

All tests so far: trade bot (9/17 - 10/3/2026)

Prepared Saturday 10/3. Results are from tick replays (simulate.py) or 1-minute-bar studies.
"In-sample" means the rule was tuned on the same days it was tested on. **Entries and exits were tested separately, as you asked:** exits on a fixed list of buys, entries on every signal.

1. Setup J era (9/17 - 9/28)

Test	Result	Decision
Live 9/17-9/22	70 trades, 30% won, -\$212. "Deterioration" exits: 53 trades, -\$678	Exits were the problem
Giveback-room exit (2/3, then 1/4)	Worse on both days (-\$211, -\$359): freed slots got refilled with weaker stocks	Off
Live entry score ≥ 55	Small gain on 2 days (in-sample)	Superseded by v2
Fixed hard stop	No gain in the sim, because of slot-refill churn	Kept, for safety
Entry slope rule (5 bars)	-\$155 vs -\$311 (3 days)	Superseded
Exits on 144 fixed buys	Current -\$34; stall 45 min +\$41 (the only helpful one); breakeven locks worse	—
Re-entry after a loss only above the old entry	+\$1.84 vs -\$0.29 per signal, better on all 4 days	Live (still on)
Trade plan (R:R ≥ 1.5)	25 signals, +\$6.54 avg, 64% win	Superseded
Real level targets (5 days)	+\$352 vs +\$216	Superseded
Max 3-5% above open (6 days, tick)	-\$1 vs +\$145: blocked strong trend pullbacks	Rebuilt later as v2's 3% + breakout exception
5-day levels + target cap	-\$51 vs +\$145	Off
20-day bar study, J = above-open + R:R 2	+\$103 vs -\$98	J went live 9/28
Shadow entry-rules gate (20 days, tick)	J +\$21 vs gate +\$6	Off
Distance above VWAP	Only consistent signal across 3 studies: stop hit first 25% below VWAP $\rightarrow$ 47% at 4%+ above	Became v2's VWAP 0 to +2% rule

2. Research studies (what predicts and what doesn't)

Study	Result
Big winners (63 of 630 stock-days)	"Buy the early leaders at 10:30" loses (-\$517 to -\$1,610). Winners peak after noon. Exits are the lever.
trade1 entry rules (620 picks, 21 days)	Hold to close -\$1,275. No feature separates risers from fallers (best AUC 0.56)
trade1 exits on those picks	Step-R + 1% stop + breakeven: -\$397. With a 15-bar wait: +\$407 (first positive)
Speed/shape (654 stock-days)	No prediction (AUC 0.45-0.54)
Buy/sell flow (660 stock-days)	No prediction. Only "down on net selling keeps falling"
VWAP reclaim (680 stock-days)	Negative in every variant
Pattern groups (in-sample rules)	Failed on 6 months out of sample (ALLOW +0.00% vs AVOID -0.03%)
2-year rule study (~500 days)	Only X1 climax holds: after a $\geq 10\times$ volume bar at a new day high, -1% came first 46-47% of the time vs +1% first 33-39%, in every period

Study	Result
Opening-range breakout (your uploaded bot.py; 503 days)	Negative in all 12 variants. Take only its safety features (broker-side stop, daily loss limit, kill switch, PDT plan)

3. Entry rules v2 and exit_v2 (9/28 → now)

Test	Result	Decision
v2 replay on 9/28	6 trades, +\$142	v2 live 9/29
Exits on v2's fixed buys (23 days)	J +\$141; smooth +\$126 (both halves +) ; smooth+trail +\$68; trail only +\$20	exit_v2 smooth, trail OFF
+ X1 climax exit (24 days)	+\$68 → +\$108	Live 10/1 (re-check fix live 10/5)
Smooth arm 0.7 vs 0.8 (24 days)	+\$282 vs +\$107 , halves +\$177/+\$104, better on 9 days and worse on 2	Live from 10/5
Smooth sell only below VWAP	−\$277	Off
Entries: v2 live vs B1 (block after a volume burst), 24 days	Live +\$37 (80 trades, 54% win) vs B1 −\$6	B1 off
v2 buys by time of day	9:45–11:30 +\$32 (49 trades); 11:30–13:30 −\$32 (18) ; 13:30–15:15 +\$37 (13)	Watch (small sample)

