

# Operation Whirlwind

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Situation Manual

February 12, 2014

This Situation Manual (SitMan) provides exercise participants with all the necessary tools for their roles in the exercise. Some exercise material is intended for the exclusive use of exercise planners, facilitators, and evaluators, but players may view other materials that are necessary to their performance. All exercise participants may view the SitMan.

## EXERCISE OVERVIEW

<b>Exercise Name</b>	Operation Whirlwind
<b>Exercise Dates</b>	February 12, 2014
<b>Scope</b>	This exercise is a table top, planned for 4 hours at the State Emergency Operations Center (SEOC). Exercise play is limited to the activities and responsibilities of state level functions and the SEOC, in response to severe summer weather conditions.
<b>Mission Area(s)</b>	Response
<b>Core Capabilities</b>	Public Information & Warning, Operational Coordination, Infrastructure Systems, Mass Care Services, Mass Search & Rescue Operations, Fatality Management Services, Situational Assessment, Public & Private Services and Resources, Public Health & Medical Services, Environmental Response/Health & Safety, On-Scene Security & Protection, Operational Communications
<b>Objectives</b>	<ol style="list-style-type: none"> <li>1. Describe how ND agencies deliver coordinated, prompt, reliable, and actionable information to the whole community.</li> <li>2. Describe the role of each state agency in establishing &amp; maintaining a unified, coordinated operational structure that integrates all critical stakeholders.</li> <li>3. Describe how state agencies support on-scene security and protection of individuals &amp; businesses in the affected areas.</li> <li>4. Discuss the state's role in stabilizing and restoring critical infrastructure functions; also providing essential public &amp; private services and resources to the affected populations.</li> <li>5. Describe the state's role and the lead agency's plan to provide life-sustaining services (shelter, water, &amp; food) to the affected population.</li> <li>6. Identify resources that would be utilized for mass search &amp; rescue operations.</li> <li>7. Identify the state's strengths &amp; weaknesses in providing fatality management services.</li> <li>8. Describe the operational communications systems utilized by the state, and the process to insure that decision-makers are provided with relevant information regarding the nature &amp; extent of hazards.</li> <li>9. Describe the state's role and the lead agency's plan to provide health &amp; medical services, prevent additional disease, and mitigate injuries to citizens and responders in the affected areas.</li> </ol>

<b>Threat or Hazard</b>	Severe Summer Storm/ Tornado
<b>Scenario</b>	July 9, 2014 – A squall line of severe thunderstorms crosses the state of North Dakota, spewing out lightning, hail, and tornados. In the early evening, an EF-4 tornado touches down near Carrington, causing widespread destruction.
<b>Sponsor</b>	North Dakota Department of Emergency Services (NDDDES)
<b>Participating Organizations</b>	Participants will include Governor Dalrymple and representatives from the following agencies: Governor’s Office, ND National Guard, ND Department of Emergency Services, ND Department of Health, ND Department of Transportation, ND Highway Patrol, ND Civil Air Patrol, ND Department of Human Services, ND Department of Animal Health, ND Department of Agriculture, State Fire Marshall, ND State Electrical Board, National Weather Service, American Red Cross, Voluntary Organizations Active in Disaster, and FEMA Region VIII.
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## GENERAL INFORMATION

### Exercise Objectives and Core Capabilities

The following exercise objectives in Table 1 describe the expected outcomes for the exercise. The objectives are linked to core capabilities, which are distinct critical elements necessary to achieve the specific mission area(s). The objectives and aligned core capabilities are guided by elected and appointed officials and selected by the Exercise Planning Team.

