NAVAL WAR COLLEGE
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Operational Command and Control of Federal Domestic Emergency Response Operations

By

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature: Sharon K. Richey

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In the past 50 years, the federal role in emergency response operations to larger-scale disasters has increased and so have the related command and control (C2) challenges. Large-scale federal domestic emergency response is comparable to the operational level of war in which C2 is one of the most important functions. At present no national standard C2 organization and system is mandated for domestic emergency responses. This paper recommends that the Incident Command System (ICS) be mandated as the national, all-hazard, all-risk command and control system for all domestic emergency response operations. This paper reviews recent disaster responses, explores the advantages using the Incident Command System as a C2 system for response operations and provides recommendations to further improve emergency responses at the operational level.

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OPERATIONAL COMMAND AND CONTROL OF FEDERAL DOMESTIC EMERGENCY RESPONSE OPERATIONS

"Generally, management of the many is the same as management of the few. It is a matter of organization." Sun Tzu, 400-320 B.C., *The Art of War*

Introduction

For most of our nation's history, state and local governments and private organizations have had the primary responsibility for domestic emergency response operations while the federal government's role has been limited. However, with increasing populations, higher risks and decreasing satisfaction with emergency preparedness at the federal level, the U.S. Government's involvement in domestic emergency response operations has gradually increased over the past 50 years. Domestic emergency response operations include responses to natural disasters such as hurricanes, earthquakes, fires, and floods, and to man-made disasters such as mass-transportation accidents (air, land, sea), oil and hazardous substances spills, acts of terrorism, and civil disobedience. As the federal role in emergency response operations to larger-scale disasters has increased, so have the related command and control (C2) challenges. The federal role in domestic emergency response has been primarily a coordination role, not a command and control role. However, large-scale federal domestic emergency response is comparable to the operational level of war in which command and control is one of the most important operational functions because it binds together all the "operational functions". It is the means by which the commander synchronizes joint force activities in time, space and purpose in order to achieve service and functional component unity.[1] At present no national C2 organization and system is mandated for federal domestic emergency responses. The Incident Command System was developed in the 1970's by an interagency working group to address the command and control challenges

of large-scale wildfires in California and is a modified military operational C2 system that includes organization, unity of command, incident planning, integrated logistics and other key operational C2 elements. The Incident Command System has been implemented gradually on a voluntary basis by state and local agencies and also by some federal agencies. The Incident Command System should be mandated as the national, all-hazard, all-risk command and control system for domestic emergency response operations.

Background

a. *The Federal Emergency Management Function.* The Constitution provides an explicit federal role for suppressing civil disorder. Article I, Section 8 states that "Congress Shall have the Power to…provide for calling forth the Militia to execute the Laws of the Union, Suppress Insurrections, and repel invasions." However, the federal role in disaster response has been more ambiguous for most of our nation's history.[2] The federal role in domestic emergency response has, for the most part, been to provide resources only as needed. As early as 1803, Congress made federal resources available to Portsmouth , New Hampshire, after a devastating fire. Between 1803 and 1950, federal resources were used in response or for recovery in the wake of more then 100 disasters, including floods, tornadoes, earthquakes and fires. For a time, the American Red Cross was chartered as the coordinating agent for disaster response. The federal government took a more proactive role in disaster response during the Great Depression, yet, as the federal role in disaster response became more proactive, various presidents emphasized that the federal government's role was simply one of supplementing, not replacing, the state and local governments. President Truman emphasized this theme in 1952, when he issued Executive Order 10427, which stated that: "Federal aid was not a substitute for disaster assistance efforts of state and local government and private agencies."[3]

In 1973, the Nixon administration transmitted a report on federal disaster preparedness and assistance that was intended to reverse the trend of an expanding federal role in the management of disaster relief operations through greater reliance on states, local and private relief organizations.[4] In the late 1960's and the 1970's a series of disasters, including Hurricane Camille (1969), the San Fernando Earthquake (1971) and others made it clear that governments were inadequately prepared to deal with large domestic disasters. Legislation designed to be corrective had little effect on solving the response preparedness problem. Since 1950 several approaches to emergency management at the federal level have been tried, with minimal success (see Figure 1). In 1978 the landmark National Governors' Association Report (NGA) described "the governors' concern about 'the lack of a comprehensive national emergency policy, as well as the dispersion of federal responsibilities among numerous federal agencies." In response to the NGA report, President Carter established the Federal Emergency Management Agency (FEMA) in 1978 as the single agency accountable for all federal emergency preparedness and response activities. Despite the expectations surrounding FEMA's creation, it was plagued with problems from the outset.[5] FEMA is a small organization consisting of a little more than 2000 employees and an annual budget of approximately 3 billion dollars (including disaster relief funds). One of the primary challenges facing FEMA is the mandate to coordinate with a wide range of organizations in a variety of response activities.

