



Emergency Preparedness Guidebook

The Property Professional's Resource for Developing Emergency Plans for Natural and Human-Based Threats

Edited by Lawrence J. Schoen, P.E., Fellow ASHRAE



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Foreword to the Third Edition

BOMA International is proud to present the Third Edition of the *Emergency Preparedness Guidebook*. The publication was first issued in 2000 under the title *Are Your Tenants Safe? BOMA's Guide to Security and Emergency Planning*. After the events of September 11, 2001, the guidebook was updated and issued in 2002 under the title *The Property Professional's Guide to Emergency Preparedness*. The 2012 edition represents the latest guidance for preparing for every type of emergency situation.

Acknowledgements

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Introduction

In 2000, BOMA International published its first preparedness guide, *Are Your Tenants Safe*, BOMA's Guide to Security and Emergency Planning. BOMA updated the guidebook in 2002 soon after the terrorist attacks on the World Trade Center and the Pentagon in 2001 to reflect BOMA International's concentrated efforts toward helping restore a full sense of security in America's workplaces.

Since the 2002 edition, the commercial real estate industry has experienced or been threatened with other natural disasters (floods, hurricanes, tornadoes, etc.), accidents, crimes, terrorism and public health threats, which are far more likely to occur than extreme terrorist actions. It is fortunate that significant emergencies in office buildings have been relatively rare, yet tenants are now more sensitized to these possibilities. The goals for all of these incidents are similar: to make preparations that mitigate potential damage, to institute plans for rapid and effective action during an emergency and to recover from the event and return to business. Clearly, an effective emergency plan can reduce the negative impact.

Representing an industry that has been directly affected by such tragedies, BOMA International established the BOMA Preparedness Task Force comprised of members representing property managers, building owners, government building representatives and security experts. The task force

- Reviews all communications with federal, state and local agencies and identifies available materials and information on emergency preparedness;
- Reviews and compares information shared by BOMA Local Associations on individual emergency response plans for their respective cities; and
- Collects information and publishes an industry resource guide, which will include "best practices" or "considerations" for building owners and managers in emergency preparedness, evacuation and recovery planning.

It is with these considerations in mind that updates to this edition of *Emergency Preparedness* were written. Clearly, individual building preparedness represents a small part of an overall effort needed to safeguard buildings and tenants.

While the industry remains vigilant in dealing with the new reality of terrorist threats, it should also take pride in the knowledge that the emergency procedures in place in the World Trade Center and in the Pentagon on September 11th, and the implementation of those plans by building management, were instrumental in saving tens of thousands of lives when tested against an attack that no one could have foreseen.

Dedication

This edition is dedicated to the crew of the U.S.S. Bunker Hill and chief engineer Lt. Cmdr. Joseph Carmichael, Jr., a World War II aircraft carrier hero who died on September 26, 2011, at the age of 96.

Two suicide attack planes struck the carrier on May 11, 1945, when he had just finished his shift and was doing paperwork. He could have stayed there, but instead ran down through five decks, passing sailors who were evacuating, and made it to the engine compartment about 25 feet below sea level. He knew the ship was burning above him and could sink at any moment.

He and his 500 or so men kept the engines running, controlling dials in the smoke-filled dark, enabling the Bunker Hill to sail out of the range of further attacks. They kept fans blowing so that air reached oxygen-starved men below decks, and ran pumps that brought in seawater to fight the fires.

At one point, wrote Maxwell Taylor Kennedy, a son of Robert F. Kennedy, and author of “Danger’s Hour: The Story of the U.S.S. Bunker Hill and the Kamikaze Pilot Who Crippled Her,” Lt. Cmdr. Carmichael defused panic on-board when he opened the public address system and announced: “This is the chief engineer speaking. The ship is not sinking. It is not in any danger of sinking. And it will not sink. So put your minds at rest on that.”

Smoke kept pouring into the engine and boiler rooms and 125 men in the engineering crew died, along with 168 other sailors. The engineering crew who survived remained at their posts for nearly 20 hours. Their actions are credited with helping save not just the ship but nearly 2,800 crew members as well.

Lt. Cmdr. Carmichael received the Navy Cross for “extraordinary heroism” in keeping the Bunker Hill afloat that day. After the war, he became a real estate developer in New York and later banking executive. By steady performance at the tasks he and his crew were trained to do, keeping his wits about him and calming panic in others, we see models of behavior to use in situations that we hope and pray we ourselves never need to face.

Source: The New York Times, October 2, 2011.



Photo Credit: U.S. Navy

Chapter 1: Emergency Preparedness Basics

This Chapter gives general information about the purpose of the guide, what an emergency plan is and why it is needed.

Purpose of This Guide

This guide is intended as a resource to help property professionals develop emergency plans for any sudden event, natural and human-based that jeopardizes the occupants, contents and/or physical structure of a building. In light of new threats, emergency preparedness planning must now include not only basic security planning and procedures, but also a wide range of situations (see the “Table of Contents” for a list of events covered).

Not every building is equally susceptible to these risks and some are extremely unlikely. Each management team must decide what is reasonable for a property. This manual is a compilation of issues and concerns to be considered. Frequencies, specific reports, checklists, forms, codes, procedures practices and resources in this manual are given as examples and may not apply to every property. While focused primarily on the United States, many of the general principles and actions are applicable anywhere in the world.

This guide focuses primarily on physical threats to real property and occupants. As such, it includes minimal coverage of cyber threats, risks and attacks, which is a broad field of its own. For more information about these risks, see the Computer Emergency Readiness Team (www.us-cert.gov/).

This book itself is not an emergency plan, since variances in regulations, codes, building systems, building size, occupants (high- or low-exposure tenants), hazards and types of likely emergencies preclude a universal plan. A single solution for all facilities would either omit critical factors or include information that has no practical application for a specific facility.

Throughout this book, we use the terms “emergency plan,” or simply “plan” to refer to a facility-specific plan, while the terms “guide” or “manual” refer to this book.

What Is an “Emergency Plan”?

An emergency plan is a set of policies and procedures covering the four phases of emergency management: mitigation, preparedness, response and recovery.

The Four Phases of Emergency Management

Mitigation: Preventing future emergencies or reducing their effects

- Includes any activities that prevent an emergency, reduce the chance of an emergency happening or reduce the damaging effects of unavoidable emergencies.
- Maintaining automatic fire suppression/detection systems and buying insurance are mitigation activities.
- Mitigation activities take place before and after emergencies.

Preparedness: Preparing to handle an emergency

- Includes plans or preparations made to save lives and property and to help response and rescue operations.
- Notification/evacuation plans and stocking food and water are both examples of preparedness.
- Preparedness activities take place before an emergency occurs.