

Virginia Department of
Emergency Management

2005



Functional Exercise

May 25, 2005

VERTTE



After-Action Report

EXECUTIVE SUMMARY

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After - Action Report- Executive Summary

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HANDLING INSTRUCTIONS

1. The title of this document is the Consolidated Virginia Emergency Response Team Exercise (VERTEX) 2005 After-Action Report (AAR) Executive Summary.
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Executive Summary

Domestic security preparedness involves a cycle of outreach, planning, capability development, training, exercising, evaluation, and improvement. Successful exercises lead to an ongoing program of process improvement. This after-action report (AAR) is intended to assist the Commonwealth of Virginia and its Virginia Emergency Operations Center (VEOC) by providing the following:

- Identification of strengths to be maintained and enhanced
- Identification of potential areas for further improvement
- Recommended follow-up actions

The suggested actions in this AAR should be viewed as recommendations only. In some cases, agencies may determine that the benefit of their implementation does not outweigh the costs. In other cases, agencies may identify alternative solutions that are more effective or cost-efficient. Each agency should review the recommendations and determine the most appropriate action and the resources (e.g., time, staff, and funds) for implementation.

Exercise Scope

The Virginia Emergency Response Team Exercise (VERTEX) 2005 was a 6-hour, real-time functional exercise and a regionally conducted tabletop exercise focused on the response and recovery activities associated with a major hurricane making landfall in the Tidewater area of Virginia. The exercise scenario involved widespread power outages, infrastructure damage, and flooding.

Of note, although the scenario focused on a natural disaster, the processes and procedures used by the Commonwealth in its all-hazards approach to response are applicable to other disasters, such as manmade, technological, etc. Activities were played out at both the operational and planning levels during a multi-agency response, with an emphasis on decision-making, coordination, process execution, recognition, situational assessment, and communication interoperability.

Participating EOCs included the VEOC and at least one EOC from each of the seven Commonwealth emergency management regions. Each regional EOC decided on its level of involvement in supporting the VEOC during exercise play, a fact reflected in the issue write-ups from Chapter 5, Analysis of Critical Task Performance. The activities of the Federal Government, neighboring States, and non-participating jurisdictions within Virginia were simulated.

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Exercise Overview

VERTEX 2005 was a 6-hour, real-time functional exercise and regionally conducted tabletop exercise focused on the response and recovery activities associated with a major hurricane making landfall in the Tidewater area of Virginia. The exercise scenario involved widespread power outages, major infrastructure damage, and flooding.

Exercise Participants

VERTEX 2005 attendees were designated the following roles for the purposes of the exercise:

- **Exercise management** staff consisted of individuals representing the VERTEX 2005 Planning Committee and the Commonwealth Exercise Support Team.
- **Controllers** planned and managed the exercise, set up and operated the exercise incident site, and substituted for response personnel/agencies that were not actually participating in the exercise. Controllers provided key data to players and prompted or initiated certain player actions to ensure exercise continuity. Controllers were the only non-players who provided information or direction to the players. All controllers were accountable to the VERTEX 2005 Senior Exercise Controller.
- **Evaluators** were chosen from various Commonwealth agencies to evaluate and comment on exercise response activities. Evaluators were chosen based on their expertise in the functional area to which they were assigned. Evaluators had a passive role in the exercise; they noted only player actions and did not interfere with the flow of the exercise. Evaluators completed exercise-related assessment worksheets and attended the formal hot wash after the exercise.
- **Players** were agency personnel who had an active role in simulating response to and planning for such an emergency. Players included personnel who were offsite, but who had an integral role in directing agency responses and actions. Players initiated actions that controlled and mitigated the simulated emergency.
- **Simulation support** consisted of the Raytheon Company, which was contracted to provide modeling and simulation support for the exercise. A project lead and seven personnel supported the exercise.
- **VIPs, observers, and media** constituted a group who visited or observed selected segments of the exercise. VIPs, observers, and media did not participate in exercise play, and they did not have exercise control functions.