Exercise Objective	Core Capability
Describe how ND agencies deliver coordinated, prompt, reliable, and actionable information to the whole community.	Public Information & Warning
Describe the role of each state agency in establishing & maintaining a unified, coordinated operational structure that integrates all critical stakeholders.	Operational Coordination
Describe how state agencies support on-scene security and protection of individuals & businesses in the affected areas.	On-scene Security & Protection
Discuss the state's role in stabilizing and restoring critical infrastructure functions; also providing essential public & private services and resources to the affected populations.	Infrastructure Systems Public & Private Services and Resources
Describe the state's role and the lead agency's plan to provide life-sustaining services (shelter, water, & food) to the affected population.	Mass Care
Identify resources that would be utilized for mass search & rescue operations.	Mass Search & Rescue Operations
Identify the state's strengths & weaknesses in providing fatality management services.	Fatality Management Services
Describe the operational communications systems utilized by the state, and the process to insure that decision-makers are provided with relevant information regarding the nature & extent of hazards.	Operational Communications Situational Assessment
Describe the state's role and the lead agency's plan to provide health & medical services, prevent additional disease, and mitigate injuries to citizens and responders in the affected areas.	Public Health & Medical Services Environmental Response/Health & Safety

**Table 1. Exercise Objectives and Associated Core Capabilities**

### Participant Roles and Responsibilities

The term *participant* encompasses many groups of people, not just those playing in the exercise. Groups of participants involved in the exercise, and their respective roles and responsibilities, are as follows:

- **Players.** Players are personnel who have an active role in discussing or performing their regular roles and responsibilities during the exercise. Players discuss or initiate actions in response to the simulated emergency.
- **Observers.** Observers do not directly participate in the exercise. However, they may support the development of player responses to the situation during the discussion by asking relevant questions or providing subject matter expertise.
- **Facilitators.** Facilitators provide situation updates and moderate discussions. They also provide additional information or resolve questions as required. Key Exercise Planning Team members also may assist with facilitation as subject matter experts (SMEs) during the exercise.
- **Evaluators.** Evaluators are assigned to observe and document certain objectives during the exercise. Their primary role is to document player discussions, including how and if those discussions conform to plans, policies, and procedures.

## Exercise Structure

This exercise will be a multimedia, facilitated exercise. Players will participate in the following 3 modules:

- **Module 1:** The Gathering Storm
- **Module 2:** Darkness Descends
- **Module 3:** The Rising Sun
- **Module 4 (Optional):** The Path to Recovery

Each module begins with a multimedia update that summarizes key events occurring within that time period. After the updates, participants review the situation and engage in group discussions of appropriate response issues.

## Exercise Guidelines

- This exercise will be held in an open, low-stress, no-fault environment. Varying viewpoints, even disagreements, are expected.
- Don't be afraid to make a mistake. This is not a test. Engage, discuss, ask questions, and learn.
- Respond to the scenario using your knowledge of current plans and capabilities (i.e., you may use only existing assets) and insights derived from your training.
- Decisions are not precedent setting and may not reflect your organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Issue identification is not as valuable as suggestions and recommended actions that could improve response efforts. Problem-solving efforts should be the focus.

## Exercise Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted and/or account for logistical limitations. Exercise participants should accept that assumptions and artificialities are inherent in any exercise, and should not allow these considerations to negatively impact their participation. During this exercise, the following apply:

- The exercise is conducted in a no-fault learning environment wherein capabilities, plans, systems, and processes will be evaluated.
- The exercise scenario is plausible, and events occur as they are presented.
- All players receive information at the same time.

## Exercise Evaluation

Evaluation of the exercise is based on the exercise objectives, aligned core capabilities, and capability targets, which are documented in the Situation Manual, North Dakota Threat & Hazard Identification and Risk Assessment (THIRA), and National Preparedness Goal. Exercise facilitators will also evaluate exercise play in accordance with the exercise manual.

Additionally, players will be asked to complete participant feedback forms & participate in the hot wash session. These documents, coupled with facilitator observations and notes, will be used to evaluate the exercise and compile the After-Action Report (AAR).

## MODULE 1: THE GATHERING STORM

All times are Central Daylight Savings times, in a 24 hr. format.

July 9, 2014

Weather – Deep low Pressure along the Canadian border with a strong cold front trailing along a NE – SW axis. The cold front runs from just north of the international border to the Black Hills of South Dakota. Temps ahead of the front are in the low 90's, dew points in the upper 60's to low 70's. Behind the front temps are in the low 70's, dew points in the 50's.

