

DEFENSE ALPHA

RF & Communications Emerging Company

Report

February 05, 2026

10 Prospects | Proprietary & Confidential

Data Sources:

- 5,147 DoD contracts from USASpending.gov (2020-2025)
 - 1,653 SBIR awards with semantic embeddings
 - 1,979 SEC Form D filings
 - Proprietary composite scoring across 13 signal types

Executive Summary

This report identifies the 10 most promising emerging companies in the target technology sector of the U.S. defense industrial base. Companies were surfaced through semantic search over 1 technology query against 1,653 SBIR award titles, then filtered and ranked using Defense Alpha's composite scoring system, which weighs 13 intelligence signal types including SBIR phase progression, contract wins, private capital raises, multi-agency interest, and risk indicators.

Scoring Methodology

Composite Score: Weighted sum of 13 signals (SBIR advancement, contract wins, VC raises, agency breadth, risk factors).

Higher = stronger momentum.

Relevance Score: Semantic similarity between company R&D portfolio and target technology (0-1 scale).

Final Rank: 65% relevance + 35% normalized composite score.

Top 5 Recommended Prospects

1. HAVENLOCK INC

Seed / Early | Composite: 4.96 | Relevance: 0.645

<https://havenlock.com/>

Deployable Security Solution with Networked Mesh Radios for Expeditionary Security & Communications | Signals: SBIR + VC Raise, SBIR Phase II, Fast SBIR Graduation

2. TETRATE.IO, INC.

Seed / Early | Composite: 3.28 | Relevance: 0.472

<http://www.tetrate.io>

Tetrate Ambient Mesh: A Critical Tool for the United States Air Force in Maintaining Secure and Optimized Communication During Wartime | Signals: SBIR Phase II, Fast SBIR Graduation, High-Priority Tech

3. ZENITH AEROSPACE INC

Series A | Composite: 3.60 | Relevance: 0.412

<https://www.zenithaero.com>

High Bandwidth Air-to-Air and Air-to-Ground Networked Communications for Unmanned Aerial System | Signals: SBIR + VC Raise, Funding Velocity, High-Priority Tech

4. NANTRAK TACTICAL LLC

Seed / Early | Composite: 3.25 | Relevance: 0.403

<https://www.nantrak.com/>

TANGOTRAK Mesh Utility 40mm Projectile - Including Relay, Decoy, Beacon & Motion Sensor | Signals: SBIR Phase II, Fast SBIR Graduation, High-Priority Tech

5. MATRIXSPACE, INC

Series B+ | Composite: 1.50 | Relevance: 0.528

<https://www.matrixspace.com>

Distributed Dual-Mode Mesh Radar for Base Defense | Signals: SBIR + VC Raise

Analyst's Note

Defense Alpha identified 10 emerging companies with active programs in RF & Communications, backed by 27 SBIR awards totaling \$23.2M and \$51.5M in disclosed private capital across 4 companies. Sub-segment activity clusters around mesh networking (4), tactical communications (2), radar & sensing (2). 7 of 10 sit at Seed / Early stage (2 at Series A, 1 at Series B+) - a fragmented, early-stage vertical with consolidation opportunity.

Momentum is concentrated in companies pairing SBIR validation with private capital: HAVENLOCK INC, ZENITH AEROSPACE INC, MATRIXSPACE, INC. 7 companies hold Phase II awards but none have converted to production contracts - a transition gap that represents both risk and opportunity for partners who can accelerate commercialization. Watch HAVENLOCK INC, TETRATE.IO, INC., ZENITH AEROSPACE INC for near-term movement based on acceleration signals.

Engage at the SBIR Phase II inflection point, where technology is government-validated but commercialization support is scarce - these companies are most responsive to strategic partnerships and most likely to convert to program-of-record suppliers.

Ranked Prospect List

#	Company	Stage	Score	Relev.	Key Signal	Latest
1	HAVENLOCK INC	Seed / Early	4.96	0.645	SBIR + VC Raise	2024-08-13
2	TETRATE.IO, INC.	Seed / Early	3.28	0.472	SBIR Phase II	2024-08-01
3	ZENITH AEROSPACE INC	Series A	3.60	0.412	SBIR + VC Raise	2024-08-26
4	NANTRAK TACTICAL LLC	Seed / Early	3.25	0.403	SBIR Phase II	2024-09-11
5	MATRIXSPACE, INC	Series B+	1.50	0.528	SBIR + VC Raise	2024-07-01
6	TERASPATIAL INC	Series A	2.90	0.395	SBIR + VC Raise	2024-09-06
7	THRUST AI LLC	Seed / Early	3.17	0.370	SBIR Phase II	2024-08-28
8	NEXTGEN AERONAUTICS, INC.	Seed / Early	2.05	0.442	SBIR Phase II	2024-09-23
9	FOURTH STATE COMMUNICATIONS, LLC	Seed / Early	2.55	0.354	SBIR Phase II	2024-05-10
10	SOLSTAR SPACE COMPANY	Seed / Early	2.05	0.395	SBIR Phase II	2024-05-14

