### Naval Surface Warfare Center (NSWC) Indian Head Explosive Ordnance Disposal Technology Division (IHEODTD)



#### Supporting the Warfighter for 125 years

CAPT. VINCENT MARTINEZ COMMANDING OFFICER



MR. ASHLEY JOHNSON TECHNICAL DIRECTOR

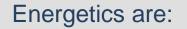
Distribution Statement A. Distribution Unlimited



# **Mission**



 Research, develop, test, evaluate (RDT&E), manufacture and provide in-service support of energetics and energetic systems. Provide Soldiers, Marines, Sailors, and Airmen with information and technology to detect, locate, access, identify, render safe, recover, exploit and dispose of explosive threats



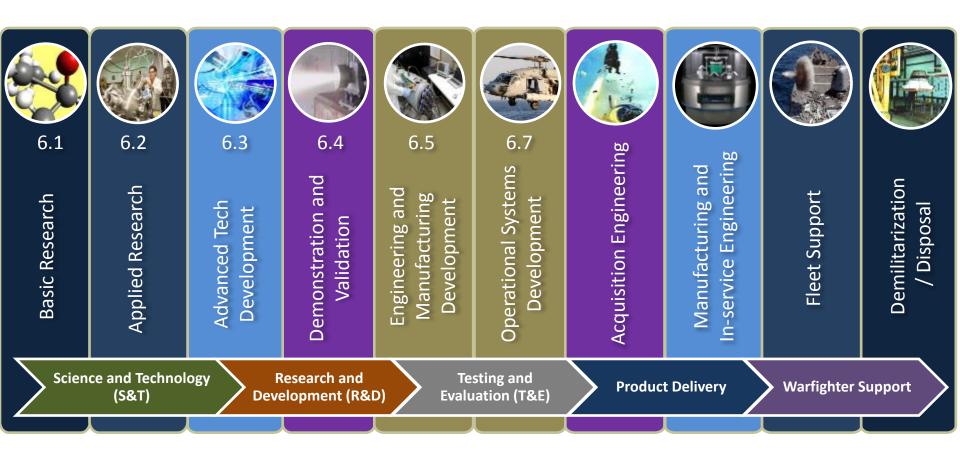
- Propellants
- Explosives
- Fuels
- Pyrotechnics
- Reactive materials
- Warheads
- Rocket motors
- Munitions





# **Molecule to Mission**



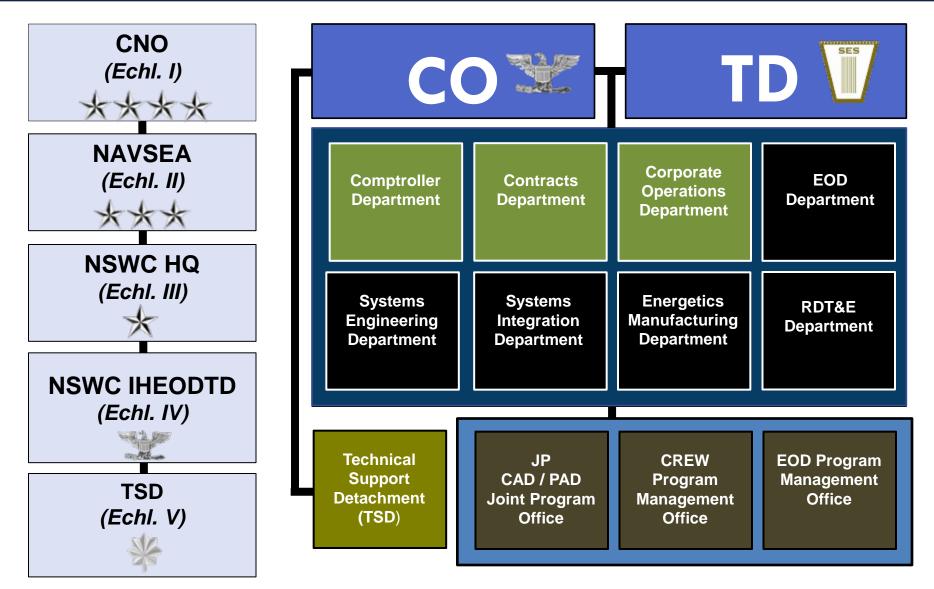


Only DoN activity delivering both energetics and EOD technology solutions from basic research through disposal



## **Organization Structure**







# **Strategic Locations**



Ogden, Utah: 15 civ.

