

# U.S. Army Engineering and Support Center, Huntsville

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Deputy Commander  
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US Army Corps of Engineers  
**BUILDING STRONG**



# Huntsville Center Mission

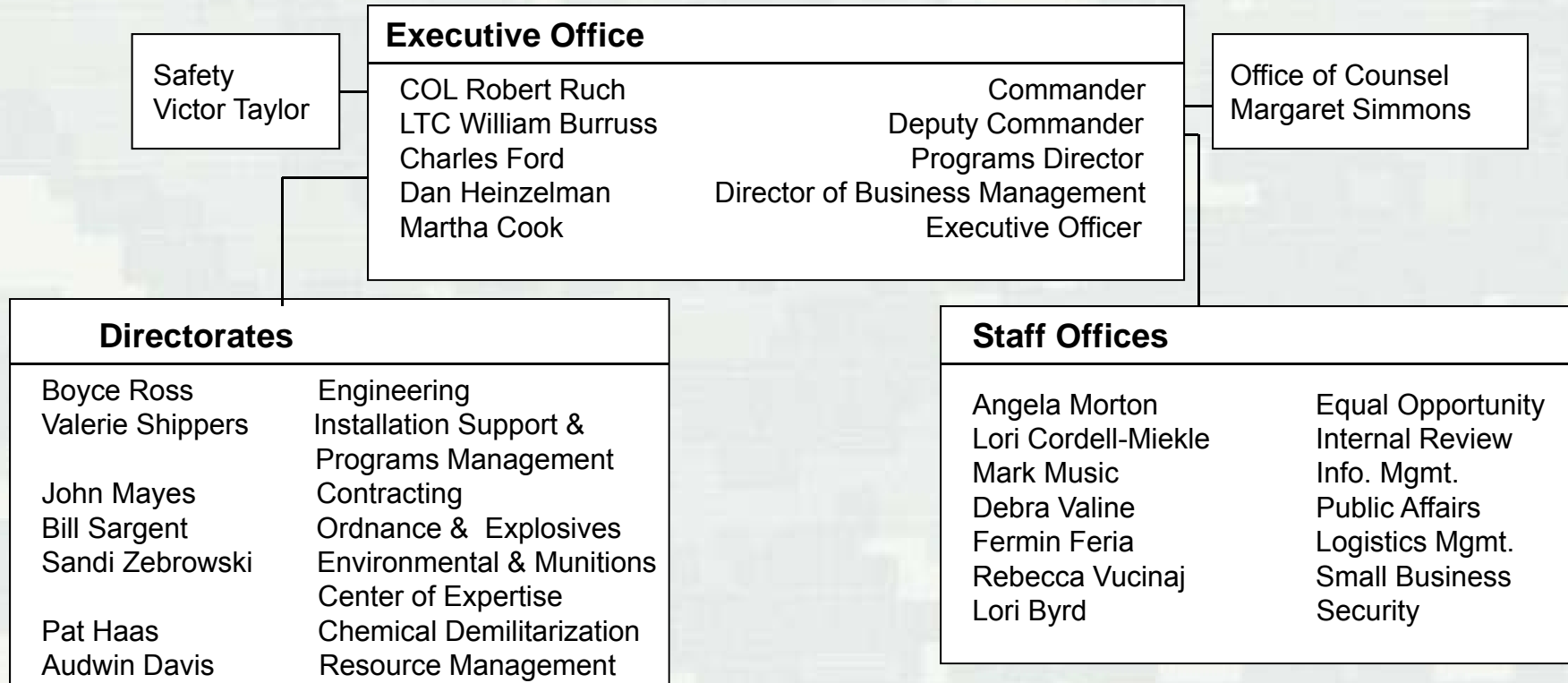
The U.S. Army Engineering and Support Center serves the U.S. Forces, their Families and the nation by providing specialized technical expertise, global engineering solutions, and cutting edge innovations through centrally managed programs in support of national interests.

# Huntsville Center Vision

A world class work force with an expeditionary mindset providing effective, innovative, global engineering solutions to unique, complex, and high-risk missions in strengthened partnership with our strategic allies, in support of the Warfighter, their Families, and the nation.



