DSCA Handbook

Liaison Officer Toolkit

GTA 90-01-021

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Quick Reference Guide

DSCA Handbook
Liaison Officer Toolkit

NAVIGATING THE HANDBOOK

The *DSCA Handbook* is divided into five major sections—the Liaison Officer Toolkit on this side, and the *Tactical Level Commander and Staff Toolkit* on the reverse side with four sections, background, planning, staff annexes, and reference annexes. Major sections are delineated by colored bottom borders as indicated in the section descriptions that follow.

Liaison Officer Toolkit

> **Chapter 1** of the **Liaison Handbook: Duties and Responsibilities** is designed to assist Liaison Officers in performing their duties.
>
> **Chapters 2 through 9** include information on capabilities of High Demand Task Organizations in a Defense Support of Civil Authorities (DSCA) environment:
>
> **Chapter 2: Military Law Enforcement**
>
> **Chapter 3: Military Engineering**
>
> **Chapter 4: Aviation**
>
> **Chapter 5: Communication**
>
> **Chapter 6: Search and Rescue**
>
> **Chapter 7: Medical Capabilities**
>
> **Chapter 8: Mortuary Affairs**
>
> **Chapter 9: CBRNE Response Capabilities**

Tactical Level Commander and Staff Toolkit
Background Chapters

> **Chapter 1** contains **background** information relative to DSCA, including legal, doctrinal, and policy issues. This chapter also provides a quick summary of the legal underpinnings related to DSCA.
>
> **Chapter 2** is an overview of **incident management processes,** including the National Response Framework (NRF), National

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Incident Management System (NIMS), and Incident Command System (ICS), as well as Department of Homeland Security (DHS) organizations.

Chapter 3 discusses **civilian and military responses** to a natural disaster. Also included are the organization and command relationships involved in Defense Support of Civil Authorities (DoD) response to a disaster.

Chapter 4 is a brief review of the **Joint Operation Planning Process** and mission analysis.

Planning Chapters

Chapter 5 provides **DSCA planning factors** for response to **all hazard events**.

Chapter 6 is a review of **safety and operational/composite risk management processes**.

Chapters 7 through 11 contain the Concepts of Operation (CONOPS) and details **five natural hazards/disasters** and the **pertinent planning factors** for each within the scope of DSCA.

Annexes complement the content of this handbook by providing other useful information.

Annex A contains information on **Legal Aspects of DSCA**.

Annex B discusses **Standing Rules for the Use of Force (SRUF)** and contains SRUF templates.

Annex C is a **Suggested Individual Equipment Matrix.**

Annex D provides **DSCA Mission Assignment Review Criteria**.

Annex E explains the **Request for Assistance/Mission Assignment Process**.

Annex F lists the DoD **Pre-Scripted Mission Assignments (PSMAs)** associated with Emergency Support Functions.

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Annex G gives examples of **Command Messages and Straight Talk Messages**.

Annex H lists **State TAGs/National Guard POCs**.

Annex I provides **Defense Coordinating Officer Contact Information**.

Annex J contains copies of pertinent **Reports**—Joint Personnel Status and Casualty Report (JPERSTAT) and Logistics Status Report (LOGSTAT)—and a Resource Tracking List.

Annex K lists **References** used in the development of this handbook.

Annex L lists **Useful Websites**.

Annex M is the **Glossary/Terms** annex.

Annex N is the **Acronym** annex.

Special information is found in color coded boxes throughout the handbook.

Green note boxes indicate critical information.

Orange document boxes provide references pertinent to the subject area.

Red boxes provide warnings.

Blue boxes indicate vignettes.

Gray boxes give information on special topics of interest.

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SECTION I: LIAISON HANDBOOK

This section of the Liaison Officer (LNO) Toolkit provides information on LNO duties and responsibilities. It also provides LNOs and commanders with basic tools for success in a Defense Support of Civil Authorities (DSCA) environment. It is not intended to describe the duties of the Emergency Preparedness Liaison Officers (EPLOs).

Section II, Chapters 2 through 9, includes information on capabilities of High Demand Task Organizations in a DSCA environment.

To be most effective, LNOs should read both the *LNO Toolkit* and the *Tactical Level Commander and Staff Toolkit* (GTA 90-01-020).

CHAPTER 1: DUTIES AND RESPONSIBILITIES

1.1 Introduction

> liaison *n.* Contact or intercommunication maintained between elements of military forces or other agencies to ensure mutual understanding and unity of purpose and action (*The DoD Dictionary of Military Terms)*.

A Liaison Officer acts as the commander's representative at another unit or agency and effects coordination and cooperation between organizations. The LNO is the command's representative to other governmental agencies, Non-Governmental Organizations (NGOs), and/or the private sector and provides input on the unit's policies, resource capabilities, and other matters.

> Title 10 unit commanders should not deploy, assign, or detail unit LNOs to the Regional Response Coordination Center (RRCC) or National Response Coordination Center (NRCC) without prior approval of the Defense Coordinating Officer (DCO)/Joint Force Commander (JFC) (federal forces) or JFHQ (state forces).

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1.2 Levels of LNOs

- **State—** represents the Title 10 and/or Title 32 forces at state Office of Emergency Management (OEM) Emergency Operations Center (EOC); should be senior officers or NCOs knowledgeable of state military/Department of Defense (DoD) resources and capabilities
- **County—**advises state interagency partners and County Emergency Managers on Title 10 and Title 32 assets
- **Field or Incident—** represents military unit at field/incident site or Major Subordinate Command (MSC)
- **Major Subordinate Command—**is assigned from MSC to EOC and provides coordination of mission requirements from EOC to parent MSC

> LNOs must exercise caution to ensure that they do not obligate or volunteer their agency for taskings.

1.3 What Makes a Good LNO

LNOs should be prepared to walk into a tense, chaotic, and usually, unorganized environment. As a result, LNOs should possess the following traits:

- Innate ability to solve problems
- Excellent communication skills, both verbal and written
- Professional and confident approach
- Proactive and self-motivated
- Team building skills
- Genuine willingness to help
- Desire to build a mutual cooperative relationship with mission partners
- Organizational skills
- Ability to synchronize and focus on critical needs
- Awareness of limitations with an ability to learn quickly
- Politically astute with the ability to grasp difficult leadership roles of civilian organizations

1.4 What an LNO is Not

It is important to understand what an LNO is *not.* An LNO:

- **Is not a mission or resource approval authority**
  Only the commander can commit resources to a task. The LNO is there to provide an understanding of the ramifications of tasks.
- **Does not fill a staff role within the EOC/Incident Command Post (ICP)**
  Because of their broad functions, it is frequently but incorrectly assumed that LNOs fill a staff role within the EOC/ICP. That job should be given to an augmentee.
- **Is not a full-time planner**
  LNOs are often identified as "on-call" representatives to the EOC/ICP and are called for when specific component or subject matter input is required. Planning, however, is just one subset of the four functions performed by LNOs (see Section 1.6). It should not dominate the LNO's time or preclude accomplishment of other LNO functions.
- **Is not a full-time watch/duty officer**
  LNOs should be assigned a workspace within the EOC/ICP and given access to electrical outlets, land-line phone connections, and, if possible, the internet; however, while the EOC/ICP is their base, they may be required to visit several locations in the incident area, including going from the EOC to the ICP or the headquarters of any deployed unit and/or Joint Task Force (JTF).
- **Is not a substitute for transporting critical info through normal Command and Control (C2) channels**
  That LNOs relay information to their respective organizations does not relieve the EOC/ICP staff of the responsibility to promulgate the same information via normal and more formal C2 means.
- **Is not a replacement for proper staff-to-staff coordination**
  For example, if the ICP Operations Section Branch Director wants to ensure that coordinating instructions in a recently released order are clearly understood by a particular organization, then that individual should communicate directly with the appropriate commander or staff principal of that unit,

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rather than use the LNO as a middle-man to relay the expectations and interpretations of the two staffs.

- **Is not a replacement for an <u>augmentee</u> or <u>representative</u>** LNOs articulate the organization's capabilities, plans, and concerns, and normally remain at the receiving organization's headquarters. <u>Augmentees</u> are individuals assigned to a specific billet within various staffs, agencies, boards, or cells that require specific skills or subject matter expertise. They work for the receiving commander or staff, and usually fill a requirement of the gaining organization.

  Formal <u>representatives</u> work for the sending organization and provide short-term, as-required input into the planning process. They are a direct link to the sending unit commander and have limited decision-making authority for the sending unit. Augmentees and representatives are expected to be subject matter experts for the function they represent. In ICS they may be called "Technical Specialists."

1.5 Core Competencies of an Effective LNO

> The LNO must be thoroughly knowledgeable of the *supporting* organization's missions, Tactics, Techniques, and Procedures (TTP); organizational structure, and capabilities. Gaining this competency is an on-going process for the LNO. It is not reasonable to expect the LNO to understand the *supported* organization's mission upon arrival; however, this knowledge must be gained quickly.

An LNO must be able to:
- Effectively manage internal and external information
- Effectively communicate during all aspects of an operation
- Identify and use tools, tactics, techniques, and procedures to maintain individual and team situational awareness of the operational environment
- Know how to effectively track requests for information, assistance, and resources

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- Know when to ask for assistance from the unit to maintain situational awareness and not become overwhelmed
- Understand why and how to maintain historical documentation and forensic data
- Possess the appropriate language and cultural expertise

Recommended Training for LNOs

At a minimum, LNOs should complete the following courses:

- IS 100.a: Introduction to Incident Command System (ICS) (online)
- IS 200.a: ICS for Single Resources and Initial Action Incidents (online)
- ICS 300: Intermediate ICS (state resident course, advanced training.) Visit http://training.fema.gov/IS/otherNIMScrs.asp for more information.

Also recommended:

- ICS 400: Advanced ICS (state resident course, advanced training)

Additional Courses

Available at FEMA Emergency Management Institute: http://training.fema.gov/IS/

- IS 700.a: National Incident Management System (NIMS): An Introduction (online)
- IS 800.b: National Response Framework (NRF): An Introduction (online)

Available at ARNORTH DSCA training http://www.dsca.army.mil/

- DSCA Phase I Course (online)—prerequisite for DSCA Phase II Course (resident)

Specifically the LNO must:
1. Be familiar with the legal limitations of forces (Title 10, Title 14, Title 32, and/or State Active Duty) (see Annex A and Annex B).
2. Understand the LNO's role in DSCA and senior leadership expectations.

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3. Understand the established channels of Incident Command and staff communications and relationships.
4. Be familiar with the doctrine and staff procedures of the supported unit or organization.
5. Appreciate and understand the supported unit or agencies procedures, organization, capabilities, mission, current and future operations, critical activities, and customs.
6. Be familiar with the requirements for and the purpose of liaison; the liaison system, and its corresponding reports, reporting documents, and records; and the training of the liaison team.
7. Be of sufficient rank to effectively represent the commander with the supported unit or agency staff and management.

1.6 Functions, Roles and Responsibilities of an LNO

1.6.1 Functions

LNOs, whether individually or in teams, perform several critical functions that are consistent across the full range of military operations. In accordance with Section C, "Joint Task Force Liaison Personnel," of Joint Publication (JP) 3-33, *Joint Task Force Headquarters*, "LNO responsibilities are to monitor, coordinate, advise and assist."

1.6.1.1 Monitor

LNOs must know the *current situation and planned operations*, understand pertinent staff issues, anticipate potential problems, and be sensitive to the desires of both the deployed unit and the supported organization.

LNOs facilitate *effective coordination between staffs* but are not a substitute for proper and direct coordination between the commander/staff of deployed forces, JTFs, and the local Incident Commander (IC). Similarly, established C2 procedures, such as Fragmentary Orders (FRAGOs), Warning Orders (WARNOs), and Alert Orders, are still the proper method for communicating specific orders and taskings.

1.6.1.2 Coordinate

Coordination between agencies, organizations, centers, and staffs alleviates problems before they become elevated. By anticipating local incident response resource or information requirements, the LNO can help give the JTF the maximum lead time possible to plan, prepare, and/or react.

1.6.1.3 Advise

LNOs are to *advise the IC* and their staffs on the optimum use of the forces/resources. They are available and able to answer, or quickly find the answers to, questions posed by the EOC/ICP staff. The LNO also *advises the deployed units or JTF Commander* of any EOC/ICP issues, and particularly those that may affect the deployed forces.

1.6.1.4 Assist

LNOs must assist on two levels: first, *as a conduit between the unit and local EOC/ICP*; second, by *integrating into the local EOC/ICP* and attending various boards, meetings, and planning sessions. The LNO can ensure that those groups make informed decisions concerning the use of military resources. The LNO also facilitates the submission of required reports from the supporting forces to the JTF, as necessary.

1.6.2 Roles and Responsibilities

Prior to arrival, a good LNO will be prepared and understand the situation and those whom he/she will be supporting. Failure to do so will present the LNO as a hindrance, not an asset, to the incident. Correcting this perception may take some time. A simple phone call to the IC liaison for an update and Point of Contact (POC) information will do wonders for the IC's perception of the LNO.

Often, LNOs provide the initial contact with civil authorities. *First impressions are extremely critical to the overall perception of*

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professionalism of military forces during an operation. The LNO serves as the command representative and is the vital link between the commander and the local, state, or federal agency to which military support is being provided.

Specific roles and responsibilities of assigned LNOs include but are not limited to the following:

- Serving as unit representative to supported agency
- Keeping the supported agency briefed on unit current operations
- Keeping the staff (all agencies) fully informed
- Advising supporting agencies on unit capabilities and limitations
- Informing military chain-of-command on current and anticipated missions requested by the supported agency
- Working with civil authorities to identify appropriate missions, develop clear and concise mission request(s), and ensure requests flow through proper channels
- Resolving and de-conflicting mission requests which are outside capabilities and authorization of the unit

> See Annex A for legal restrictions concerning DoD personnel and taskings.

- Coordinating with staff to track mission, personnel, and equipment status of unit assets in Area of Operation (AO)
- Keeping commander informed of overall IC perception of military support, interagency conflicts, problems or concerns of civil authorities, and the mission of other state/federal agencies operating in AO
- Assisting in mission formation and requesting procedures (who, what, where, when, why)
- Providing daily briefings on unit operations
- Working same shifts as those established by the supported IC

> At no time will the LNO speak to members of the press without prior coordination through the unit Public Affairs Officer (PAO).

1.6.3 Gauging Success

LNOs are successful when:
- Routine and effective communication of tasks is accomplished in a timely manner
- Smooth information exchange and mission coordination occurs up and down the chain
- Military chain-of-command is informed on current missions
- Situational awareness is at such a point that proposed tasks can be anticipated

LNOs need to ensure that the following issues are avoided:
- Duplication of efforts and wasted resources
- "Mission creep" and acceptance of unnecessary tasks
- Poor command decisions based on incorrect information provided by LNOs
- Poor unity of effort due to lack of situational awareness
- Untimely response due to incomplete information

1.7 Mission Requests

When receiving mission requests, ensure that:
- Request makes sense and is clearly understood
- Request meets existing mission profiles as established by commander and is within task force/unit capability
- Information is complete and accurate (who, what, when, where, and why)
- POC is clearly identified with contact information

For any mission request, the following information needs to be included:
- Requesting agency and POC
- Phone number of POC
- Location of mission
- Date-Time Group (DTG) of request
- DTG of need
- Mission type and details
- On scene POC if different than requestor
- Special instructions (maps, directions, special equipment, etc.)

A mission request tracking sheet is used to track requests and actions. It serves as a chronological, consolidated list of actions taken or pending action. Requests and tasking status updating is critical and should be validated with regularity. Department of the Army (DA) Form 1594 (Daily Staff Journal or Duty Officer's Log) may be used for this purpose.

> The LNO is able to track the status of completed Requests for Forces (RFF) and approved Mission Assignments (MAs) via DoD Defense Support to Civil Authorities Automated Support System (DDASS), DoD's MA tracking, coordination, and prioritization tool. (For more information see Chapter 5, "Communication," Section 5.2).

1.8 LNO Data Collection

One of the important functions of an LNO is data collection. Data should be collected in a timely, consistent manner, should be accurate and related to the operation, and should be chronologically organized. Information has a shelf life. Remember, bad news does not age well.

Data is collected for:
- Audits
- Inquiries
- Investigations
- Organizational history
- Awards and decorations
- Media stories and inquiries
- Funding/program justification
- After-action reports and lessons learned
- Freedom of Information Act (FOIA) requests

1.9 Liaison Practices and Politics

At times, liaison work can be very sensitive. The role of the liaison is to share information. Occasionally, this can be difficult. It is essential

that the liaison observe and be sensitive to political issues and avoid involvement in power struggles.

Guidelines for Liaisons

1. Do not obligate resources to taskings.
2. Do not recommend missions unless you have discussed it with your commander and have received approval to do so.
3. Never over-promise or under-deliver.
4. Learn local response procedures and policies.
5. Avoid taking actions that inadvertently violate policies. Understand the politics involved in these policies.
6. Keep your opinions to yourself (open mind – close mouth).
7. Do not make excuses.
8. Always tell the truth and do not embellish your own skills and abilities.
9. Do not exaggerate the capabilities (or limitations) of deployed forces.
10. While working with EOC director/IC:
    a. Ensure you are readily available to them without being intrusive.
    b. Ensure you understand *their* mission intent.
    c. Remember, they report to political figures.
    d. Never surprise them or cause them embarrassment.
    e. Always understand that you and the unit you represent are there to support, not control.
11. Verify all information before reporting on it. Do not pass on rumors.
12. If you are not sure of something, query the most expert source you know. Do not be afraid to ask questions.
13. Watch your dress and language; few individuals are chastised for being neat and not using expletives. Think before you speak
14. Integrate yourself into the EOC/ICP operation:
    a. Attend all meetings and planning sessions open to you.
    b. Never hesitate to assist when asked – be part of the team.
    c. Understand and appreciate the work being done by members of the EOC/ICP staff and the responders.
    d. Be especially sensitive to safety issues.
    e. Adjust your schedule to meet the needs of the EOC/ICP.

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15. Adjust the size of the LNO team to meet the mission needs and the facilities available.
16. Accomplish your mission without interfering in the normal operation of the local EOC/ICP or IC.
17. Never stay quiet about a problem or mistake; be part of the solution (or you may have a problem).

1.10 Effective Communication

Communication, or giving and receiving information, is essential to organizational success. How we communicate often dictates the speed of a response and the success of our missions. Be ready at all times; you never know when you will be called on as an LNO to give or receive information. Your personal information management system may make the difference to a situation.

Information sharing goes both ways between the supported agency and the represented command. Understanding and/or anticipating the information requirements of both parties is essential for success. Being able to interpret information is equally important (e.g., ICS/NIMS versus military terminology/jargon).

1.10.1 Barriers to Effective Communication

Typical barriers to effective communication between parties include the following:
- **Use of acronyms or unfamiliar jargon.** ICS/NIMS and military acronyms are generally different and their use may impact effective communication.
- **Non-verbal communications.** Sometimes it is not what is said, but how it is said. Be aware of your reactions.
- **Negative associations.** Associations which are agreeable or disagreeable will affect the flow of information. If you dislike someone, you may screen out most of what is said. Be aware that this may affect your ability to do your job.
- **Assuming truths.** Do not assume information is correct because it is published. Not fully understanding the information you disseminate is a bad practice.

- **Motivation.** Do the people in the conversation consider the communication important? If one of them does not, either the sender is not effective or the receiver is not listening.
- **Distractions.** The receiver may not be listening because other things are on his or her mind, such as physical discomfort, personal problems, or more immediate ideas which seem to be more relevant at the moment.
- **Conflicting messages.** How can a leader talk about good military bearing if he doesn't wear the uniform properly?
- **Information overload.** Trying to provide information without established priorities (i.e., Commander's Critical Information Requirements (CCIR)) will cause the sender to send everything he/she hears and reads without consideration of importance or relevance.

1.10.2 Overcoming Communication Barriers

There are methods to help you ensure that the information you receive will not be forgotten or distorted.

- **Define the acronyms and terms that are unfamiliar.** Keep their use to a minimum. Abbreviate and use key words.
- **Take notes.** Get copies of shared written information or write down key information received. Document conversations. Use a duty log or journal.
- **Repeat back what you think you heard the person say.** Ask questions. Read back from your notes to make sure that you have correctly written the information you were given.
- **Verify and Clarify.** Trust but verify the information and its source. Try to validate the information with multiple sources if possible but do so in a politically sensitive manner. If there are discrepancies, ask for the reason and perhaps proof of accuracy.
- **Use visuals.** Provide or draw sketches, maps, or diagrams when appropriate.
- **Report immediately.** Information has the most value when it is fresh. Rapid reporting reduces the chances you will distort the meaning of what you heard.

1.10.3 Effective LNO Communications

LNOs retrieve information from:
- Documented sources—written, visual, and auditory
- Undocumented sources—verbal (briefings, conversations, etc.)

Always remain cognizant of nonverbal clues (e.g., uncertainty, confusion, anger, disinterest). Also remember that attribution is very important when sharing information (What is the source? Is the information reliable? Who is the POC?) Know procedures and tools used to exchange information with your assigned unit, the JTF, and other organizations. These include:
- Reports
- Request for Assistance (RFA)/Request for Information (RFI) tracking
- Journal/radio log
- Documenting conversations
- Internet
- Instant messenger
- Meetings
- Briefings/daily update brief
- Situation Reports (SITREPs)
- Status boards/maps
- Conference calls/video teleconferencing
- Outlook files/email/calendar

Finally, remember characteristics of effective communication:
- Active listening
- Accuracy of information
- Clear visuals
- Bottom line up front
- Taking notes
- Greeting new ideas with interest
- Giving the individual your undivided attention
- Maintaining eye contact
- Speaking the supported agencies language

Above all, smile, relax, and be approachable. *Always* look, listen, and learn.

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1.11 Questions LNOs Should Ask

1. Do the Operations Section/Joint Field Office (JFO)/Defense Coordinating Element (DCE) and deployed forces know that . . .?
2. Will we have a need for it?
3. Is it important to my commander?
4. Who else needs to know?
5. Is this an appropriate mission for my unit?
6. Does it support the overall plan?
7. Is it operationally feasible for my unit?
8. Are required resources available to execute the mission?
9. Are new missions a sign of mission creep?
10. Are requests for support/missions being sent and approved in the authorized manner?
11. Is specific tasking within scope and authority of my unit's operational mission, per the Operations Order (OPORD)/FRAGO for the incident response?

1.12 Planning Considerations

LNO planning considerations are built around a 4-phase operational approach, condensed from the six phases of the United States Northern Command (USNORTHCOM) Concept Plan (CONPLAN) 3501.

Phase 1, Assessment and Preparation/Mobilization *(parallels USNORTHCOM Phases 0 and I).* Phase 1 begins with all pre-incident actions and continues through post-notification pre-deployment actions. Phase I ends at deployment.

Phase 2, Deployment *(parallels USNORTHCOM Phase II).* Phase 2 begins with deployment of forces and ends upon arrival with commencement of operations.

Phase 3, Support of Civil Authorities *(parallels USNORTHCOM Phases III and IV).* Phase 3 begins upon arrival at incident area with the first operational actions. It ends when there are no future mission requirements and current operations begin to draw down.

Phase 4, Re-deployment/Demobilization (parallels USNORTHCOM Phase V). Phase 4 begins when operations start to draw down. It ends with the successful and complete transition to local command and release of personnel at home station.

LNOs should become familiar with the ICS. In addition, LNOs should be familiar with the Federal Emergency Management Agency (FEMA)/United States Coast Guard (USCG) "Planning P" (shown in Figure 1-1) for general activities related to the ICS planning process.

The stem of the "P" contains activities that are performed only once in an incident, typically in the initial response phase. The body of the "P" reflects activities, performed in order, that are cyclic and thus performed for each operational period within the incident. For civil authorities, this model assists in establishing the incident "battle rhythm." An example integrated incident battle rhythm is provided in Figure 1-2.

1.12.1 Phase 1 - Assessment and Preparation/Mobilization

☐ Determine existing and future expected operations.
☐ Review CCIRs; review latest Operation Plan (OPLAN), OPORD, and/or FRAGO.
☐ Review reporting and Standard Operating Procedures (SOP).
☐ Identify gaps in assets needed to accomplish its mission.
☐ Review Interagency Incident Action Plans (IAPs) and probable DoD mission sets.
☐ Determine weather conditions that may have a major impact on the operation.
☐ Document and distribute the battle rhythm. Coordinate for required transportation and communications equipment.
☐ Pick up all correspondence designated for the supported agency.
☐ Identify available communication methods. Are there telephones, radios, facsimile machines, computers, and internet connectivity?
☐ Identify LNO reporting requirements.
☐ Assist in communicating supported agency's requirements.
☐ Obtain required maps and overlay products.

The Operational Planning "P"

OPS Section Chief develop strategy & tactics (plan of action for next OPS period to meet IC/UC direction, priorities, & objectives

Block of time set aside for the Command & General Staff to prepare for the Planning meeting, updating charts, maps, & OPS Section Chief's plan of action, i.e., Safety Plan, etc.

Meeting for the IC/UC, Command & General Staff, to review planned actions and finalize information that will be incorporated into the Incident Action Plan (IAP) Get tacit approval from IC/UC on planned actions

Block of time set aside for OPS & Planning to discuss & document strategies, tactics & contingencies; time to draft ICS-215 & identify OPS organizational requirements.

