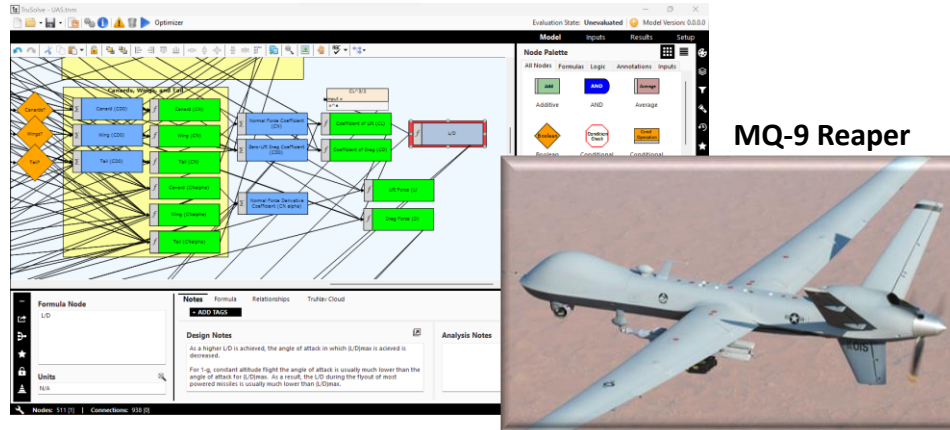


**Challenge:** Rapidly evolving UAS threats in conflict. Adversaries modify UAS systems, impeding effective response.

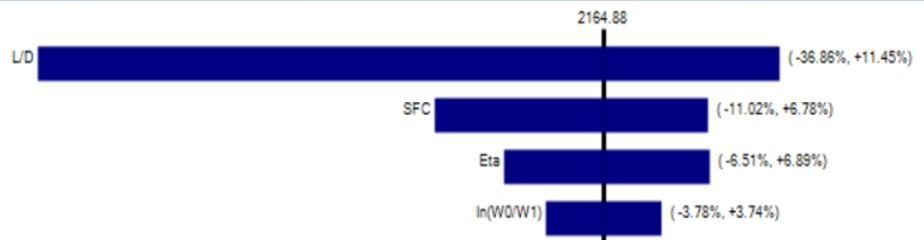
**Solution:** TruNavigator® novel and Generative AI methods and advanced simulation techniques.



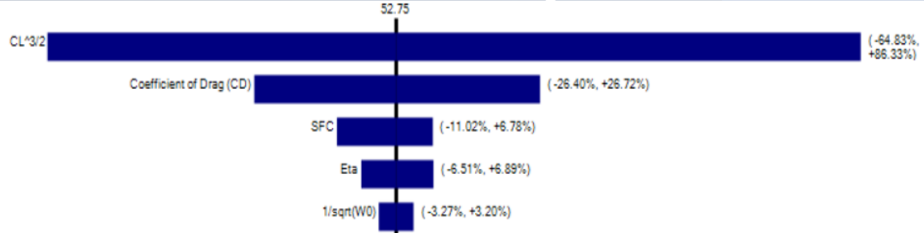
**Approach:** Evolved AI® Digital Twin UAS Model

- **Primary Goal:** Utilize demonstrated and successful Generative AI to produce a digital twin UAS model.
- **Real-Time Simulation:** Capable of simulating UAS performance in real-time.
- **Limited Information:** Utilizes limited available information for simulations.
- **Valuable Threat Assessments:** Provides valuable threat assessments.
- **Aid to Warfighters:** Assists warfighters in making informed decisions.
- **Incomplete Intelligence Assets:** Functions even with incomplete information.
- **Addressing Conflicting Information:** Handles scenarios with conflicting data

**Range. The nominal range being ~2165 nautical miles**



**Endurance. The nominal endurance being ~53 hours**



**Research Aims:**

- AI-driven Threat Assessment Real-time Simulation Digital Twin UAS Model
- Leveraging noisy, sparse and incomplete data to develop high-fidelity threat assessments
- Application to Chinese CH-4 Rainbow UAS
- Sensitivity Analysis

Scan to learn more about applying FAID™ to Hypersonic Missile Threat Modelling Simulation