# Organization



- **858 Personnel Authorized**
- Engineers
- Scientists
- Construction Experts
- Project Managers
- Explosive Ordnance Disposal
- General and Administrative Professionals
- Contract Specialists



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# Huntsville Center Footprint

## Annual Obligations ~ \$1.73 B

- Installation Support \$1,160.6M
- Engineering \$81.1M  
(includes Medical CX of \$5.7M)
- Chemical Demil \$158.2M
- Ordnance Explosives \$238M
- Environmental and Munitions  
CX \$50.5M
- Miscellaneous \$43.9

## Personnel: 875

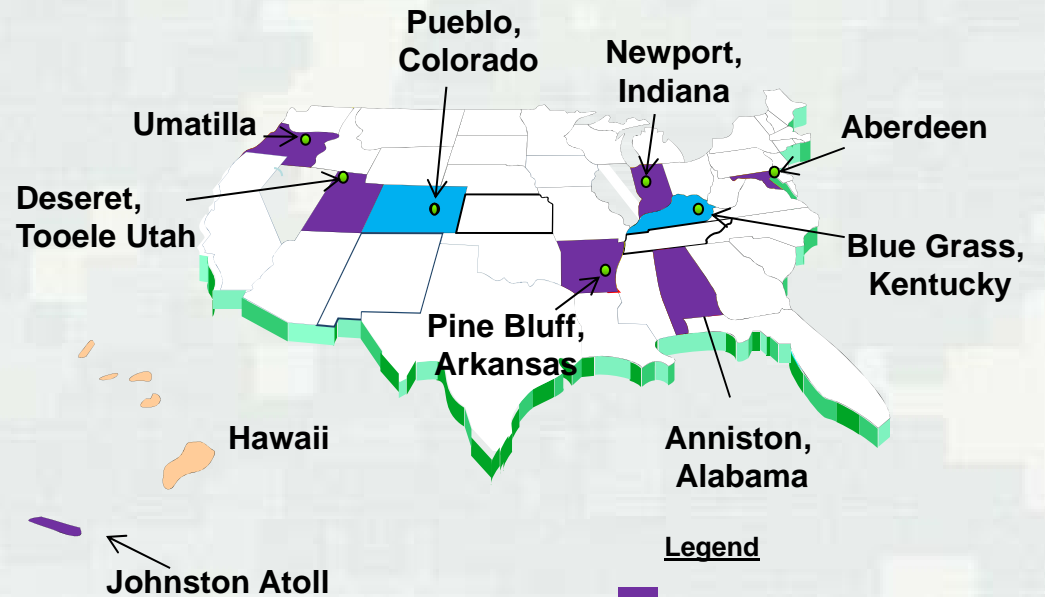
- 750 – Huntsville, AL
- 23 – Alexandria, VA
- 53 – Omaha, NE
- 2 – Pueblo, CO
- 14 – Richmond, KY
- 30 – Afghanistan
- 9 – Various PMs forward  
and liaisons

Customers: Very diverse customer base which includes DOD and many Federal government agencies.



# Chemical Demilitarization Program

- \$8.5 billion program assigned in 1981 to destroy chemical weapons stockpile.
- Design and construction of 9 sites using incineration and chemical neutralization technology.
- U.S. stockpile = 31,501 tons of chemical agent, 90 percent destroyed as of Jan 2012
- Oversaw construction of Russian chemical demilitarization site.



Blue Grass, Ky.



# Ordnance and Explosives Programs

- Military Munitions Design Center and Remedial Action Team
  - ▶ Investigation, design, and remediation of FUDS, ranges and construction sites.
- Chemical Warfare Design Center
  - ▶ Support to DA, DOD, State Department, and DTRA worldwide
- OCO Support
  - ▶ Mine clearance in Afghanistan
    - 9 Afghan mobile mine clearance teams supporting base expansion countrywide
    - Bagram AF – Clearing Soviet-era mine fields for MILCON and base expansion



Spring Valley Formerly Used Defense Site (FUDS) near Washington D.C.



