



## **NAVFAC WASHINGTON CM Training: Construction of Sensitive Compartmented Information Facilities (SCIF) and Special Access Program Facilities (SAPF)**

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### **SCIF and SAPF Construction**

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## SCIF and SAPF Construction

### Introduction - What is a SCIF?

- SCIF stands for Sensitive Compartmented Information Facility
- A SCIF is a room, area or entire building where Sensitive Compartmented Information (SCI) is stored, used, processed or discussed.
- SCI can be classified as Secret or Top Secret information
- Typically found in facilities such as Command Headquarters, Operation Centers, and Communication Centers
- A SCIF must be accredited before it can become operational

## SCIF and SAPF Construction

### Introduction - What is a SAPF?

- SAPF stands for Special Access Program Facility
- A SAPF is a room, area or entire building Special Access Program information or equipment is stored, used, processed or discussed.
- Special Access Program information or equipment is typically associated with a weapon platform or program
- Typically found in facilities such as hangars and trainers
- As with a SCIF, a SAPF must be accredited before it can become operational

## SCIF and SAPF Construction

### Accreditation

- Accreditation must be achieved before the facility can become operational for the supported command.
- Accrediting Official is responsible to accredit (approve) the facility for operation.
- The Accreditation process starts during the planning phase.
- Proper planning, communication and execution must occur throughout the project in order to achieve accreditation
- Facility Accreditation must occur prior to or concurrent with facility BOD/turnover in order not to adversely impact the mission of the facility and supported command



## SCIF and SAPF Construction

### Acronyms

AO – Accrediting Official	PM – Project Manager
BOD – Beneficial Occupancy Date	QC – Quality Control
CM – Construction Manager	RFP – Request for Proposal
CSP – Construction Security Plan	SAPF – Special Access Program Facility
CST – Construction Surveillance Technician	SCI – Sensitive Compartmented Information
CTTA – Certified TEMPEST Technical Authority	SCIF – Sensitive Compartmented Information Facility
DB – Design Build	SSA – Secured Storage Area
DBB – Design Bid Build	SSM – Site Security Manager
DM – Design Manager	UFC – Unified Facilities Criteria
ET – Engineering Technician	UFGS – Unified Facilities Guide Specification
FFC – Fixed Facility Checklist	
ICD – Intelligence Community Directive	
ICS – Intelligence Community Standard	

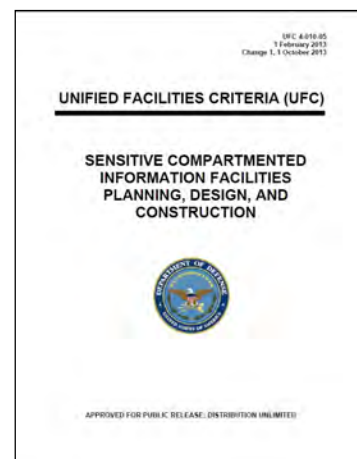
## SCIF and SAPF Construction

### Design and Construction Criteria Documents

- UFC 4-010-05 Sensitive Compartmented Information Facilities Planning, Design and Construction, 01 Oct 2013 (Being updated to include SAPF)
- NAVFACINST 4700.1A Planning, Design and Construction of Navy Sensitive Compartmented Information Facilities
- ICD/IDS 705 Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities, 13 Mar 2020
- UFGS 01 14 00 WORK RESTRICTIONS
- UFGS 01 45 00.00 20 QUALITY CONTROL
- UFGS 01 45 00.05 20 QUALITY CONTROL (DESIGN BUILD)
- DoDM 5105.21-Vol 1-3, Sensitive Compartmented Information (SCI) Administrative Security Manual
- DODM 5205.07 Volume 1-3, DoD Special Access Program (SAP) Security Manual: Physical Security

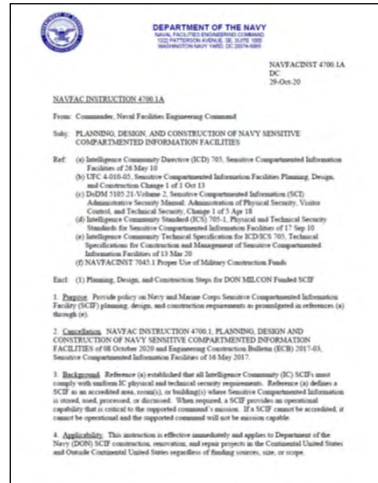
### UFC 4-010-05 Sensitive Compartmented Information Facilities PLANNING, DESIGN, AND CONSTRUCTION

