# NAVAL SIMULATION SYSTEM



### **MARITIME OPERATIONS COURSE** OF ACTION ANALYSIS TOOL

QUANTITATIVELY EVALUATING TASK FORCE EFFECTIVENESS

### **EVALUATE OPERATIONAL PLANS**

Simulate OPLAN execution vs. assessed threat to identify gaps and seams.

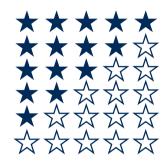
### ANALYZE EXERCISES/ **EXPERIMENTS**

Simulate planned/actual maneuver & CONOPS to maximize confidence building and investigate alternative approaches.

### **EXAMINE OPERATIONAL CONCEPTS**

Simulate innovative warfighting concepts in demanding tactical environments to evaluate their relative efficacy.

### PRIORITIZE FORCE IMPROVEMENTS



Simulate alternative force capability mixes and rank according to quantitative impact on force operational effectiveness.

### NSS EFFICIENTLY ASSESSES ALTERNATIVE FORCE STRUCTURES. CAPABILITIES. **CONCEPTS OF OPERATIONS, AND SCHEMES OF MANEUVER**

Review scenario activity at the mission and engagement levels to confirm appropriate operational behaviors.

Investigate statistical results outliers for critical insight into complex interrelationships.

Rapidly trace top-level warfighting effectiveness results to key drivers and driver combinations in force behavior and environmental conditions.

### **OBJECTIVE | RESPONSIVE | TRUSTED**

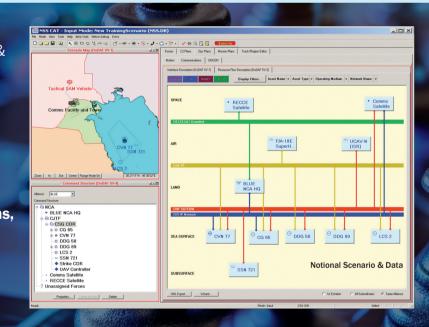
### NSS QUANTITATIVELY EVALUATES THE RELATIVE IMPACT OF COAS ON **FORCE OPERATIONAL EFFECTIVENESS**

C4ISR-Centric Explicit Modeling of campaign to engagement-level plans including branches & sequels; individual group/mission/asset commanders, command relationships and control constraints; internal and external communications architectures; command/ intel center data processing and Kalman filter fusion-driven perception based on tactical decision making.

Multisided, Full-Spectrum Maritime Operations, with extensive coverage across surface, subsurface, land, air, and space domains, including ISR TCPED, kinetic/non-kinetic engagement, logistics consumption and replenishment, operator proficiency, system reliability and damage/malfunction & repair.

**Comprehensive Template Repository for** commanders, plans, tactics, platforms, systems, adjudication arbiters, and metrics.

Intuitive User Interface, with map, editor, or file input modes and an extensive wizard toolbox for rapid entity library building and scenario development; powerful interactive run/playback mode for in-depth scenario review and cause/effect traceability; rapid batch processing setup and automated runtime error debugging; automated results data post-processing.



Command Maneuver, Fires & Control & Logistics Comms & Computing **Tactical ISR TCPED** Perception

### NSS Sponsors: US Department of Defense, US Navy, US Marine Corps, US Coast Guard

- Chairman of the Joint Chiefs of Staff
- US Navy, Commander US Pacific Fleet
- US Navy, Chief of Naval Operations
- US Navy, Warfare Development Center
- US Navy, Naval Air Warfare Center
- US Navy, Undersea Warfare Center
- USMC, Combat Development Command
- **US Coast Guard**

### **DECISION SUPPORT FOR NATIONAL SECURITY**

Systems Planning & Analysis, a leading global provider of advisory services supporting national security objectives, provides deep domain expertise, problem-solving capabilities, and a results-driven approach to program lifecycles, reaching a wide spectrum of market areas.

With over 50 years of experience, SPA successfully manages large, integrated professional service projects in engineering, analytics, modeling and simulation, and financial and scientific services for clients worldwide.



NSS POC: Bill Decker at 757.341.4160, or, wdecker@spa.com.

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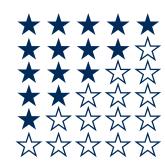
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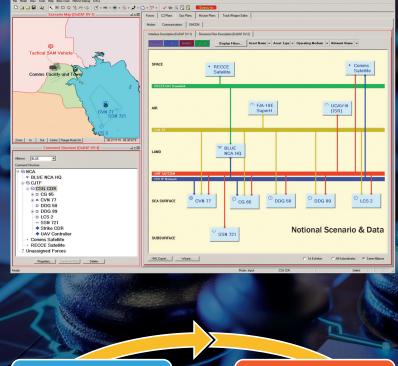
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Command & Control & Logistics

Comms & Computing

Tactical Perception ISR TCPED

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