

DATE: September 30, 2002

TO: Olivia McLean, Director - Emergency Management

FROM: John Lynch, Lead Information Systems Auditor
Claudia Tygieski, Audit Intern

THROUGH: Allen Vann, Inspector General

SUBJECT: June 28, 2002 Hurricane Freddy Exercise - Report #02-25

On June 28, 2002 we participated as observers of the Hurricane Freddy exercise that tests the District's Emergency Operations Center's (EOC) readiness for a real hurricane event.

With the Field Station and Service Center representatives functioning on-site at District Headquarters for the first time in an exercise, the staff successfully demonstrated their readiness for an emergency event. However, the Section Leaders and the IG's Office found some areas where improvements could be made. These recommendations are contained within this report.

A History of the Hurricane

Hurricane Freddy 2002 was described as a classic Cape Verde storm. The storm made landfall in Broward County on June 28th as a Category 4 Hurricane with sustained winds of 130 mph and with storm surges of 8.5 feet and was expected to cross the District as it headed for Lake Okeechobee. This major storm, moving in a northwest direction, was expected to have rainfall averaging 5" (with the heaviest rains up to 18".)

Freddy 2002's path actually carried it over Conservation Area 3 and then northwest through the Western Everglades Agricultural Area and then through the eastern half of the Caloosahatchee basin. The area averaged 10" of rainfall over a 36-hour period with local rainfall of 18" occurring in some areas of eastern Palm Beach and Broward Counties. There were resulting tornadoes in Martin, St. Lucie, Okeechobee, Osceola, and Orange Counties.

Emergency Operation Center (EOC) activation

The District's EOC exercise was activated for the exercise participants on June 28, 2002 at 9:00 a.m. The schedule for the day's activities was as follows:

- EOC Management reports to third floor EOC room at 8:00 a.m.
- Field Station Directors and the Rapid Impact Assessment Teams (RIAT) members report to the B-1 Auditorium at 8:30 a.m.
- Service Center Directors report to the conference room on the second floor in the EOC building at 8:30 a.m.
- Damage Assessment Teams (DAT) and Secondary Assessment Teams (SAT) members report to the Incident Command Tables in the B-1 Auditorium at 8:30 a.m.
- Onslaught of Storm from 9:00 a.m. until 12:00 p.m.
- Status briefing from EOC Teams, Field Stations and Service Centers at 9:00 a.m.
- Planning meeting in the Storch room at 10:00 a.m. [Develop Incident Action Plan (IAP) #2.]
- Press Conference at 11:00 a.m.
- Status Briefing and "All Clear" given at 12:00 p.m.
- Recovery and Assessment 12:00 p.m. until 4:00 p.m.
- Closing Briefing and Wrap-up at 4:00 p.m.

Note: The Mutual Aid Response Unit (MARU) semi-trailer was set-up and made operational in the B-1 parking area.

At 9:00 a.m. the Director of Emergency Management and the Executive Director initiated the exercise. The first briefing followed at 9:10 a.m. with reports from the Field Stations and the Service Centers.

Emergency Management Office Exercise Objectives

- 1) Make preliminary damage estimates of impact based on strength and duration of wind fields and estimated strength of buildings.
- 2) Planning and pre-position for immediate response.
- 3) Utilize EM2000 messaging system, Remedy Report Card, and other internet-based technologies.
- 4) Manage data and information flow in and out of the District's EOC and Operations Control Room.
- 5) Assess and utilize the capabilities of sections on action planning and intelligence.

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- 6) Assess and utilize the redundancy communication systems between the EOC and Field Operations.
 - 7) Activate and operate the District's EOC.
 - 8) Field Operations: Develop Incident Command IAP.
 - 9) Field Operations: Develop plans to incorporate Response Teams into their operation.
 - 10) Document and report emergency cost estimates to the Finance Section.
 - 11) Test ability to communicate between field and EOC.
 - 12) Transition from response to recovery.

The rating by the Emergency Management Office on how well their objectives were met is contained in the attached **Table A**.

Office of Inspector General Participation Objectives

- 1) **Center Operations:** Are the "Sections" ready for a disaster event?
- 2) Is there a **communications plan**? (Comm. Cel.)
- 3) Are the **systems** ready for: Conference calls, Automated Reports, EM 2000 fully functional, . . . phone bank (1st Floor EOC)
- 4) Do we have **redundant communications**? Land Line, Cell Phones, VHF Radios, . . . Can staff utilize the redundant communication systems between the EOC and field operations?
- 5) **Command Trailer:** Is the trailer fully functional and does it meet the need of a "remote command post?"
- 6) What was the impact of the planned **loss of power to the EOC**?
- 7) **Field Station Staff:** Are they ready for a disaster event?
- 8) **Service Center Staff:** Are they ready for a disaster event?

