

www.talonavionics.com



TALON AVIONICS

Deploy Anywhere. Protect Automatically. Without the Need for Pilots.

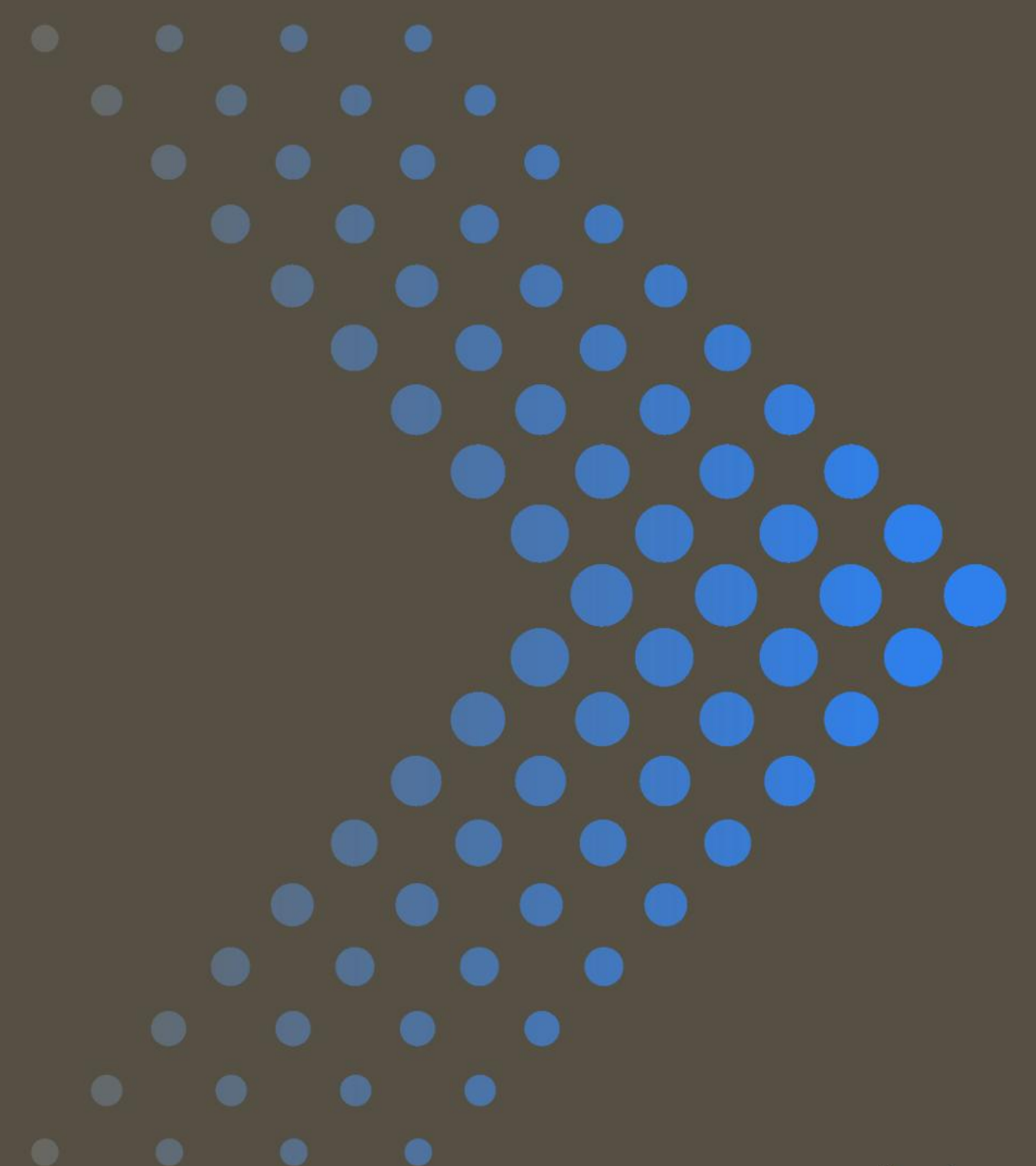


About us

Drones have created a structural imbalance: offense is now scalable and inexpensive, while traditional defense remains costly and limited. The proliferation of autonomous, AI-driven aerial threats demands a fundamentally new approach to airspace security.

Talon Avionics restores that balance.

We provide the critical infrastructure required to defend against autonomous and AI-driven threats. Counter-UAS is no longer a niche capability - it is a modern necessity. From our Idaho hub, we combine elite engineering with high-capacity production to deliver mission-ready counter-drone solutions.



THE PROBLEM

The Human Bottleneck is the Greatest Risk!

Most counter-drone systems rely on one critical failure point: the human operator. They demand skilled pilots, continuous manual control, and intensive training. In high-pressure, real-world scenarios - that is exactly where the defense breaks.

It is estimated that up to 70% of battlefield casualties are caused by FPV and camera drones.

Small, mass-produced UAVs - often costing only hundreds of dollars - are now capable of reconnaissance, targeting, and direct attack. They are scalable, expendable, and increasingly AI-driven.



