AI-ENABLED PURPLE TEAMING FOR SAHEL CONVOY SECURITY: CASE OF FUEL BLOCKADE BY JNIM

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Fuel access has become a strategic pressure point across Mali and its neighbors. In 2025, Jama't Nusrat al Islam wal-Muslimeen (JNIM) shifted from sporadic interdictions to a deliberate fuel-blockade strategy intended to pressure Bamako without holding territory. By selectively constraining movement along the Sikasso–Kayes–Bamako corridor, the group turned fuel scarcity into a tool of coercion, governance, and narrative control—shaping behavior in the capital while remaining largely outside it.

This brief draws on ACLED's dataset of nearly 3,000 JNIM activities over twelve months, including combat operations, propaganda releases, and government counter-actions. Using an adversarial-intelligence model supported by AI-enabled pattern detection and red/blue/purple-team reconstruction, the analysis reconstructs JNIM decision cycles, identifies defender vulnerabilities, and tests countermeasures against the group's operational constraints.

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Four findings emerge:

1. **Interdictions rely on a narrow ISR (Intelligence, Surveillance, Reconnaissance), spine, advance warning, and predictable defender behavior.**

    JNIM's early-warning system is effective but geographically concentrated. The Sikasso corridor—running from the Ivoirian border through Kolondieba, Bougouni, and onward to Bamako via RN7—accounted for nearly 60 percent of all convoy attacks. Secondary western routes through Koulikoro and Kayes absorbed most of the remainder. Along the Kolondieba–Kadiana segment, a rotating pool of 20–30 scouts, informants, and drone operators provides 12–24 hours of advance warning. This network performs best in daylight. Defender regularity, such as daylight departures, repeated use of the same routes, and single-column formations, enabled interception with modest resources. Nearly half of all attacks occurred at sites JNIM had targeted before.

2. **Defender behavior magnifies losses, but JNIM also operates under clear structural ceilings and timing patterns.**

    Predictable convoy patterns enabled interdiction; unpredictable patterns would degrade it. JNIM rarely fields more than 30–50 fighters for a convoy ambush, depends on a small pool of drone operators, and typically goes quiet for two to three days before major operations. The group also deliberately avoids IEDs and suicide drones against fuel convoys—despite using IEDs in more than half of military patrol attacks. Uncontrolled explosions endanger fighters, risk mass civilian casualties, and destroy fuel that might otherwise be captured. The rivalry with IS-Sahel further constrains available forces: clashes in September and November—along with the diversion of several hundred fighters to Burkina Faso—consistently preceded week-long drops in convoy attacks. When operations slow, propaganda output rises, allowing JNIM to maintain pressure at low cost. But convoy-specific threats function differently: ultimatum-style videos directed at drivers or suppliers routinely preceded attacks within days. These patterns create identifiable windows of elevated and reduced risk.

3. **A small set of low-cost countermeasures directly targets these constraints and markedly improves delivery rates.**

    Five measures outperformed escort-heavy approaches: route variation within geographic constraints, pre-dawn departures, splitting convoys into smaller elements, light patrols through key surveillance villages before departure, and deliberate leaking of false convoy plans. None require additional personnel or guaranteed air support. In combination, modeling projects these measures raise delivery rates from roughly 40–50 percent under current practices to 75–85 percent. These measures require changes in planning and coordination rather than additional equipment or personnel.

4. **JNIM's technological and communications evolution follows a predictable trajectory that shapes mid-2026 risk.**

