



# Cybersecurity for Industrial Control Systems Industry Day

22 September 2015



# Welcome!

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# Naval Facilities Engineering Command (NAVFAC)



## Who is NAVFAC?

NAVFAC is a global military Command with a Headquarters element and Component Commands that work together as one team.

- Provide facilities engineering support
- Provide contingency engineering support
- Provide expeditionary support

## Mission

NAVFAC is the SYSCOM that builds and maintains sustainable facilities, delivers utilities and services, and provides Navy expeditionary combat force capabilities.

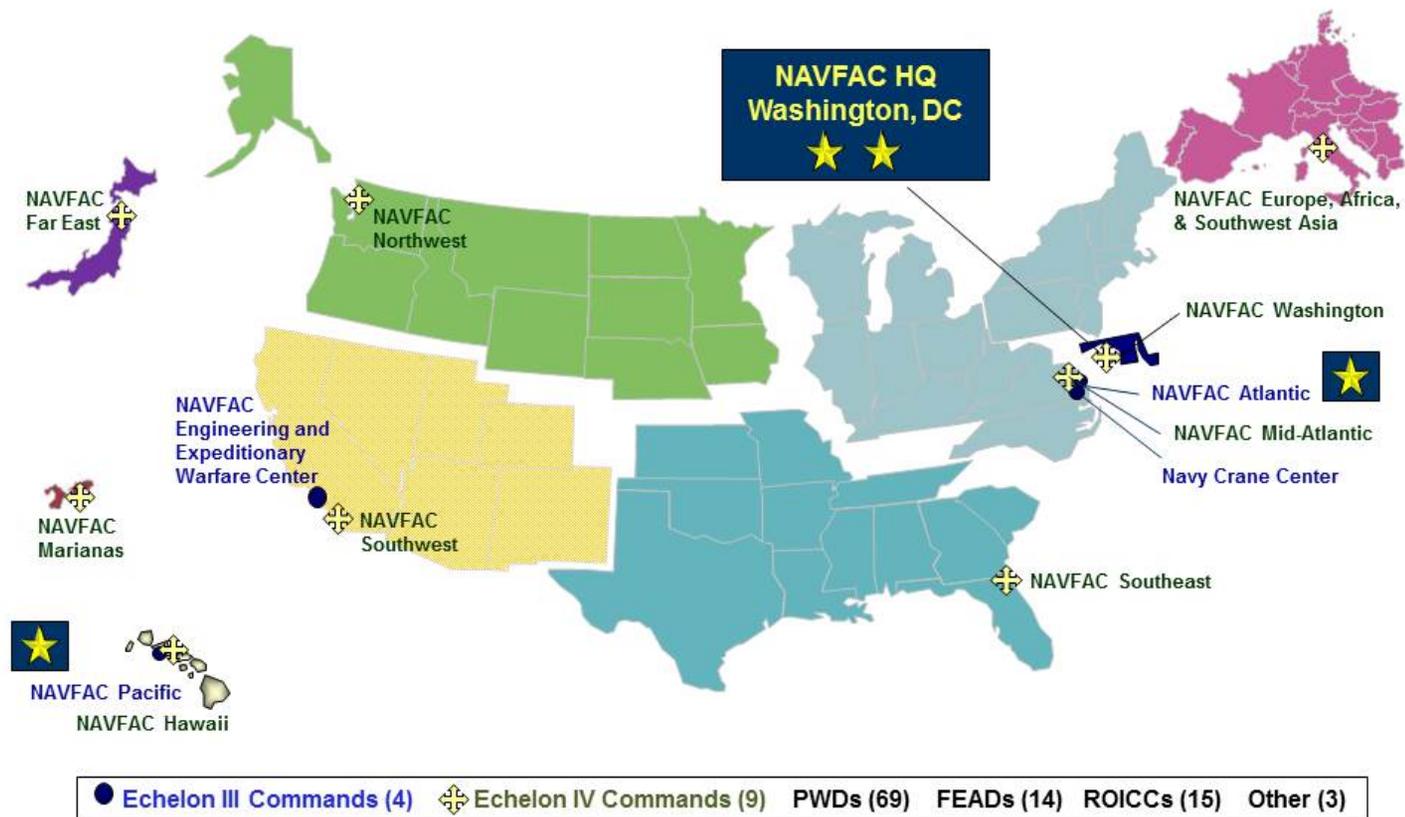
## Vision

Our expertise enables mission success.

