

**TIF Tour Industry Day
N00039-16-R-0024 CEnIIC
1 December 2016**

Foyer:

Welcome to building 1648, first a few ground rules before we walk into the classified area of the building: you will be signed in as a tour, therefore I will not ask you to sign the logbook individually but I do ask that you still swipe your card on the reader. As previously mentioned, the floor is operated at the open secret level, so if you have any electronic devices, you are asked to use the lockers here in the lobby before entering.

Inside the door and then walking toward EPF:

A converted warehouse, the building has been operational for a little over 15 years and for the first 12 years, it was exclusively used for SCN integration. The building has been expanded twice and we now have almost 40,000 sq. ft. of raised deck integration space. In general, the building is still configured for the 7 original tenants (2 CVNs, 2 LPDs, 2 T-AKEs and LHD-8) but with the down turn in shipbuilding, we have filled the space with other LANT projects that were looking for space on a rotational basis. Today, on top of a couple of SCN projects, the facility is used for CANES Software development, Army Water Craft integration, VTC integration, Computer Network Defense production, a FMS case, Coast Guard among other short term projects. As stated in the briefing this morning, we have approximately 45,000 sq. ft. controlled integration space including a limited Material Management area, it operates at the SECRET level, and as you can see has raised deck flooring with existing wire ways grids and each section of the building has permanent power panels. For the SCN community, our job is to design, integrate, test and deliver interoperable C4I system of system capabilities to the Navy Force-level, Unit-level and MSC/auxiliary surface ships during new construction with the purpose of this facility as being the mechanism to validate our design prior to installation. In general, we “mock up” the space as it will be installed onboard ship to validate GFI provided to the shipbuilder during detailed design, production of Non 2Z equipment, intra compartment cables and associated integration of our EXCOM design as well as verify interoperability of our design. Additionally, it provides a level of change management within government controls prior to the equipment delivery. As you walked in, you probably noticed the limited number of installed antennas for testing as well as two antenna platforms that can be used to house “platform specific” antennas. Additionally, we have access to the DREN via a 100 Mbs network connection. The goal of the facility is to integrate and test as much of the suite as possible prior to installation.

We have integrated 43 platforms (36 in support of PMW 760) in this facility and although the SCN workload is currently light, the future is looking brighter for SCN integration and as briefed this morning, we are expecting to perform integration efforts in this building for LPD-28, Frigate, T-AO, T-ATS and LCU on this contract. Today we will walk thru the EPF 9 and a quick tour of the material management area.

EPF 9 TIF

We do have a few pictures on the wall if you are not familiar with the Platform and if you are local, many days you can see on in the yards down at Detyens. The EPF is a high-speed, shallow draft surface vessel that's able to rapidly transport medium payloads of cargo and personnel over inter-theater distances, reconfigure and rearrange loads when missions change and ingress to or egress from port facilities that are too austere or shallow for other larger auxiliary ships. EPF is a non-combatant vessel, which will operate in permissive environments or in higher threat environments under the protection of combatant vessels and other joint forces.

