

**MissionMode**

Emergency Notification  
Incident Management



# Severe Weather Preparedness and Resiliency

*Business Continuity in the face of  
hurricanes, storms, tornadoes and  
other severe weather*

*By Howard Mannella*

## About the Author

Howard Mannella, CBCP, MBCI is Managing Principal of Alternative Resiliency Services Corp, with over a decade of national and international experience in Business Continuity, Disaster Recovery, Crisis Management, Emergency Response, Operational Risk and related disciplines.

## Table of Contents

1. Understanding Resiliency
2. The Planning Process
3. Implement and Plan
4. Putting it Together
5. Resources

Hurricanes<sup>1</sup> and other severe weather events are an unavoidable fact of life in many areas of the world. The Atlantic hurricane season officially runs from June 1st through November 30th. Companies with operations and people in coastal areas of the United States and Mexico are at greatest risk.<sup>2</sup>

Tornadoes typically occur in the central and eastern United States, but have been observed in other areas as well (the state with the most tornadoes per square mile is actually Florida<sup>3</sup>). The tornado season, while not official, typically starts in March.<sup>4</sup>

Severe weather exacts a massive financial toll (these statistics are for the United States):

- Severe weather caused damages of more than \$100 billion in 2012.
- There are an average of 1,300 tornadoes each year, according to the National Oceanic and Atmospheric Administration.
- 11 tornado outbreaks in 2011-2012 each caused damage of more than \$1 billion.

Planning and preparedness are essential for a company to protect its assets, operations, employees, and especially its brand and reputation.

This planning aid is not a simple checklist. There are many resources for example checklists (see the Resources section at the end of this paper for some good sources). This planning aid is intended to help you to think through how to properly plan, then take from the resources at the end of this article and customize to your unique needs. Then your business and people will be truly prepared and resilient!

## Understanding Resiliency

Resiliency—the ability to withstand and ‘bounce back’ from an emergency event—is more than having a checklist. Putting a document into managers’ hands does not make their operations resilient. Actively engaging in the planning process—thinking through the risks, impacts, mitigations and responses; coming up with a plan; implementing the plan; and training the employees—makes an organization resilient. To paraphrase Dwight Eisenhower, plans are helpful but planning is invaluable!<sup>5</sup>

1 The term “Hurricane” refers to a tropical storm specifically of Atlantic Ocean origin. Cyclones are a tropical Pacific Ocean phenomenon. Resiliency and preparedness principles are the same for both.

2 Tropical storms are most powerful and destructive when over water and they lose strength as they move inland; however, significant damage can and has occurred in inland areas as well.

3 [http://www.weather.com/outlook/weather-news/news/articles/what-where-is-tornado-alley-forbes\\_2011-04-14](http://www.weather.com/outlook/weather-news/news/articles/what-where-is-tornado-alley-forbes_2011-04-14)

4 <http://www.ready.ga.gov/Press/Press-Releases/March-Marks-Start-of-Active-Tornado-Season-in-Georgia>

5 At Alternative Resiliency Services Corp, “Plans are Useful, Planning is Invaluable, Exercising is Essential!” See the About ARSC section for more information.

## What comprises Resiliency?

There are five foundational elements:

**Communications:** the ability to reach your customers, suppliers, counterparties and employees. This is critical to choreographing and managing your response during a weather incident.

**Alternate means to work or live:** where would you go; where would your business processes be performed?

**A plan:** figure out what you will do, and then write it down (now you have a checklist!).

**Trained and aware people:** your managers and staff need to understand the plan, their roles and what they will do.

**Practice:** your team will become competent and comfortable with the plan. A hurricane is the worst time to try the plan for the first time!

*A common pitfall is to jump in and start compiling a checklist.*

## The Planning Process

A common pitfall to the planning process is to jump right in and start compiling a checklist. This is an excellent way to miss critical items and produce a weak plan. Proper planning means going through a step-wise process that will result in end-to-end assured preparedness. The phases below do not have to be long and burdensome; they can be as quick and streamlined as appropriate to your organization.

### Analyze and Assess

**Review the critical parts of your business, the risks and their impacts.**

Can a business process be transferred elsewhere temporarily? What are the tangible and intangible impacts if it is suspended? Identify the systems, vital records and other requirements for each—how will they be accessed during a hurricane?

**Review your premises and infrastructure.** What are the vulnerabilities? Can the facilities be hardened or protected? How will you handle food, water, power, communications etc. if you are sheltering during the storm and afterward?

**Review your employees.** Who are your critical staff? Are backups or seconds-in-command identified?<sup>6</sup> Where do they live and how will they get to work? Will they need to stay? Most importantly, will they be available to work? Investments in helping your people with their personal resiliency will pay dividends. Remember, a business cannot function without the people!

*Investments in helping your people with their personal resiliency will pay dividends.*

<sup>6</sup> Best industry practice is to identify “three-deep” critical staff: primary, secondary and tertiary.

