The Reload

How the pin rebuilt in seven sessions, stalled forty points under the June top, and rolled off at July expiration

A reported analysis of the July 1 – July 17, 2026 SPX market structure (12 trading sessions)

ZDtE Research Desk · July 18, 2026 · ~31 min read

> This is the fifth paper in a continuing series. The prior installment, The Expiry →, covered June, ended with "the pin is gone, the amplifier is back," and left a three-item watchlist. This paper grades that watchlist against the July record, and its appendix carries two corrections to the June paper's originally published figures.

The short version

"The Expiry" ended with the June pin dissolved and three questions on the watchlist: where a new pin rebuilds, whether open interest grows as price rises at the next bounce, and what the July prints do to an unguarded book. July answered all three inside twelve sessions. After two dead-flat closes to open the month ($7,483.23 and $7,483.24, one cent of index apart), the book reloaded: our per-cycle record shows fully **pinned** sessions returning July 6 through July 10, the call wall migrating from $7,630 to **$7,700**, near-money open interest roughly doubling off its late-June trough, and the volatility surface compressing to a measured VIX low of **14.96**. The rebuild was call-led, it absorbed the end of the US–Iran ceasefire along the way, and it carried the index to an intraday **$7,581.39** on July 15, thirty-nine points under the June 2 cycle top.

The headline: it did not hold. No pinned run outlived two consecutive sessions. Our net-gamma estimate changed sign five times in the ten sessions after the holiday, and into the July 17 monthly expiration the near-money book inverted from three-to-one calls to seven-tenths puts, with the put wall at **$7,520** sitting above spot by the afternoon. The index gapped 89 points lower onto the morning settlement print, its largest gap of the window, and closed the window at **$7,457.69**, a net −0.56% from June 30 with a full round-trip inside.

Structurally, July is a third character. April and May were the **damper**, a long-gamma book absorbing everything. Early June was the **amplifier**, a short-gamma book compounding everything. July is the **alternator**: the two states trading the tape back and forth day by day, absorption one session, amplification the next. The pin came back. It rented the tape; it never owned it.

Part 1, Where the prior brief ended, and two corrections

"The Expiry" closed the June window at **$7,499.36** on a quarter-end bounce it called mechanical rather than structural, with the dealer book rotated through pinned, expand, and decay, the walls compressed toward spot, and the near-money book thinned to the bottom of its range. Its watchlist: (1) the strike at which open interest stops contracting and net gamma flips durably positive, (2) whether open interest grows as price rises at the next bounce, the test that separates accumulation from short-covering, and (3) the July inflation calendar landing on a book with no pin to absorb it.

The July record grades all three. The rebuild came at **$7,500–$7,580**, and for the first time since May the open-interest test returned a yes: across July 9 and 10 the call side of the near-money book grew while price rose. The third item resolved against the prior paper's framing: the June CPI landed benign on a book that was by then half-rebuilt, and moved the index +0.38%, not the multiples the June paper suggested an unpinned book would produce. The conditional was right about the structure and wrong about the print: a soft print on a half-rebuilt book is relief, not shock. We grade that sentence against ourselves in the appendix.

Two figures in the June paper also failed this data pass and are corrected in place there, with an editor's note: the early-July spot reference (a derived-snapshot artifact that read $6,990 where the primary record shows $7,483), and the open-interest “halving” (which spanned a June 26 change in our snapshot breadth; the like-for-like series shows a dip, not a halving). The appendix of this paper carries the full detail. The wall-geometry and regime findings of the June paper are unaffected, and this paper's open-interest claims are breadth-consistent throughout.

Part 2, The quiet start, July 1 to 2

July opened with the flattest two-session sequence in our 2026 record. Wednesday, July 1 closed at **$7,483.23**; Thursday, July 2 closed at **$7,483.24**. One cent of index between two consecutive closes, bracketing a holiday weekend. The stillness was not calm. July 1 ran pinned on 86% of cycles with net gamma positive on 96%, the quarter-end book still holding;

July 2 flipped to expand on 75% of cycles with the gamma sign mixed, and the range told the truth the closes hid: 113 points top to bottom.

July 2 was also the June employment report, published a day early for the holiday: payrolls up **57,000** against a consensus near 115,000, with the unemployment rate holding at 4.2% only because participation fell to its lowest level since 2021. A print that soft, landing on May's book, is absorbed; landing on early June's, it is amplified. Landing on a book with no pin and no amplifier in charge, it produced a wide, two-sided session that finished exactly where it started, the first sketch of the character the rest of the month kept drawing.