    Across 2025, JNIM progressed from capturing government drones to deploying suicide FPVs, then to glide munitions, jamming-resistant systems, and reusing captured drones within hours of seizure—roughly one new capability every two to three months. If this pace continues, coordinated multi-drone convoy attacks are plausible by mid-2026. Two escalation indicators warrant attention: any drone or explosive attack on a fuel convoy without ground fighters present would signal a shift from controlled interdiction toward maximum destruction; recent attacks on agricultural machinery suggest willingness to extend economic coercion beyond fuel.
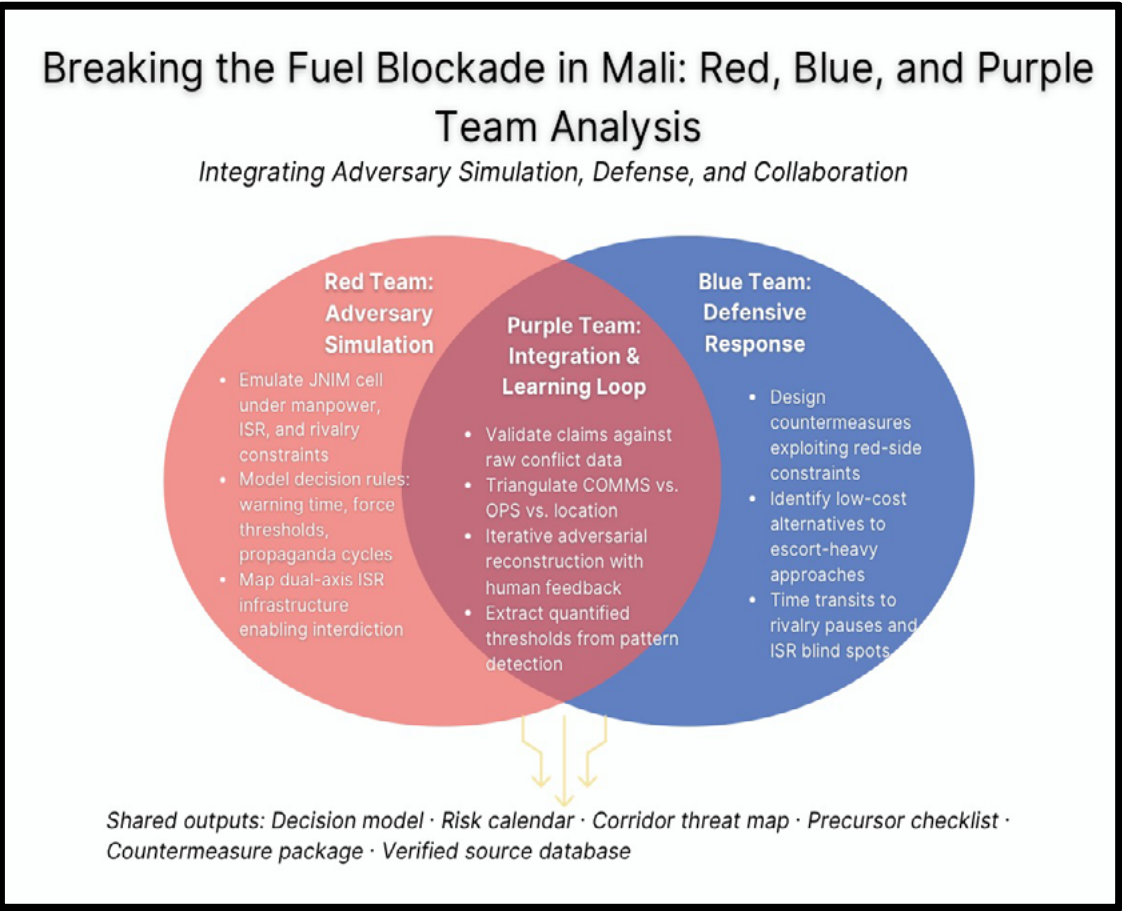
Overall Assessment

Complete protection along the corridor is unlikely under current force levels. High-probability, repeatable delivery is achievable by institutionalizing the five countermeasures and integrating limited forward ISR with communication-based warning indicators. Constraining JNIM's ISR nodes, mobilization cycles, and drone bandwidth—while exploiting the group's reliance on advance messaging—undermines the credibility of the blockade and restores maneuver space for commercial and state actors.

This assessment also illustrates the value of structured red- and purple-team analysis for governments, companies, and regional organizations. Given the rapid evolution of operational dynamics and technology in the Sahel, adversarial modeling needs to be maintained as a continuous practice rather than a one-time exercise.

SECTION 1 - METHOD & FRAMEWORK: HOW THIS PAPER WAS BUILT

This brief is based on an adversarial intelligence framework designed to understand how opponents make decisions under constraint. The approach integrates structured data, expert judgment, and machine-assisted analysis to model how JNIM prioritizes targets, allocates limited manpower, sequences communications, and adapts its operations over time. All findings in Sections 2 and 3 reflect the outputs of this process.