- **PURPOSE:** To provide unified criteria and make the planning, design and construction communities aware of policy requirements and ensure appropriate implementation.
- **PREPARING ACTIVITY:** NAVFAC
  - Point of contact: Richard Cofer
- **CURRENT DOCUMENT STATUS:**
  - Published February 2013, Available on the Whole Building Design Guide Website ([www.wbdg.org](http://www.wbdg.org))
  - Change 1 Published 1 October 2013
  - Revision in progress: Final out for review
  - Will Include SAPF



## NAVAFAC INST 4700.1A Planning, Design, and Construction of Navy Sensitive Compartmented Information Facilities

- **PURPOSE:** Provide NAVFAC policy on the planning, design and construction of Department of the Navy SCIFs
- **SUPERSEDES:** ECB 2017-03
- **PREPARING ACTIVITY:** NAVFAC Engineering and Criteria Office
  - This document was coordinated with SSO Navy, USMC HQ and NAVFAC Components through the Navy Tasker system to include NAVFAC HQ BD and the Chief's office.
- **DOCUMENT STATUS:**
  - Published September 2020
  - Updated October 2020
  - Update in for signature (Version B)
  - Future update to include SAPF



## NAVAFAC INST 4700.1A Enclosure 1

To be completed prior to construction start:									
Confirm Approved CSP construction personnel requirements for work including: - General Construction - Finish work - Outfitting (such as FF&E and ESS)	Q	Q	L	Q	Q	Q	Q	Q	SSM is Lead with NAVFAC/DoD Construction Agent providing cost and schedule implications. DoDM 5101.21 Vol 2 IC Tech Spec ICD/ICS 705 UFC 4-010-05
Confirm Approved CSP material purchasing, inspection, shipping, and SSA requirements including FF&E and ESS	Q	Q	L	Q	Q	Q	Q	Q	SSM is Lead with NAVFAC/DoD Construction Agent providing cost and schedule implications. DoDM 5101.21 Vol 2 IC Tech Spec ICD/ICS 705 UFC 4-010-05
Confirm CSP requirements for site security including area/site access control for personnel, materials, and vehicles	Q	Q	L	Q	Q	Q	Q	Q	SSM is Lead with NAVFAC/DoD Construction Agent providing cost and schedule implications. DoDM 5101.21 Vol 2 IC Tech Spec ICD/ICS 705 UFC 4-010-05
Conduct DB Post Award Kickoff (PAK) or DBB Pre-Construction Conference (PreCon). SSM must attend.	Q	Q	Q	Q	Q	Q	L	Q	Discuss site security, schedule, site visits, inspections, construction personnel requirements, submittal requirements with contractor and SSM. BMS B-1.5.5.1 BMS B-1.4.6.3 UFC 4-010-05
To be completed prior to completion of construction:									
Approved construction submittals are forwarded to SSM for inclusion in FFC	Q	Q	Q	Q	Q	Q	L	Q	CM responsible to forward approved submittals. SSM responsible for FFC. UFC 4-010-05
Construction is monitored and the CSP is adjusted as required	Q	Q	L	Q	Q	Q	Q	Q	SSM updates CSP and coordinates changes with the CM. AO must approve all changes. DoDM 5101.21 Vol 2 IC Tech Spec ICD/ICS 705 UFC 4-010-05

## SCIF and SAPF Construction

### Contract Delivery options for Construction

#### ➤ Design-Bid-Build (DBB)

- Must be used when entire facility is a SCIF
- Preferred delivery type and first consideration when project is located outside the U.S. or when a major portion of new facility is a SCIF
- DBB allows Construction Security Plan (CSP) requirements to be finalized and the requirements inserted into construction contract

#### ➤ Design-Build (DB)

- CSP requirements must be established without a final design in order to include in RFP.

## SCIF and SAPF Construction

### Contract Drawings/Final Design

- Construction plans and all related documents cannot identify the location of a SCIF or SAPF
- With approval from Site Security Manager, areas may be identified as Secure Area or Controlled Area.
- If drawing identifies a SCIF or SAPF, drawings must be marked and handled as Controlled Unclassified Information (CUI)



## SCIF and SAPF Construction

### • Protection of CUI/FOUO Information

#### • During working hours:

- Steps will be taken to minimize the risk of access by unauthorized personnel, such as not reading, discussing, or leaving CUI information unattended where unauthorized personnel are present.

#### • After working hours:

- CUI will be stored in unlocked containers, desks, or cabinets if the government or government-contract building provides security for continuous monitoring of access. If building security is not provided, the information will be stored in locked desks, file cabinets, bookcases, locked rooms, or similarly secured areas.