DATE	SPX CLOSE	DAY %	DEALER REGIME (DOMINANT)	READ
Jul 1	$7,483.23	-0.22%	pinned (86%)	Quarter-end book holds; range 7,451-7,521
Jul 2	**$7,483.24**	+0.00%	**expand (75%)**	**Jobs +57k vs 115k; 113-pt range, flat close**

The market closed Friday, July 3 for the holiday. It reopened Monday to a different book.

Part 3, The reload begins, July 6

Monday, July 6 gapped 27 points higher, opened at **$7,510.39**, never traded below $7,502.56, and closed at **$7,537.43**, up 0.72%. Our per-cycle record labels the session **pinned** on 100% of cycles, with net gamma positive on 100%, a session without a single short-gamma cycle, something no June session printed. The midday at-the-money implied volatility read **13.9%**, the most compressed of the window.

The composition of the rebuild matters as much as its existence. The July 6 near-money capture shows **160,527** calls against **49,253** puts, roughly 3.3 to 1, with the call wall at $7,630 and the put wall all the way up at $7,450. A put-hedged decay book, which is what late June was (the June 23 near-money capture ran four puts to every call), had rotated over one weekend into a call-led book with its walls above and close to spot. That is what the start of a reload looks like: not defense being bought below the market, but upside being written above it.

Part 4, The war comes back, July 7 to 8

Tuesday, July 7 flipped the sign. The index eased 0.45% to **$7,503.85** and the record flipped to **expand** on 100% of cycles, net gamma positive on just 6%. One session after the cleanest pinned day in three weeks, the book was short again. This day-after-strength flip is the first clean print of the pattern that came to define the window.

Overnight, the catalyst class this series has tracked since March returned: following attacks on commercial vessels in the Strait of Hormuz, US forces struck Iran and the ceasefire, the same ceasefire whose scheduled expiry the April paper covered as the rally's first test, was declared over. Brent crude rose 5.4% to **$78.19**. Wednesday, July 8 opened at $7,467.37 and flushed to

$7,421.82, marginally undercutting the July 2 low, on a session our record labels expand on 100% of cycles with net gamma positive on exactly none. Midday at-the-money implied volatility ran to 23.1%, the highest of the window to that point.

DATE	SPX CLOSE	DAY %	REGIME / Γ-SIGN	READ
Jul 6	$7,537.43	+0.72%	pinned 100% / γ+ 100%	Gap up held; reload begins
Jul 7	$7,503.85	-0.45%	expand 100% / γ+ 6%	Day-after flip; overnight, ceasefire ends
Jul 8	**$7,482.71**	-0.28%	**expand 100% / γ+ 0%**	**Flush to $7,421.82, reclaimed +61 pts**

Put the three ceasefire tapes side by side. April 21, the scheduled expiry on a long-gamma book: an 85-point drawdown tagged the put wall and reversed inside the session. June 5, a catalyst on a short-gamma book: a 168-point decline that ran all day without a bid. July 8, the ceasefire's actual end on a book two days into a rebuild: amplified on the way down, a 46-point morning flush with the dealers' hedging adding to it, and then reclaimed, 61 points off the low into a −0.28% close, with the broader tape mixed rather than one-way. Amplification without follow-through is the signature of a book mid-rebuild: the short-gamma flow is real, and so is the buyer underneath it.

The undercut-and-reclaim of the July 2 low is, in the price record, the floor of the entire window until expiration week. What reclaimed it shows up the next two sessions.

Part 5, The reload completes, July 9 to 10

Thursday, July 9 rallied 0.81% to **$7,543.64** on a 95%-pinned session; Friday, July 10 added 0.42% to close the week at **$7,575.39**, pinned on 100% of cycles, with the measured VIX touching **14.96** intraday, the low of the window. Three of the five sessions of the reload week, July 6 through 10, ran fully or nearly fully pinned, the densest cluster of long-gamma sessions in the regime record. Seven sessions after the June 30 close, the book had rebuilt.

The open-interest record makes the same statement quantitatively. Between the July 2 and July 10 snapshots the call wall migrated $7,625 → $7,630 → $7,675 → **$7,700** (the July 7 snapshot, taken mid-flush, stepped back to $7,615), climbing with the index the way May's walls did, and the July 10 print at $7,700 held **32,399** contracts, the single largest wall of the window. Total near-money open interest reached **278,272**, roughly 2.2 times the late-June trough on matching breadth, and the build was call-led throughout, 2.4 to 2.7 calls per put.

