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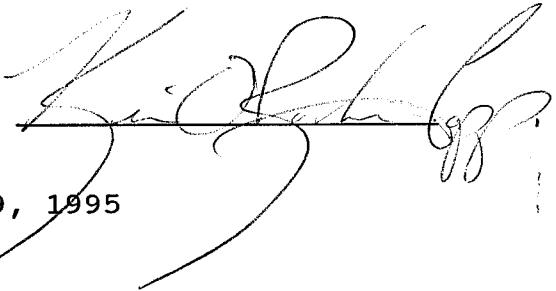
**THE APPLICATION OF OPERATIONAL ART TO
DOMESTIC DISASTER RELIEF OPERATIONS**

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.

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ABSTRACT

The application of Operational Art to domestic disaster relief operations is analyzed using Hurricane Andrew relief operations as the test vehicle. Operational Art is discussed in five parts: The Theater Organization; Forces' Operational Organization; Methods of Forces' Operational Employment; Principles of Forces' Operational Employment; Operational Logistics and Sustainment. The author validates the suitability of Operational Art for disaster relief operations and calls for use of the Operational Art's five principal components by military officers and civilian managers.

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"The influence of theoretical truths on practical life is always exerted more through critical analysis than through doctrine."

- Carl von Clausewitz¹

Operational Art is widely accepted within the U.S. military as a theoretical truth with direct influence on the practical aspects of conducting combat operations. Current joint doctrine defines Operational Art as "the employment of military forces to attain strategic and/or operational objectives through the design, organization, integration, and conduct of strategies, campaigns, major operations and battles."² Its function is to link the strategic ends with the tactical means. Appropriately, the application of Operational Art is toward warfighting. Nevertheless, Operations Other Than War (OOTW) also should benefit because Operational Art helps the commander quickly organize and allocate resources to meet the strategic goals. This paper will explore the suitability of applying Operational Art to domestic disaster relief operations by using Hurricane Andrew relief operations as a test vehicle.

This study is important for several reasons. First, by definition, federal disaster relief is needed when the devastation

¹ Carl von Clausewitz, On War, ed. and trans. Peter Paret and Michael Howard (Princeton University Press, 1984), p. 156.

² Joint Pub 3-0, Doctrine for Joint Operations, (Washington, Office of the Chairman, JCS, 9 September 1994) p. GL-12.

overwhelms the capabilities of the local and state governments.³ Second, the U.S. General Accounting Office (GAO) found that the federal disaster relief strategy for Hurricane Andrew was deficient.⁴ Lastly, the military's involvement in domestic disaster relief will continue. President Clinton includes disaster relief as a mission of the military in his National Security Strategy.⁵ Given this requirement, the military must use a framework that will assist in analyzing the situation and developing a Concept Plan, particularly at the Operational level. Operational Art provides this framework, yet its usefulness to the Operational Commander for disaster relief operations has not been proven.

There are five principal components of Operational Art. These are theater organization, forces' operational organization, methods of forces' operational employment, and operational logistics and sustainment.⁶ Each area will be discussed and applied to the Hurricane Andrew relief operation conducted by Joint Task Force Andrew (JTF-A).

³ U.S. Army and Fleet Marine FM 100-19/FMFM 7-10, Domestic Support Operations (Washington, 1 July 1993) p. 5-1; (hereafter FM 100-19).

⁴ U.S. General Accounting Office, "Recent Disasters Demonstrate The Need To Improve The Nation's Response Strategy," Testimony before the Subcommittee on VA, HUD, and Independent Agencies, U.S. Senate, 27 January 1993, pp. 1-2.

⁵ President Clinton, A National Security Strategy Of Enlargement And Engagement (Washington: The White House, July 1994), p. 9.

⁶ Malan N. Vego, "Operational Art," Lecture, Newport, RI: U.S. Naval War College, 17 November 1994.

The Theater Organization

This area includes identifying the levels of war (national-strategic, theater-strategic, operational, operational-tactical, and tactical), determining the theater's structure and geometry, and organizing the theater.

