

ACCELERATING NATIONAL SECURITY DECISIONS WITH OBJECTIVE, DATA-DRIVEN ANALYSIS

◆ SPA's capabilities span the full spectrum of national security challenges.

We help leaders translate strategic ambition into mission-ready force designs at speed. SPA tests those designs through modeling and simulation, refines them with digital wargaming, and strengthens decisions with advanced analytics. From concept to execution, our experts enable delivery through digitally enabled program management, systems engineering, and software and cloud engineering.



Strategic Analysis
and Force Design



Mission and Operations
Research Analysis



Data Science and
Artificial Intelligence



Software and
Cloud Engineering



Integrated Program
Execution



Systems Engineering and
Emerging Technology





STRATEGIC ANALYSIS AND FORCE DESIGN

By integrating threat definition, risk analysis, and proven methodologies, SPA equips leaders to design force structures that achieve and sustain competitive advantage across mission domains. This approach aligns strategy, doctrine, and resources with cross-domain national security objectives, enabling informed, timely decisions in an evolving threat environment.

- Design adaptable, multi-domain force structures to address current, evolving, and emergent threats
- Align doctrine with emerging operational and geopolitical realities
- Synchronize service, joint, and allied objectives to strengthen mission effectiveness
- Evaluate adversary capabilities and identify opportunities to gain competitive advantage



MISSION AND OPERATIONS RESEARCH ANALYSIS

By leveraging advanced modeling and simulation with disciplined analytical methods, SPA equips decision-makers with the clarity and foresight to evaluate complex missions, systems, and campaigns. Leveraging digital engineering artifacts, intelligence, and digital wargaming, this approach enables scenario-driven exploration, accelerates iteration, and delivers actionable insights that inform critical decisions across domains.

- Stress-test strategic and tactical CONOPS across mission scenarios
- Optimize critical interdependencies across systems and operational domains
- Quantify mission-critical investment decisions with decision-quality analysis
- Accelerate virtual capability experimentation and evaluation



DATA SCIENCE AND ARTIFICIAL INTELLIGENCE

By transforming raw data into actionable intelligence through secure AI/ML solutions, SPA strengthens mission success and enables decision advantage. By synthesizing diverse data types, including text, imagery, and signals, into meaningful insights, SPA bridges the gap between data collection and operational impact. Leveraging advanced analytics and mission expertise, we operationalize AI/ML to automate complex processes, reduce risk, and empower confident, timely decision-making in dynamic environments.

- Operationalize AI/ML solutions for mission-critical applications
- Synthesize diverse data into predictive, decision-ready insights
- Automate complex, resource-intensive processes to improve efficiency
- Mitigate risk through data-driven analysis and design



Collectively, these capabilities form an integrated, digital approach to strategy, analysis, and execution, combining modeling, wargaming, analytics, and software and cloud engineering to accelerate decisions and strengthen national security outcomes.



SOFTWARE AND CLOUD ENGINEERING

By applying DevSecOps methodologies, agile development practices, and AI-enhanced security, SPA delivers secure, mission-ready software and resilient cloud and hybrid architectures for dynamic digital environments. This approach advances the design, production, and sustainment of scalable, high-integrity modeling, simulation, and analytics applications. Through rigorous testing, custom code generation, and multi-level security protocols, SPA ensures every deliverable meets the highest national security standards while maintaining speed and reliability.

- Advance automated DevSecOps pipelines to streamline development and deployment
- Engineer resilient hybrid cloud architectures for mission-critical environments
- Harden infrastructure through advanced, multi-layered security approaches
- Optimize application performance and reliability through AI-enabled development



INTEGRATED PROGRAM EXECUTION

By developing integrated digital frameworks that unify program data and provide near real-time visibility, SPA equips Program Managers to navigate complex acquisition programs with clarity and control. Leveraging advanced analytics, AI, and generative AI, this approach enables risk assessment, outcome forecasting, and informed decision-making across contracts, schedules, and performance. By reducing administrative burden and eliminating silos, SPA facilitates acquisition timelines and ensures mission-focused outcomes.

- Expedite complex acquisition timelines through data-driven execution
- Minimize investment risk using advanced modeling and predictive analytics
- Optimize lifecycle resource allocation across programs and portfolios
- Navigate complex regulatory environments with greater clarity and control



SYSTEMS ENGINEERING AND EMERGING TECHNOLOGY

By combining operational expertise with advanced digital tools, including high-fidelity digital twins and model-based architectures, SPA accelerates development timelines and strengthens system resilience. Leveraging emerging technologies such as AI, this approach enables leaders to outpace adversarial innovation and maintain mission dominance. Through rigorous systems engineering and the application of leading-edge technologies, SPA architects resilient, multi-domain solutions, validates performance in complex environments, and ensures lifecycle optimization.

- Architect resilient, multi-domain systems for complex mission environments
- Validate system performance in simulated and contested environments
- Counter emerging and disruptive technological threats
- Optimize lifecycle performance and long-term operational readiness

◆ **Learn how SPA applies these capabilities to real-world missions, delivering speed, agility, and data-driven outcomes at spa.com/capabilities.**

NATIONAL SECURITY FOCUS

Defense | Intelligence | Homeland Security

SPA is a trusted agent delivering objective, data-driven analysis for the government's most complex and sensitive missions. With speed and agility, SPA translates insight into action, enabling faster, more informed decisions across the Department of War, military services, the Intelligence Community, the Department of Homeland Security, the Department of Energy, and other federal agencies. Our teams apply innovative approaches and efficient execution to keep pace with evolving national security challenges.

CLEAR ANSWERS FOR NATIONAL SECURITY CHALLENGES

- ⦿ Data-driven solutions for securing the nation's defense.
- ⦿ Capabilities that span the defense, intelligence, and homeland security market spaces.
- ⦿ Technical expertise precisely aligned with our clients' missions.
- ⦿ Objective, responsive, and trusted team members, dedicated to national service.
- ⦿ Commitment to conveying truth, even when difficult, for best outcomes.



LEARN MORE ABOUT SPA'S CORE CAPABILITIES

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OBJECTIVE | RESPONSIVE | TRUSTED