Structural Gaps In traditional air defense

- ✗ Too expensive per interception
- ✗ Limited ammunition
- ✗ Stationary and power-hungry
- ✗ Slow to adapt
- ✗ High training required

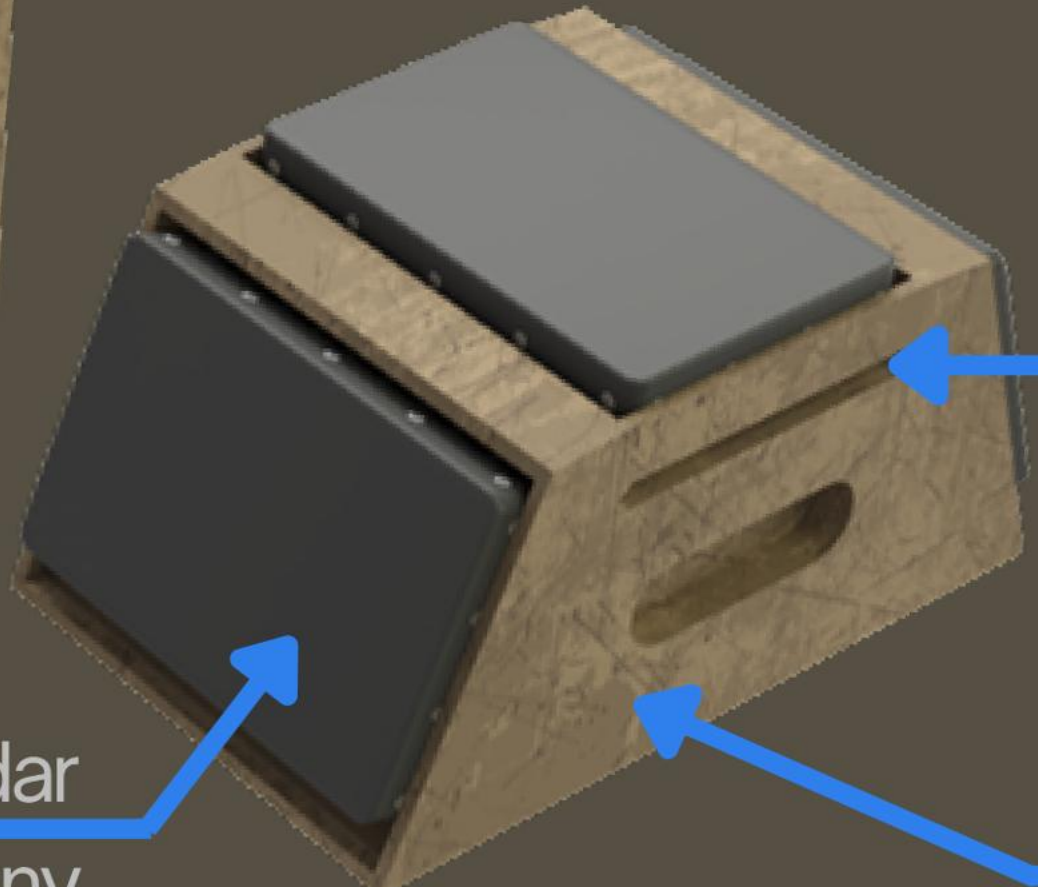


SECTR System

Interceptor station



Acoustic array detects targets up to 100m away using sound



360° High-End radar technologie from Germany



Interceptor pod

Powerful AI computer



Large rechargeable & replaceable battery

PROTECTING WHAT MATTERS MOST

Border Patrol & Law Enforcement

Securing borders and critical security operations against unauthorized drone incursions.

Border surveillance & interdiction

Infrastructure perimeter defense

Event and VIP security

Counter-drone response

Civilian & Critical Infrastructure

Resilient protection for essential systems and public gatherings against aerial threats.

Energy grids & substations

Airports & transportation hubs

Data centers & communications

Public events & mass gatherings

Military & Defense

Allied force protection in contested environments with mobile, rapid-deployment air defense.

Base & forward position protection

Mobile convoy escort

Squad-level organic air defense

Expeditionary deployments



Introducing **SECTR** C-UAS System

Cost Imbalance Correction

Modern conflict demands economically sustainable defense. Kinetic interception restores cost symmetry by countering low-cost drone threats without relying on disproportionate, high-cost interceptors.

Autonomous Engagement Capability

Contested environments move too fast for manual response. Integrated sensor fusion and onboard AI enable autonomous detection, tracking, and engagement of multiple simultaneous aerial threats.

Rapid Deployment Architecture

Operational tempo matters. Designed for vehicle-mounted or expeditionary use, the system can be fielded quickly and repositioned as mission requirements evolve.

Software-Defined Adaptability

Threats evolve rapidly. A modular, updateable architecture enables continuous capability improvement and rapid integration of new detection and engagement algorithms in the field.

Upgrade Your Existing System

You have already operating a counter-drone solution? Our patent-pending acoustic AI tracking module can be seamlessly integrated into existing platforms - enhancing detection, classification, and response time without replacing your infrastructure.



Staying hidden while maintaining full situational awareness



SECTR operates with advanced high-frequency sensing designed to minimize detectability while delivering precise tracking and obstacle awareness. Unlike conventional radar signatures that are easily identified, our approach reduces exposure in contested environments.