Identifying the levels of war will assist the commander in visualizing how the operation should unfold, appropriately assigning missions, and distributing resources. The Hurricane Andrew relief operation involved all five levels of war. President Bush and key cabinet members and advisors, particularly the Secretary of Defense and the Director of FEMA, operated at the highest level. Within DOD, the Director of Military Support (DOMS) and staff functioned as a joint staff.⁷ The DOMS staff includes Army, Navy and Air Force officers for joint planning, an O-6 as the liaison to FEMA, and several Individual Mobilization Augmentees for coordinating disaster relief operations.⁸ The theater-strategic level involved the Director of FEMA Region IV and Commander-in-Chief, U.S. Army Forces Command (CINCFOR).⁹ The former was appointed to act as the Federal Coordinating Officer (FCO); the latter directed Second Continental U.S. Army (2d CONUSA) to

⁷ U.S. Army Regulation 500-60, Disaster Relief (Washington, 1 August 1981) p. 2-2.

⁸ Charles L. Rosenfeld, "Roles and Missions of the U.S. Army in Disaster Relief Operations," (Carlisle Barracks, PA: U.S. Army War College, 1993), p. 15.

⁹ U.S. Army Forces Command, "Hurricane Andrew Response: After Action Report" (Fort McPherson, GA: FORSCOM, 16 November 1992), pp. 19-21; (hereafter FORSCOM AAR).

appoint a Defense Coordinating Officer (DCO). The DCO acted as the coordinator between the FCO and the military units and functioned at the operational level. There was no operational commander until JTF-A was formed four days after Andrew struck Florida. The 2d CONUSA commander, LTG Ebbeson, became the JTF-A and operational commander; the DCO became one of his Special Staff officers.¹⁰ The operational-tactical level comprised the commanders of the 82d Airborne Division's Task Force All-American and the 10th Mountain Division's Task Force Mountain, among others.¹¹ The lowest level involved smaller units executing tactical missions. Initially, these levels were not well defined but rather evolved as the situation developed. As a result, there was no clear chain of command, priorities, or translation of the strategic objectives into practical measures until after JTF-A was established. To properly link the strategy to the tactics, the operational commander and staff must recognize the strategic setting's influence on the campaign plan.

The strategic setting involves the current policies and the events leading up to the crisis. The national agency mandated to unify the effort is the Federal Emergency Management Agency (FEMA).¹² FEMA developed the Federal Response Plan (FRP), which

¹⁰ FORSCOM AAR, pp. 17-18.

¹¹ Joint Task Force Andrew, "Joint Task Force Andrew After Action Report," (Miami, FL: Joint Task Force Andrew, 15 October 1992), v.II, 6; (hereafter JTF-A AAR).

¹² FEMA Office of Civil Defense, Report on Principal Threats Facing Communities And Local Emergency Management Coordinators (Washington, 6 March 1991), p. v.

assigns 12 mission areas called Emergency Support Functions (ESF) to 27 organizations.¹³ The Department of Defense is the primary agency for two areas and provides support in the remaining ten. DOD has designated the Secretary of the Army for planning and executing the military support.¹⁴ No doctrine was published by the Army in this regard until 1993 when the Army and the Marine Corps jointly provided guidance for domestic disaster relief operations. This doctrine clarifies roles and responsibilities and discusses principles involved.¹⁵ In 1992, however, the FRP provided the guidance that, in theory, would allow FEMA and federal agencies to quickly respond to a disaster. In practice, FEMA uses the FRP to identify assets and responsibilities, but response must wait for a request for assistance from the state under the provisions of PL 93-288 (The Stafford Act).¹⁶ Yet, in a major disaster like Andrew, the devastation is so great that the state needs hours to identify all requirements. The Governor of Florida needed eight hours to compile the request, which involves a damage estimate, inventory of state resources committed,

¹³ "The Federal Response Plan," Code of Federal Regulations, Title 44--Federal Emergency Management Agency Regulations (Washington: U.S. General Services Administration, National Archives and Records Service, Office of the Federal Register, April 1992), Part 206.

¹⁴ Department of Defense Directive 3025.1, Military Support To Civil Authorities (MSCA) (Washington, 15 January 1993) p. 3.

¹⁵ FM 100-19, p. 1-2.

¹⁶ U.S. Public Law 93-288, as amended by PL 100-707, Robert T. Stafford Disaster Relief And Emergency Assistance Act, reprinted by FEMA, p. 13.

specific types of assistance needed, and a certificate of cost sharing.¹⁷ Furthermore, Miami officials reported significantly less damage than anticipated and this, together with the lack of communications to South Florida, delayed the state's awareness of the devastation that occurred.¹⁸ Thus, the ability for a rapid and effective response was hamstrung by the burden of proof requirements stipulated in the FRP before Andrew made landfall.