Under the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, FEMA serves as the primary coordinating agency for disaster response and recovery activities. To carry out this interagency role, FEMA executes a wide range of administrative, programmatic, and specialized tasks. Initial tasks include notification,

U.S. EMERGENCY MANAGEMENT ORGANIZATIONS

Period	Lead Federal Agency	Organizational Status
Pre-1950s	No lead federal agency	--
1951-1953	Housing and Home Finance Administration (HHFA)	Independent Agency; limited to provisions of 1950 Act
1953-1958	Federal Civil Defense Administration	Independent Agency: responsible for civil defense and disaster relief preparation
1958-61	Office of Civil Defense Mobilization (OCDM)	Reconstituted agency within the White House; responsible for disaster relief, civil defense and defense mobilization
1961-1973	Office of Emergency Planning (OEP) (Renamed Office of Emergency Preparedness in 1968)	Reconstituted agency within the White House; responsible for disaster relief and planning of civil defense; operations of latter shifted to DoD
1973-1979	Federal Disaster Assistance Administration (FDAA)	Within Department of Housing and Urban Development; responsible only for disaster relief; civil defense and preparedness shifted to other agencies
1979-present	Federal Emergency Management Agency (FEMA)	Independent Agency; responsible for disaster relief, civil defense and preparedness

Figure 1

Peter J. May. Recovering From Disasters; Federal Disaster Relief Policy and Politics. (Westport, Conn.: Greenwood Press, 1985), p. 50.

activation, mobilization, deployment, staffing, and facility setup. FEMA processes a Governor's request for disaster assistance, coordinates Federal operations under a disaster declaration, and appoints a Federal Coordinating Officer (FCO) for each declared State. In continuing operations, FEMA provides support for logistics management; communications and information technology; financial management; community relations, congressional affairs, public information, and other outreach; and information collection, analysis, and dissemination. Emergency planning and training often falls to low priority for the other federal agencies with which FEMA has responsibility to coordinate because emergency management is generally underfunded for planning, training and exercise even though these activities are every bit as essential for their effectiveness as they are for military organizations.[6]

b. *History and Development of the Incident Command System.* In the 1970's, as incidents became more complex and multiagency involvement increased, it became clear that federal, state and local authorities needed a single standard incident management system that could be used by all emergency response agencies. The need for a common C2 and management system became apparent over time. Some factors which influenced the need for a more efficient and cost-effective incident management system included population growth, the spread of urban environments, language and cultural differences, more multijurisdicational incidents, resource shortages, fiscal constraints, increasing complexity of communications, sophisticated media coverage, and greater potential for loss of life and property.[7]

The Incident Command System resulted initially from the need for a new approach to managing rapidly moving wildfires in the early 1970's. At that time, emergency managers

faced a number of problems, including, different emergency response organizational structures, lack of reliable incident information, inadequate and incompatible communications, lack of structure for coordinated planning between agencies, unclear lines of authority, terminology differences between agencies, and unclear or unspecified incident objectives. Designing a standardized emergency management system to remedy these challenges took several years and extensive field testing. An interagency task force consisting of local, state, and federal authorities developed the Incident Command System via an effort called FIRESCOPE (Firefighting Resources of California Organized for Potential Emergencies). While ICS was initially designed for responding efficiently and effectively to wildland fires, from an operational command and control perspective these incidents are similar to those seen in many law enforcement and emergency response situations. Common characteristics of an emergency response include:[8]

- They can occur with little or no advance notice
- They develop rapidly
- Unchecked they may grow in size
- Personal risk for response personnel can be high
- There are often several agencies with some on-scene responsibility.
- They are often multi-jurisdictional
- They often have high public and media visibility
- Risk of life and property can be high
- Cost of the response is high

In 1980, the original ICS developed in California under the FIRESCOPE program made the transition into a national program called the National Interagency Incident Management System (NIIMS). ICS is the response sub-system of the NIIMS. Other NIIMS sub-systems include training, certification and supporting publications and technologies. Many agencies have voluntarily adopted some or all of the Incident Command System concepts including FEMA, USCG, OSHA, EPA, NOAA, NFPA, and several states now

employ some type of ICS-based emergency management system. While some agencies are voluntarily adopting the ICS, some have tailored or altered the system for a variety of reasons, and some federal agencies with responsibilities for domestic emergency operations have not yet adopted the system. The Federal Response Plan (FRP) states that "the FRP employs a multiagency operational structure that uses the principles of the Incident Command System (ICS)."[9] However, at present there is no federal requirement for response agencies to use ICS or any other standard response management system in emergency response operations.

Elements of the Incident Command System

The Incident Command System is a flexible, rapid-response management system that can also be used as the basis for training and preparing for emergency responses. ICS is based on the assumption that every incident has certain major management activities that must be performed independent of the tactical response activities or tasks demanded by the event. The five management activities that are the foundation upon which the ICS organization is based are: Command, Operations, Planning, Logistics and Finance/Administration. Figure 2 lists the definitions of these five management activities and Figure 3 is the standard multi-branch ICS organization. Since nearly all emergency response operations today are multijurisdictional, the military concept of a Unified Command was adopted which allows for the establishment of common objectives, strategies and incident planning. When agencies fully trained in ICS respond to an incident they quickly establish an ICS organization tailored for that incident. Responders integrate into the organization based on their resources and skills. For example, in a large oil-spill response,

COMMAND

SETS OBJECTIVES AND PRIORITIES, HAS OVERALL RESPONSIBILITY AT THE INCIDENT OR EVENT

OPERATIONS

CONDUCTS TACTICAL OPERATIONS TO CARRY OUT THE PLAN DEVELOPS THE TACTICAL OBJECTIVES, ORGANIZATION, AND DIRECTS ALL RESOURCES