Undetectable Localization:

Operating at 90 GHz causes extreme radio wave scattering. This physical phenomenon makes it nearly impossible for adversary Electronic Support Measures (ESM) to pinpoint the transmitter's location.

Low Probability of Intercept (LPI):

While standard X-band or K-band radars are easily tracked, our high-frequency signature stays "under the noise," allowing for high-precision obstacle avoidance and tracking without compromising the platform.

The Silent Death

The Changing Face of War: Drones Waiting in Silence
TALON early detection makes the difference!



Our SECTR system detects hostile drones even when conventional radar systems are ineffective.

Using its independent acoustic array capability, SECTR can identify threats at distances of up to 100 meters - even as they launch from roadsides or ground-level positions.

Through real-time acoustic-array fusion, the threat is instantly detected and classified - and in less than one second, a counter-drone is deployed.

No delay, No surprise, Just fast!



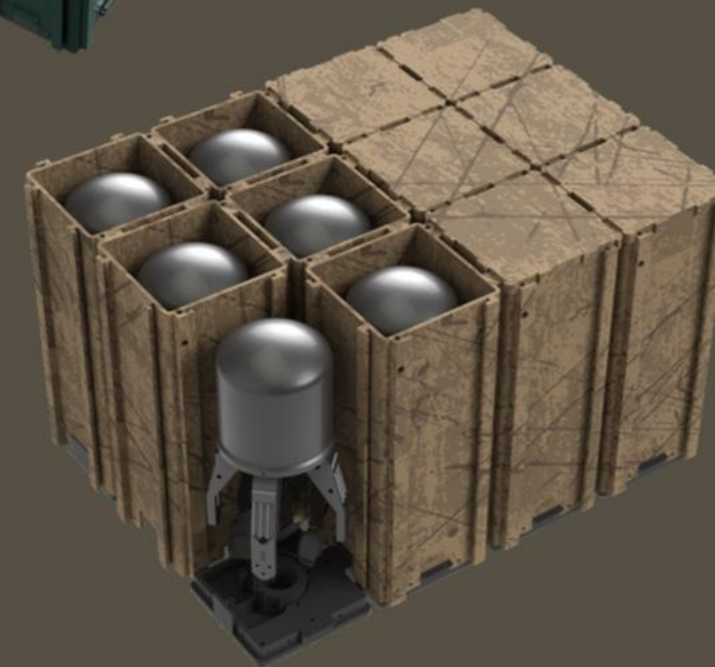
SECTR System

CORE PLATFORM

Modular 10x10 System

A scalable counter-UAS platform built around a configurable 10x10 launch pod. Vehicle-mounted or static deployment with single-operator control.

- Scalable up to 100 launch tubes **x**
- Single control station **x**
- Vehicle-mounted or static **x**
- Mission-configurable grid **x**



DETECTION SUITE

Acoustic & High-End Radar

Proprietary multi-modal sensor fusion combining acoustic detection with conventional radar for comprehensive airspace awareness up to 1,000m.

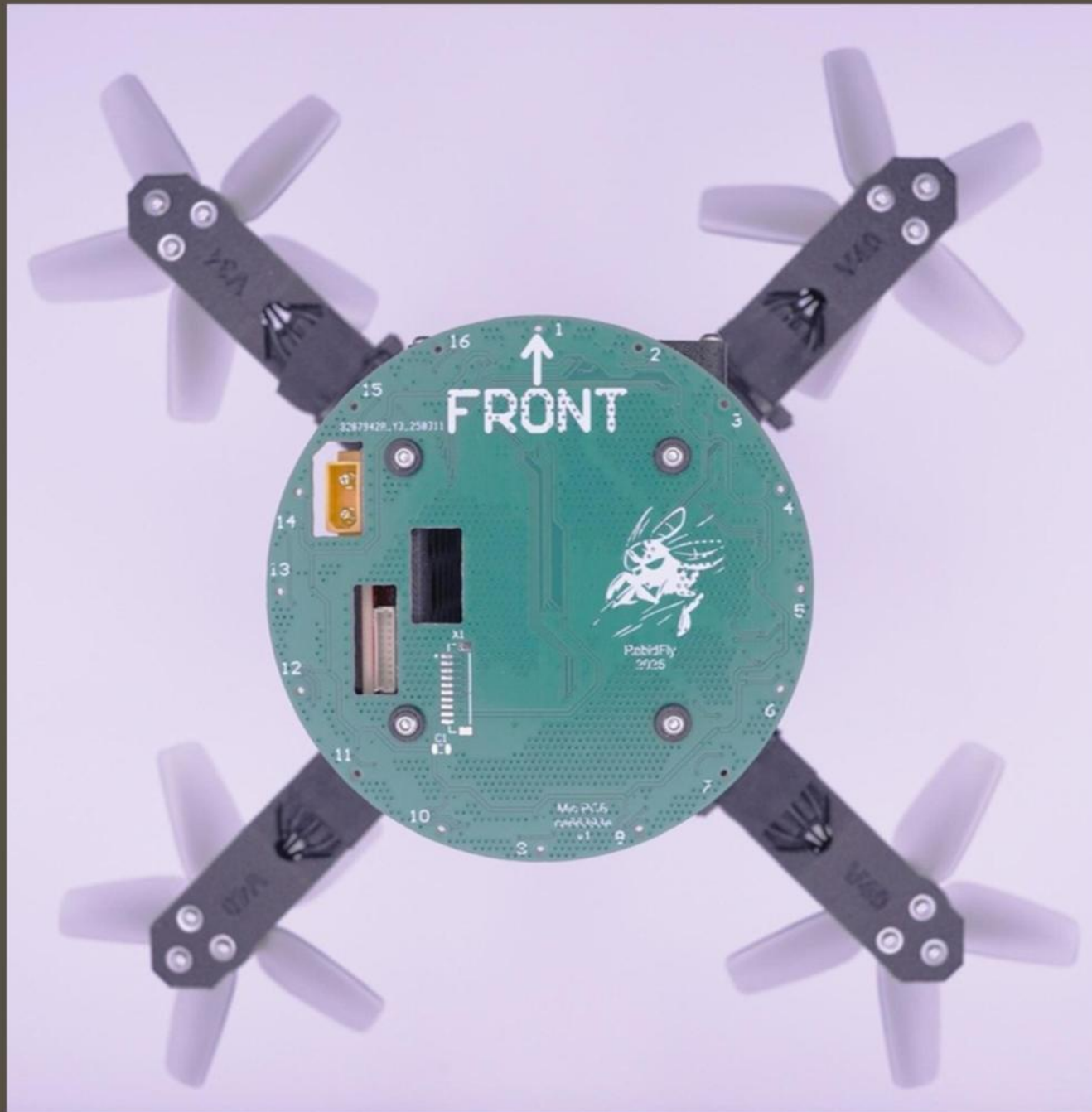
- x** Proprietary acoustic detection
- x** Conventional radar integration.
- x** Multi-modal sensor fusion
- x** Range up to 200 - 1,000m*

