

Elizabeth L. Burbank

Founder, CEO & Systems Strategy Architect

Certified Women-Owned Small Business (WOSB) | CAGE: 1ZVH8 | SAM UEI: SSF2KHHWYVL9

Profile

Elizabeth L. Burbank is the Founder, CEO, and Systems Strategy Architect of STATIC-KINETIC LLC, a certified Women-Owned Small Business (WOSB). Her company operates as a pure-play intellectual and strategic property house, architecting hardware-enforced safety IP for defense primes and the DoD. This pure-play licensing model bypasses traditional manufacturing bottlenecks, empowering the DoD and Tier-1 contractors to scale the KINETIC-369 Hardware Safety Kernel (HSK) rapidly across 8 primary critical infrastructure sectors — securing zero-trust, high-consequence environments currently transitioning into AI and autonomy.

Strategic Thesis

Her strategy addresses a fundamental reality: software cannot guarantee physical safety. In the era of autonomous systems we can no longer rely on code alone — true safety and sovereignty are enforced strictly by deterministic, hardwired CMOS logic gates, physics, and fluid geometry.

While probabilistic software remains vulnerable to adversarial AI manipulation and weeks-long patching cycles that leave critical assets exposed, STATIC-KINETIC delivers a plug-and-play, non-disruptive brownfield upgrade. It allows frontier AI and control software to operate at maximum capability, backed by an unhackable physical boundary.

In Her Words

“Let frontier developers build AI to its absolute limit. Our domain is the physical boundary. If an autonomous system drifts past safe thresholds, hallucinates a critical command, or attempts a sandbox escape, the KINETIC-369 HSK-01 breaks the circuit at the speed of physics — neutralizing the threat before a software failsafe can even register the anomaly.”

Mission & Mandate Alignment

- DoD Directive 3000.09 — appropriate human judgment over the use of force, enforced in hardware.
- EU AI Act, Article 14 — human oversight and an interruption mechanism independent of the model.
- Executive orders on safe, secure, and trustworthy AI in critical infrastructure.
- NIST AI RMF and zero-trust guidance — assume-breach fallback that survives a compromised stack.

Engagement

STATIC-KINETIC licenses its IP portfolio to defense primes, DoD programs, and critical infrastructure operators. Before any Technical Data Package (TDP) is released, all parties must execute a mutual Non-Disclosure Agreement.

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