National economic, political and cultural factors also come into play. Often these will vary in influence throughout the operation. This is clearly evident where media attention is most pronounced, as it is during domestic disasters. Three days after Hurricane Andrew swept across Florida and President Bush declared three counties as federal disaster areas, the Governor expressed the victims' mounting frustration with the slow federal response. The 1992 Presidential election was weeks away and Democrats were continually criticizing the Administration for lack of attention to domestic needs.¹⁹ Consequently, President Bush quickly appointed the Secretary of Transportation to lead a Presidential Task Force. One day later JTF-A was formed. The strategic setting of the impending Presidential Election, sensitivity to domestic issues, and policies and legislation not suited for quick

¹⁷ JTF-A AAR, v.I, 2.

¹⁸ Rosenfeld, p. 5.

¹⁹ "In The Eye Of The Political Storm," Time, 7 September 1992, p. 18.

response to a major disaster, caused the military to take an unanticipated lead role in relief operations.

The theater's structure for disaster relief is another important consideration because it directly effects the time and space factors for employment of forces. The theater's structure was informally defined. There was no Theater of War defined, but in effect it stretched from Texas to New York. Within this area were two Theaters of Operations (T.O.), although these, too, were not delineated. In effect, one T.O. included Texas, Louisiana, and Mississippi, and was assigned to Fifth CONUSA. Eventually, since little military effort was requested, this T.O. was not needed.²⁰ The other T.O. included the federally declared disaster areas of Broward, Dade, and Monroe counties in South Florida.²¹ This area was the JTF-A T.O., even though it was not so labeled, because it required the need for large forces over a long period of time and contained a major strategic threat.²² The strategic threat was the public's perception of a poor federal response, which would erode the Administration's voting base in the country, particularly in Florida. After JTF-A was functioning on August 29, 1992, three Areas of Responsibility were established within these counties to focus relief operations.²³

²⁰ FORSCOM AAR, p. 3.

²¹ JTF-A AAR, v. I, 3.

²² Malan N. Vego, "NWC 1132: The Theater And Its Structure; Glossary Of Terms," (Newport, RI: U.S. Naval War College, September 1994), p. 2.

²³ JTF-A AAR, v. I, 17.

This concentrated strategic resources in critical areas within the T.O., which was clearly lacking up to this point.

The theater's geometry helps in conceptualizing the terrain's affect upon the operation. In disaster relief operations, the salient points of the geometry are physical objectives, decisive points, central and exterior positions, base of operations, line of operations, and lines of communication.²⁴

The base of operations comprises facilities or areas from which relief efforts are projected. The JTF-A base of operations curved through the Port of Miami, Miami International Airport, West Palm Beach, Homestead AFB, Tamiami Airport and Opa-Locka Airport.²⁵ This provided a tight network of bases at aerial and coastal ports from which relief supplies could be quickly moved to stricken areas and temporary shelters. The Line of Operations converged from this baseline into the JTF-A T.O. The Line of Operations flowed through the tactical units and focused resources on the physical objectives.

The JTF-A established four operational objectives which were applied to four key physical objectives. The objectives of providing immediate life support and clearing debris from major roads were translated into physical objectives of constructing four Life Support Centers and prioritizing roads for clearing operations. Likewise, the remaining objectives, to assess the

²⁴ Malan N. Vego, "NWC 1097: Maritime Theater And Its Elements" (Newport, RI: U.S. Naval War College, September 1994)p. 5.

²⁵ FORSCOM AAR, p. 19.

relief needs of the victims and to sustain relief operations, were developed into physical objectives involving door-to-door contact in communities, and establishing main and forward supply depots with requisite transportation assets.²⁶

Tying the base of operations to the forces at the physical objectives are the Air, Sea, and Land Lines of Communication (LOCs). In a disaster area, LOCs will be severely degraded and will require substantial engineer effort to clear and upgrade. Until this is done, relief forces will be forced to operate from exterior positions on the periphery of the disaster area. Once access is provided, forces will be able to operate from the more advantageous central positions, which are likely to be near the physical objectives, and which will ease the logistical effort.

The operational commander is responsible for organizing the theater. This includes establishing a theater-wide command, control, and communications (C³) system, identifying locations for the basing system, determining operational recce and intelligence requirements, and determining the need for operational fires and operational protection.²⁷ Although these considerations are loosely identified in the FRP, the theater was not organized until the JTF-A commander deployed and took the first vital step of establishing an effective C³ system. The federal agency responsible for ESF #2 (Communications) is the National Communication

²⁶ FORSCOM AAR, pp. 19-20.