Time block set aside for completing all documentation associated with the IAP IC/UC approves IAP Duplicate plan for distribution

Tactics Meeting

Preparing for the Planning Meeting

Planning Meeting

Preparing for the Tactics Meeting

IAP Prep & Approval

Meet and brief Command & General Staff on IC/UC direction, objectives & priorities
Assign work tasks
Resolve problems & clarify staff roles and responsibilities

Command & General Staff Meeting / Briefing

Operations Briefing

Provide operations briefing to Ops Sec Personnel
Ensure support to operations in place
Deploy next operating period resources

Establish priorities
Develop response objectives
Identify response emphasis
Agree on operating policy, procedures and guidelines

IC / UC Develop/ Update Objectives Meeting

Execute Plan & Assess Progress

New Ops Period

Determine UC representatives
Agree on organization structure
Identify command post & support facilities
Order appropriate staffing

Initial UC Meeting

Brief command on initial response activities
Clarify issues & concerns
Discuss planned operations & direction
Identify incident escalation potential

Incident Brief ICS-201

Monitor on-going operations & make tactical adjustments
Measure/ensure progress against stated objectives
Debrief resources coming off shift
Prepare to brief UC/Planning on accomplishments

Initial Response

Notification

Incident/Event

Initial Response

Management initial response activities
Conduct Initial Assessment
Develop plan of action
Complete ICS-201
Prepare for command briefing

Figure 1-1. Operational Planning "P"

Battle Update Brief to J-Staff (1600)

Daily Mission summary (1600)

Shift Brief Change (1800)

JTF-CS CUB (1900)

JTF-CDR Conference Call (1930)

External Agency Sitrep Group Message (2000)

JTF-CSVTC w/NORTHCOM (1045) **subject to change

Example of Integrated Battle Rhythym Matrix

Conf Call - Adj. States & NGB (1000)

JTF-CS CUB (0900)

Battle Update Brief to J-Staff (0830)

Battle Staff Daily Mission Summary (0830)

External Agency Daily Sitrep Group Message (0800)

JTF-CDR Conference Call (0730)

Shift Change (0600)

1500 1600 1700 1800 1900 2000 2400 0600 0700 0800 0900 1000

Figure 1-2. Example Integrated Battle Rhythm

1.12.2 Phase 2 - Deployment Phase

☐ Whenever possible, deploy to assignment with basic office supplies, laptop computer with "air card" or other means of internet connectivity, a cellular phone, and a satellite phone if available.

☐ Be prepared to deploy and *self sustain for up to three days* without relief. Plan for all circumstances. Commands are responsible to ensure that LNOs are provided transportation, billets, and food. In situations where billeting or feeding with local personnel is not practical or available, commands will coordinate with the FEMA/General Services Administration (GSA)/state representative for lodging and meals. It is important to remember, depending on the severity of the incident, the ability to feed and house you may not exist.

Minimum Essential Packing List
   - o   Administrative supplies and unit SOP, field uniform, equipment
   - o   Credentials (including any special certifications or qualifications)
   - o   DA Form 1594 (Daily Staff Journal or Duty Officer's Log)
   - o   Laptop computer with charger and extra battery
   - o   Common Access Card (CAC) reader
   - o   Mobile broadband card for data transfer

> Military laptop computers are not compatible with civilian local area networks (LANs). Acquire a suitable civilian laptop prior to deployment.

   - o   Cellular, radio, or appropriate communications equipment
   - o   Unit phonebook and contact information (radio frequencies)
   - o   Telephone calling (credit) card
   - o   Tent (cots, stove, etc., as appropriate)
   - o   Cash (Automated Teller Machines (ATMs) and credit cards will not work in the absence of electricity or communication lines)

- o Government credit card
- o Bedding and three day's supply of food and water
- o Sport utility vehicle (SUV)-like transportation external to the incident site (rental cars may not be available; plan to drive in)
- o Deployment orders

1.12.3 Phase 3 - Support of Civil Authorities

☐ Obtain credentials for identification and appropriate security clearances.

☐ Provide the local EOC/ICP with corresponding unit contact information, as required.

☐ Coordinate with Incident Command Section Chiefs, or their deputies, to obtain local policies, procedures, organizational structures, IAPs, and other ICS forms that affect incident response activities.

☐ Become familiar with command relationships among all major commands.

☐ Become familiar with all mutual aid agreements.

☐ Review requirements of supported agencies and the commander's intent to meet those requirements.

☐ Facilitate comprehension of the commander's intent.

☐ Determine availability of aviation assets (rotary and fixed-wing).

☐ Use communications in accordance with established procedures.

☐ Remain informed of the current situation and make the information available to the supporting unit or organization staff.

☐ Attend EOC/ICP staff meetings, commander's updates, and planning sessions. Be prepared to offer recommendations on developing plans or Courses of Action (COAs).

☐ Be prepared to brief current status of deployed forces at any EOC/ICP updates.

☐ Report in accordance with the IC requirements.

☐ Track missions. Avoid becoming actively involved, yet maintain situational awareness.

☐ Assist in assessing current and future operations.

☐ Report future operations to your unit for preliminary planning.

☐ Provide daily personnel and equipment status reports.
☐ Maintain a journal of critical information, events, decisions and milestones.

1.12.4 Phase 4 - Re-Deployment/Demobilization

☐ Upon receipt of redeployment orders:
  - o Coordinate unit redeployment with the IC.
  - o Monitor recovery of equipment and sensitive items.
  - o Review historical data files to make sure that all journals from the liaison team are included.
  - o Consolidate After Action Report (AAR) comments.
☐ Brief the battle chief or Executive Officer (XO) on mission-related liaison activities and prepare a written report.
☐ Develop lessons learned and consolidate comments for future training and SOP development.

DSCA Handbook
Liaison Officer Toolkit

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SECTION II: HIGH DEMAND TASK ORGANIZATIONS

The chapters in this section describe key capabilities that tactical level commanders and Liaison Officers (LNOs) may encounter in their area of responsibility while participating in Defense Support of Civil Authorities (DSCA) operations. Though not all-encompassing, each chapter should provide a brief overview of the Services' unique capabilities.

CHAPTER 2: MILITARY LAW ENFORCEMENT

This chapter discusses Military Law Enforcement (MLE), typical units, functions, and special legal considerations in a DSCA environment. For the purposes of this document, MLE includes licensed Service police forces and all other military personnel performing security, force protection and/or crowd control functions. It does not include military criminal investigative units.

2.1 Military Law Enforcement in DSCA

The most legally sensitive function in DSCA is Military Law Enforcement. Consequently, to prevent violations of the law, all military personnel should be educated on MLE. The main legal obstacle to the use of the military for law enforcement is the Posse Comitatus Act (PCA), discussed briefly in Section 2.3.1 of this chapter. (For more detail on PCA, see Annex A.) The PCA affects National Guard (either in State Active Duty (SAD) or Title 32) and federal forces (Title 10) differently. Thus, it is very important to understand the status of military personnel prior to mission assignment.

> If possible, *all* law enforcement actions should be done with the local civilian law enforcement agencies present and in charge. This eliminates most potential legal conflicts.

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2.1.1 Individual Protection/Force Protection

Military forces have the right and responsibility to protect themselves and their assets at all times. State military justice laws, for Title 32 and SAD, and the Uniform Code of Military Justice (UCMJ) for Title 10 and are always in effect for military personnel.

2.1.2 Physical Security/Critical Infrastructure Protection

Most physical security and critical infrastructure protection activities are performed by non-military organizations, often involving Memoranda of Understanding (MOUs) with the local civilian law enforcement authorities. The most likely use of the military is through the local National Guard forces. However, there is a process to receive federal aid.

The Critical Infrastructure and Key Resources (CIKR) Support Annex to the National Response Framework (NRF) dated January 2008 covers the Department of Homeland Security (DHS)/ Federal Emergency Management Agency (FEMA) plan for addressing critical infrastructure. The annex can be accessed at http://www.dhs.gov/xlibrary/assets/NIPP_Plan.pdf

 CIKR-related preparedness, protection, response, and recovery activities operate within a framework of mutual aid and assistance. Incident-related requirements can be addressed through direct actions by owners and operators or with government assistance provided by federal, state, tribal, or local authorities in certain specific circumstances.

Under the Stafford Act, disaster assistance programs generally offer support for incident-related repair, replacement, or emergency protective services needed for infrastructure owned and operated by government entities. Stafford Act principles permit consideration of private-sector requests for assistance, but the application of these legal principles does not guarantee that needs or requests from private-sector entities will be met in all cases. A private-sector CIKR owner or operator may receive direct or indirect assistance from federal government sources when the need:

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High Demand Task Organizations
Military Law Enforcement (MLE)

- Exceeds capabilities of the private sector and relevant state, tribal, and local governments
- Relates to immediate threat to life and property
- Is critical to disaster response or community safety
- Relates to essential federal recovery measures

2.1.3 Traffic Direction/Control

The PCA impacts all federal forces by prohibiting them from performing any law enforcement actions, including directing traffic. Consequently, federal military forces may not direct traffic in a civilian jurisdiction unless it is to help military vehicles/convoys that need to arrive at a destination quickly in order to perform an urgent mission, and to move through an area unimpeded. In these unique situations, federal military forces rely on the Military Purpose Doctrine exception to the PCA. The National Guard may direct traffic, in accordance with state law. This may seem like a trivial point, but it can cause unnecessary legal problems if not handled correctly.

2.1.4 Civil Disturbance

All DSCA operations have the potential for civil disturbance. How civil disturbance is handled will depend upon the specifics of the incident and must have Presidential approval. (For more details see Section 2.1.4.2). However, federal military commanders may exercise *emergency authority* in civil disturbance situations as described below. In these circumstances, federal military commanders will use all available means to seek specific authorization from the President through their chain-of-command while operating under their emergency authority.

Emergency authority can be used in only two circumstances:
1. The use of federal military forces is necessary to prevent loss of life or wanton destruction of property, or to restore governmental functioning and public order. Under these conditions, emergency authority applies when sudden and unexpected civil disturbances occur, if duly constituted local authorities are unable to control

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the situation and circumstances preclude obtaining prior authorization by the President.

2. Duly constituted federal, state, or local authorities are unable or decline to provide adequate protection for federal property or federal governmental functions located in the area of the civil disturbance and circumstances preclude obtaining prior authorization by the President. Federal action, including the use of federal military forces, is authorized when necessary to protect the federal property or functions.

> Remind Service members early and often—United States civilians *are not* an enemy force.

2.1.4.1 Riot

Violent crowd actions can be extremely destructive. The only limits to violent crowd tactics are the attitude and ingenuity of crowd members, training of their leaders, and the materials available are. Crowd or mob members may commit violent acts with crude, homemade weapons or anything else that is available. If violence is planned, crowd members may conceal makeshift weapons or tools for vandalism.

Rioters can be expected to vent their emotions on individuals, troop formations, and equipment. They may throw rotten fruits and vegetables, rocks, bricks, bottles, or improvised bombs. They may direct dangerous objects (vehicles, carts, barrels, or liquids) at troops located on or at the bottom of a slope. They may drive vehicles toward troops to scatter formation and jump out of vehicles before reaching roadblocks and barricades. Rioters may set fire to buildings or vehicles to block the advance of the formation, create confusion and diversion, and destroy property.

Types of riots include:
Organized riots: Leaders organize the population into quasi-military groups capable of developing plans and tactics for riots and disorders. Riots can be instigated for:

Theft of property/supplies—leaders organize a riot as a way to disrupt security surrounding logistics control points, with the objective of seizing guarded property.

Political purposes—riots are often organized for propaganda or to embarrass the government.

Grievance protests—a grievance protest can be organized as a riot. Under normal circumstances, this type of riot is not extremely violent in nature. It may turn violent when leaders try to exploit the successes of the riot or the weaknesses of the security force.

Unorganized riots: Unorganized riots are spontaneous, although they can be exploited and diverted by leaders into different types of riots. They are usually indicative of extreme frustration and fear. Under determined leadership, the pattern of these gatherings can change to an organized riot.

Once a riot begins, it can spread to other areas and become entrenched in several different key locations.

2.1.4.2 Federal Intervention and Aid

Under the Constitution of the United States and the Insurrection Act, the President is empowered to direct federal intervention in civil disturbances to:
- Respond to state requests for aid in restoring order
- Enforce the laws of the United States
- Protect the civil rights of citizens
- Protect federal property and functions

The Constitution of the United States and federal statutes authorize the President to direct the use of armed federal troops within the 54 states and territories and their political subdivisions. The President is also empowered to federalize the National Guard of any state to suppress rebellion and enforce federal laws.

Federal assistance is provided to a state when the state has used all of its resources, including its National Guard, to quell a disorder and finds the resources insufficient. Usually, active duty federal forces

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are used to augment the National Guard of the requesting state. However, the President may choose to federalize the National Guard of another state and use them alone or with other forces to restore order.

The President is also authorized to use armed federal troops to protect federal property and functions when the need for protection exists and local civil authorities cannot or will not give adequate protection.

As a temporary measure, federal military equipment and facilities may be loaned to law enforcement agencies of state and local governments for use during civil disturbances. These resources may also be loaned to state National Guard and non-Department of Defense (DoD) federal agencies. The requesting agencies are expected to provide enough resources of their own to minimize the need for federal military resources. In addition, the loan of the resources must not conflict with the military needs of the United States. Examples of appropriate civil disturbance mission taskings are:

- Man traffic control points
- Provide building security
- Escort emergency equipment
- Provide area security, area patrols
- Provide security at custody facilities
- Provide security for emergency work crews
- Protect sensitive sites
- Transport law enforcement personnel
- Show of force
- Disperse crowds
- Employ riot control agents
- Provide protection and/or escort for dignitaries
- Provide reserve, quick reaction force
- Joint patrols, ride-alongs
- Other missions mutually agreed upon

Examples of inappropriate civil disturbance mission taskings are:
- Hostage negotiation

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High Demand Task Organizations
Military Law Enforcement (MLE)

- Negotiating with barricaded suspect
- Evidentiary searches
- Criminal investigation

2.2 Typical MLE Unit Types/Functions in DSCA

MLE support can be an important asset in all disaster-relief operations. MLE officials are trained and equipped for decentralized operations and operate in highly mobile vehicles equipped with radios. All military personnel can be assigned to perform military security-type duties. However, the best option for most MLE tasks is trained Military Police (MP). Experience in civil-military affairs equips Military Police to oversee and assist agencies for law enforcement and sensitive security. For this reason, the military police are often needed after other forces have redeployed.

Since Active Component military missions are constrained by the PCA, non-federalized National Guard units are often employed to conduct these operations. National Guard MP units are trained, skilled, and experienced in providing law enforcement. They offer civilian authorities a unique, specialized capability not available from other National Guard units.

2.2.1 United States Army Military Police
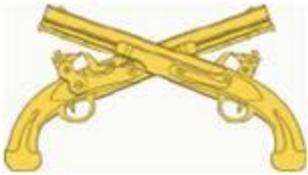
The United States Army Military Police Corps is the Army's uniformed law enforcement branch and the largest of all the DoD MLE organizations. They provide expertise in law and order and stability operations in order to enhance security and enable mobility. The Army's Military Police can be used in direct combat and during peacetime. They have five main functions:

- Maneuver and mobility support operations
- Area security operations
- Law and order operations
- Internment and resettlement operations
- Police intelligence operations

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2.2.1.1 Missions

The MP Company executes a wide variety of missions. Within their missions, company personnel may:
- Provide mobility support for both vehicles and personnel
- Perform security for critical personnel, sites, cargoes, and railways
- Secure, safeguard, shelter, and control dislocated civilians
- Restore order in civil disturbances
- Carry out limited law and order operations
- Provide liaison, coordination, and training for all aspects of law enforcement to other agencies
- Disseminate information
- Support force protection and security

The MP Company possesses robust mobility and communications. Each of the company's three-man teams is equipped with a military radio and a High Mobility Multipurpose Wheeled Vehicle (HMMWV), up-armored HMMWV, or Armored Security Vehicle (ASV). Each MP platoon, company, and battalion headquarters is equipped with high-frequency radios. These capabilities allow Army Military Police (even when widely dispersed) to maintain centralized communications.

2.2.1.2 Capabilities

The typical MP company can provide area security for 2,000 square kilometers (km) of rural terrain, or 800 square km of high density urban terrain. Other capabilities include:
- Security of 12 small, critical site facilities or storage areas
- Security of 400 km of pipeline or three quartermaster petroleum terminal/pipeline operating companies
- Railway security of seven trains
- Battlefield law and order for 75,000 non-divisional personnel or garrison law and order for 25,000 personnel
- Detention of 700 prisoners
- Security of one major headquarters

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Examples of previous deployment of Army MPs for civil support include:

JTF Los Angeles: The 49th MP Brigade (National Guard) provided civil disturbance assistance to Los Angeles in the aftermath of the Rodney King trial.

Operation Hawkeye: The 16th MP Brigade and units of the 89th MP Brigade provided security, protection, and humanitarian assistance to the population of Saint Croix in the aftermath of Hurricane Hugo.

JTF Andrew: The 16th MP Brigade provided humanitarian assistance in the aftermath of Hurricane Andrew.

Operation Restore Democracy: The 16th MP Brigade deployed to Haiti in 2010 to provide humanitarian assistance.

2.2.2 United States Navy– Shore Patrol/Masters at Arms

The United States Navy (USN) has two areas of law enforcement. The first is the Shore Patrol (SP), an additional duty assigned to sailors to maintain order when a ship's crew is on liberty. Shore Patrol duty is authorized by Title 32, United States Code (USC):

Title 32 National Defense, PART 700—UNITED STATES NAVY REGULATIONS AND OFFICIAL RECORDS, Subpart I—The Senior Officer Present § 700.922 - Shore patrol. *The senior officer present shall cause to be established, temporarily or permanently, in charge of an officer, a sufficient patrol of officers, petty officers, and non-commissioned officers to maintain order and suppress any unseemly conduct on the part of any person on liberty.*

Most SPs are armed with only a baton and do not perform all law enforcement functions.

The majority of the USN's law enforcement comes from the Masters-At-Arms (MAs). MAs are a traditional military police force

High Demand Task Organizations
Military Law Enforcement (MLE)

and provide the Navy with security specialists who perform antiterrorism, force protection, physical security, and law enforcement duties on land and at sea. An MA may operate a force protection watercraft, direct an investigation, control a base access point, or supervise a K-9 asset. Specific MA duty areas include:

- Waterborne security patrols and interdiction
- Customs operations
- Base security patrols
- Base access and entry control operations
- Aircraft and flight line security operations
- Law enforcement operations
- Oil platform protection
- River security operations
- Protective service to high ranking dignitaries and government officials
- K-9 explosive and narcotics detection operations/missions
- Physical security inspections
- Preliminary investigations into UCMJ violations
- Security force personnel training
- Crime prevention programs
- Brig operation
- Weapons and funds escorts

Additionally, the USN is developing a Mobile Security Force (MSF). The MSF will be designed as a deployable unit which can provide land-based and underway security to Navy ships in areas where established force protection units are not in place.

2.2.3 United States Marine Corps Military Police

United States Marine Corps (USMC) military police and corrections personnel provide the commander continuous support in enforcing the law. The responsibilities of these personnel include:

- Preventing and suppressing crime
- Assessing command physical security posture
- Preserving military control

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- Quelling disturbances
- Investigating offenses
- Apprehending offenders
- Protecting property and personnel
- Providing flight line security
- Registering and controlling privately owned vehicles and weapons
- Investigating traffic accidents
- Controlling traffic
- Antiterrorism protection
- Handling and safeguarding prisoners of war, refugees, or evacuees
- Conduct of small unit offensive and defensive combat operations
- Guarding military prisoners and absentees/deserters returned to military control
- Supervision of brig operations and correctional custody units

2.2.4 United States Air Force Security Forces

United States Air Force (USAF) Security Forces are the military police and the air base ground defense forces of the USAF.

Security Forces personnel are the first line of defense of the Air Force. It is their job to maintain the rule of law on all Air Force bases and installations, to include all police activities associated with an Air Force base, from securing the perimeter of the base to dog handling. Security Forces personnel are responsible for ensuring the safety of all base weapons, property, and personnel from hostile forces. Security Forces personnel also train dog teams in all aspects of canine law enforcement and are occasionally assigned to an armory to control and safeguard arms, ammunition, and equipment.

The Headquarters (HQ), Air Force Security Forces Center (AFSFC), located at Lackland Air Force Base, Texas, acts as an extension of the Pentagon staff, conducting staff studies dealing with a wide range of topics, including nuclear security, antiterrorism/force protection,

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base defense, police services, combat arms and Security Forces training, equipment management, and military working dogs. The Headquarters consists of three divisions—Force Protection, Operations, and Corrections—in three geographically separated units in Miramar, California, Fort Leavenworth, Kansas, and Charleston, South Carolina.

In addition to the headquarters divisions, the 820th Security Forces Group provides a highly-trained, rapidly-deployable "first-in" force protection capability to any operating location in support of the USAF Global Engagement mission. The 820th gives the Air Force a totally dedicated composite unit for force protection drawn from many disciplines, not just Security Forces. The unit is composed of personnel from Security Forces, Office of Special Investigations, civil engineering, logistics and supply, communications, intelligence, administration, personnel, and medical career fields, providing the capability to assess each threat and act accordingly.

2.3 Special Legal Considerations in DSCA

2.3.1 Posse Comitatus Act

The PCA prohibits the use of federal forces (Title 10) for any direct civil law enforcement activities unless a Constitutional or Act of Congress exception applies. The PCA does not apply to the National Guard (SAD or Title 32) or to the United States Coast Guard. For a complete discussion of the act and its exceptions, see Annex A.

National Guard forces will perform most MLE activities in DSCA. Federal or federalized forces should interact frequently with the Staff Judge Advocate (SJA) to ensure that all force actions meet legal standards.

2.3.2 Criminal Activity

It is very important that civilian law enforcement personnel (if available) are present and supervise all MLE activities. Military personnel conducting a search or making an apprehension must carry out all procedures within the parameters of their training and

authority given to them. For each search and apprehension performed, the apprehension element must document the specific conduct of the person that violated the law.

All apprehensions should be made by the civilian police force, unless it is not possible for them to do so. To be apprehended, individuals must be known to have committed an illegal act, or there must be probable cause to believe that an individual committed such an act. If it becomes necessary for military personnel to apprehend or temporarily detain such violators, they should do so with the approval of the civil authorities. This ensures that all searches, apprehensions, and detentions (if necessary) are conducted within the parameters of the law.

If United States military forces are called upon by local authorities, certain policies must be observed during search, apprehension, and detention operations. Attitude and behavior of military personnel performing these operations are very important. Military personnel should treat all people firmly but with reasonable courtesy and dignity. Military personnel should never be seen as a policing force on American soil. Treating people with contempt, hostility, or excessive force increases the likelihood of resistance and violence. Searching people, placing them under apprehension, and/or detaining them without probable and just cause or without concern for their Constitutional rights can create problems and hinder due process. Numerous cases exist where authorities violated an individual's rights, resulting in the prosecution of police authorities or civil suits against the officers, their leaders, and the military personnel assisting those officials.

2.3.3 Use of Force

All use of force, deadly or otherwise, is covered by Standing Rules for the Use of Force (SRUF), detailed in Annex B. Specific Rules for the Use of Force (RUF) will be given to military personnel by the commander prior to action. If ordered to perform security tasks, and if trained and properly equipped, military personnel may use non-lethal weapons as a force protection option.

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High Demand Task Organizations
Military Law Enforcement (MLE)

CHAPTER 3: MILITARY ENGINEERING

This chapter outlines the capabilities of military engineer units and the United States Army Corps of Engineers (USACE) (Title 33 role). It emphasizes missions that are most common, as well as distinct capabilities the military engineering community can offer in a Defense Support of Civil Authorities (DSCA) environment.

3.1 Short History of the Corps of Engineers

Since its establishment, the United States Army Corps of Engineers has responded to changing defense requirements and has played an integral part in the development of the country.

In the 20th Century, the Corps became the lead federal agency for flood control and significantly expanded its civil works activities, becoming a major provider of hydroelectric energy and the Nation's leading provider of recreation. Its role in responding to natural disasters has grown dramatically.

As the primary agency for Emergency Support Function (ESF) #3, "Public Works and Engineering," USACE is responsible for providing technical advice and evaluations, engineering systems, construction management and inspection, emergency contracting, emergency repair of wastewater and solid waste facilities, removal and handling of debris, and the opening and maintaining of roadways following Presidential Disaster Declarations.

A Historical Perspective of Disaster Support

USACE received its first federal disaster recovery assignment in February 1882, when heavy floods along the Mississippi River forced thousands of people to flee their homes and seek refuge on levees and hilltops. Although Congress provided $100,000 for recovery supplies, the Army Quartermaster Corps could not deliver desperately needed food and tents to the shivering refugees. Chief of Engineers, Brigadier General Horatio G. Wright proposed that Corps boats deliver the supplies but noted that the vessels could not be used for disaster

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recovery without Congressional authorization. Congress pushed through a disaster recovery bill that very day, and soon engineer vessels were steaming up and down the river, plucking people off levees and rooftops, and dispensing hundreds of tons of supplies to the needy. Over the next six weeks, the Corps' steamboats, snagboats, and towboats delivered hundreds of tons of supplies to communities all along the Mississippi.
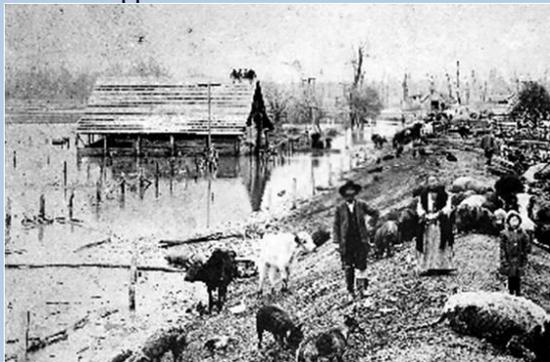
Victims and livestock fled to the levees near Hickman, Kentucky, during the 1912 flood.