Mine clearance in Afghanistan



- \$2 billion Worldwide Remediation Services Contract



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# Environmental and Munitions Programs

- Environmental and Munitions Center of Expertise (EM CX) provides:
  - ▶ Expert technical consultation for environmental, radioactive and military munitions cleanups nationwide
  - ▶ Independent technical review
  - ▶ Quality assurance reviews
  - ▶ Technology transfer/lessons learned
  - ▶ Guidance document development
  - ▶ Participation on panels and advisory committees
  - ▶ Training development
  - ▶ Environmental compliance support
  - ▶ Green sustainability remediation support
  - ▶ USACE Civil Works sustainability reporting



A specially equipped helicopter searches for anomalies at Martha's Vineyard, Mass.



Workers preparing railcar for offsite shipments of radium contaminated soils and debris for the Shattuck Superfund Site, Denver, CO



# USACE Centers of Expertise

## Mandatory Centers of Expertise

- Medical Facilities
- Army Ranges and Training Lands
- Electronic Security Systems
- Environmental and Munitions
- Utility Monitoring and Control Systems



Fort Belvoir Community Hospital, VA

## Technical Centers of Expertise

- Energy Savings and Performance Contracting
- Heating, Ventilation and Air Conditioning
- DD Forms 1391/3086 Preparation/Validation
- Installation Support
  - ▶ Facilities Reduction
  - ▶ Facilities Repair and Renewal
  - ▶ Centralized Furnishings





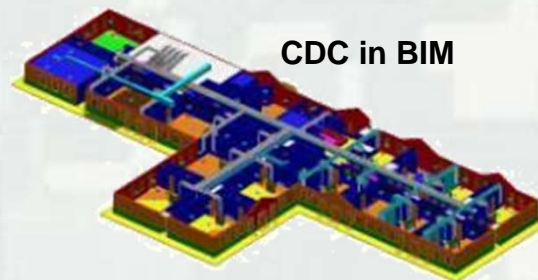
# Engineering Programs: Centers of Standardization

- Child and Family Services
  - ▶ Child Development Centers (Infants- 5 years)
  - ▶ Child Development Centers (School Age 6-10)
  - ▶ Youth Activity Centers
  - ▶ Army Community Service Centers
  - ▶ Soldier Family Support Centers



Fort Benning, Ga.  
Fitness Center

- Sports and Fitness Facilities
  - ▶ Physical Fitness Facilities
  - ▶ Outdoor Sports Facilities



- Medical Facilities

- Emergency Facilities
  - ▶ Fire Stations
  - ▶ Consolidated Fire, Safety and Security Facilities
- Training Ranges
  - ▶ Automated Record Fire Ranges
  - ▶ Combat Pistol/MP Qualification Courses
  - ▶ Modified Record Fire Ranges
  - ▶ Urban Assault Courses
  - ▶ Live Fire Shoothouses
  - ▶ Battle Command Training Centers
  - ▶ Training Support Centers



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# Medical Programs

- **Medical Facilities CX** is responsible for design acquisition strategy, design development and technical oversight during design and construction medical aspects projects.



Design concept of Weed ACH, Fort Irwin, Calif.

- **Medical Support Team** provides Army MEDCOM support
  - ▶ **Medical Repair and Renewal (MRR) Program:** Design, repair, replacement, renovation, sustainment, restoration and modernization
  - ▶ **Integrated Medical Furniture (IMF):** Provides systems furniture worldwide for Army MEDCOM
  - ▶ **Operations and Maintenance Engineering Enhancement (OMEE):** Contract services to operate facility infrastructure and maintain building systems
  - ▶ **Initial Outfitting and Transition (IO&T):** Takes facility from construction complete to functional Soldier ready

1. Fort Bliss SATOC, \$240M, Q1, FY15
2. IO&T, \$495M, Q3, FY14



# Installation Support Programs – Facilities Division

- USACE Installation Support CX: Huntsville Center executes assigned ACSIM and IMCOM programs in partnership with Districts, DPWs and IMCOM.
  - ▶ **Facilities Reduction Program:** Eliminates excess facilities.
    1. Facilities Reduction, Midwest, \$48M, Q3, FY14
    2. Facilities Reduction, Pacific, \$48M, Q3, FY14
  - ▶ **Facilities Repair and Renewal:** Fast track, efficient method for design/build renovations for all federal agencies.



