BLECHER

Blecher LLC Project Overview

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This document provides a brief overview of our key proprietary platforms, each representing a significant breakthrough in its respective class. The following pages detail the unique capabilities and innovative design principles behind each system.

Part I — Weapons Platforms & Manufacturing Capability

Principals: Designers of 20+ firearms and experts in CNC manufacturing at the limits of standard machining, who also serve as counsel for CFIUS, ITAR, and dual-use export controls.

X: Purpose-built for UAS/drones. A recoilless 5.56 NATO platform at about 1 kg, with tunable near-zero recoil, servo-actuated fire control, and full-auto fire.

Mongoose / 1.36 (5.56, 300 Blackout, 9mm): Ultra-compact quick-change upper receiver: long stroke operating system, sub-minute barrel swaps, bufferless, fully integrated retractable stock.

BrashZero: A caseless operating system firing standard NATO-spec projectiles, solving one of the most persistent challenges in firearms engineering to reduce weight and logistical burdens. The system scales across calibers, up to heavy artillery.

Kimono: A modernized AK platform: full-length monorail, true ambidextrous controls, retractable stock, with the reliability that made the AK legendary.

R&D Excellence; Manufacturing Capability: Concept to production-ready prototype in under a month. Our decentralized model can stand up licensed production in-country.

Part II — Reckon Defense Capability Briefing

Reckon: A 1–10x intelligent weapon optic consolidating rangefinder, ballistic computer, wind meter, drone detector, and training system into a conventional scope form factor.

Autonomous Fire Timing: The human authorizes, the machine times. The shot breaks at the computed moment of maximum hit probability. Human-in-the-loop by architecture.

Counter-Drone: Three-layer drone detection (radio frequency, acoustic, visual AI), shared across every shooter instantly over an encrypted squad mesh.

Vehicle Integration: The same intelligence mounted on armor: remote weapon stations, pintle mounts, coaxial installations. Platform agnostic across Western, Eastern, and domestic fleets.

The Reckon Matrix: One network, one intelligence engine. Talon, Max, Kestrel, Fleas, Loki, Solid Eye, and X-Gun: every asset a node.

The Sovereignty Advantage: Free of US export jurisdiction by design. No US export license, no FMS process, no third-country approval.

BLECHER

Principals

JDBlecher

Education & Credentials

- New York Bar, 99th percentile
- MPRE, 99th percentile
- Juris Doctor, UC Berkeley School of Law (2024)
- Previously ranked 4th at Florida State University College of Law, 4.036 GPA
- Book prizes in Constitutional Law and Legal Writing
- Prosser Prizes in Secured Transactions (Article 9) and Estates and Trusts
- Business Law Certificate
- BS Biology, University of Florida — completed in two years, cum laude
- 98th percentile nationally and 3rd in class on the National Biology Major Field Test
- Designed his own high school curriculum, with over twenty Advanced Placement courses

Practice & Technical

- Prior practice in mergers & acquisitions at a top firm in NYC
- Sole architect of Veracity-Engine — automated citation verification, agentic workflows, zero-retention encrypted inference. 500k+ lines of code
- Built inference-relay — npm-distributed compute routing, ~98.9% cost reduction, patent pending
- Co-designed BrashZero — caseless ammunition operating system that eliminated the brass cartridge case
- Built the ITAR/EAR compliance and cross-border manufacturing framework (TAAs, DDTC registration, CFIUS) for allied-nation precision defense supply chains
- Dual-use software specialist
- Prolific patent drafter and lead applicant — UAS, striker-fired mechanisms, caseless ammunition, AR15/M16 modifications, and the IP underlying his software ventures
- SolidWorks since age eleven; designer of over ten firearms
- Lived in five countries and five US states
- Resting heart rate of 36 BPM

APBlecher — Co-Founder & General Partner

Education & Credentials

- Admitted in New York. Passed the New York, California, and Ontario Bar Examinations. M&A and Securities at Kirkland & Ellis LLP (NYC). Securities Law at Stikeman Elliott LLP (Toronto)
- JD, Osgoode Hall. 1st place in US Securities Regulation, 1st place Business Associations. Engineering (Boston University), Physics (York University)

