

# MASS FATALITY INCIDENTS (MFI) : THE ROLE OF FORENSIC ANTHROPOLOGISTS AND DMORT IN MFI

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# MFIs defined:

- ▣ “a relative term and hinges upon the capabilities of the local community to administer to the injured and dead” (Steadman 2009);
- ▣ are “when the number of dead exceeds the capacity of local agencies to manage them” (Sledzik and Willcox 2009)
- ▣ All are unique, but share commonalities

FORENSIC  
ANTHROPOLOGISTS AND  
MASS FATALITY INCIDENTS

# The Big Thompson Flood, Colorado (1976)

**Rocky Mountain News**

**Scores dead, hundreds hurt  
in Big Thompson flash flood**

Page 1



**U.S. 34 west of Loveland is no more**

**Flood photos on pages 15, 38 and 65**

# Hardin Cemetery Flood, Missouri (1993)



# Terrorist Attacks



# Noble, Georgia Crematorium (2002)



**Spring 2005: The crematory site has been cleared, as shown in the photo above.**

# Hurricane Katrina, 2005





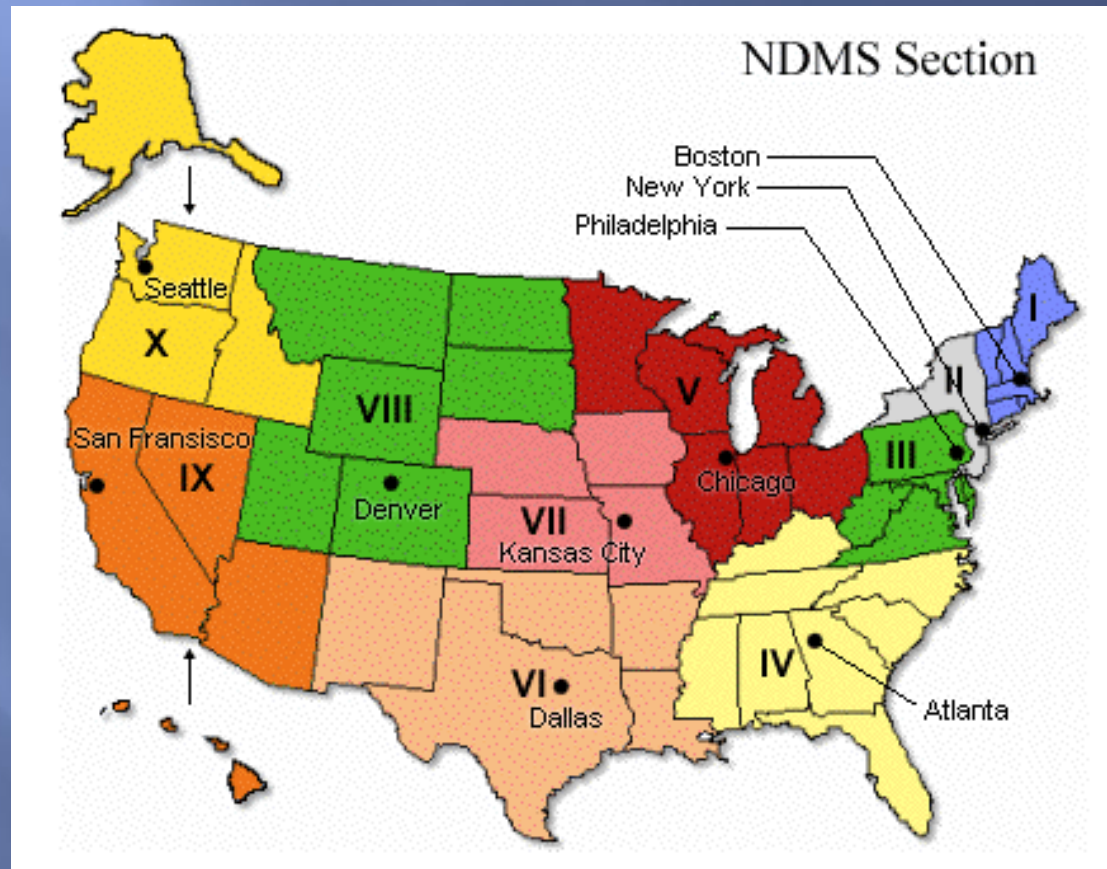
## Port-au-Prince, Haiti (February, 2010)



