

2004



# After-Action Report

Hurricane Response

Emergency Management Assistance Compact





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A stylized graphic of a hurricane eye, composed of several concentric, overlapping circular bands of varying thicknesses, centered on the left side of the page. The bands are a lighter shade of the background color, creating a sense of depth and movement.

2004 Hurricane Response  
after-action report

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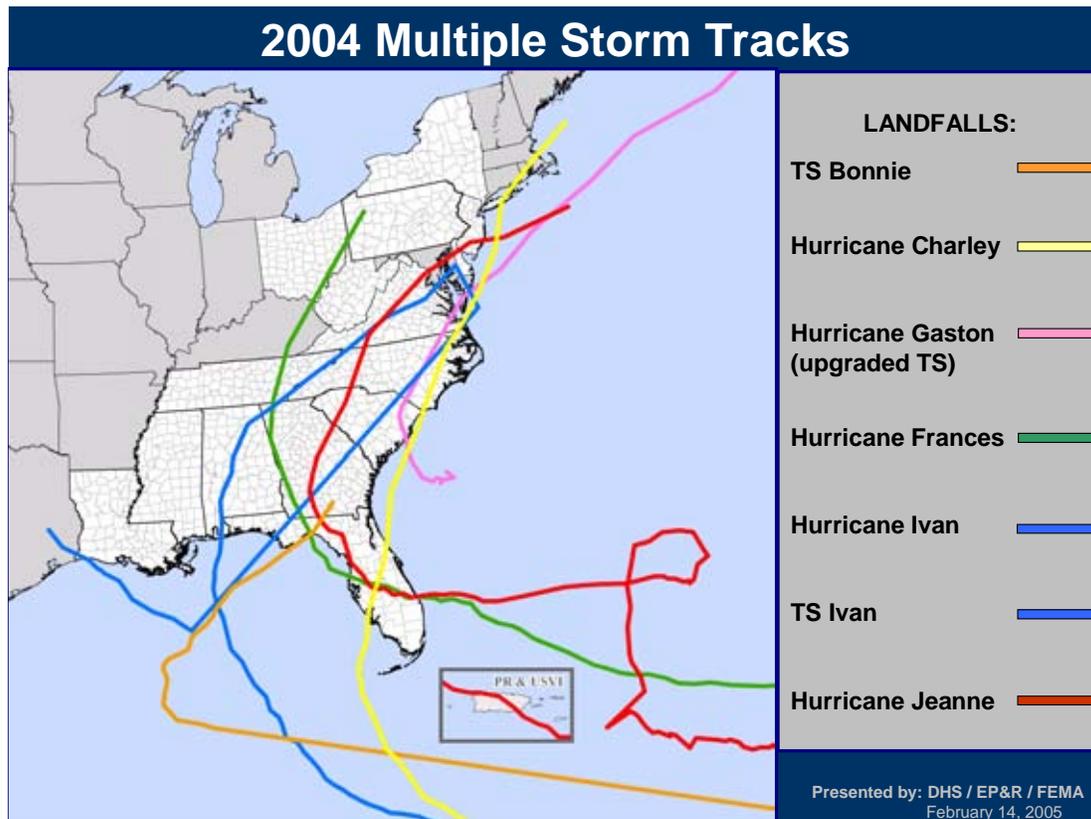


## 2004 HURRICANE SEASON RESPONSE AFTER-ACTION REPORT

### Introduction

The 2004 hurricane season was one of the most challenging periods in U.S. disaster response and recovery history. It tested Emergency Management Assistance Compact (EMAC) policies, plans, and procedures in circumstances heretofore unseen in scope, magnitude, intensity, and duration. Over a period of 85 days, 38 States deployed nearly 800 personnel in the largest use of State-to-State mutual assistance in history.

At 2:00 p.m. on August 12, 2004, Tropical Storm Bonnie made landfall near Apalachicola at the mouth of the Aucilla River in Florida's Panhandle. It was the first of five major storms to pummel the southeast and U.S. eastern seaboard in rapid succession over a period of 48 days (see **Figure 1**), including one Category 2 hurricane (Frances), two Category 3 hurricanes (Ivan and Jeanne), and one Category 4 hurricane (Charley) (see **Appendix 1** for a description of hurricane categories). While none of the storms were of the same magnitude of Hurricane Andrew, which decimated south Florida in 1992, the cumulative effect was even greater—and the response to these storms was as unprecedented as the devastation they produced.



**Figure 1. Multiple Storm Tracks**



This was not the deadliest U.S. weather-related disaster—a record held by the September 8, 1900, hurricane that leveled Galveston Island, TX, killing an estimated 8,000 to 12,000 people. Nor was it the most intense U.S. storm—a title earned by the “Great Labor Day Hurricane” of 1935 with 26.35 inches of pressure at landfall in the Florida Keys. However, its overall effect is without precedent. In Florida alone, in addition to 117 fatalities, 9,400,000 people were evacuated and 368,438 were sheltered. Eight million five hundred thousand (8,500,000) customers lost power and 3,934 public schools were closed for at least 1 day. Nearly 5,000 trucks transported almost 10 million gallons of water and 78 million pounds of ice into the stricken areas, where victims also consumed some 14 million Meals Ready-to-Eat (MREs). Insurance claims totaling \$23 billion were filed. Twenty percent of Florida’s residential dwellings were damaged and, so far, \$481,136,296 has been disbursed for housing assistance. More than 100 critical facilities were lost or damaged, including hospitals, nursing homes, fire and rescue stations, law enforcement facilities, schools, and emergency shelters. These horrendous storms left in their wake more than 37 million cubic yards of debris.

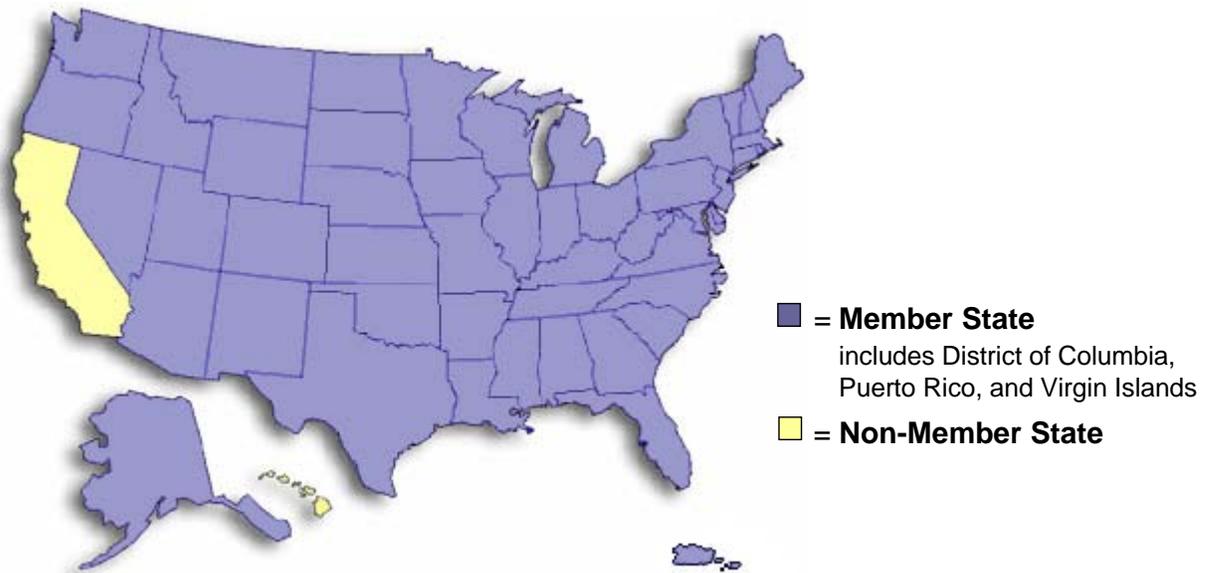
As bad as it was, the situation could have been even worse. The brunt of the four hurricanes struck relatively lightly populated areas, missing the more populous Gold Coast, the Tampa metropolitan area, and the Florida coast just east of Orlando. Had Hurricane Charley hit Miami directly, analysts speculate the damage could have been double that caused by Andrew in 1992.

Scientists attribute the unusual intensity of Florida’s 2004 hurricane season to a 1-degree warming of the waters where Atlantic hurricanes tend to form and grow, coupled with a rigid set of atmospheric factors that prevented the systems from turning north. According to the National Oceanic and Atmospheric Administration’s (NOAA’s) Hurricane Research Division, these conditions might well continue for the next decade.

## Emergency Management Assistance Compact

### Background

In the aftermath of Hurricane Andrew, the most destructive U.S. hurricane on record, Florida Governor Lawton Chiles proposed that the 19 members of the Southern Governors’ Association (SGA) establish some mechanism to enable mutual aid among Member States in similar emergency situations. The Southern Regional Emergency Management Assistance Compact (SREMAC) was accepted and signed by the SGA governors in August 1993. Because of the uniqueness of the States, membership in SREMAC required legislative approval by each participating State. Following recognition by the National Governors’ Association and the Federal Emergency Management Agency (FEMA) that SREMAC had nationwide applicability, the U.S. Congress enacted the Emergency Management Assistance Compact (EMAC) as Public Law 104-321 in 1996. Currently 48 States, the U.S. Virgin Islands, Puerto Rico, and the District of Columbia are members of the Compact (see **Figure 2**). Member States are required to have an implementation plan and to follow provisions specified in the *EMAC Operations Manual*.



**Figure 2. EMAC Member States**

## Resources

State resources that a governor can call upon in response to a disaster or emergency have always included the internal emergency management community of trained professional staff, dedicated equipment within the State and in its local jurisdictions, and State and local health and public safety organizations as well as all other assets within the States. This is the first line of disaster response. Additionally, as commander-in-chief of the State's National Guard, the governor can order those military organizations with their substantial resources to support response and recovery operations under the direction of the State's emergency management authorities, if the State's constitution and laws allow.

With EMAC in place, the governor of a State that experiences a significant disaster now has a much broader range of valuable response and recovery resources from which to draw. Upon declaring a state of emergency for the effected political jurisdictions within the State, the governor now has access to the considerable and, in many ways, unique assets of EMAC Member States. For example, prolonged disaster response and recovery operations can severely strain the finite emergency management personnel resources of any specific State. The only other source from which to obtain additional professional emergency management personnel already trained in State and county operations is from another governor. EMAC can facilitate the provision of these assets between Member States under the Compact. The administrative details, matters of cost reimbursement, and legal issues have already been addressed within the context of the Compact, which has been adopted by the legislatures of each Member State. Thus, by following the procedures outlined in the *EMAC Guidebook*, the governor can have virtually immediate access to more than 90 percent of the Nation's trained State and county emergency management staff. In addition to emergency management expertise, the governor can request, through EMAC, any other personnel or equipment resources that might be needed to meet the circumstances of the situation. EMAC Member States are not obligated to commit resources after receiving a request for assistance from another Member State because some States might very well be faced with similar emergency conditions. However, those that are



able, can do so unencumbered by inordinate bureaucratic constraints, exposure to excessive liability, or violating professional licensure provisions.

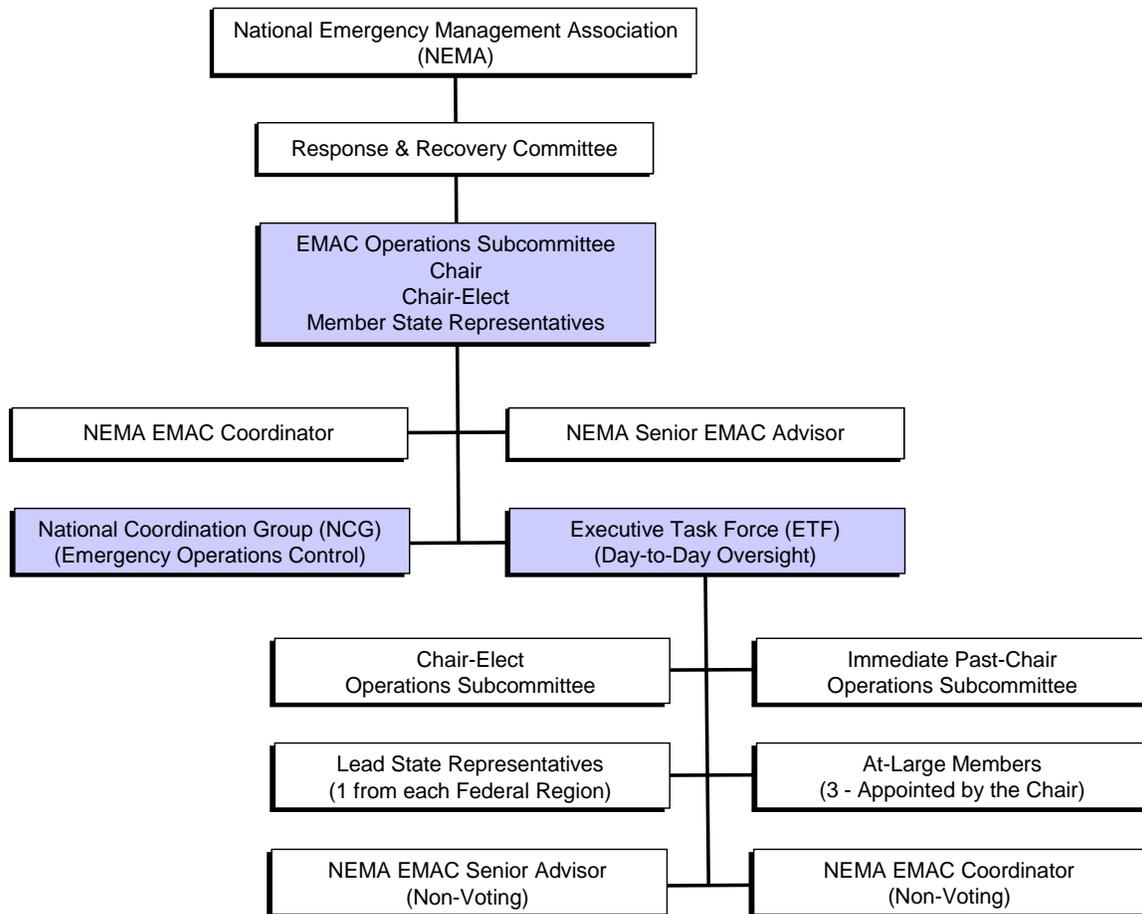
The resources available from other Member States under the Compact are not an alternative to Federal assistance obtained when the President, in response to a request from a governor, issues a Presidential Declaration. Resources deployed under EMAC are different from those obtained through Federal assistance and complement the Requesting State's emergency management personnel and resources.

## Process Management

Two principle tools have been devised that are essential to EMAC operations. The first is the *EMAC Guidebook and Standard Operating Procedures*. It is a relatively brief document that contains the specific language of the agreement in the form of 13 articles that have been accepted by all parties to the Compact. It also contains a complete list of the officials in each of the Member States who are authorized to request or commit resources through the request for assistance process. The standard operating procedures described in the *EMAC Guidebook* explain the operational details for obtaining and providing support through EMAC. In May 2005, a new *EMAC Operations Manual* was distributed to the Member States, which includes more detailed information regarding the organizational structure and division of responsibilities during State-to-State mutual-aid operations. The second essential operational tool is the EMAC Web site. It contains resources for Member States and hosts the EMAC Broadcast and Notification System, which is essential to EMAC operations. The EMAC Web site is also a critical communications link for information sharing during emergencies and in day-to-day operations.

## Organization

The National Emergency Management Association (NEMA) oversees EMAC through the EMAC Operations Subcommittee of the NEMA Response and Recovery Committee. The EMAC Operations Subcommittee conducts the business affairs of the Compact and is supported by the NEMA staff of the Council of State Governments. Each Member State is represented on this subcommittee, which annually selects a Chair from among its members. The EMAC Operations Subcommittee Chair is also designated as Chair of the EMAC Executive Task Force (ETF), which exercises day-to-day administrative oversight of the EMAC program and of the National Coordination Group (NCG), which assumes responsibility when it is activated during EMAC operations (see **Figure 3**).



**Figure 3. EMAC Organization Chart**

## Operations

The fundamental building block for EMAC operations is the Advance Team, or A-Team. When an event occurs, or threatens to occur, in a Member State that may require inter-State mutual aid through the Compact, the NCG is notified. Upon a request by the affected State, the Chair of the NCG may request that an A-Team be deployed to that State. The A-Team deploys to the Emergency Operations Center (EOC) of the Requesting State and helps define, quantify, and document inter-State resource requirements and coordinate with the other Member States offering to provide those assets. The A-Team may be augmented by additional members or with A-Team personnel from other States, depending on the scope and magnitude of the impending disaster. All A-Teams must be ready to deploy within 24 hours. During day-to-day operations, the EMAC ETF continuously monitors conditions and is prepared to transition into an operating mode when required.



## Levels of Activation

The lowest level of EMAC activation is **Level 3**, which is in effect whenever one Member State needs mutual-aid assistance from another Member State. **Level 2** activation occurs when conditions require that an A-Team deploy to coordinate aid from within a single region with the support of the NCG. The highest level of EMAC activation is **Level 1**, in which a major disaster requires the coordination of massive response and recovery resources. Upon a request from the U.S. Department of Homeland Security (DHS)/FEMA, the NCG Chair may activate a National Coordinating Team to coordinate directly with FEMA and other government and volunteer relief organizations at the National Emergency Operations Center. Regional Coordinating Teams may be deployed to one or more Federal Regional Operations Centers to coordinate EMAC operations within a specific regional area of operations.

## Typical Operating Sequence

In a typical sequence of events, a Member State at risk notifies the EMAC ETF Chair of the impending situation and that support through EMAC will likely be needed. The ETF Chair activates the NCG, broadcasts this information on the EMAC Web site, and surveys Member States within reasonable proximity of the Requesting State, but who are not at serious risk themselves. After the governor of the Requesting State declares a state of emergency, an A-Team is activated in one of the Member States by the NCG. The EMAC NCG remains in a support role. In weather-related incidents, the Assisting State's A-Team deploys immediately to the Requesting State's EOC so that it is in place in advance of the storm.

Upon arrival at the Requesting State's EOC, the role of the A-Team is to coordinate the support provided through EMAC. The A-Team helps the Requesting State's emergency management personnel by posting requests for assistance on the EMAC Broadcast and Notification System and by negotiating and coordinating the provisions of that assistance. Requests are formalized by using the Request for Assistance (REQ-A) Form (see **Appendix 2** for a sample REQ-A Form). The A-Team ensures that Part I is complete, accurate, and signed by an authorized official. Part I identifies the required resources, specifies the work location and anticipated duration of deployment, describes the work and living conditions as well as the logistical support arrangements, and provides reporting instructions and any other special requirements or directions. The A-Team compares the requirements with the resources being offered by Member States on the EMAC Web site and coordinates directly with potential Assisting States telephonically or by e-mail. After ensuring that an official listed in the *EMAC Guidebook* has signed Part I, the REQ-A Form is sent via facsimile (fax) to the Assisting State. The A-Team also helps to arrange local accommodations and other logistical support for the deploying personnel.

The State that is offering assistance (Assisting State) completes Part II of the REQ-A Form, listing the assets available to meet the requirements described in Part I and specifying the deployment costs. After an authorized official from the Assisting State (as designated in the *EMAC Guidebook*) signs Part II, the REQ-A Form is returned by fax to the Requesting State's EOC. Upon review and approval, Part III is executed by the Requesting State formally accepting the offer of assistance. The contract is now in place and deployment commences. Since all parties have been continuously engaged telephonically or via the Internet, the response can be virtually spontaneous.



Deploying personnel are instructed to contact the A-Team upon arriving in the Requesting State. The A-Team arranges for an initial orientation and provides logistical support information to the deployed personnel. The typical period of deployment for most assets is normally 14 days plus 2 days for travel. If the requirement extends beyond that period, the request for assistance can be amended or replacement assets sought by submitting a new REQ-A Form. The A-Team also prepares and disseminates a daily Situation Report using the EMAC Web site, conducts regular teleconferences with all parties, and maintains a complete record of all EMAC transactions.

## The Gathering Storms

It was an ominous Friday the 13th when Hurricane Charley made landfall at around 3:45 p.m., devastating Florida's Captiva Island and Port Charlotte with sustained winds of 145 miles per hour (mph) and gusts up to 180 mph. Hurricane Charley cut a 10-mile wide swath of destruction from Charlotte County on Florida's southeastern coast through Flagler County in the northwest of the State, hitting Orlando and Daytona before moving out to sea. The Category 4 hurricane had been preceded just 25 hours earlier by Tropical Storm Bonnie, which delivered a severe tornado to the Jacksonville area. Charlotte County was particularly vulnerable to Charley because it has the highest percentage of elderly residents in the State. According to the 2000 census report, 35 percent are over the age of 65. Charlotte County is also home to more than 30 trailer parks, housing hundreds of people. Two million seven hundred thousand (2,700,000) were evacuated as the storm advanced, and 102,094 sought safety in emergency shelters.

Twenty-three days later, just after midnight on the morning of September 5, 2004, as the State still reeled from the continuing effects of Charley, Hurricane Frances struck at Sewell's Point in Martin County. A Category 2 hurricane with 105-mph winds rotating counterclockwise for a distance of 85 miles from its 50-mile wide storm center, Frances produced widespread flooding throughout the area from its pounding rains. One million eight hundred thousand (1,800,000) people were evacuated, and 186,620 others moved into emergency shelters.