DATE	NEAR-MONEY OI	CALL : PUT	CALL WALL	PUT WALL
Jul 2	280,907	1.3 : 1	$7,625	$7,350
Jul 6	209,780	3.3 : 1	$7,630	$7,450
Jul 7	186,303	1.3 : 1	$7,615	$7,325
Jul 9	168,683	2.7 : 1	$7,675	$7,500
Jul 10	**278,272**	**2.4 : 1**	**$7,700 (32,399)**	**$7,400**

The June watchlist's central test returned its first yes since May. “Does open interest grow as price rises, or does it keep contracting?” Across July 9 and 10 the call side of the near-money book grew from 106,736 to 196,930 contracts while price rose, with the walls migrating up and the volatility surface compressing. By the test as written, the reload was real accumulation, not short-covering. What the test could not say, and what the next five sessions demonstrated, is how long real has to last to matter.

Part 6, The stall under the June top, July 13 to 15

Monday, July 13 repeated the day-after-strength flip at larger scale: a 24-point gap down, a slide to $7,506.52, a close at **$7,515.34**, down 0.79%, expand on 100% of cycles, gamma positive on 9%. Two fully pinned sessions, then a fully short one. The reload had reached the same altitude as the June top's launch zone with none of its persistence.

Tuesday, July 14 was the June CPI, and it is worth being precise about the polarity, because it inverted between the June paper and this one. In early June the tape leaned on rate-cut hopes; by mid-July, with May inflation having printed 4.2% and war-driven energy pressure rebuilding, the market priced hike risk: futures assigned roughly 75% odds to a September hike the day before the print. The CPI came in soft, −0.4% on the month, 3.5% year over year against 3.8% expected, core flat, and the hike odds fell to about 63%. On a half-rebuilt book, relief bought 0.38%: a close of **$7,543.59** on the most evenly split session of our 2026 record, pinned and expand at 50% each.

Wednesday, July 15 printed the window high, **$7,581.39**, thirty-nine points, about half a percent, under the June 2 cycle top of $7,620.67, gave back as much as 54 points intraday, and closed at $7,572.40, just under where it opened. The internals of that session are the window's clearest tell. Net gamma was positive on 80% of cycles, the book long; the regime classifier read **expand** on 65%, the tape trading like amplification. A long book whose tape trades short is a pin present but not in control, and the two layers did not align long again in the window.

DATE	SPX CLOSE	DAY %	REGIME / Γ-SIGN	READ
Jul 13	$7,515.34	−0.79%	expand 100% / γ+ 9%	Day-after flip, at scale
Jul 14	$7,543.59	+0.38%	pinned 50% / expand 50%	CPI 3.5% vs 3.8%; hike odds 75% → 63%
Jul 15	**$7,572.40**	+0.38%	expand 65% / γ+ 80%	**High $7,581.39, 39 pts under June top, fades 54**

A pin that owns the tape converts a benign CPI at the highs into a push through the prior top; May 13 and 14 are the template, when the April CPI landed at the highs and the index went out through $7,500. A pin that is renting converts it into a 39-point near-miss and a fade. The book had one session of margin left, and spent it.

Part 7, The expiration, July 16 to 17

Thursday, July 16 fell 0.51% to **$7,533.77**, expand on 99% of cycles, gamma positive on 8%, and the composition of the book began its turn: the near-money capture went to parity, 0.96 calls per put, with a **12,731**-contract put wall building at $7,375, the largest put-side print of the window to that point. The macro tape turned with it: the semiconductor complex was rolling into its worst week since April 2025, roughly 20% off its record on doubts about the pace of AI infrastructure spending and a surprise Chinese model release, and a major streaming platform guided to slowing sales after the close, opening 7% lower the next day.

Friday, July 17 was the July monthly expiration, and standard SPX monthlies settle on the opening print. The index gapped down **89.24 points**, 1.18%, the largest gap of the window, directly onto that settlement: whatever July-monthly structure remained on the book marked its final print at the low open rather than anywhere the month had actually traded. The session then ran both directions, a 53-point bounce to $7,497.33, a break to **$7,431.64**, and a close at **$7,457.69**, down 1.01%, the window's largest single-session decline, on the deepest short-gamma reading of the window (gamma positive on 0% of cycles, the median estimate at its most negative). The measured VIX opened above 19 for the only time in the window. The week closed 1.6% lower, the worst since the June flush.