DoDI 5200.48 Controlled Unclassified Information (CUI)

## SCIF and SAPF Construction

### Construction Security Plan (CSP)

- Documents the security requirements for each project
- Prepared by Site Security Manager (SSM) (not construction contractor or NAVFAC) and must be approved by Accrediting Official (AO) prior to construction contract award
- Specific security requirements in the CSP intended for the construction contractor must be incorporated into the construction contract documents prior to award
- CM should receive copy of CSP at contract award (may be CUI)
- Any changes to an approved CSP must be submitted to the AO for approval
  - The CM must communicate to the SSM when changes to the CSP may result in a changed condition to the contract (additional time and/or money). Would be considered a Customer Requested Change

## SCIF and SAPF Construction

- **Contract Award**
  - **For DBB projects:**
    - Do not award a construction contract without AO approved CSP.
  - **For DB projects:**
    - Do not start onsite construction activities (excluding mobilization, demolition, clearing and grubbing) without AO approved CSP.



## SCIF and SAPF Construction

### Construction Personnel

- **Within the U.S. and its territories.**
  - SCIF/SAPF construction and design shall be performed by U.S. companies using U.S. citizens or U.S. persons with AO approval.
  - Intrusion Detection System (IDS) installation and testing shall be performed by U.S. companies using U.S. citizens with a trustworthiness determination.
- **Outside U.S. and its territories**
  - General SCIF/SAPF construction shall be performed by U.S. companies using U.S. citizens.
  - SCIF/SAPF finish work shall be performed U.S. Top Secret-cleared or Secret-cleared personnel
- **These are documented in the CSP.**



## SCIF and SAPF Construction

### Construction Security

- Refer to contract and project CSP for workers vetting, Access Control, Material Procurement, Material Control access control and inspection procedures.
- SSMs have 24-hour unrestricted access to on-site construction offices and areas to conduct security inspections.
- Contractor must provide a list of personnel working on or within the SCIF/SAPF
  - SSM will verify information provided on construction personnel
  - Denied workers will not be allowed to enter SCIF/SAPF
- Construction site security and access control must include effective entry and exit screening and search procedures. A single entry point should be established to aid in this process.
  - Physical security barriers shall be erected to deny unauthorized access to the controlled areas.
  - Cell phones may be prohibited.

## SCIF and SAPF Construction

### Secure Storage of Construction Materials

- Materials specifically destined for SCIF/SAPF construction may have to be stored in a secure storage area (SSA)
- Some materials specifically destined for SCIF/SAPF construction may have to be delivered prior to use to allow time for the SSM to inspect materials
- Only personnel vetted by the SSM will have access to the stored materials.



## SCIF and SAPF Construction

### Other Security Documents

- **Fixed Facility Checklist (FFC)**
  - Identifies what built-in elements are required to meet security needs
  - Risk mitigation measures to building elements: (windows, building systems, wall construction, floor and ceiling, doors, intrusion detection systems, telecomm)
  - Prepared by SSM with coordination designers/engineers, CMs, or designer of record
- **TEMPEST Checklist**
  - Redaction portion may be available to provide building elements required for risk mitigation (i.e. shielding)
  - Prepared by the SSM and submitted to the CTTA

UNCLASSIFIED (Until Filled In)

**Section D: SCIF Doors**

The following door type definitions are referenced in this section (Reference 3E)

a. Primary door: A SCIF perimeter door employed as the main entrance.

b. Secondary door: A SCIF perimeter door employed as both an entry and egress door that is not the Primary door.

c. Emergency egress-only door: A SCIF perimeter door employed as an emergency egress door with no entry capability.

1. Is the Primary door equipped with the following:

a. A CSA-approved pedestrian door deadbolt meeting the most current version of Federal Specification FF-L-2740. NOTE: Personally AG approved FF-L-2740 integrated locking hardware may be used. Additional standards and flush-mounted dead bolts are prohibited. ☐ Yes ☐ No  
If NO, explain:

b. A combination lock meeting the most current version of Federal Specification FF-L-2740. NOTE: Personally AG approved combination lock or deadbolt lock type may be used. ☐ Yes ☐ No  
If NO, explain:

c. Is an approved access control device installed? ☐ Yes ☐ No  
If NO, explain:

d. Is there a by-pass keyway for use in the event of an access control system failure? ☐ Yes ☐ No  
If NO, explain:

2. Secondary Door Criteria

3. Heating, Ventilation and Air Conditioning (HVAC) Systems; Water Pipes; Gas Pipes; Sprinkler Systems, etc.

Provide a diagram indicating their exits from the SCIF. If there are any grounding mitigations, please indicate on the diagram. Are wave guides installed? ☐ Yes ☐ No

Do ventilation ducts/pipes penetrate the SCIF perimeter? (Ref. Chapter 3G) ☐ Yes ☐ No

(Describe each HVAC System or pipe. Please explain in detail: path, connections in/outside of the SCIF, composition of the vent or pipe, size, accessibility, etc.)