Just after 3:00 a.m. on September 16, 2004, Hurricane Ivan came ashore in Baldwin County, AL, bringing Category 3 winds of 130 mph and creating a powerful and damaging storm surge affecting the Florida Panhandle/Big Bend and south Georgia. Ivan washed away as much as 164 feet of beach in some places and undermined a five-story oceanfront Alabama condominium, the largest U.S. building ever to fail during a hurricane (see **photo at right**). Five hundred forty-four thousand nine hundred (544,900) people were evacuated from the Florida Panhandle area, and 33,472 took refuge in shelters.





Finally, on September 25, 2004, Hurricane Jeanne made landfall at almost the same location where Frances struck just 20 days earlier. A Category 3 hurricane with sustained winds of 120 mph, it impacted as much on the psyche of the beleaguered residents of the Florida peninsula as on the structures that had already been severely damaged or destroyed. Even the most resilient citizens finally seemed to surrender, as 4,400,000 evacuated the area—some for the second time in 3 weeks—and another 46,252 moved into emergency shelters. **Figure 4** shows comparative data from all four hurricanes.

2004 Hurricane Matrix								
	Landfall Dates	Maximum Sustained Winds	Forward Speed	Diameter (Hurricane Force Winds)	Forecast Rainfall	Maximum Storm Surge / Tide	Tornadoes (292 Total)	Confirmed Fatalities (173 Total)
	At Landfall							
<b>Charley</b>	Aug 13	140 mph	22 mph	25 mi	4 - 8 in	10 - 15 ft	25 (TS Bonnie 30)	35
	Aug 14	85 mph	28 mph	60 mi	2 - 5 in	6 - 8 ft		
	Aug 14	75 mph	28 mph	45 mi	2 - 5 in	4 - 6 ft		
<b>Frances</b>	Sept 5	105 mph	5 mph	85 mi	8 - 12 in	3 - 5 ft	117	55
	Sept 6	65 mph	8 mph	TS - 85 mi	6 - 10 in	2 - 5 ft		
<b>Ivan</b>	Sept 16	130 mph	13 mph	105 mi	10 - 15 in	10 - 16 ft	104	81
<b>Jeanne</b>	Sept 15	70 mph	8 mph	TS - 70 mi	8 - 12 in	1 - 3 ft	16	2
	Sept 25	120 mph	13 mph	130 mi	10 - 15 in	4 - 7 ft		

**Figure 4. Comparative Hurricane Data**

## Engaging EMAC

When Florida Governor Jeb Bush declared a state of emergency on August 10, 2004, as Hurricane Charley approached the Florida coast, the EMAC Operations Subcommittee Chair was in Albany, NY. His tenure as chairman was scheduled to expire in September, and he was engaged, along with core EMAC staff members, in an exercise intended to ease the transition for his successor in New York State. A year earlier, shortly after assuming the EMAC responsibility, Washington State was thrust into action when Hurricane Isabel struck the coasts of North Carolina and Virginia. The Washington State Chair wanted to share with his designated successor the lessons he had learned during that experience.

On August 11, the day the transition exercise was scheduled to commence, the Chair of the NCG received a call from the Florida Emergency Management Director. The Director informed him that Governor Bush had issued an emergency declaration and asked that an EMAC A-Team be deployed to the Florida State Emergency Operations Center (SEOC) in Tallahassee



to process requests for emergency support. The NCG Chair immediately activated the EMAC NCG and surveyed Member States to identify available resources. A three-person A-Team from Kentucky was deployed to Florida, arriving on August 12, and commenced work at the SEOC on the morning of August 13, approximately 8 hours before Hurricane Charley made landfall.

The EMAC Chair responsibility remained with Washington State for more than a month after EMAC operations commenced. The Chair, however, worked closely with the Chair-elect and incoming NCG staff in New York to ensure a seamless transition of EMAC operations in support of Florida. On September 11, 2004, with support through EMAC in response to Hurricane Frances fully under way and with Ivan looming in the Gulf of Mexico, the State of New York assumed the responsibility for EMAC, and the leadership transition was completed. Between August 13 and October 18, 2004, 45 A-Team members, deployed under EMAC, worked in the Florida and Alabama SEOCs and at the “Charley Command” forward command post, processing and coordinating support from an additional 750 personnel.

## After-Action Report

### Purpose

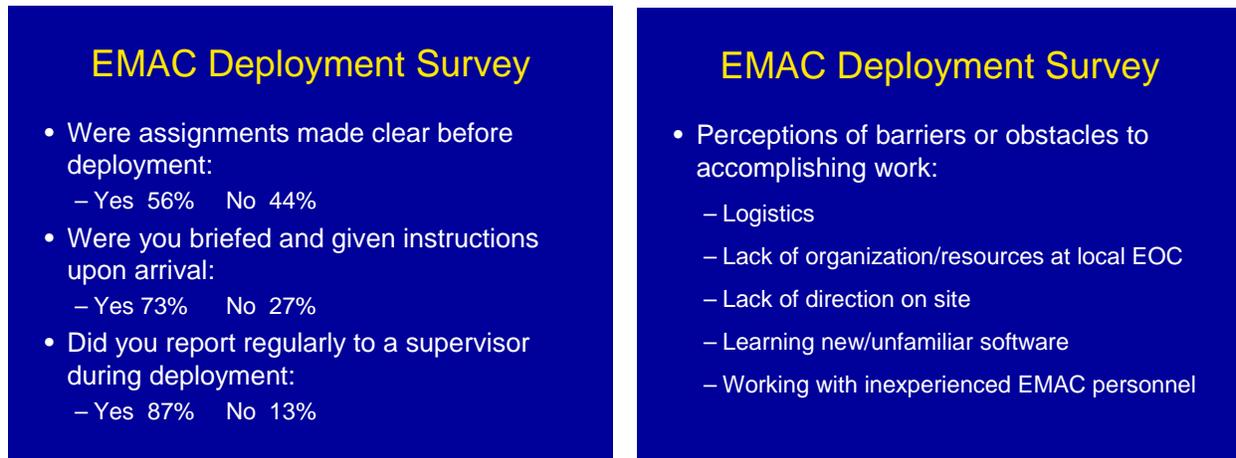
NEMA, in partnership with DHS, contracted with L-3 Communications Titan Corporation to produce this report describing the effectiveness of assistance obtained by Requesting States through EMAC.

The purpose of this After-Action Report (AAR) is to document from this keystone event both the successes and areas requiring adjustment so that continuous improvement and refinement will enable EMAC to meet future challenges.

### Methodology

A Consolidated EMAC Deployment Survey served as the starting point for identifying the various operational issues and best practices, and for formulating recommendations for improvement (see **Appendix 3** for a consolidated report of the EMAC deployment survey data). The survey of participants from both Requesting and Assisting States yielded a variety of information about what went well and about areas requiring attention, including impediments to the EMAC process, barriers encountered by deployed personnel, and difficulties experienced in logistics and other support areas.

The EMAC deployment survey data was very helpful. This data established general perceptions of what worked well and identified barriers or obstacles to accomplishing work. Results consistently identified challenges with logistics, lack of resources and organization at local EOCs, and lack of specific directions for assignments (see **Figure 5**).



**Figure 5. EMAC Deployment Survey**

A formal EMAC critique was conducted in Tampa, FL, on January 12–13, 2005. It proved to be a pivotal forum for collecting data from the broadest possible constituency. Sixty participants representing the three States that requested assistance, as well as nearly all of the 38 Assisting States and other supporting organizations, engaged in intensive facilitated discussions. Information gathered during that forum, along with the results of follow-up interviews and teleconference discussions with selected individuals, clarified and expanded information on specific events and issues.



*Participants representing the three States that requested assistance, as well as nearly all of the 38 Assisting States and other supporting organizations, engaged in intensive facilitated discussions.*



## Validation

A thorough multi-tiered validation process followed the collection and analysis of preliminary data. Key officials from both the Requesting and Assisting States reviewed the materials for completeness and accuracy, but with the understanding that different viewpoints are both acceptable and appropriate. Two or more persons may share a similar experience at different points in time and draw distinctly different and sometimes conflicting conclusions. The goal of this project was to achieve a general consensus, not unanimity. The final step in the validation process was a detailed review by a steering group established by the EMAC Chair.

## Organization

This report comprises two principle annexes containing information about the implementation of EMAC during the 2004 hurricane season. **Annex A, Requesting States**, presents the views of representatives from the three States that asked for assistance—Florida, Alabama, and West Virginia. **Annex B, Assisting States**, describes the perspective of the 38 States that rendered assistance when it was requested. A third annex, **Annex C, Federal and Other Support**, offers a brief summary of Federal emergency response activities as well as EMAC-related issues and recommendations.

Annexes A and B are structured in the same fashion. An introductory passage describes the roles and responsibilities of the subject organizations and the general nature of their engagement during response and recovery operations. This is followed by a discussion of positive accomplishments and issues for improvement along with related recommendations organized under five categories. To place in proper context the State-to-State mutual-aid focus of this report, Annex C summarizes briefly the Federal emergency response role during the 2004 hurricane season. It is important to note that the recommendations contained in this report are those of the broad EMAC community, not the AAR project staff. They were obtained during the course of collecting and analyzing data beginning with the initial survey, the interactive group debriefing of participating State representatives, and in follow-up teleconferences and individual discussions. We have attempted to faithfully present all of the recommendations so that the EMAC leadership can evaluate and act upon them as appropriate.

The five categories of findings and recommendations in Annexes A and B include the following:

- **Category 1 – Executing Deployment.** Contains material dealing with all aspects of initiating support through EMAC, including the process for requesting assistance and for receiving and fulfilling those requests, alert and notification actions, information exchange, preparing and delivering the requested resources, and similar topics.
- **Category 2 – Command and Control.** Addresses such matters as span of control, operational control and administrative management responsibilities, and the transition process for replacing deployed personnel.
- **Category 3 – Logistics.** Includes all aspects of ensuring adequate support to deployed personnel, including equipment, transportation, food, lodging, and providing for their safety throughout the deployment.
- **Category 4 – Field Operations.** Contains information about the actual conduct of response and recovery operations in the stricken area, including information management and personnel accountability.



- **Category 5 – Mobilization and Demobilization.** Addresses the processes of activating and deactivating EMAC resources, including cost tracking, financial management, and reimbursement.

## Major Accomplishments and Opportunities for Improvement

As in any event of this type, things do not always go as planned. Amidst the frenzied activity endemic to a major disaster, some glitches will occur, while other aspects of support activities often exceed expectations. It is important to capture all of this information in order to draw from it for future events. We have listed here only a few of the major accomplishments and opportunities for improvement found throughout this report. First and foremost, it was consistently reported by members of the Requesting States and the Federal personnel that EMAC adds critical and timely assets to the arsenal of response and recovery resources available to the governors of affected States.

### Major Accomplishments

1. The request for assistance system worked well. When the REQ-A Form is properly completed and signed by a competent authority, it serves as a contractual bond between the Requesting and Assisting States. It is also a historical artifact that documents the resources needed to augment intra-State assets.
2. Deploying personnel who were already trained in the Incident Command System integrated flawlessly into the command and control structure of the Requesting State. Such training also ensured a flawless transition between departing and replacement teams.
3. The on-the-job training acquired by deployed personnel vastly improves the response and recovery capabilities of the Assisting States. The trained, but previously untested, staff members deployed under EMAC now possess a wealth of operational experience to draw upon and share with their colleagues.

### Opportunities for Improvement

1. Accountability of deployed personnel was dangerously lacking. Team members were frequently, and sometimes repeatedly, relocated to meet the demands of a dynamic situation. It was often impossible for managers from Assisting States to locate and contact their deployed personnel.
2. Deployed personnel sometimes arrived with inadequate equipment and inappropriate gear for the primitive conditions in the stricken area. In such cases, they added to the burden of the Requesting States, requiring much of the same support as the victims.
3. A great deal of time was consumed in trying to precisely define the desired attributes of required resources on the one hand and the qualifications of available assets on the other. This illustrates the need for an acceptable form of “resource typing,” a requirement identified by representatives of both the Requesting and Assisting States.



## Additional Observations for Consideration

During the process of collecting and analyzing data for this AAR, certain other items requiring the attention of EMAC officials became apparent.

- An **enhanced EMAC database** is critical to better serve the needs of the entire community of EMAC Member States when responding to catastrophic events. Currently, a great deal of useful data is preserved in the database, but not in a form or format that can be easily used for strategic analysis. The EMAC AAR Team had to reformat the deployment data in order to sort by category of assignment, and then re-sort the information to correlate with the location of the assignment. The average duration of deployment, duty days, and cumulative hours worked had to be computed by hand. Such information is crucial to constructing a holistic representation of the total resource deployment under EMAC (see **Appendix 4**). Additionally, the terminology of deployment data, including descriptions of resource categories, varies among different submitting States. Some States reported information about National Guard assets while others did not. Data pertaining to the West Virginia deployments is not contained in the EMAC database. With an enhanced EMAC database, officials can analyze the nature of resources most frequently requested and the work sites to which they are deployed to better train and organize resources for future deployments. It is recommended that EMAC define what information it wants in the database and how that information will be used. The EMAC database should be electronically accessible to the sources of required information, including an electronic version of the REQ-A Form.
- **Electronic REQ-A Forms** should be developed and incorporated into the Web-based EMAC support system. Reliance on the hard copy REQ-A Form impedes transaction processing; inhibits the ability of Requesting and Assisting State officials to simultaneously, and in real time, access resource requirements and availability; and limits access to valuable deployment data. Currently, detailed information associated with specific requests for assistance is contained on the hard copy REQ-A Form, but is not available in the electronic EMAC database.
- Advances in **electronic signature technology** should be evaluated to eliminate the reliance on fax devices at both send and receive locations. The REQ-A Form requires the signature of the authorized representative of the Requesting State governor in Parts I and III and the signature of the authorized representative of the governor of the Assisting State in Part II. Electronic signatures would increase transaction efficiency.
- DHS/FEMA should continue to **embrace EMAC as a full partner** along with other components of the Nation's response and recovery community. EMAC-generated reinforcements in State and local EOCs ensured a functioning cadre of emergency management staff with which deploying Federal resources could effectively interact. It is in the interest of the Federal Government to nurture EMAC capabilities and ensure that the conditions under which resources can be deployed through EMAC are fully understood by all participating organizations. To address the requirements specified in this report, EMAC needs a steady and reliable funding source that is not now in place.



Annex A  
requesting states

Annex A  
requesting states

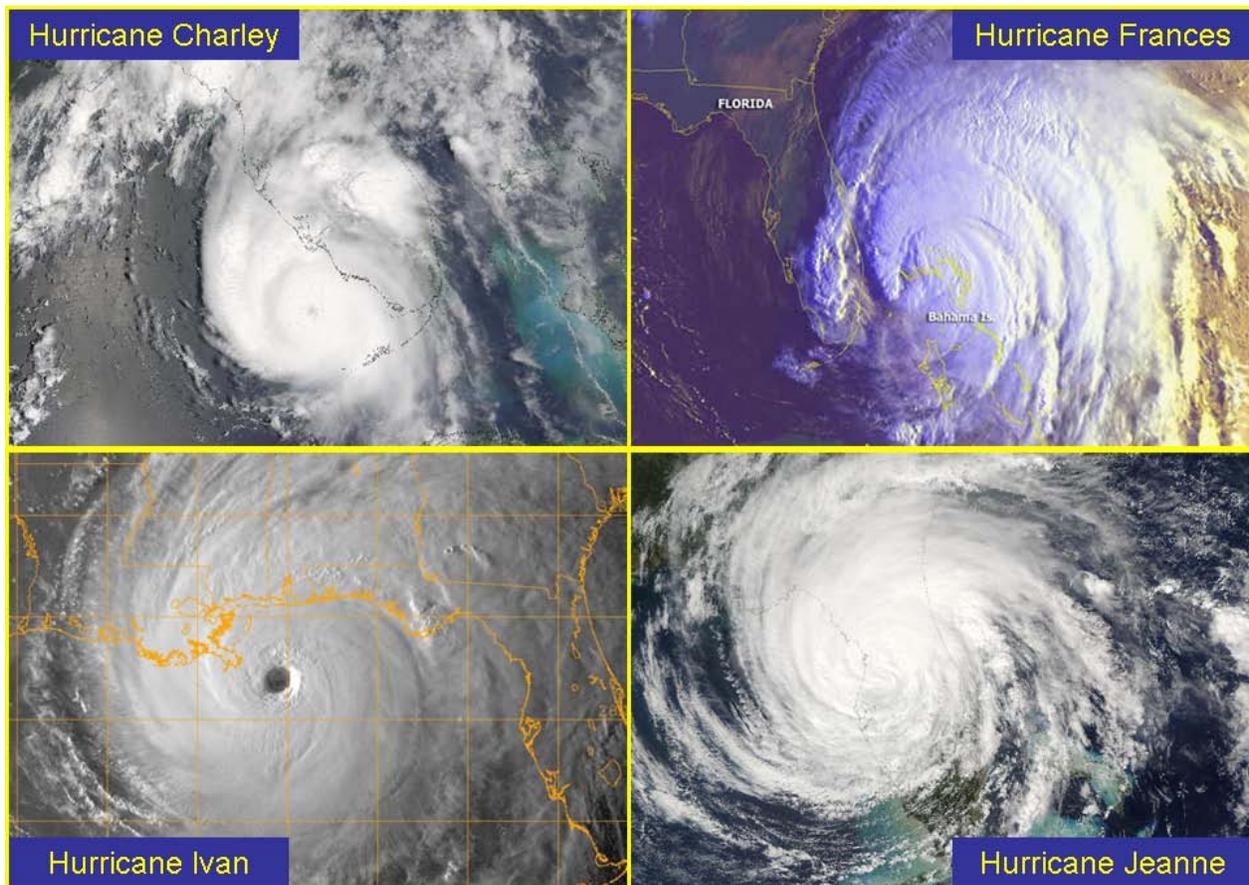


## ANNEX A REQUESTING STATES

### Introduction

#### Early Warning

Unlike many forms of catastrophic events, weather-related disasters normally afford some degree of warning. As a result of a significant investment in science, technology, communications, emergency preparedness, and consequence management over the past several decades, the loss of life attributed to such disasters has been greatly reduced in the United States. We are able to identify major storms as they gather far out at sea, measure their strength and track their movement, and even forecast with some degree of precision the path a storm is likely to follow and the pace at which it will advance (see **Figure A-1**).



**Figure A-1. Tracking Major Storms Prior to Landfall**

In high-risk geographic areas of the country, evacuation routes are planned in advance and well marked. Communications technology and protocols ensure that notification is prompt, redundant, and widely disseminated. Emergency shelters are stocked with provisions to host



evacuees for the duration of an event. A cadre of trained professional public safety officials and emergency managers is in place to help ensure safety, preserve order, restore essential services, and direct recovery efforts. When a community is at risk from an approaching and potentially catastrophic storm, a comprehensive nationwide response and recovery network begins to lean forward. The Emergency Management Assistance Compact (EMAC) is an important part of that network.

## **Initiating the EMAC Process**

There is a single prerequisite that must be met for one EMAC Member State to request and receive mutual aid from another—the governor must first declare that a state of emergency exists. There are, however, actions that can and should be taken before such a declaration. As the risk becomes increasingly apparent, warnings are sounded throughout the communities likely to be affected. State emergency management officials confer with their colleagues in local jurisdictions. If it appears that help may be needed from other States, the relevant emergency management staffs coordinate directly with one another or through the EMAC National Coordination Group (NCG), which is also notified of the impending circumstances. Determining when to declare a state of emergency is a critical aspect of acquiring timely assistance. If an emergency declaration is not issued until the storm makes landfall, it is too late to have outside response support in place, and the deployment of badly needed resources is impeded. Additionally, augmenting command, control, and management capabilities occurs in the heat of operations, further burdening the system it is intended to bolster.

The earlier in an event that an emergency declaration is issued, the sooner help is on the way. This timing often reflects the trust and confidence existing between the governor and the State emergency management director. Some would argue that warning citizens to begin boarding up residences, stock up on emergency supplies, and consider leaving the threatened area does not constitute a state of emergency. Others view such actions as the first steps in an inevitable escalation leading to mandatory evacuation and, therefore, sufficient justification for an emergency declaration. This is a matter of judgment with important implications for response and recovery activities.

## **Requesting Assistance**

EMAC Member States have the option of requesting assistance through the EMAC Operational Response System or directly from another Member State (in coordination with the EMAC NCG). Verbal requests must be followed within 30 days by a written Request for Assistance (REQ-A) Form signed by the EMAC authorized representative as identified and listed in the *EMAC Operations Manual*. Requests for assistance submitted to the NCG are e-mailed to Member States on the EMAC Web-based Broadcast and Notification System. The NCG, or a deployed Advance Team (A-Team), will assist in coordinating the provision of assistance and post a Situation Report to the Web site, which describes the resources made available to satisfy the requirement. EMAC Web site mutual-aid transactions must be documented within 4 hours using the REQ-A Form.

