

## **Production Services Support Facility**

### **PHNSY & IMF, Joint Base Pearl Harbor-Hickam**

### **Oahu, Hawaii**

### **November 2012**

**N**aval Facilities Engineering Command (NAVFAC) Hawaii was the Navy's Administrative Contracting Office for the new Production Services Support Facility for Pearl Harbor Naval Shipyard & Intermediate Maintenance Facility (PHNSY&IMF), located on Joint Base Pearl Harbor-Hickam (JBPHH).

The new facility was designed to optimize efficiency by consolidating related functions into a single, two-story permanent structure, creating a safe, secure and all-weather working environment for staff. Completion of the new facility will assist the Shipyard's production shops and engineering teams to more efficiently perform critical maintenance on surface ships and submarines of the Navy's 21<sup>st</sup> Century fleet.



*New Production Services Support Facility Building #1916, located next to Dry Dock #1.*

#### **Contract Award**

NAVFAC Hawaii awarded this project, P-307, to Manson-Nan Hawaii, Joint Venture, on Sept. 29, 2010 for \$15,850,032. Construction officially began in August 2011 with beneficial occupancy occurring 15 months later in November 2012. Project costs totaled \$18 million.

#### **History/Background**

The location of the Production Services Support Facility, within the PHNSY/IMF Controlled Industrial Area (CIA), is important due to historical events in the construction of the Shipyard's Dry Dock #1, which is located adjacent to the site of the new building.

In exchange for Hawaii's exportation of sugar to the United State duty-free, King David Kalakaua granted the U.S. exclusive rights to establish a coaling and repair station at Pearl Harbor. On May 13, 1908, Congress passed an Act officially creating Pearl Harbor Navy Yard, Territory of Hawaii, and authorized nearly \$3 million to help build it. Pearl Harbor's channel and lochs were dredged and enlarged "to admit the largest ships," Navy Yard shops and supply houses were built, and dry dock work on a dock started on September 21, 1909. The project was underway for four years. At its first testing, on Feb. 17, 1913, the entire dry dock structure collapsed within four minutes and was completely destroyed.

Experts said tremendous water pressure around the outside of the facility and hydraulic-type pressure on the bottom caused the collapse, but some local community members believed the Hawaiian legend that Pearl Harbor was sacred to shark goddess Ka'ahupahau and that she had been disturbed by the construction of the dry dock. When the decision was made to rebuild the dry dock in the same location a year later, a Hawaiian blessing ceremony was held. The dry dock was successfully completed without further incident, officially opened to flooding on August 21, 1919, and has stood the test of time through World War II to present day.

The site of the new Production Services Support Facility lies within an area with many historically significant buildings. As approved by the State of Hawaii Historic Preservation Officer, the exterior of this new structure, where feasible, is compatible with the original 1940-era building design elements.

To make space for this new building, two older buildings, Bldgs. 1449 and S157, were demolished.

### **Project Overview/Specifics**

The new two-story building, assigned #1916, provides a total floor area of approximately 36,685 sq. ft. (The ground floor has 22,045 sq. ft. and second floor, 14,640 sq. ft.).

The building will achieve a sustainable design rating of Leadership in Energy and Environmental Design (LEED) Silver. LEED is an internationally-recognized "green" building certification system, developed by the U.S. Green Building Council (USGBC) in March 2000. It provides building owners and operators a framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.

LEED is a point-based rating system which offers four certification levels for new construction - Certified, Silver, Gold and Platinum. Each level corresponds to the number of credits accrued in five "green" design categories: sustainable sites, water efficiency, energy and atmosphere, materials and resources and indoor environmental quality.

Some of the work spaces Building 1916 includes are: work/production support areas, administration areas, briefing room, secure storage room, nursing station, staging areas, break/lunch room, vending area, restrooms, a satellite tool shop, and an information technology help desk. The building is surrounded by new concrete pavement and infrastructure, including sanitary sewer, storm sewer, water, telecommunications and electrical utilities. Photovoltaic (PV) panels are installed on the building's roof.

Facility services include electrical, lighting, telecommunications, fire sprinklers, fire alarms, mass notification, an elevator, compressed gases, mechanical ventilation in industrial and storage spaces, and air conditioning of production support spaces and second floor administration areas.

## Project Highlights

- Zero Lost Time Mishaps
- Photovoltaic system provides generation of approximately 100 KWH
- Maximizes natural light penetration and natural ventilation in industrial areas
- Provides lunch/break/training room on second floor with room partition designed to maximize flexibility
- Building is surrounded by 2 acres of concrete pavement to facilitate Shipyard operations

## General Timeline

September 29, 2010	Contract awarded to Manson-Nan Hawaii, JV
October 2010 – July 2011	Design Phase
July 6, 2011	Ground Breaking/Blessing Ceremony
August 2011	Construction Commenced
September 2012 – November 2012	Systems Testing/Commissioning
November 21, 2012	Project Completion

For more information, contact  
Denise Emsley, Public Affairs Officer, NAVFAC Hawaii,  
(808) 471-7300, or [denise.emsley@navy.mil](mailto:denise.emsley@navy.mil).

---

### **Naval Facilities Engineering Command: The Facilities and Expeditionary Combat Systems Command**

NAVFAC is the Systems Command that delivers and maintains quality, sustainable facilities, acquires and manages capabilities for the Navy's expeditionary combat forces, provides contingency engineering response, and enables energy security and environmental stewardship. Additional updates and information about NAVFAC can be found on social media sites Facebook and Twitter. Become a Fan at [www.facebook.com/navfac](http://www.facebook.com/navfac) and follow us at [www.twitter.com/navfac](http://www.twitter.com/navfac), or visit our Photostream on Flickr at <http://www.flickr.com/photos/navfac>.