DATE	NEAR-MONEY OI	CALL : PUT	CALL WALL	PUT WALL
Jul 13	195,304	1.1 : 1	$7,650	$7,400
Jul 14	150,215	1.2 : 1	$7,600	$7,450
Jul 15	170,217	1.9 : 1	$7,660	$7,430

DATE	NEAR-MONEY OI	CALL : PUT	CALL WALL	PUT WALL
Jul 16	175,698	1.0 : 1	$7,675	$7,375 (12,731)
Jul 17	**299,596**	**0.4 : 1**	**$7,600**	**$7,520 (15,119)**

> **The two largest open-interest prints of the window are opposites wearing the same number.** July 10: 278,272, two and a half calls per put, the call wall stepping up to $7,700, price rising. July 17: 299,596, seven-tenths puts, the put wall at $7,520 above spot, price gapping down onto a settlement. The June watchlist asked whether open interest grows; July's answer is that the question needs a second axis. What grows matters as much as whether it grows. Call-led growth at rising price is a book being bought. Put-led growth into an expiration is a book being defended.

By the July 17 afternoon capture, the put wall at $7,520 stood above the closing price: protection concentrated at strikes the index had already surrendered. The reload's structure, the $7,700 wall included, went out with the monthlies that morning.

Part 8, The alternator, and what to watch into the FOMC

Three structural characters now sit in this series' record, and July's is new. April and May ran a damper: net gamma positive on every session but one, catalysts absorbed, walls migrating up with the index for weeks at a stretch. June 1 through 10 ran an amplifier: gamma negative throughout, the same catalyst class producing five-session slides. July ran an alternator: the gamma sign changed five times in ten sessions, no state survived longer than three, and the decay label that closed June appears on essentially none of July's cycles. The roll-off completed, and what remains is two regimes contesting the tape day by day.

WINDOW	CHARACTER	GAMMA SIGN	CATALYST RESPONSE
Apr – May	Damper	Positive, all but one session	Absorbed; walls migrate up
Jun 1–10	Amplifier	Negative throughout	Amplified; five-session slide
Jul 6–17	**Alternator**	**Five sign changes in ten sessions**	**One-day moves that do not chain**

Under a damper, yesterday's absorption tells you about today. Under an amplifier, yesterday's slide does. Under an alternator, yesterday tells you almost nothing: the July record's characteristic print is a fully pinned session followed by a fully short one, twice at one-day intervals off the strongest closes of the window. That property, not any single level, is the structural fact of mid-July. Three indicators rank high on our watchlist.

- **A pinned run that outlives an expiration.** The reload's ceiling was two consecutive long-gamma sessions, and its structure died with the monthlies it was built from. The June question was where a pin rebuilds; the July record sharpens it to durability: a rebuilt book that has not carried its open interest through an expiration week has not yet demonstrated it is anything but rented.

- **Which shelf re-forms first.** The expiration cleared the board's two reference points at once: the $7,700 call shelf settled out, and the $7,520 put shelf sat above spot at the close. The first wall to rebuild with size in the post-expiration sessions, upside written above the index or protection stacked at and below it, defines which side the next book leans.
- **The July 28–29 FOMC on inverted polarity.** The June paper watched inflation prints landing on cut hopes; the market has since moved to pricing hike risk, and the July 14 CPI showed the benign branch of that tree, relief worth 0.38% on a half-built book. The other branch remains: a hawkish surprise landing on an alternator has no standing damper to meet it, and the July 17 session is the record's freshest measurement of what this book does with a shock when the gamma sign is at its most negative.

Five papers ago this series began with an amplifier dragging the index to a war low, and a damper forming at the bottom. The damper carried it up for two months; its expiry handed June to the amplifier; and July is the first window in which neither held the tape for longer than three sessions. The index finished the window 0.56% from where it started it. The book finished it a different instrument entirely: rebuilt, inverted, and settled out inside twelve sessions.

The reload was real. So was the expiration.

Appendix, Data, Methodology, and Corrections

The quantitative claims in this paper rest on three internal layers: our per-cycle dealer-regime record (every July session, ten-second cadence), our per-cycle feature capture (measured spot VIX, at-the-money implied volatility, and the net-gamma estimate), and our near-money open-interest snapshots. Methodology notes and this window's corrections follow.

Daily SPX OHLC

Daily figures are the first, maximum, minimum, and last spot of each regular session in the per-cycle record, with two refinements over the prior paper. Leading pre-open carry values repeated at the open are dropped before computing the open and high (without this, a Monday inherits Friday's carry as a phantom high), and the close is taken through the settlement window just after the bell. So measured, our closes reproduce the public end-of-day cash-index record on every session we cross-checked: exactly on July 8, 14, and 15, and to the public source's rounding on July 17. July 3 (holiday) and the frozen weekend carries are excluded; twelve sessions remain.