Breaking the Fuel Blockade in Mali: Red, Blue, and Purple Team Analysis
Integrating Adversary Simulation, Defense, and Collaboration

Red Team: Adversary Simulation
- Emulate JNIM cell under manpower, ISR, and rivalry constraints
- Model decision rules: warning time, force thresholds, propaganda cycles
- Map dual-axis ISR infrastructure enabling interdiction

Purple Team: Integration & Learning Loop
- Validate claims against raw conflict data
- Triangulate COMMS vs. OPS vs. location
- Iterative adversarial reconstruction with human feedback
- Extract quantified thresholds from pattern detection

Blue Team: Defensive Response
- Design countermeasures exploiting red-side constraints
- Identify low-cost alternatives to escort-heavy approaches
- Time transits to rivalry pauses and ISR blind spots

Shared outputs: Decision model · Risk calendar · Corridor threat map · Precursor checklist · Countermeasure package · Verified source database

The analysis drew on two parallel datasets: ACLED's 2,966 event records and a subset of 166 high-impact operations with associated communications. This subset was coded in detail, including by date, location, force size, tactical method, sophistication level, and propaganda timing, to enable adversarial modeling of JNIM decision-making under resource constraints. Using AI-enabled pattern detection, the analysis triangulated what JNIM says against when it acts, computed force-mobilization thresholds that correlate with attack sophistication, and isolated geographic chokepoints where surveillance infrastructure enables interdiction. The output is a threat model that treats JNIM as a rational, constrained actor rather than an unpredictable threat, allowing defenders to anticipate windows of elevated or reduced risk based on observable precursors.

Four methodological concepts structure this approach:

Adversarial Intelligence

A structured method for reconstructing an adversary's logic. It examines how a group balances resources, risk, and messaging; how it times operations; and how it converts small tactical actions into political or psychological leverage. Machine-learning tools assist in identifying patterns across incidents, communications, and movement data, but the core remains the analytic reconstruction of decision flows.

AI-Enabled Planning

Computational tools were used to map risk across routes, time windows, and terrain features; to cluster incidents and communications; and to test the effects of different defensive postures. These models help clarify which choices increase or decrease the adversary's opportunities and how convoy timing or routing interacts with JNIM's preferred engagement patterns.

AI-Assisted Threat Detection

Automated scanning tools processed JNIM statements, local reporting, and incident history to surface shifts in rhetoric, timing, or operational rhythm. The purpose is early warning: identifying when language, movement, or staging activity begins to align with past periods of increased pressure on fuel corridors.

Purple-Team Integration

Red-side analysts model adversary behavior using the elements above. Blue-side planners test how real defensive measures perform against that model. Iteration between the two produces findings that reflect both adversary incentives and defender constraints. The convoy insights in Section 3 come from this combined perspective.

This framework is not presented as a standalone capability. It is simply the structure through which the data in this brief was organized, tested, and interpreted. The next sections present the resulting threat picture (Section 2) and a detailed application to the Sikasso–Kayes–Bamako fuel corridor (Section 3).

SECTION 2: JNIM'S STRATEGIC APPROACH: REMOTE GOVERNANCE THROUGH LAYERED PRESSURE

Section 2 explains how JNIM turned fuel scarcity into political leverage in 2025—using selective corridor disruption, public threats, and governance claims to shape behavior in Bamako from the outside. It also shows why the blockade's tempo swings—pauses, lulls, and resumptions driven by bargaining, rivalry pressure, and finite manpower—without treating any of that as guidance for convoy protection.

Evolution of Strategy: From Corridor Ambushes to a Fuel Blockade

JNIM's approach in 2024–2025 reflects a deliberate progression rather than opportunistic escalation. From 2022 to 2024, the group expanded its rural governance footprint in Ségou, Kayes, and central Mali through taxation, dispute resolution, and regulation of trade flows. By late 2024 it had shifted toward chokepoint pressure on key corridors, using ambushes and temporary road control to test state responses.[1]

In 2025, this evolved into a fuel-focused strategy aimed at influencing Bamako indirectly by targeting the capital's supply lines and the surrounding rural belts.[2] The result is a model of remote governance: shaping political and social outcomes in Bamako without the burden of administering the city. This transition was formalized in September 2025. The September 7 "Siege of the Tyrants" video series declared the blockade as doctrine,[3] and subsequent operations aligned closely with this announcement. Pattern analysis shows that interdictions after September 7 were not reactive but followed a recurring prepare–pressure–pause cycle, signaling the maturation of corridor leverage into a sustained strategic tool. These operations relied on concentrated early-warning and staging systems along a narrow set of southern and western approaches to Bamako, rather than broad territorial control.