²⁷ Malan N. Vego, "OPS Session 7: The Theater Organization," (Newport, RI: U.S. Naval War College, November 1994), p. 23.

System, which comprises representatives from 23 agencies and some telecommunication equipment.²⁸ Nevertheless, the DOD assumed the lead role because it was the most capable organization available in South Florida. C³ is a critical area; one that needs to be thoroughly prepared prior to a major disaster occurring.

The JTF-A headquarters, comprised initially of 2d CONUSA key staff, was located at Miami International Airport.²⁹ The communication network in theater was austere, but improved once military tactical satellite communication equipment and radios arrived. This network linked the basing system that was established at the various aerial and coastal ports.

Operational Recce and Intelligence was lacking. Initially, the state had little information on the extent of damage in South Florida. No satellite or other overhead imagery was used. National observation assets need to be used immediately before and after a major disaster strikes. Engineer Damage Assessment Teams and Special Forces Disaster Assistance Survey Teams need to respond within the first 24 hours. This is essential because the chance for survival of trapped victims dramatically diminishes after 72 hours.³⁰ If early assessment is done, then the commander will have the means for an adequate Intelligence Preparation of the Battlefield. This did not occur for JTF-A operations.

²⁸ FM 100-19, p. 2-4.

²⁹ FORSCOM AAR, p. 18.

³⁰ FORSCOM AAR pp. 8-9.

Consequently, the federal response was slow and relief assets had to be shifted after they were deployed into the T.O.

Application of Operational Fires for disaster relief are exclusively non-lethal. These must be centrally planned to have a decisive impact on the operation. JTF-A employed Operational fires by conducting psychological operations. This included door-to-door contact with all victims and development of a close relationship with the media. This contributed to good public relations, deterrence of crime, and was the primary means of determining relief requirements and priorities.³¹

Operational Protection was not a concern for JTF-A. The critical vulnerability that had to be defended, slow federal response, was accomplished with the deployment of JTF-A and thousands of troops. Until this occurred, this critical vulnerability was under attack, which prompted the formation of a Presidential Task Force and reconnaissance of the disaster areas by the Army Chief of Staff and CINCFOR.³² Force protection was afforded by using the Florida National Guard (FLNG) in law enforcement, which was not federalized and not bound by the restrictions of the Posse Comitatus Act.³³ This was possible because Active Duty personnel assumed the FLNG's mission for traffic control.

Forces' Operational Organization

Forces can be organized along functional or component lines.

³¹ FORSCOM AAR, p. 23.

³² FORSCOM AAR, p. 22.

³³ FORSCOM AAR, pp. 99-101.

JTF-A was largely organized along functional lines with the establishment of ARFOR, NAVFOR, and AFFOR headquarters; the Special Purpose Marine Air Ground Task Force (SPMAGTF) was under the operational control of ARFOR.³⁴ One key exception was the creation of a joint and combined Task Force Engineer, which had all American and Canadian engineers working for a U.S. Army Corps of Engineer Division Engineer. This concept provided good control, but lengthened the engineer response time to over 24 hours. If the engineers had remained with their component commands, the response was expected within 4-6 hours.³⁵ A key element initially missing in the JTF-A staff was a Joint Air Operations Center to control air space and coordinate air assets. These tasks were done on an ad hoc basis by the Air Force at Homestead AFB later in the operation. Thus, initially, aircraft flying into theater did so dangerously and with little advance coordination.³⁶

Command relationships were generally good. Nevertheless, the JTF-A staff spent much time and effort reporting to the DA staff, which was acting as a higher headquarters, as well as Forces Command.³⁷ Much of this would have been resolved had the development of Essential Elements of Information (EEI) occurred. Another problem area was the relationship with the FCO. The FCO

³⁴ JTF-A AAR, v. II, Annex C, 1.

³⁵ U.S. Army Engineer School, Engineer Support to Operations Other Than War, (Fort Leonard Wood, MO, 11 April 1994), p. 25.

³⁶ JTF-A AAR, v. II, Annex D, 4-6.

³⁷ JTF-A AAR, p. 106.

has the authority to assign missions to the military. The FCO may delegate this authority, yet this was not done during JTF-A operations.³⁸ Delegation would have allowed JTF-A to accept requests directly from local authorities. This would have resulted in quicker response times and enhanced public opinion of the federal relief operation, which were key political concerns.

