Best Practices and Major Concerns of Engineering Designs in the AT World and Defense Critical Infrastructure Program (DCIP)

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Best Practices and Major Concerns of Engineering Designs in the AT World

Based on personal observations of AT practices at over 120 installations - * Not the official position of DoD

• AT requirements considered at the programming, planning and design stages
• Technical Requirements not well understood
• Coordination among ATO, planner and designer
• Threat analysis, criticality analysis, and vulnerability analysis required for Risk Assessment and Risk Management
Suggestions for AT Planning and design

Based on observations of AT practices at over 120 installations

- Ensure AT requirements are spelled out at the beginning
  - Perform TA and establish Design Basis Threat
- Continued coordination among ATO, Planner, and designer
- Designate an AT Design POC
- Understand the AT requirements (DBT, ACPs, standoff, progressive collapse, etc.) – construction specific
  - Alternate ways to meet AT requirements – engineer it!
- Physical barriers for standoff
  - Stationary threat or moving vehicle threat? - DBT
Defense Critical Infrastructure Program (DCIP – Public Works Sector)

Objectives of the Presentation

- USACE CI Resilience – THREE Programs At DoD, Army and USACE levels
  - Overview of programs
- Awareness on DCIP activities
  - DCIP 101
DCIP

Infrastructure Resilience

• USACE’s Three CIP Roles
  – DCIP (Public Works Sector)
    DoD Program under ASD (HD & ASA)
    • Assets owned by Mission owners / Services
    • Assessments coordinated by J-34 (executed by DTRA)
      Sectors assist, advise and provide guidance
  – USACE G-3/5/7 supporting DA CIRM program
  – CISP: Civil Works - NIPP (DHS Dams Sector)
Overview of USACE’s CIP Roles

PW Asset Identification Methodology:
- PW Sector Characterization Guide
- PW Sector Risk Management Approach

Remediation by Asset Owner

Vulnerability Assessments on high priority TCAs by DTRA

Defense Critical Assets

COCOM’s Task Critical Assets

ERDC
TCA Desk top pre-assessments
TBS “Quick Turn” (2 hr, 5 hr, 24 hr)

USACE CECW-HS
(Transportation & Dams)
CISP
Ed Hecker
Yazmine Seda-Sanabria

USACE Campaign Goal 3b:
Improve Resilience and Life Cycle Investment in Critical Infrastructure

CIR-PDT Members:
DCIP Public Works
CISP
USACE G-3
USACE G-2 / EI2RC
Dam Safety
Asset Management
Provost Marshall
Emergency Management
ERDC
DCIP

- Provide an overview of the Public Works Defense Infrastructure Sector’s roles and responsibilities as they apply to the Defense Critical Infrastructure Program (DCIP) and the Sector’s current support and ongoing initiatives towards the program.
- Mission - Enhance risk management decisions at all levels to ensure that Defense Critical Infrastructure is available when required.
DCIP

• The DoD Critical Infrastructure Protection Plan (1998) tasked USACE to be the Defense Sector Lead Agency (DSLA) for the Public Works Defense Infrastructure (DI). USACE has been active as the Public Works DSLA since then.


• DoD Directive 3020.40 (dtd Aug 2005), Defense Critical Infrastructure Program, assigns and designates Chief, USACE as the Defense Infrastructure Sector Lead Agent (DISLA) for Public Works. (SSA in DHS)

• DoD Instruction 3020.45 (dtd Apr 2008) Clarifies complementary relationships between DCIP and other DoD programs in executing requirements of DoDD 3020.40  DCIP Management
DCIP

• Defense Infrastructure Sector
  A virtual association within the DCIP that traverses normal organizational boundaries, encompasses defense networks, assets, and associated dependencies that perform similar functions within DoD, and are essential to the execution of the National Defense Strategy.

• PW Defense Infrastructure Sector
  The DoD, government, and private sector worldwide network, including the real property inventories (environment, land, buildings and utilities) that manages the support, generation, production and transport of commodities (e.g., electric power, oil and natural gas, water and sewer, emergency services, etc.) for and to DoD users.

• PW is one of ten Defense Infrastructure Sectors (cf. 18 National Sectors - DHS)
DCIP

Program Notes
• Compliments other DoD program and efforts, such as FP, AT, IA, COOP, CBRNE, Readiness and Installation Preparedness – all towards Mission Assurance
• Collaborate with other (9) DISLAs and DoD components to identify cross-sector interdependencies.
• Task Critical Assets (TCAs, 3 Tiers) and Defense Critical Assets (DCAs, higher classification)
DCIP

- PW Sector Program Current Activities
  - CIAO, Mr. Edward Hecker, HQUSACE, CECW-HS
  - Updated PW Sector Working Group Charter
  - PW Sector Infrastructure Database Tools: TRITON 4.1 Upgrades and HD-MAP (NSWC MAD)
  - USACE Civil Works CI/KR and Public Works Data Integration
  - CAIP to nominate TCAs IAW DoDM 3020.45, Vol 1
  - PW Sector Preliminary desktop analysis of supporting infrastructure assets for identified service installations - Accomplish via PW Working Group & Benchmarks
DCIP

• PW Sector Program Current Activities (cont)
  – ERDC Critical Infrastructure Technologies Development
    • Chemical & Biological Protection of Facilities
    • Infrastructure Vulnerability
    • Infrastructure Security
    • Seismic and Wind Load Analysis of Facilities and Infrastructure
    • Coastal Wave Surge
    • River Flooding and Dam Break Analysis
  – Future collaboration with CISP, CIRM and PDC
  – Future exercises (subject to funding)
DCIP Team at HQ

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Questions

AT Assessments / Designs

DCIP – Infrastructure Resilience