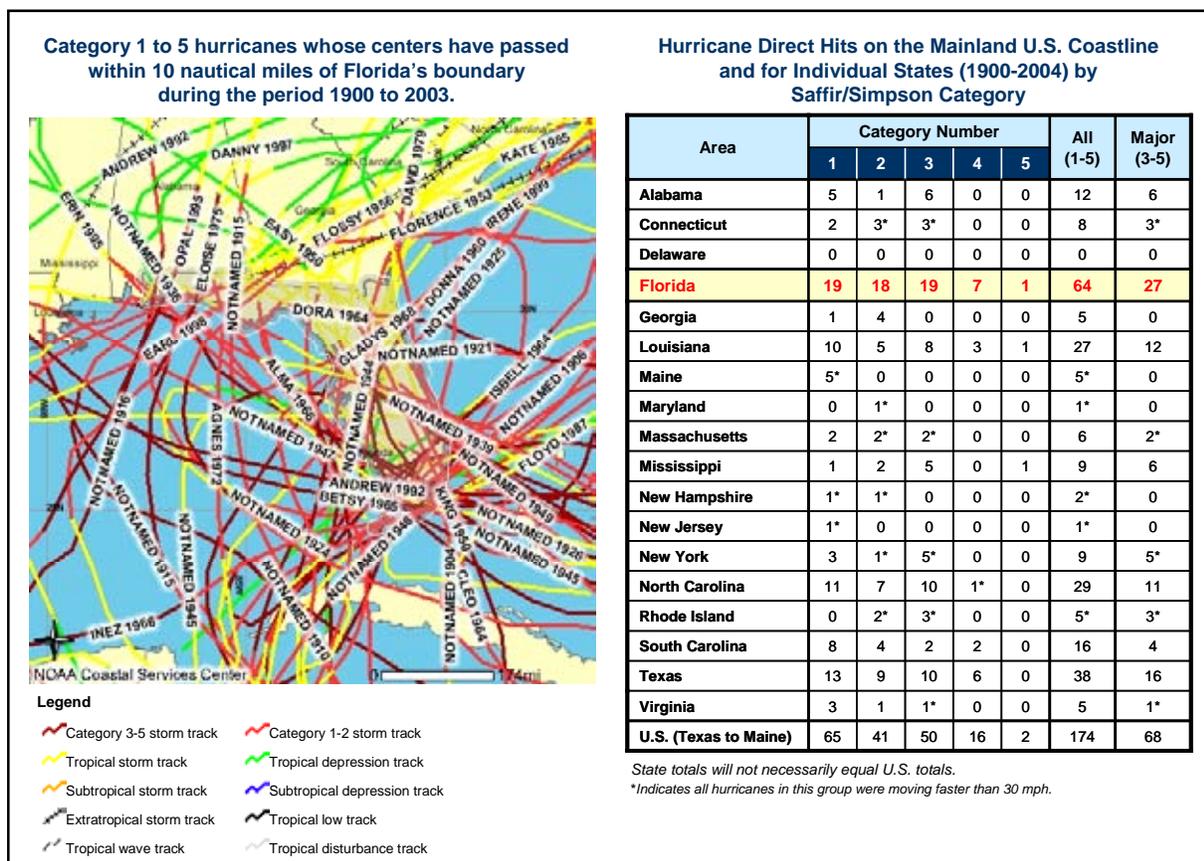


## The Requesting States

During the 2004 hurricane season, three EMAC Member States—Florida, Alabama, and West Virginia—requested assistance from a total of 37 other Member States and from California, a non-EMAC member at the time.

### Florida

With its extensive shoreline, the Sunshine State has been struck by more hurricanes over the years than any other (see **Figure A-2**). With nearly 54,000 square miles of land area and a vast coastline susceptible to storms in the Atlantic, the Caribbean, and the Gulf of Mexico, Florida has attracted some of the Nation’s most notorious meteorological visitors including, in recent years, Hurricanes Donna, Betsy, Opal, and Andrew.



**Figure A-2. Florida’s Extensive and Vulnerable Coastline**

As a result, Florida has a wealth of experience in emergency preparedness and disaster response and recovery operations, as well as a finely honed infrastructure and well-trained staff focused exclusively on protecting the lives and property of its 17 million residents. In anticipation of its continuing vulnerability to the Nation’s most severe seasonal storms, Florida is the only State with a permanent staff agency whose mission is to coordinate donations and volunteer support.



At the beginning of the 2004 hurricane season, Governor Jeb Bush was nearly halfway through his second term. He had worked closely and extensively with the leaders of Florida's emergency preparedness community, including the Director of the Emergency Management Division, the State Emergency Response Team Leader, and the Florida Adjutant General. The Florida Emergency Management Division includes more than 160 employees organized into four bureaus:

- Compliance Planning and Support
- Policy and Planning
- Preparedness and Response
- Recovery and Mitigation

Each of Florida's 67 counties has its own contingent of emergency preparedness practitioners. Thus, when a hurricane strikes one region of the State, resources can be deployed from unaffected jurisdictions to reinforce the available local emergency management staff. This strategy works well until one hurricane is followed by another, and another, and another, in rapid succession, as occurred in the 2004 season. As recovery efforts following Hurricane Charley were under way, emergency management staff from other jurisdictions scurried home to prepare for the imminent arrival of Frances, and then Ivan, and finally, Hurricane Jeanne.

This is where EMAC came into play. In addition to individuals with skills related to specific recovery operations, Florida requested and received assistance in the form of personnel experienced and trained in Emergency Operations Center (EOC) support at both State and local levels, qualified Incident Management Team (IMT) members, and individuals with expertise in all of the relevant Emergency Support Functions (ESFs). The more than 730 staff resources sent to Florida by the governors of other States filled a tremendous void that is completely outside the domain of Federal disaster recovery assistance. **Table A-1** represents the cumulative deployment of EMAC personnel, by category, for all hurricanes that impacted the State of Florida during the 2004 season. The data tables in **Appendix 4** provide detailed deployment information for Tropical Storm Bonnie and the individual hurricanes (Charley, Frances, Ivan, and Jeanne) for the States of Florida and Alabama. National Guard deployments are not represented in this data.



**Table A-1. Florida's Cumulative Assisting States Personnel Deployed by Operational Category**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>Tropical Storm Bonnie and Hurricanes Charley, Frances, Ivan, and Jeanne</b>					
A-Team	State EOC	39	12.75	497.25	3,978
State EOC	State EOC	25	12	300	2,400
Operations Chief	State EOC	3	13	39	312
Human Services	State EOC	12	14.33	171.96	1,375.68
Infrastructure	State EOC	3	15	45	360
Donations	State EOC	11	11.5	126.5	1,012
Finance	State EOC	2	14	28	224
Health/Medical	State EOC	6	17	102	816
SPSN	State EOC	16	14	224	1,792
Logistics	State EOC	3	15	45	360
City/County EOC	City/County EOC	85	26	2,210	17,680
Community Relations	City/County EOC	29	12	348	2,784
DRC Management	City/County EOC	13	24	312	2,496
ESF Support	City/County EOC	111	12.5	1,387.5	11,100
Mass Care	City/County EOC	8	9	72	576
Amateur Radio	City/County EOC	11	16	176	1,408
Animal Control	City/County EOC	6	16	96	768
Health/Medical	City/County EOC	155	8	1,240	9,920
PA Recovery	City/County EOC	6	13	78	624
CISM	City/County EOC	3	7	21	168
Nurses	City/County EOC	81	15.5	1,255.5	10,044
Housing Assistance	City/County EOC	4	7	28	224
Field Operations	City/County EOC	3	13	39	312
DFO Operations	DFO	25	18.5	462.5	3,700
Public Assistance	DFO	6	19	361	2,888
Forestry Command	Logistic Staging Area	67	16	1,072	8,567
<b>TOTALS</b>		<b>733</b>	<b>14.65</b>	<b>10,732.21</b>	<b>85,897.68</b>



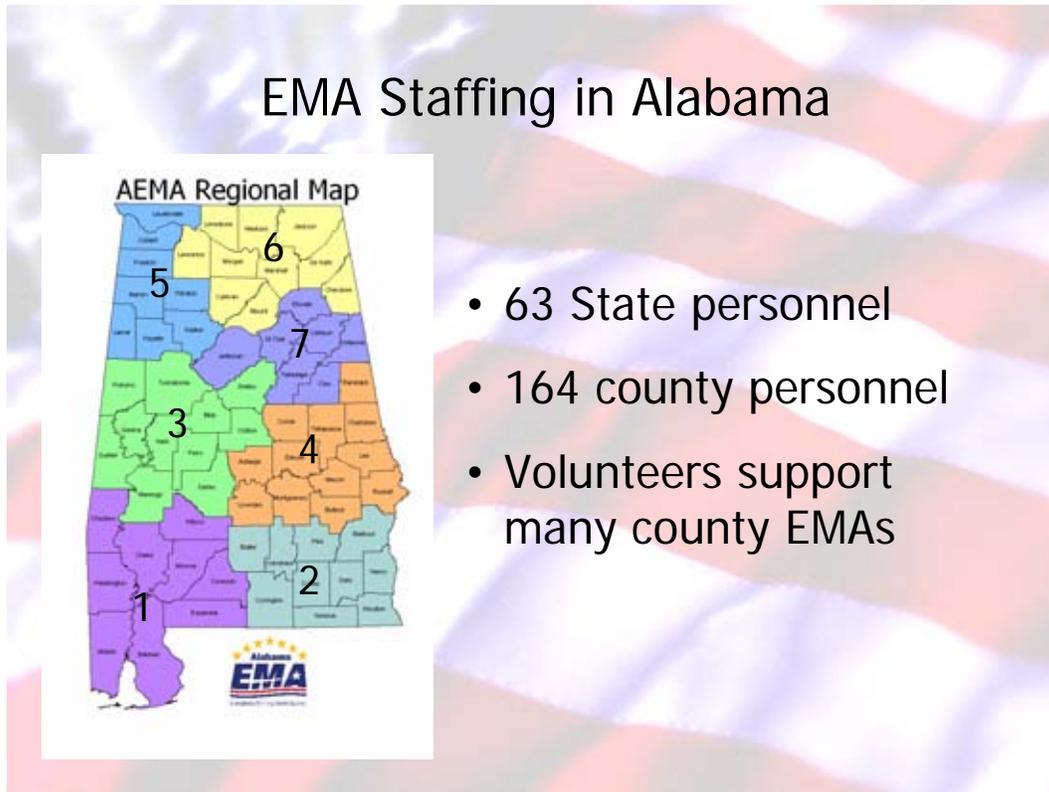
## Alabama

Strategically situated on the Gulf Coast between Mississippi and the Florida Panhandle, Alabama includes only about 32 miles of direct exposure to the Gulf of Mexico. However, in addition to its substantial attraction as a beach destination, the coastal area is also home to Alabama's second largest city, Mobile, with a population of more than 200,000. It was here, at Gulf Shores in the extreme eastern portion of coastal Alabama, that Hurricane Ivan made land-fall at just after 3:00 a.m. on September 16, 2004. As a result of the storm surge, water from the Gulf reached nearly a mile inland.



**Figure A-3. Hurricane Ivan – Storm Surge**

Alabama has about one-fourth the population of Florida, distributed over approximately the same size land area, but with less historical exposure to catastrophic weather events and, therefore, less investment in response and recovery infrastructure. The Alabama Emergency Management Agency (AEMA) has a total of 63 staff members organized into an executive division, an operations division, a preparedness division, and an administrative and resource support division. One hundred sixty-four (164) additional staff professionals are employed by the 67 county jurisdictions, which participate in a Statewide mutual-aid system (see **Figure A-4**).

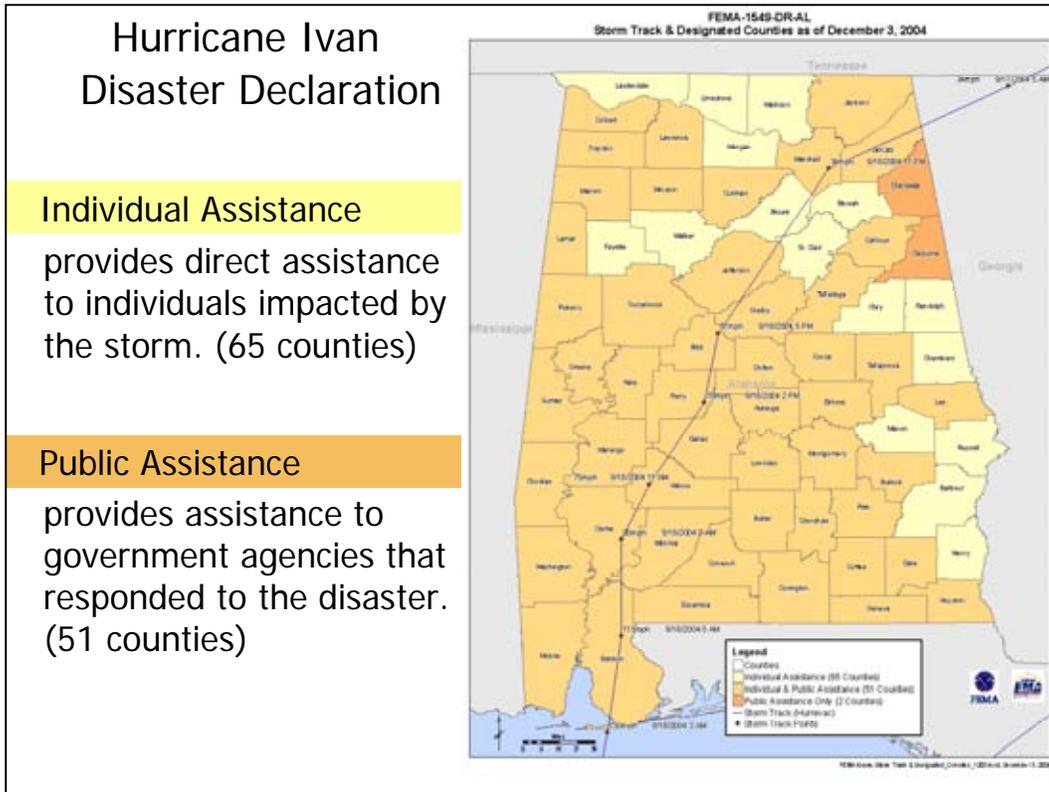


**Figure A-4. EMA Staffing in Alabama**

Governor Bob Riley, a successful Alabama businessman and three-term U.S. congressman, had no previous State government experience when sworn into office in January 2003. Mr. Bruce P. Baughman is the Director of AEMA. Prior to his appointment, Mr. Baughman had more than 30 years experience in disaster preparedness, response, and recovery activities as a senior official with the Federal Emergency Management Agency (FEMA). Thus, while he had been AEMA Director for only about 18 months, he brought tremendous experience, knowledge, and understanding to the job. As a long-standing member and current vice president of the National Emergency Management Association (NEMA), Mr. Baughman was very familiar with EMAC, the resources it makes available, and the procedures for obtaining those resources.

On September 13, 2004, 3 days before Ivan would make landfall, but with substantial voluntary evacuation already under way, Governor Riley, acting on Mr. Baughman's recommendation, declared a state of emergency. The emergency declaration enabled the governor to invoke various emergency preparedness measures, including Alabama's price gouging law. Governor Riley encouraged residents along the coast in Mobile and Baldwin County to move inland under a voluntary evacuation.

"Our number one priority is to make sure every precaution is being taken to save lives, protect property, and get people in danger out of harm's way," Governor Riley said in a briefing to the press at the State's EOC in Clanton. "I want everyone in Alabama to know that their State Government has been monitoring this hurricane for several days and that we are as prepared as we can be to face this potential disaster."



**Figure A-5. Affected Alabama Counties**

On September 15, three EMAC A-Team personnel from Kentucky arrived at the State EOC to coordinate EMAC assistance. Hurricane Ivan proved to be the most destructive storm in Alabama’s recorded history, leaving a trail of devastation that touched every local jurisdiction. Governors from nine States sent 54 EMAC personnel to aid in Alabama’s response and recovery efforts.

**Table A-2. Alabama’s Assisting States Personnel Deployed by Major Categories**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>Hurricane Ivan</b>					
A-Team	State EOC	6	5	30	240
State EOC	State EOC	2	8	16	128
City/County EOC	City/County EOC	42	8	336	2,688
DFO Operations	DFO	4	14	56	448
<b>TOTALS</b>		<b>54</b>	<b>8.1</b>	<b>438</b>	<b>3,504</b>



## **West Virginia**

On Saturday, September 18, 2004, heavy rain produced by the remnants of Ivan fell across the eastern sections of Pennsylvania and New York and into New England. Meteorologists warned of major flooding along the upper Ohio River, and West Virginia residents were evacuated from riverside areas in Wheeling and Moundsville.

Tornadoes in West Virginia's Eastern Panhandle, just west of the Washington, DC, area, collapsed buildings and tossed several tractor-trailers onto their sides on Interstate 81. More than 3,000 people in the State were evacuated as mudslides and high water blocked roads and toppled trees. Some people had to be rescued by crews in helicopters and boats.

Across West Virginia, flooding and mudslides closed nearly 200 roads. In Wheeling, the Ohio River crested at about 9 feet above flood stage, submerging the city's riverfront park and amphitheater. It mostly covered the city's mid-river Wheeling Island, which holds residential neighborhoods and the Wheeling Island Racetrack and Gaming facility.

Governor Bob Wise declared a state of emergency for eight counties on September 19, 2004, placing nearly 200 National Guard soldiers on duty. The number of affected West Virginia counties soon reached 22. Because it made use of its own trained A-Team resources, West Virginia requested Level 3 EMAC assistance in the form of 120 personnel and heavy equipment to aid in clearing debris.



*Wheeling, WV (photo by Ann Nelson)*

## **LESSONS LEARNED**

### **Category 1 – Executing Deployment**

From the perspective of the Requesting States, the important aspect of executing deployment is that the right resources arrive in a timely fashion at the location where their services are needed. The challenge presented by the often chaotic conditions in the area of operations can inhibit access to accurate, detailed information on which to base deployment instructions. Nevertheless, EMAC deployment during the 2004 hurricane season was considered to be successful and very helpful by officials in the Requesting States.

### **Positive Accomplishments**

The States requesting EMAC assistance all reported generally quick and proactive responses from Member States in fulfilling requests made for mutual assistance under the Compact.

Assisting States were flexible with time extensions required by deployed personnel to complete assigned missions. Many dedicated disaster workers and their agencies undertook multiple deployments during this extraordinarily demanding hurricane season.

Even though California was not an EMAC member, its response to these unprecedented storms was extremely valuable. A State-to-State agreement between Florida and California, patterned after the EMAC model, was quickly executed providing access to California's highly experienced



and well-trained emergency management resources. The exposure to EMAC operations proved extremely beneficial to the California participants.

EMAC A-Teams represented the interests of both the Requesting and Assisting States extremely well in negotiating requests for assistance. This is an important EMAC success factor because it substantially lessens a significant burden during demanding response operations and increases confidence in the request for assistance process.

### ***Issues for Improvement***

**A-1 – Early A-Team Deployment.** Initial A-Team presence in the Requesting State EOC was predicated on the declaration of a state of emergency by the Requesting State governor. Early declarations enabled A-Team engagement prior to landfall, but, in some cases, only by a matter of hours. Earlier A-Team deployment would have substantially increased the capability to identify, alert, and initiate the EMAC request process for response and recovery resources, which could then be dispatched after the emergency declaration is issued. The current requirement that the Requesting State governor issue an Executive Order declaring a state of disaster or emergency prior to requesting A-Team assistance is considered by some to be overly restrictive.

#### **Recommendations**

- a. EMAC leadership and Member States should review the threshold for activating and deploying A-Teams when a disaster is imminent. Member States should consider allowing the Requesting State governor the discretion of issuing an Executive Order that specifically authorizes A-Team activation when a disaster or emergency is at hand.
- b. The NEMA Legal Committee in support of EMAC should explore all legal barriers and available remedies to enable A-Teams to deploy as early as possible before a disaster strikes.

**A-2 – Maintaining Momentum.** In the aftermath of Hurricane Charley, EMAC leadership at the NCG experienced a significant reduction in resources available for deployment by Member States. The initial surge of support for Florida quickly consumed the most experienced personnel and reflected the natural reaction to come to the aid of those in immediate jeopardy. Once that passed, personnel without A-Team experience in States less practiced in EMAC operations were not stepping forward to join the effort. To remedy this phenomenon, the EMAC Chair, initiated an immediate call to all Member States over the National Warning System (NAWAS). NAWAS was established as a component of the U.S. Civil Defense Warning System and has communications terminals in every State Emergency Operations Center (SEOC). It is regularly tested and used by local emergency management officials several times a year to coordinate activities. The EMAC Chair also asked the president of NEMA to help raise the consciousness of Member States. The NEMA President personally telephoned 25 State emergency management directors and urged them to step up to the plate. The result of these efforts was a renewed and steady stream of continuing support to the Requesting States.



### Recommendations

- a. Communications systems that exist in and between the States should be integrated into the notification and communications plans for Level 1 EMAC operations.
- b. NEMA should establish a high-visibility program to regularly recognize those States that provide resources through EMAC to other Member States in time of need. For example, EMAC Assisting States should be acknowledged each year at the annual NEMA conference.

**A-3 – EOC Support Teams.** Approximately half of all State resources deployed under EMAC during the 2004 hurricane season worked at State and county EOCs. They brought much needed expertise in command, control, coordination, communications, and emergency management to the response and recovery operations, as well as technical qualifications in the various ESFs. In some cases, Assisting States deployed teams of trained individuals, but, in most instances, local EOCs were staffed with individuals from a variety of sources. This made it particularly difficult to attain and maintain continuity of team operations.

