

AFWERX OPEN TOPIC SBIR PHASE I

Proposal Evaluation Summary

Solicitation: AFWERX Open Topic 25.3
Proposal Number: AF253-OT01-####
Company: ████████████████████
PI: ████████████████████
Topic: Open Topic - Dual-Use Technology
Phase I Amount: \$75,000
Evaluation Date: February 2026
Recommendation: SELECT FOR AWARD

PROJECT TITLE

Autonomous RF Spectrum Monitoring System for Contested Electromagnetic Environments

EVALUATION OVERVIEW

AFWERX Open Topic proposals are evaluated on three primary criteria: (1) Technical Merit and Feasibility, (2) Team and Company Qualifications, and (3) Potential for Impact and Commercialization. Each criterion is scored on a scale of 1-5 (5 = Outstanding, 4 = Excellent, 3 = Good, 2 = Fair, 1 = Poor). Proposals must achieve a minimum composite score of 3.0 to be considered for award. Evaluations are conducted by a panel of Air Force and Space Force subject matter experts.

Evaluation Criterion	Rating	Score
Technical Merit and Feasibility	Excellent	4.3
Team and Company Qualifications	Outstanding	4.7
Potential for Impact and Commercialization	Good	3.7
COMPOSITE SCORE		4.2

Recommendation: SELECT FOR AWARD

EVALUATOR COMMENTS

Technical Merit and Feasibility (4.3/5.0)

The proposed RF spectrum monitoring system addresses a validated Air Force capability gap in contested electromagnetic environments. The technical approach uses a novel combination of software-defined radio architecture with on-device machine learning classification that could provide significant advantages over current monitoring solutions. The PI demonstrated prior feasibility through a TRL 3 prototype that achieved 94%

classification accuracy across 12 signal types in laboratory testing.

- **Strength:** Clear technical approach with quantified performance metrics from prior prototype work.
- **Strength:** Well-defined Phase I milestones with go/no-go criteria tied to specific performance thresholds.
- **Weakness:** The proposal does not adequately address how the system will perform in high-density signal environments typical of operational theaters. Laboratory testing with 12 signal types is a limited representation of the contested spectrum.

Team and Company Qualifications (4.7/5.0)

The team is exceptionally well-qualified. The PI has 15 years of experience in RF systems development including prior DoD contract work. The co-PI brings complementary ML expertise with publications in real-time signal classification. The company has completed two prior SBIR Phase I awards (one Army, one Navy) and successfully transitioned one to Phase II.

- **Strength:** Prior SBIR track record with demonstrated Phase II transition.
- **Strength:** Direct domain expertise in the proposed technical area.

Potential for Impact and Commercialization (3.7/5.0)

The dual-use potential is credible. Military applications are clear and the proposal identifies specific program offices (PEO C3T and AFRL/RV) as potential Phase II and Phase III customers. Commercial applications in cellular network monitoring and spectrum compliance are reasonable but would require significant adaptation of the military-focused design.

- **Strength:** Identified specific military end-users and acquisition pathways.
- **Weakness:** Commercial market analysis is thin. Revenue projections for the commercial segment are not well-supported.
- **Weakness:** The STRATFI/TACFI pathway is mentioned but no program office champion has been identified for follow-on funding.

ADDITIONAL EVALUATOR NOTES

The proposal is well-written with clear technical detail and appropriate use of preliminary data. The budget is reasonable and well-justified for the proposed scope. The company should use the Phase I period to engage directly with operational units to validate the concept in more representative environments and to identify a program office champion for potential STRATFI/TACFI follow-on.

Note on AFWERX evaluations: AFWERX Open Topic evaluations are typically shorter than this example. Most companies receive only a brief notification of selection or non-selection with minimal feedback. This expanded format is provided for educational purposes to illustrate what evaluators consider.