# DMORT (Disaster Mortuary Operational Response Team)



# DMORT Regions



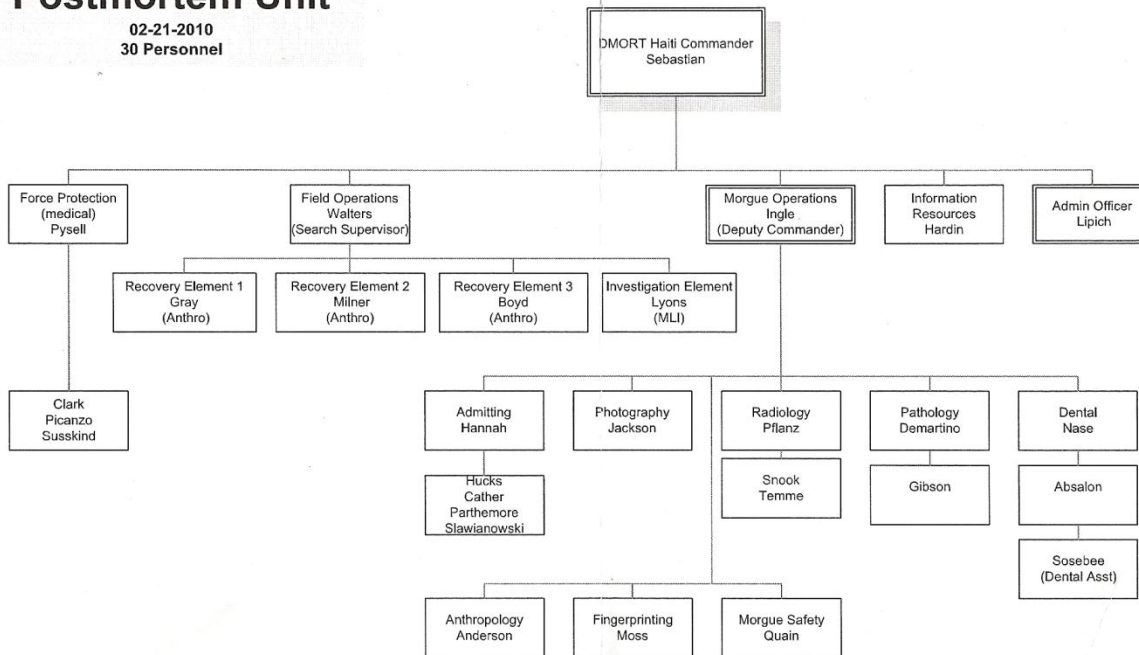
# DMORT OPERATIONAL PROTOCOL:

Incident Command System

# The DPMU

## DMORT Haiti Postmortem Unit

02-21-2010  
30 Personnel









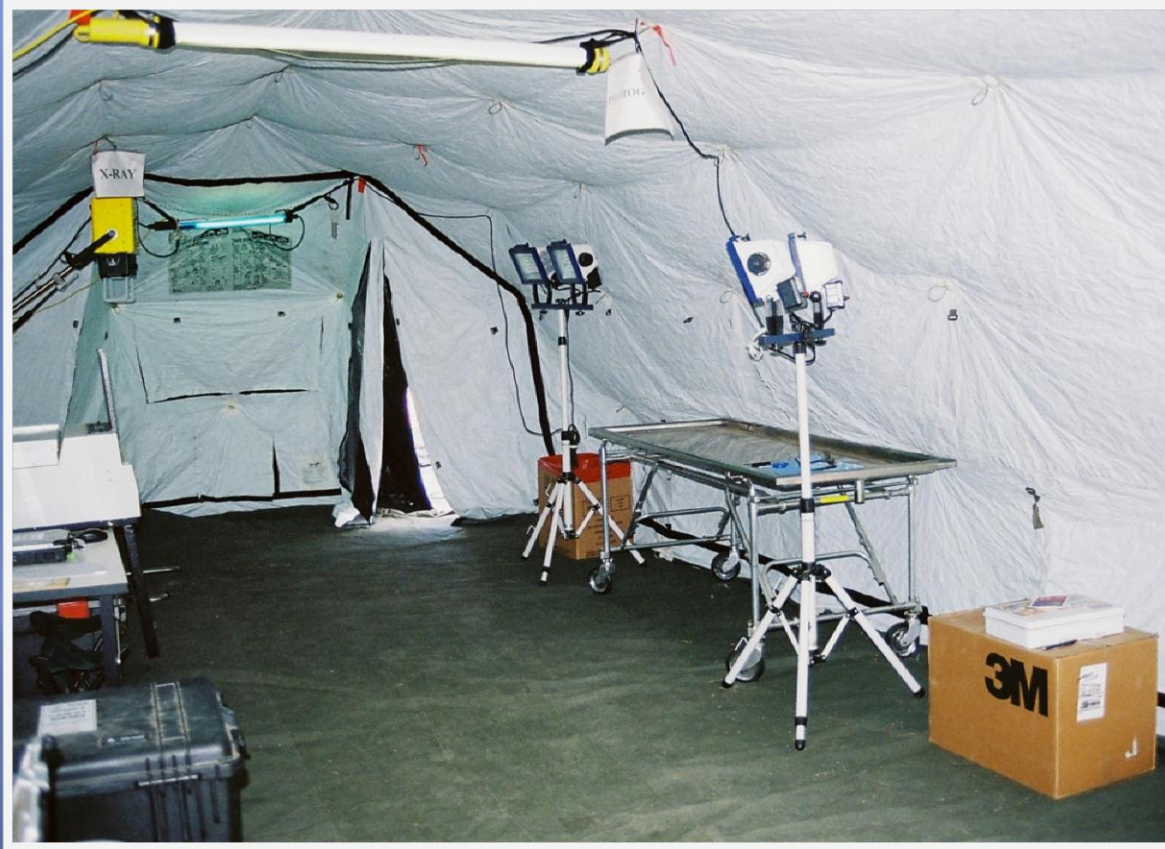




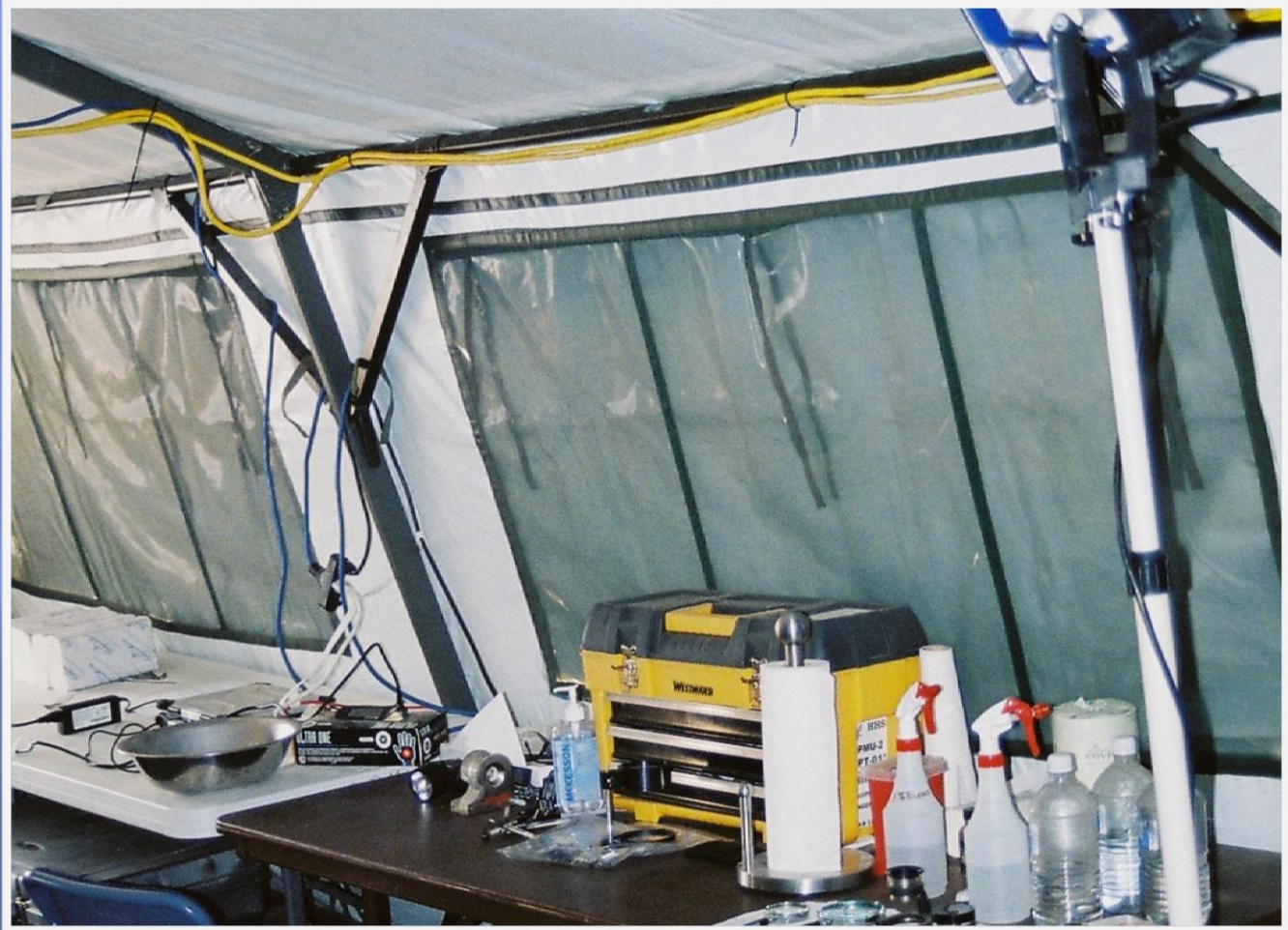
# DMORT Specialists

- ▣ Medical Examiners
- ▣ Medicolegal Death Investigators
- ▣ Forensic Anthropologists
- ▣ Forensic Dentists
- ▣ X Ray Technicians
- ▣ Funeral Home Personnel
- ▣ Photographers
- ▣ Fingerprint Specialists
- ▣ Family Assistance Center


















# Morgue Data Sheets

	Site Recovery # _____ <small>Put N/A in all unused fields.</small>	VIP/DMORT <b>Victim</b>	Incident _____ Incident Date _____
<b>Site Recovery Form</b>		<b>Morgue Reference No.</b>	
Date: _____ <small>MM/DD/YYYY</small>	Description of Remains: _____		
Time: _____ <small>24 hour (00:00)</small>	Recovery Grid #: _____	GPS of Recovery: _____	
Place / Address of Recovery: _____			
<b>Condition: select all that apply</b>			
<input type="checkbox"/> Autopsied Previously	<input type="checkbox"/> Decomposed	<input type="checkbox"/> Mummified	<input type="checkbox"/> Skel
<input type="checkbox"/> Burned-Partial Thickness	<input type="checkbox"/> Embalmed	<input type="checkbox"/> Saponified	<input type="checkbox"/> Skel
<input type="checkbox"/> Burned-Full Thickness	<input type="checkbox"/> Fragmented	<input type="checkbox"/> Scavenged	<input type="checkbox"/> Wet
<input type="checkbox"/> Remains	<input type="checkbox"/> Fresh	<input type="checkbox"/> Skin Slippage	