Trained EOC support teams are critical to the success of disaster operations of significant magnitude and should be available through EMAC. Based on the 2004 hurricane season, Member States should anticipate increased EOC support requests in the future, especially in light of requirements of the National Incident Management System (NIMS), which calls for a more formal and standardized approach to managing major incidents.

### Recommendations

- a. Each EMAC Member State should establish at least one Incident Management Team (IMT) for deployment as a unit to provide EOC support.
- b. EMAC should clearly define the composition of an EOC support IMT, in coordination with FEMA and the ongoing NIMS resource typing initiative, to ensure consistent team standards.

**A-4 – Defining Requirements.** There is unavoidable tension between the ability of the Requesting State to specify precisely the nature of required resources and the ability of Assisting States to translate that request into a qualified deployable asset. This is particularly true in the fast-paced and unpredictable environment of a Level 1 EMAC operation. Part of the difficulty is the absence of a standard “resource typing” protocol that collapses important qualifying attributes into universally understood categories. With an acceptable resource typing protocol, the REQ-A Form could better address the specific aspects that are truly unique to a particular set of circumstances.

### Recommendations

- a. EMAC leadership should seek ways to join in the NIMS efforts to arrive at an acceptable resource typing protocol that incorporates EMAC requirements.
- b. The EMAC Operations Subcommittee should review the REQ-A Form and ensure it extracts the most pertinent information to satisfy the needs of all EMAC parties.
- c. The REQ-A Form should identify the work and living conditions as adequate, marginal, or primitive so proper planning for deployment can be accomplished.



**A-5 – EMAC Contact Information.** Contact information contained in the *EMAC Guidebook* and on the EMAC Web site, including the identification of Member State authorized representatives, was not up-to-date due to staff changes within the various Member State organizations. This caused unnecessary delays in requesting and coordinating assistance through the Compact.

*Recommendation*

All EMAC Member States should update critical contact information on the EMAC Web site whenever changes occur, and this information should be incorporated into the *EMAC Operations Manual* as frequently as publication allows.

**A-6 – Enhanced NEMA Membership Focus on EMAC.** NEMA serves as the primary focal point for EMAC and provides staff support to maintain the Compact, perform operational planning, and to conduct exercises and training. The Requesting States impacted during the 2004 hurricane season report that an enhanced focus is necessary on EMAC issues during the NEMA mid-year and annual conferences to ensure current critical issues are brought to the attention of the NEMA membership.

*Recommendations*

- a. EMAC, in coordination with the NEMA leadership, should consider conducting EMAC-specific annual conferences to facilitate the proper and necessary presentation, discussion, and resolution of Compact-related issues.
- b. EMAC issues should be included on the agenda at each NEMA mid-year and annual conference, and time should be reserved in the general sessions at these conferences to discuss critical EMAC issues.

## **Category 2 – Command and Control**

EMAC Member States recognize that control during emergency operations is only one aspect and not alone wholly synonymous with command. During the 2004 hurricane response operations, the EMAC Requesting States exercised operational control over Assisting States' assets in a manner consistent with predefined operating structures.

The process through which Requesting States organize, direct, and coordinate the assets of Assisting States is best achieved through the emergency management organization itself, applying established doctrine and standard operating procedures, while using crisis management software and well-equipped EOCs to support operations. This operational control does not relieve Assisting States of the continuing administrative management responsibilities that pertain to their own deployed assets.

### ***Positive Accomplishments***

Scheduled EMAC conference calls and online conference call reports that engaged the A-Teams, NCG, and other participating entities without question proactively facilitated smoother daily operations. This communication effort was enhanced through the use of the NAWAS. The continued use of these communications channels should remain a priority for coordinating EMAC critical operations and status reporting.



EMAC participated in the daily FEMA Emergency Support Team (EST) video teleconference calls, which proved to be a successful method of coordinating EMAC activities with those of FEMA and other Federal Government agencies. EMAC was also assigned a designated work position at the EST, which ensured that issues of common concern were addressed in a timely and coordinated manner. This relationship between the EST and EMAC should be maintained during all future operations of Level 1 magnitude.

### ***Issues for Improvement***

**A-7 – Enhanced Standard Operating Procedures.** Officials from the Requesting States were very complimentary of the EMAC operating support tools, particularly the *EMAC Guidebook* and Web site. However, they also believe strongly that many additional improvements are needed. The new *EMAC Operations Manual* (May 2005) and its appendices encapsulate many, but not all, of their concerns. Standard emergency management software is available off-the-shelf and is widely in use throughout the country, but there is not a common software suite in use by EMAC members. Some Member States have set aside workspace in the EOC for a visiting A-Team; others have not. The EMAC community has not identified standard workspace and equipment requirements so that other Member States know exactly what will be available for A-Team use following deployment.

#### *Recommendations*

- a. Additional improvements to the *EMAC Operations Manual* should be promulgated as addendums when appropriate and incorporated in the annual update of the new manual.
- b. The EMAC Operations Subcommittee should consider the workspace and support requirements for a three- to five-person A-Team and urge Member States to provide for those requirements in the SEOC.
- c. EMAC should evaluate database applications needed to support operations and consider redeveloping the current database or adopting another core software capability to support EMAC operations.

**A-8 – Command and Control of Assisting States' Assets.** After deploying to field assignments in local jurisdictions, some EMAC personnel were reassigned to different locations or duties without the knowledge of Requesting State EOC personnel or members of the A-Team located at the EOC. In other cases, deployed personnel assessed the immediate situation and redefined their own role without consulting proper authorities. While some of these actions were operationally appropriate or even necessary, they represent an unacceptable breakdown in command and control of assets in the field.

#### *Recommendation*

EMAC must clearly delineate the responsibility of a Requesting State to exercise operational direction over all deployed EMAC resources, even when immediate supervision is delegated to local jurisdiction emergency managers. Changes of mission, duty assignment, or location should be made only in coordination and consultation with Requesting State emergency management staff. The A-Team should be informed of all such duty changes so that it can execute its inherent administrative responsibilities on behalf of personnel deployed under EMAC.



### Category 3 – Logistics

An EMAC Member State that has suffered a major disaster is confronted with overwhelming logistical challenges presented by a vast displaced population, which must first survive in order to recover. Food, water, shelter, health and sanitation, security, transportation, and a myriad of other human necessities must be accommodated. The resources so generously provided by Assisting States were invaluable in serving the needs of the displaced residents of a Requesting State, but they too had logistics needs to be met. Tolerance and patience are critical attributes in chaotic circumstances.

#### ***Positive Accomplishments***

Applying the premise that smart, hard working persons can perform a wide variety of duties, the first rule followed by many of the Assisting States was to deploy, in every case, the best available asset. As a result, most of those in field assignments were flexible, adaptable, and sensitive to the needs of the victims.

#### ***Issues for Improvement***

**A-9 – EMAC A-Team Self Sufficiency.** While the EMAC Requesting States were very pleased with the professionalism and dedication of the deployed A-Teams, there was general agreement that the teams should be more self-sufficient and less reliant upon the Requesting States for logistical support. Deploying A-Teams should be self-contained to the extent that they are never a burden on a Requesting State, which may already be struggling with critical continuity issues such as EOC relocations, communications connectivity, and limited physical space.

##### *Recommendations*

- a. EMAC should develop and include in the *EMAC Operations Manual* a minimum list of A-Team supplies necessary for all deployments. This information should be included in all A-Team training and tested during deployment drills.
- b. The EMAC leadership should explore the possibility of developing, in coordination with FEMA and NEMA, A-Team deployment kits to be maintained in each FEMA Region for rapid deployment on demand.

**A-10 – EMAC Support to Local Jurisdictions.** EMAC personnel assigned to duties at local EOCs or performing field support activities in forward locations should bring with them sufficient equipment, supplies, and personal provisions to operate under the most austere conditions. Even though a local government facility may be marginally functional, the surrounding area might lack fundamental life support amenities. Additionally, the potential displacement from one forward location to another demands a higher degree of self-sufficiency than can reasonably be accommodated by Requesting State officials.

##### *Recommendation*

The EMAC Operations Subcommittee should survey participants who worked in local jurisdictions during the 2004 hurricane season and develop a recommended list of equipment and supplies for both personal and operational field support, including critical logistics items such as computer connectivity, portable laptop computers, voice and data telecommunications, and universally accepted forms and documents.



**A-11 – EMAC Assistance Cost Tracking and Reporting.** All emergency operations logistics must include adequate provisions for financial controls and management—EMAC support operations are no exception. The unique multi-agency nature of State-to-State mutual-aid operations brings with it the challenge of coordinated and accurate documentation that will satisfy the needs of multiple systems of control. Some EMAC Requesting States found it difficult to track the cost of assistance where multiple A-Teams were deployed during sequential disasters. Continuity of cost tracking and reporting is vitally important to both Requesting and Assisting States for full cost recovery and audits.

*Recommendation*

EMAC should develop, in coordination with its Member States, a template in the form of a universal spreadsheet that details specific procedures and accountability measures regarding job tracking to foster improved financial management practices.

**A-12 – Resource Typing.** The Requesting States were unable to anticipate accurately the complete and pertinent qualifications of deploying EMAC personnel because of the absence of a commonly accepted resource typing system. In some cases, Assisting States attached resumes or biographical data to the REQ-A Form. That was helpful, but not uniformly applied throughout EMAC support operations. FEMA has developed schemes that classify resources by **Category** (the applicable function for which the resource would be most useful); **Kind** (the broad class of characterization such as teams, personnel, equipment, and supplies); and **Type** (a measure of minimum capabilities to perform its function). This is an integral component of the newly created NIMS and could serve as a standard for typing EMAC resource requirements.

*Recommendation*

The EMAC leadership should evaluate existing resource typing systems (such as the National Wildfire Coordinating Group and FIREScope) and the evolving FEMA NIMS, and take action to endorse the use of resource typing, fully integrating it into all Member State response and recovery operations plans.

## **Category 4 – Field Operations**

Successful and sustainable field operations are critically important during all disaster response and recovery operations, and that was certainly the case among the three States receiving EMAC assistance during the 2004 hurricane season. The severe impact of the season's hurricanes required extensive mutual-aid support in the hardest hit disaster areas over an unprecedented period of time. Some aspects of those field operations are particularly noteworthy.

### ***Positive Accomplishments***

Early during the response to Hurricane Charley, the Florida State Coordinating Officer (SCO) established a unified forward command from which to direct, firsthand, the critical initial response activities.

Deployed EMAC personnel in field support and local jurisdiction assignments responded with great flexibility to meet the most pressing needs of a dynamic and dangerous situation.



## ***Issues for Improvement***

**A-13 – EMAC Senior Advisor.** Establishing a unified forward command in the impact area allowed the SCO, collocated with the Federal Coordinating Officer (FCO), to direct response operations based on firsthand knowledge of the circumstances. The forward site was designated “Charley Command” to signify that it was neither a State nor Federal activity, but a truly unified command center. At one point, two A-Team members deployed forward to work at Charley Command. The problem is that the mission of the A-Team is not particularly compatible with the conditions of austerity likely to be found in a forward command location. The A-Team needs reliable voice and data communications and a capability to expeditiously exchange REQ-A Forms via facsimile (fax) with Assisting States so that signatures can be transmitted and authenticated. The forward command site may be limited to voice communications via radio or cellular telephone, which will at times be predictably unreliable. While the A-Team can best perform its mission at the SEOC, there is still a requirement to provide the SCO and FCO with expertise on the applicable use of EMAC resources in the embattled area.

### *Recommendation*

The EMAC Operations Subcommittee should consider establishing a pool of senior personnel qualified to serve as EMAC Senior Advisors to the SCO.

**A-14 – Sustainable Field Operations.** Many Assisting State and local emergency workers come from organizations, agencies, or disciplines that may not be familiar with operating in a catastrophic disaster environment. These personnel represent critically important disciplines that provide valuable services under EMAC and must be prepared to sustain operations under the most severe disaster conditions. They otherwise risk becoming a burden to the host jurisdiction.

### *Recommendation*

EMAC Member States should train, equip, and emotionally prepare all deployable disaster workers for sustained operations in the operations area under the most primitive housing and living conditions.

## **Category 5 – Mobilization and Demobilization**

To ensure that resources are fully prepared for the next activation and deployment, it is important to capture and pass on the lessons learned from past experiences, especially those of the most demanding nature.

### ***Positive Accomplishments***

The handful of very experienced EMAC A-Team resources responded rapidly and with great vigor to the challenges of the 2004 hurricane season.

A-Team leaders compiled notes and constructed checklists to help the transition for replacement personnel.

Some Requesting and Assisting States conducted Hot Wash debriefings or prepared After-Action Reports to capture lessons learned.



EMAC distributed a post-operations survey to help determine what program improvements might be needed.

### ***Issues for Improvement***

**A-15 – Continuity of Operations.** During extended operations such as those that prevailed during the 2004 hurricane season, checklists and similar artifacts are important tools to ensure the provision of EMAC assistance is not disrupted with the ebb and flow of A-Team membership.

#### *Recommendation*

The EMAC Operations Subcommittee should collect all A-Team checklists developed during the 2004 operations and compile a composite operations checklist that can be appended to the *EMAC Operations Manual*.

**A-16 – Clear Mobilization Instructions.** In many instances, deploying EMAC personnel did not have accurate information about the operational area, their specific work assignment, or the circumstances under which they would be laboring. Some of this can be corrected by more vigorously complying with the instructions for completing the REQ-A Form. However, the experiences gathered during the 2004 hurricane season provide ample information to construct much more helpful guides for working in austere field conditions.

#### *Recommendations*

- a. Develop a detailed *EMAC Mobilization and Demobilization Guide* for use by all Member States, similar to the *National Interagency Mobilization Guide* of the National Interagency Fire Center.
- b. Provide guidance and training to all EMAC Member States on how to most effectively provide clearly written mobilization and demobilization instructions to deploying personnel.

**A-17 – EMAC Specific Training.** Some participating staff from Assisting States with little previous deployment experience had only limited training in EMAC and no operational experience. Thus, officials from the Requesting State or other deployed Assisting State personnel provided on-the-job training in many instances. Multiple echelon training and refresher training is necessary for all EMAC Member States and at all levels of government, including an executive orientation.

#### *Recommendation*

NEMA should develop a self-paced EMAC study course. Different levels of EMAC training should be made available, and all disciplines should be addressed, with subjects such as A-Team operations, financial management, and executive or elected officials' responsibilities. Additionally, interactive certification through a Web site should be possible at some point. Training materials should be updated regularly and concisely abridged information provided annually. Executive summaries, overviews, and briefings should be available for all EMAC Member States.



Annex B  
assisting states

Annex B  
assisting states



## ANNEX B ASSISTING STATES

### Introduction

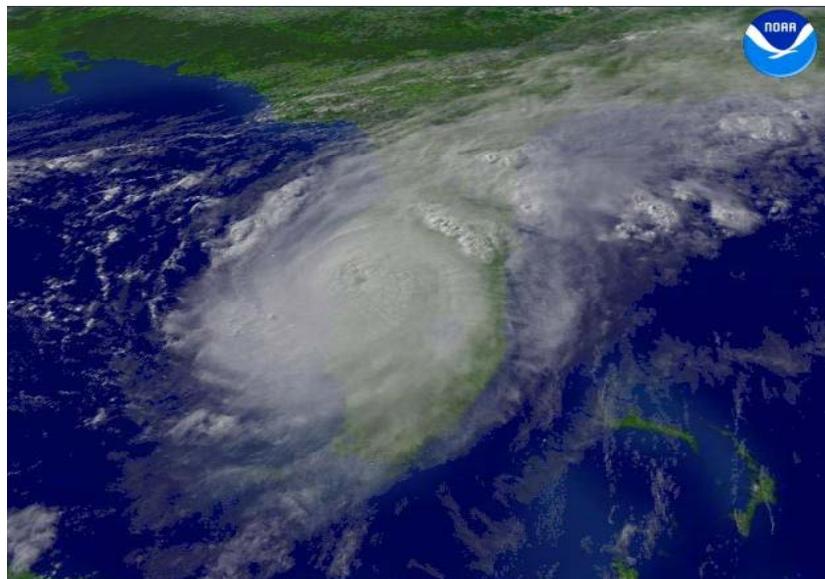
#### Hurricane Charley

On August 11, 2004, with Tropical Storm Bonnie approaching the Florida Panhandle and Tropical Storm Charley growing in strength as it bore down on Jamaica moving west-northwest at 24 miles per hour (mph), the National Oceanic and Atmospheric Administration's (NOAA's) National Hurricane Center issued a hurricane watch for the Florida Keys. Hurricane conditions with winds in excess of 74 mph were likely to make landfall within 36 hours. Forecasters predicted that Charley would hit the Florida mainland as a Category 1 hurricane early on Friday, August 13, 2004. The Emergency Management Assistance Compact (EMAC) Executive Task Force (ETF) Chair, engaged in a tabletop training exercise in New York at the time, immediately activated the National Coordination Group (NCG) and began monitoring conditions.

Governor Jeb Bush declared a state of emergency on August 10, 2004, at the recommendation of the Florida Emergency Management Director, clearing the path for activating EMAC support. A telephone call was placed to the EMAC NCG Chair requesting that an Advance Team (A-Team) be dispatched to Tallahassee immediately to process requests for EMAC assistance. The NCG broadcast the A-Team requirement on the EMAC Web site. A three-person A-Team from Kentucky deployed to Florida on August 12 and arrived at the State Emergency Operations Center (SEOC) in Tallahassee early on the morning of August 13 to begin coordinating the EMAC process.

At 3:41 p.m. on August 13, Hurricane Charley, now at Category 3 strength, made landfall at Cayo Costa, FL, just north of Captiva Island.

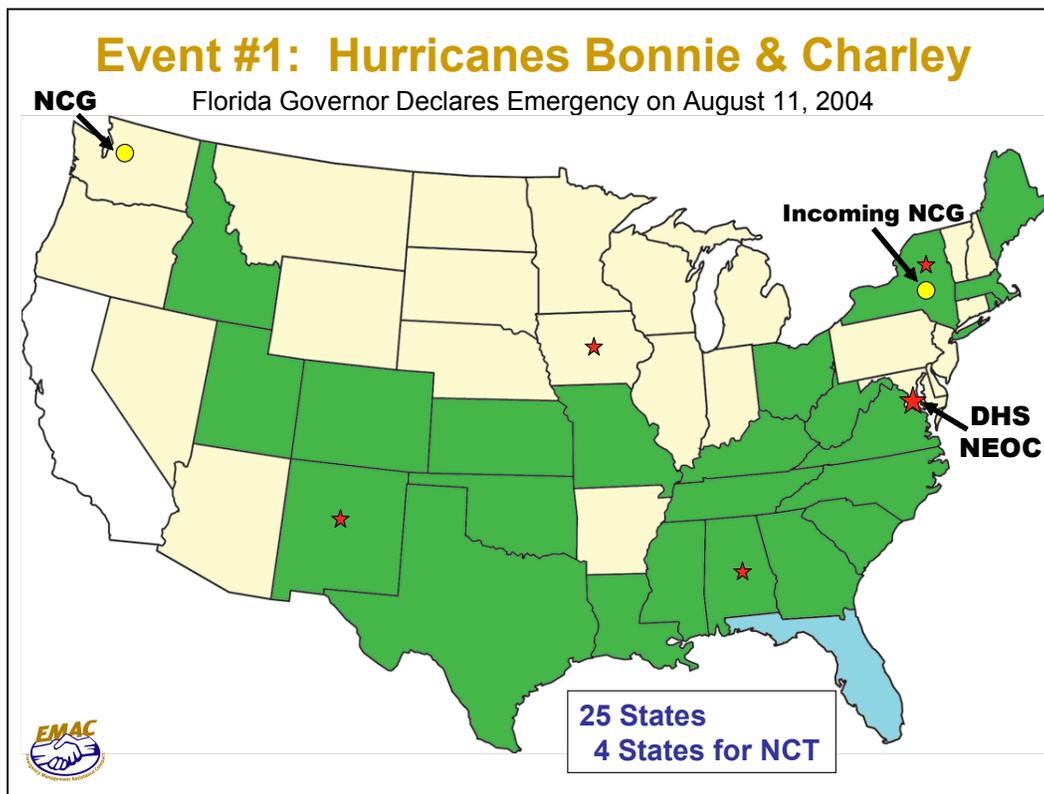
Hurricane Charley, with sustained winds of 145 mph, traveled northeast along U.S. 17, the Dixie Highway, cutting a swath of destruction through Florida's agricultural heartland. Farming is the top employer in the region and, in some locations, there are twice as many cattle as people. More than a third of the State's orange juice is produced from fruit grown here, and Charlotte, DeSoto, Hardee, and Polk Counties constitute the self-proclaimed "cucumber capital of the world."



On August 20, 2004, a forward State Emergency Response Team (SERT) led by the Florida Emergency Management Director deployed to Charlotte County. Designated as “Charley Command” to denote its unified composition, the forward SERT directed support for local response and recovery efforts, relaying information and instructions to the SEOC, where the EMAC A-Team continued to operate. Both the State Coordinating Officer (SCO) and Federal Coordinating Officer (FCO) operated from Charley Command. This unified forward command concept remained in place for the duration of the hurricane season, shifting location and changing names with each succeeding event.