1300 – The Storm Prediction Center in Norman, OK issues a Tornado watch for McHenry, Pierce, Benson, Ramsey, Nelson, Grand Forks, Eastern McLean, Sheridan, Wells, Eddy, Foster, Griggs, Steele, Traill, Burleigh, Kidder, Stutsman, Barnes, Cass, Emmons, Logan, LaMoure, Ransom, Richland, McIntosh, Dickey, & Sargent counties.

1520 – NWS Doppler radar indicates a line of thunderstorms forming on a line from Mohall – Beulah – Glen Ullin – Elgin – Lemmon, moving east at 35 mph.

1555 – A severe thunderstorm warning is issued for Morton & Burleigh counties. The line of severe thunderstorms is moving east at 35 mph, with individual cells moving northeast at 38 mph.

1617 – A funnel cloud is spotted by weather observers along I-94, just west of Mandan.

1632 – A tornado warning is issued for the cities of Bismarck & Mandan.

1637 – A Doppler radar indicated tornado is detected 3 miles south of Underwood. A tornado warning is issued for eastern McLean & western Sheridan counties.

1731 – ¾" hail is reported near McClusky, with wind gusts to 63 mph. A severe thunderstorm warning is issued for Sheridan & Wells Counties.

1753 – A tornado is sighted by NDHP south of I-94, moving east. A tornado warning is issued for Kidder County, including the town of Steele.

1828 – NWS Doppler radar indicates a severe thunderstorm near Bowdon. A severe thunderstorm warning is issued for eastern Wells, southern Eddy & Foster Counties.

1913 – NWS Doppler radar indicates a hook echo 3 miles southwest of Carrington.

1914 – A tornado warning is issued for western & central Foster County, including the city of Carrington.

1916 – Tornado touchdown southwest of Carrington, traveling northeast at 35 mph.

## Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 1. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

- ❖ What are the key issues at this point in time?
  - What is the primary mission of each of the state agencies at this point? What actions are taken toward that mission at this time?
    - Core Capabilities: Planning, Operational Coordination, Public Information and Warning, Information and Intelligence, Threat and Hazard Identification, and Situational Assessment
      - How has the ND THIRA process defined the threat level and consequences of tornados?
      - What communication and coordination is occurring between the SEOC and NWS?
      - What information is communicated between the SEOC and state agency directors during the watch and warning phases?
      - Does the state provide any public information messages to the public in the watch/warning phase?
      - Do any state agencies have plans that identify actions to be taken in the watch/warning phases of predicted tornado activities? If so, what are they? If not, should there be any specific actions taken?
      - Based on the information in Module 1 when would the SEOC activation level increase above normal day to day operations? When would the Governor be briefed and by who? When would the TAG be briefed and by who?

## MODULE 2: DARKNESS DESCENDS

1928 – Tornado lifts off the ground and begins to dissipate, northeast of Carrington.

1945 – NDDES Duty Officer is notified of the tornado touchdown in Carrington.

1950 – State Radio receives reports of massive damage to the city.

2001 – SEOC is notified of a leak at an anhydrous Ammonia storage facility in the northeast section of the town. Winds behind the cold front are from 320° (northwest) at 17mph. Golden Acres Manor (senior living facility) is .3 miles downwind.

There are unconfirmed reports that critical injury cases have arrived at the Foster County Medical Center. Minor damage is reported at the medical center.

2003 – SEOC is notified that the city water tower is destroyed, as is the electrical substation on the northeast side of city. Most of the city has no electrical power, numerous power lines are down, lying across streets, buildings, & homes. Landline phone service is spotty due to downed lines caused by fallen trees. Cell phone service appears to be working at this time, but extremely high volumes are causing frequent dropped calls.

2007 – A massive explosion & fireball is reported at the Cenex Convenience store/gas station.