Selection of the operational commander is another critical component of the forces' operational organization. Two attributes seem to be common among the best theater commanders: strategic vision and strength of will.³⁹ The operational commander, therefore, must understand the strategic ends desired, the ways to attain these ends by developing a campaign plan, the means to resource the campaign, and the associated risks. These concerns can be phrased into the following questions.⁴⁰

The first question addresses the ends: What operational goals and military (or related political and social) conditions must be produced in the Theater of Operations to achieve the nation's strategic goals? Domestic disasters will require a strategic goal of accomplishing the relief operation quickly and effectively, as judged by the general public.

The second question, What sequence of actions must be planned and executed to most likely reach the goals and

³⁸ FORSCOM AAR, p. 62.

³⁹ Mitchell M. Zais, "Strategic Vision and Strength of Will: Imperatives for Theater Command," Parameters, v. XV, No. 4 (Carlisle Barracks, PA: U.S. Army War College), 62.

⁴⁰ Vego, "Operational Art" Lecture.

conditions?, involves developing the campaign plan (The Ways). The five principal components of Operational Art discussed in this paper allows the commander to develop an acceptable plan.

The third questions deals with the means to accomplish the campaign plan: How should the resources of the joint force be applied to accomplish the sequence of actions? A phased operation is a necessity in disaster relief operations. FEMA recognizes four phases in major disaster operations: preparedness, response, recovery, and mitigation.⁴¹ The first phase deals with contingency planning; anticipating and resolving problems. The second phase is concerned with the appropriateness of the response, which is seen as much more critical than speed.⁴² JTF-A used three phases: Response, Recovery and Reconstitution. These are included in the latest U.S. Army doctrine for domestic support operations and should be used in answering this question.

The last question asks: What are the likely derivative costs and risks to the joint force in performing that sequence of actions? A risk analysis is important at all levels. It starts at the strategic level since combat forces are being committed and will not be able to respond quickly to another crisis or contingency. To reduce risk at the operational level, the operational

⁴¹ Thomas E. Drabek, Some Emerging Issues in Emergency Management: Monograph Series 1984, V.1, No 3, (Emmitsburg, MD: Federal Emergency Management Agency, 1986), p. 10.

⁴² Enrico L. Quarantelli, Organizational Behavior in Disasters and Implications for Disaster Planning: Monograph V.1, No 2 (Emmitsburg, MD:Federal Emergency Management Agency,1984), p. 26.

commander must determine if the mission is suitable, appropriate and feasible. If not, then he or she must ask for a change in mission scope or obtain additional assets.

Methods of Forces' Operational Employment

This area includes phases in employment, identification of critical factors and the sector of main effort, measures of effectiveness, culmination, and operational maneuver.⁴³

The phases of employment critical to disaster relief are deployment and redeployment. Deployment should be driven by a METT-T analysis by the DOMS staff. Redeployment should be driven by the same analysis but at the JTF level. Major disasters require quick assessment of the situation. Local authorities may be unable to assess the damage. The JTF HQ, built around a CONUSA staff and augmented with Corps or Fleet staff, must be established and deployed to the area to link up with local and state officials. After Andrew struck, the deployment of the Division Ready Brigade (DRB) and the Assault Command Post from the 82d Airborne Division on August 28, 1992, was the result of the reconnaissance by the Army Chief of Staff and CINCFOR the day before. Redeployment was keyed to three Measures of Success:

- 1) Reestablishment of state and local governments' capacity to provide essential public services.
- 2) Civilian communities knowledgeable that DOD can/will respond quickly to provide emergency needs and not leave until job is complete.
- 3) "Soldiers" feel pride in their accomplishments.⁴⁴

⁴³ Malan N. Vego, "OPS Session 8: Elements of Operational Warfare" (Newport, RI: U.S. Naval War College, 1994), pp. 26-28.

⁴⁴ JTF-A AAR, p. 15.

These three criteria were not developed at the onset, but were defined late in the operation.⁴⁵ Eventually these led to Measures of Effectiveness used to gauge the progress of the operation. These included the number of meals served, cubic yards of debris removed, number of facilities repaired, and other quantifiable items. These, in turn, were closely related to the critical factors of the operation, particularly the center of gravity.

The threat's Strategic Center Of Gravity was the devastation in the 3-county area, particularly in Dade County where relief operations were appropriately centered. This area included three cities where the devastation was worst: Florida City, Homestead, and the Cutler Ridge area south of Miami.⁴⁶ These areas became the decisive points in JTF-A's plan to defeat the threat. Thus, the sector of main effort was in Dade County with the point of main attack through these terrain-oriented decisive points. Consequently, public opinion gradually improved so that the strategic-political goal was attained.