Hurricane Charley moved out to sea just north of Daytona and was downgraded to a tropical storm at 2:00 p.m. on August 15 while continuing to move northward off the North Carolina coast.

Twenty-five EMAC Member States came to the aid of Florida in the wake of Hurricane Charley, deploying 182 personnel (see **Figure B-1**).

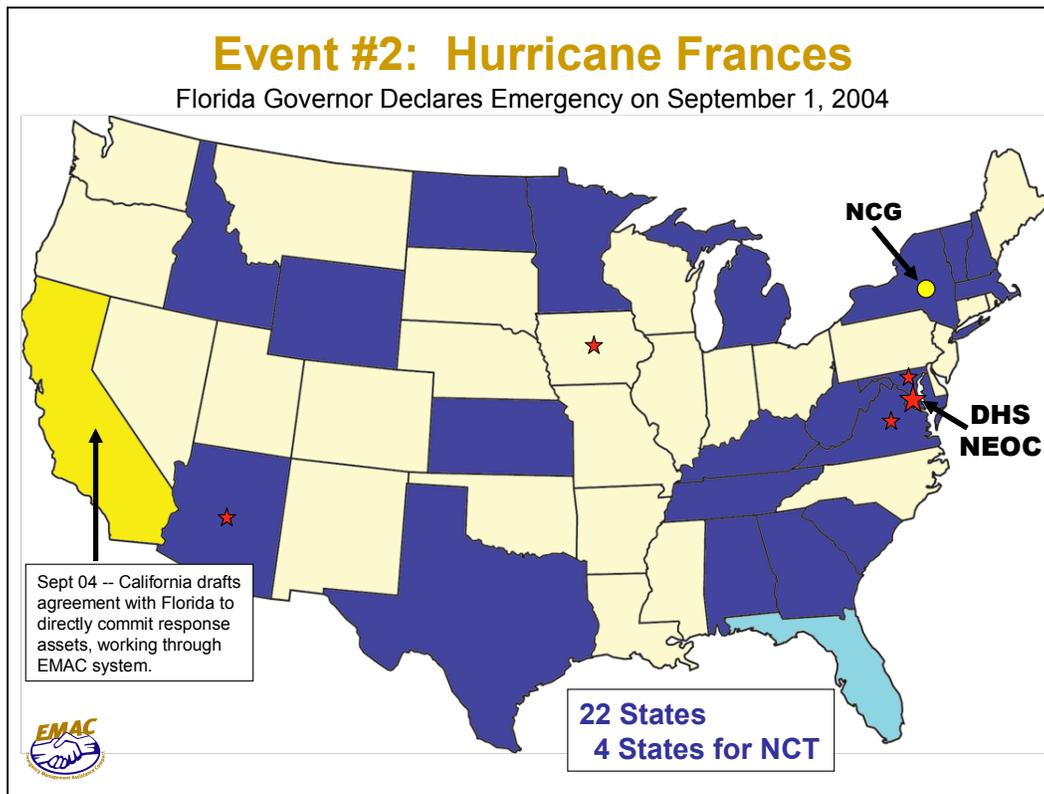


**Figure B-1. Twenty-Five EMAC Member States Came to the Aid of Florida in the Wake of Hurricane Charley**

## Hurricane Frances

As recovery efforts from Charley continued, Hurricane Frances loomed on the horizon. By August 30, the A-Team, which had grown to six persons, began focusing on the new threat while continuing to support recovery efforts from Charley. On Saturday, September 4, 2004, as Hurricane Frances neared the coast, Governor Bush declared a state of emergency and ordered the largest evacuation in Florida’s history. Mandatory evacuations were ordered for 16 counties with voluntary evacuations recommended for five others. While Charley was a fast moving, compact storm causing mostly wind damage, Frances was a slow moving monster the size of Texas. After making landfall in Martin County at midnight on Sunday, September 5, it took a full 12 hours for the entire eye of the storm to come ashore. A Category 2 hurricane with sustained winds of 105 mph, Frances drenched the Sunshine State with as much as 20 inches of rain in some locations, causing widespread flooding.

Twenty-two State governors dispatched EMAC assistance in response to requests from Florida, sending a total of 274 personnel (see **Figure B-2**). On September 4, California drafted an agreement with Florida to directly commit response assets working through the EMAC system.



**Figure B-2. Twenty-Two State Governors Dispatched EMAC Assistance in Response to Hurricane Frances**

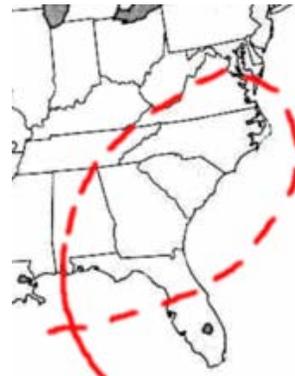
## Hurricane Ivan

Hurricane Ivan was the fourth major hurricane of the 2004 Atlantic season and the third to strike Florida. Reaching Category 5 strength at its peak, Ivan left a trail of death and destruction throughout the Caribbean before traveling north through the Gulf of Mexico and making landfall on the extreme eastern coastal area of Alabama just after 3:00 a.m. on September 16, 2004. Combining the strength of Charley and the size of Frances, Ivan left massive storm surge damage throughout coastal Alabama and the Florida Panhandle. **Figure B-3** shows before and after photographs of damage along the gulf coast.



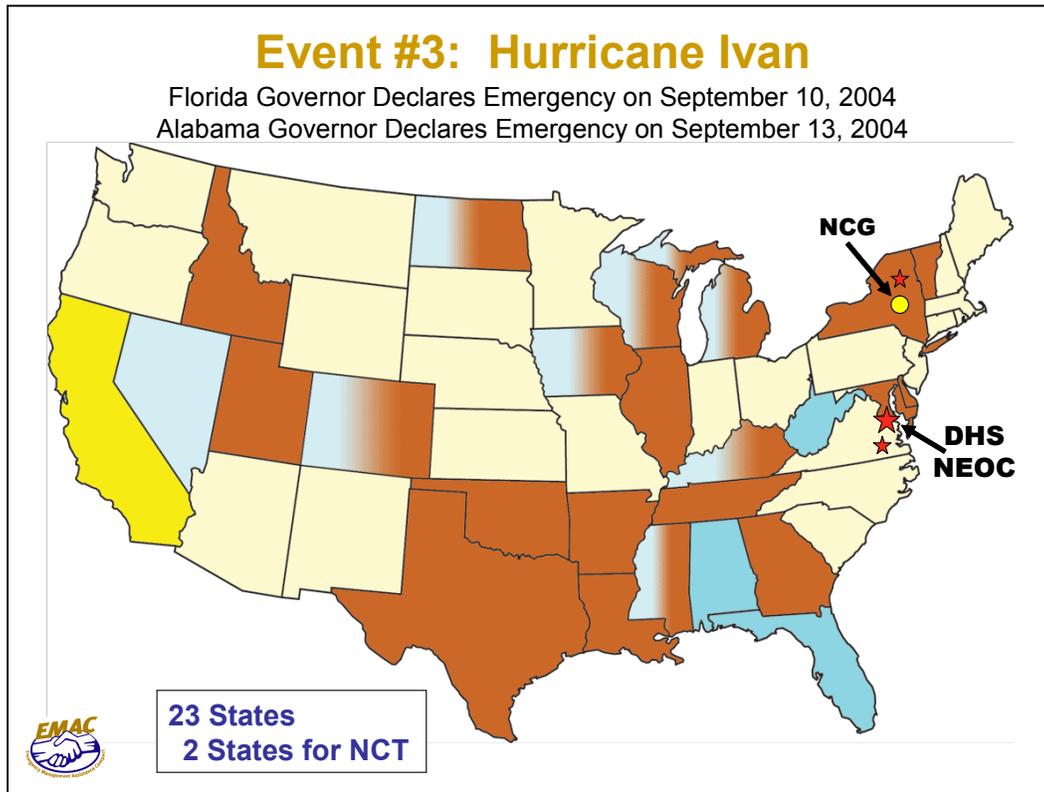
**Figure B-3. Storm Damage Along the Alabama Coast and at a Florida Marina**

Hurricane Ivan wavered in strength but managed to spawn 104 tornadoes and cause extensive flooding from the Gulf area as far north as Pennsylvania. After downgrading to a tropical depression, Ivan looped to the east and then south, hooking around and traveling westward across Florida. It regained tropical storm strength and made landfall for a second time near Cameron, LA, on September 23 (see **Figure B-4**). Ivan became the third costliest U.S. hurricane on record, behind Hurricane Georges and Hurricane Andrew.



**Figure B-4. Ivan's Return Visit**

Alabama Governor Bob Riley declared a state of emergency, and a three-person A-Team from Kentucky deployed to the Alabama Emergency Operations Center (EOC) in Clanton on September 15, 2004, to coordinate the EMAC assistance offered by nine Member States. The total EMAC support provided to both Alabama and Florida in response to Hurricane Ivan included 274 personnel from 23 Assisting States (see **Figure B-5**).



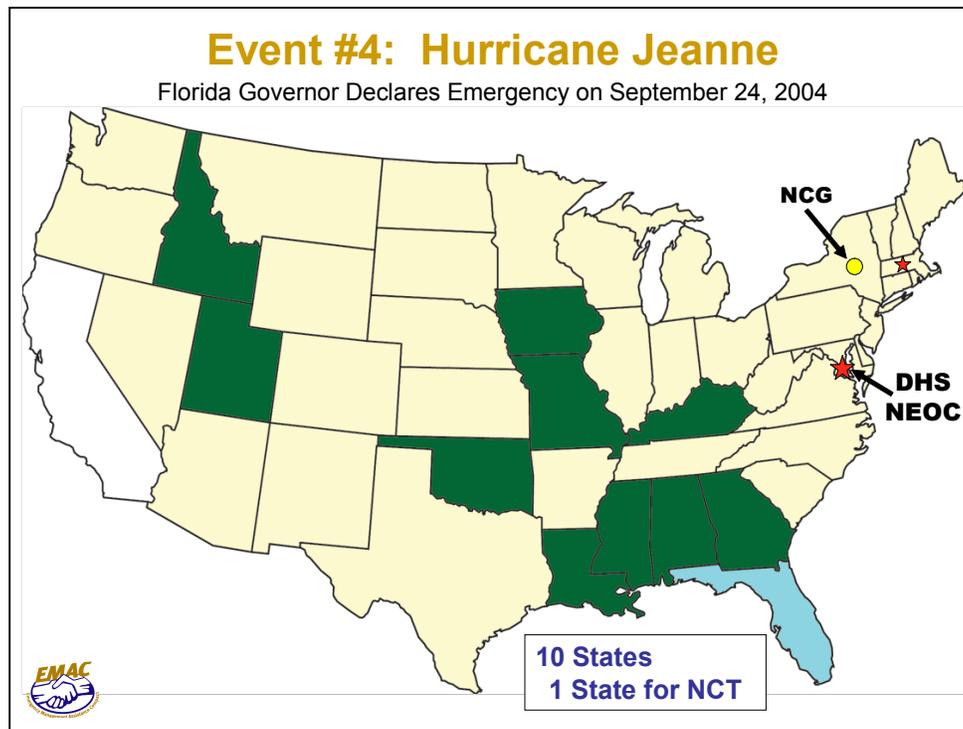
**Figure B-5. EMAC Support Provided to Alabama and Florida in Response to Hurricane Ivan**

## Hurricane Jeanne

By September 21, Tropical Storm Jeanne was wreaking havoc in the Caribbean, following an unusually bumpy track. Gaining hurricane strength, Jeanne caused especially devastating damage to Haiti and the Dominican Republic, accounting for more than 1,200 deaths in Haiti alone. On September 23, after doing a full circle east of the Bahamas, Jeanne took dead aim at Florida. Shortly before midnight on September 25, 2004, with 120 mph Category 3 winds, Hurricane Jeanne struck the Florida coast in Martin County at almost the same point where Hurricane Frances made landfall 20 days earlier.

On September 24, 2004, in anticipation of Jeanne's arrival, Florida Governor Jeb Bush issued Executive Order 04-217 (see **Appendix 5**) declaring a state of emergency because of the threat posed by Hurricane Jeanne "alone and in combination with the destruction by Hurricanes Charley, Ivan, and Frances." Jeanne brought high winds and drenching rains, causing extensive flooding, power outages, and structural damage to the storm-weary residents of central Florida. Some of the nearly 50,000 persons who sought safety from Jeanne in public shelters had to be further relocated when winds ripped off the roof of an elementary school housing 342 special-needs evacuees.

Although the Kennedy Space Center suffered less damage than caused by Hurricane Frances, the impact of Jeanne placed in doubt the planned Spring 2005 shuttle launch. Thirty-eight counties reported some degree of damage resulting from Hurricane Jeanne, bringing the total number of Florida counties affected during the four storms to 67—every local jurisdiction in the State. Ten Assisting States sent 57 personnel to Florida in response to EMAC requests for assistance related to Hurricane Jeanne (see **Figure B-6**).



**Figure B-6. Ten Assisting States Sent Personnel to Florida in Response to EMAC Requests for Assistance Related to Hurricane Jeanne**



## Summary

It had been 118 years since a single State suffered as many direct hits as Florida during the 2004 hurricane season and never had so many storms struck in such rapid succession. Moreover, all of the southeastern States and most of the States along the Atlantic seaboard suffered significant effects from the same storms, severely straining response and recovery resources at all levels of government. And yet, 38 States, including one non-EMAC member, deployed resources to Florida, Alabama, and West Virginia. More than 780 construction engineers, health and safety technicians, emergency operations staff, building inspectors, transportation experts, emergency management professionals, medical doctors and nurses, heavy equipment operators, communications specialists, donation management personnel, animal rescue staff, public safety officers, and many other skilled personnel came to the aid of their neighbors in distress. In addition, 16,000 relief workers were dispatched by the Federal Government—joining the dedicated members of the National Guard units deployed throughout the affected area and tens of thousands of volunteers from faith-based and other charitable organizations who gave selflessly of their time and energy. The sum of this magnificent relief effort was even grander in scale than that following the terrorist attack on New York’s World Trade Center.

According to the EMAC database, 787 personnel invested 11,175.21 staff days, working a total of 89,401.68 hours helping the storm victims in Florida and Alabama, as depicted in **Table B-1**. Eighty-seven percent of those personnel, including 45 A-Team members were assigned to duties in State and local EOCs, reflecting the unique value of EMAC, the primary source for such expertise (see **Appendix 4** for detailed deployment utilization data).

**Table B-1. Florida and Alabama’s Cumulative Deployed Assisting States Personnel**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
All	All	787	14.2	11,175.21	89,401.68

Clearly, there are many areas where improvements can be achieved in EMAC policies, procedures, and management practices, as noted in the following section. However, the 2004 hurricane season was not only the largest State-to-State mutual-aid event in history, it was also the most successful. The spontaneous gratitude routinely displayed by the victims of this unprecedented series of devastating storms toward those who rushed to their aid from all across the country is a resounding endorsement of EMAC.



## LESSONS LEARNED

### Category 1 – Executing Deployment

The challenge for officials in an Assisting State is to completely understand the needs of the Requesting State so that appropriate assets are identified, thoroughly briefed on the circumstances of the event, and dispatched without delay. Many aspects of this process worked exceptionally well.

#### ***Positive Accomplishments***

A-Team personnel integrated seamlessly into the Requesting State EOC. They were able to clarify many of the specific requirements so that precise matches could be achieved and ensure that logistical support for deployed personnel was adequately coordinated.

The basic process for requesting assistance was effective. When the Request for Assistance (REQ-A) Form was completed properly by both the Requesting and Assisting States, the system for providing support functioned smoothly.

The procedures outlined in the *EMAC Guidebook* proved to be very flexible and were easily adapted to meet the challenging conditions in the field.

State-to-State communications were good. The emergency management community represents an effective communications link among the responsible officials across the country. The EMAC Web site facilitates near real time information exchange throughout the entire EMAC community.

At the request of one Requesting State, some Assisting States appended biographic information to REQ-A Form Part II. The Requesting States could then judge if the training and experience of the resources proposed for deployment were properly suited for the requirements.

Deploying experienced, well-trained personnel who understood the EMAC system and who were able to fit into a team structure without extraneous issues ensured that support operations were up and running quickly and smoothly.

#### ***Issues for Improvement***

**B-1 – Personnel Accountability.** Some personnel deployed under EMAC failed to maintain contact with the A-Team after arriving in the area of operations, despite established policies and procedures. Frequently, after personnel arrived in the area of operations, they were reassigned, sometimes repeatedly, to different locations or job positions to meet the shifting needs of very dynamic circumstances. A-Team leaders in the EOC had no knowledge of such changes and, in many instances, could not locate or contact deployed personnel. Had a severe injury or fatality occurred in the field involving personnel deployed under EMAC, emergency notification would have been impossible. Conversely, had an emergency befallen a family member of one of the deployed individuals, it would have been difficult to find, notify, and extract that person. During the recovery operations following Hurricane Charley, the A-Team located at the SEOC in Tallahassee was instructed to warn personnel in the field of the approaching Hurricane Frances. It did so with mixed results.



Recommendations

- a. Create an information and management tracking system that maintains the location and contact information of all deployed personnel.
- b. Remind Assisting States through the *EMAC Operations Manual* and Web site that personnel accountability is their continuing responsibility, shared with the A-Team, throughout the duration of support operations.
- c. Each Assisting State should designate a leader responsible for accountability and communications with deployed personnel.

**B-2 – Status of Requests for Assistance.** The A-Team sent resource requirements to Member States via e-mail or on the EMAC Web site. Various States identified resources that could meet the requirement and responded in the same manner. In many instances, States were not notified when a requirement was filled or whether or not their assets were still needed. Personnel placed on standby to deploy were not told to stand down when other resources met that requirement.

Recommendations

- a. Feedback should be provided to all States offering support in response to a request for assistance.
- b. Contact information for the originator of the request should be posted to facilitate follow-up communications.

**B-3 – Resource Typing.** There is not a standard definition of resource categories by discipline that simplifies the matching process to satisfy support requirements. Past attempts to establish standardization have not been universally accepted. The National Incident Management System (NIMS) Integration Center (NIC) is currently engaged in an effort to establish standard resource definitions.

Recommendations

- a. All Member States should adopt the NIC resource types into their operational processes so that they can be used in connection with requests under the EMAC operational system.
- b. Develop templates for use on the EMAC Web site based on NIC resource definitions.

**B-4 – Requirements Definition.** In many instances, the level of mission-related detail contained in Part I of the REQ-A Form was insufficient to identify the most suitable resource to meet a particular requirement. In some cases, the skills, training, and experience needed were not clearly specified. At other times, the conditions in the work area as described on the REQ-A Form were different than those encountered after deployment.

Recommendations

- a. Revise the REQ-A Form so that it contains specific information regarding the resources needed for each requirement.



- b. Use REQ-A Form Part IV to provide additional helpful information. The Requesting State must provide information in sufficient detail, and the A-Team leader must review the REQ-A Form to ensure that it is complete and accurate.

**B-5 – Lead State Representative.** For purposes of administrative coordination, there is a designated EMAC Lead State Representative (LSR) in each U.S. geographic region. There was some confusion regarding the role of the LSR during EMAC operational responses. Some LSRs coordinated among the Assisting States participating in response and recovery operations within their region, others did not. Some Assisting States were unsure of the appropriate role, if any, of the LSR.

Recommendation

The EMAC Operations Subcommittee should review and clearly define the operational role of the LSR and provide training to all Member States.

**B-6 – Use of Local Resources.** There is not a standard policy regarding the acquisition of local resources by emergency management staff engaged in response and recovery operations. The National Emergency Management Association (NEMA) Legal Committee and the EMAC Operations Subcommittee developed a proposed document in 2004, but it was not adopted as standard policy. The ability to acquire local resources varies from State to State. Where local supplies cannot be obtained, outside sources must be used, increasing the transportation and distribution challenge and causing delays.

Recommendations

- a. A Memorandum of Understanding for Intra-State operations should be developed and posted on the EMAC Web site for review, comment, and possible adoption by Member States.
- b. Training on the acquisition of local resources should be extended to all EMAC personnel.

**B-7 – Resource Management and Coordination.** In some instances, when Member States attempted to activate personnel under EMAC, they discovered that individuals had already deployed to the impacted area under the auspices of the Citizens Corps, a new nationwide voluntary service that asks individuals to obtain training in first aid and emergency skills and volunteer to support local emergency responders, disaster relief, and community safety.

Recommendation

The EMAC Operations Subcommittee should coordinate with the U.S. Department of Homeland Security (DHS) to ensure that volunteer resources are not double-counted and, therefore, unavailable to participate in EMAC operations.

**B-8 – Recruiting and Training.** The 2004 hurricane season produced exceptional dividends for EMAC in the context of national outreach and performance credibility. The participating Member States now have a rich core of seasoned personnel deployed under EMAC on which to build and expand capabilities. The value of EMAC was clearly demonstrated.



### Recommendations

- a. EMAC should upgrade all training materials to incorporate the experience gained during the 2004 hurricane season.
- b. Key personnel from the Assisting States who are now trained and experienced in A-Team skills should be engaged in recruiting additional volunteers and as training instructors for new A-Team candidates.