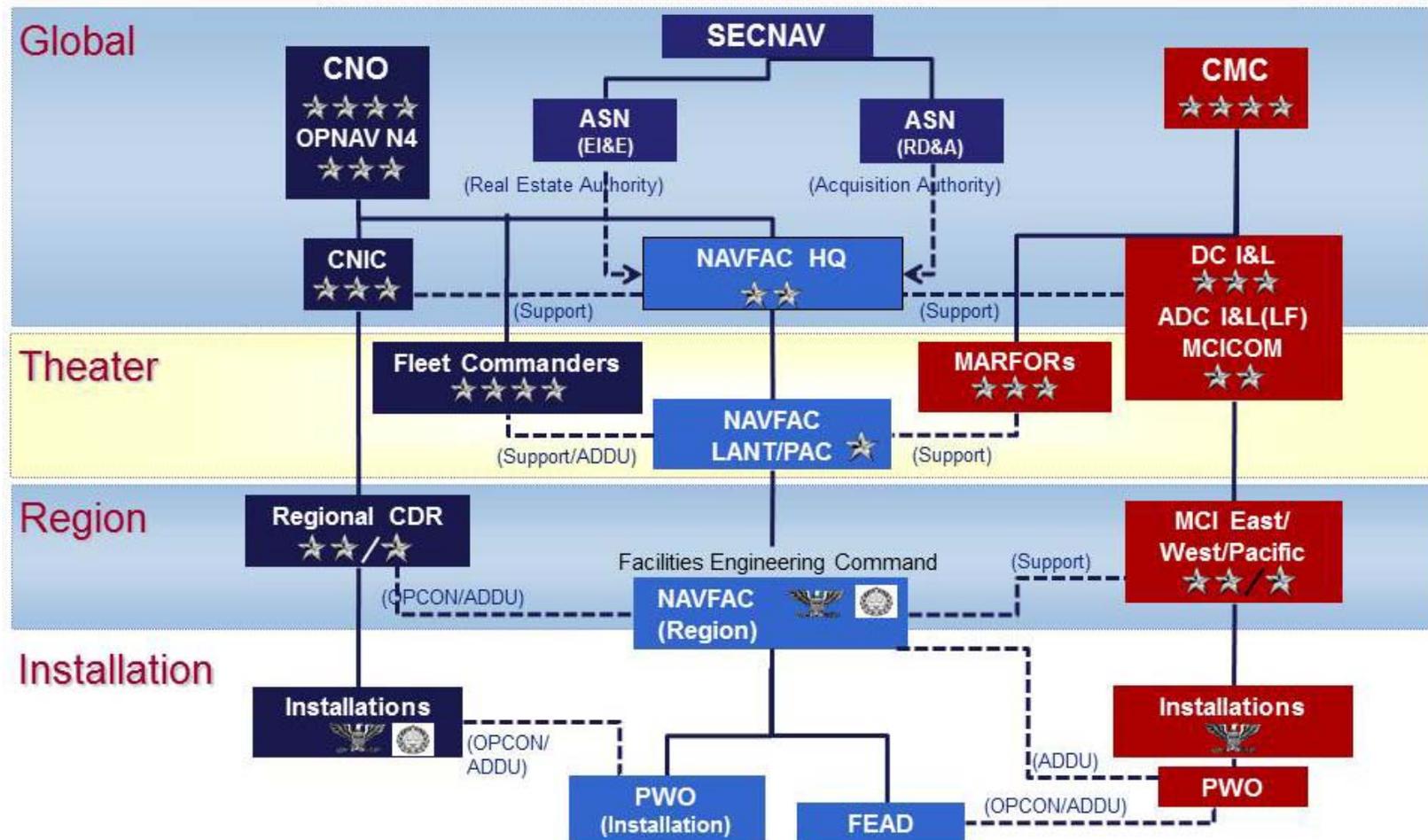
# NAVFAC Organization & Component Commands