2017 – SEOC receives a report on Twitter that the Federated Church has collapsed, trapping an estimated 35+ people inside. The Carrington Inn & Suites and the Chieftain Conference Center have taken direct hits and are very heavily damaged. An unknown number of guests were inside at the time the tornado hit.

2100 – The first reports of fatalities come into the SEOC. 3 reported dead in the downtown business district which was in the direct path of destruction. More reports of injuries are coming in from the medical facility. 23 serious to critical patients have arrived; 47 walk in cases, noncritical in nature (mostly lacerations from flying debris).

2105 – The following initial damage assessment has come in:

City water tower: Destroyed

Electrical Substation: Destroyed

Central Business District: Destroyed

14 unit apartment building: Destroyed

12 unit apartment Building: Destroyed

Federated Church: Collapsed

Carrington Inn: Destroyed

Chieftain Conference Center: Very heavy damage, some collapsed walls  
Unknown number of residents injured, killed, & missing.

Foster County Sheriff & Carrington's mayor are among the missing  
Massive amounts of debris are slowing damage assessment, rescue, & recovery operations to a crawl. Downed power lines, trees, branches, destroyed homes, and flipped vehicles fill the streets. The smell of natural gas & propane lingers in the air.

2115 – KVLV, KFVR, KXMB, & WDAY news crews arrive and begin live newscasts.

2130 - The SEOC receives calls from CNN & Fox News, asking if reports of 45 dead in the collapse of the Federated Church are true.

2131 – Preliminary classification by the Storm Prediction Center rates the tornado as an EF4; .4 miles wide, with winds estimated at 175 mph.



2134 – Sunset

2214 – End of evening civil twilight

2247 – Rescue efforts at the Federated Church continue. Calls to State Radio indicate that 9 dead and 18 injured have been discovered. 7 more are missing and presumed to be in the rubble. Most of the injured have critical to serious conditions.

2315 – Rescue efforts by citizens at the Carrington Inn have turned up another 12 fatalities, and 11 injured.

2317 – Foster County deputies report from the Chieftain Conference Center that there are 5 fatalities, and 29 injured. Extent of the injuries is not known at this time.

## July 10, 2014

0133 – Foster County Sheriff's office reports that 15 fatalities, including children, have been discovered in the rubble of the 12 unit apartment building. 3 seriously injured have been rescued.

0345 – Rescue efforts at the 14 unit apartment building are underway; 8 injured have been found.

0400 – The Foster County Medical Center reports that in the last 7 hours, an additional 54 patients have been brought in via private vehicles. Of these, only 8 have required hospitalization, the rest have been lacerations & fractured bones.

## Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 2. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

- ❖ What are the key issues at this point in time?
  - What are the possible ways the SEOC would be notified of the tornado touch down in Carrington?
  - What happens in the SEOC when we become aware of the tornado hitting Carrington?
    - Activation level increase?
    - Situational awareness and communications? How does the state obtain actionable information for decision makers?

- What is the structure of “unified command” at the state?
- Public information messages?
- Emergency Declaration?
- NG?
- IMAT?
- Other actions?
- What is the primary mission of each of the state agencies at this point? What actions are taken toward that mission at this time?
  - Core Capability: - Critical Transportation
    - What is the state’s role in responding to debris blocked city streets? State highways? Federal highways? Rails?
  - Core Capability: - Public Information and Warning:
    - What public information messages need to be provided? What media would be used? How do we ensure consistency in messages from the various state agencies involved?
  - Core Capability: Operational Communications
    - What operational communications systems would be in use at the scene? In the SEOC?
    - Is there anything the state could do to control or support cell phone service?
  - Core Capabilities: - Environmental Response/ Health and Safety, Infrastructure Systems, Mass Care Services, and Public Health and Medical
    - What resources does the state have to provide for the immediate needs of water and sanitation?
    - What is the process for deploying those assets?
  - Core Capability: - Mass Care Services
    - How can the state assist in the immediate provision of food and shelter to those who survived the tornado?
    - Who is responsible for set up and management of a shelter? Transportation of victims to the shelter?
    - What other shelter issues would need to be addressed?
  - Core Capability: – Public Health and Medical
    - What is the capability and capacity of the Medical Center?