An excavator demolishes the former U.S. Army Reserve Center in Tuscaloosa, Ala. The center and surrounding buildings were hit by a tornado.



# Installation Support Programs – Facilities Division

- ▶ **Access Control Points:** Upgrade installation gates security equipment and facilities to meet new standards and assure consistency Army-wide.
- ▶ **Information Technology Services:** Provides project management and acquisition support to the Army and other federal agencies in the procurement of Information Technology Technical Services, hardware and software commodities.



IB barrier being tested at Aberdeen Proving Ground, Md.

1. Project Management Information System (P2) Operations and Maintenance Services (GSA 8A STARS), \$25M, Q3, FY14
2. IT Hardware Catalog Management Services (CHESS), \$46M, Q3, FY14
3. Program Executive Office Missile and Space Technical Services, \$12M, Q3, FY14



# Installation Support Programs – Electronic Technology Division

- ▶ **Electronic Security Systems (ESS)**  
**CX:** Responsible for reviewing all design and test submittals for Army ESS. Also provides technical, engineering, acquisition, and fielding support to all federal agencies.

Electronic Security Systems  
\$450M, Q2, FY15



Security upgrades at the Kennedy Center

- ▶ **Utility Monitoring and Control Systems (UMCS) CX:** Reviews all design and procurement packages; provides technical assistance, criteria, guidance and training; and executes projects for DOD and other federal agencies.
- ▶ **Army Metering:** Installing 13,000 meters and global meter data management system to track, record and report energy consumption.

Technical and Programmatic Support Services  
\$150M, Pre-solicitation Open



# Installation Support Programs – Military Integration Division

- ▶ **Army Centralized Furnishings Program:**  
Provides program management for ACSIM/IMCOM MILCON, and SRM administrative and barracks furniture.

A-E Interior Design, \$9M, Q3, FY14



- ▶ **Range and Training Land Programs (RTLTP) CX:** Responsible for reviewing designs, conducting construction inspections and ensuring Army standards are met. Provides planning, MILCON programming and development of standard designs for Army automated ranges, and DD1391 preparation and validation.



Fort Bliss Digital  
Multi-purpose  
Range Complex



# Installation Support Programs – Energy Division

- ▶ **Energy Engineering Analysis Program (EEAP):** Analyzes energy use at installations and provides options for savings.
- ▶ **Resource Efficiency Manager (REM):** Increases assigned installation's energy programs by identifying cost-effective programs and practices to reduce energy and water costs.

REM \$40M, Q4, FY14

- ▶ **Energy Conservation Investment Program (ECIP):** designed to complete a thorough project DD Form 1391 review and verification process



The Brigade Combat Team Dining Facility at Fort Bliss, Texas, is powered by solar panels.



# Installation Support Programs – Energy Division

- ▶ **Energy Savings Performance Contracting (ESPC):** Contractor provides capital and expertise to make infrastructure energy improvements to significantly reduce energy utilization and cost.

ESPC, \$1.5B, Open

- ▶ **Commercial Utility Program (CUP):** CUP helps the Army purchase reliable utility services at the best rates and helps garrisons resell their utilities to tenant activities
- ▶ **Power Procurement Agreements (PPA):** Supports EITF tools to execute third party financing investment in renewable energy source power generation

