

# WITHIN BUDGET

We realize the need to optimize budget allocations by mitigating the greatest amount of risk possible. We understand the operational and system design trade-offs that are required to provide optimal security. We utilize assessment and analysis tools that shed a bright light on the murky decision space between system performance and cost effectiveness, so that our nation's budget dollars buy the greatest risk reduction possible.

## Short-Term Savings vs. Long-Term Value

Sandia's philosophy is that a secure environment is one comprehensive ecosystem with interdependent parts that address system detection, delay and response functions. Failures in the industry to utilize this concept have shown that costs go up and system effectiveness remains the same or is reduced.

Sandia specializes in addressing today's threats and those not yet conceived.

# THE SANDIA LIFECYCLE

**Requirements:** The process taps multiple simulation and modeling tools, including Adversary Time Line Analysis System (ATLAS), Analytical Systems Software for Evaluating Safeguard Security (ASSESS), and Joint Conflict & Tactical Simulation (JCATS).

**Design:** We identify the gaps in available, commercial off the shelf (COTS) products that we have tested and approved and develop custom technologies when required. Each configuration is fully tested at Sandia's state-of-the-art facilities, including a Command, Control, Communications, Computing and Intelligence (C4I) test bed.

**Implementation:** Our teams coordinate the implementation of the security ecosystem, supervising local vendors, suppliers and service providers to ensure system performance, as well as perform final tests. We prepare our end users with training and documentation.

**Sustainment:** A long-term relationship means Sandia continues to be a partner, analyzing performance data and modifying where needed. Our teams assist with long-term operations and maintenance, performing predictive maintenance and obsolescence planning.



Sandia National Laboratories is a multi-program laboratory managed and operated by Sandia Corporation, a wholly owned subsidiary of Lockheed Martin Corporation, for the U.S. Department of Energy's National Nuclear Security Administration under contract DE-AC04-94AL85000.



# Sandia National Laboratories

## Physical Security

Ensuring National Security by Safeguarding America's Most Critical Assets



UNDERSTANDING YOUR THREAT SPECTRUM

IDENTIFYING YOUR VULNERABILITIES

REDUCING YOUR RISK

Dave Corbett, Director, (505) 844-3310  
Randy Peterson, Deputy Director, (505) 844-5792  
Defend-Protect@sandia.gov

## TRUST

Sandia National Laboratories has been entrusted with designing and implementing the security systems that have protected the nation's nuclear weapons installations for nearly 40 years. This legacy represents an unmatched and enduring core competency in Physical Security.

## EXPERIENCE

As a national Center of Excellence in Physical Security, we established principles and technical design standards which have been implemented domestically and abroad to defend America's critical assets. Our track record of creating custom physical security solutions for more than 300 U.S. government facilities and military installations is unmatched, with a 100% customer acceptance rate among government clients.

## MISSION

Driven by Sandia's mission to provide "exceptional service in the national interest," our Physical Security Program represents an objective and unbiased approach to secure our nation against high-consequence terrorist threats and national incidents through the effective use of science, technology & system solutions.

## BENEFITS

Partnering with Sandia means leveraging more than \$1 billion in advanced research and development, unique testing facilities, proprietary analysis and assessment tools, and targeted solutions developed to confront the most difficult and most critical national security challenges.

Since President Harry S. Truman established the national laboratory to oversee our nuclear arsenal, Sandia has been involved in protecting our nation's critical assets from terrorist threats and other vulnerabilities. We combine research and development, trained specialists, and a proven methodology to deliver fully integrated, comprehensive engineered solutions.

**Military Installations:** Sandia upgrades and extends the life of critical physical security systems at military facilities throughout the Department of Defense. Using science-based systems engineering, Sandia designs, tests, and implements optimal protective solutions.