In 1906 the Corps called on its engineer troops to assist with disaster recovery efforts following the earthquake in San Francisco, California. The massive quake—measuring 8.3 on the Richter scale—struck the city in the early hours of the morning of 18 April. Roused from their beds at nearby Fort Mason, 150 men of the First Battalion of Engineers were the first troops to enter San Francisco and quickly began patrolling the devastated city to keep order.

Soon after the earthquake subsided, a new danger emerged; dozens of fires were burning across the city and, with the water mains broken, the city's firefighters were powerless to stop them. Fleeing both the earthquake and the subsequent conflagration, thousands of frightened city residents descended on Fort Mason where engineer troops worked around the clock to feed and shelter the refugees. By 19 April fires in the city were burning out of control, and the engineers were forced to undertake a new and dangerous mission—blowing up hundreds of buildings to establish a firebreak to prevent the flames

from consuming the western part of the city. Ultimately the firebreak held, and two days later the San Francisco fires were finally brought under control.

San Francisco, California, following the April 1906 earthquake and fires.

3.2 Military Engineer Response to Civil Authorities

In addition to the military combat role, military engineers perform military construction, environmental restoration, installation support, real estate research and development, and civil-works missions in peacetime. It provides a base for conversion of its resources to support war and other national emergency conditions. Military engineers provide engineering and related services in four broad areas. These are:
•   Military construction and support
•   Engineering research and development
•   Water and natural-resource management
•   Support to other government agencies
In general, military engineering is separated into four distinct types of units:
•   Combat engineers
•   Civil engineers
•   Horizontal engineers
•   Vertical engineers

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Each Service branch has a specialty designed around its specific mission, and personnel are trained and equipped to fulfill that mission. However, for DSCA operations there is significant overlap in capabilities of the Services to support the Incident Commander (IC).

3.2.1 Engineering Limitations under Stafford and Economy Acts

Because military engineers have capabilities that are in high demand during disaster recovery operations, engineer units will always be requested. There will be pressure to use those capabilities outside the scope of the disaster recovery. Both the Stafford and Economy Acts limit the activities that Department of Defense (DoD) engineers can perform. ***The general rule is that DoD engineers should not be in competition with the civilian workforce who, because of the disaster, may have lost work and will need to earn a living***.

3.2.2 Emergency Support Function #3

The Department of Homeland Security (DHS), primarily through the Federal Emergency Management Agency (FEMA), is the primary federal agency in preparation for and response to disasters and emergencies. USACE, as one of many federal partners, supports the DHS mission under the National Response Framework (NRF). Specifically, the USACE has been assigned the role as primary coordinator for Emergency Support Function #3. The standing missions of USACE include the following:

3.3 Engineer Resources

3.3.1 United States Army Corps of Engineers

Whenever and wherever disaster strikes, many federal, state and local agencies rely upon USACE to provide an extensive range of expertise in:
- Engineering and construction support
- Debris management
- Critical infrastructure assessment
- Temporary repairs

- Temporary housing and/or critical public facilities
- Commodities (typically ice and water) and associated distribution systems assistance

In any disaster, USACE is prepared to execute a broad portfolio of missions in order to sustain lives, support critical infrastructure needs, and set conditions for recovery.

3.3.1.1 Flood Control and Coastal Emergencies

Through special provisions of Public Law (P.L.) 84-99, USACE provides technical and direct assistance to communities in risk of or affected by floods.

3.3.1.2 Disaster Preparedness

Disaster preparedness activities of USACE include:
- Participation in state and local emergency preparedness training and exercises
- Inspection of flood control works constructed by USACE
- Inspection of non-federally constructed dams and flood control projects upon request

3.3.1.3 Flood Fighting

In fighting floods, USACE will:
- Assist in search and rescue operations
- Provide technical assistance and expertise
- Make emergency repairs to levees and other flood control projects
- Furnish flood fight materials such as sandbags, plastic sheeting, lumber, pumps and rocks

3.3.1.4 Post-Flood Response

Post-flood response activities of USACE include:
- Clearing drainage channels, bridge openings, or structures blocked by storm-generated debris
- Clearing blockages to critical water supply intakes and sewer outfalls
- Removing debris necessary to reopen vital transportation routes

- Restoring critical public services and facilities through temporary measures
- Identifying hazard mitigation opportunities

3.3.1.5 Rehabilitation

USACE will assist in rehabilitation by:
- Repairing and/or restoring completed levees, floodwalls, and other flood damage reduction projects
- Repairing and/or restoring hurricane or shore protection structures damaged or destroyed by wind, wave, or water action from storms

3.3.1.6 Military Emergency Preparedness and Contingencies

USACE supports military commanders in achieving security objectives by facilitating disaster preparedness training for emergency management officials. USACE provides assistance to military commanders through specially trained teams who rapidly respond to hurricanes, earthquakes, or other disasters, whenever DoD has the lead for natural disaster response, either within the United States or around the globe.

3.3.2 United States Army Geospatial Center

The mission of the United States Army Geospatial Center (AGC) at the Humphreys Engineering Center, Virginia, is to:
- Coordinate, integrate, and synchronize geospatial information requirements and standards across the Army
- Develop and field geospatial enterprise-enabled systems and capabilities to the Army and DoD
- Provide direct geospatial support and products to Service personnel during both wartime and peacetime

AGC can provide geospatial products such as maps, hydrological information, and "flyover capabilities" to allow units supporting civil authorities to have up-to-date information on the disaster area.

The AGC also hosts the DoD Defense Support to Civil Authorities Automated Support System (DDASS). DDASS is a web-based tool

used by Defense Coordinating Elements (DCEs) as well as United States Northern Command (USNORTHCOM) and other Combatant Commands to coordinate and prioritize DoD disaster support efforts. DDASS tracks all Mission Assignments (MAs) from validation and approval through mission funding, mission progress and tasking. It serves as the electronic repository for all related MA documentation. The AGC maintains the DDASS software, server, connectivity, and access for all DSCA users.

3.3.3 Tactical Engineers

The military side of USACE is the largest engineering capability within DoD. Engineer assets range from large combat engineer organizations to small, specialized units like topographical or base maintenance teams.

The major engineer commitment is to keep the lines of communication and tactical march routes open to sustain the committed forces, shift other forces, and implement USACE-directed missions. In DSCA operations, this requires continuous repair of damage caused by heavy traffic and the weather.

Combat-support equipment companies augment the combat engineers with equipment to move earth and maintain horizontal surfaces such as roads and airstrips. Combat engineers also assemble tactical bridges provided by panel-bridge companies or allocated from theater stocks for use on lines of communication and other routes. Medium Girder Bridge companies erect their own tactical bridges.

The engineer brigade also has float-bridge assets for river-crossing operations. Advanced Ribbon Bridge companies transport, assemble, and operate ribbon rafts and bridges during river-crossing operations. Other float-bridge companies provide different types of bridging for longer-term use at the crossing sites. Combat engineers also assemble these float bridges.

The light combat engineers and the light equipment companies reinforce the light division engineers, particularly during their initial

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deployment. The airborne corps battalion can parachute into an operational area and construct an assault airstrip. The light equipment company augments light forces with additional earth-moving equipment.

3.3.4 Construction Engineers

Construction activities occur throughout the theater of operations. Within the unit's area, for example, operational construction requirements, such as forward log bases, heliports, and main supply routes, are needed to ensure the continuity of support for operations. These activities are in addition to unit-generated construction requirements (bed down, logistic bases, rehearsal ranges, etc.) that keep unit construction assets fully engaged. The nature of unit operations limits construction to essential facilities needed to sustain the current operation.

Specialized engineer units are used for quarrying; electrical, water, gas and sewer repair; water pipeline, petroleum pipeline, and port construction.

3.3.5 Topographic Engineering

A topographic company provides all forms of support for the commanders, including a terrain-analysis team.

3.4 Air Force Engineers

The role of the Air Force combat engineer is to ensure that the engineering-related aspects of air base operations are responsive and effective. The following are basic wartime missions of Air Force engineers:
- Emergency repair of damage (including rapid runway repair, facility repair, and utility repair)
- Force bed down of Air Force units
- Operations and maintenance of Air Force facilities and installations
- Construction management
- Supply of materiel and equipment to perform the engineering mission

To accomplish these missions, Air Force engineers are organized into three basic types of units with complementary wartime missions—RED HORSE units, Prime Base Engineer Emergency Force (BEEF) units, and Prime Readiness in Base Support (Prime RIBS) units. The engineering and services force module combines Prime BEEF and Prime RIBS capabilities to support a flying squadron.

3.4.1 RED HORSE Units

RED HORSE civil engineering squadrons provide a heavier engineering capability than the civil engineering base Prime BEEF and Prime RIBS units. RED HORSE squadrons have a regional responsibility; they are not responsible for base operations and maintenance. They are mobile, rapidly deployable, and largely self-sufficient for limited periods of time. Their primary mission in peacetime is to train for wartime. These squadrons represent the strongest combat engineer capability in the Air Force

3.4.2 Prime BEEF Units

All Prime BEEF forces are Combat Support (CS) forces that are generally configured as squadrons and teams. Their mission is to provide CS to the air combat forces which are, or may become, a part of a theater, command, or task force formed for combat or civil support operations. These civil engineering base units are organic at essentially all major Continental United States (CONUS) and overseas Air Force bases in order to provide peacetime real-property maintenance capability.

There are two basic Prime BEEF mobile force classifications: large CS squadrons and small specialty CS teams. Prime BEEF CS units have no organic heavy equipment—only toolboxes and small team kits such as power tools. They require base operating support, and most deploy in 50- or 100-person team increments.

3.4.3 Prime RIBS Units

Prime RIBS units are combat base support units and are not typically used in a DSCA environment.

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3.5 Navy Engineers

Naval Construction Force (NCF) is a generic term applied to the group of deployable naval units that has the capability to construct maintain, and/or operate shore, inshore, and deep-ocean facilities in support of the United States Navy and Marine Corps and, when directed, other agencies of the United States Government, including the Army and unified commanders. The NCF is frequently referred to as the *Seabees.* It is composed of both active and reserve component units.

Air-transportable, task-organized NCF units are available for deployment upon 48-hours notice. Priority construction projects can be initiated days prior to the arrival of maritime prepositioning force shipping. Additionally local contractual acquisition of heavy engineer equipment can augment air-transported equipment. NCF units provide:

- Responsive military advanced base construction support, including operational, logistics, underwater, ship-to-shore, shore, and deep-ocean facilities construction, maintenance, and operation
- Amphibious assault and ship-to-shore construction support operations
- Damage repair operations
- Disaster control and recovery operations

3.6 Marine Combat Engineer Battalion

Each Marine division is supported by one Combat Engineer Battalion (CEB) that provides close combat support and limited general engineering support for the division through task-organized combat engineer elements for ground combat operations. The CEB has the following capabilities:

- Conducting engineer reconnaissance
- Employing assault bridge systems and other standard bridge systems when augmented
- Providing expedient repair and reinforcement of existing bridges
- Providing essential construction support

- Providing temporary repair of existing roads and limited new construction of combat roads and trails
- Providing utility support including mobile electric power equipment and potable water
- Constructing and improving expedient vertical takeoff and landing sites to support division operations

3.7 Engineering Capabilities

3.7.1 Command and Control

Engineering, by its very nature, is highly dependent upon a well-designed Command and Control (C2) system. Engineers use project management processes to ensure projects are completed on time. This C2 is extremely useful for ICs and their staffs as it is a useful tool for tracking projects, both military and civilian led.

> Military communications equipment is not interoperable with civilian authority, National Interagency Fire Center (NIFC) and most state communication equipment. Military radios should operate on 700 Megahertz (MHz) and 800 MHz.

3.7.2 Mission Analysis

The ability to analyze missions, both civilian and military, to produce the required outcome is a task required for engineer assessments. This analysis is an in-depth look at support and personnel requirements needed to complete the mission. The IC uses this asset to assist staff in mission delegation and task assessment.

3.7.3 Debris Clearing

Engineers, both combat and construction, have heavy equipment that is capable of removing debris, including:
- Snow and ice
- Mud and dirt
- Limbs and trees
- Vehicles
- Broken equipment

- Concrete
- Barrier material

Waterborne debris in navigable waterways is removed by using bridge erection boats.

> ### Debris Clearing vs. Debris Removal
>
> One of the quickest ways to get into trouble is to work outside of the MA tasking order. For example, an engineer unit is assigned to clear debris from a residential neighborhood with the MA of enabling two-way traffic on major roads. The unit is within its MA to clear those roads to allow emergency equipment into the area to conduct operations. However, the tasking does not allow for removal of cleared debris. Local companies that specialize in debris removal contract with local authorities to remove the debris to a collection point.
>
> Military engineers are normally prohibited from completing missions that can be performed by civilian companies, though circumstances may warrant exceptions. If authorized, changes to and modifications of specific duties within each MA are available for review within DDASS (see Chapter 5, "Communication", Section 5.2).

3.7.4 Road, Ferry and Bridge Construction

The ability for emergency management and response personnel to get through to an incident is critical. If there is not enough time to contract out the work to be done or if contractors are not available, military engineers can build and repair roads and bridges for temporary use. While the military has paving units, the need to take immediate action to open roads and the legal ramification of building permanent structures prohibits the use of these assets.

Temporary bridges and ferries are available through military Advanced Ribbon and Ribbon Bridge units. These bridges float and are capable of carrying up to 70 tons.

3.7.5 Fireline/Dozer Operations

Engineer units with D7 bulldozers are capable of assisting NIFC or State Forestry Departments with wildland fire suppression using both equipment and manpower.

3.7.6 Shelter Construction

Military engineering construction units have the ability to construct temporary shelters with associated sewer, electrical, and water for displaced persons.

3.7.7 Power Generation

Engineers have power generation capabilities within most of their units. Mobile emergency power capability from 5 kilowatts (kw) to 60 kw or more is available.

> Military personnel are not permitted to connect military generators to civilian infrastructure. A certified civilian electrician must connect the power. Ensure that power lines are not reenergized by connecting infrastructure to generators.

3.7.8 Explosives

The use of explosives during an incident is a last resort but may become necessary. Military engineers are trained in explosives and explosive safety. Explosives have been successfully used for ice dam removal, remote debris clearing, and flood control.

Use of Explosives for Flood Control

In the spring of 1995, Northern California was hit by a series of devastating storms. The first of these storms dropped several feet of snow in the Siskiyou Mountains and saturating rains in the Sacramento River Valley. A Presidential Disaster Declaration was granted and the California National Guard deployed to assist the Tehema County Emergency Management Office. Elements of D

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(Combat Engineer) and E (Ribbon Bridge) Companies of the 132nd Engineer Battalion were tasked.

As the storms continued, the air grew warmer. Snow in the mountains melted, adding to the already flooding tributaries of the Sacramento River. One of these tributaries was projected by National Oceanic and Atmospheric Administration (NOAA) to crest in roughly six hours. A silted-in beaver dam had blocked the river; if it failed, a major highway bridge as well as roughly $22,000,000 in agricultural land would be threatened by floodwaters.

The IC for Tehema County asked the California National Guard Liaison Officer (LNO) for E Company if there was a way to remove the dam. The ground was too saturated to get any heavy equipment into the area. The LNO, a combat engineer, suggested using explosives, specifically PETN (Pentaerythrite Tetranitrate), which is used by quarries because it has excellent earth moving properties. The IC contacted a local quarry and acquired 85 pounds of PETN, detonation cord, and fuses that the LNO had requested. The explosives were placed in accordance with AR 5-250, "Military Explosives and Demolition." The river was cleared two hours before flood crest and the projected flooding was allowed to pass without incident.

3.8 Resources

Army Corps of Engineers
http://www.usace.army.mil/Pages/default.aspx

Corps of Engineers, Topographic Engineering Center
http://www.agc.army.mil/

Appendix 3.A Common Military Engineering Equipment

HMMWV, CGO/TRP CARRIER:
M998A1 w/4 PAX TOP

HMMWV, CGO/TRP CARRIER:
M998A1 w/4 PAX TOP

HMMWV, CGO/TRP CARRIER:
M1038A1 w/2 PAX TOP

TRUCK, CARGO, 5 TON:
M923A1

TRUCK, CARGO, 5 TON: M923A1
w/CANVAS

TRUCK, CARGO, 5 TON: M925A1
w/WINCH & CANVAS

TRK CARGO, LMTV: M1078

TRK CARGO, LMTV: M1078 w/
CANVAS CARGO TOP

TRUCK, DUMP, 5 TON: M929A1

TRUCK, CGO, HEMTT,
w/MHE (LT CRANE): M977
w/MHE (MED CRANE): M985

TRUCK, DUMP, 7 TON MTVR:
MK29

TRUCK, WRECKER, 7 TON MTVR:
MK36

TRAILER,CARGO HIGH MOBILITY,
.75T – M1101 & 1.25T – M1102

HIGH MOBILITY TRL:
HMT CBPS

TRAILER, CARGO, 1.5T,
M105A2

TRAILER, WATER, 400 GAL
M107A2

TRAILER, POWER UNIT, 5-kW,
60-Hz: M116A3 / PU-797

TRAILER, POWER UNIT, 5-kW,
60-Hz: HMT / PU-797A

TRAILER, POWER UNIT, 10-kW,
60-Hz: M116A3 / PU-798 & PU-799

TRAILER, POWER UNIT, 10-kW,
60-Hz: HMT / PU-798A & PU-799A

TRAILER, POWER UNIT, 15-kW,
50/60-Hz: M116A3 / PU-801

TRAILER, POWER UNIT, 15-kW,
50/60-Hz: HMT / PU-801A

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High Demand Task Organizations
Engineering

TRAILER, POWER UNIT, 15-kW,
50/60-Hz: M200A1 / PU-802

TRAILER, POWER UNIT, 30-kW,
50/60-Hz: M200A1 / PU-803

TRAILER, POWER UNIT, 60-kW,
50/60-Hz: M200A1 / PU-805

TRACTOR, WHLD DSL 4X4
w/EXCAVATOR: FLU419

HIGH-MOBILITY ENGINEER
EXCAVATOR (HMEE)

SCOOP LOADER: MW24C

EXCAVATOR, COMBAT M9
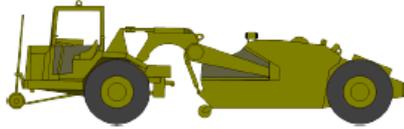ACE

TRACTOR, FULL TRK, LT ENGR
DEUCE

BULLDOZER D7F

EXCAVATOR, HYDRAULIC, TYPE I:
JD230LCR

EXCAVATOR, HYDRAULIC, TYPE III:
JD330LCR

GRADER: CCE 130G

SCRAPER ELEVATING
613BSNS

FORKLIFT 4000 LB:
M4K

FORKLIFT 4000 LB:
MHE-270

FORKLIFT, VARIABLE REACH
ROUGH TERRAIN: 6000 LBS

FORKLIFT, VARIABLE REACH
ROUGH TERRAIN: ATLAS 10K

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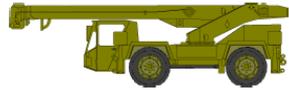High Demand Task Organizations
Engineering

TRUCK FORK ROUGH TERRAIN, 5 TON:
M-10A

TRUCK FORK ROUGH TERRAIN, 5 TON:
M544E

CRANE, TRUCK MOUNTED, 4 TON AIRCRAFT MAINT,
MDL # RT41AA (SCAMP)

CRANE, WHEEL MOUNTED (ROUGH TERRAIN),
7 1/2 TON KOEHRING: LRT 110

CRANE, TRUCK MOUNTED, 25 TON: MT-250

HIGH SPEED, HIGH MOBILITY CRANE, 25 TON:
HSHMC-25

COMMON BRIDGE TRANSPORTER W/IRB
RAMP BAY: M1977/M16

COMMON BRIDGE TRANSPORTER W/IRB
INTERIOR BAY: M1977/M17

COMMON BRIDGE TRANSPORTER W/BRIDGE ERECTION BOAT:
M1977/USCSBMK 1 or 2

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NOTES

CHAPTER 4: AVIATION

This chapter describes the key aviation capabilities that typically operate in a Defense Support of Civil Authorities (DSCA) environment. When operating in coordination with local and state first responders, aviation assets can be a tremendous response multiplier. Operating cost for use of these limited resources is expensive. Thus, every effort should be made to first task the Department of Homeland Security for (DHS) for these resources and to avoid duplication of effort in response to incidents. Safe employment of aviation assets in a DSCA environment is essential to prevent equipment damage and additional casualties.

4.1 Domestic Incident Aviation Operations

Aviation assets operating in a DSCA environment may include aircraft and resources owned, chartered, contracted or leased by state and local governments; the National Guard; the Federal Government to include the Department of Defense, the United States Coast Guard, United States Department of Agriculture, United States Forestry Services, Civil Air Patrol, Customs and Border Protection, and the U.S. Marshall Service; and under certain conditions commercial operators and assets made available by private aircraft owners and corporations, and private and public airfield owners and operators. For pictures of DoD aircraft, see Appendix 4.A.

4.1.1 Joint Field Office Aviation Branch Operations

Federal, state, local, tribal, and territorial departments and agencies have diverse roles, statutory authorities, and unique capabilities for domestic incident aviation operations. The development and implementation of a centralized Command and Control (C2) structure to direct all air missions is impractical. However, a unified coordination system that synchronizes the varied federal, state, local,

tribal, and territorial aviation operations enhances response efforts by providing a safer operating environment through aircraft coordination, reducing redundancy, and saving money by combining missions.

As part of the Joint Field Office (JFO), the Aviation Branch coordinates procurement and integration of federal aviation assets when requested by a state in response to a disaster or emergency. While the JFO may have operational control or mission assignment authority over some aircraft used in the incident area, most aircraft will be directly managed by organizations outside the JFO.

At the incident level, in accordance with the National Incident Management System (NIMS), the Operations Section Chief may designate a director for the Aviation Branch when air operations complexity requires additional support. When tasking aviation resources, DHS assets should be contacted first to simplify coordination and speed response.

Effective response to major domestic incidents that require federal assistance to affected states frequently demands the use of air missions carried out by multiple agencies. These flights are extremely varied and include evacuation, logistics transport, Search and Rescue (SAR), firefighting, and damage assessment air missions. These flights are often carried out in Visual Meteorological Conditions or Visual Flight Rules for which Air Navigation Services provided by the Federal Aviation Administration (FAA) may have been temporarily disrupted or degraded.

Additionally, each department and agency operating response aircraft usually uses its own C2 system to dispatch, manage, and support its flights. The aviation operations environment during major incidents may rapidly become complex and challenging in terms of the efficient and effective use of available air assets, flight safety, and critical factors.

The Aviation Branch is intended to provide a unified planning and operations coordination mechanism that integrates aviation resources for missions carried out by diverse agencies participating in the

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response efforts. The Aviation Branch should be directly linked to the State Emergency Operations Center (SEOC) aviation component. If co-located, the federal, state, local, tribal, or territorial organization may operate as a multiagency coordination group. This role is enabled by a number of key functions, including:

- Support of air mission requests
- Prioritization of aviation missions
- Mission assignment of available aircraft assets
- Air mission planning and coordination including deconfliction
- Situational awareness of aviation operations in the incident area
- Coordination of ground support at designated airfields/airports

The Aviation Branch also serves as the principal interface with the FAA for the incident area. The FAA is the final authority on matters of air traffic management, including the establishment and management of Temporary Flight Restrictions (TFR); development and implementation of incident response aviation operations coordination plans; coordination with active air traffic control facilities; and the mitigation of impacts on the National Airspace System (NAS).

4.1.2 FEMA Aviation Mission Priorities

Priorities may vary from incident to incident. All personnel involved with aviation operations should be briefed and understand the following the Federal Emergency Management Agency (FEMA) priorities:

- Life saving/search and rescue
- Life sustaining (Medical Evacuation (MEDEVAC) or provision of critical food and water)
- Property protection (fire suppression/law enforcement)
- Rapid needs assessment (digital imaging, and hazardous materials (HAZMAT))
- Logistical support (e.g., equipment and commodities)
- Minimizing damage to the environmental

Aviation mission sets may include the following activities:

- Search and Rescue

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- Aeromedical Evacuation (AE)
- General population evacuation
- Incident Awareness and Assessment (IAA)
- Life sustaining logistics commodities distribution
- Firefighting
- Airfield opening
- Command and control
- Infrastructure repair
- Response team and personnel movement
- Recovery missions
- National defense/homeland security missions
- Identification of airborne contaminants
- Other missions as assigned

4.1.3 Joint Field Office/State Emergency Operations Center

Upon commencement of the federal response, the Federal Coordinating Officer (FCO) may establish an Aviation Branch to coordinate federal aviation resources in support of state requirements. This organization could be located at the JFO or co-located with its state counterparts.