**B-9 – Predeployment Orientation.** Personnel alerted for deployment to the damage area, particularly those without previous deployment experience, were often unprepared for the conditions they would encounter.

### Recommendation

The EMAC Operations Subcommittee should prepare a simple, standard information sheet with general information about conditions in a disaster environment and the code of behavior to which assisting personnel should adhere.

**B-10 – Non-Deployed Resource Costs.** When resources are alerted and prepared to deploy in a support role, the Assisting State incurs some costs, even if the actual deployment does not occur or if the requirement is cancelled while they are en route. Resources are assembled, equipment is drawn from storage, and, in some cases, assets are relocated to staging areas. Not all of these costs can be recaptured. If an Assisting State directs action before a REQ-A Form is signed, then it is responsible for any costs incurred. If a requirement is cancelled after a REQ-A Form has been signed, the costs incurred are reimbursable.

### Recommendation

The EMAC Operations Subcommittee should ensure that all Member States understand the financial responsibility for predeployment costs.

## **Category 2 – Command and Control**

Command and control, as it pertains to the Assisting States, refers to the interface with the Requesting State's command structure and also the ability to extend effective administrative control over deployed resources, as opposed to their operational direction, which is the responsibility of the Requesting State. During the challenging hurricane season of 2004, the following aspects of command and control were considered exemplary and should become standard practices.

### **Positive Accomplishments**

The A-Team concept worked well. The system allowed for the movement of a large number of people to disparate geographic locations. A-Team members understood and performed well their assigned roles.

The size and composition of the A-Team expanded and contracted as the situation demanded, again demonstrating the flexibility and adaptability of EMAC.



The A-Team developed checklists and instructions that proved invaluable during transition operations. They should be adopted and incorporated in the *EMAC Operations Manual*.

Team deployments, when feasible, proved to be extremely effective. For example, North Carolina sent a team that assumed operational responsibility of the Charlotte County EOC and performed admirably.

### ***Issues for Improvement***

**B-11 – A-Team Functions.** At times, the A-Team was expected to assist the State or local staff by performing routine EOC functions. Such duties interfere with the primary function of the A-Team and detract from the overall effectiveness of EMAC operations.

#### *Recommendation*

The job functions and daily tasks of the A-Team should be clearly specified, consistent with the Incident Command System, and specifically focused on EMAC operations.

**B-12 – Twice-Daily Conference Calls.** Conference calls are important, but can become time consuming if overused. Some felt the practice of conducting telephone conference calls twice each day was not necessary except during peak operational times, normally the first few days after landfall. Much of the information conveyed during the conference calls duplicated information on the EMAC Web site.

#### *Recommendation*

Only conduct teleconferences when the spontaneous interaction of participants is essential and limit content to essential elements of EMAC information.

**B-13 – Chain of Command.** The operational chain of command was not always evident to deployed resources in the field. In some instances, they reported directly to county authorities. In other situations, the Requesting State EOC provided operational direction. County authorities sometimes appeared unaware that assistance had been requested and felt it was not needed.

#### *Recommendation*

The chain of authority and command must be clearly defined for all parties and should be consistent throughout the operating area.

**B-14 – EMAC Credentials.** Personnel deployed under EMAC do not have an official photo identification card or other distinguishing item that signifies their legitimate role in response and recovery operations.

#### *Recommendation*

EMAC should prepare and issue to all personnel a recognizable identification card that is coordinated with and accepted by all Member States and by Federal agencies and other response organizations.



**B-15 – Orientation for Non-EMAC Personnel.** Most of the general public and many people working in State and local government agencies and in faith-based organizations are unaware of EMAC. Deployed personnel found it necessary to repeatedly explain the program to other officials in the area of operations.

Recommendations

- a. EMAC should produce and widely distribute an information pamphlet or brochure describing the program.
- b. EMAC should be a conference agenda item for all organizations engaged in response and recovery activities.
- c. EMAC should engage in national, regional, and State training exercises so that all of the participants become familiar with EMAC and its role during emergencies.

**B-16 – Orientation for Federal Agency Personnel.** Because it is a State-to-State compact, many Federal Government employees are unfamiliar with EMAC or misunderstand its provisions. For example, in one incident, a request for specific Federal resource support was denied by a Federal agency official who was under the impression that all “State and EMAC” resources must first be exhausted. Assets deployed through EMAC are separate and distinct from other government resources and are not part of a hierarchy for obtaining assistance.

Recommendation

Key personnel in all Federal agencies that participate in response and recovery assistance should be thoroughly familiar with and regularly briefed on EMAC provisions.

**B-17 – Team Leadership.** In some cases, Assisting States deployed complete teams of personnel with a designated leader or coordinator. This proved to be the most effective structure for managing and controlling resources. In other instances, groups of individuals were deployed from a single Assisting State without a designated leader, making it difficult and sometimes impossible to exercise adequate control in the field.

Recommendations

- a. Assisting States should always strive to deploy teams of personnel or, at a minimum, designate a single individual to coordinate among personnel in the field.
- b. Provide instructions to all deployed personnel regarding to whom and how often they should report.
- c. Require that deployed personnel provide and exchange contact information with a designated coordinator.

**B-18 – Operational Transition.** A formal transition among arriving and departing personnel during extended EMAC activities is essential to the continuity of support operations. In some cases, deployed teams were required to depart before replacements arrived. This creates additional burdens both for the new personnel and the host staff of the Requesting State.



### Recommendations

- a. Require a 24-hour overlap between arriving and departing personnel.
- b. Produce an A-Team Continuity of Operations (COOP) Plan and include it in routine EMAC training.

**B-19 – Multi-Level Coordination.** The roles and responsibilities of the EMAC NCG, the National Coordinating Team (NCT), and the Regional Coordinating Team (RCT) were unclear. The NCG, NCT, and RCT were not explicitly addressed in the previous *EMAC Guidebook*. The new *EMAC Operations Manual* rectifies this oversight.

### Recommendation

Emphasize the roles of the NCG, NCT, and RCT in appropriate training materials.

## **Category 3 – Logistics**

Providing adequate personal hygiene arrangements, food, lodging, local transportation, and financial support requires close cooperation, coordination, and communications between the Requesting and Assisting States. It is especially challenging when multiple disasters occur in rapid succession, as was the case during the 2004 hurricane season. For the most part, logistical support for deployed personnel was satisfactory and, in some cases, exemplary.

### ***Positive Accomplishments***

Arrangements for State-to-State National Guard support were particularly well coordinated. Supporting organizations were provided with billets, areas to store equipment, maintenance support, and all other logistical requirements.

The continuous information flow transmitted via the EMAC Web site, and daily telephone conferences helped authorities in the Assisting States plan for the circumstances that deploying personnel would likely find in the area of operations and ensured the timely delivery of badly needed assets.

Deployed personnel from the Assisting States made good use of local resources to sustain day-to-day operations.

The State of Florida assigned finance personnel to assist the A-Team in resolving logistics issues.

### ***Issues for Improvement***

**B-20 – Predeployment Logistics Information.** Because of the rapidly shifting conditions in the area of operations, unanticipated changes often occurred while deploying personnel were en route. Logistics information included on the REQ-A Form was sometimes not valid when teams arrived at the Requesting State.



Recommendation

The logistics information included on the REQ-A Form should be confirmed and updated as appropriate just prior to deployment.

**B-21 – Mode of Travel.** Personnel traveling from neighboring States often used government-owned or personal automobiles. They were able to carry adequate logistical supplies to sustain operations for the anticipated duration of the deployment. Personnel deploying by air from more distant Assisting States were limited in the amount of allowable accompanying baggage.

Recommendations

- a. Whenever possible, encourage vehicular travel by deploying personnel.
- b. The cost of transporting additional baggage when deploying by air should be factored into the estimated deployment costs when completing REQ-A Form Part II.

**B-22 – Available Lodging.** Some deploying personnel had difficulty obtaining lodging in the area of operations. Reportedly, in at least one incident, power company personnel from out of State offered to pay a higher rate for rooms that had been reserved for personnel deploying under EMAC. In other cases, rooms simply were not available.

Recommendation

The EMAC A-Team should ensure the Requesting State has made logistics arrangements for arriving personnel. Rooms vacated by demobilized team members returning to their home State should be retained for replacement staff.

**B-23 – Living Conditions and Work Environment.** In many cases, deploying personnel were not prepared for the quality or condition of facilities in the area of operations. Some hotels had adequate capabilities, others had only limited services, and those in the hardest hit areas offered little more than basic shelter.

Recommendation

The living conditions and work environment should be described on the REQ-A Form as adequate, marginal, or primitive so that deploying personnel can plan accordingly.

**B-24 – Post-Deployment Relocations.** In several cases, personnel deployed under EMAC were relocated in preparation for the arrival of the next storm or to assist at a more severely damaged site. Based on predeployment instructions and the initial duty location, they were not well prepared for the conditions in more severely damaged areas.

Recommendations

- a. Deploying personnel should anticipate the possibility of relocation in the area of operations and bring equipment, supplies, and clothing that would be needed under the most severe conditions.
- b. Assisting States should consider assigning a logistics specialist to the A-Team to plan for and coordinate logistical activities.



## Category 4 – Field Operations

The sole purpose of EMAC is to provide response and recovery assistance to the Requesting State. The final measure of success is the effectiveness of EMAC operations in the field, where personnel deployed under EMAC work shoulder-to-shoulder with authorities from the Requesting State, the local jurisdiction, various Federal agencies, private relief organizations, and other volunteers. Conditions during the 85-day deployment in response to hurricanes Charley, Frances, Ivan, and Jeanne presented unprecedented field operations challenges. The extended duration of support required detailed and near continuous transition planning as personnel arrived in and departed from the area of operations. Groups of personnel deployed under EMAC from different Assisting States often worked together under austere and challenging circumstances. Many positive results were attained.

### ***Positive Accomplishments***

With nearly 800 personnel from 38 different States engaged, it is remarkable that personalities, egos, and ownership were not disruptive factors. Individuals came to help the storm victims, not for personal gain or prestige.

A-Team members were well trained and dedicated to their task. Most were thoroughly schooled in the Incident Management System and experienced in EMAC procedures. The A-Team fit seamlessly into the Requesting States' emergency operations and served as the focal point for disseminating EMAC information.

Residents throughout the affected jurisdictions were appreciative and helpful to EMAC personnel.

Daily Situation Reports were thorough, well written, and timely.

At the A-Team and forward-deployed locations, local supervisors were readily available and provided valuable advice and information.

The A-Team worked diligently to monitor the location of deployed resources and their activities, although the dynamics of the situation were sometimes prohibitive.

A significant number of the deployed personnel operated in forward areas. They regularly demonstrated that highly qualified and motivated personnel can perform any required function.

### ***Issues for Improvement***

**B-25 – Mission Assignments.** In some cases, deployed personnel were not entirely clear regarding the work that was expected of them upon arrival in the area of operations or of the chain of command in the field. Some local authorities seemed unaware that EMAC resources had been requested to support their jurisdictions.

#### *Recommendations*

- a. Ensure that REQ-A Form mission instructions are clear and unambiguous. Update those instructions prior to departing for the area of operations.



- b. The name of the requesting official and contact information should be included on the REQ-A Form to facilitate direct predeployment coordination.

**B-26 – Field Resource Transitions.** There was not always an opportunity for overlap in the field between personnel departing and arriving under EMAC. Because travel dates are included within the specified duration of deployment, the outgoing and incoming teams were often simultaneously in transit. In the absence of incumbent staff, replacement personnel had a steeper than necessary learning curve to become operationally effective.

Recommendations

- a. A minimum of 24 hours overlap should be incorporated into the period of deployment to accommodate EMAC team transition.
- b. A transition checklist should be developed and maintained by each team in the field to serve as an operational guide for replacements in the event that a physical transition is impossible.

**B-27 – Personnel Tracking.** Personnel frequently deployed directly to a field operations site without going to the Requesting State's EOC or another staging location. It was often difficult to keep track of who was working at each location and the nature of assistance activities under way.

Recommendations

- a. The EMAC Operations Subcommittee should reinforce existing procedures addressing how deploying team members check in upon arriving in the Requesting State.
- b. Personnel deploying under EMAC should be provided contact information, maps, and all other pertinent materials to ensure complete accountability.

**B-28 – Communications.** During the height of the various storm activities, personnel in the field often were unable to communicate with the A-Team or personnel in other locations. Local power outages, disruption of landlines of communications, and damaged cell towers prohibited normal communications. Reportedly, the handheld BlackBerry device was sometimes the only reliable means of transmitting and receiving information.

Recommendation

Explore all potential methods of field communications and equip deploying personnel accordingly so that they are never without some means of communicating.

**B-29 – Temperament.** Response and recovery operations in the aftermath of a devastating event are stressful. Work and living conditions are bereft of many of the conditions we routinely expect, such as electricity, climate control, fresh food and water, personal hygiene facilities, and privacy. Teams are often composed of strangers, working together for the first time under the most primitive and demanding circumstances. Occasionally, deploying personnel were neither prepared nor well suited for these stressful conditions. This proved to be harmful not only to the individual but to the operations of the team as a whole.



### Recommendation

Care must be taken by Assisting States and the EMAC A-Team to ensure that the expectations of deploying personnel are consistent with the conditions in the area of operations and that they are psychologically suited for EMAC operations.

## **Category 5 – Mobilization and Demobilization**

Multiple sequential events with overlapping consequences significantly complicate for Assisting States the administrative burden associated with mobilizing and demobilizing resources. Deploying assets under EMAC requires a request for assistance based on the declaration of a state of emergency by the Requesting State. Each independent event requires a distinct emergency declaration. Thus, during the 2004 hurricane season, an Assisting State might have resources simultaneously deployed to Florida in response to four separate emergency declarations.

### ***Positive Accomplishments***

Despite the potential complications, most mobilization and demobilization activities went smoothly. State-to-State reimbursement of deployment costs was prompt in most cases. The instructions for completing documentation were reasonably clear.

### ***Issues for Improvement***

**B-30 – Reimbursement for Distinct Events.** In some cases, Assisting States believed that it was necessary to wait until all of the deployed resources were demobilized before seeking reimbursement from the Requesting State. Because the deployments were in support of a particular event, the costs associated with Hurricane Charley should have been collected and processed separate from those of Hurricanes Ivan, Frances, and Jeanne. This would ensure that Assisting States are reimbursed as quickly as possible.

### Recommendation

Continue the education and training process so that all of the administrative agencies of the Member States understand how best to collect and maintain cost data and apply for reimbursement.

**B-31 – Standardized Financial Practices.** Where problems occurred in obtaining prompt payment for mobilization and deployment costs, it was generally because a particular Assisting State had unique internal financial management practices and policies that did not synchronize well with the EMAC process.

### Recommendation

Collect and distribute to Member States the best practices associated with collecting and submitting costs for reimbursement after an EMAC deployment.

**B-32 – Timely Distribution of EMAC Operational Information.** Not all Member States have a system in place for immediate distribution of EMAC operational information to State emergency management staff. In some cases, after-duty contact is through a contract service, which relays



the information at the beginning of the next duty day. In other cases, after-duty points of contact responding to requests for assistance were unfamiliar with the EMAC program.

*Recommendation*

Member States should ensure that EMAC operational information is expeditiously distributed to proper authorities 24 hours a day, 7 days a week by personnel familiar with the Compact.



Annex C  
**federal  
& other support**



## ANNEX C FEDERAL AND OTHER SUPPORT

### Introduction

#### Federal Emergency Management Agency

Established in April 1979, the Federal Emergency Management Agency (FEMA) is currently charged with coordinating the disaster response activities of up to 28 Federal agencies and the American Red Cross. In March 2003, FEMA became one of four branches of the newly established U.S. Department of Homeland Security (DHS). The 2,500 full-time employees of the Emergency Preparedness and Response Directorate are supplemented by more than 5,000 standby disaster reservists who are activated when needed.

To coordinate Federal disaster recovery efforts, FEMA recommends, and the President appoints, a Federal Coordinating Officer (FCO) for each affected State. The FCO establishes a Disaster Field Office (DFO) in relative proximity to the disaster scene from which to direct operations in close coordination with the State Coordinating Officer (SCO). This approach has been frequently tested, fine-tuned, and proven effective in responding to 569 major disaster declarations between 1979 and 2004.

Quick, efficient, and well coordinated relief operations are critical to saving lives, restoring order, and rebuilding stricken communities. But even under the best of conditions, natural disasters have exorbitant price tags. According to FEMA, relief efforts associated with the 10 costliest disasters in U.S. history total \$20 billion (see **Figure C-1**).

<b>Top Ten Natural Disasters</b>		
<b>Ranked By FEMA Relief Costs</b>		
<b>Event</b>	<b>Year</b>	<b>FEMA Funding*</b>
Northridge Earthquake (CA)	1994	\$6.973 billion
Hurricane Georges (AL, FL, LA, MS, PR, VI)	1998	\$2.253 billion
Hurricane Andrew (FL, LA)	1992	\$1.814 billion
Hurricane Ivan (AL, FL, GA, LA, MS, NC, NJ, NY, PA, TN, WVA)	2004	\$1.528 billion
Tropical Storm Allison (FL, LA, MS, PA, TX)	2001	\$1.307 billion
Hurricane Hugo (NC, SC, PR, VI)	1989	\$1.223 billion
Hurricane Jeanne (DE, FL, PR, VI, VA)	2004	\$1.223 billion
Hurricane Charley (FL, SC)	2004	\$1.177 billion
Midwest Floods (IL, IA, KS, MN, MO, NE, ND, SD, WI)	1993	\$1.140 billion
Hurricane Frances (FL, GA, NC, NY, OH, PA, SC)	2004	\$1.129 billion

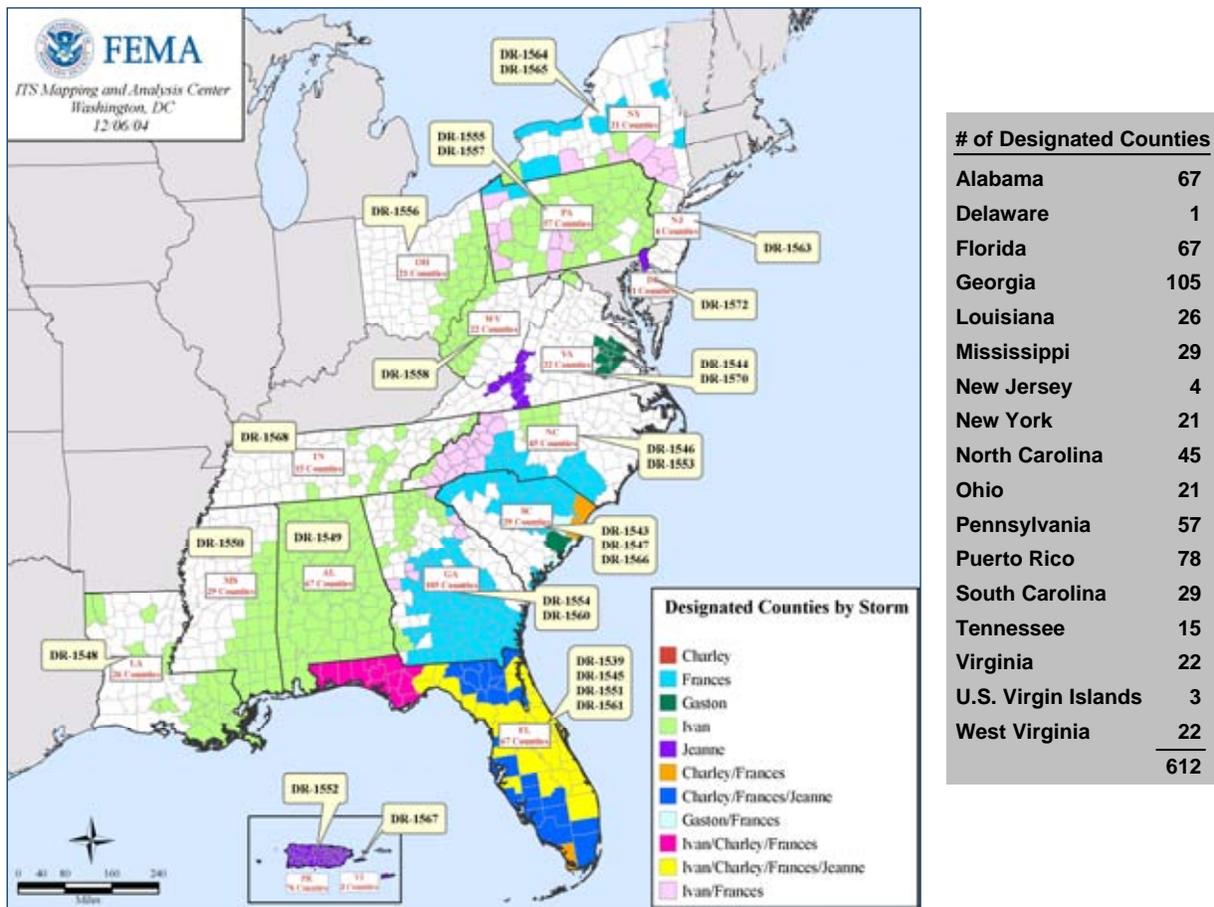
\*Amount obligated from the President's Disaster Relief Fund for FEMA's assistance programs, hazard mitigation grants, Federal mission assignments, contractual services, and administrative costs as of January 31, 2005. Figures do not include funding provided by other participating Federal agencies, such as the disaster loan programs of the Small Business Administration and the Agriculture Department's Farm Service Agency. **NOTE:** Funding amounts are stated in nominal dollars, unadjusted for inflation.

