



BY LIGHT CAPABILITIES

GOLDEN DOME AND SHIELD

By Light Professional IT Services LLC, together with its wholly owned subsidiary Cole Engineering Services Inc. (CESI), delivers integrated, mission-focused solutions across cyber, AI/ML, modeling & simulation, DevSecOps, and secure network infrastructure. As a trusted partner to DoD and the Intelligence Community, we are uniquely positioned to support the end-to-end digital and operational demands of Golden Dome.

CORE CAPABILITIES

AI-ENHANCED CYBER & DECISION SUPPORT

- Real-time anomaly detection and predictive threat analytics
- AI/ML-enabled SOC integration for space and missile defense environments
- Explainable AI (XAI) models for mission-critical BMC3 operations
- Adherence to DoD Responsible AI and model validation requirements

MODELING, SIMULATION & DIGITAL ENGINEERING

- Digital twin development for interceptors, sensors, and C2 systems
- Multi-domain scenario generation using LVC and synthetic environments
- Campaign-level analysis using AFSIM, STORM, and custom M&S tools
- Cislunar and hypersonic threat modeling

DEVSECOPS & AGILE SOFTWARE ENGINEERING

- CI/CD pipeline automation with integrated security testing
- Secure software factory (Coalesce) supporting cross-domain DevOps
- Support for AI and simulation model deployment on secure enclaves
- Containerization, K8s orchestration, and edge-to-cloud delivery

SECURE NETWORKING & MISSION SYSTEMS INTEGRATION

- Tactical and space system communications architecture
- Mesh networking integration
- Zero Trust architecture implementation across hybrid environments
- High-assurance cross-domain solution engineering



WHY BY LIGHT?

- **PROVEN M&S LEGACY**
A leader in military-grade simulation and synthetic environment development
- **AI WITH INTEGRITY**
Secure, transparent, and auditable AI aligned with DoD ethical guidelines
- **MISSION-FOCUSED DEVSECOPS**
Coalesce Software Factory enables rapid, secure delivery across domains
- **CSFC TRUSTED INTEGRATOR**
History of success with USSF, PEO STRI, and USCYBERCOM
- **FLEXIBLE PARTNER**
Small-business agility with large-enterprise reach and sustainment

PAST PERFORMANCE HIGHLIGHTS

- **CYBER TRIDENT (USCYBERCOM/PEO STRI)**
AI-driven cyber training and operations platform supporting 13,000+ users
- **EWOCs / EW PLANNING TOOLS**
Integrated modeling and testbed for electromagnetic warfare support
- **SPACE TDL & SATELLITE M&S (USSF)**
Rapid development of orbital wargaming and training tools
- **COALESCE SOFTWARE FACTORY**
DevSecOps platform managing 11 Scrum teams, 26 external developers, 280+ monthly support tickets

TEAMING OPPORTUNITIES FOR GOLDEN DOME

We are actively seeking alignment with primes or integrators needing teammates in:

- Advanced M&S and threat simulation
- AI/ML-based decision aids and BMC3 tooling
- Secure CI/CD infrastructure for ISR/C2 applications
- System integration support for satellite and comms payload testing
- Cybersecurity, enclave design, and cross-domain operations

POINT OF CONTACT

Dolores Lowe
Business Development, By Light/CESI
Dolores.Lowe@bylight.com
(C) 407-252-5230

www.bylight.com