PLANNING

DEVELOPS THE ACTION PLAN TO ACCOMPLISH THE OBJECTIVES, COLLECTS AND EVALUATES INFORMATION, MAINTAINS RESOURCE STATUS

LOGISTICS

PROVIDES SUPPORT TO MEET INCIDENT NEEDS, PROVIDES RESOURCES AND ALL OTHER SERVICES NEEDED TO SUPPORT THE INCIDENT

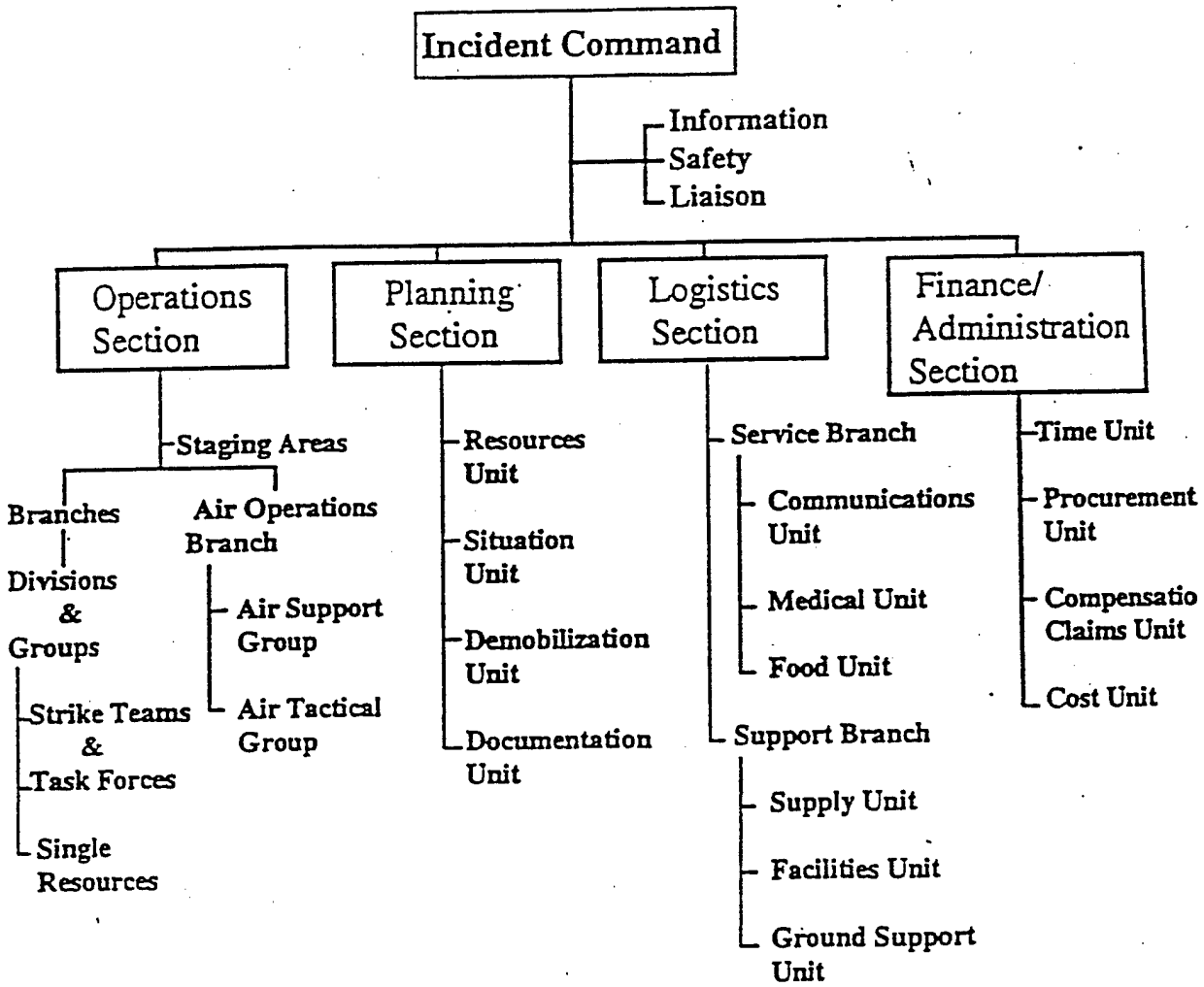
FINANCE/ADMINISTRATION

MONITORS COSTS RELATED TO INCIDENT, PROVIDES ACCOUNTING, PROCUREMENT, TIME RECORDING, AND COST ANALYSES

Incident Command System Major Activities (Figure 1-3)

Figure 2

INCIDENT COMMAND SYSTEM ORGANIZATION



Incident Command System Organization

Figure 3

the Air Operations Branch might be staffed by Coast Guard, state, and private (contractor) pilots. Primary components of a unified command organization are:[10]

- A single integrated incident organization: the various jurisdictions and/or agencies are blended together into an integrated unified team.
- Collocated (shared), pre-designated incident facilities.
- A single planning process with consolidated action plans
- Comprehensive resource management, including a coordinated process for resource ordering, tracking and demobilization
- Integrated communications
- Joint Information Center
- Manageable span of control
- Modular organization and common terminology

The Incident Command System has many features common to military command and control structures because it is based on the military model and, in fact, the group that designed the system (FIRESCOPE) included former members of the military. ICS is different from traditional military C2 organizations in that is provides a simple, modular, functional-based, organization and management system designed specifically for a flexible, rapid and integrated response.