- Co-located at Hill Air Force
  Base
- CAD / PAD Air Force Integrated Product Team

Indian Head, Md. (two sites): 1,511 civ., 1 mil. and 192 ctr.

- NAVSEA Center of Excellence (CoE) for Energetics
  - DoD EOD program lead
    Combined Explosives Exploitation Cell platoons

McAlester, Okla. 18 civ. and 6 ctrs.

- Co-located at McAlester Army Ammunition Plant
- Navy Special Weapons

Picatinny, N.J.: 223 civ., 5 mil., and 14 ctr.

- Located at Picatinny Arsenal
  - Joint CoE for Guns and Ammo
- Navy Package, Handling, Shipping and Transportation (PHST), Guns and Ammo

Louisville, Ky.: 12 civ. and 6 ctr.

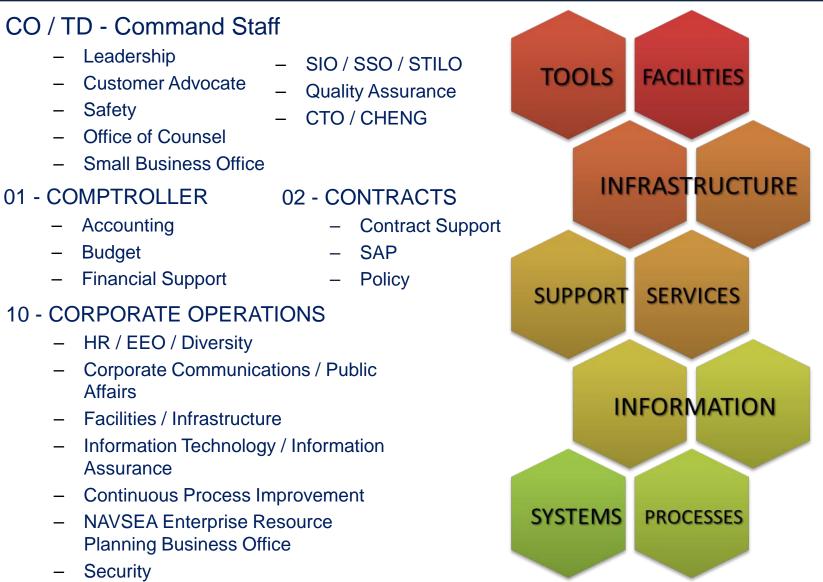
Naval Guns

1,779 civilians, six military and 218 contractors, with 21 OCONUS personnel providing fleet support



## **Business Departments**







## RDT&E (R) Dept.





#### **Top Five**

- Integrated signatures program
- Hypervelocity projectile
- Insensitive munitions advanced development high explosives
- Cold helix program (closed-access)
- Advanced energetics program

Department workforce: 161 civilians and five contractors

### Lines of Operation

- Research and technology division
  - Novel energetic material synthesis and formulation and detonation physics
  - o Material characterization and chemical analysis
- T&E division
  - Detonation and combustion T&E
  - Material properties, non-destructive evaluation, ballistic and environmental tests

### **Unique Capabilities and Facilities**

- Material development continuum
- Comprehensive analytical capabilities
- Detonation characterization advanced diagnostics
- Ordnance dissection
- Non-destructive evaluations



## Systems Engineering (E) Dept.







## **Systems Integration (G) Department**





**Top Five** 

- In-service engineering agent (ISEA)
- Standardized pier-side maintenance and repair
- Phalanx close-in weapons system
- Conventional ammunition ISEA
- PHST

### Lines of Operation

- Guns division
- Conventional ammunition division
- Conventional ammunition systems program management office
- Naval PHST