Are there any grounding mitigations? ☐ Yes ☐ No  
If Yes, describe:

Are any wave guides installed? ☐ Yes ☐ No  
If Yes, describe:

## SCIF and SAPF Construction

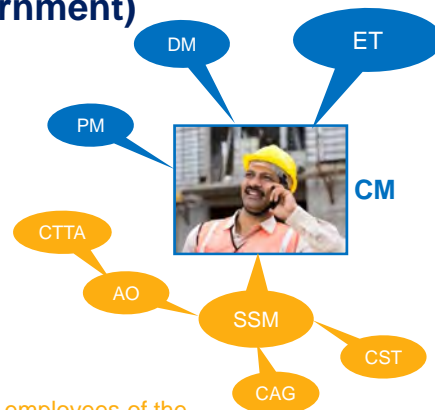
### Construction Team Members (government)

#### ➤ NAVFAC

- Construction Manager (CM)
- Engineering Technician (ET)
- Design Manager (DM)
- Project Manager (PM)

#### ➤ Accreditation Authority

- Accrediting Official (AO)
- Site Security Manager (SSM)
- Certified TEMPEST Technical Authority (CTTA)
- Construction Surveillance Technician (CST)
- Cleared American Guards (CAG)
- To avoid conflict of interest, above personnel cannot be employees of the construction contractor, employees of or contracted by the DoD construction agent



## SCIF and SAPF Construction

### Team Member Roles and Responsibilities

#### ➤ Construction Manager (CM)

- Reviews NAVFACINST 4700.1A
- Reviews Chapters 1 & 4 of UFC 4-010-05
- Reviews RFP or Plans and Specifications for SCIF/SAPF requirements
- Have SSM attend the PAK or PRECON. Discuss procedures for inspection and accreditation procedures including site security requirements and quality control inspections
- Receives approved Construction Security Plan from SSM
- Regularly communicates with the Site Security Manager (SSM)
- Forwards approved technical submittals to SSM for information and inclusion in the Fixed Facility Checklist (FFC) for accreditation.
- Ensures construction and inspections are performed in accordance with the final design and contract specifications

## SCIF and SAPF Construction

### Team Member Roles and Responsibilities (cont)

#### ➤ Engineering Technician (ET)

- Reviews Chapters 1 & 4 of UFC 4-010-05
- Reviews RFP or Plans and Specifications for SCIF/SAPF requirements
- Reviews UFGS 01 45 00.00 20 or 01 45 00.05 20 Quality Control for inspection requirements for SCIF/SAPF
- Performs Quality Assurance during construction
- Coordinate and accompany Site Security Manager on periodic inspections
- Ensures QC Manager is documenting periodic inspections
- Participates in Acceptance Inspections

## SCIF and SAPF Construction

### Team Member Roles and Responsibilities (cont)

#### ➤ Project Manager (PM)

- Reviews NAVFACINST 4700.1A
- Reviews UFC 4-010-05
- Responsible for planning, design and gathering project requirements
- Working with the NAVFAC Facility Planner, ensures supported command has concept approval for SCIF prior to finalizing planning documents
- Ensures supported command has appointed a Site Security Manager and identified the Accrediting Official
- Ensures SSM has completed CSP, preliminary FFC and TEMPEST Checklist.

## SCIF and SAPF Construction

### Team Member Roles and Responsibilities (cont)

#### ➤ Design Manager (DM)

- Reviews NAVFACINST 4700.1A
- Reviews Chapters 1, 3 & 4 of UFC 4-010-05
- Responsible for leading or overseeing the design effort ensuring SCIF/SAPF requirements are appropriately included
- Provides related design support during construction

## SCIF and SAPF Construction

### Team Member Roles and Responsibilities (cont)

#### ➤ Site Security Manager (SSM)

- Appointed by the Supported Command or AO, not a construction contractor or NAVFAC employee or contractor
- Responsible for security aspects during construction ensuring procedures to control site access are implemented
- Prepares and submits Construction Security Plan and Fixed Facility Checklist for AO approval
- Performs periodic inspections during construction
  - Inspections should be performed jointly with ET and QC Manager
- Receives technical submittals associated with SCIF/SAPF from CM for information and inclusion in FFC for accreditation
- May take photo record of construction progress

## SCIF and SAPF Construction

### Team Member Roles and Responsibilities (cont)

#### ➤ Accrediting Official (AO)

- Approval authority for SCIF/SAPF security requirements and accreditation. The AO is not a NAVFAC or construction contractor employee
- Approves Construction Security Plan
- Approves Fixed Facility Checklist (FFC)
- Approves TEMPEST Countermeasure Review
- Approves design concept
- Provides Accreditation to operate