Position Remains Found In:			_____
Estimated Age: <input type="radio"/> Baby/Child <input type="radio"/> Adolescent <input type="radio"/> Young Adult <input type="radio"/> Middle Aged <input type="radio"/> Elderly <input type="radio"/> No Estimate			
Estimated Sex: <input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> Not Assessed			
Estimated Race: _____			
Clothing on Remains: (brief description)	_____		
Personal Effects on Remains: (brief description)	_____		
Other Items with Remains: (specify + describe)	_____		
Medical Records Recovered: <input type="radio"/> Yes <input type="radio"/> No			
Recovery Comments: _____			
<b>Presumptive FIELD ID:</b>	Last _____	First _____	Middle _____
<b>ID Based On:</b>	DOB (MM/DD/YYYY) _____	SSN _____	ID# / Drivers license # / State _____
			# Photos _____
			Photo File Name: _____
Found By: _____	_____	_____	_____
<small>Name and Agency (if applies)</small>	<small>Phone #</small>	<small>Date Found</small>	<small>Time Found</small>
Reported By: _____	_____	_____	_____
<small>Name and Agency (if applies)</small>	<small>Phone #</small>	<small>Date Reported</small>	<small>Time Reported</small>
Reported To: _____	_____		
<small>Name and Agency (if applies)</small>	<small>Phone #</small>		
<b>Recovered by:</b> Agency _____	_____	Phone # _____	
<b>Team Leader:</b> _____			
<b>Team Members:</b> _____			
_____			
_____			
Barcode # _____	Place Barcode Sticker Here		