*1,000m available Q2/2027

DRONE System



Acoustic array detects targets up to 100m away using sound



- Our drones rely on an array of sensitive microphones for targeting and guidance
- Each drone carries 16 microphones
- The beamforming algorithm is forming a narrow beam that scans the area around the drone in all directions for the sound sources
- When the system locks onto the sound signature of another drone, it flies towards it
- To do this reliably, the drone uses an AI model, that can separate between sound of a target drone and sound of its own motors and wind.



AI Training

THE TRAINING PIPELINE

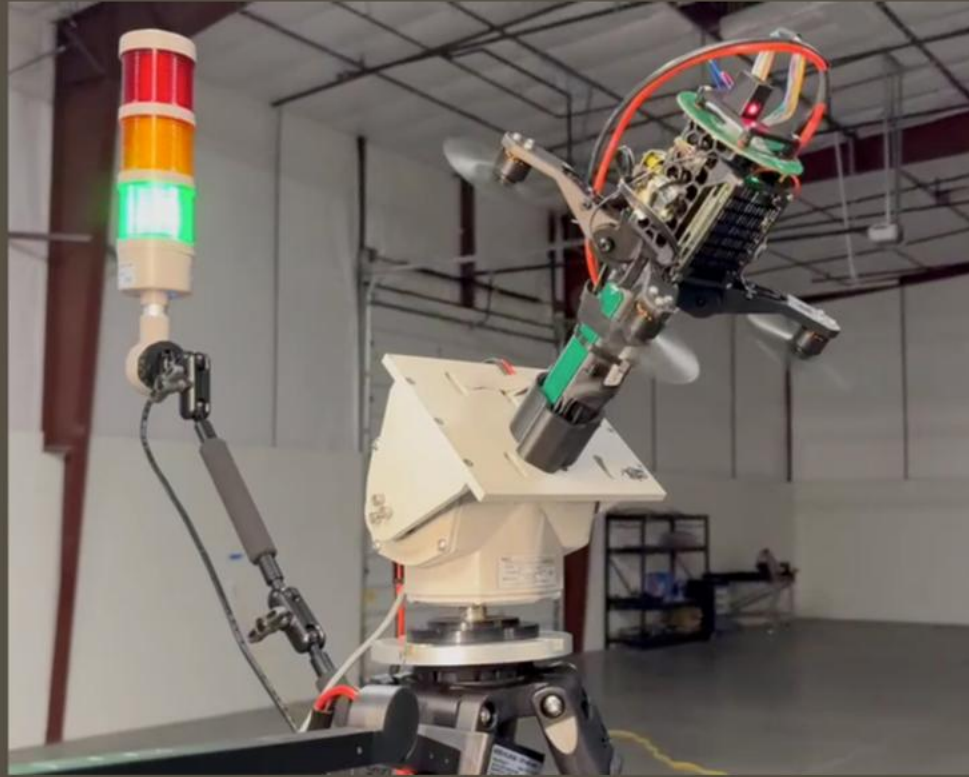


Real-life
Samples

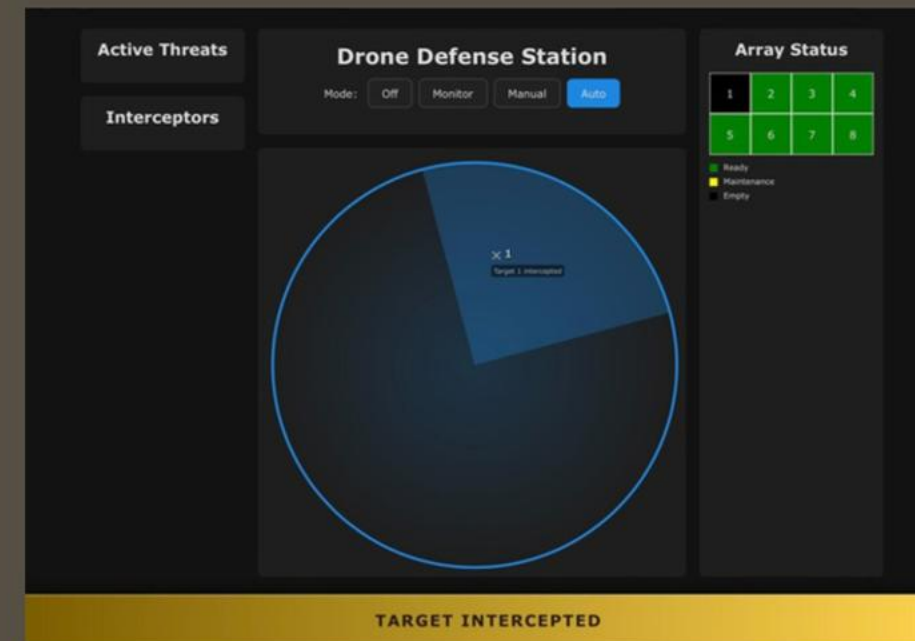
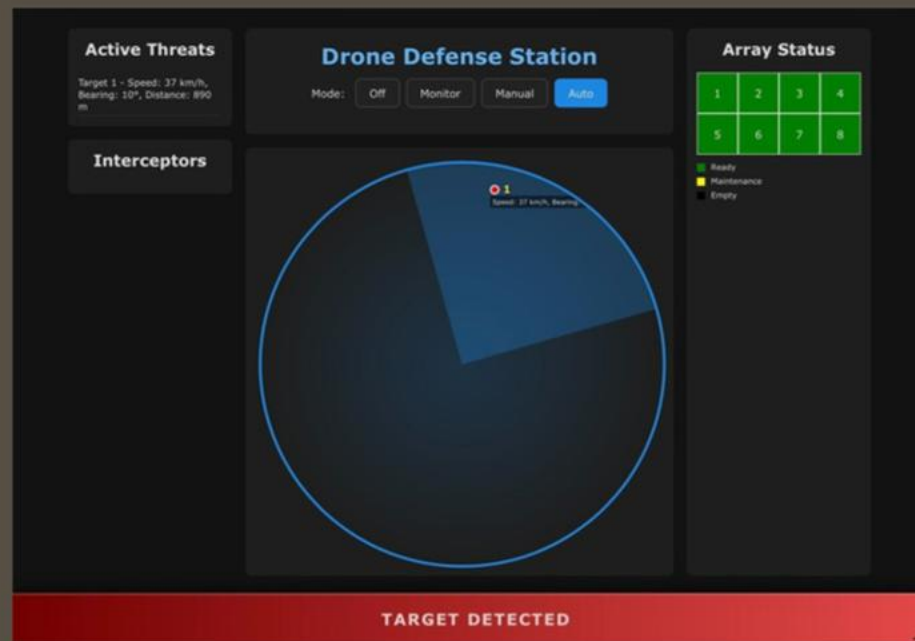
Validation
Dataset



AI Training - In Action



THE AI BRAIN



AUTONOMOUS OPERATION

Zero-Expertise Autonomy

Fire-and-forget operation requiring no skilled operators. Automated target tracking and engagement with reduced response time for rapid threat neutralization.

- ✘ Fire-and-forget operation
- ✘ Automated target tracking
- ✘ No skilled operator needed
- ✘ Reduced response time



Specifications - SECTR System



SECTR-IK-02



SECTR control panel

This is an example of
12x SECTR-IK-02



SECTR-CS-R-02

Parameter	Specification
Target type	FPV and camera drones, ≤ 1 kg
Radar range 2)	250 m up to 1,000 m
Acoustic-Array-Module range	100 m
Single-Interceptor Hit Probability 1)	≥ 95%
Weight (interceptor + launch tube) 1)	700 g
Dimensions (launch tube)	100 × 100 × 250 mm (4 × 4 × 10 in)
Maximum number of interceptors in one system	100 (10 × 10 grid)
Maximum flight time	5 min
Maximum speed	135 km/h (85 mph)
Operational Endurance (100-interceptor system, single charge) 1)	24 hours
Temperature Range	-40°C ... +85°C

1) Capability currently in development and undergoing validation testing.

2) The system must comply with FCC regulations, which require limiting transmission power. For military applications, this restriction may not apply. *1.000m available Q2/2027

Specifications - SECTR Acoustic Array Module



SECTR-MTP

The Acoustic Array Module is a compact multi-microphone acoustic sensing subsystem designed for integration into partner UAV platforms. The module performs onboard acoustic capture and processing to support drone detection, bearing estimation, and acoustic classification workflows. It is intended for low-SWaP airborne applications and interfaces with host avionics over standard power and data links.