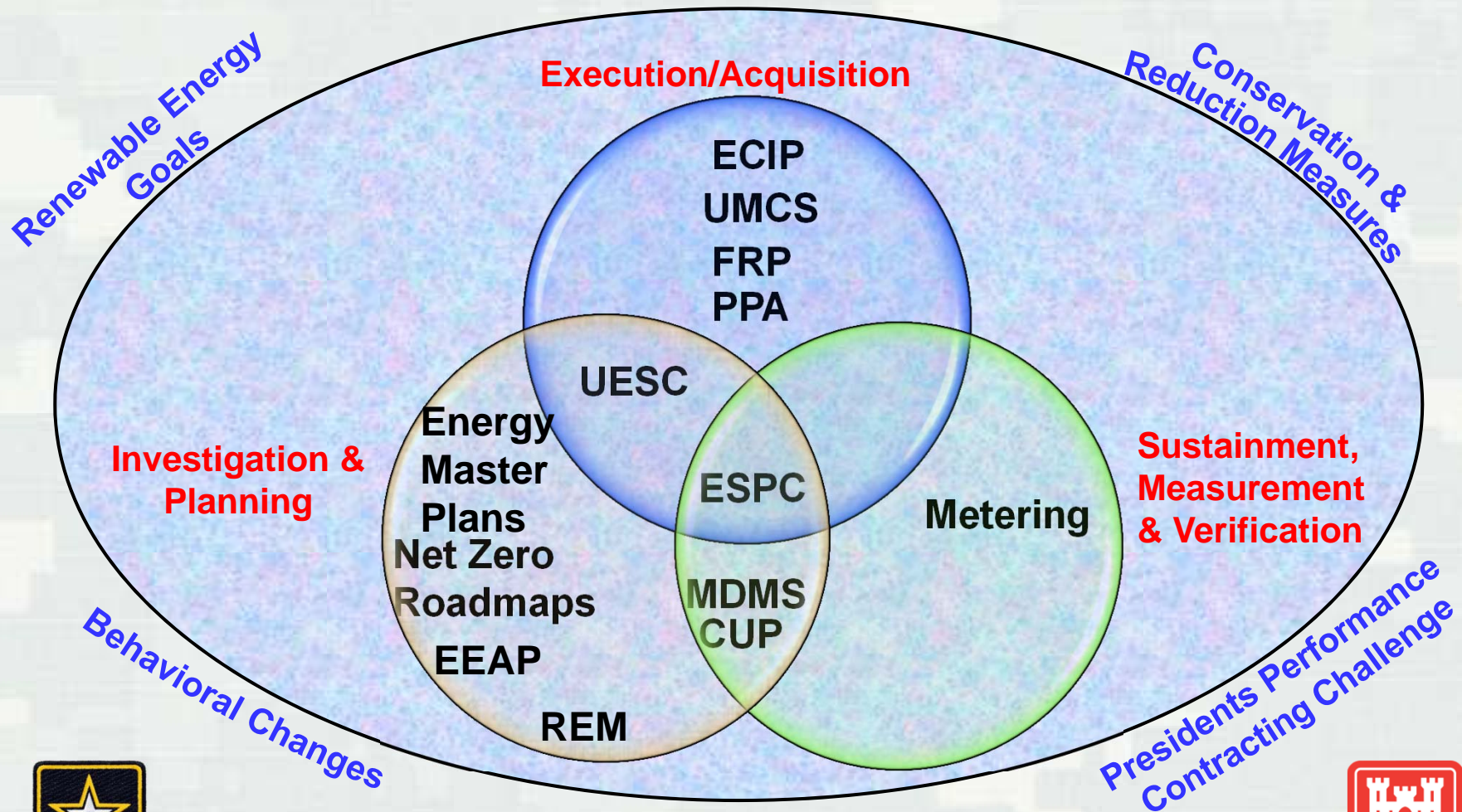
Redstone Combined Heat and Power, \$1.2B, Q4, FY15





# Energy Portfolio Management

Pathway to Net Zero, Energy Security and Meeting Federal Mandates



# Synergistic Energy Programs

- **Leverage the energy tool box available to you:** HNC manages a suite of programs and acquisition vehicles to support Army and DoD in meeting energy, water, waste and renewable energy mandates
- **Begins with Energy Audits**
  - ▶ The cornerstone for developing effective energy management strategies, capital investment plans, and projects to meet reduction, net zero and renewable energy goals
  - ▶ Scalable product for a holistic, integrated and comprehensive planning approach that leverages scale (vs. fragmented approach)
  - ▶ Create vision with comprehensive energy master plan
  - ▶ Submit plans for POM resourcing