## NAVFAC Component Commands



# Supported Command Alignment





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# Purpose of Industry Day



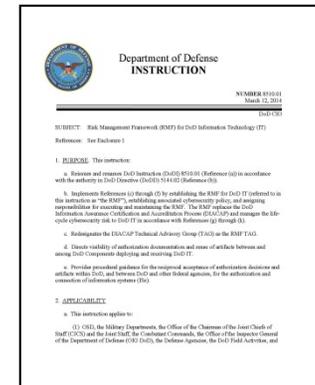
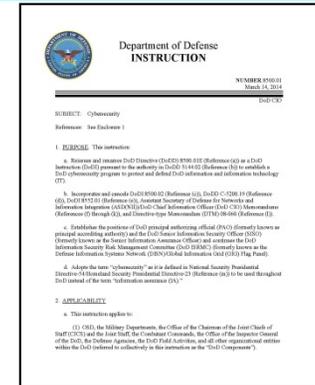
- To foster the exchange of information between DON and Industry
- Benefit DoD criteria development efforts related to Cybersecurity of Industrial Control Systems



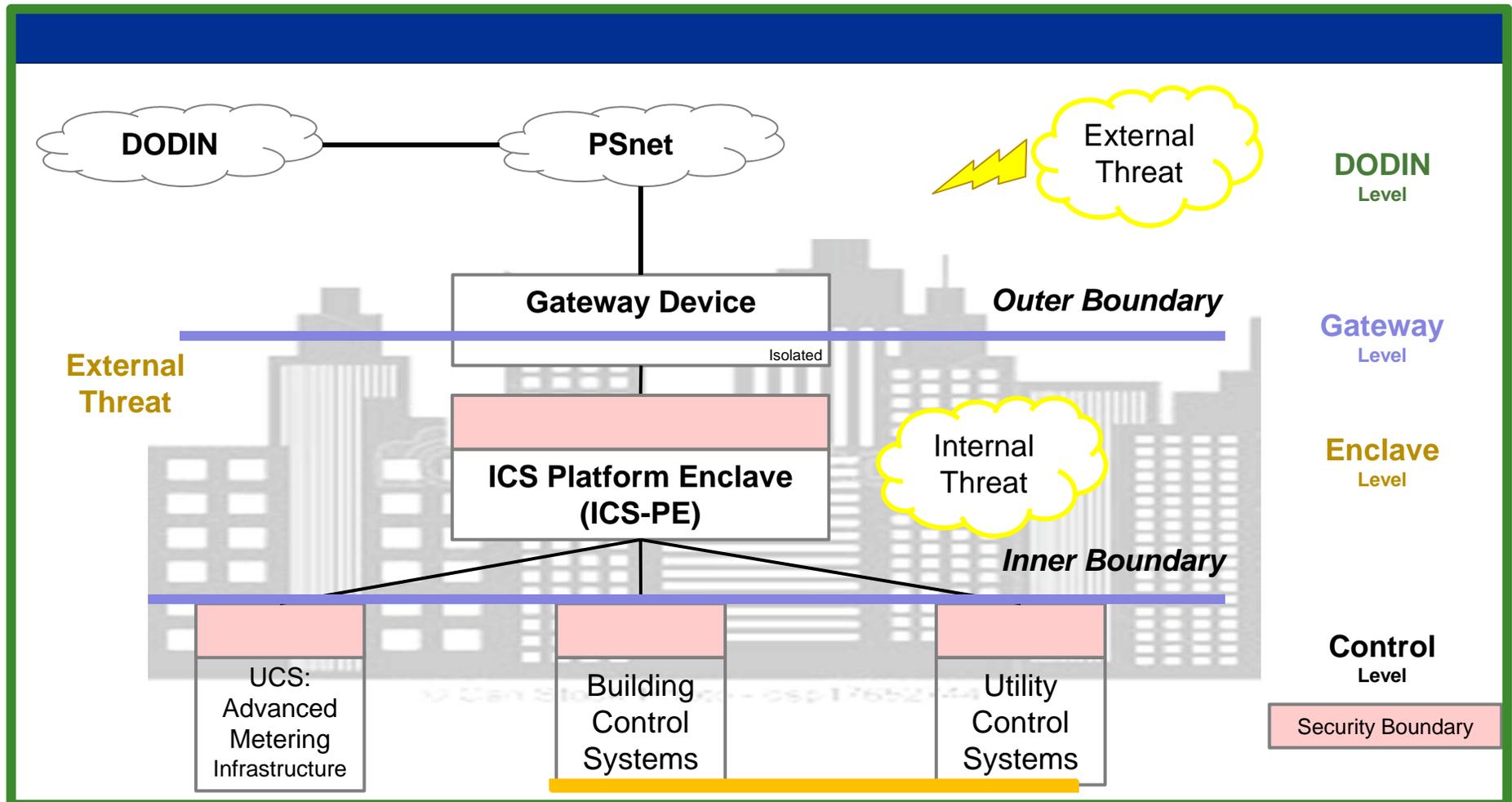
# DoD/DoN Cyber Policy



- **DoDI 8500.01, “Cybersecurity”**
  - Establishes DoD cybersecurity program to protect and defend information and information technology
- **DoDI 8510.01, “Risk Management Framework (RMF) for DoD Information Technology (IT)”**
  - Establishes RMF for DoD IT and associated cybersecurity policy
  - Implements NIST SP 800 series
- **SECNAVINST (draft), “Cybersecurity Safety (CYBERSAFE) Program”**