Execution Threats and Moral Demands Used to Intimidate Bamako

The November 18 execution threat[4] marked a sharp escalation in JNIM's blockade strategy. JNIM uses fuel scarcity to exert social and political influence over the capital. JNIM's spokesperson Bina Diarra framed the blockade as a means of moral reform in Bamako, citing nightclub closures, dress-code enforcement, and "immoral venue"

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1. The Soufan Center. (2024, November 20). *Jihadist spillover impact and deteriorating security in coastal West Africa*. IntelBrief. https://thesoufancenter.org/intelbrief-2024-november-20/

2. Crowe, P. (2025, November 3). *Jihadists' fuel blockade poses biggest threat yet to Mali's military rulers*. Reuters. https://www.reuters.com/sustainability/society-equity/jihadists-fuel-blockade-poses-biggest-threat-yet-malis-military-rulers-2025-11-03/

3. Al-Zallaqa Media Foundation. (2025, September 7). Ḥiṣār al-Ṭughāt [Siege of the Tyrants] [Video series]. Jama'at Nusrat al-Islam wal-Muslimin.

4. On November 18, 2025, JNIM spokesperson Bina Diarra (Abou Hudheifah al-Bambari) released a propaganda video directly threatening to execute tanker drivers as military targets if the NDC fuel company did not halt deliveries to Bamako. This marked a sharp escalation from prior tactics of torching vehicles and releasing drivers to treating non-compliant transporters as combatants subject to capital punishment.

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shutdowns as victories achieved without urban presence[5]. His November 17–18 videos set explicit demands, including Sharia implementation, full veiling in public transport, and the cessation of deliveries by specific suppliers. These messages coincided with steep fuel price spikes and growing driver refusals.[6]

The group's communications and operations followed a consistent pattern. Statements preceded actions rather than describing them retrospectively. September's doctrinal declaration was followed by sustained convoy interdiction throughout the month. In November, threats shaped behavior even as attack volume fell sharply, demonstrating that messaging alone could sustain pressure during periods of reduced operations. This messaging-first pattern allowed JNIM to exert influence through expectation management as much as through violence.

A Pattern of Controlled Disruption, Not Total Closure

JNIM benefits more from a weakened, dependent capital than from attempting to hold it. Interdiction trends confirm JNIM seeks controlled pressure rather than maximum blockade. September demonstrated capability with 15 attacks distributed across the month following the September 7 doctrine announcement. October sustained pressure with 18 attacks, including major incidents destroying 50+ trucks at Kankela (October 17) and 38 trucks at Loulouni (October 21)[7]. Despite this pressure, eight large escorted convoys still reached Bamako during this period. Major interdiction phases were consistently preceded by 48–72 hours of reduced operational activity, indicating deliberate preparation cycles rather than continuous effort.

November marked a dramatic shift. JNIM carried out just two attacks over the entire month—an 89 percent drop from October—while multiple 200–300-tanker convoys moved successfully under heavy escort. This roughly 40-day lull, with minimal convoy interdiction, overlapped with two negotiations on October 29–30: the UAE reportedly paid $50–70 million for the release of two Emirati hostages, while the Malian junta released 25 JNIM detainees in a separate arrangement. Claims that the pause was formally tied to a prisoner exchange remain unproven. Violence tapered off without disappearing, giving JNIM room to rest units and conserve resources while keeping pressure on key routes intact.

JNIM resumed convoy attacks December 6 with what propaganda labeled the «Zero Tanker Operation»—destroying 20+ trucks from a 200-tanker convoy on the Bougouni-Bamako axis. Two additional attacks followed December 10 and 13, the latter less than 80km from Bamako. Yet simultaneously, multiple mega-convoys of 300-400 tankers successfully reached Bamako under heavy FAMa escort throughout December. The pattern indicates deliberate calibration: enough disruption to sustain blockade credibility, but not enough to trigger collapse or external intervention. A weakened capital dependent on contested corridors provides political leverage without administrative burden.

5. Al-Zallaqa Media Foundation. (2025, November 17–18). Bayān ʿan Taʿzīz al-Ḥiṣār wa-l-Iṣlāḥ al-Akhlāqī fī Bāmākū [Statement on Blockade Escalation and Moral Reforms in Bamako] [Video]. Jamaʿat Nusrat al-Islam wal-Muslimin. https://ent.siteintelgroup.com/ (Archived via SITE/TRAC)

6. RFI. (2025, November 5). Mali's economy near standstill amid JNIM fuel attacks. RFI. https://www.rfi.fr/en/africa/20251105-mali-s-economy-near-standstill-amid-jnim-fuel-attacks

7. ACLED

How JNIM Fights: Distributed Operations and Short-Duration Control

JNIM achieves outsized impact with small, mobile units that rely on repeated terrain and ISR patterns rather than large forces. Their operations along the corridor rely on 20–80 fighter units, with larger mobilizations uncommon. The November 6 movement of approximately 800 fighters on 400 motorcycles from Mopti toward Sikasso was exceptional.[8] Most operations use a fraction of this number, and JNIM rarely fields forces at this scale. Larger concentrations create vulnerability to airstrikes and drone surveillance while straining logistics.