The "Current State" of Federal Domestic Emergency Response C2

(a) *Increasing interagency responses.* The trend in domestic emergency response operations is for increasing involvement by multiple agencies. The Federal Response Plan is organized into 12 Emergency Support Functions, and federal agencies are assigned primary or support responsibility as appropriate (see Figure 4). Domestic emergency response operations have improved over the past several years in many areas as a result of several key events such as Hurricane Andrew. However, improvements are still needed, especially in response integration efforts.[11] Responses involving a variety of agencies and organizations coming together to perform an operation present unique challenges. The challenge of meshing different organizational cultures and competing agendas, missions and resources

#	1	2	3	4	5	6	7	8	9	10	11	12
ESF / Agency	Transportation	Communications	Public Works and Engineering	Firefighting	Information and Planning	Mass Care	Resource Support	Health and Medical Services	Urban Search and Rescue	Hazardous Materials	Food	Energy
USDA	S	S	S	P	S	S	S	S	S	S	P	S
DOC		S	S	S	S		S			S		
DOD	S	S	P	S	S	S	S	S	S	S	S	S
DOEd					S							
DOE					S		S	S		S		P
HHS			S		S	S		P	S	S	S	
HUD						S						
DOI		S	S	S	S					S		S
DOJ					S			S	S	S		
DOL			S				S		S	S		
DOS	S									S		S
DOT	P				S		S	S		S		S
TREAS	S				S		S					
VA			S			S	S	S				
AID								S	S			
ARC					S	P		S			S	
EPA			S	S	S			S		P	S	
FCC		S										
FEMA	S	S		S	P	S	S	S	P		S	
GSA	S	S			S	S	P	S			S	
NASA					S		S		S			
NCS		P			S		S	S				S
NRC					S					S		S
OPM							S					
SBA					S							
TVA	S		S									S
USPS	S					S		S				

P = Primary Agency: Responsible for Coordination of the ESF

S = Support Agency: Responsible for Supporting the Primary Agency

— Emergency Support Function Designation Matrix

Figure 4

into an integrated response with unity of effort is not easy. The advantage to the interdisciplinary approach, however, is that it brings the many diverse skills and resources of the government and public and private organizations to bear. Each agency brings its own unique experiences and core competencies to the forum. It is important that responders train and exercise before the emergency so that roles, responsibilities, conflicts and processes can be worked out in advance of the crisis. Leaving these challenges to be addressed during the response results in an inefficient, uncoordinated evolution, at best. Interagency connectivity must be established before a response.

(b) *Adoption of ICS for oil-spill responses.* In the wake of the 1989 T/V EXXON VALDEZ incident, the U.S. Coast Guard identified the need to establish a standard oil-spill response organization. In 1996, the Coast Guard adopted the Incident Command System as doctrine for response management of oil and hazardous substance incidents. The decision to adopt ICS significantly improved multiagency, government and civilian oil-spill responses in the United States. As responders trained in ICS as part of the National Preparedness for Response Exercise Program (NPREP), government, industry and non-profit organizations learned to integrate into a Unified Command, resulting in more efficient and effective responses. However, when responders are not trained in ICS and have not practiced in a Unified Command with other responders, the results are less satisfactory. For example, on 7 January 1994, the T/B MORRIS J. BERMAN grounded and spilled approximately 36,000 barrels of oil near Puerto Rico's main tourist district. Responders were not trained in ICS and problems in C2 and coordination were identified post-incident. Several command posts were established by different agencies resulting in an uncoordinated effort with limited integration and no overall response strategy.[12]

(c) *Recent mass transportation disaster case studies.* The United States has recently experienced several unfortunate commercial airline incidents requiring multiagency responses, which can serve as current case studies in domestic emergency response command and control. In each case, after-action reports identified a need for responders to be able to organize quickly and effectively. While the responses demanded by these particular cases are not of the same level required in disasters of national significance such as the T/V EXXON VALDEZ spill, a large terrorist incident or major hurricane, they are still valuable as recent examples of multiagency domestic emergency response.

On 17 July 1996, at approximately 2230, EST, TWA flight 800, with 230 passengers and crew onboard, burst into flames and crashed into the ocean 10 nautical miles from Long Island, New York. The U.S. Coast Guard portion of the response included over 70 units and 1400 personnel. Additionally, more than 20 agencies, including local, state and federal agencies responded, many of which had not adopted ICS. An ICS organization was eventually established, and the overall operation was successful. However, the early establishment of an ICS organization could have greatly improved this response. Some areas where preparation in ICS may have helped include:[13]

(1) *Command and control.* It took time to determine who was in charge of what and how everyone fit into the overall response. Responders who are fully trained and have practiced ICS are able to quickly integrate into a unified command organization.

(2) *Communications.* Using ICS, the Incident Commanders could have set one of the first objectives to develop a Communications Plan and established protocol for use of frequencies and information sharing.

(3) *Demobilization.* In the post-emergency phase, the operation becomes routine, and a plan needs to be developed to release non-essential personnel and equipment from the response. Keeping non-essential assets on-scene needlessly raises the cost of the operation.

