AI EW DECISION

Explainable AI decision-support for electronic warfare

UNCLASSIFIED // FOR TRAINING USE ONLY

Turn the electromagnetic picture into a **decision**. AI EW Decision sits on top of OAK DEFENSE's physics-based EW models and applies machine learning to **classify emitters, prioritise threats, recommend a course of action, answer plain-language questions, and learn the fight** — all transparently, all offline, and **grounded in open published literature**. Packaged with a classification-handling shell so it deploys in your environment with your data.

AI EW Advisor

Classify, score threat & priority, recommend an EW technique — with explainability and a published grounding per class.

AI Model Trainer

Train & benchmark classifiers on synthetic or **real public data** (RadioML, RadChar): accuracy, confusion matrix, ROC.

AI EW Assistant

Ask in plain language and get an explained, sourced answer from the suite's models. Offline, no cloud.

Cognitive-EW Agent

A closed-loop agent that learns which technique beats which threat — beats fixed doctrine.

Why it wins evaluations

- **Honest by design.** Cited open sources (RadChar / RadioML / MIT OCW / Skolnik / POMR), visible confidence and feature-level explainability — auditable, not a black box.
- **Real-data proof.** Benchmarks the same models against public RadioML / RadChar datasets, in transparent pure-numpy.
- **Breadth.** A 13-class emitter taxonomy and an open named-system library across **8 markets** (Iran · Russia · China · USA · France · Sweden · Netherlands · Israel).
- **Classification-ready.** Marking banners, role-based access, audit log and bring-your-own-data — field it controlled, with your own authority.
- **Deployable.** Self-contained offline Windows app; per-user install; built-in self-test. No network, export-friendly.

The honest-by-design difference

- Unclassified & representational — **no operational technique library, no classified parametrics, no exploit content.**
- The software only **displays** the handling level the operator asserts; it never confers classification. Everything ships UNCLASSIFIED // FOR TRAINING.
- That is precisely what makes it classroom-safe, export-friendly, and deployable on unclassified networks today.

OAK Defense Ltd · Robby Miles · robbymiles@oakdefenseltd.com · 1-613-462-8803 · www.oakdefenseltd.com/ew-suite