Center Operations

The Emergency Operations Center was set up with tables and computers for each section. Computers were available and network connected at each section location. Signs in the room identified each section. The room was well prepared with computers, communications devices, and presentation equipment. However, the layout of the room combined with the number of people required to support each section made it difficult to move around and created a crowded feeling.

Each section was properly represented and staffed with trained personnel for the event. However, at times during the exercise meetings, section leaders and their backup were absent from the EOC, leaving no one to

monitor messages. In addition, during the 10:00 a.m. planning meeting in the Storch Room, not all section leaders were present.

Communications Plan

A communications plan dated June 28, 2002 was distributed. The plan addressed the type of communications and the contact numbers for each of the responsible groups. This included the EOC, Field Stations, Incident Commanders, Service Centers and MARU Trailer. The plan included the use of 4 digit telephone communications, e-mail, Satellite Phones, Nextel radiophones, and low-band radio.

The plan effectively covered the use of the various types of communications necessary for the exercise.

Systems

The computer systems in the EOC were ready for the event. However, there was a new issue with “record locking” that occurred with the EM2000 product. The most significant system problem we noted was a computer network switch failure that disconnected the “message takers” on the first floor of the EOC building from the EM2000 program for part of the exercise.

Teleconferenced status reporting during the briefings from the field stations and service centers was at times difficult to hear. Additionally, staff did not follow a standard briefing format (template) and therefore, these reports were somewhat disjointed.

Redundant Communications

This was the first time the District had used the Satellite phones for the exercise. There were two problems with the use of the Satellite phones noted: (1) there needs to be additional training on the use of satellite phone for staff and (2) since a line of sight must be established with the satellite, their use is limited during onslaught of a storm.

The use of individually owned e-mail accounts was a problem for communicating of information to the sections. If the owner of the e-mail account was away from their section other section members could not access the e-mail. Attachments to an EM2000 message or the use of the “EOC folder” on the computer server Andrew is the suggested methods for sharing files (Word, PowerPoint, Excel, . . .) within the EOC.

In addition to the “record locking” problem, EM2000 presented a communications issue with staff’s inability to differentiate between “information only” and messages that required specific “action or response” from the section.

Command (MARU) Trailer

The MARU trailer was visited and tested by various field groups during the exercise and found to be fully functional.

Power Loss to B-1 EOC

The switch of the EOC to emergency generators was successful. The planned power failure within the EOC building did not appear to impact any emergency operations.

Field Station Staff

This was the first time during a hurricane exercise that the District used the B-1 Auditorium for the representative from the Field Stations. All field stations were represented and functioned according to their plans.

Being on-site gave the field staff the opportunity to visit and test the MARU trailer and see first hand how the EOC functions during an event. This change was a positive addition to the exercise.

Service Center Staff

This was the first time that the Service Centers used the EOC conference room to actually be on-site during a hurricane exercise. Like the field staff, this provided the Service Center representatives the opportunity to see the full EOC in operation.

With the exception of the Fort Myers Service Center, the Service Centers were appropriately represented during the exercise and functioned according to their plans. Being on site was a positive addition to the exercise.

Additional Comments by Support Teams and IG’s Office

On July 24, 2002 an exercise debriefing meeting occurred with various key staff members including “Officers”, “Liaisons”, and “Section Chiefs” to

discuss their “Ups and Downs” reports and gather additional input from the participants. (The Ups and Downs reports for “areas needing improvement” is summarized in the attached **Table B** of this memorandum.)

Action Items and General Comments from the debriefing meeting include:

Action Items

- There is a need for more current telephone numbers without violating employee’s privacy.
- Review the age of VHF (low band) radios and consider the need for additional training on proper “radio protocol.”
- Give consideration during the conference call “status reporting” for an increase in verbal description of presented material, since those “conferenced in” cannot “see” what is being discussed.
- Reconfiguration of the EOC room to provide a less congested atmosphere.
- Since Field Command was not comfortable with the process, review the “search and rescue” procedures.
- In order that Team Leaders get a better understanding of the sites they will need to communicate with, consider providing the opportunity for them to visit the District’s field locations.

General Comments

- The Information Technology Department will have weekly Communication Cell meetings during hurricane season to stay ahead of any communication support issues.
- During the event the District’s Governing Board Operations Manager will document the activities and communicate directly to the Governing Board Members.
- Having the Field Station staff on-site during the exercise was an excellent way for them to see the EOC in operation and provided each unit the opportunity to use the MARU trailer.

In addition to the Action Items (above), we recommend the following:

- Assure that each Section in the EOC is covered with responsible staff at all times.