Detailed Prospect Profiles

1. HAVENLOCK INC

Location: NASHVILLE, Tennessee

Website: <https://havenlock.com/>

Stage: Seed / Early

Composite Score: 4.96 (+5.0 / 0.0)

Technology Relevance: 0.645

Technology Focus:

- Deployable Security Solution with Networked Mesh Radios for Expeditionary Security & Communications
- Enhancing AFSFC Security Infrastructure with Haven Lockdown and Alarm.com

Intelligence Signals:

- [+] SBIR + VC Raise (+1.50)
- [+] SBIR Phase II (+1.35)
- [+] Fast SBIR Graduation (+1.06)
- [+] Funding Velocity (+1.05)

Financial Summary:

- 2 SBIR awards (\$1.8M)
- Private capital: \$2.4M

Recent Activity:

- Latest SBIR: 2024-08-13
 - Latest Reg D filing: 2023-02-17
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2. TETRATE.IO, INC.

Location: MILPITAS, California

Website: <http://www.tetrate.io>

Stage: Seed / Early

Composite Score: 3.28 (+3.3 / 0.0)

Technology Relevance: 0.472

Technology Focus:

- Tetrate Ambient Mesh: A Critical Tool for the United States Air Force in Maintaining Secure and Optimized Communication During Wartime
- Fortifying the Digital Battlefield: Implementing Secure Technical Implementation Guide (STIG) for Warfighter Network Communications
- Zero Trust Compliance Framework Built on Open Security Controls Assessment Language (OSCAL)

Intelligence Signals:

- [+] SBIR Phase II (+1.35)
- [+] Fast SBIR Graduation (+1.12)
- [+] High-Priority Tech (+0.80)

Financial Summary:

- 4 SBIR awards (\$3.3M)

Recent Activity:

- Latest SBIR: 2024-08-01
-

3. ZENITH AEROSPACE INC

Location: BELMONT, California
Website: <https://www.zenithaero.com>
Stage: Series A
Composite Score: 3.60 (+3.6 / 0.0)
Technology Relevance: 0.412

Technology Focus:

- High Bandwidth Air-to-Air and Air-to-Ground Networked Communications for Unmanned Aerial System
- Stratospheric Long Range UAS

Intelligence Signals:

- [+] SBIR + VC Raise (+1.70)
- [+] Funding Velocity (+1.20)
- [+] High-Priority Tech (+0.70)

Financial Summary:

- 2 SBIR awards (\$2.5M)
- Private capital: \$9.7M

Recent Activity:

- Latest SBIR: 2024-08-26
- Latest Reg D filing: 2024-04-04

4. NANTRAK TACTICAL LLC

Location: FRANKLIN, Virginia
Website: <https://www.nantrak.com/>
Stage: Seed / Early
Composite Score: 3.25 (+3.2 / 0.0)
Technology Relevance: 0.403

Technology Focus:

- TANGOTRAK Mesh Utility 40mm Projectile - Including Relay, Decoy, Beacon & Motion Sensor
- TANGOTRAK 40mm Satellite Navigation Warfare & Communications Decoy Electronic Warfare Projectiles
- 40mm Rapid Perimeter Deployment System

Intelligence Signals:

- [+] SBIR Phase II (+1.35)
- [+] Fast SBIR Graduation (+1.09)
- [+] High-Priority Tech (+0.80)

Financial Summary:

- 3 SBIR awards (\$3.1M)

Recent Activity:

- Latest SBIR: 2024-09-11

5. MATRIXSPACE, INC

Location: BURLINGTON, Massachusetts

Website: <https://www.matrixspace.com>

Stage: Series B+

Composite Score: 1.50 (+1.5 / 0.0)

Technology Relevance: 0.528

Technology Focus:

- Distributed Dual-Mode Mesh Radar for Base Defense
- Low SWAP-C Multi-function Multi-band Antenna Payload

Intelligence Signals:

- [+] SBIR + VC Raise (+1.50)

Financial Summary:

- 2 SBIR awards (\$3.1M)
- Private capital: \$32.2M

Recent Activity:

- Latest SBIR: 2024-07-01
 - Latest Reg D filing: 2023-05-24
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6. TERASPATIAL INC

