UTC listing of the United States Military. These organized packages will be helpful when USTRANSCOM is used to provide airlift. (Office of the Press Secretary, 2003)

The politics driving some moves of the government cannot be helped. Being proactive is considered a positive impression and will be taken advantage of in a democratic society. The best way to control it is to have the processes firmly established and to ensure everyone knows them in order to recover from knee-jerk reactions.

Answer for the Basic Research Question

The first question was if FEMA should work with USTRANSCOM at all. Based on the current policy and the interviews with FEMA and DOMS personnel, the answer appears to be yes. The follow up question regarded when they should work together and the best process they should apply to provide the best, most efficient and most cost effective support for recovery operations. FEMA should have procedures in place to use USTRANSCOM resources, but only when the commercial sector cannot provide the assets due to availability. If commercial costs are higher than USTRANSCOM, or if the commercial sector cannot support FEMA in the time required to prevent loss of life or

further devastation of property, then USTRANSCOM should also be used. In all other cases shown in the quantitative data analysis, the cost of civilian aircraft will usually be cheaper.

Implications

Future of FEMA-USTRANSCOM Interface

The majority of this project was concerned with relief efforts prior to the events of September 11th, 2001. The effects on United States domestic policy because of September 11th continue to change as most recently evidenced by the passage of the Homeland Security Act of 2002. A new Federal Response Plan is in draft and will be referred to as the National Response Plan (Bertino, 2002(b)). FEMA will now be a division underneath the Department of Homeland Security, with the Director of this new department now taking responsibility for all of FEMA's roles. USJFCOM will no longer be the lead combatant command for the United States, as that role was taken over by USNORTHCOM. These new organizations will not only have to establish their new roles, but also master the new complexities of shared responsibilities. (United States Congress, 2002)

Along with this change, DOMS has been moved under the Assistant Secretary of Defense for Homeland Defense (ASD(HD)) and will be a part of the Joint Staff in Washington DC, with JDOMS as their new designation. The Secretary of the Army will no longer be executive agent for military support to civil authorities, as that responsibility is transferred to the ASD(HD) as well. Although the same people will do many of the

same jobs, the chains of command as well as the lines of communication will be much different. This will be an opportunity to improve upon some of the weaknesses of the prior system and procedures.

Research Limitations

Limitations exist with all research projects. The chief challenge to this effort was the lack of data. For the quantitative data, this caused a very small sample size. Also, the absence of direct observations forced the analysis to rely heavily on third party information. Personal opinions and limited views of the big picture could have provided skewed or inaccurate data. A sample of nine mission listings challenges the general reliability of the findings as well. The fact that estimates had to be made for the cargo on those missions further challenges the findings reliability.

Another limitation was that the affect of politics could not be measured. Even though the laws provide clear guidance on when and how FEMA should use USTRANSCOM, the President has the ability to direct the use of USTRANSCOM when he deems it necessary for saving lives or property (United States Congress, 2000). Many times that is done due to political motivation to show the American public that the administration is proactive in assisting those in need. An example of this was immediately following the tragic events of September 11th, 2001. The Naval Hospital Ship USS Comfort was immediately dispatched to the shores of New York City prior, even before any requests were made from the local or state government (Avila, 2003).

Areas for Future Research

There are some open avenues for potential research topics related to FEMA and USTRANSCOM interactions. If the opportunity exists for direct observation of a

disaster relief effort, a more in-depth study of these same research questions could be accomplished. Another avenue would be the study of how onloading and offloading are accomplished, who is responsible, and how has it been done in the past. Regardless of the category, however, most of these research opportunities can be taken advantage of unless data is better tracked in the future.

The DIRMOBFOR's role in this process has not been discussed and could be another good research topic. The DIRMOBFOR participates more in the execution once the airlift has been requested and approved but could possibly be incorporated earlier into the process. The new NIMS system and how USTRANSCOM could incorporate it into the military process could also be researched further.

Summary

The lack of available data leads to one main conclusion of this project. If a true comparison of commercial support versus military airlift support is to be accomplished, the airlift data must be tracked with consistency throughout disaster relief efforts. With the small sample size obtained, the data does suggest that commercial rates should be checked prior to attempting to acquire airlift, unless the military is the only one capable of the lift or the only one that can provide the airlift quick enough. Ultimately, procedures are in place but are often not followed, in part because the personnel accomplishing the tasks are not familiar enough with the other agencies or written procedure to make it work properly. As the Department of Homeland Security develops and matures, these problems should be addressed.