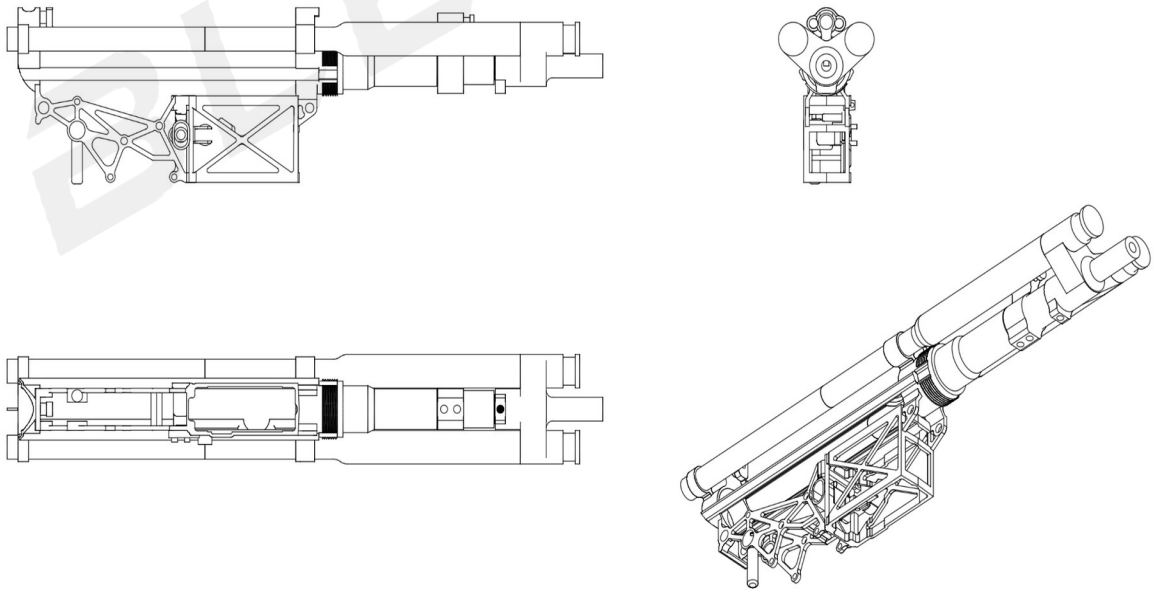
Practice & Technical

- Founded Blecher LLC, Flying Gun (Recoilless X-Gun UAS weapons platform), and Blecher Precision (CNC R&D and prototyping). Patented inventions spanning UAS, striker-fired systems, caseless ammunition, and AR-15/M-16 long stroke bufferless systems. Designed and Manufactured Short Run Prize winning Motorcycles
- Designed 12+ firearms
- Expert in high-compression-ratio piston design, thin-walled high-pressure components, and CNC tool path programming for parts at the limits of standard machining (small internal radii, extreme depths, tight tolerances). Many Patents Pending
- Specialist in Arbitrage in multiple industries and market disruptions
- Serial entrepreneur. Opened and operated multiple flagship Pandora Jewelry Concept Stores including the first Pandora store in Houston
- Sold Pandora Concept Stores for the highest multiple in the company's history. Over 18 years in the jewelry industry spanning retail, manufacturing, and wholesale diamond business

X-Gun

Developed as a weapons system specifically designed for aerial drone operations. Principles include fully autonomous capability potential with servo controlled trigger and safety/selector. Capable of semi automatic and fully automatic fire. Main focus was on weight reduction and compact design including only those essential operating and structural components required for reliable operation. The complete system weighs about 1 kg. Different versions designed for multiple levels of service life to cover the gamut of extended service life and light weight versions where survivability was determined to be measured in hundreds of rounds rather than hundreds of thousands of rounds.
A key requirement to weapons systems mounted on lightweight platforms is the ability to mitigate or eliminate recoil. This has successfully been achieved by the incorporation of a patent pending adjustable jet deflection system balancing out forces to achieve tunable near zero recoil. In addition there are multiple mounting options. There is the ability to mount the system in the conventional orientation so that it may be attached to the belly (or other mounting surface) of a traditional drone. In addition there is the option to mount the system magazine up (technically upside down) for the most compact configuration. The added benefit of this is that it facilitates the downward ejection of spent cartridge cases away from the possibility of interfering with the propellers. In addition there is the option of incorporating mounting brackets for the attachment of spars that extend outward on which end motors and propellers are mounted creating an integrated armed drone where the firearm receiver forms the body of the drone.

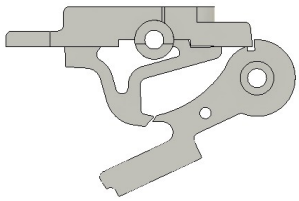
Previous, disclosed model: https://flyinggun.ai/