## SCIF and SAPF Construction

### Team Member Roles and Responsibilities (cont)

#### ➤ Certified TEMPEST Technical Authority (CTTA)

- Authority to establish TEMPEST Countermeasures for accreditation.
- Each project requires a TEMPEST countermeasures review (TCR), performed by the CTTA.
  - The SSM will request a TCR by submitting a TEMPEST addendum (TEMPEST Checklist) for review.
  - Based on the results of the TCR, the CTTA will determine the most cost-effective countermeasures and will document these requirements in writing
- Normally, facilities located on military installations within the United States do not require additional countermeasures beyond implementing RED/BLACK separation guidance.

## SCIF and SAPF Construction

### Team Member Roles and Responsibilities (cont)

#### ➤ Construction Surveillance Technician (CST)

- Normally not required for projects within the U.S. and its territories
- When required by the CSP, CSTs are specially trained in surveillance and the construction trade to monitor construction activities to deter technical penetrations and thwart implanted technical collection devices.
- CSTs supplement site access controls, implement screening and inspection procedures in accordance with the Construction Security Plan (CSP)
- Not a NAVFAC or construction contractor employee

## SCIF and SAPF Construction

### Team Member Roles and Responsibilities (cont)

#### ➤ Cleared America Guard (CAG)

- Normally not required for projects within the U.S. and its territories
- Possesses a U.S. SECRET clearance
- Performs access-control functions at all vehicle and pedestrian entrances to the site except as otherwise noted in the CSP.
- Screens all non-cleared workers, vehicles, and equipment entering or exiting the site.
- Conducts random inspections of site areas to ensure no prohibited materials have been brought on to the site.
- Not a NAVFAC or construction contractor employee

## SCIF and SAPF Construction

### Construction Quality Management

#### ➤ Required SCIF/SAPF Inspections (Per UFGS 01 45 00.00 20)

- Periodic Inspections
- Preliminary Inspection
- Acceptance Testing and Sound Attenuation
- Acceptance Testing and for Electronic Security Systems
- Final Inspection



## SCIF and SAPF Construction

### Required SCIF/SAPF Inspections

#### ➤ Periodic Inspection

- Regular inspections performed a minimum of once every two weeks by QC Manager focusing on SCIF/SAPF perimeter construction
- Performed jointly with QC Manager, ET, and Site Security Manager
- Inspection frequency increases to weekly within 30 days of planned acceptance testing
- Performed with specific emphasis on the construction of the secure area perimeter focus on sound rated assemblies, perimeter penetrations, perimeter doors, electronic security system, man-bar installation, inspection ports and TEMPEST countermeasures
- Inspections documented in daily QC Report

## SCIF and SAPF Construction

### Periodic Inspections

#### • Perimeter construction

- Wall goes from floor slab (true floor) to underside of floor or roof deck (true ceiling)
- Acoustic insulation is securely fastened
- Top and bottom of walls are sealed (both sides) with acoustical foam or sealant
- Wall uniformly finished and painted from true floor to true ceiling



Check the metal thickness!  
All perimeter metal partitions must be a minimum 16 gauge (54 mil)



## SCIF and SAPF Construction

### Periodic Inspections

#### • Gypsum Wallboard installation

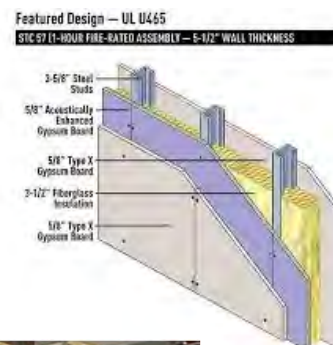
- Standard STC 45 wall has three layers of 5/8 inch (15.9 mm) gypsum wallboard (GWB). One layer on the uncontrolled side (outside) of the protected area and two layers on the controlled side (interior).
- Standard STC 50 wall indicates four layers. Two layers on the uncontrolled side (outside) of the protected area and two layers on the controlled side (interior).
- UFGS 09 29 00 GYPSUM BOARD requires submittal for sound rated assemblies that includes material and installation instructions.

