

Autonomous Counter-Indirect Fire Threat — TRL-2 to TRL-3 Overview

THE CHALLENGE

Low-cost drones and indirect-fire delivery platforms are reshaping modern conflict and civil security. Existing counter-UAS and counter-indirect-fire systems are expensive, manpower-intensive, and often too slow to respond. Operators need a **fast, autonomous, affordable, and scalable intercept capability**.

OUR SOLUTION

A pending-patent autonomous intercept concept that determines **optimal timing and geometry** for engaging airborne indirect-fire threats and hostile sUAS.

Key Attributes

- **Autonomous:** reduces operator burden
- **Sensor-agnostic:** integrates with existing systems
- **Platform-agnostic:** adaptable to multiple effectors
- **Cost-efficient:** built for scalable deployment

(Technical mechanisms are intentionally excluded to protect IP.)

CURRENT STATUS — TRL-2

- Concept formulated
 - Theoretical basis established
 - Patent pending
 - Early feasibility analysis completed
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NEXT STEP — TRL-3 PROOF OF CONCEPT

Using **Ansys (STK + physics-based simulation)** to produce a defensible, government-fundable proof of concept.

TRL-3 Objectives

- Analytical modeling
 - Physics-based simulation
 - Engagement geometry validation
 - Early performance envelope definition
 - Foundational data for TRL-4 prototyping
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COOPERATION SOUGHT

Seeking **R&D collaboration** with Lithuanian defense ecosystem partners:

- Universities
- Research labs
- Prototyping centers
- Government-aligned organizations

Focus: simulation, analysis, and TRL-raising activities.

ALIGNMENT WITH GOVERNMENT PRIORITIES

- Lithuanian MoD innovation priorities
 - DIANA & STEP dual-use innovation pathways
 - Innovation Agency LT R&D funding mechanisms
 - NATO interest in autonomous counter-UAS and counter-indirect-fire capabilities
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CONTACT

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