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Exercise Evaluation

A controller and evaluator briefing (C/E) was conducted on Tuesday, May 24, 2005, from 1100–1300 in the training rooms at VDEM Headquarters at 10501 Trade Court in Richmond, VA. At this briefing, evaluators were issued their materials for review, including exercise evaluation guidelines, an evaluator plan, etc.

For the exercise, the evaluation team was comprised of the Evaluation Director and the venue evaluators. The Evaluation Director, a member of the planning committee, was responsible for all exercise evaluation, including recruiting and appointing all evaluators to their locations/functions; ensuring the evaluators were trained properly in the Homeland Security Exercise and Evaluation Program methodology; and collecting all evaluations for inclusion in this AAR.

Evaluators constituted subject-matter experts on agency- or jurisdiction-specific plans, protocols, and procedures. They were assigned to various exercise venues or functions.

Once at their venues, all evaluators were supposed to coordinate with their respective venue controllers to optimally position themselves within their assigned areas for maximum effectiveness in data collection. Also, each evaluator was supposed to work with his or her specific controller to note any weaknesses in the master scenario events list and to propose injects through the Senior Controller to the Exercise Director for a final decision.

After the exercise started, evaluators were responsible for collecting and recording exercise data, such as date and time of significant events and how players handled exercise issues (positive and negative). Immediately after the exercise, evaluators were asked to review their forms and notes to ensure an accurate reconstruction of events and activities for purposes of discussion at the C/E debriefing on May 26, 2005, at VDEM Headquarters. Evaluation materials, including notes and forms, constituted part of the exercise documentation and were submitted to exercise support staff at the C/E debriefing.

In addition to these activities, evaluators were responsible for post-exercise activities, such as collecting and recording information from the hot washes and submitting correctly formatted issue write-ups for inclusion in this AAR.

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Exercise Goals

VERTEX 2005 was designed to assess the response and recovery capabilities of Commonwealth personnel during a natural disaster. The agreed-upon exercise objectives follow:

1. Evaluate the effectiveness of the Virginia Emergency Operations Center (VEOC) in sharing information critical to response and recovery operations with the participating jurisdictional EOCs.
2. Assess the effectiveness of the VEOC in communicating critical information and coordinating actions between the emergency support functions.
3. Evaluate the ability of the VEOC to maintain an effective level of situational awareness.
4. Demonstrate the effectiveness of the VEOC in setting up, announcing, conducting, capturing information, and disseminating information from conference calls.
5. Evaluate the ability of the VEOC to use its automated tools in managing mission requests, mission assignments, and monitoring resources allocated to those missions.
6. Assess the ability of the joint information system to provide emergency public information to the media and the public.

Exercise Events Synopsis

Scenario

The scenario tracked the evolution of a tropical storm off the African coast into a Category Two hurricane with landfall in the Tidewater region. The scenario encompassed the initial monitoring of the tropical storm on Friday, September 16, 2005, through the Commonwealth of Virginia's hurricane recovery efforts on Tuesday, September 27, 2005.

On Monday, September 26, 2005, Hurricane Katrina entered the Commonwealth as a Category Two hurricane, with winds gusting up to 90 knots. The hurricane continued toward Virginia Beach, losing peak wind-speed intensity slightly with sustained winds of 85 knots. On approach to Portsmouth, top wind gusts were 78 knots, diminishing Katrina to a Category One hurricane.

With wind gusts between 75–80 knots, Katrina rumbled northwestward, moving through Suffolk, Norfolk, Hampton, and Newport News. By the time Katrina reached Petersburg, sustained hurricane winds had weakened to top speeds of 55 knots. At this point, the National Hurricane Center downgraded its hurricane warning to a tropical storm warning, which extended throughout the Commonwealth.