**Figure C-1. Top 10 National Disasters**



## Summer of 2004

As described previously in this report, the 2004 Florida hurricane season was unprecedented, but it was only part of a much larger tapestry of natural disasters that struck across the Nation that summer and fall. At one point, FEMA dealt with 35 active emergencies and 27 concurrent Presidential Disaster Declarations, affecting 612 counties in 17 States and Territories (see **Figure C-2**). One out of every six counties in the United States was affected. Given the circumstances in Florida, where nearly 10 million people were evacuated from 67 counties, it is conceivable that the total number of citizens moved from harm's way in the summer of 2004, a figure not currently tabulated, could conservatively be in the range of 12 to 13 million. That is the equivalent of approximately 1 of every 22 Americans. It was an incredibly challenging period for FEMA and for the entire Federal response community.



**Figure C-2. Presidential Declarations**

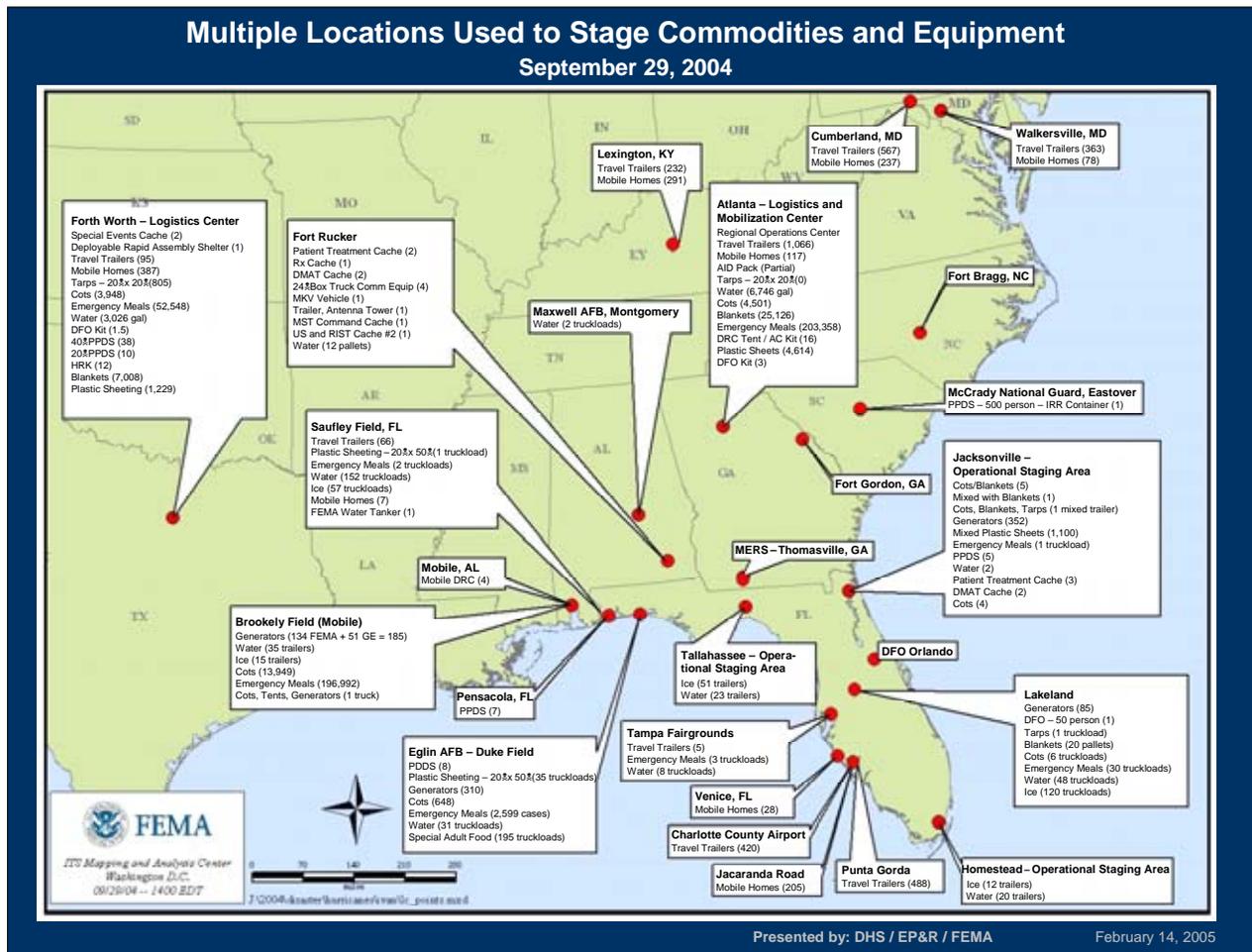


## Federal and Other Post-Hurricane Support

FEMA coordinated a massive relief effort in response to Hurricanes Charley, Frances, Ivan, and Jeanne. The FCO established the DFO in Orlando, FL; however, shortly after Hurricane Charley made landfall, joined the SCO at a forward command post located in Charlotte County. Designated “Charley Command” to emphasize that it was truly a unified command, the forward location gave the FCO and SCO an opportunity to observe firsthand the destruction wrought by Charley.

To ensure coordination with Emergency Management Assistance Compact (EMAC) activities, FEMA invited EMAC to dispatch a National Coordinating Team (NCT) to the National Emergency Operations Center (NEOC). The EMAC NCT coordinated directly with the Federal Emergency Support Function (ESF) groups located at the NEOC and participated in FEMA-hosted video conferences.

As the Federal response gained momentum, FEMA established 23 sites from which to stage commodities and equipment into the affected areas (see **Figure C-3**).



**Figure C-3. Logistic Staging Areas**



Emergency Management Assistance Compact (EMAC)  
After-Action Report for the 2004 Hurricane Response

Emergency Management Assistance (EMAC)  
**Interstate Mutual Aid Request**

Form REQ-A (2005)

Type or print all information except signatures.

**Part I TO BE COMPLETED BY THE REQUESTING STATE**

Dated:	Time:            hrs	From the State of:	
Contact Person:		Telephone:	Fax:
To the State of:		Authorized Rep:	
Incident Requiring Assistance:			

Type Assistance/Resources Needed (for more space, attach Part IV):

Date & Time Resources Needed:	Staging Area:		
Approximate Date/Time Resources To Be Released:			
Authorized Rep. Name:		Authorized Rep. Signature:	
Title:	Agency:	Mission No:	

**Part II TO BE COMPLETED BY THE ASSISTING STATE**

Contact Person:	Telephone:	Fax:
Type of Assistance Available:		

Date & Time Resources Available From:	To:		
Staging Area Location:			
Approx. Total Cost of this Deployment for Which Reimbursement will be Requested:        \$			
Trans. Costs from Home Base to Staging Area:        \$		Trans. Costs to Return to Home Base:        \$	
Logistics Required from Requesting State (for more space, attach Part IV):			
Authorized Rep. Name:		Title:	
Authorized Rep. Signature:		Agency:	
Dated:	Time:            hrs	Mission No:	

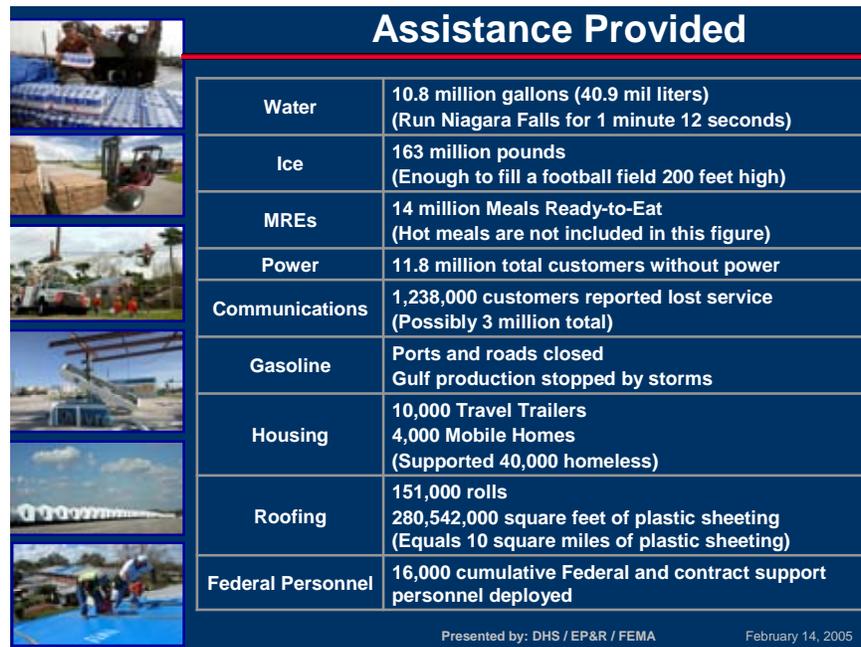
**Part III REQUESTING STATE'S APPROVAL**

Authorized Rep. Name:		Title:	
Signature:		Agency:	
Dated:	Time:            hrs	Mission No:	

**Additional Information**



Massive amounts of supplies were funneled through the staging sites to local distribution points (see **Figure C-4**).



**Figure C-4. Federal Assistance**

FEMA also established 44 Disaster Recovery Centers (DRCs) throughout the area of operations, where victims could register for Federal aid. On September 28, 2004, a remarkable 44,799 registrations were processed, setting a single 24-hour record (see **Figure C-5**).

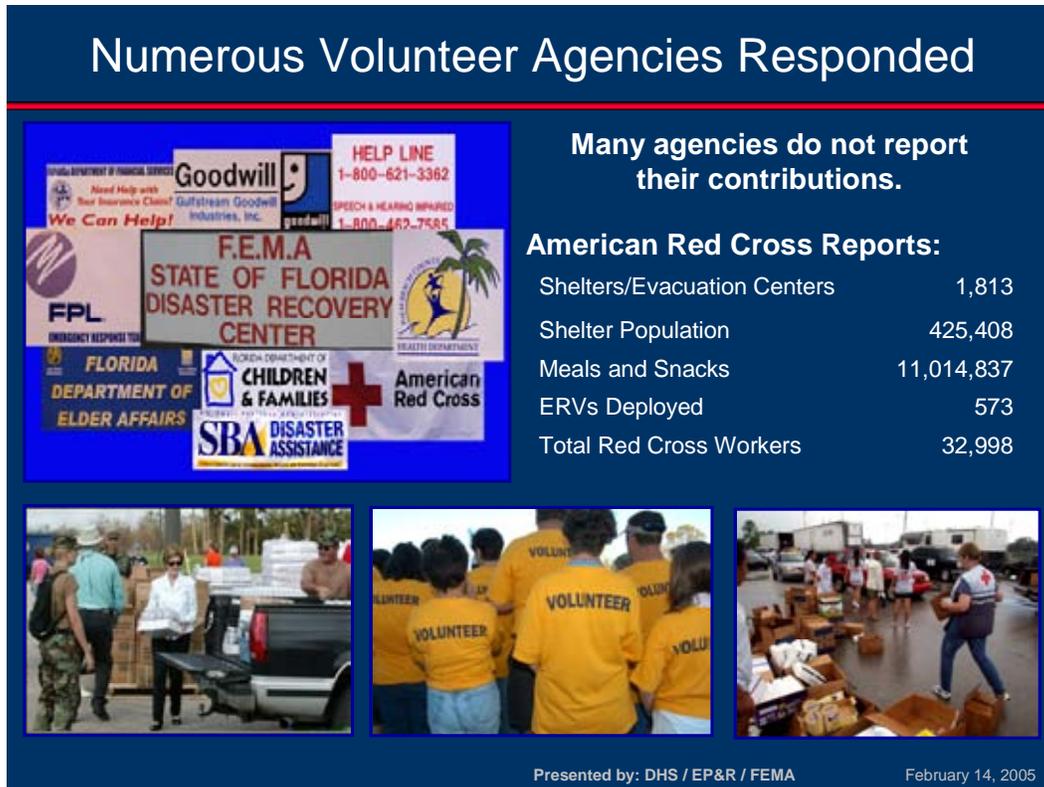


**Figure C-5. Recovery Support**



Among the more than 16,000 Federal employees and support contractors deployed to the area of operations were 4,000 FEMA staff (including disaster reservists), nearly 2,000 National Disaster Medical System (NDMS) personnel, and 3,100 community relations personnel. Eighteen Urban Search and Rescue Task Forces were also employed with more than 800 members who searched the ruined buildings for possible survivors.

Volunteer agencies mounted massive relief efforts as well. Nearly 33,000 American Red Cross volunteers contributed their time and energy to help the hurricane victims (see **Figure C-6**).



**Figure C-6. Numerous Volunteer Agencies Responded**

A major component of the total effort was the support and resources provided by the National Guard of the affected States and from elsewhere, when requested through EMAC or directly through National Guard channels. While some Assisting States reported information on the National Guard assets that they provided through EMAC, others did not. As a result, this report does not include detailed information about a valued response and recovery partner, the men and women of the National Guard. While committed to active warfighting overseas at an unprecedented level, the National Guard is the first to come to the aid of its neighbors in distress.



## LESSONS LEARNED

### ***Positive Accomplishments***

EMAC proved to be of critical value to the relief workers deployed to the area of operations by FEMA. As noted by the FCO, to be successful, the managers of Federal disaster relief operations need to interact directly with authorities of the local jurisdictions. Without the presence of augmentation personnel deployed under EMAC and working in county and city Emergency Operations Centers (EOCs) throughout the area, that direct interaction would have been impossible in many cases.

Deploying an EMAC NCT to the NEOC was very successful. The NCT was able to help clarify EMAC issues with members of the ESF groups working at the NEOC. The NEOC Director listened to and sought advice on EMAC issues from the NCT.

Video teleconference sessions hosted by FEMA from the NEOC aided information sharing and helped resolve resource issues.

### ***Issues for Improvement***

**C-1 – Senior EMAC Advisor.** While operating from Charley Command, a forward command post in badly damaged Charlotte County, FL, the FCO and SCO did not have access to accurate and timely EMAC information upon which to base important resource decisions. For a brief period of time, two EMAC Advance Team (A-Team) members were located at Charley Command, but it was an inappropriate location from which to process requests for assistance.

#### *Recommendation*

EMAC should develop a cadre of experienced and knowledgeable personnel who could serve as advisors to the FCO and SCO during Level 1 EMAC operations.

**C-2 – NEOC Procedures.** The new National Response Plan requires a revision to the current standard operating procedures (SOPs). The current SOPs do not address the role of the EMAC NCT assigned to the NEOC.

#### *Recommendation*

EMAC should coordinate with FEMA to ensure that the revised NEOC SOPs include provisions for the EMAC NCT.

**C-3 – EMAC Awareness Training.** It was evident to members of the NCT assigned to the NEOC that representatives of several Federal agencies with important disaster response roles were unfamiliar with EMAC or substantially misunderstood its mission.

#### *Recommendations*

- a. EMAC should coordinate with FEMA to provide awareness training to ESF groups at the national and regional levels.
- b. Upon arrival for duty at the NEOC, the NCT should offer an EMAC orientation briefing to Federal agency ESF representatives.



**C-4 – EMAC Presence at the Regional Operations Center (ROC).** The FEMA ROC in Atlanta, GA, coordinated intra-regional operations in support of the massive Federal relief effort. FEMA did not request that EMAC deploy a Regional Coordinating Team (RCT) to the ROC. As a result, the ROC did not have an EMAC presence to address matters pertaining to inter-State resource transactions.

Recommendation

Whenever a Level 1 EMAC operation is under way involving multiple States in one or more Federal Regions, consideration should be given to assigning an EMAC RCT to each operational ROC.

**C-5 – Obtaining National Guard Resources Through EMAC.** On several occasions, a Requesting State used EMAC to obtain National Guard resources. This is a legitimate application of EMAC as a State-to-State mutual-aid program. However, in some cases, information about the required resources traveled faster through National Guard channels than it did through the EMAC request for assistance process. This led to confusion as to whether these were separate and distinct requests or duplicative.

Recommendation

The EMAC Operations Subcommittee, in coordination with proper authorities in the National Guard Bureau, should establish standard request for assistance coordination and tracking procedures so that State emergency management staff and National Guard representatives have greater visibility over the process.

**C-6 – Limitations on National Guard EMAC Deployments.** There are occasions when National Guard resources are needed to fill public safety and security missions. Limitations exist on deploying armed National Guard personnel from one State to another. Currently, the respective governors in such instances execute a Memorandum of Understanding to deploy National Guard personnel for such purposes.

Recommendation

Investigate barriers to requesting National Guard resources through EMAC.

**C-7 – National Guard Bureau Teleconferences.** The National Guard Bureau hosted regular teleconferences addressing disaster relief operations, but did not invite EMAC to participate.

Recommendation

EMAC should discuss with the National Guard Bureau mutual participation in operations-related teleconferences by both parties.

# appendices



# Appendix 1

## Saffir-Simpson Hurricane Scale



## APPENDIX 1

### Saffir-Simpson Hurricane Scale

The Saffir-Simpson Hurricane Scale is a 1 to 5 rating based on the hurricane's present intensity. This is used to give an estimate of the potential property damage and flooding expected along the coast from a hurricane landfall. Wind speed is the determining factor in the scale, as storm surge values are highly dependent on the slope of the continental shelf in the landfall region. Note that all winds are using the U.S. 1-minute average.

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#### **Category One Hurricane** – Winds 74 to 95 mph (64 to 82 kt or 119 to 153 km/hr)

Storm surge generally 4 to 5 feet above normal. No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Some damage to poorly constructed signs. Also, some coastal road flooding and minor pier damage.

[Hurricanes Allison](#) of 1995 and [Danny](#) of 1997 were Category One hurricanes at peak intensity.

#### **Category Two Hurricane** – Winds 96 to 110 mph (83 to 95 kt or 154 to 177 km/hr)

Storm surge generally 6 to 8 feet above normal. Some roofing material, door, and window damage of buildings. Considerable damage to shrubbery and trees with some trees blown down. Considerable damage to mobile homes, poorly constructed signs, and piers. Coastal and low-lying escape routes flood 2 to 4 hours before arrival of the hurricane center. Small craft in unprotected anchorages break moorings.

[Hurricane Bonnie](#) of 1998 was a Category Two hurricane when it hit the North Carolina coast, while [Hurricane Georges](#) of 1998 was a Category Two hurricane when it hit the Florida Keys and the Mississippi Gulf Coast.

#### **Category Three Hurricane** – Winds 111 to 130 mph (96 to 113 kt or 178 to 209 km/hr)

Storm surge generally 9 to 12 feet above normal. Some structural damage to small residences and utility buildings with a minor amount of curtainwall failures. Damage to shrubbery and trees with foliage blown off trees and large trees blown down. Mobile homes and poorly constructed signs are destroyed. Low-lying escape routes are cut by rising water 3 to 5 hours before arrival of the center of the hurricane. Flooding near the coast destroys smaller structures with larger structures damaged by battering from floating debris. Terrain continuously lower than 5 feet above mean sea level may be flooded inland 8 miles (13 km) or more. Evacuation of low-lying residences with several blocks of the shoreline may be required.

[Hurricanes Roxanne](#) of 1995 and [Fran](#) of 1996 were Category Three hurricanes at landfall on the Yucatan Peninsula of Mexico and in North Carolina, respectively.

#### **Category Four Hurricane** – Winds 131 to 155 mph (114 to 135 kt or 210 to 249 km/hr)

Storm surge generally 13 to 18 feet above normal. More extensive curtainwall failures with some complete roof structure failures on small residences. Shrubs, trees, and all signs are blown down. Complete destruction of mobile homes. Extensive damage to doors and windows. Low-lying escape routes may be cut by rising water 3 to 5 hours before arrival of the center of the hurricane. Major damage to lower floors of structures near the shore. Terrain lower than 10 feet above sea level may be flooded requiring massive evacuation of residential areas as far inland as 6 miles (10 km).

[Hurricane Luis](#) of 1995 was a Category Four hurricane while moving over the Leeward Islands. [Hurricanes Felix](#) and [Opal](#) of 1995 also reached Category Four status at peak intensity.



**Category Five Hurricane** – Winds greater than 155 mph (135 kt or 249 km/hr)

Storm surge generally greater than 18 feet above normal. Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. All shrubs, trees, and signs blown down. Complete destruction of mobile homes. Severe and extensive window and door damage. Low-lying escape routes are cut by rising water 3 to 5 hours before arrival of the center of the hurricane. Major damage to lower floors of all structures located less than 15 feet above sea level and within 500 yards of the shoreline. Massive evacuation of residential areas on low ground within 5 to 10 miles (8 to 16 km) of the shoreline may be required.

[Hurricane Mitch](#) of 1998 was a Category Five hurricane at peak intensity over the western Caribbean. [Hurricane Gilbert](#) of 1988 was a Category Five hurricane at peak intensity and is one of the strongest Atlantic tropical cyclones of record.