On 31 October 1999, at approximately 0150, EST, Egypt Air Flight 990, traveling from New York to Cairo, crashed in the Atlantic Ocean about 60 miles south of Nantucket Island, Massachusetts. The FAA immediately notified the Coast Guard for response to the crash site. The Coast Guard coordinated with the National Transportation Safety Board (NTSB) and Federal Bureau of Investigation (FBI) officials to establish an Incident Command Post in Newport, R.I. Ultimately, a U.S. Navy Task Group was formed to coordinate recovery efforts. One observation from the Coast Guard lessons learned report was that only local and state agencies and the Coast Guard were using ICS. Other responding agencies were not familiar with ICS and invaluable time was spent converting ICS organizational constructs into other terminology.[14] The Coast Guard lessons learned report identified other observations which point to the value of training and exercising prior to a disaster with all response agencies.[15]

At 1615 on 31 January 2000, PST, the Coast Guard in Long Beach, California was notified of a possible aircraft down off Anacapa Island. Alaska Airlines flight 261, carrying 88 passengers and crew members, crashed approximately eight nautical miles southwest of Point Mugu in nearly 700 feet of water. One post-response observation was that the use of ICS provided great benefits to the response, such as command and control, resource tracking, incident planning, logistics support, public affairs and interagency liaison activity. State and local agencies and the Coast Guard had worked together previously and were very familiar

with ICS. It is important to note here that California has fully implemented ICS state-wide for all emergency responses. In this case, it seems that only DOD was unfamiliar with the system and the recommended action was for ICS-trained responders to learn the military equivalents so organizations can be more rapidly translated.[16]

(d) *Response to terrorist actions.* Recent concern over the proliferation of weapons of mass destruction led Congress to mandate the enhancement of domestic preparedness and response measures to cope with potential terrorist attacks involving the use of nuclear, radiological, biological, and chemical weapons. The FRP Terrorism Annex describes the federal government's role in such an attack, however, much work remains on clarifying roles and assigning responsibilities across the interagency community.[17] Many domestic emergency response operations will include the use of military resources to some degree, resulting in joint civil-military response operations that present unique challenges. Military personnel find themselves in environments where rules of engagement, responsibilities, and chain of commands are fluid at best. A better procedure is needed to exercise command and control over an entire operation, especially when the lead federal agency may shift during the response.[18] For example, in a response to terrorism, the FBI is the Lead Federal Agency (LFA) initially. Once the response has shifted to "consequence management", the LFA is transferred to FEMA. With the end of the Cold War and the expansion of the military role into worldwide peacekeeping and humanitarian missions, one could argue that the military should have the role of coordinating domestic emergency response operations. DOD does have expertise in organizational C2, however, for a variety of reasons C2 of domestic emergency response operations should be left to civilian agencies.[19] Response agencies, however, do need to establish a standard, responsive, coordinated, and effective C2 system.

(e) *Fragmented adoption of ICS.* Some agencies appear to be modifying and complicating the ICS organization (and therefore its principles) by creating unique, tailored structures and limiting the integration of responses. Whether real or perceived, adopting the ICS, then tailoring it, often reduces the effectiveness achieved when applied correctly. The command and control organization for domestic terrorist incidents was published in the FRP in June 1999 (see Figure 5). The FBI Joint Operations Center Structure contains some ICS elements, in addition to other organizational elements, and appears to be a modified Incident Command organization.

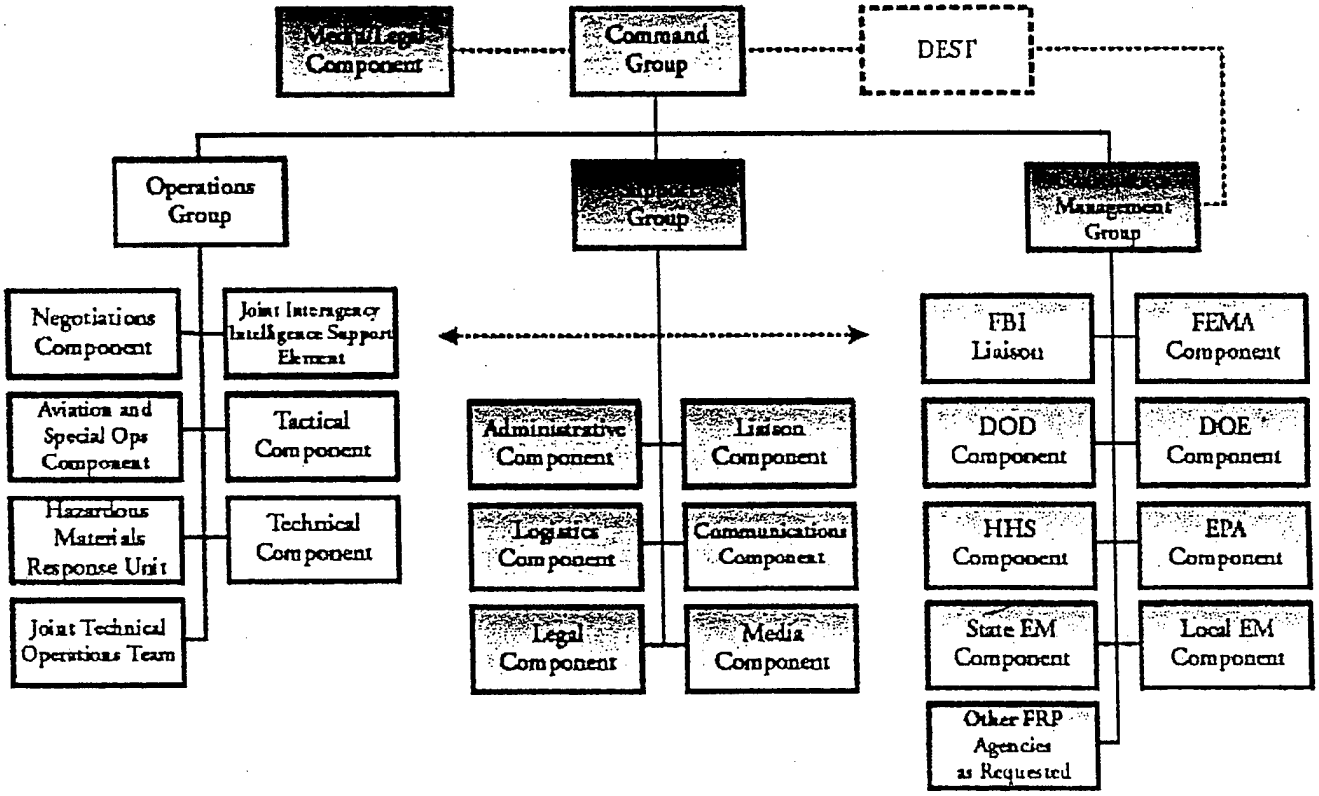
Why ICS should be the National Standard C2 System for Domestic Emergency Response Operations

