

20-Day Tick Replay: Setup J vs entry_rules Gate — 2026-09-27

What we tested

We downloaded full trade-by-trade data for the 20 saved days (8/27 – 9/24, the same rebuilt 9:28 top-30 lists as the 20-day bar study) and replayed each day three ways. Every signal was taken (no slot limit), so only the **entry** decision differs:

1. **J** — setup J exactly as it runs live Monday.
2. **J + gate** — J, but it only buys if entry_rules says **PASS** at that moment (otherwise it retries 5 seconds later).
3. **J + gate + 15-min lockout** — once entry_rules refuses a stock, that stock can't be bought for 15 minutes (to stop "flicker" entries like HAFN on 9/24).

Results

	Trades	Wins	P/L
J	9	4 (44%)	+\$21.46
J + gate	6	2 (33%)	+\$5.95
J + gate + lockout	6	2 (33%)	+\$5.95

13 of the 20 days had **no trades at all** — J is very selective.

What the gate did with J's 9 trades

Day	Stock	J result	Gate
8/27	MARA	−\$32.70	kept
9/10	PATH	−\$22.37	kept
9/10	F	+\$13.31	blocked
9/14	BNC	−\$45.05	blocked (good)
9/15	RLGT	+\$47.25	blocked (bad)
9/17	BNC	−\$17.76	kept
9/17	BKKT	−\$7.91	kept
9/21	BNC	+\$22.86	kept
9/22	BFLY	+\$63.83	kept

It blocked one loser and two winners: **−\$15.51 worse than J alone**. The 15-minute lockout changed nothing here.

In the earlier 5-day test (9/17 – 9/25, the bot's real lists) the gate was **+\$31 better**. Put together: **no proven edge either way**. The gate is not worth turning on.

The shadow features across 64,000 moments

For every time a stock's decision changed, we checked whether the price hit the plan's **target** or its **stop** first.

Feature	Result
entry_rules verdict	PASS: target 42% / stop 28% vs FAIL: 40% / 31% — tiny difference
VAS score (0-10)	no difference — 41%, 41%, 40%, 40% target from low to high score

Feature	Result
Buy/sell imbalance	no difference (40–43% target in every band)
Beats SPY & IWM	no difference (41% vs 40%)
Volume trend / bar RVOL	no difference
Distance above VWAP	clear pattern (below)

Price vs VWAP	Target first	Stop first
below VWAP	45%	25%
0 – 1% above	42%	29%
1 – 2% above	33%	35%
2 – 4% above	40%	39%
4%+ above	36%	47%

This is now the **third study in a row** (20-day bars, 5-day ticks, 20-day ticks) where buying stretched above VWAP means the stop gets hit more often.

Important: tick data vs bar data

The 20-day **bar** study had J at +\$103 on 10 trades. With real ticks it is **+\$21 on 9 trades** — same general picture (small, selective, slightly positive), but less rosy. Tick replay is the more accurate of the two.

Also found and fixed

- On 9/22 the bot crashed at 10:49, so its decision log ended there — the replay clock stopped at 10:49 too. Re-ran 9/22 on a normal 5-second clock for the full day: same single trade (BFLY +\$63.83), so no change to results.

Conclusions

1. **Don't turn on the entry_rules gate.** VAS, imbalance and relative strength did not separate good entries from bad ones.
2. Keep the shadow recorder watching live — real days are free extra data.
3. **Distance above VWAP is the one feature that keeps working.** It's the best first rule for breakout_rules.py in the new trade1 bot: e.g. "no buy more than ~1–2% above VWAP".
4. J makes only ~1 trade every 2 days, so **any** entry filter on top of J is judged on too few trades. To test entry features properly, test them on **all** raw signals (hundreds), not just J's.

Data now saved for testing

Full trade-by-trade data for **21 days** (8/27 – 9/25, 6.4 GB) is now cached on the server. Every future backtest — including the new trade1 rule files once the simulator is connected — can use it without downloading again.