The Aviation Operations Coordination Center (AOCC) at the National Response Coordination Center (NRCC) receives Mission Tasking Orders and assigns them to the Aviation Branch at the Regional Response Coordination Center (RRCC), which coordinates with Aviation Branch at the Joint Field Office and the SEOC. An Air Operations Branch may be established on the ground at each airport, airfield, helibase and/or facility where air missions are conducted.
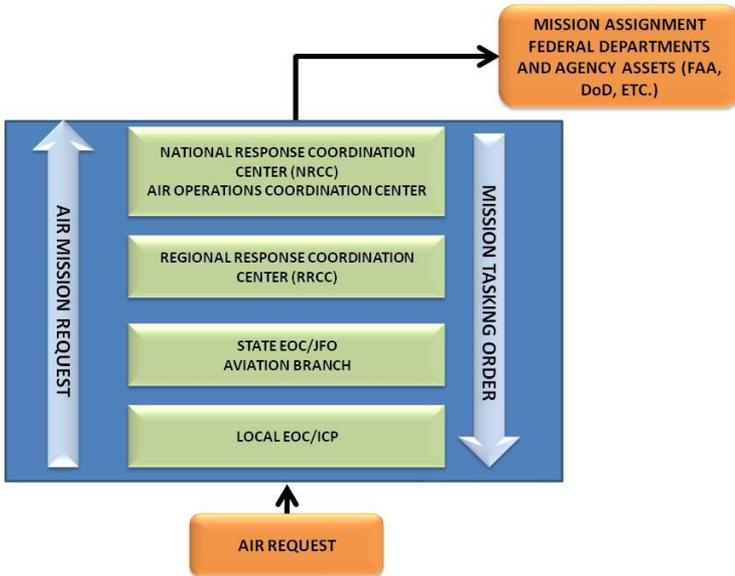
4.1.4 Aviation Request and Assignment Process

The aviation request and assignment process uses Incident Command concepts and principles at all levels. The supported agency will identify the specific parameters of the request (e.g. cargo transport, timeline, originating location, and destination) and the supporting agency will be responsible for sourcing and tasking the appropriate air asset to accomplish the request.

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Figure 4-1. Aviation Asset Resource Mobilization Process

4.1.5 DoD Support

Department of Defense (DoD) flight activity will be in direct support of emergency/disaster operations. Requests for Assistance (RFAs) or Mission Assignments (MAs) will drive the participation, but other flight operations may be in direct support of DoD forces and installations within the disaster area. However, depending on the category of support (e.g., national airlift, SAR, or AE), visibility of the mission and its requirements will be provided by the Defense Coordinating Officer (DCO), reaching back to Air Forces Northern (AFNORTH) and United States Northern Command (USNORTHCOM). Visibility of Army flight operations will be provided to the Joint Task Force (JTF) and DCO via U.S. Army North (ARNORTH) or the Joint Forces Component Command (JFCC) for the response.

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DoD will provide an aviation Liaison Officer (LNO) to the Aviation Branch to synchronize DoD flight operations with other air response missions. Additionally, the LNO may coordinate all DoD-related issues and requests for DoD assistance for the DCO.

Air Force Rescue Coordination Center (AFRCC) coordinates requests for DoD search and rescue assets for the U.S. Inland Search and Rescue Region (Continental United States) but normally does not directly conduct responses. In most situations, the actual SAR is carried out by DoD, United States Coast Guard (USCG), Civil Air Patrol (CAP), state, or local rescue services.

4.2 Federal Airspace Command and Control

In civil support operations, the Federal Aviation Administration is always the Airspace Control Authority (ACA). The Airspace Coordination and Control Plan (ACCP) developed by the FAA for emergencies provides specific planning guidance and procedures that all organizations, civilian and military, follow for airspace control during civil support operations. Strict adherences to the airspace control plan, combined with FAA air traffic procedures, are designed to ensure safe, efficient, and expeditious use of airspace while allowing all participants the ability to complete their respective mission.

The ACCP is normally a separate document referenced in the National Response Framework. As required, the Joint Force Air Component Command (JFACC) coordinates with the FAA and issues supplementary instructions to air commanders to accommodate changes required for emergency operations by military aircraft.

The ACCP describes processes and procedures for the safe employment of air assets, both military and civilian, operating within the rescue and recovery area. The ACCP assumes that civilian air traffic control facilities and communications will control all air traffic to provide visual and instrument flight rules separation. DoD C2 assets will augment FAA capabilities when an incident disrupts civilian air command and control facilities.

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4.2.1 Airspace Management in a DSCA Environment

Information flow during a major civil support operation can be challenging due to the rapidly changing nature of the situation and the available resources. It is imperative that information flow freely between DoD and other participating agencies to ensure all units are operating on current information. The JFO Aviation Branch is the correct coordinating office at the federal level and is designed to facilitate coordination of all aviation support assets during disaster operations.

Following a natural disaster, if military aircraft are providing the majority of support to DSCA operations, and if FAA control systems have been damaged or are non-operational, the FAA will relinquish airspace control in the disaster area to the JFACC. The JFACC will assist with airspace control and coordination. In this case all military and civil agencies and organizations are asked to provide liaisons to the JFACC and all air activities are coordinated by the JFACC with FAA representatives.

4.2.2 Daily Air Tasking Order

All military aircraft in the Joint Operations Area (JOA) are tasked via an Air Tasking Order (ATO) issued by the JFACC. For those assets not directly tasked by the JFACC, applicable mission information appears in the Airspace Control Plan and Special Instructions (SPINS) section of the ATO for command, control, and coordination purposes. All participating military aircraft are required to adhere to the Airspace Control Plan and applicable ATO SPINS.

4.3 Air Forces Northern

Air Forces Northern, or 1st Air Force, is assigned by the Joint Chiefs of Staff (JCS) as the United States Air Force (USAF) air component to support USNORTHCOM civil support missions. Daily civil support operations are conducted by AFNORTH from Tyndall Air Force Base (AFB), Florida.

The AFNORTH standing "tailored" Air Operations Center is responsible for all homeland security operations taking place within

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the USNORTHCOM Area of Responsibility (AOR) except for Alaska. In Alaska, the 11th Air Force Combined Air Operations Center - Air (COAC-A) supports the Alaska North American Aerospace Defense Command (NORAD) Region and JTF-Alaska.

4.3.1 Director Mobility Forces-Air

AFNORTH has a continuing relationship with the Director Mobility Forces-Air (DIRMOBFOR-Air) officers that coordinate the overall mobility effort for the JFACC/Combined Force Air Component Commander (CFACC), and act as the primary liaison between AFNORTH and United States Transportation Command (USSTRANSCOM), Air Mobility Command (AMC) and the 618th Tanker Airlift Control Center (TACC) during contingency operations. The DIRMOBFOR and staff work closely with the Air Mobility Division (AMD) to orchestrate the mobility operation between AMC, USNORTHCOM, AFNORTH and potentially multiple JTF's.

The AMD works closely with the DIRMOBFOR staff to coordinate and monitor airlift and mobility missions within the AOR. This data collection takes many forms, to include C2 systems such as Global Decision Support System (GDSS), Strategic Mobility System (SMS), and Theater Battle Management Core Systems (TBMCS), and the establishment of relationships with the NORTHCOM Deployment Distribution Operations Center (DDOC), AMC, and the USTRANSCOM DDOC.

4.3.2 Regional Air Movement Coordination Center

The AFNORTH Regional Air Movement Coordination Center (RAMCC), located at Tyndall AFB, is part of the joint Concept of Operations (CONOPS) for air mobility during crisis response. The RAMCC assists DoD in providing assets and coordinates with the primary federal agency controlling disaster response to predict arrival of transient DoD air assets within the JOA.

Many agencies may be operating in shared airspace during a natural disaster. Aviation units must ensure coordination with the RAMCC and verify mission support is listed in the ATO.

The RAMCC stands up during contingencies to provide management of airflow into and out of designated airfields for the purpose of maximizing personnel and cargo throughput. It coordinates with military C2 elements, Contingency Response Group/Element/Team (CRG/CRE/CRT), present at the airfields to determine maximum on-ground limitations and factors that affect airflow. The RAMCC then coordinates with the FAA, TACC, National Guard Bureau (NGB), and Airlift Control Team (ALCT) to determine and issue slot times for aircraft transiting the contingency airfield.

4.3.3 Air Component Coordination Element

In support of civil support operations, AFNORTH is prepared to deploy multiple Air Component Coordination Elements (ACCEs) as well as additional liaison elements to support other major commands.

To Request/Access AFNORTH ACCE Team or Liaison
Commander AFNORTH
(850) 283-4272, DSN 523
AFNORTH Chief of Staff
(850) 283-9158, DSN 523
AFFOR Contingency Action Team (CAT)
(850) 283-5309/5871
Non-contingency/After Hours (24/7/365)
CAOC Senior Operations Duty Officer
(850) 283-5573, DSN 523
Direct call to Chief of Staff

The JFACC may establish one or more ACCE teams with other state, JTF, and sister component headquarters to better integrate USNORTHCOM air and space operations with their own operations and within the joint force.

An ACCE team may be as small as a single individual (an LNO) or a large presence (team), depending on the scope of the operation and the size of the staff with which they will liaise. Usually the ACCE Director will be a USAF senior officer in the rank of O-6 or higher. The ACCE does not replace, replicate, or circumvent normal theater request mechanisms already in place, nor does it supplant normal planning performed by the Combined Air Operations Center (CAOC) and Air Force Forces (AFFOR) command staff.

ACCE teams will provide the following to federal, state, and JTF leadership:

- JFACC capabilities and limitations (constraints, restraints, and restrictions)
- JFACC plan to support federal, state, and JTF requirements
- Reach-back to JFACC staff processes
- Proper information flows between the CAOC and AFFOR staff, sister components, and federal, state, JTF leadership

4.3.4 AFNORTH DSCA Responsibilities

AFNORTH operates in an environment that includes natural and man-made disasters. Natural disasters such as massive wildland fires, hurricanes, earthquakes, or pandemics can overwhelm local responders and may require allocation of military resources to assist civil authorities in mitigating the effects of a disaster and providing for recovery and relief efforts.

AFNORTH consists of a Command Element, Air Staff, Personal Staff, and Air and Space Operations Center (AOC). The JFACC is responsible for planning, tasking, and directing air and space capabilities from multiple services and coordinating activity with interagency air capabilities.

4.3.4.1 Airspace Coordination Authority

The Airspace Coordination Authority is responsible for coordinating and de-conflicting air traffic.

4.3.4.2 Space Coordinating Authority

The Space Coordinating Authority is responsible for collecting and linking any space requirements (imagery, communications, Global Positioning System (GPS), etc.) and ensuring space products are effectively and efficiently disseminated.

4.3.4.3 Collections Operations Manager for Imagery Analysis and Assessment

The Collections Operations Manager for Imagery Analysis and Assessment is responsible for collecting and linking federal, state, and military imagery requirements to specific imagery platforms and ensuring imagery products are effectively and efficiently disseminated.

4.3.4.4 Air Forces Northern

Air Forces Northern is responsible for coordinating DoD SAR support within the Continental United States (CONUS). The Air Force Rescue Coordination Center executes CONUS inland SAR for the Inland SAR Coordinator as the SAR Mission Coordinator and is embedded in the 601st AOC. The JFACC establishes a Joint Personnel Recovery Center as required.

Other mission types and capabilities planned, executed, and supported by AFNORTH include:
- Air tasking order (rotary-fixed)
- Airspace surveillance
- Aerial search and rescue
- Airlift
- Space support
- Aerial firefighting
- Aerial spray
- Airspace restrictions
- Incident Awareness and Assessment
- Airspace control/deconfliction
- Open airfields
- Aeromedical evacuation

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- Weather
- Radar evaluation
- Interagency connectivity
- Support for USAF field units

4.3.5 Joint Airspace Control

USAF Airborne Warning and Control System (AWACS) aircraft may deploy to provide a detailed air picture to the airspace control authority. The AWACS can become the link between the FAA controllers on the ground working out of a military facility, and aircraft in and around the incident site. In addition to the 1st and 11th Air Force, the Air National Guard Air Control Squadrons can also provide operationally ready command and reporting center mission control elements for support of theater air operations. These elements include radar surveillance and tracking, radar service to tactical aircraft, supervision of subordinate deployed air control units, and data-link of a combined air picture to higher headquarters.

Figure 4-2. Amphibious Assault Ship

Many United States Navy ships are capable of air command and control support during civil support operations. They possess robust communications capabilities. For example, Navy Helicopter

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Direction Control Centers are located on LHA/LHD class amphibious assault ships. They are able to assist the JFACC in air space planning, integration, and de-confliction of multiagency air assets.

A United States Marine Corps Air Support Squadron provides a Direct Air Support Center (DASC) cell for coordination and control of aircraft operating in direct support of Marine Air Ground Task Force (MAGTF). The entire DASC, or a portion of this cell, may deploy for civil support operations.

4.4 Air Force Capabilities

4.4.1 Modular Aerial Spray System

Modular Aerial Spray System (MASS) is a modular unit designed for insertion into modified C-130H aircraft to disperse up to 2,000 gallons of chemical. The MASS provides a large-area, fixed-wing aerial spray capability to control insect-borne disease vectors, vegetation, and pests of vegetation in combat areas, DoD installations, non-DoD property, or in response to declared emergencies. The MASS can also be used in coordination with Joint Director of Military Support (JDOMS) and the United States Coast Guard to apply dispersants to support oil spill cleanup and removal operations.

4.4.2 Hurricane Hunters

Hurricane Hunters Air Force Reserve Command 53rd Weather Reconnaissance Squadron (53 WRS) operates specially equipped WC-130J aircraft to conduct hurricane/tropical cyclone reconnaissance, synoptic surveillance, and research missions. These aircraft use onboard sensors, dropsondes, and buoys to collect and transmit weather data back to the Chief of Aerial Reconnaissance Coordination located at the National Hurricane Center.

Figure 4-3. WC-130J Hurricane Hunter

4.4.3 Aeromedical Evacuation

Aeromedical Evacuation (AE) units evacuate patients under the care of AE Crew-Members (AECMs) and Critical Care Air Transport Teams (CCATT) using fixed-wing aircraft. AE units transport sick, seriously ill, or injured military personnel and their dependents (CONUS or Outside the Continental United States (OCONUS)). If an Aeromedical Evacuation mission assignment is approved by the Secretary of Defense (SecDef) or his representative, AE units can also transport seriously ill or injured civilians to definitive care facilities.

The C-130 is the predominant AE platform; however, if resources are available, the C-17 can also support AE. There are 32 AE Squadrons: 4 Active Duty, 18 Air Force Reserve Component, and 10 Air National Guard. Aircraft capacities:

- C-130 with a capacity of 70 litters or 92 ambulatory patients/attendants
- C-17 with a capacity of 60 litters or 36 litters and 54 ambulatory patients/attendants

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4.4.4 Air Mobility Contingency Response Forces

A Contingency Response Group (CRG) is a cross-functional team designed to rapidly deploy and to support airbases/airfields opening or extending existing airfield infrastructure. CRGs are tailorable task forces that vary in size from 12 to 113 personnel. Contingency Response Forces can be deployed in smaller elements called Contingency Response Team (CRT) or Contingency Response Element (CRE). A CRT is usually comprised of 3 to 8 personnel, where a CRE ranges in size from 12 to 80 personnel. Both USTRANSCOM and Air National Guard (ANG) have CRG units. AMC has four CRG units located at two Contingency Response Wings. USTRANSCOM has Operational Control (OPCON) of the CRG/CRE, but OPCON may transfer to the Commander of USNORTHCOM after initial deployment when a formal supported/supporting relationship is mandated by JCS.

Capabilities include airfield assessment, airfield operations, C2, aerial port, aircraft maintenance, air traffic control, intelligence, security forces, fuels, supply, contracting and finance. Once deployed, CRG/CRE can self-sustain for 5 days, after which resupply is required.

4.4.5 Unmanned Aerial Systems

ANY request for the imagery products of Unmanned Aerial Systems (UAS) or Unmanned Aerial Vehicles (UAV) capabilities, platforms, or packages in support of DSCA operations requires compliance with Northern Command Instruction (NCI) 14-3, *Domestic Imagery* dated 5 May 2009, paragraphs 2 and 3, and the Chairman of the Joint Chiefs of Staff (CJCS) DSCA Execution Order (EXORD), paragraph 4.D.7.

NCI 14-3 applies to *ALL domestic imagery*, *regardless of platform*, whether manned or unmanned. This includes any UAS providing domestic information at the request of or in support of a USNORTHCOM (NC) mission, even if in

response to a request from civilian law enforcement agencies. Requests for domestic imagery products (not capabilities, platforms, or packages) must be submitted through the JTF to the ARNORTH, G2, Collection Requirements Branch, for review and approval before submission to NC/J24.

A *Proper Use Memorandum* (PUM) must also be submitted with each request. It must include a narrative statement in non-technical terms of the intended purpose of the request, the intended use of the domestic imagery, the time frame for collection of new imagery or for the intended use of archived imagery, the supported project/operation/exercise name, and certifying compliance with Intelligence Oversight rules (NCI 14-3, paragraph 3.2.6.2).

Certain USAF UAS aircraft, such as Global Hawk, can operate far above normal commercial traffic while providing situation assessment to ground commanders. Intermediate systems such as the Predator have supported recent disaster operations, dramatically increasing situational awareness at the field office level. If available and authorized, these systems can provide real time data to command posts for extended periods.

Figure 4-4. Predator Unmanned Aerial Vehicle

The JFACC coordinates with the FAA and includes the mission on the ATO when approved. The FAA issues Notices to Airmen (NOTAM) as required.

4.4.6 Civil Air Patrol/Air Force Auxiliary

When tasked by the Air Force, CAP, in its Air Force Auxiliary (AFAUX) role, can support federal, state, and local authorities by performing various reconnaissance, emergency services, homeland security, and disaster relief missions. USAF assigned missions are missions flown under a federal mission number and performed as the AFAUX. During these missions, the USAF maintains control over AFAUX assets directly through Commander AFNORTH or through the requesting Air Force organization, as determined by USAF. CAP has over 55,000 volunteers and a fleet of 550 aircraft available for tasking, generally with a 4-hour response time.

CAP National Operations Center

The CAP National Operations Center is the single resource for coordinating mission approvals, assisting customers in accessing CAP support, and documenting and reporting of both Air Force Assigned Missions and CAP corporate missions.

Phone:
Toll Free: (888) 211-1812
Commercial: (334) 953-7299
DSN: 493-7299
Fax: (800) 555-7902

E-mail:
opscenter@capnhq.gov
If you send a time sensitive e-mail after hours
(M-F 0730-1630 CST), please alert the Duty Officer.

4.4.6.1 CAP/AFAUX Capabilities

CAP/AFAUX capabilities include:
- IAA
- Airborne visual reconnaissance

- Satellite link airborne dynamic re-tasking
- Light air transport/air taxi
- Air and ground fleet availability
- Communications support
- Law enforcement support
- VIP support

4.4.6.2 CAP/AFAUX Assets

Command and Control/Legal Status: The same legal authorities that govern the use of Air Force assets generally apply to the use of CAP when acting in its capacity as the AFAUX. All USAF-assigned missions will be flown under military command and control, generally at the operational (JFACC) level.

Personnel: Trained ground crews provide damage assessment and mitigation, disaster recovery, and limited security to augment civil and military authorities.

Aircraft: 550 light civil aircraft, including Cessna C-172, C-182 and C-206 models, as well as 16 Gippsland GA-8 eight seat aircraft, are strategically placed throughout the nation.

Aircraft Equipped Hyperspectral System: The Gippsland GA-8 is equipped with airborne Hyperspectral Imaging systems.

Airborne Real-Time Cueing Hyper Spectral Enhanced Reconnaissance (ARCHER): The most sophisticated unclassified Hyperspectral imaging system available, ARCHER has direct applications for search and rescue; counterdrug; disaster relief and impact assessment; and homeland security. ARCHER is a non-invasive reflected light technology.

Satellite Digital Imaging Systems Equipped Aircraft: 100 C-182 aircraft are equipped with Satellite Digital Imaging Systems (SDIS) and are used to transmit still-frame digital pictures in near real-time and direct voice communications from the aircraft.

Satellite Digital Imaging System: Point-to-multipoint transmission of aerial digital photography is delivered in-flight via satellite communications. An SDIS functional unit is comprised of an aircraft equipped with a photo window, a digital camera, laptop computer,

aircraft satellite telephone equipment, and a trained three-person crew.

Ground Equipment: CAP has over 850 seven, twelve, and fifteen passenger vans, 4x4s, and long-bed pickups, as well as 90 dedicated communications vehicles with limited all-band capability.

Nationwide Radio Communications System: Comprised of over 15,000 CAP-owned base, mobile, and portable two-way radios, the national and regional high-frequency radio networks provide survivable, infrastructure-independent C2 communications that are not dependent on satellite/cellular telephone systems.

Sensor Descriptions: The Direction Finder is designed to locate Emergency Locator Beacons on downed aircraft or Emergency Position Indicating Radio Beacons from ships in distress. It can receive emergency signals on 121.5 Megahertz (MHz) (old civil frequency), 243 MHz (old military frequency), and 406 MHz (new universal frequency).

4.5 Army Aviation Capabilities

In a DSCA environment, the Army is capable of providing a mix of rotary and/or fixed-wing capabilities to the JTF. An Aviation Task Force normally includes an Army Aviation Brigade Headquarters for command and control of assigned, attached, OPCON or Tactical Control (TACON) aircraft. When deployed, an Aviation Task Force may also receive TACON of Marine or Navy aircraft.

Aviation units generally seek operating locations or initial staging bases that best replicate their home station facilities and capabilities. If available, aviation units occupy areas in and around an airfield or improved surface to facilitate sustainment operations. Desired facilities include an operational tower, navigational aids hanger facilities, helicopter parking areas, and housing for aircrews and maintenance personnel.

Army Aviation support for civil support operations includes air movement support of logistics and transportation operations; C2; support to federal, state, and local authorities; air evacuation; and IAA support.

4.5.1 Army Combat Aviation Brigades

The Combat Aviation Brigade (CAB) is intended to operate as a tailored task force based on mission requirements. A CAB headquarters is capable of planning and conducting multiple DSCA support operations simultaneously. Each aviation brigade is tailored for specific missions; however, each accepts other organizations and performs missions not necessarily defined in the mission statement. Aviation Brigade missions include IAA, air assault, air movement, command and control, aeromedical evacuation, and Casualty Evacuation (CASEVAC). The aviation brigade is also capable of conducting enabling missions to support operations. These enabling missions include downed aircraft recovery, forward refueling operations, aviation maintenance, and Air Traffic Services (ATS).

Typically Aviation Brigades have six battalions. The types of subordinate battalions found in Aviation Brigades vary based on the Component (Active, Reserve or National Guard). Most often in a DSCA environment, a composite Aviation Task Force will be deployed to provide multi-functional aviation support.

Typical battalions supporting DSCA include:
- Assault Helicopter Battalion (AHB) with 30 UH-60s (refer to Field Manual (FM) 3-04.113, *Utility and Helicopter Operations*) (details in Section 4.5.1.1)
- General Support Aviation Battalion (GSAB) with 4 A2C2S UH-60s, 4 General Support UH-60s, 12 CH-47s, and 12 HH-60s (refer to FM 3-04.113) (details in Section 4.5.1.2)
- Security and Support (S&S) Battalion (currently equipped with 24 OH-58A/Cs, and in the future with the Light Utility Helicopter (LUH)) (details in Section 4.5.1.3)
- Aerial Reconnaissance Squadron (ARS) with 30 OH-58Ds that can perform IAA missions in support of DSCA (refer to FM 3-04.126)
- Unmanned Aircraft Systems (UAS) company (refer to Field Manual Interim (FMI) 3-04.155, *Army Unmanned Aircraft System Operations*) (details in Section 4.5.1.5)

- Aviation Sustainment Battalion (ASB) performing maintenance and providing logistics support

> Army National Guard CAB (Expeditionary) (CAB-E) is designed primarily to focus on homeland security operations. These operations include counter-drug missions, disaster relief, humanitarian assistance, civil disturbance, counter-terrorism, and domestic support, which the National Guard is uniquely suited to perform. The CAB-E is similar to the CAB except for a security and support battalion in lieu of one ARB. The LUH is projected to replace the current OH-58C fleet in the S&S Battalions by 2015. Additionally, Army National Guard (ARNG) GSABs only have 8 CH-47s.

4.5.1.1 Assault Helicopter Battalion

Primary missions of the AHB are to conduct air assault and air movement operations to extend the tactical reach of the maneuver commander and negate effects of terrain. These missions include:

- Air movement of supplies, equipment, and personnel including logistics-over-the-shore
- Insertion/extraction operations
- Pathfinder operations (available in medium divisions only)
- Chemical, Biological, Radiological, or Nuclear (CBRN) surveys
- Wet Hawk and Fat Hawk refueling operations
- CASEVAC

Figure 4-5. UH-60A/L/M Series Black Hawk

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> Assault and ground support helicopter units may conduct CASEVAC operations when medical aircraft are not readily available (refer to FM 3-04.113).

4.5.1.2 General Support Aviation Battalion

Primary missions of the GSAB include air assault, air movement, aeromedical evacuation, C2 support, and ATS. Specific functions of the GSAB are the same as an AHB with the addition of CH-47 and HH-60 capabilities. The GSAB includes the following units:
- Command Aviation Company (CAC)
- Air Ambulance Medical Company (AAMC)
- Medium Lift Helicopter Company
- ATS Company
- UAS Company

Some of the additional functions of a GSAB include:
- Battle Command on the Move (BCOTM)
- Wet Hawk, Fat Hawk, and Fat Cow refueling operations
- Air crash rescue support

CH-47's capabilities include high-altitude operations and oversized heavy and special equipment movement

Command Aviation Company: Army aircraft assigned to the GSAB are equipped with Airspace Command and Control System (A2C2S) and can serve as an airborne Tactical Command Post (TAC CP) with the same digital capabilities as the ground TAC CP. Refer to FM 3-04.113 for additional information.