Operational maneuver was exercised with the deployment of the DRB from the 82d Airborne division four days after Andrew struck and the 10th Mountain Division three days after the DRB. These forces were directed at the threat's strategic center of gravity. Engineer forces were directed at the threat's operational center of gravity, arguably the 52 Dade County schools that were to be opened by September 15, 1992, and the roads that

⁴⁵ FORSCOM AAR, p. 5.

⁴⁶ FORSCOM AAR, p. 18.

serviced them. Nevertheless, operational maneuver nearly came too late. It should be conducted as soon as disaster areas are declared so that culmination can be forestalled.

Culmination in disaster relief operations occurs when the initial response is too slow, or ineffectual, or both. The establishment of JTF-A and deployment of military units pushed the culminating point for Phase I, Response, into Phase II, Recovery. Culmination in Phase II was delayed by massing the engineer effort. Ultimately, the operation did not reach culmination. In future disasters, contractors should be used to clear debris, which requires heavy equipment, so that military engineers can deploy by air and focus on construction of Life Support Centers and repair of critical facilities.

Principles of Forces' Operational Employment

Operational design includes operational guidance and objectives, and the operational idea or scheme that addresses the threat's operational critical factors.⁴⁷

Operational guidance and objectives clarify the mission. Besides the objectives already discussed, this includes the commander's intent. The JTF-A commander's intent was clearly stated: provide food and water to the cities of Homestead, Florida, and South Miami (Cutler Ridge area); provide expanded support as the

⁴⁷ Malan N. Vego, "NWC 4113: Fundamentals of Operational Design," (Newport, RI: U.S. Naval War College, 1994), p. 1.

situation develops; and assist other agencies with the receipt, storage and distribution of supplies and equipment.⁴⁸

Defining an endstate that supports the national aim in OOTW is very difficult. Throughout the JTF-A operation, relief efforts suffered from the lack of a defined operational endstate. This contributed to the problem of redeployment during Phase III. Eventually the operational endstate was defined as the emplacement of life support systems, the relief of initial hardships, and the handoff of relief operations to local authorities.⁴⁹ Until an endstate was developed and accepted by the FCO, tactical units were unsure when to cease support. Food, medical and other services continued even though local businesses reopened. Local authorities were hesitant to lose JTF-A units and the stability that the military presence provided.⁵⁰ Without an endstate, the disaster relief operations will experience a prolonged Recovery Phase and a delayed redeployment of military units.

The operational scheme used by JTF-A involved a three-phased operation, with coordinated and sequential application of forces and assets at a high operational tempo. Phase I involved quick response and immediate relief within theater. Phase II was recovery; an engineer intensive phase that demands clear, prioritized objectives. Phase III was reconstitution, which passed the

⁴⁸ JTF-A AAR, v. I, 4.

⁴⁹ JTF-A AAR, v. I, 4.

⁵⁰ Engineer Support to Operations Other Than War, pp. 77-78.

relief operation to local authorities and permitted redeployment of military forces.⁵¹

Throughout the operation, protection of our own Center of Gravity (Public Opinion) was afforded by a highly effective Joint Information Center (JIC). The JIC was established one week after Andrew struck and operated under the Presidential Task Force. The JIC was built around representatives from ten federal agencies. Daily information briefings were given to the media to demonstrate the effectiveness of the federal response. Key to the JIC's success was the support provided by the Army Reserve's 314th Press Camp Headquarters.⁵²

Operational Logistics and Sustainment

Operational logistics and sustainment is usually the single largest constraint on the operational commander. Local and state governments recognize the vast resources and capabilities of the military. They also perceive that the deployment of military forces will be largely ad hoc with many procedures improvised.⁵³ Nevertheless, predeployment identification of assets that will be required is critical to an appropriate response. The operational scheme must include sustainment, which will be crucial as supplies and equipment will flow into the T.O. from several sources.

Initially, XVIII Airborne Corps' Support Command assumed

⁵¹ FORSCOM AAR, pp. 43-44.

⁵² JTF-A AAR, v. II, Part 3, 14.