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- Section Leaders need to be present for the exercise planning meetings. (Other District business should not distract the Section Leaders from their duties during the exercise.)
 - Provide for Field Staff training on the use of satellite phones.
 - Resolve the “recording locking” issue with EM 2000.
 - Improve the quality of teleconferencing Audio.
 - Require support staff to use the standard format for status reporting.
 - Provide additional training on techniques for EOC sections to share computer files with EM2000 or on the EOC server Andrew.
 - In EM2000 Identify “information only” messages vs. messages that may require action by a specific Section.

Attachments: Emergency Management Office Exercise Objectives, Rating
Hurricane Freddy 2002 “Ups/Downs” Reports, Summary

c: Henry Dean, Executive Director
John Fumero, General Counsel
George Horne, Deputy Executive Director
Alvin Jackson, Deputy Executive Director
Pamela Mac’Kie, Deputy Executive Director
Chip Merriam, Deputy Executive Director
Tommy Strowd, Director – Operation Control
Bob Brown, Director – IT Information Applications
Ric Morgan, Director – Infrastructure Services
Bill Hall, Chief Technologist, IT

Table A

Emergency Management Office Exercise Objectives Rating

Exercise Objective *	Score:	Poor			Satisfactory			Excellent		
		0	1	2	3	4	5	6	7	8
Make preliminary damage estimates of impact based on strength and duration of wind fields and estimated strength of buildings.		✓								
Planning and pre-position for immediate response.						✓				
Utilize EM2000 messaging system, Remedy Report Card, and other internet-based technologies.					✓					
Manage data and information flow in and out of the District's EOC and Operations Control Room.							✓			
Assess the capabilities of Sections on action planning and intelligence.	Logistics	✓								
	Field Command					✓				
	Operations Support				✓					
	Disaster Analysis & Planning						✓			
	Communications						✓			
	Finance							✓		
Assess and utilize the redundancy communication systems between the EOC and Field Operations.							✓			
Activate and operate the District's EOC.								✓		
<u>Field Operations</u> Develop Incident Command IAP.								✓		
<u>Field Operations</u> Develop plans to incorporate Response Teams into their operation.								✓		
Document and report emergency cost estimates to the Finance Section										✓
Test ability to communicate between field and EOC.							✓			
Transition from response to recovery.								✓		

* Ratings of Objectives provided by the Emergency Management Office on 9/10/2002

Table B

HURRICANE FREDDY 2002 from “Ups/Downs” Reports Areas Needing Improvement

OPERATIONS SUPPORT AND COORDINATION

1. Unit mission needs to be refined, especially Staging and Operations Support.
2. Utilize all computers in the section.
3. Assign EM2000 Operators.
4. Utilize DAT and SAT teams on site better.
5. Coordinate S & R.
6. Who will oversee debris removal contractors in field?

RESOURCES AND LOGISTICS

1. Identify which field stations control what structures, canals.
2. Office supplies were not easily obtained (staples, pens, pencils, etc.)
3. Organization.

DISASTER ANALYSIS AND PLANNING

1. Learn how to obtain resources.
2. Training on how to use necessary tools to perform mission (Resources).
3. Understanding EM2000 (Larry Gerry),
4. Finding forms on computer.

OPERATIONS OFFICER

1. Improved message taking from Field Offices to Missions Officer.
2. More attention by sections in capturing “unmet needs” during conference calls and preparing response without waiting for missions to be assigned. Suggests Operations Officer take lead in capturing and coordinating such items with Field Command.
3. Items that were simply contract resource needs; e.g. crane, pump, etc. had to go through Operations Support and seems like request could have gone directly to Logistics.

PUBLIC INFORMATION

1. Verification of Emergency phones/contact lists.
2. Upgrade facilities and equipment in Media Room.
3. Request tools/materials in Media Room.

LEGAL

1. Update Office of Counsel Emergency Management Manual/Notebook.

EMPLOYEE SERVICES

1. Identify fax resources for EOC. Where? What #.
2. EE notification line did not work.
3. Communications regarding missing employees – need more detail, and missions were not entered into system.

MISSION OFFICERS

1. Split missions so they are traceable.
2. Ensure title of mission reflect mission.
3. Need procedures for search and rescue.
4. Clarification of “Liaison” role (returned all assignments).
5. Continued efforts and coordination with Field Command.
6. Problem with conferring with Field Command on assignments from field – need this prior to making assignments.

LIAISON OFFICER

1. Ineffective messages from EOC liaisons.
2. Need fax in EOC rather than Security Office.
3. Liaison Reports “needs” were never called in to be included in the EM Tracker.

COMMUNICATION CELL

1. Development of Communications Plan.
2. Voice mail-greeting customization for phones at section locations.
3. Standardize communications between COMM CELL and supporting staff.

Summary provided by the Emergency Management Office