## Combatant Commands

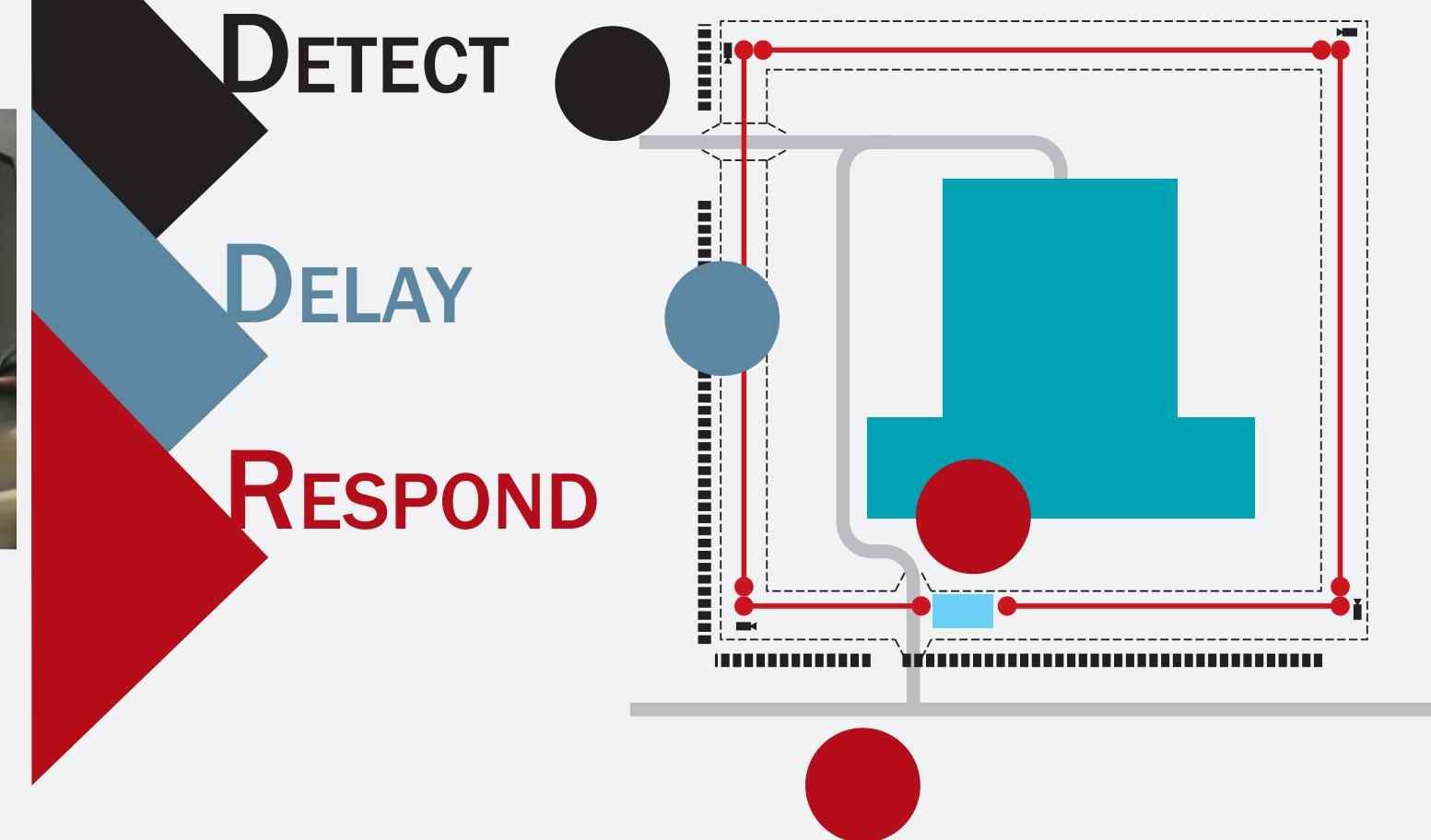
**(COCOMs):** Sandia provides technical & engineering support for the nation's unified combatant commands. Energy surety, cyber security, and operations analysis support is also provided to several of these commands. By providing vital information to the Combatant Commanders, they are able to successfully implement next generation weapon systems and execute future missions.

**Mission Critical Facilities:** Sandia has successfully assessed, designed and/or implemented holistic protective systems for multiple governmental agencies including the Department of Energy, Department of Defense, Department of State, and Department of Homeland Security.

*We are the technology, science and solutions for protecting our nation's most critical assets.*

# DETECT, DELAY, RESPOND

Sandia recognizes and focuses on the three foundational pillars of physical security – Detect, Delay, Respond – our designs ensure a balanced approach among these foundational capabilities. Our aim of balance enables us to recognize trade-space and identify solutions which result in greatest levels of risk reduction at the lowest cost. We have continued to build upon and mature our performance-based designs to mitigate the increasingly complex threat spectrum facing America today.



## DETECT an intrusion.

- ▶ High probability of assessed detection
- ▶ Low nuisance and false alarms
- ▶ Sensor fusion for expanded early warning and situational awareness
- ▶ Integrated solutions harmonized with operational mission
- ▶ Optimized human interface to increase system performance

## DELAY the intruders.

- ▶ Effective designs to disrupt and slow progress of mounted and dismounted attackers
- ▶ Technologically advanced materials to increase delay and protective characteristics
- ▶ Blended with response forces tactics and capabilities
- ▶ Balanced approach

## RESPOND with protective forces.

- ▶ Increase survivability and lethality of response forces
- ▶ Optimize battlespace to defender's advantage
- ▶ Provide realistic site-specific simulation and training tools
- ▶ Increase response effectiveness through systems approach