Air Ambulance Medical Company: The AAMC consists of a company headquarters and four Forward Support MEDEVAC Teams (FSMTs). Each FSMT consists of three HH-60 aircraft and personnel capable of supporting 24-hour operations. Each aircraft can be operated individually in support of DSCA operations.

The primary mission of the FSMT is aeromedical evacuation; however, it can also provide:

- Patient movement between Medical Treatment Facility(ies) (MTFs) (patient transfers)
- Class VIII (medical logistics) resupply
- Joint blood program support
- Medical C2
- Movement of medical personnel and equipment
- Air crash rescue support

HH-60 MEDEVAC	LUH-72 MEDEVAC (ARNG)

Figure 4-6. Army Medical Evacuation Aircraft

> Evacuation of casualties is the responsibility of the Health Service Support (HSS) system. Air evacuation is the preferred method of evacuation of seriously wounded and ill personnel. The aviation brigade has an organic AAMC in the GSAB.

Medium Lift Helicopter Company: The Medium Lift Helicopter Company is organic to all aviation brigades. Because of CH-47 lift characteristics, it can perform high-altitude operations and transport oversized, heavy and specialized equipment movement. The primary missions are:

- Air movement
- Personnel movement
- CASEVAC
- Personal recovery support
- Logistics support missions (internal and external loads)

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Figure 4-7. CH-47 Chinook Helicopter

4.5.1.3 Security and Support Battalions

These organizations are equipped with OH-58A/C or LUH-72 aircraft capable of providing direct aviation support during domestic operations. It is the National Guard's intent to equip the S&S Battalions LUH with mission equipment packages that enable the aircraft to be interoperable with civil support agencies. When employed, these aircraft could provide a governor with a wide range of capabilities to include C2, IAA, MEDEVAC and light utility aerial transport.

4.5.1.4 Aerial Observation Units

ANY request for the imagery products of intelligence assets, capabilities, platforms, or packages in support of DSCA operations requires compliance with NCI 14-3, *Domestic Imagery*, paragraphs 2 and 3, and the CJCS DSCA EXORD, paragraph 4.D.7. NCI 14-3 applies to *ALL domestic imagery*, *regardless of platform*, whether manned or unmanned. (Refer to Section 4.4.5 for more information.)

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If approved by the SecDef Army aerial observation units may be employed to verify the status of key infrastructure such as roads, bridges, ports, and government offices, and verify their existence, assess damage, or provide other IAA following a natural disaster.

OH-58A/C	**LUH-72**	**OH-58D**

Figure 4-8. Army Aerial Reconnaissance Aircraft

Aerial Reconnaissance Squadrons and S&S Battalion are equipped with OH-58A/C Kiowa, LUH-72 Light Utility Helicopters, or OH-58D Kiowa Warrior aircraft and are capable of performing aerial IAA mission support.

4.5.1.5 Unmanned Aerial Systems

> *ANY* request for the imagery products of intelligence assets, capabilities, platforms, or packages in support of DSCA operations requires compliance with NCI 14-3, *Domestic Imagery*, paragraphs 2 and 3, and the CJCS DSCA EXORD, paragraph 4.D.7. NCI 14-3 applies to *ALL domestic imagery*, *regardless of platform*, whether manned or unmanned. (Refer to Section 4.4.5 for more information.)

If approved by the SecDef, aviation brigade assets may conduct IAA with manned and unmanned assets. The focus of IAA is generally infrastructure such as a key infrastructure, nuclear power plants,

roads, and bridges. Restrictions on the use of UAS operations in domestic operations are numerous.

> Operators of UAS supporting civilian law enforcement agencies must be cognizant of, and fully comply with, DoD Directive (DoDD) 5525.5, "DoD Cooperation with Civilian Law Enforcement Officials," and any operational parameters and limitations specified in the DSCA EXORD regarding collection, retention, and dissemination of UAS sensor data and imagery. Operators cannot conduct surveillance on specifically identified United States persons, unless expressly approved by the SecDef, consistent with United States laws and regulations. Additionally, civilian law enforcement agencies will handle any data collected by such surveillance operations. Finally, per current Office of the Secretary of Defense (OSD) guidance, National Guard forces conducting domestic UAS operations will normally be in Title 10 status, unless the SecDef determines Title 32 status is more appropriate.

Hunter UAS	Shadow UAS
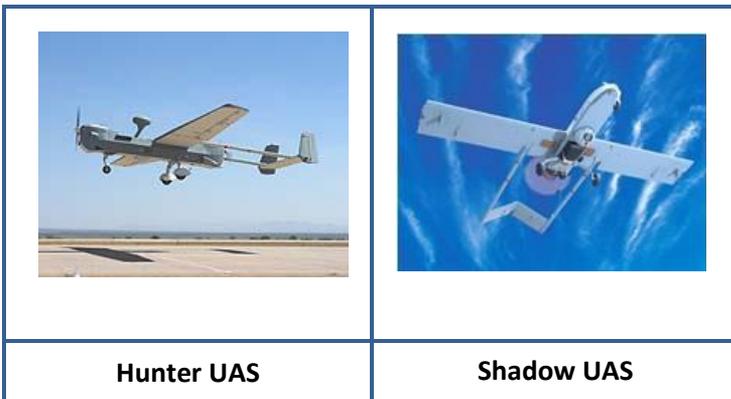
Figure 4-9. Army Aerial Surveillance Aircraft

4.5.2 Enabling Functions of the Combat Aviation Brigade

4.5.2.1 Aviation Maintenance

The aircraft of the aviation brigade require robust and redundant maintenance, repair, and ground support. The maintenance concept of support of the Aviation Sustainment Battalion must be fluid and adaptable to the complexities and challenges of accelerated Operating Tempo (OPTEMPO) associated with DSCA operations.

4.5.2.2 Forward Arming and Refueling Point Operations

All units depend on the Forward Arming and Refueling Point (FARP) to provide fuel where and when needed. The FARP increases time on station and extends the range of aircraft by reducing turnaround time associated with refueling.

4.5.2.3 Air Traffic Services

Air Traffic Services provide Airspace Command and Control (AC2) and ATS support, enabling commanders to orchestrate air and ground maneuver operations. ATS units assist in deconflicting, synchronizing, and integrating all airspace requirements, including UAS. AC2 cells develop and maintain a real-time single integrated air picture to airspace. Refer to FM 3-04.120, *Air Traffic Services Operations* for additional information on ATS operations.

4.5.2.4 Airfield Management

When more than one unit occupies an airfield, the appropriate joint forces commander will appoint an airfield commander. The airfield commander is responsible for safe operation and accommodation of aircraft. This is accomplished through implementation of procedures and controls. Responsibility for daily operations can be delegated to an airfield manager.

4.5.2.5 Theater Aviation Company

A Theater Aviation Company (TAC) consists of a company headquarters and 3 flight detachments spread throughout the continental United States plus one full TAC in Alaska. Each

detachment consists of 2 C-23B/B+ Sherpa aircraft. The C-23B Sherpa is the only multi-mission tactical transport aircraft in the Army inventory that can operate efficiently on unimproved runways. The primary mission of the C-23B Sherpa is cargo and passenger transport. The C-23B Sherpa is capable of transporting a maximum of 4 small cargo pallets or up to 30 passengers in airline-type seats or up to 18 litter patients along with their medical personnel.

4.6 United States Navy Capabilities

United States Navy DSCA support typically consists of helicopter and maritime patrol aircraft operations. All helicopters are capable of aerial search, internal and external cargo movement, personnel transfer, and personnel recovery by hoist from land and water areas that do not permit landing. Heavy lift helicopters, specifically MH-53E, also tow sonar equipment used to determine if waterways are clear prior to reopening to vessel traffic. P-3C Orion aircraft provide aerial video and photography transmitted real-time through a tactical data link to leadership personnel positioned on the ground.

4.6.1 United States Fleet Forces Command

United States Fleet Forces Command (USFF) is the Navy's supporting Commander to USNORTHCOM. Additionally, USFF is the Joint Force Maritime Component Commander-North (JFMCC-N) for USNORTHCOM in an OPCON relationship while simultaneously maintaining Component Commander responsibilities to United States Joint Forces Command (USJFCOM). Located at Norfolk, Virginia, the mission of USFF is to provide/coordinate maritime forces prepared to conduct homeland defense, civil support operations, and theater security cooperation activities when directed by USNORTHCOM. Navy aviation forces on the West Coast are assigned to United States Pacific Command (USPACOM) and the force provider is Commander, U. S. Pacific Fleet (COMPACFLT). JFMCC-N coordinates maritime operations on the West Coast of the United States in concert with COMPACFLT.

Other Navy aviation assets that are frequently called upon by USNORTHCOM/USPACOM, include the P-3C maritime patrol

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aircraft which can with appropriate ground receiving equipment transmit full motion video and provide other IAA services. Additionally, USFF has responsibilities to generate ready Navy forces for assignment to global Regional Combatant Commanders, execute the Fleet Response Plan (FRP) using the Fleet Training Continuum, articulate to the Chief of Naval Operations the integrated Fleet warfighting requirements as coordinated with all Navy Component Commanders, and provide operational planning support to Commander, USJFCOM, and United States Strategic Command (USSTRATCOM).

MH-53E	SH-60B

Figure 4-10. U.S. Navy Rotary-Wing Aircraft

4.7 United States Marine Corps Capabilities

The United States Marine Corps (USMC) provides support to a lead federal agency at the direction of the President or SecDef by using expeditionary warfighting capability to respond rapidly to a domestic incident in support of civilian authorities. Marine Forces North executes force protection responsibilities; plans for the use of USMC forces; advises on the proper employment of USMC forces; and coordinates with and supports USMC forces when attached to USNORTHCOM within the AOR in order to conduct homeland defense operations and provide defense support to civil authorities.

Typically in a DSCA environment, if tasked to provide support following a natural disaster, the USMC will provide a MAGTF. A MAGTF is comprised of four core elements: a Command Element

(CE), a Ground Combat Element (GCE), an Aviation Combat Element (ACE), and a Logistics Combat Element (LCE). As a modular organization the MAGTF is tailorable to each mission through task organization. If tasked, the USMC is capable of supporting DSCA operations using fixed-wing (C-130 or V-22) or rotary-wing (CH-46, CH-53, and UH-1) aircraft.

4.8 United States Coast Guard Aviation Assets

The United States Coast Guard is a separate federal agency under the Department of Homeland Security. The Coast Guard provides unique benefits to the nation because of its distinctive blend of military, humanitarian, and civilian law enforcement capabilities. The Coast Guard operates three fixed-wing Maritime Patrol Aircraft (MPA), all of which can be forward deployed for short periods.

4.8.1 HC-130 H/J

HC-130s are long-range surveillance and transport aircraft that act as responders for offshore search operations; however, they have limited prosecution capabilities. HC-130s can be used as On-Scene Commander (OSC) platforms for search and rescue. Typically, these aircraft are flown from air stations and are used in (large area) search or surveillance activities.

4.8.2 *HC-144A*

Also known as the CASA or the CN-235-300M, the HC-144A turboprop is the newest aircraft in the Coast Guard inventory. These medium-range surveillance aircraft have the capability to respond to SAR cases up to 600 miles off the shores of the continental United States. They have surveillance and communications systems designed to enhance Maritime Domain Awareness (MDA). Broad area electronic surveillance is accomplished using radar, electro-optical/infrared, and emitter identification. Enhanced communications systems allow global information exchange with DHS, DoD, and other local, state, and federal government agencies.

4.8.3 HU-25

HU-25s are medium-range surveillance aircraft. They can act as responders for offshore search operations, but they have limited prosecution capabilities. Typically, HU-25s are flown from air stations and are used for surveillance activities.
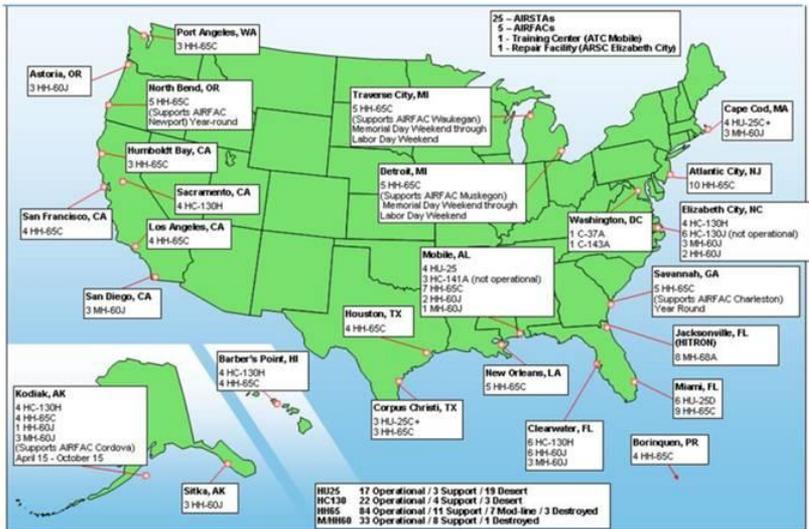
Figure 4-11. U.S. Coast Guard Aviation Assets

4.8.4 Rotary-Wing Aircraft

The Coast Guard operates five types of rotary-wing aircraft:
- HH-60J Jay Hawk – medium-range recovery helicopter
- MH-60J – armed version of the HH-60J
- HH-65C Dolphin – short-range recovery helicopter
- MH-65C – armed version of the HH-65C
- MH-68A – short-range interdiction helicopter

Helicopter SAR response typically occurs from shore. The ability of both the short- and medium-range helicopters to pick up and deliver personnel from shore or water in extreme weather conditions makes these platforms extremely valuable. They have a rapid-response

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capability and are used for near-shore surveillance. Helicopters are also assigned to seasonal air facilities to support SAR season peak loads.

Figure 4-12. USCG Jay Hawk

4.9 Aviation Safety

Safety in aviation operations is paramount. In everyday operations, pilots require a certain amount of airspace to conduct approaches and departures safely. Pilots also require current information about weather conditions, ground hazards, wind speed and direction to safely operate. A pilot needs three things for safe operations at any helicopter landing site:

- Adequate clear airspace for approach and departure with at least one, but preferably two, departure paths
- Adequate clear space for expected ground maneuvers
- Adequate current information about wind speed and direction (a wind sock is the ideal source for such information)

In a disaster situation with numerous helicopters participating in relief efforts, multiple approach and departure paths into the landing zone along with multiple parking areas are highly desirable. These

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measures provide an increased safety margin and operational flexibility and also reduce operational delay. Specifically, commanders should consider the following aircraft selection criteria when selecting aircraft sites.

4.9.1 Location

Remember the ultimate purpose of the facility when selecting the location of a temporary or permanent emergency-use Helicopter Landing Zone (HLZ). HLZs near the disaster site and the emergency room entrance at receiving hospitals are most desirable but not at the expense of safety, communications, and operations. The HLZ should be placed far enough away from activity centers so rotor wash will not blow dust or supplies around and noise will not interfere with communications.

4.9.2 Approach and Departure Paths

Like all aircraft, helicopters require clear airspace for safe operations during approach and departure. When selecting landing sites, it is critical to choose locations that provide at least the minimum airspace recommended by the FAA. Some of the most common helicopter accidents at landing sites are collisions with immovable objects or obstacles in the flight path. Such accidents might involve collision with a tower, trees, or wires. These accidents can destroy aircraft and injure or kill occupants. Safety of aircrew and the aircraft is paramount.

Obstacles such as buildings, antennas, or wires must not penetrate either the approach/departure surfaces or the transitional surfaces. Aircraft operate best when taking off or landing into the wind. Thus, while one approach and departure path might be acceptable at some locations, two or more paths are recommended as a way to provide greater safety and operational flexibility during varying wind conditions. Approach and departure paths should not pass over command posts, treatment areas, or operationally congested ground areas where rotor wash and noise might interfere with communications and operations.

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Figure 4-13. Black Hawk Improvised Landing Zone

4.9.3 Minimum Recommended Size–Final Approach and Takeoff Areas

The minimum recommended Final Approach and Take-Off (FATO) area size is determined by the largest aircraft expected to use the facility. Keep in mind the largest helicopter might be a military aircraft such as the CH-47 or MH-53. Choosing landing sites that exceed the minimum requirements can increase the safety margin.

4.9.4 Minimum Recommended Size—Safety Area

The size of the safety area around the FATO is determined by the largest aircraft expected to use the facility, military or civilian. The safety area provides clearance between the FATO's edge and buildings, trees, fences, telephone poles, wires, hillsides, or anything else that could be struck by main or tail rotors. For daytime operations, a minimum tip clearance rotor circumference plus 40 feet in all directions should provide a safe margin. For nighttime operation, a minimum tip clearance of a minimum of twice the rotor circumference is recommended.

4.9.5 Wind Indicator

A means of informing the pilot of wind velocity and direction is essential at a landing zone. The recommended means is a wind sock.

High Demand Task Organizations
Aviation

Placement is critical, particularly if the landing site is located near a building. Place the wind sock so it does not interfere with flight operations but still gives a true indication of wind speed and direction. A lighted wind sock should be used for night operations. Care should be taken to ensure this lighting is installed in a way that does not degrade night vision.

4.9.6 Surface Slope (in Degrees)

The landing surface should be flat with no bumps or depressions and level (or as near level as possible). In no case should the slope exceed 10 degrees from the horizontal.

4.9.7 Surface Composition

Landing surfaces should be capable of supporting 1.5 times the heaviest helicopter's maximum takeoff weight and be skid-resistant. All helicopter landing areas should be free of dust, loose dirt, other forms of loose debris and objects, and gravel smaller than 1.5 inches in diameter. Rotor wash can pick up and throw small gravel. Turf landing zones are suitable, but vegetation should be no higher than 18 inches. To control dust in dirt areas, wet down the landing area with a hose before landing operations begin.

4.9.8 Obstructions and Obstacles

Obstacles such as signs, poles, light fixtures, or fire extinguishers should be kept well clear of helicopter maneuvering areas. This is particularly relevant for objects that are difficult to see from the air such as power or telephone lines, guy wires, and poles that blend into the background. Obstructions should be briefed to pilots and, for night operations, should be lighted in a way that will not interfere with the aircrew's night vision.

4.9.9 Lighting

Lighting systems are necessary to support night operations. Portable lighting systems are available commercially and can be used at temporary facilities. Many aviation units are equipped with landing zone lighting kits. Flares, vehicle lights, and other light sources are

acceptable field expedients if employed by trained personnel. Special care must be taken in the placement and orientation of lighting to avoid the destruction of crew's night vision.

4.9.10 Logistical Support

Long-term operations require support with fuel, maintenance, flight crew food, fluids, rest, etc. Planning must reflect these needs and provide a means of obtaining the necessary resources. These logistical support requirements are built into the Incident Command System.

4.10 Planning Checklist

These guidelines provide some of the primary considerations for airspace coordination in domestic operations:

- Contact with the ACCE and air command center
- Location of the CAOC
- Identification of centralized command for all military air-assets and other federal air assets
- Contact with the JFO Aviation Branch
- Obtaining airspace control plan and website addresses for updated information
- Locating FAA representatives
- Determining JFACC controlled (such as Air Force, Army, or Navy) and non-JFACC controlled (such as Coast Guard, Navy, or Marine Corps) assets
- Contact with all supported and controlling agencies

4.11 References

AFNORTH *Airspace Coordination Plan* (ACP)

AFNORTH *DSCA Air Support Handbook*, 1 January 2010

Civil Air Patrol website: www.capmembers.com

DoD-DoT Memorandum of Understanding (MOU), 10 November 1998

DoD-FEMA Interagency Agreement (IAA)

Federal Aviation Regulation (FAR) Part 91, Section 137, "Temporary flight restrictions in the vicinity of disaster/hazard areas," and Part 99, Section 7, "Special security instructions"

FEMA *Joint Field Office (JFO) Aviation Branch Operations Manual, Interagency Coordination for Federal Aviation Support to Disaster Operations*, Coordinated Draft Version 10.2, 31 January 2009

FM 3-04.111, *Aviation Brigades,* August 2003

FM 3-04.113 (1-113), *Utility and Helicopter Operations,* December 2007

FM 3-17.2/Navy Tactics, Techniques, and Procedures (NTTP) 3-02.18/Air Force Tactics, Techniques, and Procedures (AFTTP)(I) 3-2.68, *Airfield Opening*, May 2007

Joint Concept of Operations (J-CONOPS) Air Mobility Coordination for Crisis Response

USNORTHCOM (J47) *General Population Evacuation by Air Planning Guide,* June 2008

NORAD and USNORTHCOM Instruction (N-NCI) 14-3 "Domestic Imagery," 5 May 2009

Appendix 4.A DSCA Support Aircraft

Aircraft	Owning Service	Passenger capability	Hook lift capable?	Hoist capable
HH-60 "Pave Low"	U.S. Air Force	11-13	YES	NO
SH-60B Sea Hawk"	U.S. Navy	11-13	YES	NO
UH-60A/L/M "Black Hawk"	U.S. Army	11-13	YES	NO
CH-47D/F "Chinook"	U. S. Army	33-55 Troops, 24 litters, and 3 attendants	YES	NO

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Aircraft		Owning Service	Passenger capability	Hook lift capable?	Hoist capable
UH-60 "Black Hawk" MEDEVAC		U. S. Army	3 – 6 patients and 2 attendants	YES	YES
OH-58A/C "Kiowa"		Army National Guard	3	NO	NO
UH-72 "Lakota"		U. S. Army	8 troops or 2 litters and medics	NO	SOME
MH-53E/CH-53E "Sea Stallion"		U.S. Navy U.S. Marine Corps	37-55	YES	NO

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High Demand Task Organizations
Aviation

Aircraft	Owning Service	Passenger capability	Hook lift capable?	Hoist capable
V-22 "Osprey"	U. S. Marine Corps U.S. Air Force	24-32	YES	NO
UH-1 "Iroquois"	U. S. Marine Corps U.S. Air Force	11-13	YES	YES
CH-46 "Sea Knight"	U. S. Marine Corps	25	YES	SOME
MH/HH-65C "Dolphin"	U.S. Coast Guard	6	NO	YES
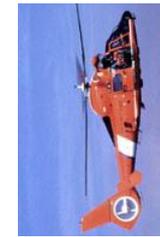
UNCLASSIFIED

High Demand Task Organizations
Aviation

Aircraft		Owning Service	Passenger capability	Hook lift capable?	Hoist capable
MH-60J "Jay Hawk"		U.S. Coast Guard	11-13	YES	YES
C-23 "Sherpa"		Army National Guard	30	NO	NO
RC-26B "Metroliner"		Air National Guard	0	NO	NO
GA-8 "Air Van"		Civil Air Patrol (CAP)	6	NO	NO

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UNCLASSIFIED

Aircraft		Owning Service	Passenger capability	Hook lift capable?	Hoist capable
P-3C "Orion"		U.S. Navy	N/A	N/A	N/A
C-5 "Galaxy"		U.S. Air Force	73 in upper area and 270+ additional pallet seats	N/A	N/A
C-17 "Globemaster III"		U.S. Air Force	54 on side walls plus 48 centerline seats or 80 pallet seats	N/A	N/A
C-130 "Hercules"		U.S. Air Force U.S. Marine Corps U.S. Navy U.S. Coast Guard	92 ambulatory or 70 litter patients	N/A	N/A

Appendix 4.B Aviation Glossary

INSTRUMENT FLIGHT RULES: A set of regulations and procedures for flying aircraft whereby navigation and obstacle clearance is maintained with reference to aircraft instruments only and separation from other aircraft is provided by Air Traffic Control (ATC). It is an alternative to Visual Flight Rules (VFRs), where the pilot is ultimately responsible for navigation, obstacle clearance, and traffic separation using the "see-and-avoid" concept. These regulations allow an aircraft to safely fly through clouds, which is not permitted under VFR. Also called IFR.

JOINT FORCE AIR COMPONENT COMMANDER: The commander within a unified command, subordinate unified command, or joint task force responsible to the establishing commander for making recommendations on the proper employment of assigned, attached, and/or made available for tasking air forces; planning and coordinating air operations; or accomplishing such operational missions as may be assigned. The joint force air component commander is given the authority necessary to accomplish missions and tasks assigned by the establishing commander. Also called JFACC.

MAXIMUM ON GROUND: Maximum number of aircraft an airfield can have on the ground. Also called MOG.

PARKING MAXIMUM ON GROUND: Parking MOG is the total number of planes that can be parked at an air facility. Parking MOG is affected by both the overall size of the facility and by how available apace is managed. Larger airfields usually can accommodate a greater number of aircraft.

ROTARY-WING: Helicopters.

SLING LOAD: Consists of supplies or equipment properly rigged with one or more slings, cargo bags, or cargo nets to the underside of a helicopter.

SORTIE: In air operations, an operational flight by one aircraft.

UNMANNED AIRCRAFT SYSTEM: That system whose components include the necessary equipment, network, and personnel to control an unmanned aircraft. Also called UAS.