#### **Unique Capabilities and Facilities**

- 16,000 sq. ft. PHST weapon container test facility
- Gun stand complex
- 12,000 sq. ft. minor caliber lab
- Medium caliber gun range facility

#### Department workforce: 261 civilians, five military and 16 contractors



### **Energetics Manufacturing (M) Dept.**





#### **Lines of Operation**

- Energetic development, scale-up, qualification
- Low-rate initial production and full-scale production of energetic materials and energetic end-items

Department workforce: 293 civilians and 60 contractors

#### **Top Five**

- Otto Fuel II
- Hydra 70/2.75 in. rocket and insensitive material warhead
- M72A7 light anti-tank and M72A9 antistructure munition warheads
- Sole source CAD / PAD provider
- Navy's only CAD / PAD stock and issue point

#### Unique Capabilities, Facilities and Prototyping

- Cast composite propellant and polymerbonded explosive mixing / casting
- Chemical manufacturing and scale up
- Pressed explosives and warheads
- Cartridge, igniter and CAD / PAD assembly
- Explosive decontamination and disposal



### Explosive Ordnance Disposal (D) Dept.





#### **Top Five**

- AEODRS
- Safe diver stand-off study
- Gemini development
- Joint EOD decision support system
- Foreign materiel acquisition and exploitation

#### Lines of Operation

- Information management division
- Acquisition and technology division
- Logistics division

### **Unique Capabilities and Facilities**

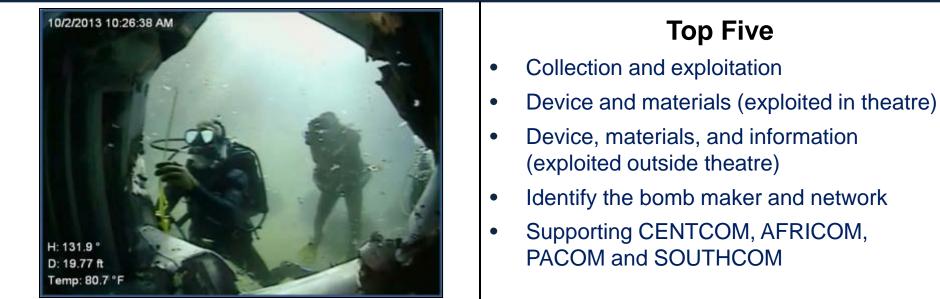
- EOD information management
- 24/7 technical support center
- EOD countermeasure development
- Robotics range

#### Department workforce: 283 civilians and 61 contractors



## **Technical Support Detachment**





#### Lines of Operation

- R&T department
- Operations department
  - CEXC platoons 1-4
  - Foreign Material Acquisition

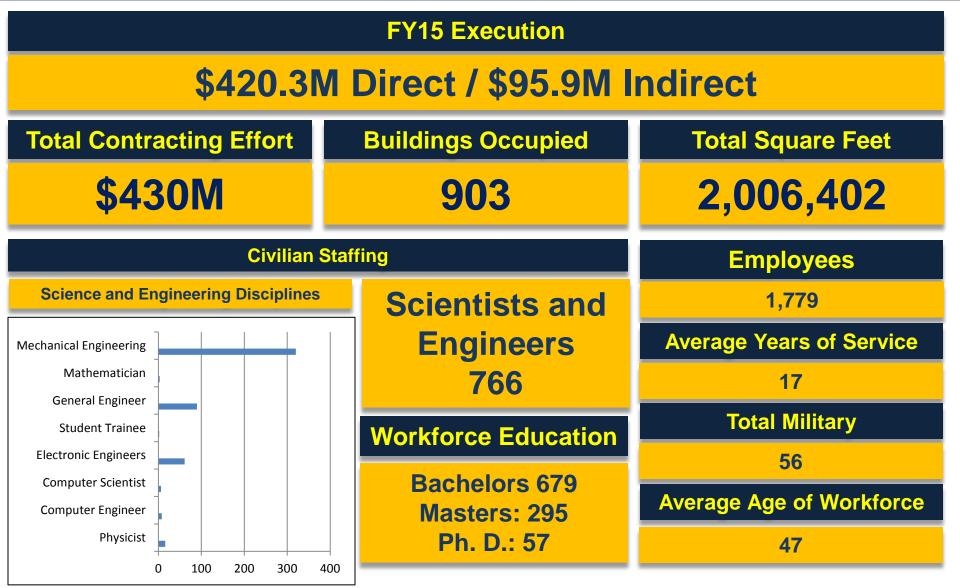
#### Military Expeditionary Unit, Echelon 5 Activity