Dealer-regime record and net-gamma sign

The per-cycle classifier and its **pinned** / **expand** / **decay** labels are unchanged from the prior paper; the dominant label reports the plurality share across a session's regular-hours cycles. New this paper: we also report, for every session, the share of cycles on which our independent net-gamma estimate (per-strike gamma times open interest, calls positive, puts negative) is positive. The two layers agree on ten of the twelve sessions; the July 14 and 15 divergences, a long book trading like expansion, are discussed in Part 6 rather than averaged away.

Open interest and walls

All open-interest figures in this paper are from the 75-strike near-money capture (roughly ±185 points around spot) with the same far-out-of-the-money artifact rejection as prior papers, and every cross-day comparison in this paper is at matching breadth, including the “2.2 times the late-June trough” claim, which compares against the like-for-like near-money recomputation of the June snapshots (roughly 128,000 to 177,000 across June 23 to 29). Intraday 0DTE open interest resets each session and is never used for cross-day growth claims. Volume put/call ratios are not reported this window;

the per-side volume series used in prior papers was not part of this window's capture, and open-interest composition carries the flow analysis instead.

Volatility measurement

From this paper forward the volatility column reports our measured internal spot-VIX capture directly, and the authored 30-day “VIX-equivalent” proxy of the earlier papers is retired. On the June 30 bridge session the proxy read 18.3 against a measured 16.45; the two series agree in direction and shape across their overlap, and the proxy's continuity anchoring is no longer needed now that the measured series spans the full window. ATM IV figures remain the midday (11:30–12:30 ET) median at-the-money implied volatility on the front 0DTE chain, used for direction and relative magnitude, not absolute level.

Corrections to the June paper

This data pass found two figures in “The Expiry” that failed verification against primary records, both corrected in place there under a dated editor's note. (1) “Spot near $6,990 by July 3”: the primary per-cycle record shows July 1 and 2 closing at $7,483.23 and $7,483.24, never below $7,427.69 intraday; the published figure came from a derived gamma-profile snapshot and is retracted, along with the “continuation lower” framing built on it. (2) The “371,000 to 174,000” open-interest contraction: snapshots through June 25 were full-chain (roughly 250 strikes) while later snapshots capture 75 near-money strikes, so the published halving mixed two breadths; like-for-like, the late-June near-money book ran roughly 177,000 to 128,000 to 174,000, a dip and recovery. The June paper's wall-geometry and regime findings are computed near-money on both sides of the boundary and stand. We also grade one non-numerical sentence against ourselves: the June watchlist's suggestion that a July inflation print would move an unpinned index by “multiples” of April's quarter-percent; the benign July 14 print on a half-rebuilt book moved it 0.38%, and the conditional should have been written two-sided.

Macro events and timeline

The July 2 June employment report (payrolls +57,000 against a consensus near 115,000), the July 8 end of the US–Iran ceasefire and the associated 5.4% Brent move, the July 14 June CPI (3.5% headline against 3.8% expected, with September-hike odds moving from roughly 75% to 63% on futures pricing), the July 16–17 semiconductor and streaming-guidance pressure, and the July 17 standard-monthly AM settlement all follow the public record and the scheduled calendar. Their characterization as catalysts is our interpretation of the tape and the structural record; this paper makes no novel macro claim, and its focus is the dealer-book response.

Prepared by the ZDtE Research Desk. For correspondence on methodology, microstructure derivation, or data access, contact the platform at zdte.ai. Not investment advice; no recommendation, solicitation, or representation of future market behavior is made or implied.

Frequently asked questions

Did a new pin form after the June 2026 expiry?

Briefly, yes. Our per-cycle record shows pinned-dominant sessions returning July 6 through July 10, with the call wall migrating from $7,630 to $7,700 and near-money open interest roughly doubling off its late-June trough, call-led. It did not hold: no pinned run outlived two consecutive sessions, and the book rolled off again into the July 17 monthly expiration.

What is the alternator regime?

A label for what the July record shows: the dealer book flipping sign day to day instead of holding one state. Our net-gamma estimate changed sign five times in the ten sessions after the holiday. April and May were positive on all but one session; early June was negative throughout. Under an alternator, absorption on one day says little about the next.

What happened at the July 2026 monthly expiration?

Standard SPX monthlies settle on the opening print, and the index gapped down roughly 89 points into that settlement after a semiconductor-led selloff overnight. By the afternoon our near-money capture was about 71% puts, the inverse of the call-led reload a week earlier, and the session closed at $7,457.69, down 1.01%, the largest decline of the window. The reconstruction is descriptive; it makes no claim about what follows.

THE SERIES

This is the fifth paper in a continuing structural series tracking the SPX dealer book from the April V-low through its June expiry and July's attempted rebuild. Start from the beginning:

Read the first paper, The V in 23 Sessions → →

Published by zdte.ai Research Desk