Operational activity concentrates along a narrow set of southern and western approaches to Bamako, allowing JNIM to sustain pressure with limited manpower while managing competing commitments elsewhere. When the group absorbs losses[9], shifts fighters to other fronts[10], or anticipates negotiations, activity along these approaches predictably declines, reinforcing the pattern of deliberate pacing rather than constant pressure.

Environmental factors also show some noteworthy correlations. Across more than 3,000 JNIM events from 2024–2025, higher millet prices coincide with deadlier attacks, even though overall attack volume remains steady. Solar flare windows show a modest uptick in daily incident tempo, while rainfall levels themselves do not meaningfully track JNIM activity once seasonal patterns are accounted for. These patterns are not treated as predictors, but they offer additional context for periods when JNIM violence tends to be costlier.[11]

Governance Through Local Deals and Rivalry Constraints

Local deals expand JNIM's influence, while rivalry with IS-Sahel limits its ability to mass forces. JNIM sustains village cooperation through credible displacement threats. Late November warnings stated that reporting vehicles to the army would result in villages being «emptied just like the others»—referencing Loulouni and Léré. The November 30 release of three

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8. Philip, B. [@BrantPhilip_]. (2025, November 6). *Pro-government Malian sources are reporting that 400 motorcycles (~800 JNIM fighters) are leaving the Mopti region in central Mali to reinforce the blockade in the Sikasso region* [Post]. X. https://x.com/BrantPhilip_/status/198651598210640328

9. Forces Armées Maliennes. (2025, November 28). *Flash Info : Opérations de surveillance du territoire – découverte et neutralisation d'une base terroriste à Ouessesbougou.* Bamako, Mali.

10. Philip, B. [@BrantPhilip_]. (2025, November 10). Large JNIM reinforcements arrived today in the Baoulé forest west of Bamako. From this forest, JNIM can monitor and ambush fuel tankers coming from Senegal from both the Kayes-Diema and Kita-Kati axes [Post]. X. https://x.com/BrantPhilip_/status/1987986455600488500

11. Millet prices and lethality:
When millet prices rise, the average JNIM attack becomes markedly more lethal. Battles in high-price months produced around 60 percent more fatalities per event than battles in post-harvest periods, even though the number of attacks stayed broadly similar. This does not establish causation, and it does not imply JNIM drives these prices, but it does show that high-price periods tend to coincide with more lethal violence.
Solar flares and tempo:
In the few days around major solar flares, JNIM incidents occur roughly 15–20 percent more often than on comparable days. The effect is modest and the mechanism is unclear, but the pattern is consistent. In normally low-lethality, low-price months, attacks inside flare windows were about one-third more lethal than attacks outside those windows.
Rainfall:
Daily and weekly rainfall did not meaningfully correlate with attack size, sophistication, or lethality once the basic rainy-season/dry-season cycle was accounted for. This suggests the millet-price and flare patterns are not simply seasonal artefacts.

Egyptian hostages[12] without ransom after declaring them «innocent of cooperation with the Malian government»[13] reinforced the boundary: avoid state service and you are safe; serve the junta and you are a legitimate target.

At the same time, the IS-Sahel rivalry imposes structural limits on JNIM's ability to concentrate forces near Bamako.[14] Major clashes throughout 2025 caused significant JNIM losses and forced redeployments to other fronts.[15][16] These pressures consistently coincided with downturns in corridor activity, underscoring that the blockade competes with other operational priorities rather than operating in isolation.

Multi-Front Allocation: Expansion While Maintaining the Blockade

JNIM operates through calculated resource allocation rather than maximum effort at all times. Operating across Mali, Burkina Faso, Benin, Togo, Niger, and Nigeria forces JNIM to balance corridor pressure with competing commitments on multiple fronts. The late October announcement of operations in Nigeria[17], followed by the November 22 operation in Kwara State, Nigeria—JNIM's first official claim inside Nigeria—signaled deliberate geographic expansion requiring AQIM approval. This demonstrates strategic confidence: despite IS-Sahel pressure and the demands of the fuel blockade campaign, JNIM allocated resources to activate a new front, reinforcing the remote-governance model where influence projection matters more than territorial consolidation.

