AIT Complex
Facility Design Team

Mary Ellen McCrillis
HQDA, G-3/5/7 (Proponent)

Dolat G. Desai
OACSIM (Co-Chair)

David Carr
IMCOM (Housing)

Chip Williams
TRADOC, G-4

Goldie Bailey
ACES

Dwain Scott, R.L.A.
USACE, COS
AIT Barracks & Support Facilities
(Fort Worth District)

William J. Lawrence, R.A.
USACE, Architecture Section
(Fort Worth District)

David Gary, P.E.
USACE, COS Dining Facility
(Norfolk District)

5-STORY AIT B/COF – Ft. Lee, VA

1300 PN DFAC – Fort Jackson, SC
Redesigned Living Quarters to address reduced Peak Design Capacity

1. In lieu of 100% of the Living Quarters designed to accommodate the Peak Design Capacity (PDC) of 3 Occupants per Sleeping Area only 50% of the Living Quarters will accommodate PDC.

2. Relocation of structural Grid lines removes column from built-in wardrobe closets.

3. Length of the Vanity Counter extended from 3'-0" to 4'-0".

4. Width of Toilet/Shower Room extended to provide more separation between toilet and shower.

Design Criteria

- **Base Design Capacity (BDC)**
  \[ \text{BDC} = 2 \text{ Occupants per Sleeping Area in 50\% of the Living Quarters} \]

- **Peak Design Capacity (PDC)**
  \[ \text{PDC} = 3 \text{ Occupants per Sleeping Area in 50\% of the Living Quarters} \]

- **Allocated Space per Occupant**
  - **Base Design Capacity (BDC)**: 90 NSF
  - **Peak Design Capacity (PDC)**: 72 NSF
Grouping of Laundry, Day Rooms, and Computer Learning Lab to create Trainee Support Modules

1. Central location of the Trainee Support Module among the Living Quarters provides improved trainee access to laundry rooms and recreational spaces.

2. Relocation of the laundry and recreational spaces from the building’s central core to the housing wings allows for natural day-lighting.

3. Two Laundry Rooms provide gender separation for enhanced safety and security.

4. Two Day Rooms provide for separation of trainee recreational uses, Media (Quiet) and Games (Noisy).

5. Corridor width increased to minimize congestion at entrances to laundry rooms and trainee recreational spaces.
AIT Complex
B/COF Standard Design

Reorganization of Administrative and Training/Instructional Areas to create a Training and Instruction Module

1. Company COFs have been redesigned and remain at the front of the building. COFs are adjacent yet separated by and accessible from a single main entrance to the building.

2. Placement of the CQ Station to maximize visual site lines for enhanced safety and security.

3. Adjacency of Multi-Purpose/Instructional Areas for each Company provide maximum flexibility through the use of operable walls to partition instructional areas.
**AIT Complex**

**B/COF Proposed Standard Design**

**Building footprint options**

**Standardization and Sustainability**

1. The Standardization of Building Program Components advances the concept of 'Standardization'.

2. The Trainee Support Module can be reorganized to serve as a transitional space to support multiple 'Building Organizational Concepts'.

3. These 'Building Organizational Concepts' will provide Installations with the ability to consider multiple site configurations in the development of their Installation Master Plan.

4. This additional level of 'Standardization' will provide the opportunity to select a 'Building Organization Concept' and Site that consider building orientation and placement minimizing site development costs while addressing sustainability requirements to maximize daylighting and energy efficiencies.

---

**Building Organizational Concept 'A'**

**Building Organizational Concept 'B'**

**Building Organizational Concept 'C'**
Proposed Floor Plan
(Second through Fifth Floor)
AIT Complex
5-Story B/COF – Proposed Standard Design

Massing Model
AIT Complex
3-Story B/COF - Standard Design

Proposed Floor Plan (First Floor)

LEGEND
- CIRCULATION
- COMMAND
- SERVICE
- SLEEPING
- STORAGE
- TRAINING

Main Entrance
Main Entrance
Proposed Floor Plan
(Second Floor)
Proposed Floor Plan

## Design Criteria

- **Base Design Capacity (BDC)**
  
  BDC = 2 Occupants per Sleeping Area in 50% of the Living Quarters

- **Peak Design Capacity (PDC)**
  
  PDC = 3 Occupants per Sleeping Area in 50% of the Living Quarters

- **Allocated Space per Occupant**
  
  - Base Design Capacity (BDC): 90 NSF
  - Peak Design Capacity (PDC): 72 NSF

- **Authorized Furnishings per PN**
  
  - A. One Bed (39" x 84")
  - B. One Night Stand (18" x 18")
  - C. One Desk (24" x 36")
  - D. One Chair (24" x 24")

- **Authorized Personal Storage**
  
  - E. Built-In Wardrobe Closet (24" x 36")
Grouping of individual rooms to create Living Quarters Modules

1. Standardization of the 14-Room and 16-Room Living Quarters Modules provides symmetry and balance of building’s massing with a more cost-effective building/roof structure.

2. Placement of two pair of cross-corridor doors and internal stairs on the upper floors of each wing within the 14-Room Living Quarters Modules provides more flexibility for gender separation and enhanced Safety and Security.

Number of Female Occupants per Floor:
- 1 Flr  18 BDC to 24 PDC  6.0% to 6.4%
- 2 Flrs 36 BDC to 48 PDC  12.0% to 12.8%
- 3 Flrs 54 BDC to 72 PDC  18.0% to 19.2%
- 4 Flrs 72 BDC to 96 PDC  24.0% to 25.6%
Standardization and Sustainability

1. The Standardization of Building Program Components advances the concept of 'Standardization'.

2. This Module can be reorganized to serve as a transitional space to support multiple 'Building Organizational Concepts'.

3. These 'Building Organizational Concepts' will provide Installations with the ability to consider multiple site configurations in the development of their Installation Master Plan.

4. This additional level of 'Standardization' will provide the opportunity to select a 'Building Organization Concept' and Site that consider building orientation and placement minimizing site development costs while addressing sustainability requirements to maximize day-lighting and energy efficiencies.
Reorganization of the Company Multi-Purpose Rooms to provide adjacency of Instructional Areas within the Training and Instruction Module

1. Provides maximum flexibility for instruction and assembly

- Multi-Purpose Room
  - Alternative Seating Plan (300 PN in Chairs w/tablet arms)
  - Drop-down Projection Screens (2 locations)
  - Instructor's Podium (3 locations)
  - Seating Capacity 300 PN
  - Standing Muster 600 PN

Training and Instruction Module

Main Entrance