Pre-Launch Hardening Audit

Independent red-team summary — July 2026

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June 2026

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What this document is

In late June and early July 2026, an independent AI red-team pass (the "Fable hardening audit") was run against the entire Smooth Brains production system before scale-up: the execution engine, protective-stop stack, signal ingestion pipeline, sizing and risk controls, published performance artifacts, and the operational safety nets around them. The mandate was adversarial: assume prior audits were wrong, attempt to falsify every safety claim, and tag every finding by whether it could cost user capital.

This is the public summary. It contains findings, severities, and remediation status - no exploit paths, no secrets, no proprietary strategy parameters.

Scope and method

– Verification of prior audits. Every previously reported fix was re-tested against the current code, not taken on trust. Items confirmed resolved include: protective-stop placement with no zero-stop window, the dead-man switch (automatic flatten if the system goes dark), the kill switch fail-safe, exchange-reconciliation guarantees, and signal emission-parity checks.

– Fresh adversarial pass. Four forensic workstreams re-derived the stop stack, sizing math, signal integrity (freshness, idempotency, ordering, duplicate-fill windows), and the integrity of published performance metrics from first principles.

– Evidence standard. Every claim was checked against code, live database records, or venue data. Findings that could not be proven were labeled as such rather than asserted.

Headline results

– 24 new findings were filed, 3 of them HIGH severity. All three HIGH findings, and the highest-impact MEDIUM findings, were fixed in an immediate remediation wave with regression tests before this document was published.

– The three HIGH findings (now fixed):

1. A rare double-failure path could record a position as closed while it was still open on the venue, making it invisible to the automatic safety nets.

2. A retry window in the fast signal-emission path could, in a narrow failure mode, produce a duplicate entry that defeated all four layers of duplicate protection.

3. A profit-and-loss display labeled "net of fees" was in fact gross of fees, which could show a near-breakeven losing trade as a win.

– Fixed in the same wave: a stop-reconciliation race that could briefly widen a protective stop beyond its modeled level; a backup stop-monitor that read a stale stop level; and a price-drift guard that was silently disabled by a missing configuration default.

– No finding indicated hidden losses, misstated headline performance, or a broken capital-protection invariant in normal operation. The capital-protection stack (native venue stops, trailing stop logic, drawdown circuit breakers, dead-man switch, kill switch) was verified fail-closed end to end.

Strategy-edge verification (Mandate B)

The same audit independently reproduced the published backtest from frozen inputs, ran an adversarial robustness matrix (roughly 44 strategy variants across four time windows plus a genuinely out-of-sample extension period), and computed deflated Sharpe to account for selection bias. Outcome: the system-level edge survives deflation with probability effectively 100%, and the audit's recommendation - upgrading the bear-market short satellite with state-aware entry gates - became the v7 strategy release. That evidence is documented separately in the "Strategy v7 confidence report" available on this page.

Remaining items

Lower-severity findings (operational monitoring gaps, labeling inconsistencies, documentation drift) are tracked in an internal ledger with owners and are being burned down in priority order. None of them sit on the capital path.

Disclaimer

This summary reflects a point-in-time review (July 2026). It is not a guarantee against future defects, and it is not financial advice.