**Saffir-Simpson Hurricane Scale**  
(Quick Reference)

Category	Sustained Winds (mph)	Damage
1	74 to 95	Minimal
2	96 to 110	Moderate
3	111 to 130	Extensive
4	131 to 155	Extreme
5	>155	Catastrophic

# Appendix 2

## Request for Assistance (REQ-A) Form



Emergency Management Assistance Compact (EMAC)  
After-Action Report for the 2004 Hurricane Response

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**Part IV MISCELLANEOUS ITEMS / OTHER MISSION INFORMATION**

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\*\*\*\*\*ADDITIONAL INFORMATION\*\*\*\*\*

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# Appendix 3

## Consolidated EMAC Deployment Survey Response Data



## APPENDIX 3

### Consolidated EMAC Deployment Survey Response Data

***What worked well in the EMAC process?*** (Merged data report, pages 119 to 133)

1. Dedication and expertise of the EMAC people.
2. Coordination and leadership demonstrated by National Coordinating Group/Team and A-Teams.
3. Ability to make changes quickly based on input from people in the field.
4. Opportunity to share experience and knowledge and to learn.

***Were assignments made clear before deployment?*** (Merged data report, pages 10 to 22)

Yes – 55                      No – 31                      Assignment Changed On-Site – 7

Several respondents noted the need to be flexible in such a large disaster and be willing to serve in whatever capacity needed.

***Were you briefed and given instructions upon arrival in the Requesting State?*** (Merged data report, pages 23 to 36)

Yes – 67                      No – 25

Reassignment happened frequently throughout deployments.

***Did you report regularly to a supervisor during deployment for tasks or mission assignments?*** (Merged data report, pages 37 to 49)

Yes – 88                      No – 11

***Were you debriefed prior to demobilization?*** (Merged data report, pages 91 to 102)

Yes – 47                      No – 43

Respondents seemed confused by whom they were to be debriefed.

***Barriers or obstacles to accomplishing work.*** (Merged data report, pages 71 to 90)

1. Logistics
2. Learning new software system for tracking resources
3. Lack of organization, resources, etc., at local Emergency Operations Centers (EOCs)
4. Working with inexperienced or difficult EMAC people
5. Lack of direction on-site



***What could EMAC have done to facilitate your assignment?*** (Merged data report, pages 103 to 118)

- Everything worked well – 26
- Logistics support – 16
- Personnel tracking and communication with A-Team – 11
- Field guide/checklists/preparation for deployment – 6
- Clearer assignments – 3

***Improvements needed in EMAC process.*** (Merged data report, pages 134 to 141)

- Everything worked well – 14
- Tracking deployed personnel and communication – 15
- Clearer information on skills needed for personnel requests – 14
- More training – 8
- Deployment procedures – 8

***Improvements needed in EMAC logistics and support.*** (Merged data report, pages 142 to 156)

- Everything worked well – 29
- Tracking personnel and communication – 15
- Logistics support needed for hotel and rental cars – 8
- Address upfront costs and reimbursement for deployed personnel – 5
- Identification/badging – 4

# Appendix 4

## Deployment Utilization Data



## APPENDIX 4

# Deployment Utilization Data

### Florida's Assisting States Personnel Deployed by Operational Category

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>Tropical Storm Bonnie and Hurricane Charley</b>					
A-Team	State EOC	12	11	132	1,056
State EOC	State EOC	11	12	132	1,056
Operations Chief	State EOC				
Human Services	State EOC	5	12	60	480
Infrastructure	State EOC	3	15	45	360
Donations	State EOC	8	9	72	576
Finance	State EOC				
Health/Medical	State EOC				
SPSN	State EOC				
Logistics	State EOC	3	15	45	360
City/County EOC	City/County EOC				
Community Relations	City/County EOC	29	12	348	2,784
DRC Management	City/County EOC	13	24	312	2,496
ESF Support	City/County EOC	72	11	792	6,336
Mass Care	City/County EOC	8	9	72	576
Amateur Radio	City/County EOC				
Animal Control	City/County EOC				
Health/Medical	City/County EOC				
PA Recovery	City/County EOC				
CISM	City/County EOC				
Nurses	City/County EOC				
Housing Assistance	City/County EOC	4	7	28	224
Field Operations	City/County EOC				
DFO Operations	DFO	1	15	15	120
Public Assistance	DFO				
Forestry Command	Logistic Staging Area	13	14	182	1,456
<b>TOTALS</b>		<b>182</b>	<b>12.3</b>	<b>2,235</b>	<b>17,880</b>



**Florida's Assisting States  
Personnel Deployed by Operational Category**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>Hurricane Frances</b>					
A-Team	State EOC	15	12	180	1,440
State EOC	State EOC	5	11	55	440
Operations Chief	State EOC	2	12	24	192
Human Services	State EOC	6	14	84	672
Infrastructure	State EOC				
Donations	State EOC	3	14	42	336
Finance	State EOC	2	14	28	224
Health/Medical	State EOC				
SPSN	State EOC				
Logistics	State EOC				
City/County EOC	City/County EOC				
Community Relations	City/County EOC				
DRC Management	City/County EOC				
ESF Support	City/County EOC	39	14	546	4,368
Mass Care	City/County EOC				
Amateur Radio	City/County EOC	11	16	176	1,408
Animal Control	City/County EOC	6	16	96	768
Health/Medical	City/County EOC	155	8	1,240	9,920
PA Recovery	City/County EOC	6	13	78	624
CISM	City/County EOC				
Nurses	City/County EOC				
Housing Assistance	City/County EOC				
Field Operations	City/County EOC				
DFO Operations	DFO				
Public Assistance	DFO	5	16	80	640
Forestry Command	Logistic Staging Area	19	16	304	2,432
<b>TOTALS</b>		<b>274</b>	<b>10.7</b>	<b>2,933</b>	<b>23,464</b>



**Florida's Assisting States  
Personnel Deployed by Operational Category**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>Hurricane Ivan</b>					
A-Team	State EOC	7	14	98	784
State EOC	State EOC	8	17	136	1,088
Operations Chief	State EOC				
Human Services	State EOC				
Infrastructure	State EOC				
Donations	State EOC				
Finance	State EOC				
Health/Medical	State EOC	6	17	102	816
SPSN	State EOC	16	14	224	1,792
Logistics	State EOC				
City/County EOC	City/County EOC	85	26	2,210	17,680
Community Relations	City/County EOC				
DRC Management	City/County EOC				
ESF Support	City/County EOC				
Mass Care	City/County EOC				
Amateur Radio	City/County EOC				
Animal Control	City/County EOC				
Health/Medical	City/County EOC				
PA Recovery	City/County EOC				
CISM	City/County EOC	3	7	21	168
Nurses	City/County EOC	48	15	711	5,688
Housing Assistance	City/County EOC				
Field Operations	City/County EOC				
DFO Operations	DFO	13	22	286	2,288
Public Assistance	DFO				
Forestry Command	Logistic Staging Area	34	16	544	4,352
<b>TOTALS</b>		<b>220</b>	<b>16.44</b>	<b>4,332</b>	<b>34,656</b>



**Florida's Assisting States  
Personnel Deployed by Operational Category**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>Hurricane Jeanne</b>					
A-Team	State EOC	5	14	70	560
State EOC	State EOC	1	8	8	64
Operations Chief	State EOC	1	14	14	136
Human Services	State EOC	1	17	17	136
Infrastructure	State EOC				
Donations	State EOC				
Finance	State EOC				
Health/Medical	State EOC				
SPSN	State EOC				
Logistics	State EOC				
City/County EOC	City/County EOC				
Community Relations	City/County EOC				
DRC Management	City/County EOC				
ESF Support	City/County EOC				
Mass Care	City/County EOC				
Amateur Radio	City/County EOC				
Animal Control	City/County EOC				
Health/Medical	City/County EOC				
PA Recovery	City/County EOC				
CISM	City/County EOC				
Nurses	City/County EOC	33	16	528	4,224
Housing Assistance	City/County EOC				
Field Operations	City/County EOC	3	13	39	312
DFO Operations	DFO	11	15	165	1,320
Public Assistance	DFO	1	14	14	112
Forestry Command	Logistic Staging Area	1	16	16	128
<b>TOTALS</b>		<b>57</b>	<b>15.3</b>	<b>871</b>	<b>6,992</b>



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**Florida's Assisting States  
Personnel Deployed by Operational Category**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>Florida Hurricanes – Cumulative</b>					
A-Team	State EOC	39	12.75	497.25	3,978
State EOC	State EOC	25	12	300	2,400
Operations Chief	State EOC	3	13	39	312
Human Services	State EOC	12	14.33	171.96	1,375.68
Infrastructure	State EOC	3	15	45	360
Donations	State EOC	11	11.5	126.5	1,012
Finance	State EOC	2	14	28	224
Health/Medical	State EOC	6	17	102	816
SPSN	State EOC	16	14	224	1,792
Logistics	State EOC	3	15	45	360
City County EOC	City/County EOC	85	26	2,210	17,680
Community Relations	City/County EOC	29	12	348	2,784
DRC Management	City/County EOC	13	24	312	2496
ESF Support	City/County EOC	111	12.5	1,387.5	11,100
Mass Care	City/County EOC	8	9	72	576
Amateur Radio	City/County EOC	11	16	176	1,408
Animal Control	City/County EOC	6	16	96	768
Health/Medical	City/County EOC	155	8	1,240	9,920
PA Recovery	City/County EOC	6	13	78	624
CISM	City/County EOC	3	7	21	168
Nurses	City/County EOC	81	15.5	1,255.5	10,044
Housing Assistance	City/County EOC	4	7	28	224
Field Operations	City/County EOC	3	13	39	312
DFO Operations	DFO	25	18.5	462.5	3,700
Public Assistance	DFO	6	19	361	2,888
Forestry Command	Logistic Staging Area	67	16	1,072	8,567
<b>TOTALS</b>		<b>733</b>	<b>14.65</b>	<b>10,732.21</b>	<b>85,897.68</b>



**Alabama's Assisting States  
Personnel Deployed by Major Categories**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>Hurricane Ivan</b>					
A-Team	State EOC	6	5	30	240
State EOC	State EOC	2	8	16	128
City/County EOC	City/County EOC	42	8	336	2,688
DFO Operations	DFO	4	14	56	448
<b>TOTALS</b>		<b>54</b>	<b>8.1</b>	<b>438</b>	<b>3,504</b>

**Florida and Alabama's Cumulative  
Deployed Assisting States Personnel**

Category Assignment	Deployment Location	Number Deployed	Average Duty Days (Approximate)	Average Staff Days (Approximate)	Approximate Duty Hours
<b>All</b>	<b>All</b>	<b>787</b>	<b>14.2</b>	<b>11,175.21</b>	<b>89,401.68</b>

# Appendix 5

## Executive Order 04-217



## APPENDIX 5

### Executive Order 04-217

STATE OF FLORIDA

OFFICE OF THE GOVERNOR

EXECUTIVE ORDER NUMBER 04-217

(Emergency Management)

WHEREAS, on August 10, 2004, the Governor issued Executive Order 04-182 to declare a state of emergency for Hurricane Charley, which came ashore in the southwestern portion of the State as a Category 4 hurricane and devastated communities in the southwestern and central portions of the State; and

WHEREAS, on September 1, 2004, the Governor issued Executive Order 04-192 to declare a state of emergency for Hurricane Frances, which came ashore on September 5, 2004 as a Category 2 hurricane and devastated communities in the central, eastern and northeastern portions of the State; and

WHEREAS, on September 10, 2004, the Governor issued Executive Order 04-206 to declare a state of emergency for Hurricane Ivan, which made landfall in the northwestern portions of the State as a Category 3 hurricane and caused the destruction of many communities there; and

WHEREAS, the different sections of the State are now trying to recover from the cumulative impacts of Hurricanes Charley, Frances and Ivan, demanding a massive infusion of its own resources, as well as resources from the United States Government and from other States to the communities stricken by these disasters; and

WHEREAS, on September 24, 2004, the National Hurricane Center advised that Hurricane Jeanne has now become a Category 2 hurricane, with sustained surface winds exceeding 100 miles per hour, and that it may strengthen even further; and

WHEREAS, Hurricane Jeanne threatens a number of communities in the State of Florida with extreme weather conditions which pose an immediate danger to the lives and property of persons in those communities; and

WHEREAS, it is likely that Hurricane Jeanne will strike those communities within a matter of days, so that the immediate evacuation of persons from those communities is vital to the safety of the residents; and

WHEREAS, special equipment, personnel and other resources in addition to those needed for Hurricanes Charley, Frances and Ivan may be required in order to ensure the timely evacuation of persons from the threatened communities and the safe movement of the evacuees to other communities in the State acting as destinations for the evacuees; and

WHEREAS, emergency measures in addition to those needed for Hurricanes Charley, Frances and Ivan may be needed to protect the lives and property of persons in the threatened communities, and the general welfare of the State of Florida; and



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WHEREAS, central coordination and direction of the use of such resources for the local evacuation measures are needed to ensure the timely evacuation of the threatened communities;

NOW, THEREFORE, I, JEB BUSH, as Governor of Florida, by virtue of the authority vested in me by Article IV, Section 1(a) of the Florida Constitution and by the Florida Emergency Management Act, as amended, and all other applicable laws, do hereby promulgate the following Executive Order, to take immediate effect:

Section 1. Because of the foregoing conditions, I hereby find that Hurricane Jeanne, alone and in combination with the destruction by Hurricanes Charley, Frances and Ivan, threatens the State of Florida with yet another catastrophic disaster. I therefore declare that a state of emergency exists in the State of Florida, and that the evacuation of multiple counties in the State may be necessary because of Hurricane Jeanne. I further find that central authority over the evacuation of these counties is needed to coordinate these evacuations, that these evacuations exceed the capability of the local governments in these communities, and that shelters in other counties are needed to accommodate the evacuees. I therefore declare that a state of emergency also exists in all destination counties that open shelters to accommodate evacuees from the communities threatened by Hurricane Jeanne.

Section 2. I hereby incorporate Executive Order 04-206, as amended, by reference into this Executive Order, and all mission assignments and orders issued by the State Coordinating Officer and Deputy State Coordinating officers in connection with Hurricanes Charley, Frances and Ivan under the authority of Executive Order 04-206, as amended, are hereby ratified and extended as if issued on this date. Executive Order 04-206, as amended, is also hereby extended, so that its date of expiration will coincide with the expiration of this Executive Order.

Section 3. I hereby designate the Director of the Division of Emergency Management as the State Coordinating Officer for the duration of this emergency and as my Authorized Representative. In exercising the powers delegated by this Executive Order, the State Coordinating Officer shall confer with the Governor to the fullest extent practicable. In accordance with Sections 252.36(1) (a) and 252.36(5), Florida Statutes, I hereby delegate to the State Coordinating Officer the following powers, which he shall exercise as needed to meet this emergency:

A. The authority to activate the Comprehensive Emergency Management Plan;

B. The authority to invoke and administer the Statewide Mutual Aid Agreement, and the further authority to coordinate the allocation of resources under that Agreement so as best to meet this emergency;

C. The authority to invoke and administer the Emergency Management Assistance Compact and other Compacts and Agreements existing between the State of Florida and other States, and the further authority to coordinate the allocation of resources that are made available to the State of Florida from such other States under such Compacts and Agreements so as best to meet this emergency;



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D. The authority to seek direct assistance from any and all agencies of the United States Government as may be needed to meet the emergency;

E. The authority to distribute any and all supplies stockpiled to meet the emergency;

F. In accordance with Sections 252.36(5) (a) and 252.46(2), Florida Statutes, the authority to suspend existing statutes, rules, ordinances, and orders for the duration of this emergency to the extent that literal compliance with such statutes, rules, ordinances, and orders may be inconsistent with the performance of essential functions;

G. The authority to direct all state, regional and local governmental agencies, including law enforcement agencies, to identify personnel needed from those agencies to assist in meeting the needs created by this emergency, and to place all such personnel under the direct command of the State Coordinating Officer to meet this emergency;

H. The authority to activate the Continuity of Operations Plans of all state, regional and local governmental agencies;

I. The authority to seize and utilize any and all real or personal property as needed to meet this emergency, subject always to the duty of the State to compensate the owner;

J. The authority to order the evacuation of all persons from any portions of the State threatened by the disaster, the authority to direct the sequence in which such evacuations shall be carried out, and the further authority to regulate the movement of persons and traffic to, from, or within any location in the State to the extent needed to cope with this emergency;

K. The authority to reverse the flow of traffic on any and all highways or portions of highways of the State Highway System as needed to facilitate the evacuation of the affected communities;

L. The authority to regulate the return of the evacuees to their home communities;

M. The authority to designate such Deputy State Coordinating Officers as the State Coordinating Officer may deem necessary to cope with the emergency; and

N. The authority to enter such orders as may be needed to implement any or all of the foregoing powers.

Section 4. I hereby order the Adjutant General to activate the Florida National Guard for the duration of this emergency, and I hereby place the National Guard under the authority of the State Coordinating Officer for the duration of this emergency.

Section 5. I hereby direct each county in the State of Florida, at the discretion of the State Coordinating Officer, to activate its Emergency Operations Center and its County Emergency Management Plan, as needed to ensure an immediate state of operational readiness, and I further direct each county in the State, at the discretion of the State Coordinating Officer, to open and activate all shelters to accommodate all evacuees.



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Section 6. I hereby direct all state, regional and local agencies to place any and all available resources under the authority of the State Coordinating officer as needed to meet this emergency.

Section 7. I hereby designate all state, regional and local governmental facilities including, without limiting the generality of the foregoing, all public elementary and secondary schools, all Community Colleges, and all State Universities, for use as shelters to ensure the proper reception and care of all evacuees.

Section 8. I find that the special duties and responsibilities resting upon some state, regional and local agencies and other governmental bodies in responding to the disaster may require them to deviate from the statutes, rules, ordinances, and orders they administer, and I hereby give such agencies and other governmental bodies the authority to take formal action by emergency rule or order in accordance with Sections 120.54(4) and 252.46(2), Florida Statutes, to the extent that such actions are needed to cope with this emergency. Without limiting the generality of the foregoing, I hereby order the following:

A. I hereby give all agencies of the State, including the collegial bodies within those agencies, the authority to suspend the effect of any statute, rule, ordinance, or order of any state, regional, or local governmental entity, to the extent needed to procure any and all necessary supplies, commodities, services, temporary premises, and other resources, to include, without limiting the generality of the foregoing, any and all statutes and rules which affect budgeting, printing, purchasing, leasing, and the conditions of employment and the compensation of employees, but any such statute, rule, ordinance, or order shall be suspended only to the extent necessary to ensure the timely performance of disaster response functions.

B. I hereby give all agencies of the State, including the collegial bodies within those agencies, the authority to abrogate the time requirements, notice requirements, and deadlines for final action on applications for permits, licenses, rates, and other approvals under any statutes or rules under which such applications are deemed to be approved unless disapproved in writing by specified deadlines, and all such time requirements that have not yet expired as of the date of this Executive Order are hereby suspended and tolled to the extent needed to meet this emergency.

C. I hereby give all agencies of the State with employees certified by the American Red Cross as disaster service volunteers within the meaning of Section 110.120(3), Florida Statutes, the authority to release any such employees for such service as requested by the American Red Cross as needed to meet the emergency.

Section 9. I hereby find that the demands placed upon the funds appropriated to the agencies of the State of Florida and to local agencies may be inadequate to pay the costs of this disaster. In accordance with Section 252.37(2), Florida Statutes, to the extent that funds appropriated to the agencies of the State and to local agencies may be inadequate to defray the costs of this disaster, I hereby direct the transfer of sufficient funds from unappropriated surplus, or from the Working Capital Fund, or from the Budget Stabilization Fund.

Section 10. Medical professionals and workers, social workers, and counselors with good and valid professional licenses issued by States other than the State of Florida shall be allowed to render such



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services in the State of Florida during this emergency for persons affected by the disaster, with the condition that such services be rendered to such persons free of charge, and with the further condition that such services be rendered under the auspices of the American Red Cross or the Florida Department of Health.

Section 11. In accordance with Sections 501.160(2) and 501.160(3), Florida Statutes, I hereby place all persons on notice that it is unlawful for any person in the State of Florida to rent or sell, or offer to rent or sell at an unconscionable price, any essential equipment, services, or supplies whose consumption or use is necessary because of the emergency. Such services shall include, without limiting the generality of the foregoing, any rental of hotel, motel, or other transient lodging facilities, and any rental of storage facilities. In accordance with Section 501.160(1) (b), Florida Statutes, any price exceeding the average price for such essential equipment, services, or supplies for the thirty (30) days immediately preceding the date of this Executive Order shall create a presumption that the price is unconscionable unless such increase is caused by actual costs incurred in connection with such essential equipment, services, or supplies, or is caused by national or international economic trends.

Section 12. All state agencies that enter emergency final orders or rules, or take other final actions based on the existence of this emergency shall advise the State Coordinating Officer in writing of the action taken as soon as practicable, but in no event later than the expiration of sixty (60) days from the date of this Executive Order.

Section 13. This Executive Order shall be deemed to have taken effect on September 24, 2004, and all actions taken by the Director of the Division of Emergency Management with respect to Hurricane Jeanne before the issuance of this Executive Order are hereby ratified. This Executive order shall expire sixty (60) days from the date hereof unless extended.

IN TESTIMONY WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Florida to be affixed, at Tallahassee, the Capitol, this 24th day of September, 2004.

\_\_\_\_\_  
GOVERNOR

ATTEST:  
  
\_\_\_\_\_

SECRETARY OF STATE

EMERGENCY MANAGEMENT ASSISTANCE COMPACT  
National Emergency Management Association

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