(a) *ICS provides a functional command and control element for multiagency responses.* Federal domestic emergency response is comparable to the operational level of war in which command and control of large, complex activities is one of the most important operational functions, because it binds together all the "operational functions". It is the means by which the commander synchronizes joint force activities in time, space and purpose in order to achieve service and functional component unity.[20] In emergency response operations, time is critical. Reaction time must be immediate and without hesitation. Precious time is wasted when numerous agencies respond with unique organizations and systems. The consequence is that time is wasted as responders try to establish an effective response organization while concurrently trying to conduct response operations.

(b) *ICS is widely accepted by state, local and private agencies.* At the state and local level, ICS is already the standard and has been proven in many actual response operations. The system has been tested for over twenty years, and has improved C2 of domestic

Terrorism Incident Annex

Figure TI-3 — FBI Joint Operations Center Structure
(Click graphic to return to text.)



Updated: June 3, 1999

Figure 5

emergency response operations. The federal government should continue to reinforce the idea that state and local governments and non-profit organizations need to be prepared for the primary response role. By adopting ICS as the national standard, the first-responder role of local agencies is, in a sense, reinforced.

(c) *ICS provides clear chain of command and control structure that is simple, flexible and integrated at all levels.* The Incident Command System provides all the desired elements of military operational command and control within an interagency framework with terminology that is clear to both the armed forces and civilian authorities. The most important elements of operational command and control are information, authority, and communications.[21] The ICS emphasizes centralized information collection for decision making and public affairs purposes, integrated logistics, including consolidated resource ordering and tracking and a single integrated incident planning process. All the elements of ICS combine to make it a highly effective C2 system.

(d) *A standard training and certification program already exists.* The National Interagency Incident Management System is well-established, with training, qualification, certification programs. NIIMS consists of 5 major subsystems that collectively provide a total systems approach to all-risk incident management. These five subsystems are; Incident Command System, Training, Qualifications and Certification, Publication Management and Supporting Technology. NIIMS is a "public domain" system that allows unrestricted distribution by commanding officers to improve the capabilities of, and unify the local response community into a more effective organization. Figure 6 is a table summarizing the ICS National Training Curriculum.

Table of Modules

The table below provides summary information on modules, course structure, and supporting documentation.

INCIDENT COMMAND SYSTEM
NATIONAL TRAINING CURRICULUM

Modules	Courses and Titles	Est. Hours	NWCG Users	Public Safety	Other Govt.	Private Sector
I-100	INTRODUCTION TO ICS					
1	ICS Orientation	2	x	x	x	x
	Total I-100	2				
I-200	BASIC ICS					
2	Principles and Features of ICS	2	x	x	x	x
3	Organizational Overview	4	x	x	x	x
4	Incident Facilities	2	x	x	x	x
5	Incident Resources	2	x	x	x	x
6	Common Responsibilities	2	x	x	x	x
	Total I-200	12				
I-300	INTERMEDIATE ICS					
7	Organization and Staffing	6	x	x	x	x
8	Organizing for Incidents or Events	5	x	x	x	x
9	Incident Resources Management	4	x	x	x	x
10	Air Operations	4	x	x		
11	Incident and Event Planning	8	x	x	x	x
	Total I-300	27				
I-400	ADVANCED ICS					
12	Command and General Staff	6	x	x	x	x
13	Unified Command	6	x	x	x	
14	Major Incident Management	4	x	x	x	
15	Area Command	6	x	x		
	Total I-400	22				
I-401	MULTI-AGENCY COORDINATION					
16	Multi-agency Coordination	4	x	x	x	x
	Total I-401	4				
I-402	ICS FOR EXECUTIVES					
17	ICS for Executives	2	x	x	x	
	Total I-402	2				
	Total All Modules	69				

Companion Documents	Recommended for Course Presentations		Recommended for Training Administrators
History of ICS			x
Instructor Curriculum Guide	x		x
Curriculum Syllabus			x
Syllabus Summary			x
ICS Glossary	x		
ICS Position Descriptions and Responsibilities	x		
Scenario and Incident Action Plan Catalog	x		
ICS Forms Catalog	x		

Users can follow course designations or establish other groupings to meet agency-specific needs.

Figure 6

(e) *ICS provides a framework for response planning and exercising.* Most after action reports stress the importance not only of planning, but of prior training and exercising within the mulitagency framework before an incident occurs. Planning and exercising are processes critical for ensuring that interagency response operations are integrated and synchronized. The Incident Action Planning process can be used as a realistic tool to exercise a given response scenario. Table-top exercises can serve both for training and plan evaluation. Finally, field training exercises are important to test execution and coordination at all response levels.