  - Establishes policy and assigns responsibilities for the Navy CYBERSAFE Program requirements.



# Shore Cyber Security Environment



## Cyber Security: Defensive Cyber Capabilities

# NAVFAC Approach to Cybersecurity



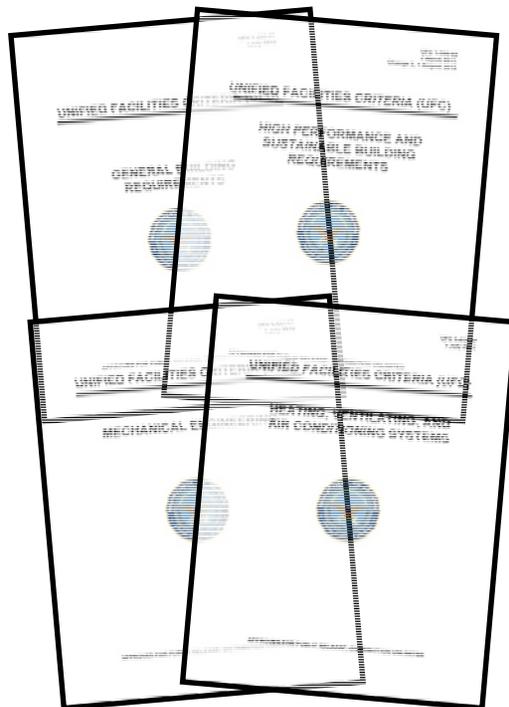
## **Objective: Cybersecure & Certified ICS (Systems & Components)**

- **Future Deployments**
  - **Criteria, Guide Specs will define cybersecurity requirements**
  
- **Legacy Systems:**
  - **Diversity of existing control systems**
    - Vendor, operating system, age/life cycle
    - Governance/sustainment framework
  
  - **Defense in Depth**
    - Leverages & inherits network controls already implemented
  
  - **Cybersecurity Enclaves & Boundary Control Points**
    - Implements controls specific to local/regional ICSs