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With varying wind gust intensity between 40–80 knots, the hurricane proceeded northwestward through Richmond, Charlottesville, Fredericksburg, and Harrisonburg. At 1400, Katrina veered slightly eastward, and sustained winds of 45 knots disrupting activities in Manassas, Alexandria, and Arlington. By 1700, top wind speeds were only 43 knots, and the storm was downgraded again to a tropical depression as it traveled through Warren County, VA.

During this scenario, Virginia Governor Mark Warner, by Executive Order, declared a state of emergency, while Federal, Commonwealth, and local agencies initiated response activities. As the scenario progressed, the Virginia Emergency Operations Center (VEOC) transitioned from Hurricane Readiness Condition 4 to Readiness Condition 1 to correspond with the hurricane's approach and landfall. The scenario culminated with President George W. Bush declaring Hurricane Katrina to be a major disaster, appointing a Federal Coordinating Officer, and authorizing the Federal Emergency Management Agency Individual Assistance Program for the localities requested by Governor Warner.

The hurricane's immediate impact varied, but most affected regions experienced power outages and structural damage from high wind speeds. Total damage estimates, including homes, businesses, and public facilities, were in the billions.

Exercise Overview

Exercise Name

Virginia Emergency Response Team Exercise (VERTEX) 2005

Duration

6 hours

Exercise Date

May 25, 2005

Sponsor

Virginia Department of Emergency Management (VDEM)

Type of Exercise

Functional Exercise

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Focus

- Response
- Recovery (Limited Play)
- Prevention
- Other

Classification

- Unclassified
- For Official Use Only (FOUO)
- By Invitation Only

Scenario

- Chemical release or threat (C)
- Biological release or threat (B)
- Radiological release or threat (R)
- Nuclear detonation or threat (N)
- Explosive detonation or threat (E)
- Cyber (Y)
- Other/Natural Disaster

Location

Virginia Emergency Operations Center (EOC) and VDEM Headquarters in Richmond, VA, and participating EOCs throughout Virginia

Jurisdiction/Entity Receiving Exercise

- Commonwealth of Virginia

Participating Agencies

- Virginia Emergency Operations Center:
 - Amateur Radio Emergency Service (ARES)/Radio Amateur Civil Emergency Service (RACES)
 - American Red Cross
 - City of Newport News
 - Dominion Power
 - EDS
 - Evidence Based Research, Inc. (EBR)
 - Joint Warfighting Center
 - Old Dominion University
 - U.S. Department of Homeland Security/Transportation Security Administration
 - U.S. Postal Service
 - Virginia Army National Guard

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- Virginia Defense Force
 - Virginia Department of Agriculture and Consumer Services
 - Virginia Department of Conservation and Recreation
 - Virginia Department of Corrections
 - Virginia Department of Criminal Justice Services
 - Virginia Department of Emergency Management
 - Virginia Department of Environmental Quality
 - Virginia Department of Fire Programs
 - Virginia Department of Forestry
 - Virginia Department of General Services
 - Virginia Department of Health
 - Virginia Department of Mental Health, Retardation and Substance Abuse
 - Virginia Department of Military Affairs
 - Virginia Department of Social Services
 - Virginia Department of State Police
 - Virginia Department of Transportation
 - Virginia Information Technology Agency
 - Virginia Modeling, Analysis and Simulation Center
 - Virginia Union University
 - Voluntary Organizations Active in Disaster
 - WRIC TV 8
- Region One – City of Hopewell EOC:
 - American Red Cross
 - City Clerk/Council
 - City Manager
 - Crater Health District
 - Director of Development
 - Director of Emergency Services
 - Director of Finance
 - Emergency Management
 - Hopewell Fire Department
 - Hopewell News
 - Hopewell Police Department
 - Hopewell Social Services
 - Public Information Officer
 - Public Works
 - RACES
 - Recreation and Parks
 - School Board Office
 - Virginia American Water Company