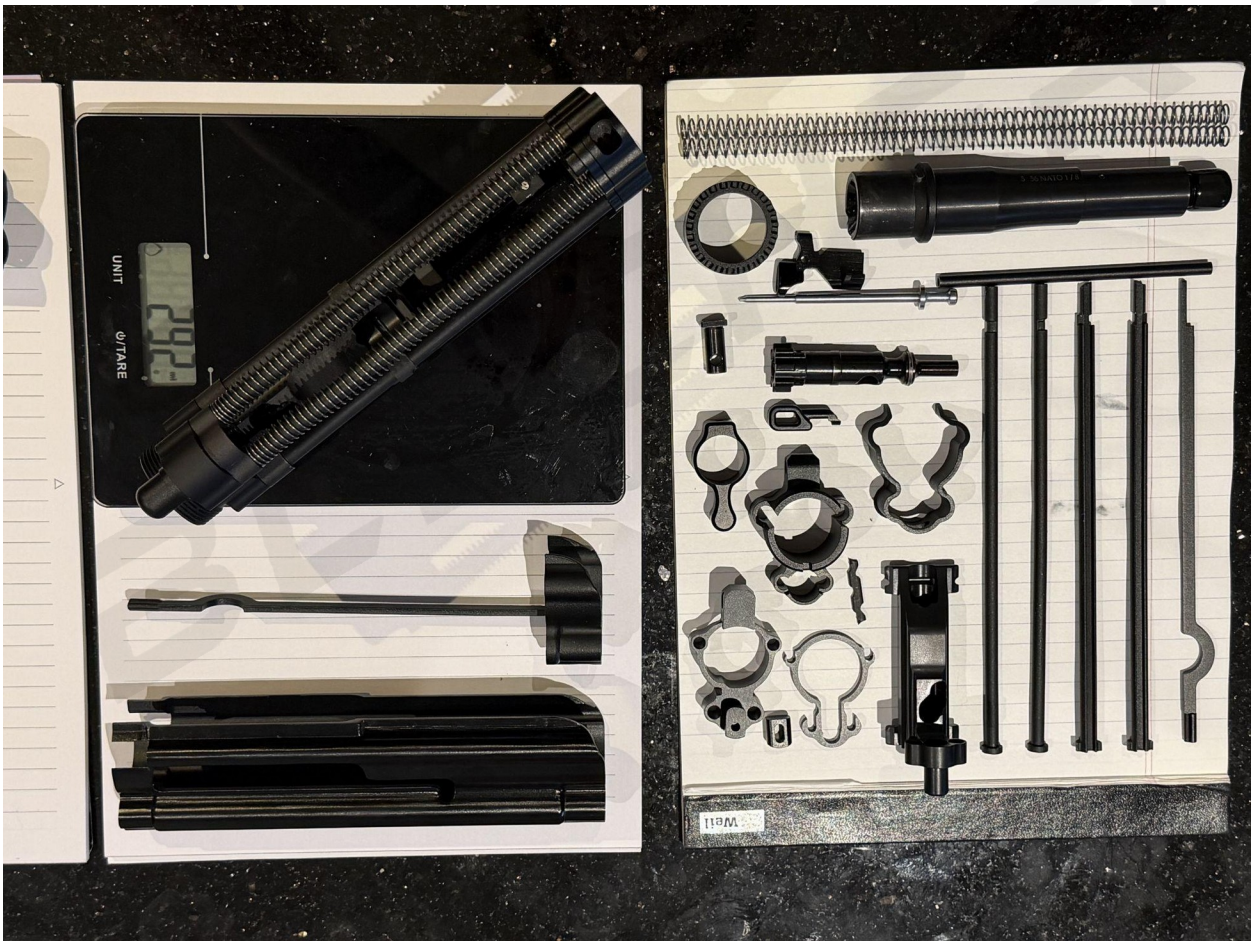


The above pictured images depict an integrated solution which is 3D printed in 6061 T6. It incorporates a skeletonized lower receiver (based on our Constellation Lower) and an integrated upper receiver with integral guide rails for our proprietary bolt carrier to reciprocate in.

This solution reduces weight wherever not required and retains rigidity where that is required.

It is the ultimate weight saving configuration.





The above pictured images include (top image) a lightened trigger group (semi auto version shown) that is designed to work with our servo actuating mechanism. The middle image shows the Constellation lower and the servo actuating mechanism. This servo actuating mechanism is designed to be able to work with any standard AR-15/M4/M16 lower receiver as well as our proprietary lightweight constellation lower receiver.

The X gun works by means of an adjustable recoilless apparatus that fits on virtually any barrel length. In addition there is a gas system tuning knob that can regulate the amount of gas fed to operate the proprietary operating system of the firearm. The adjustability is intended so that each individual application can be perfectly balanced for different ammunition types as well as different barrel lengths.

Hybrid Piston Operating System

The X Gun family's proprietary operating system has the best features of Direct Impingement (accuracy) and the best features of long-stroke operation (no fouling; clean & reliable operation), achieved by strategic placement of the piston preventing the piston's reciprocation from interfering with barrel harmonics.