UNMANNED AERIAL VEHICLE: A powered aerial vehicle that does not carry a human operator, uses aerodynamic forces to power vehicle lift, can fly autonomously or be piloted remotely, can be expendable or recoverable, and can carry a lethal or nonlethal payload. Ballistic or semi-ballistic vehicles, cruise missiles, and artillery projectiles are not considered unmanned aerial vehicles. Also called UAV.

VISUAL FLIGHT RULES:A set of aviation regulations under which a pilot may operate an aircraft in weather conditions sufficient to allow the pilot, by visual reference to the environment outside the cockpit, to control the aircraft's attitude, navigate, and maintain safe separation from obstacles such as terrain, buildings, and other aircraft. Also call VFR.

VISUAL METEOROLOGICAL CONDITIONS: Weather conditions in which VFR apply; expressed in terms of visibility, ceiling height, and aircraft clearance from clouds along the path of flight. When these criteria do not exist, instrument meteorological conditions prevail and instrument flight rules must be complied with. Also called VMC.

CHAPTER 5: COMMUNICATION

Interoperability is the key to a successful Defense Support of Civil Authorities (DSCA) mission. Non-mission capable or incompatible communications, overloaded incident command centers, distraught citizens, and exaggerated or inaccurate news media coverage contribute to confusion and chaos in a DSCA environment. This chapter provides an overview of the communication challenges that units may encounter and some of the resources available to overcome these challenges.

5.1 Introduction

Based on real world incidents (9-11 terrorist attacks, Katrina, etc.) and studies conducted by the National Communication System (NCS), there is a high probability that commercial wired and wireless communication infrastructure will be highly saturated for an indefinite period following a disaster. There are several contributing factors: higher than normal percentage of use by first responders, personnel staying home from work or school, and personnel attempting to locate information on their loved ones.

Depending on the incident, a large percentage of the commercial communication system may be degraded or destroyed. Power to cell phone towers may remain problematic for an extended period. Units cannot assume that commercial wired (landline phones, etc.) or wireless communications will be functional during an incident and must plan for alternate forms of communication and power. Units should consider bringing additional satellite telephones (including dialing instructions, directory, battery charger, and case) to support civilian partner communications needs until the civilian communications grid is restored. Providing satellite telephones (with training to use them) to key civilian leaders can greatly enhance communications and coordination.

Upon alert, communications officers verify the communications systems required. They obtain Federal Communications Commission (FCC)-approved and Federal Emergency Management Agency

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(FEMA)-approved frequency lists through the controlling Joint Task Force (JTF) headquarters. When deploying to a military installation, frequencies must be coordinated through the installation spectrum manager. If a unit system is incompatible with local emergency systems and gaining headquarters, the unit should coordinate with the gaining Combatant Command and Defense Coordinating Officer (DCO) for additional capability for its liaison teams. Plans for expedient communications should include:

- Liaison teams with unit compatible communications
- Satellite telephones, such as IRIDIUM, to provide voice communications
- Use of the internet

Most communications will travel via commercial telephone networks or the internet. Signal planning must include the ability to access commercial internet, commercial telephone, and video teleconference networks. With internet access (wireless or landline), virtual private network software, and Army Knowledge Online (AKO) addresses, units can create a Command and Control (C2) network able to handle almost all of their requirements.

Service personnel that support civilian responders in the field (e.g., medical, logistics, aviation) must be able to communicate with civilian responders in order to coordinate. Units responding to support civilian responders must be prepared to integrate communication systems with civilian agencies. Because of equipment differences, spectrum requirements, and the geography at the incident, commanders should not assume that tactical radio equipment is interoperable with civilian equipment. United States Army North (USARNORTH) deployable headquarters have communications systems that are compatible with both civilian and military communications systems, as do many National Guard forces. Interoperability planning should also include radio bridging devices that can connect varied devices such as tactical radios to cell phones, and sharing data through a common information management plan.

High Demand Task Organizations
Communication

5.2 DoD Defense Support to Civil Authorities Automated Support System

Department of Defense (DoD) DSCA Automated Support System (DDASS) is a web-based tool used by the Defense Coordinating Elements (DCEs) as well as United States Northern Command (USNORTHCOM) and other Combatant Commands to coordinate and prioritize DoD disaster support efforts. DDASS is the primary tool for tracking Mission Assignments (MAs) within DoD. DDASS tracks the progress of MAs from validation and approval through mission funding, mission progress and tasking and serves as the electronic repository for all related MA documentation. The United States Army Corps of Engineers (USACE) Army Geospatial Center (AGC) (see Section 3.3.2 in this *LNO Toolkit*) maintains the DDASS software, server, connectivity, and access for all DSCA users.

5.3 Joint CONUS Communications Support Environment

One system that has been fielded to bridge the communication gap between National Guard, DoD, and first responders is the Joint CONUS (Continental United States) Communications Support Environment (JCCSE) secure communications system. The National Guard has recently deployed this system in all 50 states and 4 territories as a method to link its military units with civilian local, state, and federal agencies during an emergency. This capability uses web-based tools, deployable communications packages, and national coordination centers to manage first responder interoperability during a crisis. JCCSE consists of three parts described in the following sections.

5.3.1 Joint Incident Site Communications Capability

The first component is the Joint Incident Site Communications Capability (JISCC). These interoperable communications modules can be deployed quickly to an incident site. Transported in cases, a JISCC module can be set up inside a command tent to link other military and civilian agencies at an incident site. The JISCC consists of radio, satellite, voice, data, and video teleconferencing capabilities. The modules are equipped with laptop computers and

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secure telephones. The major feature differentiating the JISCC from other systems is its radio interoperability function, which is performed with an ACU-1000 cross-connect device that permits it to communicate with first responders.

JISCC team at work (National Guard photo)

5.3.2 Joint Communications Control Center

The second component of the JCCSE is the Joint Communications Control Center (JCCC), which was developed as the result of a lesson learned from Hurricane Katrina. After the storm, as the Guard deployed its various communications capabilities across the devastated region, it soon realized that a decision-making cell was needed to select the types of equipment required at an incident site and to coordinate communications and spectrum with other agencies. The JCCC continuously manages and tracks every piece of communications equipment owned by the Guard. The center connects to USNORTHCOM and interoperates with that command's National Command and Coordination Capability. The center also communicates with government organizations such as FEMA,

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Department of Homeland Security (DHS), and the North American Aerospace Defense Command. The JCCC's primary location is the National Guard Bureau.

5.3.3 Joint Information Exchange Environment

The Joint Information Exchange Environment (JIEE), the third piece of JCCSE, is a web-based collaborative software capability that allows the Guard to coordinate and provide situational awareness in all 54 states and territorial joint operations centers. The JIEE also allows the Guard to pass information to USNORTHCOM or organizations such as DHS or FEMA during an emergency. The JIEE provides Guard response forces with chat capabilities and the ability to transmit imagery. JIEE also allows Guard units to access DoD's Secret Internet Protocol Router Network (SIPRNet) and Non-classified Internet Protocol Router Network (NIPRNet).

5.4 National Communications System

President Kennedy established the NCS in 1963 following the Cuban Missile Crisis. The NCS mandate included linking, improving, and extending the communications facilities and components of various federal agencies, focusing on interconnectivity and survivability. Currently, the NCS is part of the DHS Directorate for Preparedness and the DHS Deputy Under Secretary for National Protection and Programs serves as the NCS Manager.

5.4.1 Wireless Priority Service

The Wireless Priority Service (WPS) provides priority for emergency calls made from cellular telephones. Typical users are those responsible for C2 functions critical to management of and response to national security and emergency situations. Key federal, state, local, and tribal government and critical infrastructure personnel are eligible for WPS.

WPS is an easy-to-use, add-on feature subscribed on a per cell phone basis; no special phones are required. WPS is implemented as software enhancements to cellular networks and is being deployed by cellular service providers in their coverage areas throughout the

United States. For more information go to
http://wps.ncs.gov/index.html

5.4.2 Government Emergency Telecommunications Service

The Government Emergency Telecommunications Service (GETS) is a White House-directed emergency phone service provided by the NCS in the Office of Cybersecurity and Communications Division, National Protection and Programs Directorate, Department of Homeland Security. GETS supports federal, state, local, and tribal government, industry and Non-Governmental Organization (NGO) personnel in performing their National Security and Emergency Preparedness (NS/EP) missions. GETS provides emergency access and priority processing in the local and long distance segments of the Public Switched Telephone Network (PSTN). It is intended to be used in an emergency or crisis situation when the PSTN is congested and the probability of completing a call over normal or other alternate telecommunication means has significantly decreased.

GETS is accessed through a universal access number using common telephone equipment such as a standard desk set, STU-III, facsimile, modem, or wireless phone. A prompt will direct the entry of a personal identification number and the destination telephone number. Once a valid user is authenticated, the call is identified as an NS/EP call and receives special treatment. For more information go to
http://gets.ncs.gov/index.html

5.5 National Interagency Incident Communications Division

Another resource which may be available to assist military units in communicating with local civilian responders is the Commercial off-the-Shelf (COTS) communications equipment owned and maintained by the National Interagency Incident Communications Division (NIICD). NIICD is a partnership between agencies of the United States Department of Agriculture, United States Forest Service, and the Department of the Interior and is located at the National Interagency Fire Center (NIFC) in Boise, Idaho. NIICD's major focus is wildland fire suppression, but equipment and personnel have been used on hurricanes, floods, earthquakes, volcanic eruptions, oil

spills, and other man-made and natural disasters where federal assistance is required. NIICD website http://www.fs.fed.us/fire/niicd/index.html provides important information regarding the operation and maintenance of commercial communications equipment.

5.6 National Interoperability Field Operations Guide

Commanders should expect that military communications equipment will not be compatible with civilian equipment. Neither will civilian equipment be capable of adapting to DoD systems; units must adapt to them. Units can procure COTS equipment, and if necessary, fund services to establish communications with civilian counterparts. Refer to the National Interoperability Field Operations Guide (NIFOG) for guidelines on communicating with federal, state and local authorities.

The NIFOG is a pocket-sized listing of land mobile radio frequencies that are often used in disasters or other incidents where radio interoperability is required. It is based on the *National Interoperability Frequency Guide* and may be used by radio technicians when programming channels in radios. It may also be of use to emergency communications planners.

The NIFOG is also useful when no other radio interoperability arrangement has been promulgated by local authorities or when emergency responders are unaware of such an arrangement. The NIFOG does *not* supersede any federal, state, tribal, local, or regional emergency communications plan. If communicators are dispatched to a disaster or incident scene and have no other information on how to make contact with other emergency responders, the NIFOG provides useful suggestions on frequencies to use to make initial contact.

NIFOG can be accessed at http://www.npstc.org/documents/NIFOG_1_3.pdf

5.6.1 Frequencies for the Safety of Life and Property

The frequency 40.5 Megahertz (MHz) is designated as the military joint common frequency. Use of this channel is limited to emergency communications and communications necessary to establish contact when other channel information is not available. This frequency also may be used for Search and Rescue (SAR) communications.

5.6.2 Frequencies for Coordinating Search and Rescue Operations

The frequency 123.1 MHz, using class A3E emission, may be used by stations of the aeronautical mobile service and by other mobile and land stations engaged in coordinated SAR operations. The frequency 156.3 MHz may be used for communications between ship stations and aircraft stations engaged in coordinated SAR operations. When control of the scene of a SAR incident is under a Coast Guard coast station, 156.3 MHz may be used by ship stations to communicate with that coast station.

5.6.3 Law Enforcement Plans

Frequencies 167.0875 MHz and 414.0375 MHz are designated as National Calling Channels for initial contact with law enforcement agencies.

5.6.4 Incident Response Plans

Frequencies 169.5375 MHz (paired with 164.7125 MHz) and 410.2375 MHz (paired with 419.2375 MHz) are designated as the calling channels for initial contact and are identified in the Incident Response Federal Interoperability Channel Plans.

5.6.5 On-the-Scene Communications

At a federally declared disaster where a Joint Field Office (JFO) is established, the JFO Communications Unit handles the communications requirements for emergency responders working through the JFO. Emergency Support Function (ESF) #2 handles communications issues affecting the victims and the telecommunications industry.

5.7 Web Resources

DDASS
https://ddass.iec.belvoir.army.mil/DDASS/

Joint CONUS Communications Support Environment
www.ngb.army.mil/features/homelanddefense/jccse/index.html

National Guard Bureau
www.ngb.army.mil

Homeland Security Information Network (HSIN) login page
https://cs.hsin.gov

HSIN is a comprehensive, nationally secure and trusted web-based platform able to facilitate Sensitive but Unclassified (SBU) information sharing and collaboration between federal, state, local, tribal, private sector, and international partners. The HSIN platform was created to interface with existing information sharing networks to support the diverse Communities of Interest (COI) engaged in preventing, protecting from, responding to, and recovering from all threats, hazards and incidents under the jurisdiction of DHS.

Built to enable collaboration through the use of web-based technology, HSIN facilitates collaboration among the various states, territories, the National Capital Region, and major urban areas. HSIN supports Department components and partners in the gathering, analysis and distribution of relevant, timely, and actionable mission-focused information across federal, state, and local government, and private industry COIs.

A request for nomination must be sent by a COI owner or an authorized nominator, or you must send a request for membership to a COI via e-mail to hsin.helpdesk@dhs.gov. Please include the COI to which you desire membership, your name, official e-mail address, organization, supervisor's name, and a phone number. Requests received via e-mail will be forwarded to the appropriate COI for consideration.

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CHAPTER 6: SEARCH AND RESCUE

This chapter outlines the services, agencies, and structure of Search and Rescue (SAR) operations in a Defense Support of Civil Authorities (DSCA) environment. Statutory responsibilities and areas of operation for routine SAR are also described.

6.1 Federal Search and Rescue Response

The Federal SAR Response System is composed of the primary agencies that provide specialized SAR operations during incidents or potential incidents requiring a coordinated federal response. In accordance with Emergency Support Function (ESF) #9, "Search and Rescue (SAR)," when activated, components of the Federal SAR Response System provide specialized lifesaving assistance to local, state, and tribal authorities.

SAR services include distress monitoring, communications, location of distressed personnel, and coordination and execution of rescue operations, including extrication or evacuation. Public and private resources provide medical and assistance and other civilian services to assist persons and property in potential or actual distress.

6.1.1 SAR Missions

SAR missions include the search for people, aircraft, snowmobiles, vehicles, etc. when the location of the potential survivor is unknown and the mission is time-sensitive. In such missions, location of the potential survivor is unknown and the mission is time-sensitive. SAR can be conducted by air, ground or water assets. Underground, underwater, and urban SAR are specialized skills, and the military can only provide general support to these missions. The assumption is that those being searched for are alive; otherwise the mission becomes a recovery mission.

6.1.2 Rescue Missions

Rescue missions recover injured or physically isolated survivor(s) when the location and condition of the survivor(s) are known and the

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mission is time-sensitive. Rescue missions can be conducted by air, ground, or water assets.

6.1.3 Body Recovery Missions

Body recovery missions involve collecting human remains at a known location. Searching for and recovering bodies is not considered a SAR mission; however, humanitarian interests and practical concerns may cause a SAR mission to evolve into a body recovery mission. Normally, county coroners or medical examiners will handle the removal of bodies, but under certain circumstances, they may require assistance. If human remains are discovered during a search mission, they should be preserved as well as possible until local authorities assume responsibility for them.

> Transitioning from rescue operations to recovery operations is a distinct and deliberate decision process that requires changing mission sets, resources, and timelines.

6.2 Policies

Immediate SAR operations are conducted in accordance with the National Search and Rescue Plan (NSP) and the U.S. National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual, which defines SAR responsibilities and provides guidance to the federal agencies with civil SAR mandates. The federal SAR response assists and augments state and local SAR capabilities in incidents requiring a coordinated federal response or in accordance with the NSP.

In incidents requiring a coordinated federal response and upon activation by Department of Homeland Security (DHS) under the National Response Framework (NRF), DHS/Federal Emergency Management Agency (FEMA) Urban Search and Rescue (US&R) task forces are considered federal assets under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) and other applicable authorities.

Other state-to-state SAR resources are requested by the affected state through the Emergency Management Assistance Compact (EMAC). Local SAR resources are requested by the affected locality through mutual aid and assistance agreements.

Animal SAR services provided by animal control agencies and humane organizations will be integrated with human SAR operations as required.

6.3 SAR Mission Types

SAR missions include:
- Structural collapse US&R
- Waterborne search and rescue
- Inland/wilderness search and rescue
- Aeronautical search and rescue

Canine searchers play a critical role during structural collapse incidents. Using their incredible sense of smell to detect live human scent, canines help search teams to locate victims, even those buried deep in the rubble.

Activation is dependent upon the nature and magnitude of the event and the suddenness of onset, in addition to the existence and relative location of SAR resources. The following sections describe the federal response to each of these missions.

6.3.1 Structural Collapse Urban Search and Rescue

US&R involves the location, rescue (extrication), and initial medical stabilization of victims trapped in confined spaces. Structural collapse is most often the cause of victims being trapped, but victims may also be trapped in transportation accidents, mines and collapsed trenches. DHS/FEMA serves as the primary agency during structural collapse US&R operations in incidents requiring a coordinated federal response. DHS/FEMA reimburses for authorized deployments to Stafford Act declaration sites.
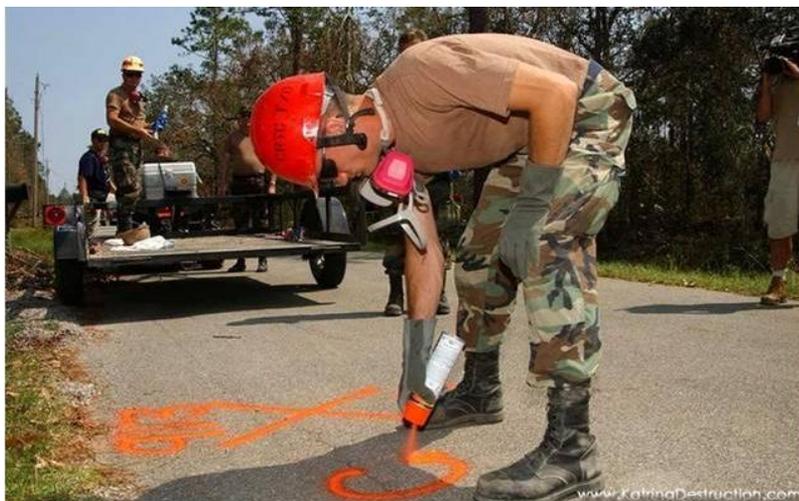
Senior Airman Shawn Muehler, 119th Fighter Wing firefighter, part secondary SAR team assigned to look for victims and survivors of storm surge of Hurricane Katrina, spray paints search symbol on the road. After search, the firefighter places a symbol on or near the home indicating the date of search, type of hazards, searching unit, and number of people found in the structure. (U.S. Air Force photo by Senior Master Sgt. David H. Lipp)

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The National US&R Response System integrates DHS/FEMA US&R task forces, Incident Support Teams (ISTs), and technical specialists. ISTs provide coordination and logistical support to US&R task forces during emergency operations.

ISTs also provide technical advice and assistance to state, tribal, and local government emergency managers. Technical specialists provide expertise in various US&R disciplines and are mobilized as needed.

6.3.2 Waterborne Search and Rescue

DHS/United States Coast Guard (USCG) serves as the primary agency and coordinator during waterborne or maritime SAR operations in incidents requiring a coordinated federal response.

Crew members of the Coast Guard Cutter Washington (WPB 1331) rescue three fishermen 50 miles south of Kauai, Hawaii, after they had been adrift for three days. (USCG photo by PA3 Eric Hedaa)

USCG develops, maintains, and operates rescue facilities for the promotion of safety on, under, and over waters subject to United States jurisdiction and has been designated as the lead agency for waterborne and maritime SAR under the NSP. USCG personnel are

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highly trained and experienced in waterborne SAR operations and possess specialized expertise, facilities, and equipment for carrying out responses to maritime distress situations. Additionally, USCG staffing at Area/District/Sector Command Centers promotes effective localized interaction, coordination, and communications with state, tribal, and local emergency managers during incidents requiring a coordinated federal response in which waterborne SAR resource allocation is required.

Operations include waterborne SAR operations for hurricane, dam/levee failure, and other disasters that primarily require USCG air, ship, and boat force operations.

Coast Guard HH-60 Jay Hawk helicopter lands next to an Air Force HH-60 Pave Hawk during search and rescue exercise in Nome, Alaska. (Coast Guard photo/Petty Officer 3rd Class Jon-Paul Rios)

6.3.3 Inland/Wilderness Search and Rescue

Department of Interior (DOI)/National Park Service (NPS) serves as the primary agency during inland, backcountry, remote area SAR operations in incidents requiring a coordinated federal response.

DOI/NPS has a congressional mandate to perform SAR and maintains a cadre of highly trained SAR providers that are specially trained to operate in their respective areas of responsibility. NPS integrates the SAR planning and capabilities of U.S. Fish and Wildlife Service, U.S. Geological Survey, and other DOI components.

6.3.4 Aeronautical Search and Rescue

United States Northern Command (USNORTHCOM)/Air Forces Northern (AFNORTH)/ Air Force Rescue Coordination Center (AFRCC) serves as the primary agency during SAR operations for aviation-related incidents requiring a coordinated federal response, both in open and wilderness areas and in the vicinity of airports and urban areas.

AFRCC is the SAR coordinator for the U.S. aeronautical Search and Rescue Region (SRR). The AFRCC is responsible for coordinating all federal inland commercial military and state aeronautical SAR in the contiguous U.S. United States Pacific Command (USPACOM) is the SAR coordinator for the U.S. aeronautical SRR in Alaska, Hawaii, and the U.S. possessions and territories in the Pacific.

6.4 Other Agencies Supporting SAR

6.4.1 U.S. Army Corps of Engineers

The responsibilities of the U. S. Army Corps of Engineers (USACE) in support of SAR include:
- Pre-incident training for DHS/FEMA task force/IST Structures Specialists, as well as for Department of Defense (DoD)/USACE Structures Specialists
- At the request of DHS, deployment of trained Structures Specialists and Technical Search Specialist teams to supplement US&R task forces and ISTs
- Assisting IST Engineering Cell and task forces with US&R efforts
- Structural engineering analysis, recommendations for hazard mitigation and shoring; ascertaining structural integrity and

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assessing whether buildings are safe to enter; building stability monitoring
- Hosting DoD Defense Support to Civil Authorities Automated Support System (DDASS) (see Section 5.2)

6.4.2 National Disaster Medical System

The Department of Health and Human Services provides National Disaster Medical System (NDMS) patient evacuation and continuing care after entrapped victims are removed from collapsed structures by US&R task force personnel when state and local emergency medical services resources are overwhelmed.

6.4.3 Customs and Border Patrol

DHS Customs and Border Patrol maintains Border Patrol Search, Trauma, and Rescue teams, which are highly specialized units capable of responding to emergency SAR situations anywhere in the United States. It also maintains air and marine assets to support SAR transportation operations.

6.4.4 Department of Labor

The Department of Labor Employment Standards Administration, through its Federal Employees' Compensation Program, provides workers compensation guidance, claims resolution, and coverage for US&R task force and IST personnel while they are engaged in training, mobilization, deployment, and field operations.

The Occupational Safety and Health Administration (OSHA) implements procedures contained in the Worker Safety and Health Support Annex to provide onsite technical assistance, including evaluation of SAR team exposure to hazardous substances and the dangers of structural collapse.

The Mine Safety and Health Administration assists with SAR and can provide mine rescue teams, mobile command centers, seismic location systems, television probe systems, gas sampling analysis, and robot explorers.

6.4.5 National Aeronautics and Space Administration

In support of SAR operations, the National Aeronautics and Space Administration (NASA):
- Provides personnel in appropriate technical disciplines, such as its Disaster Assistance and Rescue Team, to support US&R task forces and ISTs
- Provides and maintains training sites for use of US&R task forces and IST members
- Assists DHS with identification as well as research and development of new technologies for first responders
- Provides test-bed facilities for proof-of-concept and beta testing of new SAR technologies
- Provides temporary use of facilities for mobilization centers and staging areas for SAR assets

6.4.6 Civil Air Patrol

Civil Air Patrol (CAP) supports local, state, and federal search and rescue efforts upon request. See Chapter 4 for more information on CAP.

6.4.7 National Association for Search and Rescue

The National Association for Search and Rescue (NASAR) is a non-profit organization of volunteers and professionals. NASAR promotes development and improved coordination among all SAR-capable resources. Providing a national media for liaison and exchange of information among all SAR agencies, NASAR is dedicated to the advancement of professional, literary, and scientific knowledge and training in each SAR field. NASAR actively works toward developing improved coordination and communications among federal, state, local, and volunteer SAR groups.

Among the active volunteer organizations are the Mountain Rescue Association, National Ski Patrol, a number of SAR Dog organizations, numerous local volunteer SAR units, Dive Rescue units, Cave Rescue groups, and Four-Wheel Drive organizations. Even though these volunteer organizations are not federal assets, the

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AFRCC maintains a resource file of them. When commercial transportation is not available or timely for these resources, federal resources may be used, coordinated through the AFRCC, to transport volunteer units in an effort to save lives.

6.4.8 State Agencies

Most states have a specific responsibility for non-coastal search and rescue. This may be a state agency without aircraft, or in other cases, a complete well trained, responsive SAR organization with state-salaried mission coordinators and state-owned aircraft. AFRCC involvement with specific states differs depending upon the individual state's assumption of SAR responsibility. Established SAR agreements between each state's governor and the executive agent for inland SAR specify exactly who is responsible for the various emergencies and which agency will assume mission control.