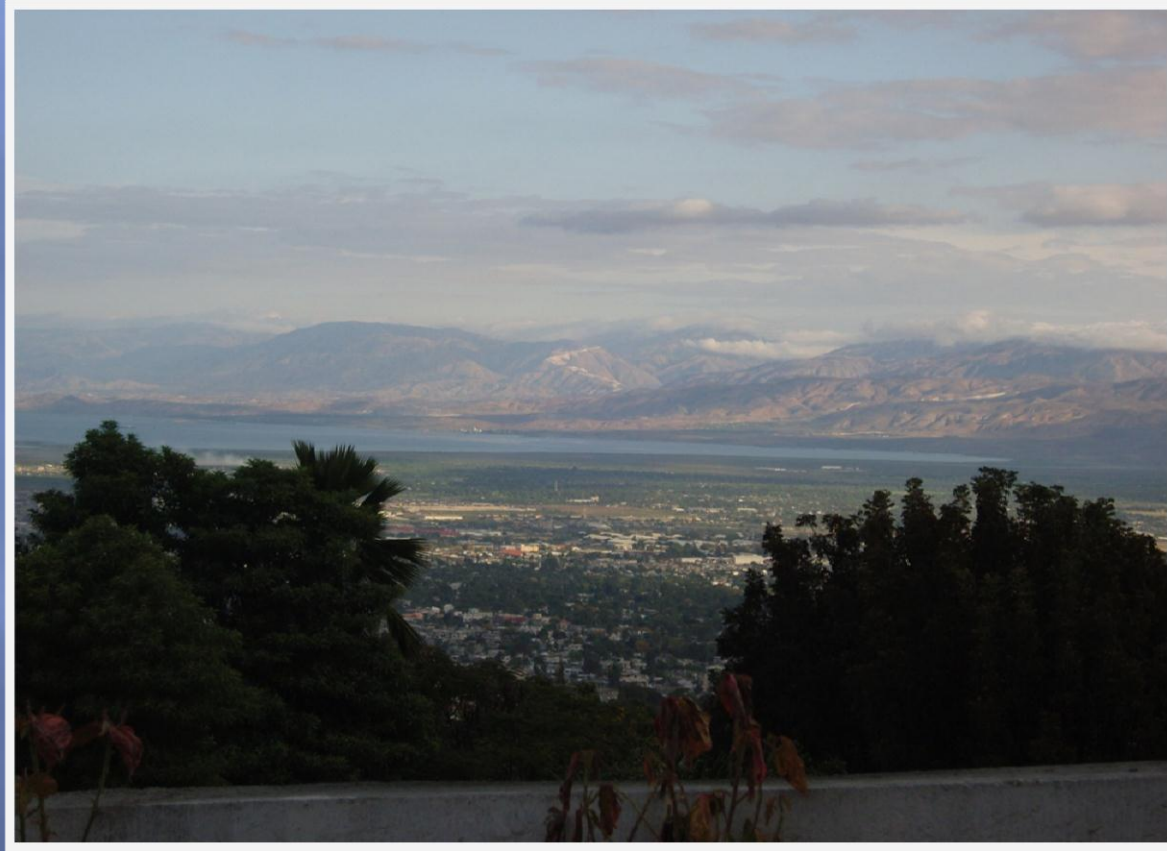




# Difficulties in MFIs

- ▣ Safety and security
- ▣ Loss of infrastructure
- ▣ Organizational chaos
- ▣ Miscommunication between agencies
- ▣ Leadership questions/issues
- ▣ Collection and retention of evidence
- ▣ Chain of custody
- ▣ Safe and humane recovery of deceased
- ▣ Family counseling and communication