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- Region Two – King George County EOC:
 - Amateur Radio
 - City of Fredericksburg
 - Community Development
 - County Administration
 - County Engineer
 - Dahlgren Rescue Squad
 - EDS
 - Emergency Management
 - Fire/Rescue
 - Fredericksburg Fire Department
 - Health Department
 - King George Community of Revenue Office
 - King George County Schools
 - King George Department of Emergency Services
 - King George Finance
 - King George Parks and Recreation
 - Procurement
 - RACES
 - Sheriff's Office
 - Social Services
 - Treasurer
 - Virginia Department of Emergency Management

- Region Three – Charlottesville/Albemarle/University of Virginia EOC:
 - American Red Cross
 - CERT Volunteer
 - Deputy Coordinator
 - Emergency Coordinator
 - Health Department
 - Thomas Jefferson HHL District
 - University of Virginia Hospital Liaison
 - Virginia Department of Emergency Management
 - WCAV-TV
 - WVIR-TV

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- Region Four – Smyth County EOC:
 - Bland County Emergency Management
 - Dickenson County Emergency Management
 - Mt. Rogers Health District
 - Pulaski County Emergency Management
 - Russell County Emergency Management
 - Smyth County Emergency Management
 - Virginia Department of Emergency Management
 - Washington County Emergency Management
 - Wythe County Emergency Management
 - Wythe County Emergency Management

- Region Five – Newport News EOC:
 - EBR
 - Hampton Emergency Management
 - Hampton Roads Planning District Commission
 - Newport News Emergency Management
 - Tidewater Emergency Medical Services (EMS) Council
 - Virginia Department of Health
 - York County Emergency Management

- Region Five – Norfolk EOC:
 - American Red Cross
 - ARES
 - Chesapeake EOC
 - CING
 - City of Suffolk
 - Department of Communications Public Information Office
 - EBR
 - Emergency Management Director
 - Facility Maintenance
 - Finance Department
 - Fire/EMS Department
 - Fleet Management
 - Health Department
 - Human Resources Department
 - Human Services Department
 - Information Technology Department
 - Norfolk Animal Management
 - Norfolk Department of Homeland Security
 - Police Department
 - Portsmouth Fire

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- Public Works Department
- Utilities Department
- Virginia Beach Fire Department
- Virginia Beach Office of Emergency Management

- Region Six – City of Covington EOC:
 - Allegheny County Sheriff’s Office
 - Covington City Public Schools
 - Covington Emergency Services
 - Covington Public Works
 - Covington Rescue Squad
 - Division of Fire
 - Division of Police

- Region Six – Henry County EOC:
 - 9-1-1
 - Amateur Radio
 - American Red Cross
 - City of Martinsville
 - Communication Center Personnel
 - Deputy Emergency Management Coordinator
 - Emergency Management Coordinator
 - Fire Department
 - Health Department
 - Henry County Department of Public Safety
 - Henry County MRSA
 - Henry County Schools
 - Henry County Sheriff’s Office
 - Martinsville Bulletin
 - Martinsville Fire and EMS
 - Message Clerk
 - Public Service Authority
 - RACES
 - Rescue
 - Security
 - Sheriff’s Office
 - Social Services
 - Superintendent of Schools
 - Virginia Department of Emergency Management

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- Region Seven – Loudoun County EOC:
 - ARES
 - Arlington County Department of Emergency Management/Fire Department
 - Arlington County EOC
 - City of Alexandria
 - Command and Control
 - Fire/EMS Operations
 - Law Enforcement
 - Leesburg Police
 - Loudoun County CERT
 - Loudoun County General Services
 - Loudoun DIT
 - Loudoun Office of Emergency Management
 - Public Health
 - Public Information
 - Public Works and Engineering
 - U.S. Army Fort Belvoir Operations
 - Virginia Department of Emergency Management
 - Virginia State Police

Number of Participants

Players.....	350
Controllers.....	26
Evaluators	21