Recommendations

(a) *Require all response agencies to adopt ICS for domestic emergency response operations.* As previously mentioned, the Federal Response Plan states that "The FRP employs a multiagency operational structure that uses the principles of the Incident Command System (ICS)".[22] This statement is too vague and should be modified into a directive to state that all domestic emergency responses shall be organized and executed via the NIIMS Incident Command System. If FEMA does not have the authority to direct a specific response management system then legislation will be required, which would be justified on the basis of improved government efficiency. In the interim, response organizations should implement programs to ensure their response personnel are trained in ICS. ICS is flexible and can be tailored for individual responses. However, agencies should not develop their own "spin-off" or modified ICS structures, but should adopt the standard organization, system and principles.

(b) *Continue emphasizing the primacy of state, local and private agency response.* The federal government should not become the 911-response organization. The primary

responsibility for emergency response should continue to reside with state, local and private agencies. However, state and local agencies must train and exercise with federal responders. What is important is to define when a federal response will be activated and who will be in charge. Even though the responses will need to be "coordinated" on many levels, an operational chain of command must be established.

(c) *Emphasize preparedness through plans and exercises.* As stated by General Schoomaker, USA, Commander in Chief, U.S. Special Operations Command: "Don't confuse enthusiasm with capability." We can not afford to assume our capability to respond to major domestic incidents is adequate. If we don't carefully plan and train for potential large-scale emergency responses, the outcome will to be chaos. Training and exercises should focus on identifying and assessing agency core competencies, identifying procedural disconnects and attaining unity of effort.[23]

(d) *Response organizations should establish Incident Management Teams (IMTs).* As mentioned previously, the first few hours and days are the most critical in mounting an effective response. There are advantages to having a core of highly trained responders that would deploy to an incident immediately to "get the ball rolling." Independent of the response, these experts can facilitate the immediate establishment of a functional, integrated response organization.

(e) *Exploit technology.* As in all areas of government and private industry, technology holds much promise in facilitating real-time situations. Domestic emergency response has the potential, like military and commercial operations, to be "network centric". The Coast Guard is developing an On-Scene Command and Control Prototype (OSC2) which is planned to serve as the support technology for ICS in providing the integration, display,

and redistribution of real-time, response and planning information. This system will initially include such features as a large-screen, real-time situation display and a web-based Intranet link to disseminate information both within and outside the command post. Future capabilities include real-time tracking and display of response resources using GPS transponders.[24] It is important that, as technology is developed, all response agencies coordinate efforts and ultimately share one common system.

Implementation Challenges

One of the main challenges in adopting the ICS for all domestic emergency response operations is that some agencies have pre-existing response organizations and may be resistant to adopting a new system. One example is the military as a domestic emergency response agency. The two-tiered Combined Joint Task Force (CJTF) is the normal choice for the military in response operations. Figure 7 illustrates a proposed CJTF organization for Civil Support. Changing a pre-existing response organization would require training personnel and changing existing directives and publications.

Agencies may not want to integrate into a common organizational structure due to the very real fear of losing resources. Once agencies integrate into an Incident Command System organization, redundant systems and resources become readily apparent, and paths to more efficient responses are exposed. This is actually one of the major advantages of using ICS; in that responses become more efficient, and duplication of effort is minimized. Furthermore, integration exposes weaknesses in response preparedness, so the advantages outweigh the disadvantages.

Although the FRP implies that FEMA employs an ICS organization, FEMA may not have the authority to mandate a federal response organization. The FRP states that, "the