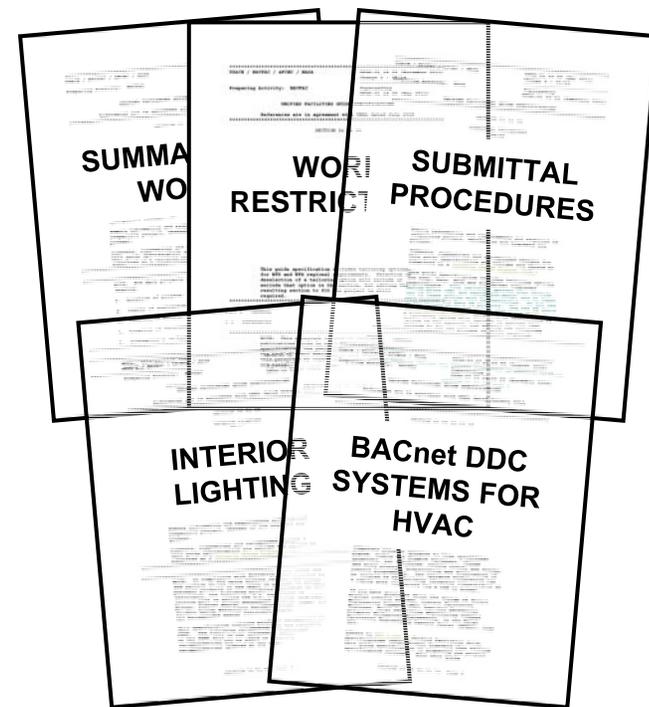
# DoD Criteria Documents



## Unified Facilities Criteria



## Unified Facilities Guide Specifications



# Whole Building Design Guide

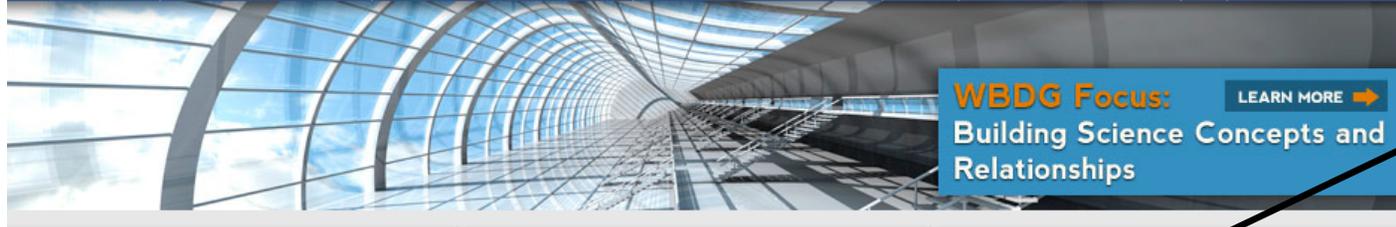
(www.wbdg.org)



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DoD  
Page  
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- ### POPULAR LINKS
- Unified Facilities Criteria
  - Unified Facilities Guide Specifications (UFGS)
  - Construction Waste Management Database
  - Building Envelope Design Guide

UFC  
UFGS

## NEWS [VIEW ALL](#)

**NCS Revision Cycle to Begin May 20**  
May 10, 2013  
[View Details](#)

**BEST4 Technical Committee Issues Call for Papers**  
May 7, 2013  
[View Details](#)

**New Agreement Ensures Wall and Ceiling Industry Is Represented in NBIMS-US**  
Apr 29, 2013  
[View Details](#)

## EVENTS [VIEW ALL](#)

**2013 SeaBEC Symposium**  
May 20, 2013  
[View Details](#)

**2013 AIA Convention**  
Jun 20, 2013  
[View Details](#)

**Building Innovation 2014**  
Jan 5, 2014  
[View Details](#)

## PARTICIPATING AGENCIES

Select an agency below for more information on its building programs.



## FEATURED PROGRAM

**Building Research Information Knowledgebase**  
The WBDG has taken down its section on Applied Research and is now linking to a new collaborative effort of the American Institute of Architects and the National Institute of Building Sciences – the Building Research Information Knowledgebase (BRIK). BRIK is an interactive portal offering online access to peer-reviewed research projects and case studies in all facets of building, from predesign, design, and construction through occupancy and reuse. For more information, visit [www.brikbase.org](http://www.brikbase.org).

## NEW & UPDATED PAGES

[FEMPFTS22 Solid-State Lighting: Highlighting Indoor Applications](#)

# WBDG – DoD UFC Page



- [NAVFAC Criteria](#)
- [NASA Criteria](#)
- [GSA Criteria](#)
- [VA Criteria](#)
- [DHS Criteria](#)
- [DOE Criteria](#)
- [Energy Star Criteria](#)
- [EPA Criteria](#)
- [Federal Facilities Council \(FFC\) Criteria](#)
- [FHWA Criteria](#)
- [Green Seal Reports](#)
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See the [DOD Engineering Criteria Status Report](#) for the list of UFCs that were formerly Agency-specific documents.