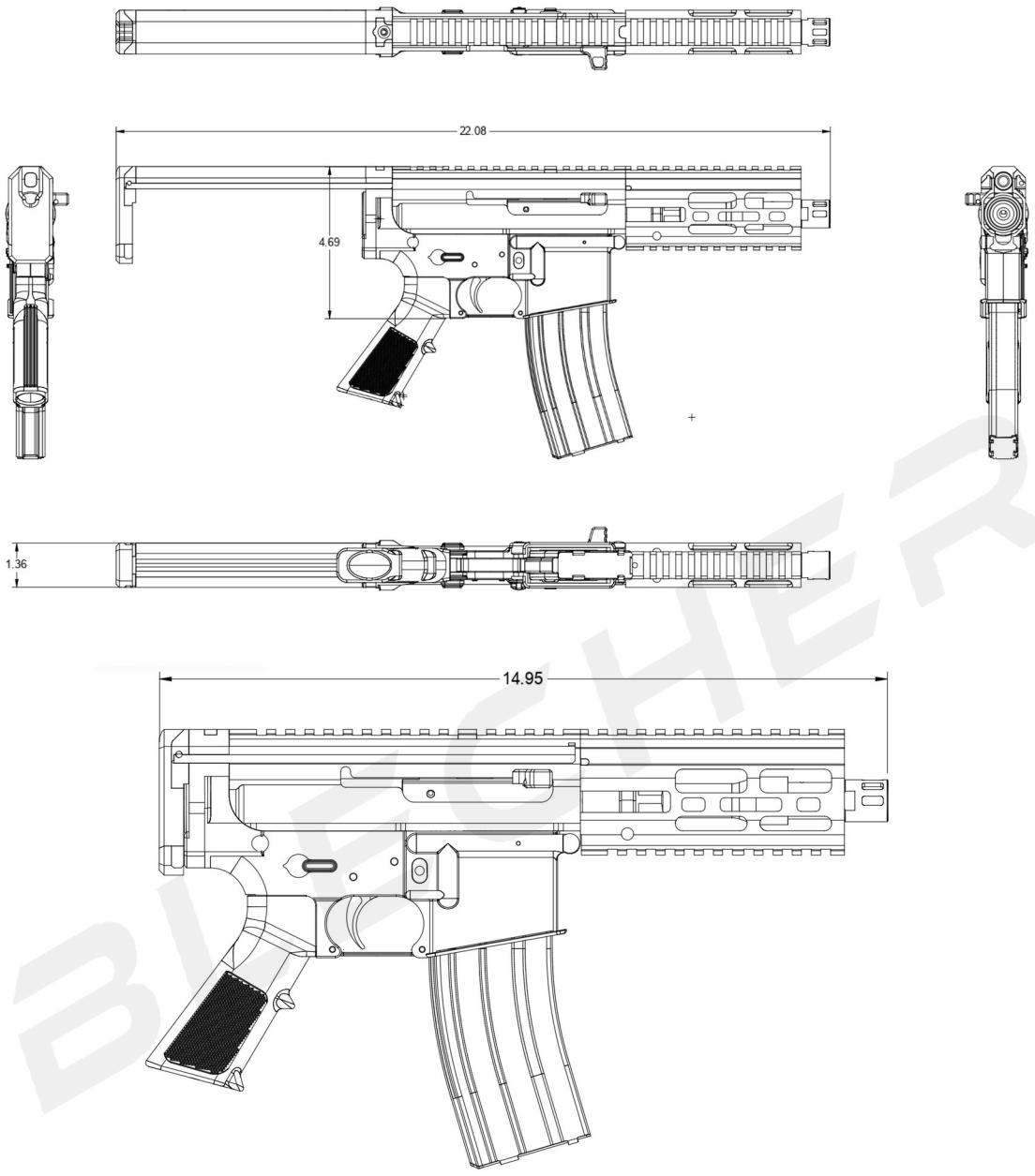
Mongoose & 1.36: Upper Receiver Kits
https://www.blecherllc.com/

Key Features

1. Under 15” long completely assembled; 2.418 lbs upper receiver with stock; 4.25 lbs completely assembled
2. Integrated Fully Retractable Brace (22” extended; longer rails available)
3. Long Stroke Operating System
4. Interchangeable Barrels (different lengths, .300, 5.56)
5. Barrel Change in UNDER 1 MINUTE
6. Change barrel in seconds with optional upgrade QUICK DETACH rail and barrel nut
7. Modular Piston Rod
8. Uses Standard M16 Lower Receiver, M16 Barrels, Bolt, cotter pin, and firing pin_
9. Lightest, Slimmest and Shortest on the Market
10. Currently produced in the USA; every part is CNC machined from solid billet–no castings or extrusions


BOOTH # 43167
L3S


BLECHER LLC



BrashZero: A Caseless Firearm Operating System Utilizing Standard NATO-Spec Ammunition Components, with Multi-Caliber Adaptability

https://brashzero.com/

The Mission:
Create a Caseless Operating System using standard 5.56 caliber projectiles, while ensuring practicality. The firearm must do more than achieve the impossible. It must be simple to use, easy to maintain and disassemble, and ergonomic, while retaining accuracy, modularity, and reliability.