# PPA MATOC

- **\$7 Billion Power Purchase Agreement (PPA) Multiple Award Task Order Contract (MATOC)**
  - ▶ Awarded all technology pools (geothermal, solar, wind, and biomass)
  - ▶ Postured to facilitate EITF project pipeline
  - ▶ Used by Energy Initiatives Task Force (EITF) for projects > 10 MW
  - ▶ Tool available for use by all DoD
    - Anticipate large demand for projects < 10MW
    - HNC postured to support installation < 10MW development needs through expertise in PPA project management



# What's New

## ■ Army leadership in ESPC execution and ECIP validation

- ▶ USACE co-chaired with DOE in White House CEQ working group to improve ESPC acquisition process across the federal government
  - Army is ESPC leader across the DoD; HNC is recognized expert in third party financing (ESPC, UESC) across federal government
  - HNC executed \$422M of the Army's \$498M contribution to President's Performance Contracting Challenge
- ▶ USACE is part of OSD working group to recommend policy changes and address programmatic issues
  - Army is recognized leader in ECIP validation through HNC
  - HNC chairs sub-committee to perform reviews and analysis of all military DD1391 life cycle cost analysis (LCCA)

## ■ Emphasis on Micro-grids

- ▶ Philadelphia District – HNC joint partnership to stand up micro-grid information sharing center of expertise
- ▶ Focus on moving from demonstration mode into proactive deployment mode



U.S. ARMY

A necessity to strengthening Energy Security



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# Energy Acquisition Opportunities

- AMC depots energy audits
- New ESPC MATOC (RFP 4<sup>th</sup> Qtr FY14)
- New REM MATOC (RFP 4<sup>th</sup> Qtr FY14)
- PPA Pipeline:
  - ▶ Redstone Arsenal, 25MW Combined Heat Power (CHP), RFP 1<sup>st</sup> Qtr FY15 – HNC
  - ▶ Redstone Arsenal 10+MW Solar PV, RFP 4<sup>th</sup> Qtr FY14 (PPA MATOC) – HNC
  - ▶ Fort Huachuca 20MW Solar PV (GSA Area-Wide w/ TEP) – Installation Contracting Office
  - ▶ Schofield Barracks 52MW Biodiesel (Lease w/ HECO) – Honolulu District
  - **FY14 Pipeline:**
  - ▶ Fort Campbell UESC/PPA, 4.1MW Solar, RFP 4<sup>th</sup> Qtr FY14 (PPA MATOC) – HNC
  - ▶ Fort Stewart 18MW Solar PV (Lease w/Georgia Power) – Savannah District
  - ▶ Fort Hood (Solar PV/Wind: requirement in development)
  - ▶ Aberdeen Proving Ground (Solar PV: requirement in development)
  - ▶ Fort Stewart (Solar PV; requirement in development)
  - ▶ Fort Benning (Solar PV requirement in development)
  - ▶ Fort Gordon (Solar PV: requirement in development)



# Summary

## ■ Established Best Practices –

- ▶ Use of alternative financing mechanisms (ESPC, UESC, PPAs)
- ▶ Acquiring resource efficiency managers (REMs)
- ▶ Performing energy master plans and audits (EEAP)
- ▶ Reduce energy use through Energy Mgmt Control Systems (EMCS/UMCS)

## ■ Key Takeaways –

- ▶ Leverage / maximize use of synergistic energy programs and SMEs
- ▶ Energy Audits – Plan for them; be strategic, holistic, comprehensive
  - Submit plans for POM resourcing – *Comprehensive Energy and Water Evaluations Policy, ASA-IEE Aug 2012*
- ▶ The Army is well-postured to support installation PPA needs
- ▶ Don't forget energy security – make it an integral feature of plans and