PROGRAM FACTS

1. Expected applicable Hull
 - a. EPD 11 Post-delivery support
 - b. EPF 12
2. Prime Shipyard
 - a. Austal USA in Mobile, AL
3. Phase/Duration
 - a. Phase 3 [TIF]: Typical integration scheduled for a 10 month duration
 - b. Phase 4 [Shipboard]: Typical installation scheduled for a 9 month duration
 - c. Phase 5 [Post Delivery Support]: We have a requirement to support the ship 12 month after ship's delivery
4. TIF Layout
 - a. Size: 2,200 Sq. Ft
 - b. Primes Space: Rack and cable tray locations are the same as they are on the ship
 - c. Residual blue tape on the floor is actual location of bulkheads onboard ship
5. Remote Spaces: Not mocked up Size of C4I Suite [FLT II]
 - a. Total Racks: 12
 - i. Charleston Built Racks: 8
 - ii. Pushed Racks: 4
6. Systems/Capability [FLT II]
 - a. Frequency Distribution
 - b. Tactical Variant Switch (TVS)/Tactical Phone
 - c. Voice Encryption
 - d. Data Encryption
 - e. UHF/VHF Line of Sight (LOS)
 - f. UHF Satellite Communication (SATCOM)
 - g. SINCGARS
 - h. HAVEQUICK
 - i. ADNS
 - j. CBSP
 - k. Tactical Computer Group
 - l. ISNS – NIPR
 - m. ISNS - SIPR
7. Current Terminations [FLT I]
 - a. TIF:
 - i. Total: 1,219 terms
 1. Cables: 864 terms
 2. Equipment: 355 terms
 - b. Ship:
 - i. Total: 748 terms
 1. Cables: 387 terms
 2. Equipment: 361 terms
8. Cable Types
 - a. Fiber
 - b. Coaxial
 - c. CAT 5
 - d. Twisted Pair
9. Testing [FLT I]
 - a. TIF:
 - i. Stage 1A Tests: 20
 - ii. Stage 3 Tests: 7
 - iii. Stage 4 Tests: 2
 - iv. Total Tests: 29
 - b. Shipboard:
 - i. Stage 3 Tests: 7
 - ii. Stage 4 Tests: 2
 - iii. Stage 5 Tests: 1

- iv. Stage 6 Tests 1
- v. Stage 7 Tests 1
- vi. Total Tests: 12

10. INSURV

- a. During acceptance trials the PMW 760/SSC LANT/Prime is responsible for demonstrating equipment to the INSURV. Typically the Prime will demonstrate the C4I equipment with Government schedule coordination and oversight.

11. Skill Sets required:

- a. TIF
 - i. Cable Manufacturing [Includes Fiber Optic Certification]
 - ii. Rack Integration
 - iii. Cable Integration
 - iv. Equipment Verification/Testing
 - v. Equipment Verification/Testing Trouble Shooting
- b. Shipboard
 - i. Cable Manufacturing [Includes Fiber Optic Certification]
 - ii. Cable Weatherization
 - iii. Rack Integration
 - iv. Cable Integration
 - v. Equipment Verification/Testing
 - vi. Equipment Verification/Testing Trouble Shooting

Material Management Area

We have 4,720 sq. ft. of space reserved for material management for the primary purpose of receiving equipment, inspecting it, moving it to the integration floor, supporting it and finally “packing it out” in preparation for shipment. We have a team of 4 contractors with Government oversight that provide:

- a. Program Of Record (POR) and Non-POR system/equipment receipt and inspection
- b. Material receipt report
- c. CMPro entry/issue
- d. Material Discrepancy Reports (MDR)
- e. Test equipment service (SSC-LANT will be responsible to de-conflict any test equipment issues i.e. multiple platforms requiring the same equipment, coordinating calibration, etc)
- f. Crypto service
- g. Pack out/shipping service/incidental material

The Warehouse Management System (WMS) is CM Pro and we currently have 3,590 line items in our inventory supporting 29 separate programs. As you can see we have three vertical lifts and one 15 shelf cable carousel. The vertical lift provides ~100 pallets of space and the cable carousel provides ~ 55 pallets of cable. These units do not replace the Command requirement for long term storage of equipment but are used for quick turnaround items and consumables. Shipments generated using CMPro and tracked through the Transportation Control Number (TCN) module with a DD-1149 generated as the shipping document. The Government is responsible for coordinating and paying for the transportation/shipment of the Radio Communications Suite (RCS) from building 1648 to the respective shipyard for installation. For TIF/System Pack out we are using TIIRF (Transaction Inventory Item Record Form) card for Configuration Audit purposes (System breakdown of equipment within a rack). Additionally, we are managing a pool of test equipment for use here in the facility as well as onboard ship. Today we have a pool of 257 components and use calibration services through Joint Base Charleston as well as local vendors. Occasionally we will ask the prime to support us by getting equipment calibrated.