**Review your technology.** Is it redundant? Backed up? Where are the vulnerabilities?

## Formulate a Strategy

**Go through each item you've covered in the Analyze and Assess phase.** Ask yourself, "What will I do for this item before, during and after a hurricane?"



**Typical strategy options** include suspension of operation, transfer to alternate or surviving locations, Shelter-In-Place and Work-From-Home. Each has advantages and disadvantages. Your strategy will probably be a mix of these options.

**Develop your communications plan.** This is the most important part of your plan. Who needs to communicate? What? How? Recovery teams especially need to be able to receive and exchange critical information.

Remember that phones and mobile systems might be degraded during an emergency.<sup>7</sup> Robust, multi-modal emergency notification is no longer a best practice—it's today's price of admission. Consider investing in a platform such as MissionMode for assured communication and information-sharing.

## Implement and Plan

The outcome of the Strategy phase is two-fold: procedures or playbooks to run the plan during the disaster and a set of implementation items to be completed in order that the plan can work. Example implementation items: if your strategy involves running on generator power, then acquire a generator, a fuel supplier (or two) and execute delivery contracts. If your strategy is to 'batten down' your facility, then acquire plywood and materials plus the tools to do the job.<sup>8</sup> Work on the implementation items and track them to completion.



Plan procedures do not have to be detailed and complicated. Simple checklists or playbooks can suffice. Remember that they are not standard operating procedures but rather the list of necessary activities specific to reacting to a disaster. Take the approach that playbooks are not for business-as-usual managers, but they are aids for interim or temporary replacements. Think, "If the weather event is imminent, what do I have to do?" Here is an outline for an emergency playbook:

<sup>7</sup> Experience in numerous disasters have shown that SMS text messaging and peer-to-peer communications such as Nextel® and Blackberry® often get through when mobile voice calls cannot.

<sup>8</sup> Pre-supplying is a good practice as supplies might be in short supply when the storm is impending.

- “Who do I call?” List of critical people and multiple means of contact
- “What do I do first?” List of immediate actions
- “What do I do next and over time?” List of ongoing actions
- “What do I stop doing?” List of deferrable actions
- “How do I return to normal” List of actions to ‘unwind’ the plan and get back to normal. This is an often-neglected part of planning, and issues or actions can fall through the cracks after the situation passes

*Communications is a critical foundation.*

Communications within your incident team during emergency situations is a critical foundation of any plan. Speed is often of the essence and everyone needs to be ‘on the same page’. This is particularly challenging when team members are in different locations.

Good incident management software, such as that offered by MissionMode, can provide an instant understanding of what is going on, and what needs to be done by whom. With the addition of a mobile incident management app, your team can coordinate a response from any location.

*Everyone should be aware of the plan.*

## Roll Out

Once your plan is ready, roll it out to your people. Everyone should be aware of the plan, where they fit in and what is expected of them (or not expected of them). Rollout plans can include company announcements, Town Halls, email, signage and other communications for general awareness. They should also include management briefings, discussions in team or department meetings and other means to provide more specific education and to hear concerns and issues.

## Test

Plan tests serve several purposes:

- They ensure that the plans work and help to identify gaps or weaknesses.
- They are a catalyst to ensure that the implementation items are completed and plan enablers are ready.
- They are valuable training and practice opportunities to ensure that staff, managers and people with recovery responsibilities are familiar, competent and comfortable with their roles.

There are a number of testing methods used for resiliency planning. They include plan reviews or walkthroughs, table top exercises, functional simulations and mock events. Look to future articles for further explanations of these methods.



## Putting It Together

After you've developed your plan, refer to the following guidance to help you walk through the actual event.

### Before the Weather Event

- Make sure that your plan enablers are ready to go. Run the generator (both isolated and under load), test batteries, etc.
- Test your communication plan to make sure the information is correct and to make sure that your people are familiar with it.
- Agree on priorities: People, Property, Assets and Reputation.
- Document your current state: take pictures of your facilities, operations, etc. Collect any documentation that will help you make the case for insurance claims or protect against liability.



### Commonly-Overlooked Items:

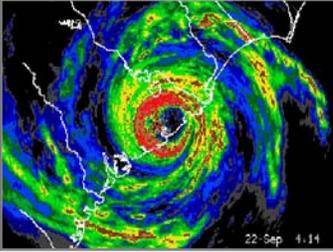
- Extension/multi-plug cords and chargers for mobile phones, laptops, etc.
- Oil for generators: having ample fuel is useless if your generator runs out of lubricating oil.
- Keys or tools for turning off gas service, electrical panels, critical machinery or systems.
- Systems or procedures for accessing absent employees' voicemail or email: critical communications might reach a standstill if critical parties are attempting communication with unavailable employees.<sup>9</sup>
- Cash: normal methods of payment (credit cards, ATMs, bank processing) might not be available for some time.
- Expiration dates: check them before the hurricane season is upon us. Remember that gasoline and other fuels degrade without rotation or addition of preservatives.
- Pet care (for personal resiliency): food, medicine, etc. Know where to find a pet-friendly emergency shelter should you or your people need one.
- Leisure or diversion/play items: do not underestimate the value of a deck of cards or shelf of books/games when your people are stranded in a location for several days.