- Compact circular acoustic array for UAV integration
- Multi-microphone synchronized audio acquisition
- Onboard embedded processing
- 12 V nominal input power
- Low-SWaP (Size, Weight and Power) airborne design
- Host interface for control, telemetry, and data streaming
- Designed for partner algorithm integration / SDK support
- Suitable for multi-rotor and fixed-wing platforms

Parameter	Specification	Notes
Input Voltage	12 VDC nominal	10–16 V operating range recommended
Power Consumption	14 W max	Typical mission power lower
Detection Range	100 m	DJI Mavic 2 Pro equivalent acoustic signature
Bearing Accuracy (median)	$\pm 2^\circ$	Azimuth and elevation
Update Rate	33 Hz (30ms)	Target presence and bearing updates
Reported Data	Azimuth, elevation, target presence	Real-time output
Operating Temperature	-40 °C to +85 °C	Electronics rated range



The threat landscape facing the United States, Europe, and the Middle East is evolving rapidly. Frontline operators need proven, mission-ready systems today - not promises for tomorrow.

At Talon Avionics, we deliver exactly that.

By building resilient production capabilities in the United States and expanding regional manufacturing where our partners require it most, we ensure that our systems are delivered fast, reliably, and at scale.

Our ability to produce in high volume strengthens the credible deterrence of U.S. forces and allied militaries around the world.

Meet the Team

Founder-Led

Engineering-driven leadership
with deep technical roots

Deep Expertise

Embedded systems, AI, robotics,
and defense-adjacent tech

Global Reach

Operational experience across
markets



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Michael Mayer-Rosa

Co-Founder & Strategic Executive

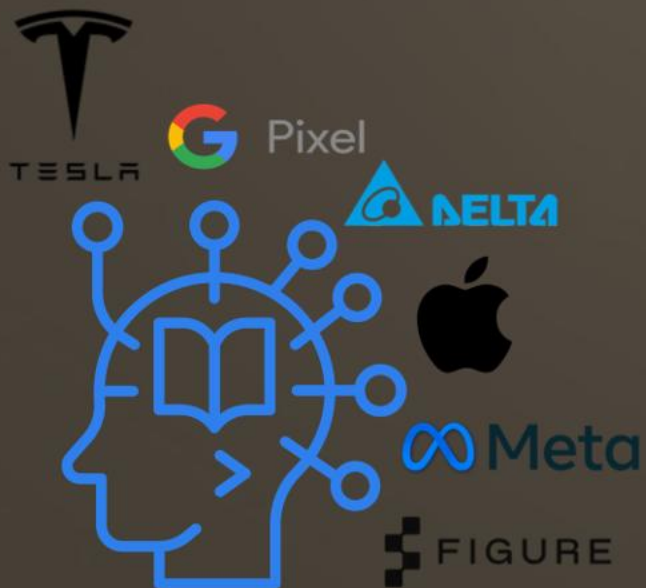
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GROW STRATEGY



BUSINESS MODEL



We operate a **hybrid go-to-market model**. SECTR systems are distributed through selected partners to efficiently serve **government, military, and enterprise customers** across different regions. Strategic key accounts with high-volume potential are managed directly to maximize margins and ensure close customer integration.

Customers acquire the **SECTR base station as the core platform** and configure it with up to 100 **interceptor pods**, depending on mission requirements.

While the **base station represents a one-time hardware investment**, the **primary revenue driver** is the recurring **replacement and operational use** of **interceptor pods** - creating a scalable, high-frequency business model with predictable follow-on demand.

In addition, we offer our **acoustic sound tracking module** as a standalone solution that can be easily integrated into existing drone systems. This is provided through a **licensing model**, enabling drone manufacturers to enhance their platforms with advanced acoustic detection and tracking capabilities.

We are already working directly with **U.S. government** authorities and have successfully registered for multiple relevant projects, further strengthening our position in the defense and security sector.

licensing model

APPLIED PROJECTS



We have entered into a cooperation with the Under Secretary of War for Research and Engineering, who has invited us to participate in the T-REX event this August, where we will showcase our solution. They fully support our acoustic sensor technology and have assigned a dedicated project team to help us prepare for the August event.



We have applied to a United States Air Force project focused on industry solutions for a portable, passive acoustic sensor capable of helping troops detect small drones and other nearby threats during both mounted and dismounted operations.

The project is managed by the Air Force Life Cycle Management Center's Intelligence, Surveillance and Reconnaissance (ISR) and Special Operations Forces directorate, based at Wright-Patterson Air Force Base.

