



## Antiterrorism Measures for Historic Properties

03-176

### Background:

DoD's basic construction criteria document addressing threats to U.S. military properties is Unified Facilities Criteria (UFC) 4-010-01, DoD Minimum Antiterrorism Standards for Buildings (October 2003). The document provides guiding principles, design and rehabilitation strategies, and base-line threat assumptions for installation commanders, facility managers, and planners. The UFC also outlines specific antiterrorism (AT) standards divided into four topical areas: site planning, structural design, architectural design, and electrical/mechanical design. The standards defined in UFC 4-010-01 are mandatory for most of the places where military personnel, DoD civilian employees, and contractors work and live on installations.

Thousands of facilities to which UFC 4-010-01 applies are historic buildings (those either listed or eligible for listing on the National Register of Historic Places). The National Register is part of the body of regulation implementing the National Historic Preservation Act of 1966, as amended. Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to consider the impacts of significant actions (called undertakings) on historic properties. No undertaking may proceed until a Section 106 review is completed. The length of the delay depends to a large extent on the complexity and scope of the project. The DoD has a dual obligation to complete the review in a timely manner, particularly for projects that affect personnel safety and security, and to ensure that properties representing significant aspects of U.S. military history and culture are not severely or irreparably degraded. These dual obligations can be fulfilled most expediently through cooperative work by project teams that include facility security engineering and historic preservation specialists.

### Objective:

The objectives of this study were to identify common circumstances in which UFC 4-010-01 undertakings will conflict with the requirements of the NHPA, and develop specific guidelines that will help installation command, AT, cultural resources, and facilities personnel to rapidly resolve those conflicts in a way that satisfies both sets of requirements.

### Summary of Approach:

UFC 4-010-01 was analyzed from a historic preservation perspective, and the Protective Design Center, U.S. Army District, Omaha, was consulted to verify the interpretation of various standards. The UFC 4-010-01 standards most

likely to raise NHPA compliance issues were then identified. AT standards and practices developed for other Federal agencies were reviewed for applicability to DoD historic properties, and manufacturer literature was surveyed to determine the state of the market in ready-to-use technologies that may support the antiterrorism and historic preservation (AT/HP) dual compliance requirements for military installations. Strategies and methods were then developed to help installation personnel achieve AT/HP dual compliance.

It was determined that some AT standards in UFC 4-010-01 present no significant conflict with NHPA requirements for historic properties. The standards relevant to the research objective were those addressing the following issues: access control, perimeter control, building standoff distances, debris minimization and control, structural strengthening, progressive collapse prevention, airborne contamination protection, and other protective design measures that can help meet the minimum AT standards with little or no impact on historic significance.

### Benefit:

Multidisciplinary facility design teams made up security engineering and historic preservation specialists can benefit from practical, plain-language guidelines that promote the collaborative development of affordable solutions to compliance conflicts that arise when antiterrorism undertakings are required on historic properties.

### Accomplishments:

The final technical report interprets UFC 4-010-01 and presents technologies commonly used for UFC compliance. It also identifies AT undertakings that may conflict with the Secretary of the Interior's rehabilitation standards and suggests ways to satisfy dual AT/HP requirements.

### Contact Information:

Name: Julie L. Webster  
Title: Research Architect  
Org: ERDC-CERL  
Address: PO Box 9005  
Phone: 217-373-6717  
Fax: 217-373-7222  
Email: Julie.L.Webster@erdc.usace.army.mil