Concurrent Technologies Corporation’s
Energetics Operations

Delivering Client-Focused Solutions that Work
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Concurrent Technologies Corporation’s (CTC’s) Energetics Operations (EO) Market Segment is staffed by former EOD operators, scientists, and engineers with extensive technical knowledge, and vast hands on experience...people who all have a vested interest in helping find rapid solutions to challenges. This multidisciplinary approach combines the best science and engineering principles with the operational experience to ensure that cutting-edge Energetics, Explosives, and EOD technologies are designed with robust capability to survive the most austere operational environment and operation by Warriors under fire. Our technical staff has demonstrated the capability to formulate, develop, and transition new and improved technologies to the user community.

CTC’s former military operators all feel a vested interest in finding rapid solutions to Improvised Explosive Device (IED) attacks and Unexploded Ordnance (UXO) technology advances, as we all have lost close friends and colleagues.

Giving back to the Community

CTC has developed numerous countermeasure techniques for the prediction, detection, prevention, neutralization, and protection of personnel from Energetic hazards, IEDs and multiple UXO solutions. CTC has actively collaborated with the key players in the Department of Defense (DoD) research, development and end-user Communities and is a vested partner in the EOD community.

Get the Solutions You Need When You Need Them

Representative CTC EO Projects and Experience

- “HUD” - A Commercial-Off-The-Shelf (COTS) Heads-Up Display Unit for control and monitoring the Man Transportable Robotic System (MTRS) EOD Class Robots.
- “Drop Box” - A lightweight rigid extendable pole with customized drop box for delivering explosive charges from a safe standoff distance of 50 feet.
- “CI2C” Counter IED Integrator Cell – Utilization of leading IED Subject Matter Experts (SMEs) to integrate consistent and current Enemy and Insurgent IED TTPs into IED training courses
- “Ripple” Reactive Information Propagation and Planning for Lifelike Exercises - Facilitates the planning and execution of large-scale live training exercises with emphasis on the cultural dimensions of the Current Operating Environment. Also facilitates Operations by supporting IED trainers conducting IED-clearing techniques exercise.
- “SSD” Specialized Search Dog – The Department of Defense (DoD) adopted the Specialized Search Dog (SSD) developed by CTC in 2005.
• “Ballistic Gauntlet” – A CTC-developed blast and fragmentation mitigation device to protect extremities.
• “MURS” Magnetic UXO Recovery System – An advanced application of digging and recovery of UXO in a remote and safe manner.
• “UXO-RDS” UXO Recovery Database System – A small PDA device for collecting UXO recovery data at the point of recovery. It captures data such as depth, location, condition, type, and nomenclature.
• “WERS” Worldwide Environmental Remediation Services – A contract award for the remediation of UXO and Munitions and Explosives of Concern (MEC).
• A Retrospective Evaluation of Technology Transfer Accomplishments at Eleven Formerly Used Defense Sites (FUDS)
• Working Robotics Wireless Radio Frequency (RF) complications with shortage of bandwidth in the world. Establishing a WIFI system to make it possible for all robotics platforms to speak to each other.
• “Ground Robotics R&D” - A contract vehicle for the research and development of advanced and improved ground robotics as essential Warfighter tools.
• Establishing venture opportunities into Joint Service EOD support, such as Army EOD training
• “3D Visualization” - A collaborative team of CTC and Polaris Sensors is evaluating a 3D Visualization sensor package for use on EOD robots.
• Air Force Civil Engineers - Regional Equipment Support Terminal (REST) – Consolidation of Unit Type Code (UTC) for Civil Engineer to regional areas throughout the world.
• Air Force Readiness Support Program – Providing support to Readiness flights within the Civil Engineer community.
• Blast Cab and Hull development – CTC utilized innovative Friction Stir Welding to improve and develop blast cab and blast hull fixtures for sensor and explosive testing.
• Energetics and Explosive characterization and testing solutions
• Infantry Immersive Trainers (IIT) – CTC operates the USMC IIT support effort with solutions throughout the IIT program.
• C-BAAM Center for Ballistic and Advanced Armor Materials
• DSI” Detonator Status Indicator
• Blast Data Recorder (BDR)
  • Demonstration of a Munitions Identification Software using Ground Penetrating Radar.
  • Underwater UXO Identification and recovery Pearl Harbor HI
  • Underwater UXO detection using Side Scan Sonar methodologies

**CTC's Energetics Operation Areas of Expertise**

- CTC has more than 60 former EOD operators, scientists, and engineers
- Energetic and Explosive Forensics and Characterization
- EOD procedure development and training
- Supporting Very Important Person (VIP) missions for designated federal agencies
- Developing and performing technology transfers of tools, equipment, vehicles and procedures to meet operational needs for the Joint Services
- Formal instruction for military and civilian audiences on all aspects of EOD
- Dismounted EOD operations
- EOD Render-safe and disposal tools and techniques
• EOD munitions forensic evaluation and exploitation
• Detonator testing
• EOD operations in a maritime environment
• IED technology evaluation and recommendation
• Intelligence collection, live-fire testing, evaluation
• MEC – UXO Historical Data Analysis
• MEC – UXO Innovative Technology
• MEC – UXO Process Control
• MEC – UXO Programmatic Studies and Documentation
• MEC – UXO Public Involvement
• MEC – UXO Underwater Geophysics
• Concepts for jamming and disabling the remote triggering mechanisms of IEDs and for remote disarming and detonation
• Captured Enemy Ammunition Program, Explosives Application and Safety, Range Operations, Weapons Training and Evaluation
• Technical intelligence on “first seen” ordnance and conducting post-blast analysis

CTC’s Research and Development into the 21st Century

CTC is continuously seeking ways of providing the Warfighter with the capabilities to stay on the cutting edge of today’s threats. Technology for the 21st century has become more advanced and has led to challenges requiring engineering and technical expertise. With a first-class engineering department second to none and a wide selection of former EOD operators with over 400 years of combined knowledge and experience, CTC is determined to utilize these valuable assets and undertake the task of countering IEDs, Weapons of Mass Destruction (WMDs), and hazardous Energetics of today and into the future. Our capabilities include:

• Interfacing robotics
• Detection
• Demilitarization

• Training
• Defeating
• Attribution through Weapons Technical Intelligence (WTI)

Contact Information

For a comprehensive capabilities summary or more information, contact Concurrent Technologies Corporation.

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