

# **■ C3 AI Contested Logistics**

# **Resilient and Adaptive Supply Networks in Contested Environments**



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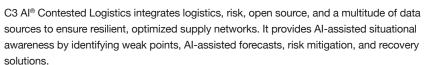
with Al simulation to account for various risks and user-defined scenarios

**Enhance Campaign Plans** 



#### **Monitor Mission Status**

in near real-time to achieve a comprehensive view of the supply network



Military logistics teams are tasked with delivering the right resources at the right time to the right place. To achieve that, logistics teams need to develop robust campaign plans, monitor missions and supply networks in real time, and adapt to constantly changing dynamics. Performing these tasks in a contested environment is challenging, as inclement weather, shifting geopolitical landscapes, and adversarial interference may disrupt commercial and government supply networks. Logistics teams may struggle with effective planning and timely responses due to extensive manual aggregation and analysis of siloed data and processes.

C3 Al Contested Logistics addresses military logistics pain points. Through scenario planning with Al-driven simulations, logistics planners are empowered to build comprehensive campaign plans that consider critical factors such as operational variability, readiness, and geopolitical risks. By leveraging near real-time monitoring capabilities, operation centers can attain a global view of all missions, encompassing vital information such as mission progress and location, mission risk assessments, and predicted estimated time of arrival (ETA). With Al-driven risk mitigation and execution optimization capabilities, tactical teams can rapidly adapt and revise the optimal route in response to dynamic risks and adversarial interferences within the surrounding environment.

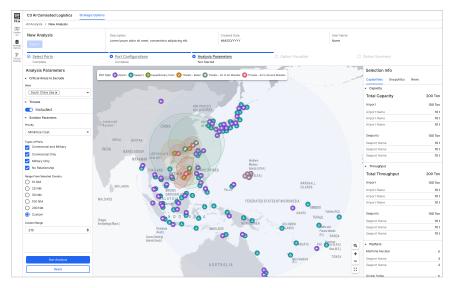


Figure 1. C3 Al Contested Logistics' Common Operating Picture provides a unified view of campaign plans and mission data.

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## **Adapt to Rapid Changes**

in contested environments with Al-assisted contingency planning

#### **Feature Summary**

- Al-Driven Contingency Scenario
   Planning equip planners with optimal campaign strategies by conducting rigorous nodal analysis using simulation techniques to analyze a wide range of scenarios, encompassing varying environmental risks and interferences
- Logistics Route Optimization facilitate near real-time supply network optimization to identify optimal routes for mission execution, leveraging current geopolitical, weather, and adversarial information
- Near Real-Time Mission Monitoring and Al-Based Lead Time Prediction – empower operations centers with a global view of all logistics missions' location, progress, and Al-predicted ETA in near real-time, enabling effective monitoring
- Delay & Risk Alerts notify operation teams promptly about mission delays and new threats in the application interface, ensuring timely implementation of necessary mitigations and adjustments
- Flexible What-If Analyses model various user-defined situations to develop robust alternatives that account for circumstances that arise during the missions, enhancing adaptability
- Common Operating Picture enable all logistics teams to have a unified and consistent view of operational data, risks, and threats to establish a shared understanding for monitoring and analysis

# Resilient Logistics at Strategic, Operational, and Tactical Echelons

C3 Al Contested Logistics establishes resilient military supply networks by breaking down data silos and harnessing the power of Al models. The application seamlessly unifies a wide array of data sources, encompassing both traditional sources such as AlS, TRANSCOM databases, and GCSS, as well as non-traditional sources like geopolitical risks and weather conditions. This unified data is processed in near real-time, generating a common operating picture that enhances situational awareness for all missions and serves as the foundation for subsequent analyses. Furthermore, the application analyzes the data with advanced machine learning algorithms and Al simulation techniques, such as Monte Carlo Stochastic Simulations, ETA predictions, and routing optimization to strengthen the supply network's resilience. These powerful analyses empower logistics teams to develop comprehensive campaign plans, real-time ETA monitoring, and optimize execution, ensuring a resilient and transparent supply network is in place.

#### With C3 Al Contest Logistics, strategic, operational, and tactical teams can:

- Accelerate time-to-insight for campaign planning to a matter of hours, replacing months-long manual analysis
- Create robust and adaptive strategic options for campaigns that account for varying objectives and constraints in any given scenario
- Stay informed and respond promptly to constantly evolving contested conditions through Al-driven notifications and mission monitoring, maintaining a competitive advantage relative to adversarial peers
- Optimize mission routing to prevent delays and ensure the timely delivery of resources to support military operations

- Effective resource allocation to eradicate shortage issues, ensuring the right resources in the right places at the right time
- Develop a unified data image by integrating disparate operational systems, enabling the creation of a common operating picture to establish a shared understanding across all echelons
- Enrich traditional analyses with non-traditional data sources, such as geopolitical risks and threats
- Increase team efficiency and collaboration by breaking down silos with a single unified application utilized across strategic, operational, and tactical organizations

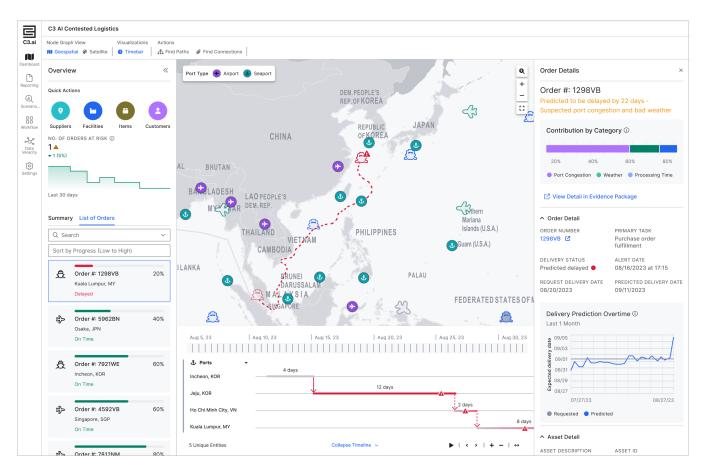


Figure 2. C3 Al Contested Logistics offers real-time mission monitoring and delayed missions.