When state SAR agencies elect to retain SAR mission responsibility, the AFRCC will continue to assist by coordinating the response of requested federal resources.

6.5 For More Information

Alaska 11th Rescue Coordination Center (RCC)
http://www.176wg.ang.af.mil/units/11rcc.asp

Association for Rescue at Sea
http://www.afras.org

Civil Air Patrol
http://www.cap.gov/

Department of the Interior
http://www.doi.gov/

FEMA SAR
http://www.fema.gov/emergency/usr/

National Aeronautics and Space Administration Search & Rescue
http://searchandrescue.gsfc.nasa.gov/

National Institute of Urban SAR http://niusr.org/

National Oceanic and Atmospheric Administration (NOAA) Search
and Rescue Satellite-aided Tracking
http://www.sarsat.noaa.gov/

National Park Service
http://www.nps.gov/

National SAR Committee
http://www.uscg.mil/hq/cg5/cg534/NSARC.asp

U.S. Air Force RCC (Tyndall AFB)
http://www.1af.acc.af.mil/units/afrcc/

USCG/National SAR School
http://www.uscg.mil/tcyorktown/Ops/SAR/default.asp

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CHAPTER 7: MEDICAL CAPABILITIES

Military medical capabilities may be requested to augment or sustain federal, state, or local medical assets in order to save lives and minimize human suffering. This chapter gives a brief overview by Service of some of those capabilities. Military medical forces will remain under command and control of U.S. military commanders but will support the Department of Health and Human Service (HHS).

7.1 Background

The Department of Health and Human Services (HHS) provides the primary federal medical response elements in a domestic event. HHS, through Emergency Support Function (ESF) #8, "Public Health and Medical Services," may request DoD patient movement in support of Defense Support of Civil Authorities (DSCA). The Joint Task Force (JTF) will coordinate all military medical actions with the national HHS Secretary Operations Center/National Disaster Medical System (NDMS) Operations Support Center.

> Medical assets deployment and set-up is a lengthy process and could take days before medical capabilities are established and ready to receive patients.

Before providing medical assistance, medical commanders should fully understand the parameters outlined in Title 10 United States Code (USC) and applicable DoD directives. Upon activation by the National Command Authorities (NCA), medical forces will remain under command and control of U.S. military commanders but will support HHS.

> Medical personnel may wish to review information on tort liability and immunity in Section 5.12 of the *Tactical Level Commander and Staff Toolkit* (GTA 90-01-020).

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7.2 United States Army Medical Capabilities

7.2.1 Combat Support Hospital (CSH) (248 Bed)

7.2.1.1 Mission

To provide hospitalization and outpatient services for all classes of patients within the theater.

7.2.1.2 Capabilities

- Hospitalization for up to 248 patients
  The hospital includes a headquarters and headquarters detachment and two completely functional hospital companies, one 84-bed and one 164-bed. Collectively, this hospital has four wards capable of providing intensive nursing care for up to 48 patients, and ten wards providing intermediate nursing care for up to 200 patients.
- Emergency treatment to receive, triage, and prepare incoming patients for surgery
- Surgical capability including general, orthopedic, thoracic, urological, gynecological, and oral maxillofacial, based on 6 operating room tables staffed for 96 operating table hours per day
- Consultation services for inpatients and outpatients to include area support for units without organic combat health support services
- Pharmacy, psychiatry, community health nursing, physical therapy, clinical laboratory, blood banking, radiology, and nutrition care services
- Routine and emergency dental treatment to staff and patients
- Medical administrative and logistical services
- Information to higher headquarters on patients' status within the Area of Operations (AO)
- Laundry for patient related linens

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High Demand Task Organizations
Medical Capabilities

7.2.1.3 Medical Team, Forward Surgical

Mission

To provide a rapidly deployable, urgent initial surgical service forward in the brigade AO.

Capabilities

- Continuous operations in conjunction with a supporting medical company for up to 72 hours
- Urgent initial surgery for otherwise non-transportable patients
- Emergency treatment to receive, triage, and prepare incoming patients for surgery; provide required surgery and continued postoperative care for up to 30 critically wounded/injured patients over a period of 72 hours with its organic medical equipments sets
- Post-operative acute nursing care for up to 8 patients simultaneously per team prior to further patient evacuations
- Technical advice and assistance to the surgeon's section for the surgical services portion of the division plans and policies
- Current information concerning surgical augmentation of Role 2 Medical Treatment Facilities (MTFs) to higher headquarters
- Team augmentation of the surgical capability of Role 3 hospitals

7.2.2 Medical Company, Ground Ambulance

7.2.2.1 Mission

To provide ground evacuation within the theater of operations.

7.2.2.2 Capabilities

- Single lift evacuation of 96 litter patients or 192 ambulatory patients
- Evacuation of patients from Brigade Combat Team (BCT) medical companies and area support medical companies to supporting hospitals
- Reinforcement of BCT medical company evacuation assets
- Reinforcement of covering force and unassigned area operations

- Movement of patient between combat support hospitals and aeromedical staging facilities, aeromedical staging squadrons, mobile aeromedical staging facilities, and railheads or seaports at Echelons Above Brigade (EAB)
- Area evacuation support beyond the capabilities of the area support medical company
- Emergency movement of medical personnel and supplies
- Medical evacuation of wounded or injured Soldiers from the point of injury to supporting ambulance exchange point or MTF
- Field feeding and vehicle refueling support for the medical battalion (multifunctional) when collocated

7.2.3 Area Support Medical Company

7.2.3.1 Mission

To provide Roles 1 and 2 Army Health System support to units located in the AO of the Area Support Medical Company (ASMC).

7.2.3.2 Capabilities

- Treatment of patients with disease and minor injuries, triage of mass casualties, initial resuscitation/stabilization, advanced trauma management, and preparation for further evacuation of ill, injured, and wounded patients who are incapable of returning to duty within 72 hours
- Treatment squads which are capable of operating independently of the ASMC for limited periods of time
- Evacuation of patients from units within the ASMC's supported area to the treatment squads of the ASMC
- Emergency medical supply/resupply to units operating within the ASMC's supported area
- Behavioral health consultation and support, to include coordinating operations of attached combat and operational stress control elements operating within the AO of the ASMC
- Pharmacy services and multi-shift laboratory and radiological services commensurate with Role 2 medical treatment

- Emergency dental care to include stabilization of maxillofacial injuries, sustaining dental care designed to prevent or intercept potential dental emergencies, and limited preventive dentistry
- Patient holding for up to 40 patients per ASMC
- Outpatient consultation services for patients referred from units with only Role 1 medical capabilities
- Food service support for staff and patients

7.2.4 Medical Detachment, Preventive Medicine

7.2.4.1 Mission

To provide preventive medicine support and consultation in the areas of Disease and Non-Battle Injury (DNBI) prevention, field sanitation, entomology, sanitary engineering, occupational and environmental health surveillance, and epidemiology to minimize the effects of environmental injuries, enteric diseases, vector-borne disease, and other health threats on deployed forces in the theater.

7.2.4.2 Capabilities

- Provides surveillance and control of disease vectors and reservoirs in assigned areas
- Monitors pest management, field sanitation, water treatment and storage, waste disposal, and DNBI control practices of units in assigned areas, providing advice and training as necessary
- Investigates and evaluates pest management, sanitation, water supply, waste disposal practices and other environmental health-related problems, recommending corrective measures as necessary
- Conducts medical surveillance activities in the supported area, to include coordinating, compiling, analyzing, and reporting medical surveillance data to assist in evaluating conditions affecting the health of the supported force
- Provides limited entomological control of disease vectors and reservoirs in assigned areas
- Conducts epidemiological investigations

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High Demand Task Organizations
Medical Capabilities

- Collects environmental samples and specimens and performs selected analyses or evaluations to assist in assessment of the health threat
- Coordinates Chemical, Biological, Radiological, and Nuclear (CBRN)-related biological specimen collection and environmental sampling and monitoring and evaluation with treatment, CBRN, laboratory, and intelligence personnel on the integrated battlefield
- Divides into three teams, as necessary, to perform assigned missions
- Monitors casualties, hospital admissions, and reports of autopsy for signs of chemical or biological warfare agent use

7.2.5 Medical Detachment, Veterinary Service Support

7.2.5.1 Mission

To provide dispersed Veterinary Roles 1 and 2 medical and resuscitative surgical care; Veterinary Role 3 comprehensive canine medical/surgical care and evacuation/hospitalization support for military and contractor working dogs; endemic zoonotic and animal disease epidemiology surveillance and control; animal holding facility and kennel inspections; commercial food source audits for Department of Defense (DoD) procurement; food safety, quality, and sanitation inspections; food defense vulnerability assessments; food and water risk assessments; food microbiological and chemical laboratory diagnostics for supported units; and foreign humanitarian assistance programs in support of all branches of the Service throughout the AO.

7.2.5.2 Capabilities

- Command and control of 3 to 6 subordinate teams or detachments in the supported area
- Veterinary support to foreign humanitarian assistance programs
- Coordination with supported logistical organizations for food safety support and with supported organizations that have government-owned animals in the AO

- Teams capable of operating in 6 to 12 locations within a 70-kilometer radius
Each veterinary service support team or food procurement and laboratory team can further divide into 2 teams. Each team is capable of supporting 10,000 personnel. Teams are capable of providing veterinary support in two different geographical locations simultaneously by deploying functional elements of its modularly designed team.
- Veterinary Roles 1 and 2 medical care for up to 50 Military Working Dogs (MWDs) (each veterinary service support team is capable of supporting 10 MWDs)
- Coordination of MWD evacuation to Veterinary Role 3 (veterinary medicine and surgical team) and beyond to Continental United States (CONUS) facilities
- Veterinary Role 1 medical care for large animals, including horses, livestock (cattle, sheep, goats, and pigs), and Navy marine mammals
- Food procurement and laboratory team (x1)
  - Food laboratory diagnostics support
  - Audits of commercial and military food establishments, to include assessment of potential military construction sites for food production or storage in the AO
  - Food defense vulnerability and food and water risk assessments
  - Surveillance inspection for CBRN contamination of Class I subsistence as required; guidance on the disposition of CBRN-contaminated subsistence
  - Food procurement team and food diagnostic laboratory deployment to separate locations
- Veterinary medicine and surgical team (x1)
  - Veterinary Roles 1, 2, and 3 canine medical care
  - Veterinary Role 3 hospitalization, comprehensive veterinary clinical care, and consultation services
  - Coordination for theater evacuation and receiving to Veterinary Role 4 hospitals in CONUS
- Veterinary service support team (x5)

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- o Early entry capability to provide Veterinary Roles 1 and 2 medical care to 10 MWDs and initial theater food inspection requirements for 10,000 personnel
- o Food safety and sanitation support for up to 10,000 personnel
- o Food laboratory diagnostics support in the AO
- o Commercial and military establishment audits to include assessment of potential military construction sites for food production or storage in the AO
- o Food defense vulnerability and food and water risk assessments in the AO
- o Surveillance inspection of CBRN contamination of Class I subsistence in the AOs
- o Two food inspection teams deployment to two separate locations to maximize food safety and defense support throughout the AO

7.2.6 Medical Detachment, Combat and Operational Stress Control

7.2.6.1 Mission

To provide combat and operational stress control prevention and treatment services in direct support of BCT and EAB units on an area basis.

7.2.6.2 Capabilities

- Planning and advice to the command and surgeon regarding the stressors affecting the Soldiers behavioral readiness, morale, and cohesion
- Preventive consultation and stress education support to leaders, chaplains, and medical personnel
- Neuropsychiatric care, triage, and stabilization
- Assistance to non-medical units with combat and operations stress reaction casualties and the return to duty of recovered Soldiers
- Holding/restoration capability of 50 Soldiers for up to 3 days

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- Reconstitution to supported units
- Debriefing after critical events and after action reports

7.2.7 Air Ambulance Medical Company

7.2.7.1 Mission

To provide aeromedical evacuation support throughout the AO.

7.2.7.2 Capabilities

- Twelve helicopter ambulances to evacuate critically wounded or other patients consistent with evacuation priorities and operational considerations, from points as far forward as possible, to Roles 1 and 2 medical treatment facilities and combat support hospitals at EAB (Single patient lift capability for the HH-60s is 72 litter patients or 84 ambulatory patients, or some combination thereof)
- Four forward support medical evacuation teams (3 helicopters each), independently or group deployed
- Air crash rescue support
- Expeditious delivery of whole blood, biological, and medical supplies to meet critical requirements
- Rapid movement of medical personnel and accompanying equipment/supplies to meet the requirements for mass casualty, reinforcement/reconstitution, or emergency situation
- Movement of patients between hospitals, aeromedical staging facilities, hospital ships, casualty receiving and treatment ships, seaports and railheads at EAB and brigade and below

7.2.8 Medical Logistics Company

Mission

To provide direct support for medical materiel, medical equipment maintenance and repair, optical lens fabrication and repair, and patient movement items to BCTs and EAB medical units operating within the AO.

Capabilities

- Class VIII, single and multi-vision optical fabrication and repair, and medical equipment maintenance support to a maximum force of 22,000 Soldiers
- Reception, classification, and issue of up to 11.1 short tons of Class VIII supply
- Storage for up to 51 short tons of Class VIII supplies
- Building and positioning Class VIII support packages as required, in support of BCT EAB medical units or contingencies
- Field- and sustainment-level maintenance for medical equipment belonging to medical units operating in the AO and capable of deploying three contact repair teams
- Reconstitution of medical logistics units, sections, or teams
- Coordination for emergency delivery of Class VIII supplies
- One food service specialist to supplement the food service section of the unit to which it is assigned or attached
- Internal unit maintenance
- Single integrated medical logistics management supply and requisition processing mission for all joint forces in the theater, when so designated by the combatant commander

7.3 United States Navy Medical Capabilities

7.3.1 Amphibious Assault Ships WASP Class

7.3.1.1 Mission

To support Marine Landing Forces.

7.3.1.2 Capabilities

The amphibious assault ships (multipurpose) (LHD) class ships are the first specifically designed to accommodate new Landing Craft, Air Cushion for fast troop movement over the beach and Harrier II (AV-8B) Vertical/Short Take-Off and Landing jets which provide close-in air support for the assault force. The LHD also accommodates the full range of Navy and Marine Corps helicopters, conventional landing craft, and amphibious vehicles.

LHD-1 has medical and dental facilities capable of providing intensive medical assistance to 60 patients per day for 1 day, 40 patients per day for 4 days, and 30 patients, sustained, based on patient evacuation policy of 24 hours, whether combat incurred or brought aboard ship during humanitarian missions. The Corpsmen also provide routine medical/dental care to the crew and embarked personnel.

Major medical facilities include:
- 4 main and two emergency operating rooms
- 4 dental operating rooms
- X-ray rooms
- Laboratories
- Patient wards
- 3 battle dressing stations
- Casualty collecting area at the flight deck level
- Medical elevators to rapidly transfer casualties from flight deck and hangar bay to medical facilities

Organic staff provides support for 3 Intensive Care Unit (ICU) beds and 10 ward beds. With an augmentation package, LHD provides surgical capability of:
- Four Operating Rooms (ORs)
- 15 ICU/recovery beds
- 45 ward/holding beds
- Blood bank capacity of 400 frozen blood units
- Fresh Frozen Plasma (FFP) and a walking blood bank

These assets may be used for humanitarian and disaster relief missions.

7.3.2 Amphibious Assault Ships Tarawa Class (LHA)

7.3.2.1 Mission

To land and sustain United States Marines on any shore during hostilities.

7.3.2.2 Capabilities

LHA ships serve as the centerpiece of a multi-ship Amphibious Readiness Group (ARG).

The Medical Department provides primary health care and emergency capabilities to the ship's crew and embarked troops. It is capable of providing medical assistance to 60 patients per day for 1 day, 40 patients per day for 4 days, and 30 patients, sustained, based on patient evacuation policy of 24 hours. It consists of more than 4 ORs, and a host of other support facilities. The Dental Department, consisting of three treatment rooms, provides primary dental care and emergency capabilities to the ship's crew and embarked troops.

Organic staff provides support for 3 ICU beds and 10 ward beds. With an augmentation package, it provides surgical capability:
- 2 ORs
- 15 ICU/recovery beds
- 45 ward/holding beds
- Blood bank capacity of 400 frozen blood units
- FFP and walking blood bank
- Full dental facilities
- Orthopedics, trauma, general surgery, and x-ray capabilities

Additionally, these assets may be used for humanitarian and disaster relief missions.

7.3.3 Hospital Ship (Mercy Class)

7.3.3.1 Mission

To provide emergency, on-site care for U.S. combatant forces deployed in war or other operations.

7.3.3.2 Capabilities

Two hospital ships, operated by Military Sealift Command, have two missions: first, to provide a mobile, flexible, rapidly responsive afloat medical capability for acute medical and surgical care in support of amphibious task forces, Marine Corps, Army, and Air

Force elements, forward deployed Navy elements of the fleet and fleet activities located in areas where hostilities may be imminent; secondly, to provide a full-service hospital asset for use by other government agencies involved in the support of disaster relief and humanitarian operations worldwide.

United States Naval Ship (USNS) Mercy (T-AH 19) and USNS Comfort (T-AH 20) each contain:
- 12 fully-equipped ORs
- 1,000 bed hospital facility
- Digital radiological services
- Medical laboratory
- Pharmacy
- Optometry lab
- CAT-scan
- 2 oxygen producing plants
- Helicopter deck capable of landing large military helicopters
- Side ports to take on patients at sea

7.3.4 Forward Deployed Preventive Medicine Unit (FDPMU)

Mission

To provide Force Health Protection (FHP) by rapidly assessing, preventing, and controlling health threats in a theater of operations and enhancing organic preventive medicine assets.

7.3.5 Fleet Surgical Team (FST)

Capabilities

- Medical and disease vector surveillance operations
- Endemic/infectious disease assessment
  Rapid detection of chemical, biological, radiological, or environmental hazards
- First responder support with on-site and deep reach back analytical, consultative capabilities

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7.4 United States Air Force Medical Capabilities

7.4.1 Small Portable Expeditionary Aeromedical Rapid Response Team

7.4.1.1 Mission

To provide a very rapid response, extremely mobile, and highly clinically capable medical asset in support of a wide spectrum of Expeditionary Aerospace Force contingency missions.

The Small Portable Expeditionary Aeromedical Rapid Response (SPEARR) Team enhances global health by providing force health protection for up to 500 contingency/disaster support personnel, or 500 Population at Risk (PAR), for an initial period of five to seven days. Sustainment or resupply capability (10 day resupply consistent with other Expeditionary Medical Support (EMEDS) modules) ensures continued medical care and force health protection, when required.

The PAR may be comprised of all U.S. military personnel or include a combination of international military and civilian personnel in a coalition operation. The scope of care includes public health/preventive medicine, flight medicine, primary care, emergency medicine, emergency surgery, perioperative care, critical care stabilization, patient preparation for aeromedical transport, and aeromedical evacuation coordination/communication.

7.4.1.2 Capabilities

The SPEARR Team is capable of being ready for deployment within two hours of initial mission notification. This rapid response time is site specific and is the best-case scenario for SPEARR Team response. The two-hour response time is dependent on the collocation of personnel and equipment and on a team standing "on call" or "Bravo" alert at all times.

The team functions as an EMEDS Unit Type Code (UTC) module which is comprised of 4 UTCs: the Prevention and Aerospace Medicine (PAM) Advance Echelon (ADVON) Team, the Mobile

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Field Surgical Team, the Expeditionary Critical Care Team, and the equipment only Expanded Capability and Infrastructure Module.

The team may deploy in a man portable mode (backpacks, medical bags, and personal equipment only) without the Expanded Capability and Infrastructure Module or in a one pallet equivalent trailer mode, which allows independent operations for five to seven days.

Flexibility is essential in the programming, planning, and deployment process to allow for the most efficient deployment of both the SPEARR Team and the EMEDS Basic (i.e., larger Air Expeditionary Force (AEF) deployments). To achieve this flexibility and rapid response capability may require positioning of similar deployable assets at both Lead Wings and Medical Centers. These positioning factors must be accurately reflected in documents such the Medical Resource Letter in order to be applied with crisis action and deliberate planning tools.

7.4.2 Expeditionary Medical Support

7.4.2.1 Mission

To deploy rapidly and provide forward stabilization, primary care, dental services, force health protection, and to prepare air and space expeditionary forces and/or civilian casualties (as appropriate) for aeromedical evacuation.

Components deploy in various combinations to support a specific theater/regional population size and deployment scenario. Support rapidly deploys in a modular, incremental and interoperable manner, using components as building blocks to support the scenario. Additionally, personnel and equipment packages may be tailored, replicated, or combined with previously deployed UTCs to reach the desired capability effect.

Base level and major command level coordination with Civil Engineer Squadrons regarding required expeditionary combat support, in light of EMEDS reduced organic capability, is essential. Once delivered to an operational site, base support personnel are required to connect this system to the base infrastructure. Base

support service requirements include, but are not limited to, contracting, billeting, food service, general supplies, sewage and waste disposal, potable water, electrical power, laundry, fire protection, transportation, vehicle maintenance, and communications (including radio maintenance) to support EMEDS and its staff.

7.4.2.2 Capabilities

SPEARR. The SPEARR consists of PAM ADVON, PAM Team Portable Equipment, Critical Care, Critical Care Equipment, Mobile Field Surgical Team (MFST), MFST Equipment, SPEARR Equipment, and MFST Resupply.

EMEDS Basic. Additional UTCs comprising the EMEDS Basic are the PAM Team 2, PAM Team Sustainment Equipment, Primary Care Team/Flight Medicine Team, C2/Med, EMEDS Basic Nursing Augmentation, Dental Augmentation Team (DAT), Equipment, and Resupply. The EMEDS package requires sufficient square footage for surgical, pre- and post-operative care, dental, primary care, and ancillary services within one contiguous shelter system. Minimum shelter size is 1,950 square feet. EMEDS is resourced with supplies and personnel for a separate flight line clinic at the discretion of the deployed force commander who must support this with space (minimum of 100 square feet) and Expeditionary Combat Support (ECS). The entire EMEDS Basic supports a deployed PAR of 1500-3000 personnel for seven days without re-supply. Transportation for multiple 463L pallets is required.

EMEDS+10. This package adds 10-Bed Personnel Augmentation Team, PAM Team 3, Equipment and Resupply to an EMEDS Basic package. This medical treatment facility includes an emergency room, a surgical suite, and a 10-bed inpatient ward. EMEDS+10 is employed for quick response to expand the EMEDS Basic force package when limited numbers of casualties are expected. Personnel work closely with Aeromedical Evacuation (AE) ground medical support UTCs for enhanced patient support until patients are evacuated. The EMEDS+10 supports a deployed PAR of 3000-5000 for seven days without re-supply.

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EMEDS+25. This package adds 25-Bed Personnel Augmentation, Surgical Augmentation, Equipment, Resupply and an additional DAT to the EMEDS+10 force package. EMEDS+25 supports a deployed force of 5000-6500 personnel for seven days without re-supply.

7.4.3 Mobile Aeromedical Staging Facility (MASF)

7.4.3.1 Mission

To provide rapid response patient staging, limited holding and AE crew support capability to support Standard Systems Centers (SSCs), humanitarian and civil disaster response operations, and major theater wars.

The MASF is normally located at or near airheads capable of supporting mobility airlift. The MASF is designed to provide forward support with the smallest footprint. It is made up of three short crews, communications, liaison, and patient care teams.

When crews are tasked from the MASF, they should be rapidly backfilled because the nurses and techs are also utilized for patient holding capability. The MASF includes a capability to receive patients, provide supportive patient care, and meet administrative requirements on the ground while awaiting AE. Critical Care Air Transport Teams (CCATTs) should be assigned to every forward based MASF to enhance rapid evacuation. The MASF brings tents for patient care but will often use a building of opportunity to conduct DSCA AE operations.

The communications capability assigned to the MASF may be integrated into the tanker/airlift control element or operations cell. An individual may be identified to work with the aerial port element on the flight line to coordinate AE load planning, configuration, and operational support.

7.4.3.2 Capabilities

MASF personnel duties include:
- Patient reception

- Medical care to patients transiting through the AE system
- Supportive nursing care
- Administrative support
- Self-supporting tasks
- Holding capability for patients entering the AE system

The MASF is equipped and staffed for routine processing of up to 50 patients at a time. It can process 140 patients every 24 hours, usually holding patients up to 6 hours. Because it has no beds, patients remain on the litters provided by the originating facility.

7.4.4 Aeromedical Evacuation Liaison Team (AELT)

7.4.4.1 Mission

To provide support between the forward user and the AE system in the form of operational and clinical interface.

7.4.4.2 Capabilities

The operational and clinical interface may occur at locations that do not otherwise have Air Force personnel on them such as far forward/bare bases and shipboard. An AELT may be geographically separated from the other Air Force assets. The flight nurse on the team assists the medical unit in preparing AE patients for flight. The administrative officer is responsible for working with the airlift center and aerial port element to ensure the aircraft is properly configured, and equipment pallets, patients, and AE support personnel are properly manifested on the AE mission. Communications personnel will be integrated into the airlift operations element supporting flight line operations or the Wing Operations Center (WOC). Establishing a communication network with airlift operations is essential for rapid evacuation.