## SCIF and SAPF Construction

### Periodic Inspections

#### • GWB Installation

- Stagger joints on the opposite sides of a partition so they are not on the same stud.
- Install the GWB so that the joints of the face layer are offset from the joints of the base layer.
- Joints in the face layer that are parallel to the framing members must fall over the framing members and offset from the base layer.
- Exception: When using adhesive between the layers, joints in the face layer do not have to occur over the framing member



#### Enhanced Wall

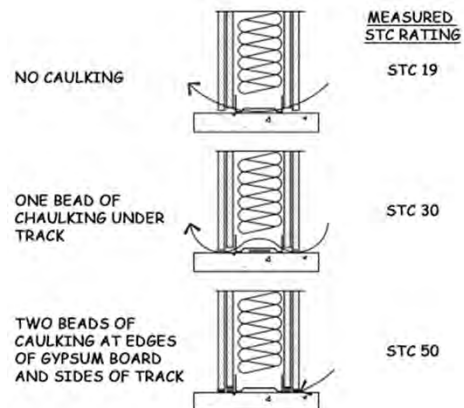
- Three-quarter inch mesh, # 9 (10 gauge) expanded metal

## SCIF and SAPF Construction

### Periodic Inspections

#### • Partition Sealants

- Minimum – Continuous sealant each side of track
- Better – Continuous sealant each side of track and bottom of track
- Best – Continuous sealant bottom of track, multiple sealant beads (one on each side of track and at finish wall board)



Continuous sealant shown at sill, but same application occurs at top of partition / underside of decking/slab

## SCIF and SAPF Construction



### Periodic Inspections

#### • Utilities @ Perimeter

- Examples: Power, telecommunications, signal, plumbing
- Surface mounted to maintain perimeter acoustical partition rating and minimize RF shielding penetrations (where RF shielding is required)

Utility can be recessed into a furred wall

- Furred wall terminates at false ceiling
- GWB can be 3/8" thick

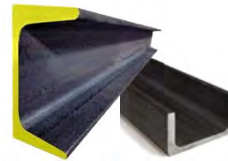
## SCIF and SAPF Construction

### Periodic Inspections

#### • Perimeter Doors

- **UFGS 08 34 73 Sound Control Door Assemblies requires:**
  - ASTM E 90 laboratory Test Report
  - ASTM E 336 field Test Report
- **Fill jamb with acoustical insulation or sound deadening material**
- **Door assemblies sealed with acoustical foam or sealant (both sides) and finished to match wall**
- **Door hardware (locks, closers, and hinges)**
- **Install in door assembly in accordance with UFGS 08 34 73 and manufacturer's instructions.**

Due to weight of acoustical doors – steel structure components must be used for door anchorage



For acoustics  
Use Structural C or U Channel in lieu of tubing

## SCIF and SAPF Construction

### Periodic Inspections

#### • Perimeter Penetrations

- Sealed (both sides) with acoustical foam or sealant
- Finished to match wall
- Metallic penetrations at perimeter (non-conductive break or grounded at the interior perimeter)
- Man-bar installation
- Inspection ports



#### NOTE!

- Utilities servicing areas other than the SCIF/SAPF cannot transit through the SCIF/SAPF without AO approval
- Single point entry for electrical
- Conduits for expansion can be done if filled with acoustical sealant and capped.



## SCIF and SAPF Construction

### Periodic Inspections

- The minimum TEMPEST Countermeasure is the **RED/BLACK** concept:
  - All equipment, wirelines, components, and systems that process NSI are considered **RED**.
  - All equipment, wirelines, components, and systems that process encrypted NSI and non-NSI are considered **BLACK**.
  - The **RED/BLACK** concept is utilized to establish minimum guidance for physical separation to decrease the probability that electromagnetic emissions from **RED** devices might couple to **BLACK** systems.
- **Red/Black line separation guidelines**
  - 39 inches if neither line is in ferrous conduit
  - 9 inches if one line is in ferrous conduit
  - 3 inches if both lines are in ferrous conduit
  - 0 inches if one line is optical fiber

## SCIF and SAPF Construction

### Periodic Inspections

- **Other TEMPEST Countermeasures documented in TCR.**
  - **RF Shielding**
    - » RF shielding protects the space from compromising emanations. When directed, provide RF mitigation for walls, ceilings, floors, and all penetrations including doors and windows. RF mitigation may also include waveguides, power line and telecommunication line filters.
  - **Signal Line Isolators and Filters**
    - » **BLACK** lines and other electrically conductive materials that egress the inspectable space are potential carriers of Compromising Emanations (CE) that can inadvertently couple to the Red lines. Various signal line isolation techniques can be used to protect the signal line, the distribution system or other fortuitous conductors from conducting compromising signals beyond secure areas.
    - » Signal line isolation should only be considered if the minimum separation recommendations cannot be met.

