# **Supporting Your Mission**

Building on over 15 years of proven solutions in Constructive Simulation and Training, C4i Training & Technology brings it newest platform, Full Spectrum Operations (FS-OPS), a true entity based Joint Theatre level Simulation & Modeling tool that trains commanders and staff from company-level and above for today's complex battle space.

A multi-purpose tool, FS-OPS can be used for command post training, course of action analysis, conceptual development or low-overhead driver for C4ISR systems.

## **FS-OPS Features**

- ◆ Rapid Scenario Development Scenario creation with FS-OPS is fast and simple.
- Multi Domain Operations
   FS-OPS accurately simulates Surface,
   Subsurface, Land and Air entities for
   joint operations.
- ◆ Live -Virtual & Constructive FS-OPS stimulates C4ISR systems with simulated data, provides a synthetic wrap for Crew Trainers, and supports HLA and DIS protocols.
- System of Systems
   Complex entities can be configured with multiple zones each assigned with specific capability, equipment and operators.
- Radar/Sensors & Sonar
   Full support for Rotating and Fixed Face, EOIR, IR, EO, IFF, ESM. Hull mounted Directional and Omni. Passive and Active Towed Arrays.
- ◆ Missiles & Effectors

  Configurable Missiles, Torpedoes, Chaff, Flares, Decoys, On-Board & Off-Board Jammers.









# Why Choose FS-OPS?

FS-OPS is a scalable and powerful entity based multi-domain Simulation & Modeling tool, built for the modern battle space, enabling Commanders to plan, prepare, execute and assess within a realistic environment to improve Operational Readiness.

#### **Rapid Scenario Development**

Scenario creation with FS-OPS is fast and simple. ORBATs can be generated, complex entities created, and units placed on the terrain with just a few mouse clicks. FS-OPS allows rapid re-purposing of existing scenarios and vignettes.

#### **Multi-Domain Operations**

**FS-OPS** simulates surface, subsurface, land & air entities for joint operations, engineering, joint fires, air support and sea-state are simulated as well as comprehensive logistics, maintenance and medical play.

Enhanced Operational Analysis using Asynchronous Monte Carlo. Initiate 1000s of parallel processes defining platform, threat entity, installed equipment behavior and characteristics.

### **High Fidelity Interface to LVC and C4ISR Systems**

**FS-OPS** stimulates C4ISR systems with realistic information flows into the Operations Center during training. Supporting configurable C2 Delays that affect the responsiveness of vehicle entities in normal and adverse conditions. FS-OPS interfaces with other LVC simulations via industry standard protocols.

Operator selectable entity data rates, Users can specify whether entities will use standard, low or high data rates within a defined Area-Of-Interest, At the highest rates, FS-OPS can run entity state calculations every 16ms supporting Hypersonic engagements with high fidelity modeling and federation to virtual systems.

### **System of Systems**

**FS-OPS** allows entities to be comprised of zones, each with their own equipment and crew, allowing for complex environments such as Ships or Tanks etc. Zones have defined length, height and orientation with crew levels for operations & maintenance. Zones can be equipped with specific capabilities including sensors, communications, special attributes such as de-mining, mobility, weapons platforms and levels of protection.

During Combat, each zone is continuously analyzed for damage and cumulatively can trigger mobility, communication or firepower kills. In addition, equipment configured with a MTBF profile may fail prematurely based on type, strength and damage associated with an impact.

#### **Probability of Detection & Kill**

**FS-OPS** supports the ability to import manufacturer PK and PD data for Weapons & Sensors, to accurately simulate real-world conditions.

FS-OPS facilitates Asset Profiles where maneuverability and radar detection signatures of personnel, vehicles, and installations can be set. Maneuverability of an entity is used in the Kill calculation if that entity is engaged by another entity's weapons system.