BrashZero has since been redesigned, improving upon the below disclosed model. It is now more ergonomic, slimmer, and more practical.

The operating system may also be upscaled or downscaled as required for different calibers, or even heavy artillery.

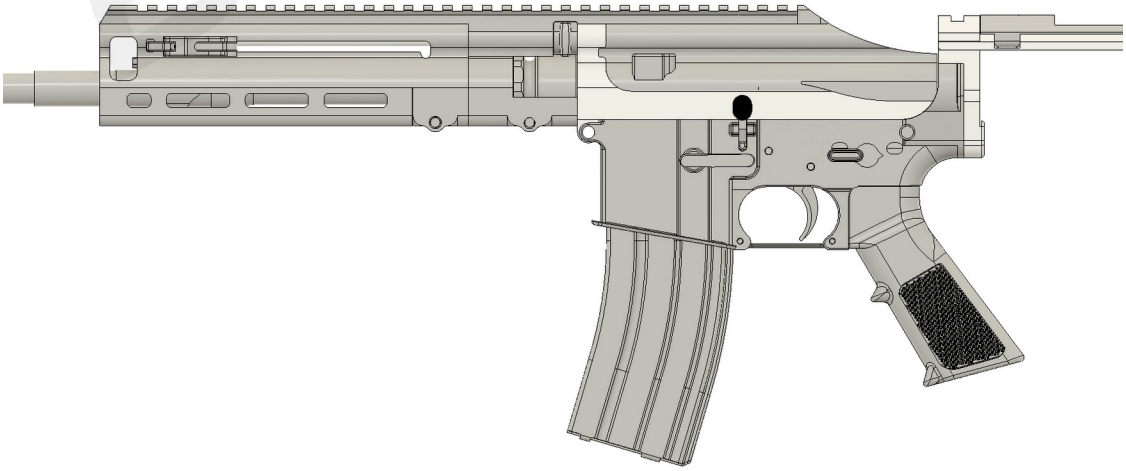
[SHOT 2026] Blecher BrashZero Caseless Bullpup Rifle

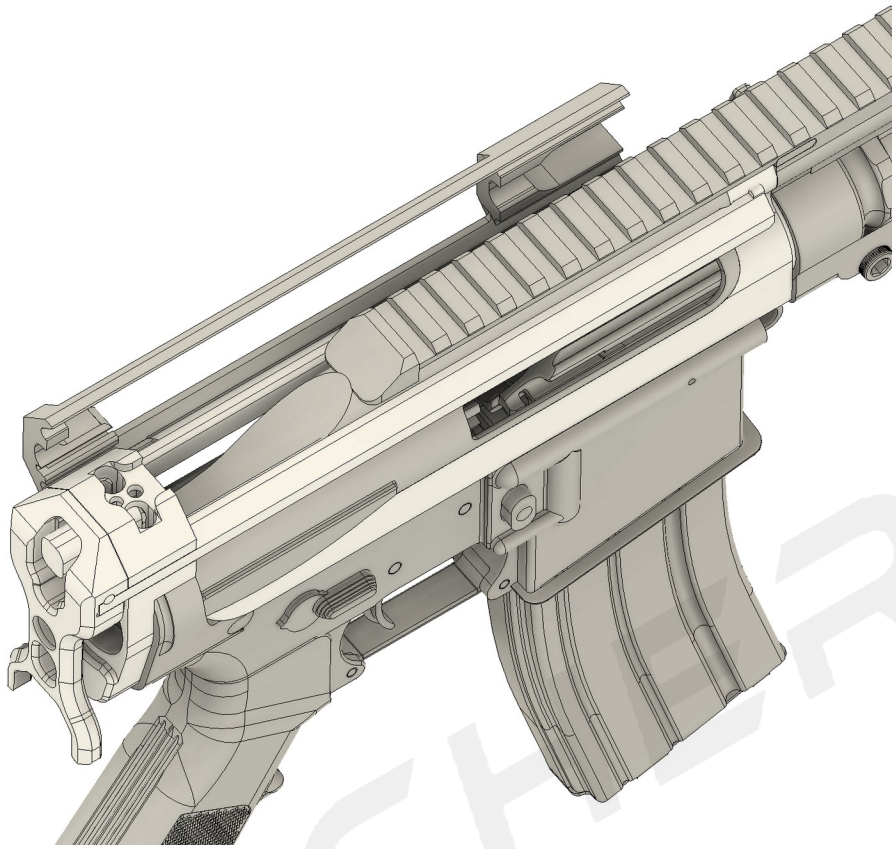
by Hrachya H

Published: January 21st, 2026

KIMONO

The idea behind the Kimono is to create a modular firearms platform based on an updated AK-47 operating system while incorporating all of the benefits that have resulted from modern firearms evolution while keeping the essence of what makes the AK platform so desirable and reliable at the same time incorporating a monorail optics and accessory rail and full modularity and adaptability. This iteration also incorporates a fully retractable brace (or stock as desired). This version has a patent pending folding hot shell case deflector cover which in the case of a stocked rifle can act as an integrated cheek weld. During testing sometimes hot shell cases would lodge themselves between the rails of the brace and the forearm–this is a known issue with braces that we solved. In addition the Kimono features our Patent Pending Toolless reversible ambidextrous charging handle.