## SCIF and SAPF Construction

### Periodic Inspections

- RF mitigation shall be provided at the direction of the CTTA when electronic processing does not provide adequate RF mitigation.
  - Provide foil backed GWB or R-Foil in accordance with *Best Practices Guideline for Architectural Radio Frequency Shielding*.
    - The use of R-foil or aluminum foil backed gypsum is required if the facility does not provide adequate RF attenuation at the inspectable space boundary and recommended for all other applications.
    - When R-foil is employed it shall be placed inside the space between the first and second layer of gypsum board.
    - Stagger joints



## SCIF and SAPF Construction

### Periodic Inspections

- RF Shielded Doors
  - Doors come pre-assembled (Frames, door leaf(s), hardware)
  - Special gasket / weather-stripping to ensure continuity of shielding when closed
  - Look at door system submittal
    - Knife edge difficult to meet accessibility requirements at sill
    - Pneumatic types typically meet egress requirements



Knife Edge Door:  
Not ABA Compliant

## SCIF and SAPF Construction

### Required SCIF/SAPF Inspections

#### ➤ Preliminary Inspection

- Performed jointly by the QC Manager, ET, and Site Security Manager after construction is complete prior to acceptance testing
- Requires (14) calendar day advance notification from contractor
- Includes acceptance testing for Sound Attenuation for doors, perimeter walls (when required) and Electronic Security Systems
- Contractor must document deficiencies and compile a Government punch list including estimated completion dates for each punch list item, and deficiencies must be corrected before scheduling a Final Acceptance Inspection

## SCIF and SAPF Construction

### Required SCIF/SAPF Inspections

#### ➤ Acceptance Testing for Sound Attenuation

- Performed by construction contractor as part of Preliminary Testing and witnessed by Site Security Manager and Government ET or CM
- Testing performed in accordance with ASTM E336 as required by:
  - UFGS 08 34 73 SOUND CONTROL DOOR ASSEMBLIES
  - UFGS 09 29 00 GYPSUM BOARD (field testing when required)
- Deficiencies identified must be included in the Government SCIF/SAPF punch list and corrected prior to the Final Inspection
- Failure to successfully test sound attenuation will prevent accreditation and require mitigation
  - Rework
  - Last resort: customer funded sound generators

## SCIF and SAPF Construction

### Required SCIF/SAPF Inspections

#### ➤ Acceptance Testing for Electronic Security Systems

- Performed by construction contractor as part of Preliminary Testing and witnessed by Site Security Manager and Government ET or CM
- Testing performed in accordance with:
  - UFGS 28 08 00 ELECTRONIC SECURITY SYSTEM ACCEPTANCE TESTING
  - Approved ESS Test Plan
- Deficiencies identified must be included in the Government SCIF/SAPF punch list and corrected prior to the Final Inspection
- Failure to successfully test electronic security systems will prevent accreditation and require mitigation.
  - Rework

## SCIF and SAPF Construction

### Required SCIF/SAPF Inspections

#### ➤ Final Inspection

- Performed only after all required acceptance testing is complete and deficiencies corrected
- Requires (14) calendar day advance notification from contractor
- Final SCIF/SAPF Inspection should be performed separately from the Final inspection of the rest of the facility unless entire facility is SCIF/SAPF
- Contractor attendees include QC Manager and Superintendent
- Government attendees include ET, CM, and Site Security Manager. Other representatives may also attend.



## SCIF and SAPF Construction

### Lessons Learned

- ✓ Accreditation takes the entire team; Contractor, Quality Control Manager and Government Quality Assurance representatives and the SSM to ensure work is completed in accordance with the contract documents.
- ✓ The following few slides show a few examples of what to do and what to watch out for.
- ✓ Any errors may lead to delays with accreditation



## SCIF and SAPF Construction

### Lessons Learned

- Top and bottom of walls are sealed (both sides) with acoustical foam or sealant



- What's wrong with this Picture? Remember the Sound Path Example.
  - Minimum – Continuous bead of sealant on each side of track
  - Better – Continuous sealant each side of track and bottom of track



## SCIF and SAPF Construction

### Lessons Learned

- Acoustic insulation is securely fastened



## SCIF and SAPF Construction

### Lessons Learned

- Joints are tight with no gaps.
- Joints staggered on the opposite sides of a partition so they are not on the same stud.
- Joints of the face layer are offset from the joints of the base layer.
- Joints in the face layer that are parallel to the framing members must fall over the framing members and offset from the base layer.