Command and Control Structure

JTF-CS Concept of Operations

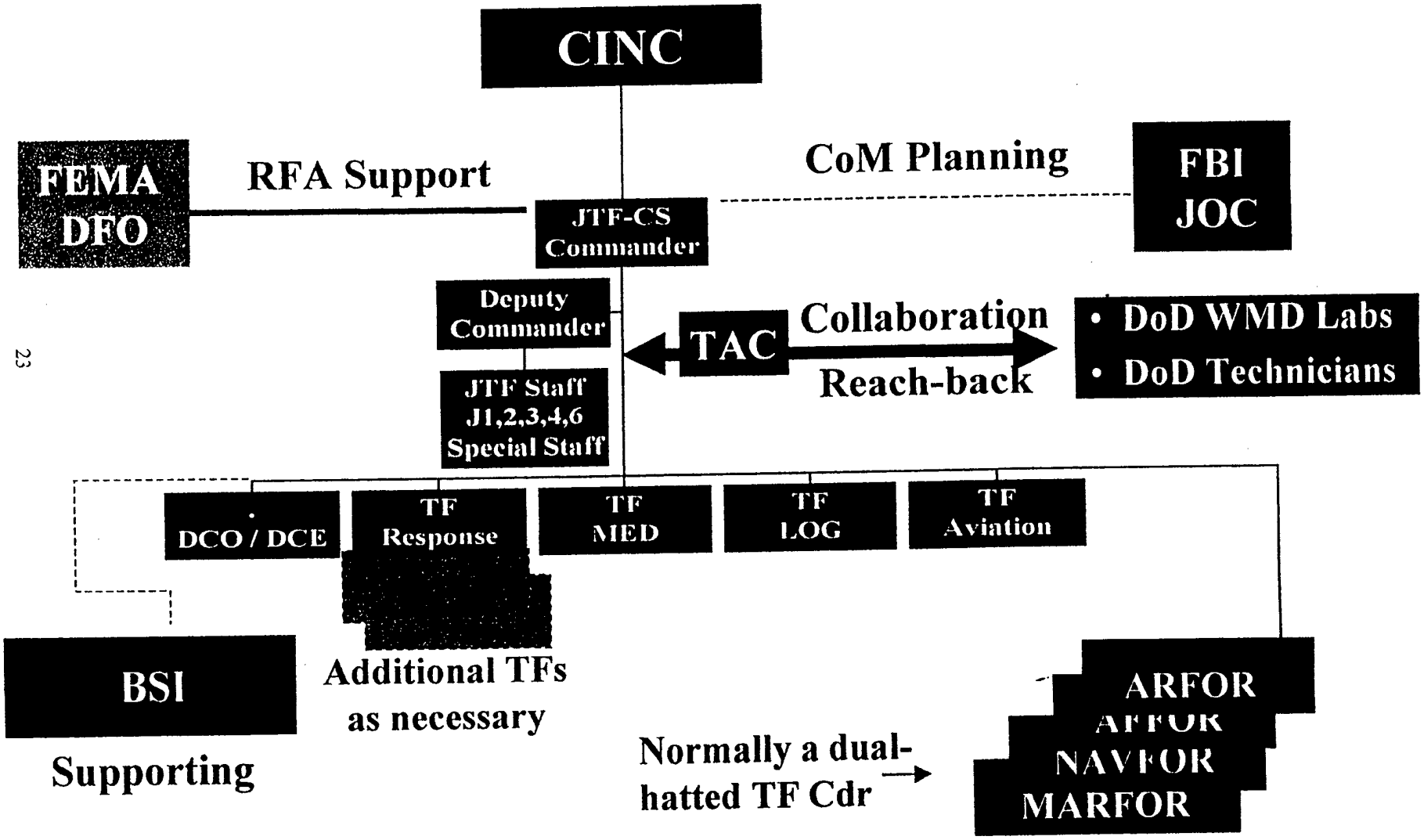


Figure 7

overall responsibility for recovery rests with state and local governments. The FRP recognizes the primacy of state and local governments in defining recovery requirements and identifying needs. The Federal Government's role is to complement and supplement state, local, and private resources to facilitate recovery."[25] Designating a national C2 organization and system might be seen as a step toward increasing the federal response role. However, as long as a process is in place to determine if and when the federal government will intervene, having a national response C2 structure would serve only to enhance the response operation.

Conclusion

It is certain that the federal government will be called upon more often to "coordinate" federal assistance for domestic emergencies. While it is important for the federal government not to become the 911-responder, it is also important that response operations be carried out in the most effective and efficient manner possible. Command and control is an important operational function that needs to be in place before a disaster occurs. Response agencies need to plan and exercise in advance of disasters to ensure a workable C2 organization will be implemented without delay. The Incident Command System is a tested C2 system that should be adopted for all domestic emergency responses.

[1] Milan Vego, On Operational Art (Fourth Draft), September 1999 (Naval War College, Newport, RI), 269.

[2] National Academy of Public Administration, Coping with Catastrophe. (Washington, DC: NAPA). February 1993, 10.

[3] Ibid., 11.

[4] Ibid.

[5] Ibid., 14.

[6] Ibid., 17.

[7] National Wildfire Coordinating Group, ICS National Training Curriculum, "History of the Incident Command System," October 1994, 1.

[8] Ibid., 2.

[9] Federal Emergency Management Agency, Federal Response Plan, Basic Plan, http://www.fema.gov/r-n-r/frp/, April 2000, 11.

[10] National Wildfire Coordinating Group, ICS National Training Curriculum Module 13, "Unified Command.", October 1994.

[11] Fischer, Carl E. "Interagency Cooperation: FEMA and DOD in Domestic Support Operations." (Unpublished Research Paper, U.S. Army Command and General Staff College, Fort Leavenworth, KS: 1997), 28.

[12] Henderson, Harlan Captain, USCG, "Implementing the Incident Command System by the U.S. Coast Guard: Update 1999," Proceedings of the Marine Safety Council, Special Summer Edition 1999, 21.

[13] Ibid.

[14] U. S. Coast Guard, Commander First Coast Guard District, "Egypt Air Flight 990 Lessons Learned," January 25, 2000, 7.

[15] Ibid.

[16] U. S. Coast Guard Marine Safety Office Los Angeles/Long Beach, "Alaska Airline Fight 261 After-Action Report," February 28, 2000.

[17] Taylor, Scott R., Rowe, Amy M., and Lewis, Brian M., "Consequence Management, In Need of a Timeout," Joint Forces Quarterly, Summer 1999, 80.

[18] Ibid.

[19] National Academy of Public Administration, Coping with Catastrophe, (Washington, DC: NAPA). February 1993, 23-25.

[20] Milan Vego, On Operational Art (Fourth Draft), September 1999 (Naval War College, Newport, RI), 269.

[21] Ibid.

[22] Federal Emergency Management Agency, Federal Response Plan, Basic Plan. http://www.fema.gov/r-n-r/frp/, 25 April 2000, 11.

[23] Joint Chiefs of Staff, Interagency Coordination During Joint Operations: Volume I (Joint Pub 3-08), (Washington, D.C.: 09 October 1996), III-13.

[24] U. S. Coast Guard Office of Marine Environmental Protection Web Site, http://www.uscg.mil/hq/g-m/mor/Articles/OSC2.htm., 01 November 1999.

[25] Federal Emergency Management Agency, Federal Response Plan, Recovery Function Annex, http://www.fema.gov/r-n-r/frp/, 25 April 2000.

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