R&D Excellence; Manufacturing Capability

At our core, we are an advanced research, design, and troubleshooting house operating primarily in the defense contracting industry. We solve problems that others deem impossible. Our pedigree includes contract work for billion-dollar companies with vast engineering teams, yet they turn to us when conventional approaches fall short. This is because we possess a unique blend of expertise and an unparalleled ability to navigate the most complex design and manufacturing hurdles.

Our advantage extends to our vertically integrated, decentralized manufacturing pipeline.

We first formulate every aspect of the production process, from designing proprietary fixtures, to speeds, feeds, and specialized tool paths and tooling.

We then leverage a hand-selected network of high-quality manufacturing contacts. We have chosen the best we've done business with over the last decade and a half. We can rapidly transform initial concepts into functional prototypes and seamlessly scale to high-volume mass production. It's a strategic advantage that eliminates the typical bottlenecks and duplicative efforts faced by even the largest defense contractors, ensuring our projects move from ideation to deployment with unmatched speed and efficiency.

As an added layer of protection of process IP and trade secrets, no one supplier has access to more than a small portion of any project.

Our ecosystem means a significant reduction in time-to-market and the assurance of quality and efficiency that only a deeply interconnected and experienced network can provide.

Our speed is a key differentiator: we've brought a complete (specific-use contract) proprietary weapons platform from initial conception and design to functional prototype ready for production testing within a month.

Licensed Domestic Production. Our manufacturing model is not tied to any geography. For government and institutional partners, we can establish complete production ecosystems in-country under license: transferring process engineering, proprietary fixtures, tooling specifications, and quality systems to local manufacturers. The result is genuine sovereignty over supply, with production capability that resides with the partner rather than with a foreign vendor.

Design Service:
We have a highly skilled design team that can take your idea from concept to finished product, through to Patent Pending. We can handle every stage, helping you turn your vision into a tangible, protected asset.

Manufacturing Service:
We are capable of moving your design to unlimited mass production, whether it be 100 units or 100,000 units.

BLECHER GROUP

RECKON

The Intelligent Fire Control Ecosystem

Capability Overview | Defense Procurement Briefing

July 2026 | blecher.ai | blecherllc.com

An engineering house that outbuilds teams a hundred times its size

Blecher Group is an independent defense technology developer with complete in-house capability across optics, electronics, firmware, AI and computer vision, and mechanical design. Our products can be designed and manufactured entirely outside the United States, free of US export jurisdiction. We operate seven days a week and we do not stop until the problem is solved.

Proven against primes

Engaged by Anduril Industries, a defense prime with more than 500 engineers, to solve engineering problems their internal teams could not.

Sought by tier one

Approached by Colt, a tier-one military small arms manufacturer, seeking to acquire the rights to our Mongoose weapon platform.

From counsel to production line

Our founders serve as counsel for CFIUS, ITAR, and dual-use export controls, and design the manufacturing side as well: cross-border supply frameworks, process and pipeline optimization, and production lines for allied-nation precision defense programs, compliant from day one.

THE UKRAINE LESSON

The battlefield changed. Fire control must change with it.

Every modern military is re-evaluating after Ukraine. Cheap drones now decide engagements, and the mathematics are unforgiving: against a small, fast, maneuvering aerial target, human reflexes cannot keep pace, and fleeting personnel targets punish hesitation the same way. The winning shot is computed.

30–50 cm

typical FPV drone target size

20–40 m/s

equal to 45–90 mph, maneuvering unpredictably

200–300 ms

human reaction time, stimulus to trigger break

6–9 m

distance the drone travels in that reaction window alone

Add ballistic time of flight and the total positional error exceeds the target size by an order of magnitude. **Every effective counter-drone solution in the world uses computational fire timing. Ours goes further (fire timing at the moment of highest hit probability, detection that warns the shooter before the threat comes into view, and shot-to-shot self-correction).**

FLAGSHIP

Reckon: the intelligent optic that replaces everything else

A clean-sheet 1–10x intelligent weapon optic that consolidates the rangefinder, ballistic computer, wind meter, compass, weather station, night-fighting aid, drone detector, and training system into a single package in the form factor of a conventional scope.