Location: PALO ALTO, California

Website: <https://teraspatial.ai/>

Stage: Series A

Composite Score: 2.90 (+2.9 / 0.0)

Technology Relevance: 0.395

Technology Focus:

- HiBeam.AI: A Highly-Integrated AI-Infused mmWave Beamforming/MIMO System for Directional Wireless Networking in Air, Space, and Ground

Intelligence Signals:

- [+] SBIR + VC Raise (+1.70)
- [+] Funding Velocity (+1.20)

Financial Summary:

- 1 SBIR awards (\$75K)
- Private capital: \$7.3M

Recent Activity:

- Latest SBIR: 2023-12-15
 - Latest Reg D filing: 2024-09-06
-

7. THRUST AI LLC

Location: ENID, Oklahoma

Website: <https://www.thrustai.com>

Stage: Seed / Early

Composite Score: 3.17 (+3.2 / 0.0)

Technology Relevance: 0.370

Technology Focus:

- Combat Controller (SOF) Parasitic Radar & Optical Fusion for Contested Airspace C2
- Passive RADAR integration with AI-enabled Terminal Airspace Awareness Suite ("Bird Brain") for Forward-deployed and Contested SOF Airfield Operations
- Combat Controller (SOF) AI Sensor Fusion for Contested Airspace C2

Intelligence Signals:

- [+] SBIR Phase II (+1.35)
- [+] Fast SBIR Graduation (+1.12)
- [+] High-Priority Tech (+0.70)

Financial Summary:

- 4 SBIR awards (\$2.6M)

Recent Activity:

- Latest SBIR: 2024-08-28

8. NEXTGEN AERONAUTICS, INC.

Location: TORRANCE, California

Website: www.nextgenaero.com

Stage: Seed / Early

Composite Score: 2.05 (+2.0 / 0.0)

Technology Relevance: 0.442

Technology Focus:

- Wireless Airborne Instrumentation Network (WAIN)
- Manufacturing High Fidelity Full-scale WTM for Next-generation Air Vehicle Development
- Manufacturable Performance-Tailored Mesostructures for Hypersonics

Intelligence Signals:

- [+] SBIR Phase II (+1.35)
- [+] High-Priority Tech (+0.70)

Financial Summary:

- 3 SBIR awards (\$3.8M)

Recent Activity:

- Latest SBIR: 2024-09-23

9. FOURTH STATE COMMUNICATIONS, LLC

Location: CHEYENNE, Wyoming

Stage: Seed / Early

Composite Score: 2.55 (+2.5 / 0.0)

Technology Relevance: 0.354

Technology Focus:

- Beyond Line of Sight Communications Backhaul SWaP Improvements in support of AFSOC Capabilities in Contested Environments
- Improved Enhanced Thermo-Scatter System BLOS Communications Capability in Support of ACE
- Backhaul SWaP Improvements for Operations in Contested Environments

Intelligence Signals:

- [+] SBIR Phase II (+1.35)
- [+] Fast SBIR Graduation (+1.20)

Financial Summary:

- 4 SBIR awards (\$1.5M)

Recent Activity:

- Latest SBIR: 2024-05-10
-

10. SOLSTAR SPACE COMPANY

Location: SANTA FE, New Mexico

Website: www.solstarspace.com

Stage: Seed / Early

Composite Score: 2.05 (+2.0 / 0.0)

Technology Relevance: 0.395

Technology Focus:

- Radiation Hardened WiFi Access Point for Spacecraft
- Wide Band Continuous Spacecraft System Communications Terminal

Intelligence Signals:

- [+] SBIR Phase II (+1.35)
- [+] High-Priority Tech (+0.70)

Financial Summary:

- 2 SBIR awards (\$1.3M)

Recent Activity:

- Latest SBIR: 2024-05-14
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Methodology

This report was generated by the Defense Alpha Intelligence Engine using the following pipeline:

Semantic Search: SBIR award titles embedded with all-MiniLM-L6-v2 sentence-transformer (384-dimensional vectors). Cosine similarity measured against technology-specific queries.

Signal Scoring: Composite score computed from 13 signal types including SBIR progression, contract wins, VC fundraising, multi-agency interest, and risk indicators (customer concentration, SBIR stalling).

Ranking: 65% technology relevance + 35% composite signal score.

Filtering: Startups only, net-positive composite score, at least one positive signal, minimum 0.40 relevance score, excluding major defense primes.

Search Queries:

- "RF antenna radio tactical communications mesh networking spectrum"
-

Data Sources:

- 5,147 DoD contracts from USASpending.gov (2020-2025)
- 1,653 SBIR awards with semantic embeddings
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