## Port-au-Prince, Haiti









## Loss of Infrastructure







## Organization of Chaos







## Humane and Timely Recovery of Deceased



# Hotel Montana



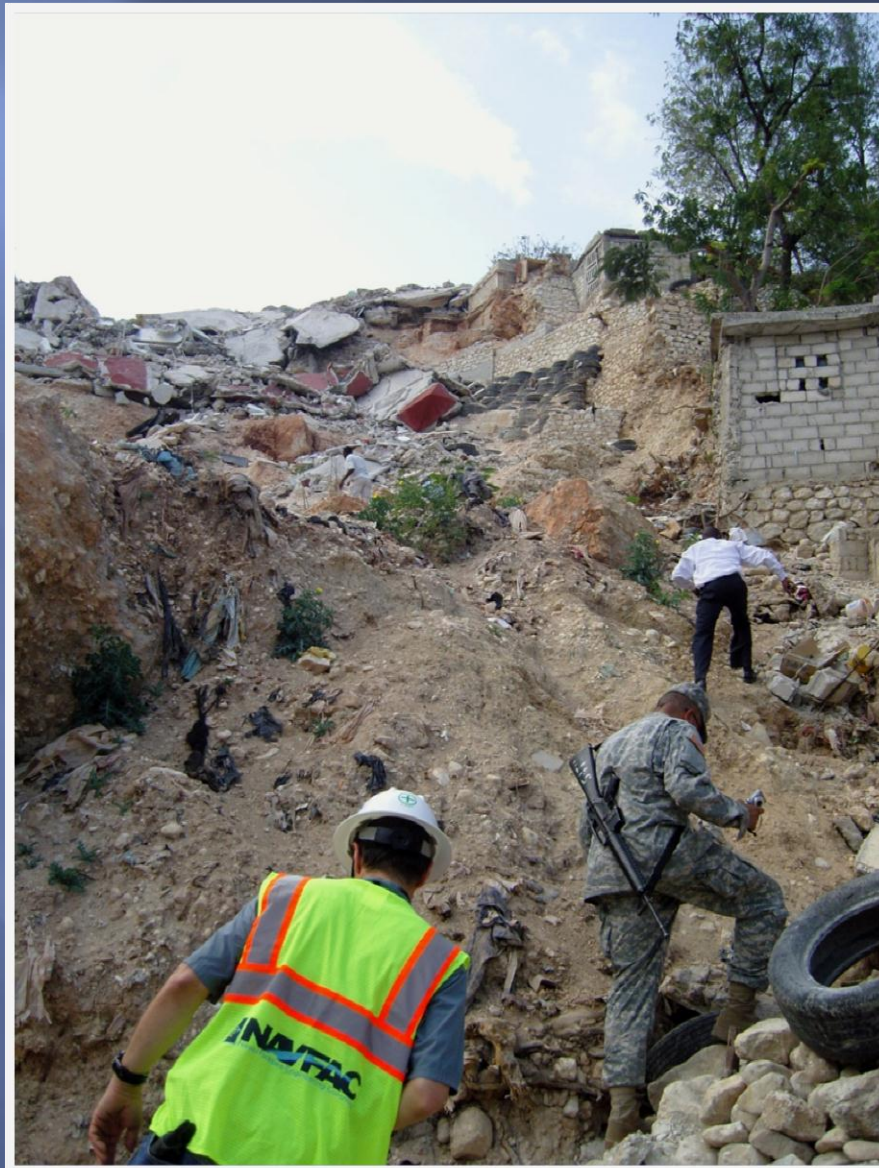


# Safe and Accurate Recovery of Deceased















## Need for Reconnaissance and Information





## Secondary Burials













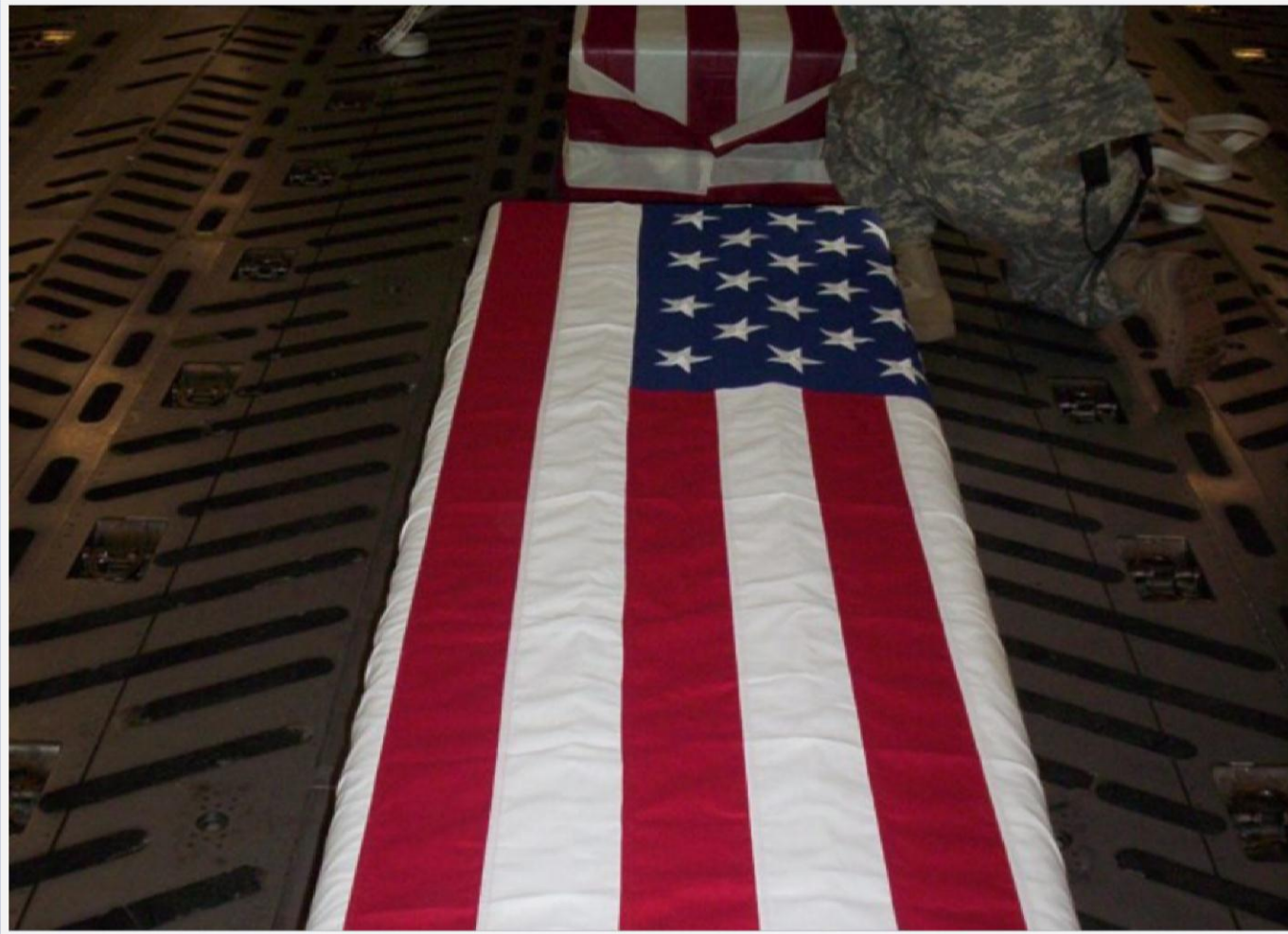
# Managing the MFI

- ▣ Recognition of need for external assistance
- ▣ Transition from Search and Rescue to Search and Recovery
- ▣ Protocol for search, recovery, analysis, and identification of human remains and associated evidence
- ▣ Communication with and counseling for families

# Forensic Anthropology Skills in MFIs

- ▣ Devise protocol for search and recovery of human remains
- ▣ Locate, recognize, and recover human remains, especially those burned and fragmented
- ▣ Maintain context and chain of custody
- ▣ Train search personnel to recognize fragmented and burned human remains
- ▣ Provide field assessment of condition of remains
- ▣ Assist with morgue analysis of remains and victim identification





## Haiti-DMORT (February, 2010)