One line of sight

Instant close-range acquisition at 1x with both eyes open, precision engagement at 10x, all through a single sight line.

Digital overlay HUD

A combiner projects computed aim points, threat cues, and squad data directly into the optical path.

AI on the weapon

Onboard neural processor detects, classifies, and tracks personnel, vehicles, and drones at 30+ frames per second.

Failsafe by design

If every electron dies, a glass-etched first focal plane reticle remains. The optic still fights as a conventional LPVO.

Self-correcting fire

The system observes each bullet's actual trajectory, computes the error, and corrects the next shot automatically.

Squad-networked

Every optic shares targets, corrections, and threat alerts across an encrypted mesh. Every shot teaches every optic.

CORE CAPABILITY

Autonomous fire timing: the human authorizes, the machine times

1 Track

The AI pipeline locks the target and predicts its trajectory from position, velocity, and acceleration.

2 Authorize

The shooter pulls the trigger fully to the rear. That pull is the explicit human decision to engage.

3 Hold

An electronic restraint holds the mechanism, while the system continuously computes probability of hit.

4 Release

At the computed moment of maximum hit probability, the shot breaks. Reaction latency is eliminated.

Fail-safe and human-in-the-loop by architecture. No trigger pull, no shot: the system cannot fire on its own. On power loss the weapon reverts to a fully conventional trigger. The mechanism sustains burst engagement against multiple targets, and every engagement is logged with a full audit trail. The architecture is proprietary and mechanically distinct from every competing system on the market.

COUNTER-DRONE

Three-layer drone detection, shared across every shooter instantly

Layer 1: Radio frequency

Detects drone control and video links at standoff range. Integrates mature detection sources rather than reinventing them.

Layer 2: Acoustic

A wearable microphone array catches autonomous drones that emit no radio signature, classifying rotor noise and estimating bearing.

Layer 3: Visual AI

Wide-angle awareness cameras watch the sky continuously. On detection, the optic cues the shooter and hands the target to the tracking pipeline.

When one soldier detects, the whole unit sees. Any detection propagates across the encrypted long-range squad mesh in real time: every equipped shooter receives the threat bearing simultaneously, with no radio call. Detections also feed standard tactical networks (ATAK/TAK) for platoon- and company-level counter-drone coordination.

The same intelligence, mounted on your armor

Everything Reckon does on a rifle, it does on a vehicle-mounted gun. The fire control core integrates onto remote weapon stations, pintle mounts, and coaxial installations, turning the machine gun on a tank or armored vehicle into an AI-assisted anti-personnel and counter-drone system.

Crew under armor

Camera-based remote sighting with a wearable or in-hull display. The gunner engages personnel and drones without exposing themselves in the hatch.

Computed engagement

AI detection, tracking, and lead computation with servo-actuated aiming and autonomous fire timing, solving the counter-drone timing problem at vehicle scale.

Platform agnostic

Designed to integrate across mixed-origin vehicle fleets (Western, Eastern, and domestic platforms alike) without dependence on any one supplier's architecture.

Sentry and overwatch modes

A parked vehicle becomes an autonomous air-watch and perimeter node: continuous sector scanning, threat cueing to the crew, engagement only on human authorization.

Purpose-built hardware for the drone fight

X-Gun, purpose-built for drones

A complete firearm system engineered from the ground up for UAS integration. Every element of the architecture serves the airborne platform, where every gram costs flight time and no operation can depend on a human hand.

- Bufferless architecture with an electronically controlled trigger for remote and autonomous activation under human command
- About 1 kg complete, with barrel lengths configurable from compact to extended to match the mission
- 5.56 NATO from standard STANAG magazines, with AR-15/M16 component compatibility that leverages existing supply chains
- Paired with Reckon fire control, the armed drone becomes a precision interceptor: detection, tracking, and computed fire timing on an airborne platform

Reckon Shrike: 1x counter-drone optic

A non-magnifying counter-drone optic that brings autonomous fire timing to every gunner at a fraction of the flagship's cost.

- Same AI detection, tracking, and sear-timing core as Reckon
- Optimized for the close-in drone engagement envelope
- Equip every rifle and every vehicle gun in a formation with computed counter-drone fire

FORCE MULTIPLICATION

Loki and Overwatch mode: one operator, many guns

Loki robotic mount

A motorized smart bipod with a normally-locked brake that holds aim through recoil and defaults to locked on any power or link loss. Turns any rifle into a remotely operated sentry.

Deploy and displace

Emplace the weapon, move to cover, and aim through a wearable display and controller. The operator engages remotely at the computed optimal moment.

Perimeter networks

A single operator monitors and controls multiple deployed weapons, with automatic patrol scanning and threat cueing across an entire defended sector.