<sup>9</sup> Seek legal advice for the ramifications of accessing employee email and voicemail accounts

## During the Weather Event

**Put your plan into action**, using good business judgment to adapt the plan to the specific circumstance.



**Understand the 'eye':** a hurricane is a storm movement revolving around a central point of calm. Many lives are lost when the storm appears to cease and people stand down, not expecting it to return, as the back of the system passes through. Remember that the winds on the other side of the eye will be in the opposite direction.

**Understand unpredictability:** hurricanes can change course unexpectedly, and tornadoes can veer and swerve and leave precise tracks, flattening a building but leaving the building across the street untouched. Close monitoring of official real-time information and a conservative approach are best practice for managing a weather event.

**Remember that text messages have a better chance of getting through than voice calls** when the mobile network is overwhelmed or compromised. Emergency notification systems can be a vital tool for contacting a large number of people within a short amount of time.

**Keep the 'human perspective' when running your plan.** Your people, your customers, your suppliers, even your competition... put people first!

## After the Event

- Confirm that your people are safe, then confirm their ability to work.
- Be prepared for reduced staffing for some period of time, as many people might be focused on self/family issues or otherwise be 'emotionally unavailable' to work.
- Provide support, counseling, etc.
- Communicate with your customers, suppliers, counter-parties etc. and assure them that you are in business and ready to assist them as needed. Remember that Resiliency can be a significant differentiator so take advantage of the investment you made in planning!
- Document damage for insurance and legal purposes. (This is why you took the 'before' pictures, right?)
- Convene your team for a 'hotwash'<sup>10</sup> to review the event, your responses, what worked and what needs to be improved. Track the improvement items to closure.



<sup>10</sup> 'Hotwash' is a term coined by firefighters referring to a meeting immediately after a fire incident to review and learn while memory is still fresh

This white paper is brought to you by



MissionMode's web-hosted emergency notification and incident management solutions reduce the time and cost of returning to normal business operations.

### Smarter Emergency Notification

The Notification Center™ is easy to use when the pressure is on, yet advanced enough to handle major disasters. Intelligent, customized automation adapts to constantly changing situations.

### Incident Management Simplified

The Situation Center™ provides the tools to remedy an incident better and faster—share information, monitor tasks, track people's status, send alerts, access any type of file, and more. It also integrates with AccuWeather's weather intelligence to create a virtual command center for dealing with weather threats.

### Revolutionary Mobile Communications

EarShot™ goes far beyond ordinary notification. It enables rich 2-way communication using forms, photos, text, profiles and GPS services.



Manage an incident in the palm of your hand

[info@missionmode.com](mailto:info@missionmode.com)

[www.missionmode.com](http://www.missionmode.com)

North America

+1 877.833.7763 (toll-free)

+1 312.445.8811

International

+44 203 021 1036

---

## About Alternative Resiliency Services Corp

Alternative Resiliency Services Corp is a venture dedicated to furthering Organizational and Personal Resiliency to enterprise and less-than-enterprise organizations. Focus areas are:

- Bespoke Consulting: Pragmatic and value-based advisory, fractional management and other services without the PowerPoint and excessive fees.
- Managed Services: Basic preparedness without the overhead.
- Educational Services: Interactive evangelizing and teaching at corporate and other events.
- Facilitated Exercises: High-energy high-value training and practice opportunities, customized.

Visit [www.alternativeresiliency.com](http://www.alternativeresiliency.com) to learn more.

MissionMode, Notification Center, Situation Center, EarShot and the MissionMode logo are trademarks of MissionMode Solutions, Inc.

## Resources

There are many resources for starting-point checklists and emergency planning information. The links below are to organizations with direct hurricane experience. They should get you started. Stay safe!

Click on a link to visit the website.

National Oceanic & Atmospheric Administration

<http://www.nhc.noaa.gov/prepare/ready.php>

Pinellas County (Florida)

<http://www.pinellascounty.org/emergency/prepareahead.htm>

University of Hawaii at Manoa

<http://www.soest.hawaii.edu/emergency/Hurricane%20checklist.pdf>

City of Miami (Florida)

<http://www.miamigov.com/emergencymanagement/Hurricane/Survival%20Kit.pdf>

FEMA

<http://www.ready.gov/hurricanes>

Red Cross

[http://www.redcross.org/images/MEDIA\\_CustomProductCatalog/m4340160\\_Hurricane.pdf](http://www.redcross.org/images/MEDIA_CustomProductCatalog/m4340160_Hurricane.pdf)

Text © Copyright 2013, Howard Mannella. Layout and design © Copyright 2013, MissionMode Solutions. All images are copyrighted by their respective sources, including various Bigstock.com photographers and the National Oceanographic and Atmospheric Administration.