This expansion reinforces the remote-governance model: influence is projected through selective disruption and signaling rather than territorial consolidation. The November–December pattern—89 percent operational reduction followed by a negotiated pause and calibrated resumption—demonstrates that JNIM can achieve political objectives without proportional operational commitment.

Messaging as an Operational Tool: Threat, Timing, Discipline and Staged Presence

JNIM uses communications to shape expectations and behavior as part of its blockade strategy, not simply to document violence. Across 2025, messaging increasingly announced intent, defined red lines, and framed outcomes in advance, allowing the

12. Egypt Daily News. (2025). *Egypt secures release of three citizens kidnapped in Mali.* Egypt Daily News. https://egyptdailynews.com/egypt-secures-release-of-three-citizens-kidnapped-in-mali/

13. Philip, B. [@BrantPhilip_]. (2025, November 3). JNIM denies requesting a ransom price for the Egyptians, and stated that they are still investigating their ties to the Malian government, both Egyptians were door-to-door sellers of household items and utensils [Post]. X. https://x.com/BrantPhilip_/status/1994865606416634127

14. African Security Analysis. (2025, September 18). *Burkina Faso – ISWAP–JNIM rivalry escalates in Sebba, turning tri-border corridor into a strategic battleground.* ASA Situation Reports. https://www.africansecurityanalysis.org/updates/burkina-faso-iswap-jnim-rivalry-escalates-in-sebba-turning-tri-border-corridor-into-a-strategic-battleground

15. ACLED

16. African Security Analysis. (2025, September 18). *Burkina Faso – ISWAP–JNIM rivalry escalates in Sebba, turning tri-border corridor into a strategic battleground.* ASA Situation Reports. https://www.africansecurityanalysis.org/updates/burkina-faso-iswap-jnim-rivalry-escalates-in-sebba-turning-tri-border-corridor-into-a-strategic-battleground

17. Al-Zallaqa Media Foundation. (2025, October 28). Wuṣūl al-Usud ilā Nījīriyā [Arrival of the Lions in Nigeria] [Video series]. Jama'at Nusrat al-Islam wal-Muslimin. https://ent.siteintelgroup.com/ (Archived via SITE/TRAC).

group to influence convoy operators, suppliers, and civilians without sustaining continuous operations. From September through December 2025, JNIM's communications output and convoy interdiction activity followed a deliberate pattern. When the group was operationally active, major convoy-related releases routinely preceded interdictions within days, embedding messaging directly into the attack cycle.[18,19,20] When operational tempo dropped (most notably during the November pause) communications volume increased sharply, allowing JNIM to maintain pressure through execution threats, governance claims, and supplier warnings while conserving fighters and resources.

The group also appears to increase messaging when operational tempo drops to maintain pressure at low cost. This dual use of communications—sometimes as an operational precursor, other times as a substitute for kinetic action—enabled JNIM to sustain blockade credibility during lulls, manage negotiation periods, and pace violence without signaling weakness. The specific timing relationships, correlations, and convoy-level indicators that distinguish these functions are examined in detail in Section 3.

JNIM leadership has demonstrated message discipline through public corrections of fighter behavior. In a speech at a May gathering, Mahmud Barry[21] called for humility and condemned boasting and collateral damage. Ousmane Dicko[22] reinforced the message in November 2025, ordering fighters to stop boasting in videos and to cease identifying by region, stating that JNIM should be "like a single body." By issuing these reprimands publicly rather than handling them through internal channels, JNIM signals to local civilians, elders, and religious constituencies that it responds to complaints, enforces moral discipline, and upholds pious standards. The public format also allows the group to claim moral ground vis-à-vis both the junta and IS-Sahel, accepting the exposure of disciplinary lapses as a tradeoff for the credibility gained by appearing principled.

Production choices actively inflate the apparent size and permanence of JNIM's small units. GoPro bodycams became standard by July, allowing the group to film 20–80 fighter units from multiple angles. Operations consistently occur at similar terrain geometries—road bends, tree lines, chokepoints—allowing camera position reuse that creates visual consistency, suggesting a systematic presence. Drone overflights and repeated fighter passes through camera frames make distributed units appear as continuous forces. The 28 September Benena parade exemplifies this staged visibility: a brief controlled appearance edited to convey permanent territorial control despite minimal operational value.[23]

18. Al-Zallaqa Media Foundation. (2025, September 7). *Ḥiṣār al-Ṭughāt* [Siege of the Tyrants] [Video series]. Jama'at Nusrat al-Islam wal-Muslimin. https://ent.siteintelgroup.com/ (Archived via SITE/TRAC).