7.4.5 Medical Global Reach Laydown Team

7.4.5.1 Mission

To provide preventive medicine support to the following mission categories:

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- Phoenix Banner – Peacetime Presidential mission support
- Expeditionary Site Surveys – Tactical Air Coordination Center (TALCE) ADVON Team initial laydown activities
- Gas and Go – Routine TALCE aircraft refueling operations
- Bare Base – TALCE personnel perform pre-deployment site survey to support follow-on force build-up
- Air Bridge – A series of enroute locations outlining an air route of travel for rapid deployment and sustainment of forces
- Non-combatant Evacuation Operations (NEO) – Preparing the airfield in support of NEO operations
- Contingency Response Group (CRG) – Medical Global Reach Laydown Team is assigned to CRG to provide medical support during rapid opening of contingency airfields; purpose is to bring significant order, foresight, speed, and safety during the crucial opening days of a contingency.

7.4.5.2 Capabilities

Medical Global Reach Laydown Team capabilities are designed to reduce the impact of DNBI on mission accomplishment in contingency operations and provide limited medical support. The Medical Global Reach Laydown Team deploys with the TALCE/Medical Strike Team (MST) and assesses the health risks associated with environmental and occupational health hazards. More specifically, in support of establishing a potential Main Operating Base (MOB) in a forward deployed location, the Medical Global Reach Laydown Team:

- Provides medical input into the proper lay-down of installation facilities
- Determines adequacy of local billeting and public facilities
- Evaluates local medical capabilities
- Recommends locations for medical facilities
- Evaluates the safety and vulnerability of local food and water sources
- Assesses occupational and environmental hazards
- Performs vector/pest risk assessment
- Provides medical intelligence

- Performs epidemiological risk assessments
- Performs health risk assessments
- Performs initial NBC planning and surveillance
- Provides limited medical support, emergency planning and response

7.5 Joint Regional Medical Planner (JRMP)

7.5.1 Mission

Strategic/Theater NORTHCOM (NC) Area of Responsibility (AOR) (pre-incident): To understand risks and vulnerabilities as well as emergency response capabilities and build mutually beneficial relationship networks aimed at improved understanding, communication and medical response capabilities.

Regional/Local (during and post incident): To support the Defense Coordinating Officer (DCO)/Defense Coordinating Element (DCE) and/or Joint Force Commander (JFC) in facilitating the right medical capability to the right place at the right time to save lives, reduce suffering, and preserve critical infrastructure

The Program Manager/Division Chief is an O-5/O-6 positioned at Peterson Air Force Base, Colorado Springs, Colorado. There are four Joint Regional Medical Plans and Operations (JRMPO) branches with personnel that operate from Fort Meade, Maryland (Northeast Region), Fort McPherson, Georgia (Southeast Region), Fort Sam Houston, Texas (Southwest Region), and Fort Lewis, Washington (Northwest Region). Each JRMPO branch is represented by an officer from the United States Army, Navy, and Air Force, providing expertise in joint medical plans and operations.

7.6 Patient Movement

To move patients out of a disaster area, local authorities establish casualty collection points. Transportation support may include commercial aviation companies, private organizations, and individual citizens. If local medical services are inadequate, local authorities request state assistance.

A state may operate regional evacuation points. When local authorities request state assistance, support may include the National Guard ground and aviation assets. If state and local authorities are unable to establish casualty collection points or regional evacuation points, they may request federal authorities to rapidly deploy teams, such as U.S. Public Health Service Commissioned Corps teams, to assist. If resources still are inadequate, local and state authorities can request additional federal medical evacuation assistance.

When necessary, the Department of Health and Human Services requests federal military support through ESF #8 for evacuating seriously ill or injured patients. Federal military support may include providing transportation assets, operating and staffing NDMS federal coordinating centers, and processing and tracking patient movements from regional evacuation points to reception facilities. DoD takes the lead for federally managed evacuation efforts.

The United States Transportation Command (USTRANSCOM) Global Patient Movement Requirements Center may deploy a joint patient movement team. A joint patient movement team regulates and tracks all patients, including civilians, transported on DoD assets to reception facilities.

USTRANSCOM coordinates DoD transportation assets and establishes aeromedical evacuation centers. The most seriously ill patients are evacuated by air. Depending on the nature and scope of the disaster, transportation may be by Air Mobility Command, Military Surface Deployment and Distribution Command, or Military Sealift Command.

Civilian medical teams meet patients at the reception facilities. These teams determine which patients will go to which NDMS hospitals. Procedures are based on local agreements and advance coordination among NDMS federal coordinating centers and hospitals. Transportation directly to the hospitals is by local ground and air transport.

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High Demand Task Organizations
Medical Capabilities

7.7 Civilian Medical Capabilities

7.7.1 Taxonomy of Care

Health Service Support (HSS) offers seven distinctive and overlapping care capabilities that enhance performance in a military force (see Figure 7-1). They include medical resources – personnel, materiel, facilities, information, and the organizational enabling capacity to deliver HSS.
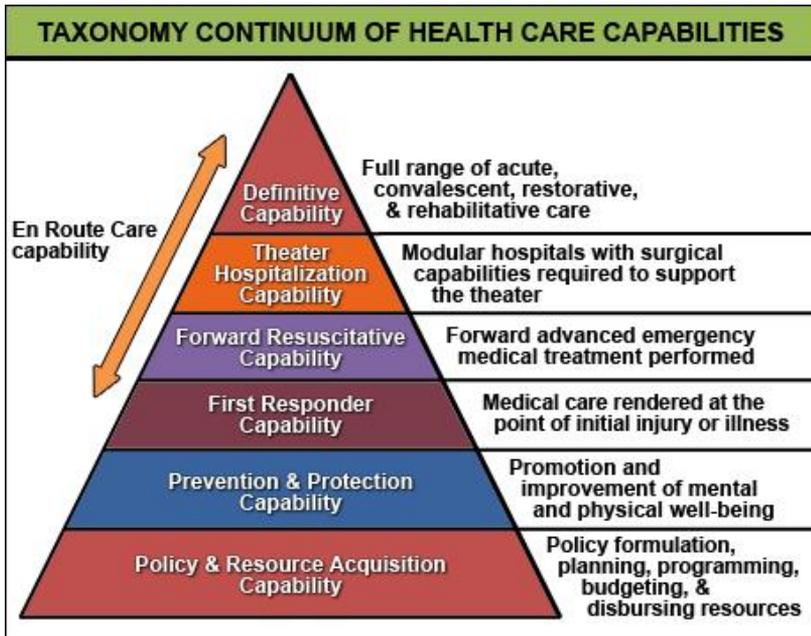
Figure 7-1. Taxonomy Continuum of Health Care Capabilities

7.7.2 Civilian State Emergency Management Agency

The duties and responsibilities of civilian State Emergency Management Agencies (SEMA) include preparing for and implementing DoD and United States Northern Command (USNORTHCOM) policies, procedures, directives, instructions, plans, and orders in support of Homeland Defense (HD), Homeland

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Security (HS), and DSCA missions related to consequence management activities. These duties and responsibilities fall into four primary categories: 1) emergency response planning; 2) emergency response training and exercises; 3) relationship building; 4) and emergency/disaster response.

7.7.3 National Disaster Medical System

National Disaster Medical System organizes a coordinated effort by the NDMS federal partners, working in collaboration with the states and other appropriate public or private entities to provide health services, health-related social services, other appropriate human services and appropriate auxiliary services to respond to the needs of victims of a public health emergency and to be present at locations, for limited periods of time, when such locations are at risk of a public health emergency. NDMS also provides resources and assets to support federal government activities under ESF #8. Furthermore, the federal partners agree that NDMS also continues the availability of the NDMS hospital network as backup to military and veterans' hospitals in a military health emergency.

The NDMS serves the federal response by providing disaster medical care to the nation. NDMS will temporarily supplement local, state, tribal, and federal capabilities by funding, organizing, training, equipping, deploying, and sustaining a specialized and focused range of public health and medical capabilities.

7.7.4 Federal Coordinating Centers

NDMS Federal Coordinating Centers (FCCs) play a critical role in the successful organization and operation of the system in the local community or communities for which they have been assigned responsibility. The FCCs will:
- Represent the NDMS
- Solicit/organize community participation
- Facilitate/maintain hospital enrollment
- Collect/report hospital bed availability data
- Coordinate NDMS patient reception area plans

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- Coordinate training and exercises
- Coordinate local NDMS patient reception operations
- Coordinate discharge and return of patients
- Coordinate financial management
- Facilitate communications

7.7.4.1 FCC Coordinator

The responsibilities of the FCC Coordinator include:
- Collaboration with local, regional, and state disaster emergency services agencies, hospitals, and disaster medical and public health services officers
- Maintaining an up-to-date list of resources and participants in the NDMS
- Ensuring adequate staffing to operate program
- Recruiting and obtaining Memoranda of Understanding (MOUs) with civilian hospitals
- Managing distribution and record keeping for all patients
- Coordinating with NDMS partners for currency of policy
- Ensuring education of NDMS-affiliated civilian hospitals
- Coordinating an annual NDMS exercise

7.7.4.2 Role of Participating Civilian Hospitals

Civilian hospitals will:
- Voluntarily commit their facilities to NDMS
- Participate in NDMS exercises
- Provide a daily bed availability report to the local FCC
- Provide a daily admission and disposition list of NDMS patients (indicating the expected length of stay)
- Provide a release of information authorization
- Provide a narrative summary upon discharge of each NDMS patient

7.7.5 Disaster Medical Assistance Team

Disaster Medical Assistance Teams (DMATs) are mobile NDMS teams comprised of professional and para-professional medical personnel (supported by a cadre of logistical and administrative staff)

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designed to provide medical care in response to a disaster or other major emergency. DMATs are self-sustaining for up to 72 hours, with the ability to provide medical triage, treatment, and preparation for evacuation, using a standard equipment cache to conduct medical operations. DMATs typically have a standard 35-person team including command/support/staff and health care provider positions.

7.7.6 National Veterinary Response Team

The National Veterinary Response Team (NVRT) is a cadre of individuals within the NDMS system who have professional expertise in areas of veterinary medicine, public health, and research. In addition to supporting the NRF mission requirements of NDMS under ESF #8, operational support may also be rendered by the NVRT to other federal partners such as the United Sates Department of Agriculture under ESF #11, "Agriculture and Natural Resources," and Federal Emergency Management Agency (FEMA) under ESF #6, "Mass Care," in the support of the Pets Evacuation and Transportation Standards (PETS) Act**.**

The NVRT provides assistance in identifying the need for veterinary services following major disasters, emergencies, public health, or other events requiring federal support and in assessing the extent of disruption to animal and public health infrastructures. These responsibilities include:
• Assessing the veterinary medical needs of the community
• Medical treatment and stabilization of animals
• Animal disease surveillance
• Zoonotic disease surveillance and public health assessments
• Technical assistance to assure food safety and water quality
• Hazard mitigation
• Care and support of animals certified as official responders to a disaster or emergency

NVRT members are private citizens who volunteer to be activated in the event of a disaster. The teams are comprised of individuals with diverse expertise to include veterinarians, animal health technicians, pharmacists, epidemiologists, safety officers, logisticians,

communications specialists, and other support personnel. These individuals are assigned to designated teams which train in preparation for what might be experienced during a response. They are enabled by a regional cache of equipment, supplies and pharmaceuticals. Teams provide assessments, technical assistance, public health, and veterinary services under the guidance of state and/or local authorities.

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CHAPTER 8: MORTUARY AFFAIRS

Under the National Response Framework, fatality management falls under Emergency Support Function (ESF) #8, "Public Health and Medical Services" with the Department of Health and Human Services as the Primary Agency (PA). DoD personnel will almost always be acting in support of another federal agency or local authority. This chapter provides information on how DoD provides mortuary affairs assistance to civil authorities in search and recovery, decontamination, identification, disposition (mass burial), and advisory support.

8.1 Background

The United States Department of Health and Human Services (HHS) is the primary agency for Mortuary Affairs (MA) in a federal emergency or disaster response. The National Response Framework (NRF) uses the National Disaster Medical System (NDMS), as part of the HHS Office of Preparedness and Response (under ESF #8), to provide victim identification and mortuary services. Responsibilities include:

- Temporary morgue facilities
- Victim identification
- Forensic dental pathology
- Forensic anthropology methods
- Processing
- Preparation
- Disposition of remains

8.2 Civilian Disaster Mortuary Operational Response Team

Disaster Mortuary Operational Response Teams (DMORTs) are composed of private citizens, each with a particular field of expertise, who are activated in the event of a disaster. DMORT members are required to maintain appropriate certifications and licensure within their discipline. When members are activated, licensure and certification is recognized by all states, and the team members are compensated for their duty time by the federal

High Demand Task Organizations
Mortuary Affairs

government as a temporary federal employee. During an emergency response, DMORTs work under the guidance of local authorities by providing technical assistance and personnel to recover, identify, and process deceased victims.

Civilian DMORTs are directed by the NDMS. Teams are composed of funeral directors, medical examiners, coroners, pathologists, forensic anthropologists, medical records technicians and transcribers, fingerprint specialists, forensic odontologists, dental assistants, x-ray technicians, mental health specialists, computer professionals, administrative support staff, and security and investigative personnel.

The Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), Response Division, in support of the DMORT program, maintains two Disaster Portable Morgue Units (DPMUs). Both DPMUs are staged at FEMA Logistics Centers, one in Rockville, Maryland, and the other in San Jose, California. DMORT personnel can also assist the local Medical Examiner/ Coroner (ME/C) in the processing and identification of remains.

The local jurisdiction ME/C will determine what and how mortuary affairs functions will be performed. The ME/C that has jurisdiction over the mass fatality for that area may be the city, county, or even state ME/C. The ME/C will also manage the ante-mortem data collection, next-of-kin notifications, and personal effects policies for the deceased.

> Notification of next-of-kin for military personnel will be performed in accordance with Department of Defense (DoD) policy.

8.3 Department of Defense Support to HHS

In the DoD, MA is a logistics function. The primary responsible officer within the United States Northern Command (USNORTHCOM) is the Joint Mortuary Affairs Officer (JMAO) assigned to the Director of Logistics. When directed by the President

or Secretary of Defense (SecDef), DoD can provide advisory support, search, recovery, receiving, decontamination, identification, processing, storage, and transportation assistance of the remains. Though MA capabilities within DoD are extremely limited, there are a number of mass-fatality scenarios where the military may be asked to provide assistance to civil authorities, including natural, man-made, and terrorist incidents.

DoD deployable MA units include (number of authorized personnel in parentheses):

- 54th Company (MA) U.S. Army, Fort Lee, Virginia (203)
- 11th Company (MA) U.S. Army, Fort Lee, Virginia (203)
- 311th Company (MA) U. S. Army Reserve, Puerto Rico (203)
- 246th Company (MA) U. S. Army Reserve, Puerto Rico (176)
- Personnel Recovery and Processing Company U.S. Marine Corps (140)

DoD fixed-base MA facilities include:

- Joint POW and MIA Accounting Command, Hawaii
- Armed Forces Medical Examiner's Office
- Armed Forces Institute of Pathology
- 512th Squadron (MA) U. S. Air Force, Dover Air Force Base
- Dover Port Mortuary

Support provided by DoD MA personnel will be tailored to the needs of the requesting authority. Requested support could vary from personnel transporting human remains, to an identification process, or a complete excavation of a disaster site. All DoD MA support will be conducted in coordination with local jurisdiction ME/C.

DoD also has specialty DMORTs, including DPMUs and the Family Assistance Center Team (FACT). A logistical team accompanies DPMUs and is equipped to assemble, operate, and maintain them. The FACT assists state and local authorities with collection of ante-mortem data used in the process of victim identification. DMORT deployment configuration is based upon the particular needs of an incident. When paired with a DPMU, a typical 50-person team can

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process 60 to 75 remains in a 12-hour work day under optimum conditions. DMORTs are composed of:

- Medical examiners
- Coroners
- Funeral directors
- Mortuary officers
- Photographers
- Medical records technicians/transcribers
- Forensic specialists (anthropologists, odontologists, pathologists)
- Logistics specialists
- Security specialists
- Computer specialists

> Licensed medical professionals may wish to review tort immunity details in Section 5.12 of the *Tactical Commander and Staff Toolkit* (GTA 90-01-020).

DoD MA personnel integrate into federal, state, and local operations to assist and augment the ME/C according to state laws. The state MC/E is legally responsible for operations associated with identification, processing, and disposition of human remains. Each state and territory has different laws for processing human remains.

> Upon SecDef approval, DoD personnel may assist National Guard and civilian law enforcement authorities in locating human remains and transporting them after processing. This guidance was initially issued in Fragmentary Order (FRAGO) 7 to Joint Task Force (JTF)-Katrina Execution Order (EXORD), dated 6 September 2005, and supported by Chapter II of Joint Publication 4-06, *Mortuary Affairs in Joint Operations*. In August 2007, Navy divers, who initially participated in locating submerged bodies from the collapsed Minnesota Bridge, were later given approval to also retrieve the bodies at the request of local authorities when no other federal, state, or local personnel were available to perform this critical, sensitive, and hazardous duty.

8.3.1 DoD Policy on Handling of Human Remains

> It is DoD policy that military personnel handle human remains with the reverence, care, and dignity befitting them and the circumstances.

Unless otherwise directed by the SecDef, it is DoD policy that only Service MA personnel handle (touch) human remains. The SecDef may approve the use of non-MA personnel to support MA personnel. Under these circumstances, MA personnel would provide basic training to quickly educate non-skilled Service personnel in mortuary affairs activities. Upon successful completion of such training, these military personnel would support MA personnel in accomplishing their mission assignment. Mortuary affairs personnel would supervise and provide oversight to these newly trained military personnel to ensure proper techniques, health and safety procedures, and guidance on the rightful respect for each deceased person.

> Search, recovery, and movement of human remains become a law enforcement issue when there is a requirement to enter private property or when the location is clearly a crime scene. In the former and unless ordered otherwise, a law enforcement official should be first to enter the premises to conduct a search to determine if any deceased persons are inside. In the latter, permission from law enforcement authorities must be received before moving human remains.

8.3.2 Handling Remains

> **Universal Precaution**—Whether or not you believe blood or body fluid is infected with blood-borne pathogens, *handle as if it is*.

Mortuary staff and body retrieval teams risk exposure to disease. Personnel should take the following precautions for exposure to blood and body fluids:

1. Use gloves when handling bodies or body fluids.
2. Use eye protection, gowns, and masks when large quantities or splashes of blood are anticipated.
3. Wash hands frequently.
4. Use body bags to reduce the risk of contamination.

Improving Resistance to Stress in Mortuary Affairs Operations

1. Remember the larger purpose of what you must do. You are showing care, giving hope, and preventing disease for the living. You are recovering bodies for registration and respectful burial.
2. Prepare yourself for what you will see and do.
3. Limit exposure of bodies to stimuli.
4. Use screens to block general population's view of the bodies.
5. Mask odors with disinfectants, deodorants, air-fresheners.
6. Avoid focusing on any individual victims.
7. Have responders who did *not* recover the body examine any materials collected for identification of the body.
8. Remind yourself the body is not "the person", only the remains.
9. Do not desecrate or steal from victims.
10. Schedule frequent breaks; maintain hygiene, drink plenty of fluids, and eat good food.
11. Have your team get together for mutual support and encouragement.
12. Help buddies or subordinates in distress by being a good listener.
13. Do not feel guilty about distancing yourself mentally from the suffering of individuals.
14. Do not be disheartened by horrible dreams, tense feelings, or intrusive memories.
15. Participate in a critical event debriefing with trained people from your supporting unit ministry and/or behavioral health/combat stress control team.
16. Keep humor alive.

DSCA Handbook

Liaison Officer Toolkit

CHAPTER 9: CBRNE RESPONSE CAPABILITIES

This Defense Support of Civil Authorities (DSCA) handbook does not provide planning factors for response to Chemical, Biological, Radiological, Nuclear, or high-yield Explosives (CBRNE) events. Contents included in this chapter simply provide an overview of response capabilities that may be used in non-CBRNE incidents.

9.1 National Guard Capabilities

9.1.1 Weapons of Mass Destruction – Civil Support Team

9.1.1.1 Mission

To assess hazards, advise civil authorities, and facilitate military support during emergencies and incidents of suspected Weapons of Mass Destruction (WMD).

The Civil Support Team (CST) advises civilian responders on appropriate actions through on-site testing and expert consultation, and assists and facilitates in the arrival of follow-on state and federal military forces.

9.1.1.2 Overview

The CST is comprised of 22 full-time Army and Air National Guard personnel divided into six sections: command, operations, communications, administration/logistics, medical, and survey. Each unit encompasses 14 Army Military Occupational Skills and 57 Air Force Specialty Codes. There are a total of 57 CSTs.

CST vehicles include a command vehicle, operations trailer, a communications vehicle called the Unified Command Suite (which provides a broad range of communications capabilities including satellite communications), an Analytical Laboratory System vehicle (containing a full suite of analysis equipment to support the determination of the hazard) and other general purpose vehicles.

High Demand Task Organizations
CBRNE Response Capabilities

9.1.2 CBRNE Enhanced Response Force Package

9.1.2.1 Mission

To provide immediate response capability to the governor including: incident site search capability of damaged buildings, rescuing trapped casualties, providing decontamination, and performing medical triage and initial treatment to stabilize patients for transport to medical facilities.

9.1.2.2 Overview

The CBRNE Enhanced Response Force Package (CERFP) is comprised of four elements staffed by personnel from already established National Guard units. Elements include command and control, search and extraction, decontamination, and medical. The *command and control* team directs the overall activities of the CERFP and coordinates with the Joint Task Force–State (JTF-State) and the Incident Commander. The *search and extraction* element is assigned to an Army National Guard (ARNG) Engineering Company, the *decontamination* element is assigned to an Army National Guard Chemical Company, and the *medical* element is assigned to an Air National Guard Medical Group. Security duties for the incident site and the four CERFP elements are performed by the state National Guard Response Force.

As part of the CERFP, the ARNG has specific fatality management Title 32 assets, Fatality Search and Recovery Teams (FSRTs), which can be federalized if needed. These FSRTs are capable of recovering and moving decedents from the location they are found in (an uncontaminated and limited contaminated environment) to collection points for further processing by local jurisdiction(s).

9.1.3 CBRNE Consequence Management Response Force

9.1.3.1 Mission

To save lives, prevent injury, and provide temporary critical life support during a CBRNE situation in the United States or its territories and possessions.

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High Demand Task Organizations
CBRNE Response Capabilities

9.1.3.2 Overview

The CBRNE Consequence Management Response Force (CCMRF) consists of three task forces (TFs):
- TF Operations (Logistics functions are folded under this TF)
- TF Aviation
- TF Medical

9.2 Marine Corps Chemical/Biological Incident Response Force

9.2.1 Mission

To forward deploy and/or respond to a credible threat of a CBRNE incident in order to assist local, state, or federal agencies and Unified Combatant Commanders in the conduct of consequence management operations.

9.2.2 Overview

Chemical/Biological Incident Response Force (CBIRF) accomplishes its mission by providing capabilities for agent detection and identification, casualty search and rescue, personnel decontamination, and emergency medical care and stabilization of casualties.

9.2.3 Capabilities

CBIRF personnel are trained to save lives under the extreme conditions of CBRNE threats. Capabilities include, but are not limited to the following:

Medical: CBIRF is able to provide medical care in the "hot zone." The medical team carries supplies to provide critical or moderate medical care to patients with a range of injuries.

Decontamination: CBIRF establishes decontamination tents designed to move casualties through a station-to-station assembly line decontamination process. A system is set up for both non-ambulatory and ambulatory casualties.

Reconnaissance: Upon arrival at the incident site, CBIRF first detects and identifies the threat.

Rescue and Extraction: CBIRF is certified in confined space rescue, trench rescue, vehicle and advanced rope rescue. Personnel can perform collapsed structure stabilization and rescue. After assessment of the threat, CBIRF moves to locate and extract casualties. There are two teams, the Rapid Extraction Team, and the Search and Extract Teams. Casualties are divided into Non-Ambulatory and Ambulatory.

Explosive Ordnance Disposal (EOD): CBIRF has the equipment and training to render an Improvised Explosive Device (IED) safe.

Command and Control (C2): C2 systems are established for critical network communications. Data exchange, communication with reach-back resources, tactical communications, and coordination with civil response liaisons are all possible with communications equipment used by CBIRF.

Logistics: CBIRF responds by land, sea or air. As a self-contained, self-sufficient, task-organized unit, it has established procedures and equipment for transportation and survival.

9.3 Air Force Civil Engineer CBRNE Response Team

9.3.1 Mission

To plan for and assist in the protection of Department of Defense (DoD) personnel and assets during disasters, accidents, or hostile action either at home station or at a deployed location, in order to ensure rapid response to and recovery from the effect of such incidents.

9.3.2 Capabilities

Capabilities of the CBRNE Response Team include:
- CBRNE Reconnaissance Teams (detect and identify)
- Shelter Management Teams
- Contamination Control Teams (avoidance and decontamination)
- Large Frame Aircraft (LFA) Decontamination
- Individual Decontamination Kit

DSCA Handbook users that would like additional information on CBRNE units, Concept of Operations (CONOPS), or Tactics, Techniques, and Procedures (TTP) are encouraged to refer to Field Manual (FM) 3-11/Marine Corps Warfighting Publications (MCWP) 3-37.1/Naval Warfare Publications (NWP) 3-11/Air Force Tactics Techniques, and Procedures (AFTTP)(I) 3-2.42, *Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical Defense Operations.*

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You have reached the end of the
Liaison Officer Toolkit

For the *Tactical Level Commander
and Staff Toolkit*,
flip the book over.