- What criteria would need to be met for the state to provide security?
- What agency(ies) would be responsible for the security support?
- How do the state agencies coordinate with local law enforcement?
- Core Capability: - Public and Private Services and Resources
  - What resources or processes are available to support fire suppression and the anhydrous ammonia leak?
- Core Capabilities: - Planning, Operational Coordination, Public Information and Warning, and Situational Assessment
  - Who else needs to be notified of the situation in Carrington and the response efforts?
  - What federal agencies would be expected to arrive in North Dakota?
  - What is the role of the feds?
  - How do we establish and maintain a coordinated response with the federal agencies?

## MODULE 3: THE RISING SUN

0511 – Morning civil twilight

0550 – Sunrise

0730 – Further damage assessment:

Carrington elementary school: Heavy damage

City Hall & Fire Hall: Moderate damage

Carrington High School: Moderate damage, gymnasium intact

Golden Acres Manor: Minor damage

Foster County Medical Center: Minor damage

Foster County Courthouse: No damage

Carrington Municipal Airport: No damage

343 residences: destroyed or very heavily damaged

84 residences: moderate to minor damage

Unknown number of residents trapped, injured, or killed

All railroad tracks through town are blocked by debris

US Highway 52/281 is blocked through the center of town

US Highway 52/281 railroad overpass has collapsed, blocking all 4 rail lines

ND Highway 200 has moderate debris covering the road

No running water available due to the destroyed water tower

No electricity south of ND Highway 200 due to loss of substation

**Total Fatalities: 34**

**Total Injured: 193**

**Total Missing: 57**

0800 – The Foster County Sheriff’s Department has 2 unconfirmed reports of looting in the downtown business district. Both alleged incidents occurred during the overnight hours.

0820 – Residents are calling the local EOC, reporting that according to Facebook, FEMA will be on scene by 1200 with disaster relief payments ready to disburse.

1100 – The governor’s office receives a call from the White House. President Obama would like to tour the scene on the morning of July 12, 2014.

## Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 3. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

- ❖ What are the key issues at this point in time?
  - Have there been any changes in the structure or operations of the SEOC?
    - What is likely the status of an emergency declaration?
  - What is the primary mission of each of the state agencies at this point? What actions are taken toward that mission at this time?
    - Core Capabilities: – Critical Transportation and Infrastructure Systems
      - What are the gaps that remain in plans and resources for restoration of transportation routes and services?
    - Core Capability: - Public Information and Warning:
      - What plans exist for facilitating the influx of media to Carrington and ND?
      - What is the role of social media in public information and situational assessment? How can rumors be controlled in the age of instant information?
    - Core Capability: - Operational Communications
      - What role does the state have regarding the loss of land line phone service?
      - What are the gaps that remain in plans and resources for operational communications?
    - Core Capability: - Infrastructure Systems
      - What role does the state have in restoring critical infrastructure (water, electrical power, and sewer)?
      - What is the relationship and how would we coordinate with private/commercial interests?
      - What are the gaps that remain in plans and resources for public works and engineering?
    - Core Capability: - Mass Care Services
      - Are there additional concerns beyond sheltering and feeding for vulnerable individuals?

- What is the process for family re-unification efforts?
  - What resources are available for crisis mental health intervention?
  - What are the gaps that remain in plans and resources for mass care?
- Core Capabilities: - Public Health and Medical, Environmental Response/ Health and Safety, and Fatality Management
  - What criteria would be used to determine if the hospital can be supported until services are restored or would need to be evacuated?
  - What role does the state have in fatality management? What resources are available?
  - What are the environmental health issues?
  - What are the public health issues?
  - What is the state's role in responding to the public health and environmental issues?
  - How do we assure the safety of responders?
  - What are the gaps that remain in plans and resources for Health and Medical response to a situation such as this?
- Core Capability: – Mass Search and Rescue
  - At what point would outside resources for search and rescue be needed?
  - What are the gaps that remain in plans or resources for Search and Rescue?
- Core Capability: – Environmental Response/ Health and Safety
  - What are the gaps that remain in plans or resources for HazMat response?
  - What actions need to be taken regarding dead and injured livestock in the tornado path?
- Core Capability: - Infrastructure Systems
  - What additional resources might be requested to assist with restoration of power?
  - What are the gaps that remain in the plans or resources for energy?
- Core Capability: - On-scene Security and Protection
  - What are the gaps that remain in plans or resources for public safety and security?

