

## 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.

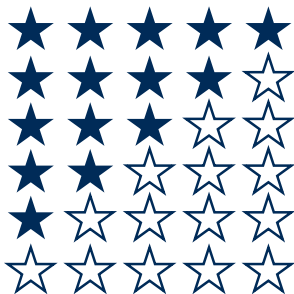
#### ANALYZE EXERCISES/ EXPERIMENTS

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.



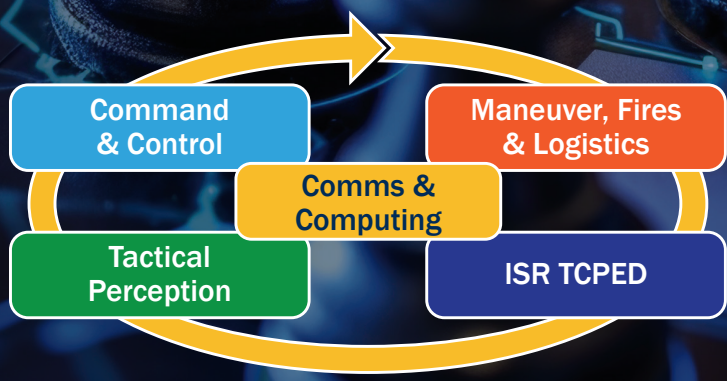
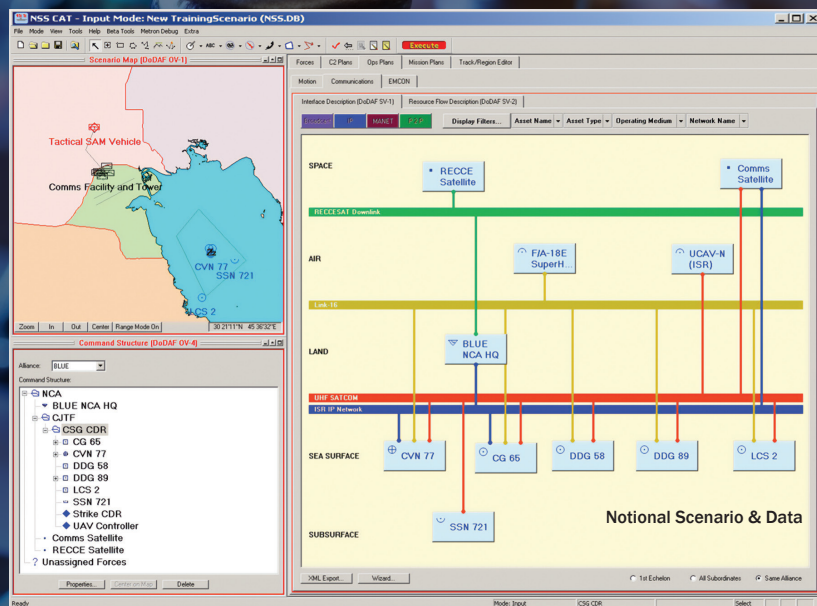
# NSS QUANTITATIVELY EVALUATES THE RELATIVE IMPACT OF COAs ON FORCE OPERATIONAL EFFECTIVENESS

**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.



## CASE-T Sponsors: SSP, DARPA, DHS S&T, and Other Government Agencies

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