4. The playbook / Star Follow (10/1 → now)

Test	Result
Reference calibration (150 closest days)	"Up" share AUC 0.63, but it measures movement, not direction ; expected-value score correlation 0.003
Star Follow, all versions (25 days)	−250% to −456% (old marks, confirmed marks, winners-only, + market/gap, band, since)
Star Follow, 6 months (Mar–Aug)	−910% / −1,199%
Winners vs losers, majority (25 days)	+8.0% (40 trades), but halves +25.7 / −17.6
Winners vs losers, normal	−56.9% (172 trades)
101 watched stocks on 10/2	Original −85%, latest about −35%, majority +1.0% (5 trades), normal −5.3%. Bot alone −\$3.41 (replay)
Advisor: bot trades, playbook overrides at 60% (10/2)	Playbook-added buys lose (−\$86 to −\$108). No-add version (skip/hold/sell only): 5 min −\$15, 10 min +\$28 , 15 min +\$17. Most of the gain is UNIT
Advisor no-add, 10-day validation	Running. First 3 days: 9/18 same, 9/21 worse (−\$54 / −\$22 vs −\$13), 9/22 needs a re-run

5. The best setup found so far (live from Monday 10/5)

This is the best **tested** combination. Its edge is still small: entries alone made +\$37 over 24 days (second half -\$48). Most of the measured gain comes from the exits.

Entry: rules v2 (entry_v2.py, config entry_v2)

A stock on the scanner's watch list is bought only when **all** rules pass on **3 checks in a row**:

1. **Wait:** at least 15 one-minute bars since the open, so no buys before 9:45.
2. **Unusual volume:** volume so far $\geq 1.5\times$ its 14-day normal for that time of day, and the last 15 minutes no more than $5\times$ normal (not a blow-off).
3. **Room:** at least **1%** below the nearest 14-day resistance (or already above the 14-day high).
4. **Buyers in control:** buy share $\geq 55\%$ of the last 15 minutes' volume.
5. **Steady climb:** 30-bar smoothness $R^2 \geq 0.7$ and straightness (efficiency) ≥ 0.5 .
6. **Position vs VWAP:** **0 to +2%** above VWAP.
7. **Not stretched:** no acceleration spike ($\text{acc5} < 1.5 \text{ ATR}$), and not both $\geq 3\times$ its normal move and $\geq 4\%$ over VWAP.
8. **Not extended:** no buy more than **3% above the 9:30 open**, unless it is a confirmed fresh breakout: 2 closes above yesterday's high or an older day high, broken within 30 min, and no more than 1.5% above it.
9. **Spread** $\leq 1\%$.
10. **After a losing trade** in the same stock, re-buy only above the old entry + 1¢.

Stop at entry: under the nearest 14-day support, between **1% and 3%** below the buy (at least 1%).

Sizing: 1% of equity at risk, capped at 19% of equity per position, **5 positions** max, no new buys after 15:15.

Exit: exit_v2 (exit_v2.py, config exit_v2, replaces J's exits)

Checked every poll, the first one to trigger sells:

1. **X1 climax:** a finished 1-minute bar after the buy with $\geq 10\times$ its normal volume **and** a new day high $\rightarrow$ sell. Re-checked every poll from Monday.
2. **Stop:** the entry stop, at least 1% below the buy. It does not trail (trail = off).
3. **Smooth break:** once the last 30 bars' smoothness (R^2) reaches **0.7** after the buy (armed; was 0.8), sell when it drops below **0.6**: the steady climb has broken.
4. **15:55:** sell everything.

Still open

- **Playbook advisor** (skip/hold/sell at 10–15 min): promising on 10/2, not yet confirmed; 10-day test running.
- **Exit robustness** (arm 0.6–0.75, break 0.5–0.65): running tonight.
- **Buy/sell flow history** for the playbook: 203/503 days; two workers, done about Sunday evening.
- **Before real money:** broker-side stop orders, a daily loss limit and kill switch, a PDT plan, and the security items (.env exposure, key rotation, REPORT_PASSWORD).