19. Al-Zallaqa Media Foundation. (2025, October 20). *Taʿzīz al-Ḥiṣār: Taḥdhīr li-l-Nāqilīn wa-l-Muʿtamadīn* [Escalation of the Siege: Warning to Transporters and Suppliers] [Video]. Jama'at Nusrat al-Islam wal-Muslimin. https://ent.siteintelgroup.com/ (Archived via SITE/TRAC).

20. Al-Zallaqa Media Foundation. (2025, November 12). *Ultimātum li-l-Munāfiqīn fī Lūlūnī wa-Mahālīhā* [Ultimatum to the Hypocrites of Loulouni and Surrounds] [Audio-video]. Jama'at Nusrat al-Islam wal-Muslimin. https://ent.siteintelgroup.com/ (Archived via SITE/TRAC).

21. Mahmoud Barry (also known as Mahmud Barry or Abou Yehiya) is a prominent JNIM spokesperson, second-in-command of Katiba Macina, and an influential member of the group's shura council.

22. Ousmane Dicko is a senior JNIM commander in Burkina Faso, often described as the deputy or number-two to Jafar Dicko (the group's local leader there); he is also linked to the legacy of Ansarul Islam

23. SimNasr. [@SimNasr]. (September 15, 2025). #Mali Benena demonstrates three points: 1. Given the camouflage, JNIM operates unhindered ; the AES is in place but enforced by the jihadists 2. The population no longer believes state propaganda 3. The jihadists can leave without fear in a fully identified Mercedes190 [Post]. X. https://x.com/SimNasr/status/1972247648184017006

Governance Claims as Coercive Leverage

Governance claims function as coercive tools that project authority far beyond the group's real reach. In November, the group issued videos claiming the blockade "governs" Bamako—closing nightclubs, enforcing conservative dress, and reducing road accidents—despite having no urban presence. The gap between these claims and operational reality tests whether messaging alone can generate compliance.

Bina Diarra's 17–18 November videos cited unheeded demands: Sharia implementation, closure of bars, and full veiling in public transport. He urged the NDC fuel supplier[24] to halt deliveries, warning that failure could expand the blockade to other goods. The October 19 and November 4 bus-check videos, which enforced gender separation and niqab requirements at temporary checkpoints, amplified brief, intermittent operations into a perception of systematic social policing across routes JNIM cannot continuously monitor. Together, these claims show how JNIM stretches intermittent control and finite manpower into an appearance of continuous governance. The blockade operates not only as a security constraint, but as a mechanism for social regulation and economic coercion well beyond the group's physical footprint.

SECTION 3 - RED, BLUE & PURPLE SYNTHESIS FOR CORRIDOR SAFETY

This section translates AI-enabled pattern detection into practical guidance for planning and protecting fuel convoys. The underlying analysis draws on a database of over 3,000 JNIM activities over twelve months, including combat operations, communications releases, and government counter-operations, to identify the conditions that trigger attacks, the circumstances under which convoys pass, and the patterns that indicate what JNIM is likely to attempt next. It uses three complementary perspectives that, when combined, produce a full adversarial-intelligence picture.

The red-team perspective reconstructs JNIM's decision-making from observed behavior: when they attack and when they stand down; how much warning they require; how they size forces; and how they adapt once a countermeasure is detected. This perspective models JNIM as a rational actor balancing manpower, terrain, warning time, and propaganda value.

The blue-team perspective examines what failed convoys reveal about defender vulnerabilities—predictable routing, daylight-only movement, single-column formations, exposure to village informant networks, and the absence of forward surveillance. These are weaknesses JNIM systematically exploits because they align with the group's own operational constraints.

The purple-team synthesis brings both perspectives together. By overlaying JNIM's requirements with defender vulnerabilities, it identifies countermeasures that attack the underlying logic of JNIM interdiction rather than its symptoms. These countermeasures

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24. NDC (Nouvelle Distribution du Carburant) is one of Mali's major private fuel distributors and importers, supplying a substantial share of petroleum products to Bamako and other regions via truck convoys from Côte d'Ivoire and Senegal. Since September 2025, NDC has been a primary target of JNIM's blockade, facing direct threats and attacks on its tankers. In videos released on November 17–18, JNIM spokesperson Bina Diarra addressed NDC and its suppliers directly, citing unmet demands for Sharia implementation and moral reforms and urging the company to halt deliveries under threat of escalation.

exploit JNIM's structural weaknesses while correcting our own. The synthesis also generates model-derived probability estimates for risk reduction; these estimates rest on explicit assumptions about JNIM's operational dependencies and are clearly labeled as projections rather than measured outcomes.