#### **Unique Capabilities and Facilities**

- Weapons effect assessments
- Environmentally-controlled labs
- Triage equipment
- Electronic exploitation equipment
- Biometric and forensic preservation
- Maritime interdiction operations under-water and post-blast analysis



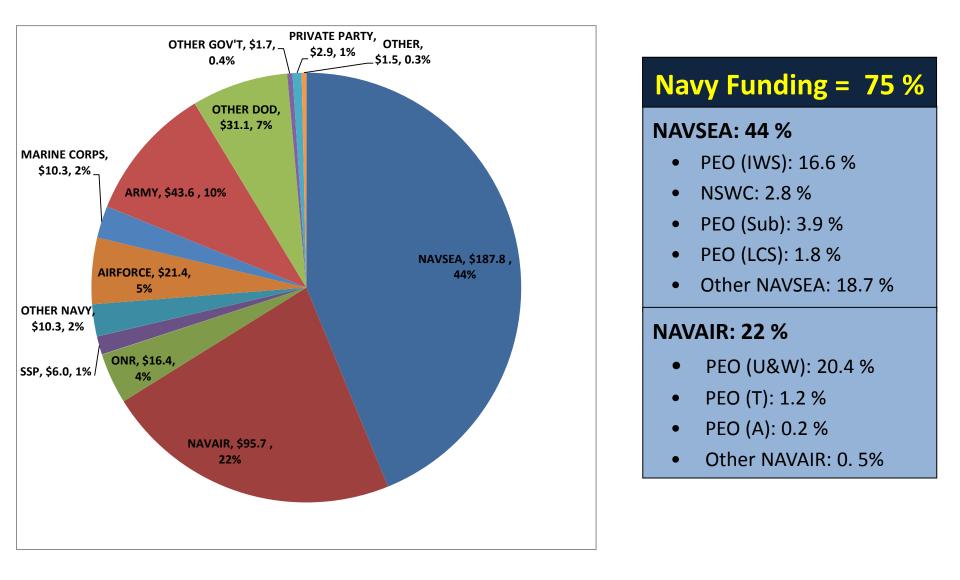






## **Customer Base**







# **Economic Impact (FY14)**



Where we live:

• Charles County 64%

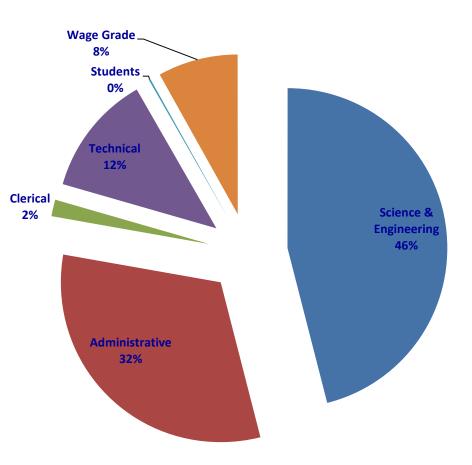
Average MD Employee Salary:

- \$91,800
- NSWC IHEODTD Total MD Payroll
- \$184M

### Local Contract Dollars

• \$193M

### **Employee Demographics**







- Save the Date 26 September
  - -Community Event here at the Pavilion
    - Sam Grow Band
    - Navy Band
    - Activities for Kids
    - Alumni Reunion
- Help us with alumni contacts. Send to Becky D'Ambrosio at becky.d'ambrosio@navy.mil





# For more NSWC IHEODTD information, contact Public Affairs at <u>nswc.iheodtd.pao@navy.mil</u> or (301) 744-6505.