## SCIF and SAPF Construction Lessons Learned

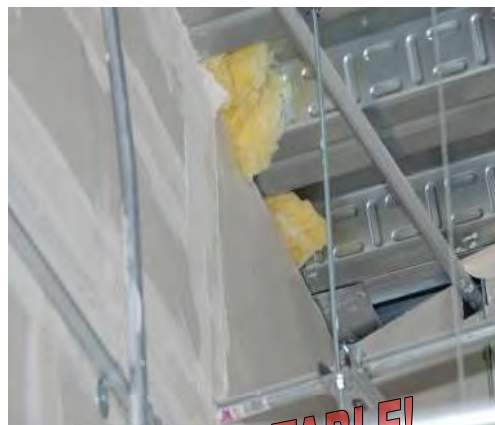
- Wall goes from floor slab (true floor) to underside of floor or roof deck (true ceiling)
- Wall uniformly finished and painted from true floor to true ceiling



## SCIF and SAPF Construction

### Lessons Learned

- True floor to true ceiling?
- Uniformly painted and finished from true floor to true ceiling?
- Acoustically sealed?



**UNACCEPTABLE!**

## SCIF and SAPF Construction

### Lessons Learned

- Penetrations acoustically sealed on both sides?
- Wall uniformly finished and painted from true floor to true ceiling?



- Still needs to be uniformly finished and painted from true floor to true ceiling.

## SCIF and SAPF Construction

### Lessons Learned

- Wall uniformly painted and finished from true floor to true ceiling?
- Penetration acoustically sealed on both sides?



## SCIF and SAPF Construction

### Lessons Learned

- Duct openings that penetrate the SCIF/SAPF perimeter wall and exceed 96 in<sup>2</sup> must be protected
  - If one dimension of the penetration measures less than 6 inches, bars or grills are not required.
  - Protection could be:
    - Manbars
    - Metal Grill
    - Welded Wire Fabric
    - Metal Sound Baffle
    - Waveguide

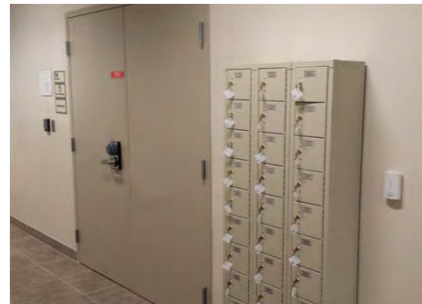


## SCIF and SAPF Construction

### Lessons Learned

#### ➤ Primary Entry Door

- Deadlocking panic hardware (FF-L-2890)
- Combination lock meeting Federal Specification FF-L 2740A
- Equipped with a key override in the event of a malfunction or loss of power to the automated access control device.
- Recessed Personal Electronic Device (PED) cabinets are prohibited on perimeter walls.
- PED cabinets cannot be located within 10 ft. (3 m) of equipment processing unencrypted NSI.



## SCIF and SAPF Construction

### Quality Verification

- Emergency Exit Doors
  - Exterior hardware is prohibited
  - Deadlocking panic hardware
  - Alarmed 24/7 with local annunciation



## SCIF and SAPF Construction

### Summary

- ✓ Ensure SSM and QC perform joint Quality Control inspections
- ✓ Ensure acceptance testing is performed as required
- ✓ Wall are finished and painted and go from true floor to true ceiling.
- ✓ Gaps around penetration in perimeter walls are prohibited
- ✓ Excess penetrations in perimeter walls must be avoided
- ✓ Large ducts penetrating perimeter may require physical protection such as manbars
- ✓ Access panels that permit visual inspections of duct are required on underside of ducting
- ✓ Emergency exit doors must not have exterior hardware

## **Knowledge Check Questions**

5 Questions

### **Question #1**

- (1) Who is responsible for preparing the Construction Security Plan (CSP)?
- A. Construction Manager
  - B. Construction Contractor
  - C. Site Security Manager
  - D. Accrediting Official

## SCIF and SAPF Construction

### Question #2

- (2) When is it acceptable for either the Construction Manager (CM) or Contractor Superintendent to also serve as the Site Security Manager (SSM)?
- A. Never
  - B. When appointed by the Accrediting Official
  - C. When delegated by the Site Security Manager
  - D. When the project is outside the U.S.

## SCIF and SAPF Construction

### Question #3

- (3) Where are the contract requirements located for SCIF/SAPF Quality Control inspections?
- A. UFC 4-010-05 Sensitive Compartmented Information Facilities Planning, Design and Construction
  - B. ICD/IDS 705 Technical Specifications for Construction and Management of Sensitive Compartmented Information Facilities
  - C. B-1.4.4.3 Construction Quality Management
  - D. UFGS 01 45 00.00 20 and UFGS 01 45 00.05 20

## SCIF and SAPF Construction

### Question #4

- (4) Changes made to the Construction Security Plan (CSP) after award could potentially lead to a contract modification resulting in additional time and money.
- A. True
  - B. False

## SCIF and SAPF Construction

### Question #5

- (5) When required, who is responsible for the Construction Surveillance Technicians?
- A. Construction Contractor
  - B. Site Security Manager
  - C. NAVFAC
  - D. Installation Commander





**QUESTIONS?**