Tracking No. FA8629-26-R-5010

TALON is registered on sam.gov



PARTNERS



Sandstorm
Defence
Solutions



OUR CLIENTS

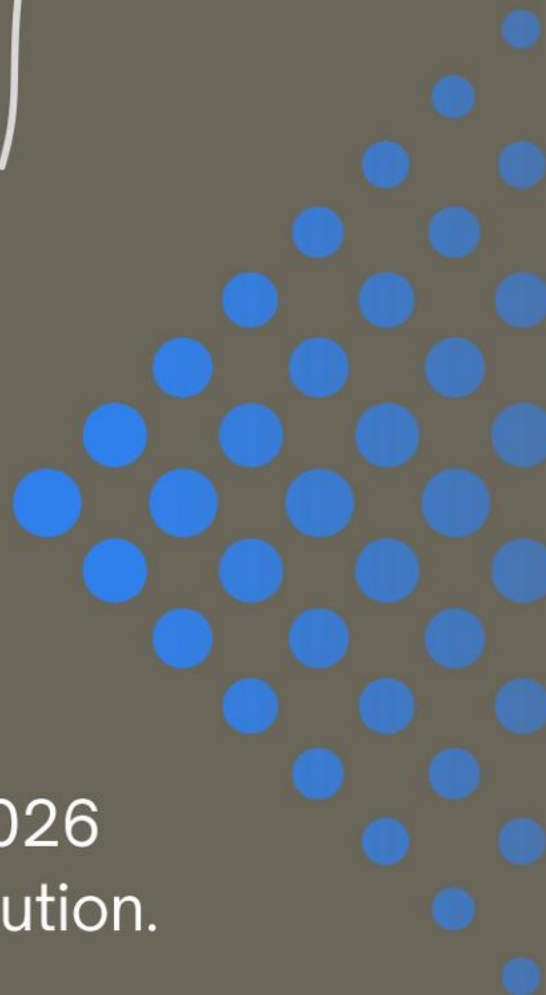
We are currently in active discussions with several potential customers and representatives from multiple countries to initiate pilot projects and establish strategic partnerships.



Potential orders for 700 interceptors and 30 control stations - valued at approximately \$2M (in 2026) - are contingent on successful live demonstration events in June with the Polish government.

In addition, we are in discussions with a potential U.S. customer regarding our licensing model for the integration of our acoustic sound tracking module into their existing drone system.

Potential order with our USA partner in UAE for 2 × 3,000 interceptors + 30 control stations in Q2–Q3 2026 (Standard SECTR solution – no Shahed solution) another UAE Partner wants that we develop a Shahed solution.

