

FORTRIS™

FORCE ON-FORCE REACTIVE TACTICAL
READINESS IADS SIMULATOR



PROVIDING A COMMAND AND CONTROL SYSTEM FOR A FORCE-ON-FORCE BATTLE MANAGEMENT ACROSS MULTIPLE PLATFORMS

FORTRIS IADS simulator is a scenario engine that provides a real-time complex battle simulation between hostile and friendly forces. The synthetic environment within FORTRIS contains a true multi-layered Integrated Air Defense System (IADS) simulation that can act and react both as an overall system as well as individual contributors making it the ideal cognitive training tool within the Live Virtual Constructive (LVC) world.

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TEXTRON Systems

PUSHING PAST POSSIBLE

FORTRIS™ FORCE-ON-FORCE REACTIVE TACTICAL READINESS IADS SIMULATION

CHARACTERISTICS & BENEFITS



COGNITIVE

FORTRIS™ features automatic cognitive reactions at each command and control level, with autonomous mode changes and behaviors representing multiple C4I layers.



WEAPON SYSTEMS

FORTRIS has the ability to model all components of today's weapons using the built-in scripting, including comms, weapons and radars all with centralized mode changes.



FLEXIBLE ARCHITECTURE

FORTRIS is Distributed Interactive Simulation (DIS) compliant and compatible with other simulation protocols like Joint Simulation Environment (JSE). Its architecture allows for integration as a simulation core or partner with high-fidelity models and supports docker/container architecture.



SYSTEM

FORTRIS is hosted on standard Commercial Off-The-Shelf (COTS) PC, Laptop, or Virtual Machine. FORTRIS functionality can also be compartmentalized as a service to provide high fidelity simulated components.



EXTERNAL INTERFACES

FORTRIS can share entities and RF signals with other simulations, ingest entities from external sources and integrate IADS layers with external simulations. Simulated entities react to those external entities without intervention.



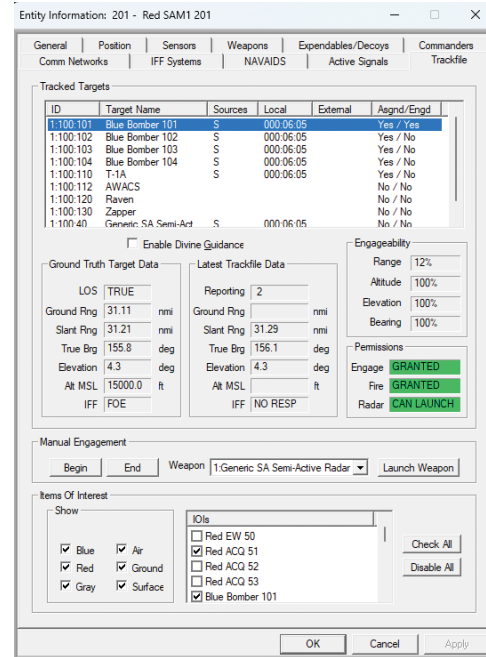
DEBRIEF/RECORD/RESET/REPLAY

FORTRIS has the ability to debrief a training exercise using features such as reset, replay, and restart.



STREAMING IQ

Pair FORTRIS with Textron System's DESIQ™ system to generate streaming IQ input for test or training systems.



FORTRIS is capable of modeling an unlimited number of layers of command and control hierarchy. The IADS communication links within FORTRIS provide the ability for entities to generate coherent communications between each other in order to share track data, send commands, and generate responses over simulated data links. These entities can be logically linked together based on their ability to communicate, their command and control responsibilities, and their role within their IADS hierarchy.

The generated coherent communications reflect each entity's perception of the environment. This perception is able to be affected by conditions such as communication link data latency, data denial, and data becoming stale. The proficiency-based entity reactions to the perception include radar mode changes, weapon launches, expendable launches, target assignments, target engagements, and communication changes within the IADS.

FORTRIS provides the capability to reset the simulated environment to intervals of at least 1-second resolution of mission elapsed time for analysis and can also track and provide performance assessment.

Providing a real-time force-on-force battle simulation that covers the full spectrum of today's enemy, from traditional IADS to loosely-networked ad-hoc weapon systems at multiple classification levels.