Appendix A: Department of Defense MSCA Missions

Secretary of the Army Standing Missions

1. Emergency Animal Disease Eradication
2. Support to US Postal Service
3. Military Assistance to Safety and Traffic
4. Wildland Firefighting Support
5. Support to Immigration Emergencies
6. Domestic Disaster Relief Operations
7. Civil Disturbance Operations
8. Support to Special Events
9. Continuity of Operations

Secretary of the Army Directed Missions

1. Presidential Inaugurals
2. Olympic Games
3. D-Day Anniversary
4. Desert Storm Victory Parade
5. Nunn-Lugar-Domenici
6. Denver Summit of the Eight
7. National Scout Jamboree
8. RC Consequence Management Integration
9. NATO 50th Anniversary Summit

(Avila, 2002)

List of Acronyms

ADS – Automated Directives System
AETC – Air Education and Training Command
AFB – Air Force Base
AMC – Air Mobility Command
APOE – Aerial Port of Embarkation
ASD(HD) – Assistant Secretary of Defense for Homeland Defense
CDRG – Catastrophic Disaster Response Group
CFO – Chief Financial Officer
CJCS – Chairman, Joint Chiefs of Staff
CMC – Crisis Management Center
CONUS – Continental United States
DCE – Defense Coordination Element
DCO – Defense Coordination Officer
DFO – Deployed Federal Officer
DIRMOBFOR – Director of Mobility Forces
DMAT – Disaster Medical Team
DOD – Department of Defense
DOMS – Director of Military Support
DOT – Department of Transportation
DRF – Disaster Relief Fund
DTG – Date Time Group
DTIC – Defense Technical Information Center
DTS – Defense Transportation System
EOD – Emergency Ordinance Disposal
ERT – Emergency Response Team
ESF – Emergency Support Function
ESF 1 – Emergency Support Function for Transportation
ESF 8 – Emergency Support Function for Health and Medical Support
ESFLG – Emergency Support Function Leaders Group
EST – Emergency Support Team
EXORD – Execution Order
FBI – Federal Bureau of Investigations
FEMA – Federal Emergency Management Agency
FRP – Federal Response Plan
FY – Fiscal Year
GPMRC – Global Patient Movement Requirements Center
GTN – Global Transportation Network
HSPD – Homeland Security Presidential Directive
ITV – In-transit Visibility
JDOMS – Joint Department of Military Support
JICTRANS – Joint Intelligence Center for Transportation
JMCG – Joint Mobility Control Group

JOPES – Joint Operations, Planning and Execution System
JOSAC – Joint Operational Support Airlift Center
JTMO – Joint Traffic Management Office
KBKF – Buckley Air National Guard Base, Colorado
KCHS – Charleston AFB, South Carolina
KDYS – Dyess AFB, Texas
KHOU – Houston International Airport, Texas
KIKR – Kirtland AFB, New Mexico
KLSV – Nellis AFB, Nevada
KNUQ – Moffett Field, Oakland, California
KPOB – Pope AFB, North Carolina
KRIV – March AFB, California
KSUU – Travis AFB, California
KSWF – Stewart AFB, New York
KWRI – McGuire AFB, New Jersey
LNO – Liaison Officer
MACA – Military Assistance to Civil Authorities
MAST – Military Assistance to Safety and Traffic
MCC – Movement Coordination Center
MERS – Mobile Emergency Response Support
MOA – Memorandum of Agreement
MSC – Military Sealift Command
MSCA – Military Support to Civil Authorities
MST – Medical Support Team
MTMC – Military Transportation Management Command
NAS – Naval Air Station
NIMS – National Incident Management System
NRP – National Response Plan
PACAF – Pacific Air Forces
PID – Plan Identification
ROC – Regional Operations Center
RETCO – Regional Emergency Transportation Coordinator
RFA – Requests For Assistance
SAAM – Special Assignment Airlift Mission
SECARMY – Secretary of the Army
TACC – Tanker Airlift Control Center
TCC – Transportation Component Command
TCN – Transportation Control Number
TPFDD – Time-Phased Force Deployment Data
TPFDL – Time-Phased Force Deployment List
USAF – United States Air Force
USAID – United States Agency for International Development
USCINCFJCOM – United States Commander in Chief Joint Forces Command
USD(P) – Under Secretary of Defense for Policy
USJFCOM – United States Joint Forces Command
USNORTHCOM – United States Northern Command

USPHS – United States Public Health Service
USTRANSCOM – United States Transportation Command
UTC – Unit Type Code

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Vita

Major Kendra S. Mathews graduated from Chamberlin High School in Twinsburg, Ohio. She entered undergraduate studies at the United States Air Force Academy in Colorado Springs, Colorado where she graduated with a Bachelor of Science degree in American History on May 27th, 1992 and was recognized as a military distinguished graduate. She also received her commission that same day from the United States Air Force Academy.

Major Mathews' first assignment was at Dover AFB, DE as an operations management officer in July, 1992. In May 1995, she was assigned to the Tanker Airlift Control Center (TACC) at Scott AFB, IL. She became a logistics planner in September 1996 and was reassigned to HQ AMC at the same base. In September of 1998, Major Mathews became the installation deployment officer at McGuire AFB, NJ. She then became Chief, Logistics Plans at HQ 8AF, Barksdale AFB, LA in September of 2000. During her time at Barksdale, she deployed to Prince Sultan Air Base, Saudi Arabia from September to December 2001 in support of Operation Enduring Freedom. In May of 2002, she entered the Advanced Study of Air Mobility program at the Air Mobility Warfare Center, Fort Dix, NJ.

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