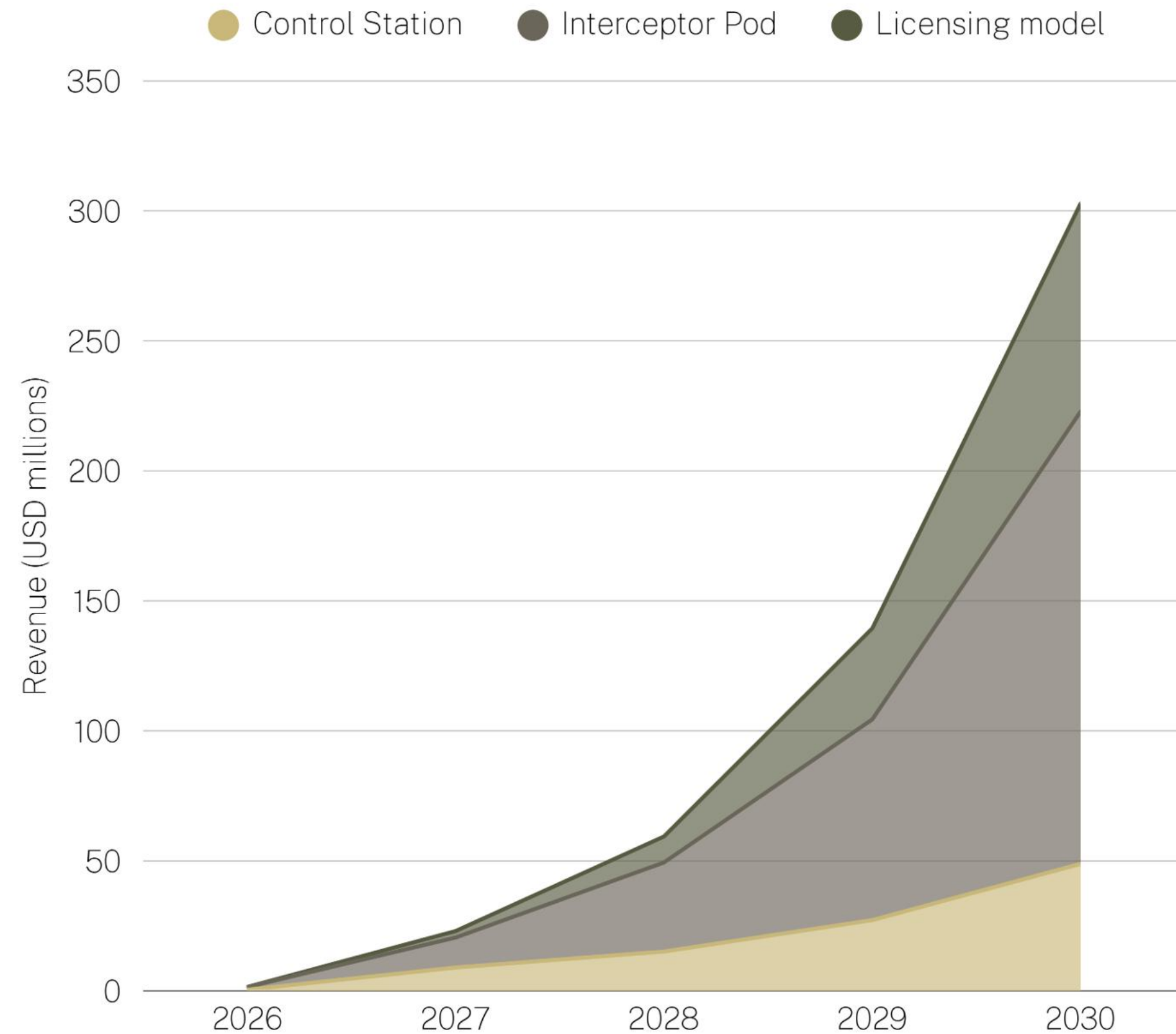


Business Growth 2026 - 2030

5-Year Growth Potential (Serviceable Addressable Market)

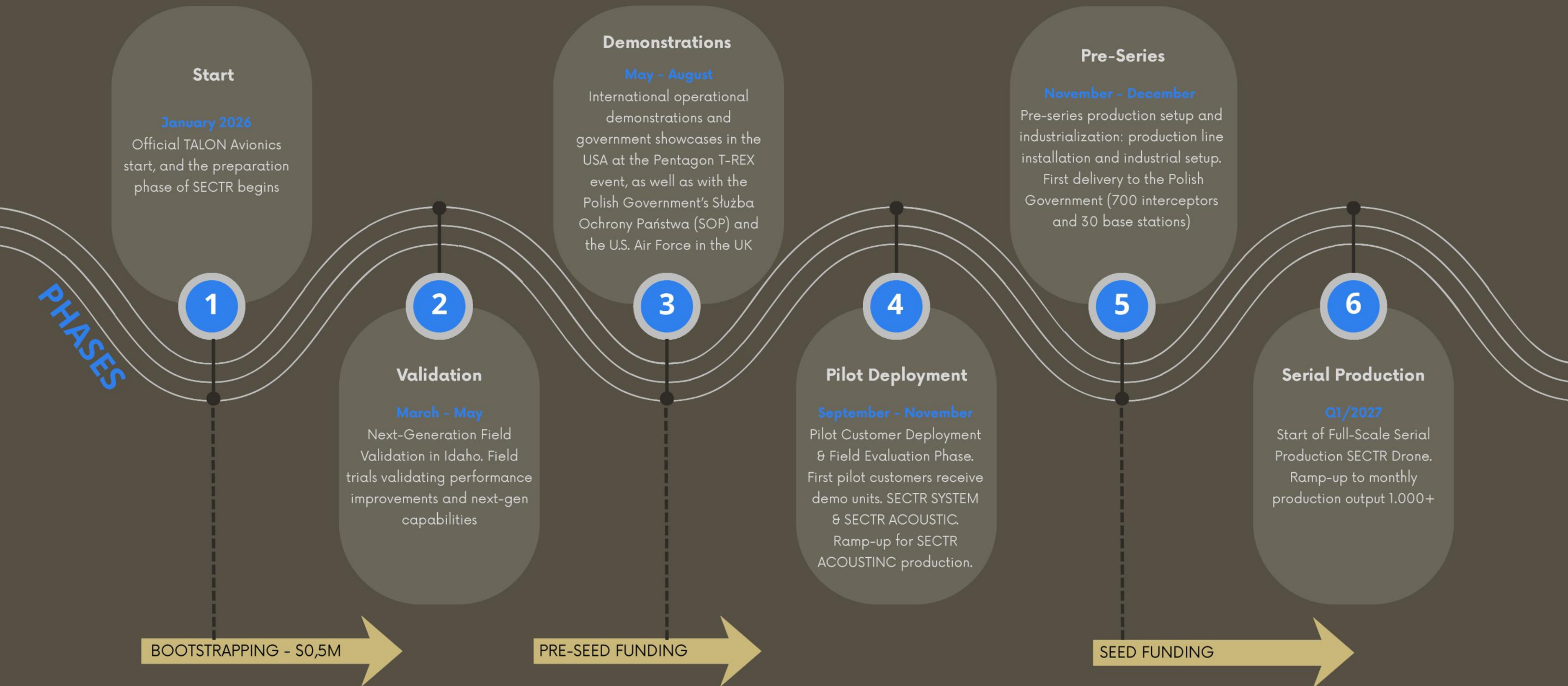
Based on the current trajectory of the C-UAS sector and Talon's focus on cost-effective aircraft augmentation, the following projections represent the Serviceable Addressable Market (SAM) for Talon's specific niche:

Year	Total Global C-UAS Market
2026	\$6.6 Billion
2027	\$8.3 Billion
2028	\$10.4 Billion
2029	\$13.0 Billion
2030	\$20.3 Billion



Revenue estimated forecast per year for our Control Station, Interceptor Pod, and licensing model.

SECTR Development & Production Timeline





Thank You

SECTR is engineered for modern drone warfare. Discuss your operational requirements with our team.

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