projects



# Communication/Collaboration

- Outreach /Communication
  - ▶ Monthly reports of all active HNC projects in each AOR distributed to every MSC MID Chief, DPM, Military Programs Chief and RIT
  - ▶ Assigned GS-15 liaisons to each MSC/RIT
    - Host line-item reviews on request
    - Face-to-face visit twice/year
    - Adding coordination with COCOM counterparts to the MSCs
  - ▶ Participate in twice-monthly MID Chief telecons with MSCs and HQUSACE
  - ▶ Quarterly HNC Commander to District Commander email
- Collaboration
  - ▶ Routine QA and COR support from Geographic Districts
  - ▶ In FY12, MIPR'd \$21M and funded \$7M in cross charge labor to other MSCs/Districts; FY13 MIPR'd \$19M and funded \$8.1M in cross charge labor
  - ▶ Virtual PM efforts
  - ▶ Surge support to GDs on request



Questions?  
[www.hnc.usace.army.mil](http://www.hnc.usace.army.mil)





# ITS Program

Mission: Support Soldiers through partnering with DoD organizations in the procurement of Information Technology Technical Services, hardware and software commodities utilizing various acquisition tools and methodologies



Huntsville Center has rich history in the Program Management and Acquisition Support for DoD and USACE Automated Information Systems.

- TRACES, MCACES, PAX,
- ULN, ENGLink, P2



# ITS Program

## The ITS Program maintains:

- A dedicated cadre of Information Technology project management and acquisition professionals with a host of government and private industry experience in the procurement of IT services and commodities.
- Subject Matter Experts in the usage of Government-Wide Acquisition Contract and Task Order vehicles such as:
  - ▶ Army CHES, GSA ALLIANT, GSA 8A STARS
- Notable Existing Customers
  - ▶ DOD High Performance Computing Modernization Program (HPCMP)
  - ▶ Headquarters Corporate Information (CECI)
  - ▶ USACE Finance Center
  - ▶ USACE CEFMS Program Office
  - ▶ USACE P2 Program Office
  - ▶ USACE ENGLink Program Office

▪ FY13 Obligations totaled \$113.1 million



# Support to Civil Works

- Support HQUSACE in meeting ASA(CW) goal of awarding \$2.5M in Energy Savings Performance Contracts (ESPCs) by Dec 2013
  - ▶ Three ESPCs at SWL, NAD (HECSA/WAD), & SAM
  - ▶ Partnering with FEMP/DOE on ESPC ENABLE at NWK
- Energy Engineering Analysis Program (EEAP) audits to be completed at seven USACE sites in FY 13 to identify energy savings opportunities
- Army Central Metering Program
  - ▶ Saylorville Lake & Pump Station at Saylorville , IA was awarded 5 November 2013 for \$156k, to be complete in April 2014.
  - ▶ Newburgh Lock & Dam near Newburgh, IN award is still pending FY14 funding (expected early December 2013) estimated at \$108k.
  - ▶ Awards for the remaining 21 Covered Facilities will occur in late FY14 after data from the above pilots can be analyzed and site surveys completed for the subject facilities.
  - ▶ Templates for facility-level advanced metering and energy management configurations
  - ▶ Current FY14 first quarter efforts are focused on socializing the Advanced Metering concept across the CW field community; this includes publishing Draft Guidance and conducting Webinars (joint effort by HQ USACE and Huntsville Center).
  - ▶ Draft Guidance for MSCs based on architecture and templates/specifications
- Facilities Reduction Program (FRP)
  - ▶ Removed 33 structures in flood plain reclamation project for SWF
- Facilities Repair and Renewal (FRR)
  - ▶ Executed 15 projects valued \$49M, including 6 new Visitor Centers



# USACE HNC PPA Acquisition Tools

- **\$7B PPA Multiple Award Task Order Contract (MATOC)**
  - ▶ Geothermal technology pool awarded May 2013
  - ▶ Solar technology pool awarded August 2013
  - ▶ Wind technology pool awarded September 2013
  - ▶ Biomass technology pool awarded September 2013
- **Current on going Standalone PPAs and Capability**
  - ▶ Fort Bliss 20MW Solar PV
  - ▶ Standalone PPA – Redstone Arsenal 25+MW Waste to Energy (WTE) / 15MW PV
  - ▶ Can execute PPA projects on smaller (<10MW) as well



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