[UFC Template in MS Word](#) (Word in compressed ZIP) 01-31-2012, Change 2: 10-03-2012

## NEW DESIGNATION "Facility Criteria (FC)"

A new designation, "Facility Criteria (FC)" has been adopted for criteria that are not applicable to all DoD Components. This is specific to facility-type documents only, for example, FC 4-721-10N "Navy and Marine Corps Unaccompanied Housing." Facilities Criteria (FC) provide functional requirements (i.e., defined by users and operational needs of a particular facility type). Differences in functional requirements between DoD Components may exist due to differences in policies and operational needs. FC are applicable only to the DoD Component (s) indicated in the title, and are intended for use with unified technical requirements published in DoD Unified Facilities Criteria (UFC).

[FC Template in MS Word](#) (Word in compressed ZIP) 05-01-2013

[Unified Facilities Spreadsheets](#)

Questions, comments, suggestions and recommended changes for these documents are welcome and should be submitted as a [Criteria Change Request](#). To submit a Criteria Change Request, click on the CCR link next to the document below.

[View Archived UFCs](#)

[View Inactive UFCs](#)

These documents are available in the following format:

Adobe Acrobat (PDF)

Title	Date	Downloads	CCR
<b>SERIES 1: POLICY, PROCEDURES AND GUIDANCE</b>			
<b>SERIES 1-200: POLICY</b>			
UFC 1-200-01 General Building Requirements, with Change 2	08-16-2010	<a href="#">158 KB</a>	
UFC 1-200-02 High Performance and Sustainable Building Requirements <b>NEW</b>	03-01-2013	<a href="#">378 KB</a>	
UFC 1-201-01 Non-Permanent DoD Facilities in Support of Military Operations	01-01-2013	<a href="#">318 KB</a>	
<b>SERIES 1-300: PROCEDURES AND GUIDANCE</b>			
UFC 1-300-01 Criteria Format Standard, with Change 2	02-28-2008	<a href="#">290 KB</a>	

Archived and Inactive UFCs

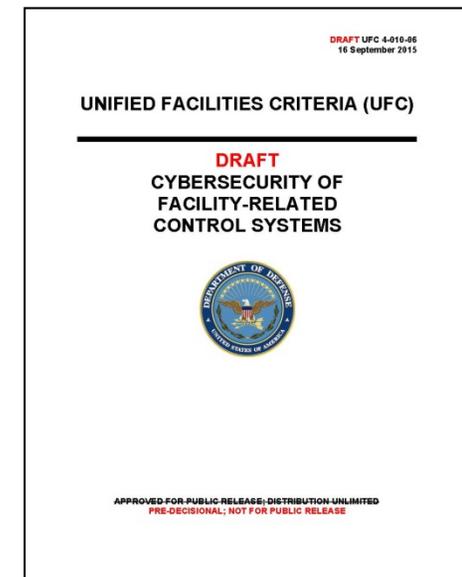
UFC Download

Submit a Criteria Change Request (CCR)

# Cyber Criteria Development



- ***UFC 4-010-06 CYBERSECURITY OF FACILITY CONTROL SYSTEMS***
  - *Implements the new Risk Management Framework (RMF), for facility control systems within facility design and construction projects.*
  - *Applies to all new construction and repair projects*
  - *Pre-final Submittal due 30-Sep-2015, Publication in FY16*



# Cyber Criteria Development



- ***UFGS for CYBERSECURITY OF FACILITY CONTROL SYSTEMS***
  - *Provides overarching construction contract requirements that will support DoD Information Assurance certification, accreditation, and Authority to Operate for facility control systems.*
  - *Applies to all new construction and repair projects*
  - *Kick-off Meeting Oct-2015, Publication in FY16*

# Industry Presentations



- **Cybersecurity innovations for industrial control systems**
- **Criteria for Cybersecurity**
- **Potential methods of gaining cybersecurity**



