

## **Oceana Naval Air Station Breaks Ground on Base-Wide Energy Saving Improvements**

*High Performance Upgrades to Save Nearly \$5 Million in Annual Energy Costs*

**Virginia Beach, Va.** — Officials at U.S. Naval Air Station (NAS) Oceana will have a groundbreaking ceremony Nov. 19 for the \$44 million base-wide Energy Savings Performance Contract (ESPC, Phase II).

These upgrades will replace aging infrastructure with more efficient and sustainable systems, improve comfort for base personnel, meet federal energy reduction goals, and enable the bases ability to continue to operate effectively in the face of shrinking budgets.

The project incorporates base-wide infrastructure improvements that are anticipated to generate energy cost savings of nearly \$5 million per year for the east coast's master jet base – one of the largest and busiest air stations in the world. The upgrades allow NAS Oceana to exceed federal energy reduction goals, as set forth by the Energy Policy Act of 2005, several years early.

Specialty Contract Acquisition, Navy and the Naval Facilities Engineering Command, Mid-Atlantic awarded Phase II of the ESPC in August. The upgrades are scheduled for completion in June of 2011 and involve 42 major buildings on the base including: five bachelor housing buildings, six aircraft hangars, the galley, seven maintenance facilities, eight office buildings, the chapel, three aircraft simulator buildings and numerous other buildings.

The NAS Oceana team is very committed to energy savings. In 2008, construction on Phase I of the ESPC was completed at Dam Neck Annex and is already seeing an energy savings of almost \$3 million annually. As a direct result of these initiatives, NAS Oceana, along with only one other naval installation, won the 2009 Presidential Award for Leadership in Federal Energy Management, which recognizes federal entities for

their support, leadership and efforts in promoting and improving federal energy management.

### **Customized Upgrades Include Renewable Resources**

Before selecting energy efficiency and conservation measures, Oceana completed an extensive survey and assessed the energy consumption of its existing building systems to determine the most cost-effective heating, ventilation and air conditioning (HVAC) systems and services. The Navy then identified upgrades that would best generate energy and ancillary savings.

Ground source heat pump (GHP) technology, a clean, renewable resource, will be the primary replacement for energy provided by the base's much less efficient aging steam plant, which will be demolished.

GHPs move heat from the earth's interior into the base's buildings as needed in cooler months, and they remove heat for cooling during warmer months. This technology offers greater efficiency in temperature management than steam generated power. A central chilled water system plant will be built to serve facilities where ground source heat pumps are unsuitable.

In 42 buildings, HVAC and mechanical systems will be upgraded and reconfigured for greater energy efficiency and mechanical redundancy to meet critical training and operational demands for the Navy's readiness and global mission. Automation systems and controls will be installed in 31 buildings, either as an addition or as an upgrade to outdated systems. These systems will give the occupants the flexibility to adjust the temperature within individual rooms.

Over 24,000 lighting fixtures will be upgraded in 70 buildings to reduce energy consumption within base facilities and hangars. Existing water and sewer systems will be upgraded with over 5,000 fixtures in 55 buildings by installing long-life, variable-flow technology in sinks, showers and toilets throughout the base.