~$5,000

Sentry capability at a fraction of the cost of autonomous tower systems. A complete remotely operated weapon point, deployable by any infantry squad with no specialized training, compared with million-dollar fixed autonomous turrets. Base defense, checkpoint overwatch, and counter-drone picket duty at squad-level cost.

Solid Eye: the heads-up display that follows the fight

Solid Eye wearable display

A 30-gram display that clips to ballistic eyewear or mounts to the helmet, receiving the weapon's HUD wirelessly.

- See around corners: aim the weapon without presenting your head
- Threat bearings, squad positions, and target handoffs in the eye at all times
- Information-only by architecture, with zero weapon control, keeping it outside export-controlled categories

Fleet and force management

Every optic in a formation is centrally manageable, on the same model enterprises use to manage fleets of mobile devices.

- Armory-level configuration push and firmware updates over the network
- Training analytics: every shot logged, scored, and trended per shooter
- Zeroing assistant and weapon health monitoring reduce range time and armorer burden

THE RECKON MATRIX

One network. One intelligence engine. Every asset a node.

Reckon carries its own network with it. Every product below shares the same mesh, the same protocol, and the same predictive intelligence engine, and capability compounds with every node added.

Reckon

The weapon-mounted hub. The soldier's interface to the entire ecosystem.

Talon

Body-attached personal drone. Deploys from the plate carrier for ISR and intercept.

Max

Autonomous ground companion. Carries gear, deploys sensors, mounts weapons.

Kestrel

Persistent surveillance drone. Multi-hour endurance, pattern-of-life intelligence.

Fleas

Expendable micro-drone swarm deployed from Max. A disposable sensor mesh.

Loki

Robotic weapon mount. Remote sentry capability for any rifle.

Solid Eye

Wearable display. The HUD off the weapon and in the soldier's eye.

X-Gun

Firearm system purpose-built for drone integration; about 1 kg, with remote and autonomous trigger control.

THE SOVEREIGNTY ADVANTAGE

Free of US export jurisdiction by design, from day one

No foreign approval required

The product line can be designed and manufactured entirely outside the United States. Procurement requires no US export license, no foreign military sales process, and no third-country government approval.

No strings attached

No end-use monitoring regimes, no retransfer restrictions dictated by a foreign capital, and no risk of a future policy change cutting off support, spares, or upgrades.

Fits the fleet you have

Platform-agnostic integration across mixed-origin vehicles and small arms, from Western and Eastern platforms to domestically produced systems.

Sovereign customization

A software-defined architecture absorbs new capabilities through firmware. Customer-specific features, languages, and doctrine integration without hardware redesign.

No competing system covers the full stack

Capability	Reckon	Smart Shooter	Elbit XACT	XM157 (US)
Integrated variable-power optic	YES	NO	NO	YES
Autonomous fire timing	YES	YES	NO	NO
Layered drone detection	YES	NO	NO	NO
Downrange wind estimation	YES	NO	NO	NO
Squad mesh networking	YES	NO	NO	LIMITED
Self-correcting fire (shot-to-shot)	YES	NO	NO	NO
Vehicle and remote-mount integration	YES	PARTIAL	NO	NO
Available without US FMS process	YES	PARTIAL	PARTIAL	NO

Assessment based on publicly available product information as of mid-2026. The XM157 is a US government program, ITAR-restricted, and unavailable to allied nations without the foreign military sales process.

Purpose-built weapons to match the fire control

Mongoose

The weapon platform a tier-one military manufacturer moved to acquire. A minimalistic, lightweight firearm system with every part CNC machined from solid billet: no extrusions, no castings, no MIM.

X-Gun

Purpose-built for drones. A complete firearm system engineered for UAS integration: bufferless, electronically triggered for remote and autonomous engagement under human command, about 1 kg.

BrashZero

The caseless operating system. Runs on standard NATO-spec ammunition components with multi-caliber adaptability, solving the problem nations spent over 80 years and hundreds of millions of dollars pursuing.

The Reckon product line can be designed and manufactured entirely outside the United States, with no US export license, FMS process, or third-country approval required.

We build to the mission. Tell us the mission.

TODAY

Capability overview

You have now seen the breadth of what the Reckon ecosystem delivers, from the rifle to the vehicle to the perimeter.

MEETING TWO

Requirements briefing

You bring the mission: platforms, mounted guns and calibers, engagement envelopes, threat set, and quantities under consideration.

WE RETURN WITH

A tailored proposal

A configuration matched to your exact requirement, a complete product catalogue for the procurement authority, and a demonstration plan.

Why act now: the drone threat has been validated at industrial scale, and no competing product addresses the full stack from detection through engagement. Early partner nations shape the configuration and secure priority in the production schedule.

BLECHER GROUP

Intelligent fire control for the fight ahead

blecher.ai | blecherllc.com