- Who will have the lead in coordinating with the Secret Service in preparation for the President's visit?
- Core Capability: - Public and Private Services and Resources
  - What additional resources or support is available for firefighting?
  - What other essential services require immediate support or intervention?

## Module 4: The Path to Recovery (Optional)

July 13, 2014

0800 – Search & rescue efforts have slowed and are geared more towards recovery. All natural gas leaks have been sealed and downed power lines de-energized. The street boulevards are piled high with debris from initial cleanup efforts. All city streets are now passable for a minimum of one-way traffic, while most are capable of 2 way traffic. ND Highway 200 is open for through traffic. US Highway 52/281 is being detoured around town, due to the collapse of the overpass over the railroad tracks. All fire & law enforcement units that were called in via mutual aid agreements have been demobilized.

### Questions

Based on the information provided, participate in the discussion concerning the issues raised in Module 4. Identify any critical issues, decisions, requirements, or questions that should be addressed at this time.

- ❖ What are the key issues surrounding recovery?
  - Core Capability: Housing
    - How is the initial assessment of housing impacts and needs completed?
    - What temporary housing solutions would be pursued?
    - What challenges do you anticipate related to re-building family dwellings?
  - Core Capability: Economic Recovery
    - What support exists for impacted businesses?
    - What are the potential inhibitors to stabilizing the affected community?
  - Core Capability: Health and Social Services
    - How would basic health and social services functions be restored?
  - Core Capability: Infrastructure Systems
    - What are the challenges in restoration of essential services and infrastructure?  
What would be a reasonable time to anticipate for restoration of each?
      - Electrical service
      - Water
      - Sewer
      - Telephone service
      - Education

- What Recovery Programs may be available?
- What is the Preliminary Damage Assessment process for Public Assistance and Individual Assistance?
- Would the ND Recovery Task Force be activated?
  - What agencies would likely be part of the Recovery Task Force?

## APPENDIX A: EXERCISE SCHEDULE

Time	Activity
<b>February 12, 2014</b>	
1230 - 1300	Registration
1300	Welcome and Opening Remarks
1315	Module 1: The Gathering Storm
1345	Break
1400	Module 2: Darkness Descends
1500	Break
1515	Module 3: The Rising Sun      Module 4 (Optional): The Path to Recovery
1615	Break
1630	Discussion of Rail Road Issues
1700	Closing Comments

## APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations
<b>Federal</b>
FEMA
National Weather Service
<b>State</b>
Governor's Office
ND National Guard
ND Department of Emergency Services
ND Department of Health
ND Department of Transportation
ND Highway Patrol
ND Department of Human Services
ND Department of Animal Health
ND Department of Agriculture
State Fire Marshall
ND State Electrical Board
<b>Other Organizations</b>
American Red Cross
Volunteer Organizations Active in Disaster
ND Civil Air Patrol

## APPENDIX C: ACRONYMS

Acronym	Term
DHS	U.S. Department of Homeland Security
HSEEP	Homeland Security Exercise and Evaluation Program
SitMan	Situation Manual
SME	Subject Matter Expert
TTX	Tabletop Exercise
NDDDES	North Dakota Department of Emergency Services
SEOC	State Emergency Operations Center
EOC	Emergency Operations Center
ESF	Emergency Support Functions
THIRA	Threat & Hazard Identification and Risk Assessment
NDHP	North Dakota Highway Patrol
FEMA	Federal Emergency Management Agency