⁵³ Leon Gordenker and Thomas G. Weiss, ed., Soldiers, Peacekeepers and Disasters, (New York: St Martin's Press, 1991), p. 2.

this responsibility for JTF-A. After two weeks the Army Material Command's Logistic Support Group established a main depot and two forward depots to enhance throughput of resources.⁵⁴ Some problems still existed. The Joint Operation's Planning System (JOPES), particularly the Time-Phased Force Deployment Data (TPFDD), was not used even though this is a key source for transportation requirements and priorities.⁵⁵ A Crisis TPFDD was developed, but was difficult to use because units were task organized. As it happened for JTF-A units, most deployed into theater without organic equipment.⁵⁶ The DOD Resource Database was available for locating resources, but was not updated and was improperly used.⁵⁷ The U.S. Transportation Command was inundated with requests from several sources. Priorities had to be established, which slowed response.

Initial response is critical and should be built around a list of critical items known to be vital for disaster relief. Items such as medical supplies, food, water, and urban search and rescue equipment are needed within 24 hours.⁵⁸ Within theater, establishment of forward depots and close coordination with the Defense Logistics Agency (DLA) will improve sustainment opera-

⁵⁴ JTF-A AAR, v. I, 9.

⁵⁵ JULLS #02939-39992 (00575), p. 2.

⁵⁶ FORSCOM AAR, p. 70.

⁵⁷ JULLS #00600-02537 (00508), p. 8, and JULLS #02253-82176 (00540), p. 1.

⁵⁸ FORSCOM AAR, p. 9.

tions. The DLA will provide a liaison to the DOMS Crisis Action Team to give guidance, which proved to be vital to the success of the Andrew relief operation.⁵⁹ Regional contractors, who should be identified prior to a disaster and have disaster relief bids on file, should be mobilized. Bids must be awarded early for items not in the military system, such as Refrigeration vans and Port-o-lets⁶⁰, and for clearing and hauling debris.

Movement of supplies and equipment must be planned. Navy ships, Marine and Army aviation, and Air Force strategic lift should be integrated into the logistics plan. During JTF-A, food, water, and medical supplies were quickly funnelled to the four 1500-person Life Support Centers (LSCs) built by military engineers. These LSCs will be typically needed in disaster relief areas, and will provide everything from food and shelter to medical care and child care.⁶¹

Disaster relief operations are logistics and sustainment operations. The commander should include this understanding in the mission statement. The JTF-A mission statement did this by stating that the JTF "provides humanitarian support by establishing field feeding sites, storage/distribution warehousing, cargo transfer operations, local/line haul transportation operations, and other logistical support to the local population."⁶² This

⁵⁹ JULLS # 01450-73835 (00582), p. 4.

⁶⁰ FORSCOM AAR, p. 8, and JTF-A AAR, v. I, 9.

⁶¹ FORSCOM AAR, p. 23.

⁶² JTF-A AAR, v. I, 3.

requires a Joint Movement Control Center. JTF-A did not have one for several days, which degraded efficiency and precluded the commander from using commercial haul assets in theater.⁶³

By executing a synchronized and comprehensive operational logistics and sustainment effort, JTF-A was able to extend operational reach. The campaign plan, although constrained by logistics, was successful. Although successful, JTF-A's operational logistics and sustainment could have been more quickly established had it been deliberately planned beforehand. The key to this success was establishing forward bases of operation, employing engineers to open and maintain LOCs, and establishing priorities for services for each phase of the operation.

Antithesis

One could argue that Operational Art is not a useful framework because there is no strategic threat to counter with military forces. The threat may be local, or even regional, but not strategic. This view is supportable if one looks at the physical damage as a local problem. But in a major catastrophe, one that results in implementation of the FRP, the national response is required and will be evaluated. Politically, a poor federal effort is unacceptable. Therefore, the disaster poses a strategic threat to the stability and credibility of the current Administration as well as regional politicians.

Some may accept that a strategic threat exists, yet disagree that the Armed Forces be used. The essential issue is the view

⁶³ JTF-A AAR, v. II, Part I, 18.

that DOD is neither equipped nor trained for disaster relief, especially in light of the present austere force structure and reduced budget.⁶⁴ Most will agree that the primary purpose of the military is to win our nation's wars. The differences arise when there is no war and the military is conducting training to prepare for war. Common ground can be found by accepting that the military will be not just fighting the war, but also winning the peace in post-conflict operations, at least initially. Certainly this is true for Combat Support and Combat Service Support units. Common missions include scheduling and prioritizing work, coordinating with local authorities, and transporting resources, among others.⁶⁵ With this in mind, disaster relief operations can be viewed as training for a post-conflict mission.

The debate should end because OOTW is here to stay. The U.S. cannot afford to buy a force with the organization and capabilities that already exist in the military. General Sullivan, the Army Chief of Staff and vocal champion of the Army's primary warfighter role, recognizes the inherent capabilities of the Armed Forces for disaster relief operations. He has stated:

"There are non-combat tasks for which the Army has a certain capability by virtue of its size, versatility, and institutional characteristics ... the Army thus becomes America's force of choice for several missions throughout the continu-

⁶⁴ Rosenfeld, p. 21.

⁶⁵ Phillip A. Brehm and Wilbur E. Gray, Alternative Missions For The Army, (Carlisle Barracks, PA: U.S. Army War College, 1992), p. 20.

um of military operations, to include peacekeeping, humanitarian assistance, and disaster relief operations."⁶⁶

This view was seconded by Senator Sam Nunn as Chairman of the Senate Armed Services Committee in 1992. Moreover, he sought to expand the military's role in domestic activities by proposing to the President a "Civil-Military Cooperation Action Program."⁶⁷ The military is already moving forward. For example, after the Andrew relief operations, the Director of the National Guard provided guidance for organizing "Humanitarian Support Units," which will be available within 72 hours and authorized for up to 45 days.⁶⁸ The U.S. Atlantic Command is currently building adaptive joint force packages and developing joint training in support of disaster relief operations in the U.S. and its territories.⁶⁹

Synthesis

Given that the military will conduct disaster relief operations, is Operational Art the best framework to use? After all, FM 100-19 includes an appendix that is useful for conducting disaster relief operations. From the Operational Art perspective, although FM 100-19 is useful for analyzing the disaster area, a

⁶⁶ GEN G.R. Sullivan, "Army Focus 92," (Washington: Government Printing Office, 1992), p. 11.

⁶⁷ Senator Sam Nunn, Domestic Missions For The Armed Forces, (Carlisle Barracks, PA: U.S. Army War College, 1993), p.3.

⁶⁸ MG R.F. Rees, "Project Standard Bearer: Implementation Guidance To Organize 'Humanitarian Support Units'," (Washington: National Guard Bureau, 30 September 1992), p. 1.

⁶⁹ Admiral Paul David Miller, "U.S. Atlantic Command: Focusing on the Future," Military Review, September 1994, p. 6.

more inclusive approach to this analysis is afforded by applying the principal five components of Operational Art.

Another available framework is the principles for OOTW, known by the acronym SLURPO.⁷⁰ These principles are Security, Legitimacy, Unity of effort, Restraint, Perseverance, and Objective, and are applicable to disaster relief operations. These principles complement, rather than replace, the Operational Art framework. The Operational Artist understands the need for suitable, appropriate, and feasible objectives. Germane to the Operational Scheme is synchronizing and sequencing the flow of resources to achieve unity of effort. Operational security and operational logistics and sustainment address the principles of security and perseverance. Restraint in the use of force and legitimacy in the eyes of the citizens are related. Both derive from clear Rules of Engagement and an understanding of the broader strategic goals, which are part of the Operational Design.

Summary

Disaster relief operations require quick response with resources organized to provide appropriate humanitarian assistance. A catastrophic disaster is equivalent to a major contingency operation in urgency. The military is trained, organized, and equipped for rapid deployment with proven ability to orchestrate complex operations at a fast pace. The military's outstanding logistics, communication, and readiness capabilities will be used

⁷⁰ Coined by COL Dan Keirse, USA, U.S. Naval War College, Department of Joint Military Operations.

by the national leadership to conduct domestic disaster relief operations. Moreover, the military should welcome the opportunity. Disaster relief operations mirror post-conflict operations; both require interagency cooperation, support to local governments, and advance operational planning. In effect, these operations are Peace Building operations; a mission area the military will be called on to perform frequently throughout the world.

The Operational Art framework is a suitable tool for the operational commander and staff to use in planning and conducting these operations. To be successful, it requires an officer corps educated in operational art.⁷¹ This framework should be adopted for use by FEMA and other agencies as they prepare to fulfill their responsibilities as outlined in the FRP. To maximize response, the federal government must be enabled by legislation to automatically respond to an imminent disaster without waiting for the state's request for assistance.

While waiting for this legislation, FEMA and DOD should jointly conduct disaster relief training for emergency managers. This training should be based on the Operational Art framework. Campaign plans can then be developed and rehearsed. Perhaps then, when the next major disaster strikes, the GAO will find that the federal response was quick, synchronized and decisive.

⁷¹ COL Brian J. Ohlinger, Peacetime Engagement: A Search for Relevance? (Carlisle Barracks, PA: U.S. Army War College, 1992), p. 16.

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