3.1 RED TEAM: What JNIM Needs to Interdict a Convoy

JNIM's ability to interdict convoys depends on a specific set of operational prerequisites—sufficient warning time, manageable escort strength, favorable terrain, available fighters, and propaganda value—that must align before the group commits forces. The map visualizes these dependencies as a decision cage: the geographic concentration of ISR infrastructure along the Sikasso corridor, the clustering of attacks at sites where terrain and surveillance coverage intersect, and the 11-month drone capability progression that has expanded JNIM's options for converting intelligence into action.

Finding 1: JNIM's ISR Infrastructure Concentrates on a Narrow Geographic Spine

JNIM's early-warning system spans multiple corridors but is heavily concentrated along predictable axes feeding Bamako. Analysis of 38 fuel convoy attacks from September through December 2025 shows that the Sikasso corridor accounted for 58 percent of all interdictions (22 of 38 attacks). This corridor follows the Kolondieba–Kadiana–Sikasso–Zegoua–Bougouni–Bamako axis, including long segments of RN7, and represents the primary fuel entry route from Côte d'Ivoire.

JNIM's 12-24 Hour Decision Cage
Sikasso-Bamako Fuel Corridor, November 2024 - December 2025
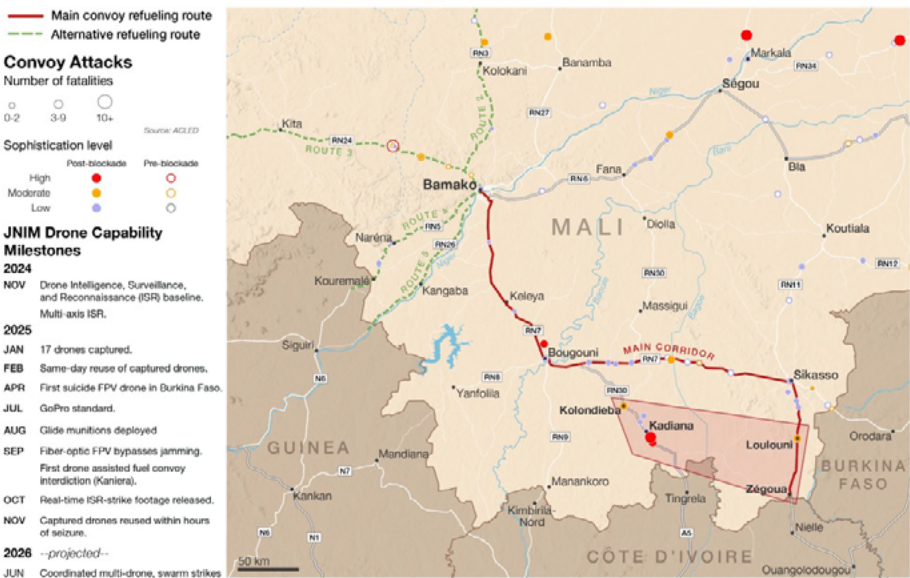
JNIM's interdiction model depends on three prerequisites: advanced warning (12-24 hours minimum for force positioning), route predictability (terrain-specific ambush setup), and ISR confirmation (visual or drone verification before commitment). Remove any of these, and the blockade's logic breaks.

Secondary corridors account for a smaller share of interdictions. The Koulikoro corridor (Soribougou–Neguela–Kolokani axis) accounted for 18 percent of attacks, while the Kayes corridor (Kayes–Diéma–Bamako axis) accounted for 11 percent. Both western corridors are monitored from staging areas in the Baoulé forest, which allow JNIM to observe and reposition toward either axis depending on convoy movement.

Following the 40-day operational pause in November, all December attacks were confined to the Bougouni–Bamako segment of RN7, indicating a deliberate return to the most ISR-dense and operationally familiar route rather than dispersion across corridors.

Village-based observation networks form the ISR backbone of this system. Along the Kolondieba–Kadiana segment, JNIM relies on a rotating pool of approximately 20–30 scouts, informants, and drone operators who provide advance reporting on convoy size, escort strength, departure timing, and route selection. These networks consistently deliver 12–24 hours of warning, sufficient for decision-making and fighter positioning.

Targeting data shows clear site reuse. Koualé, Loulouni, Néguelá, and Kankela each experienced multiple convoy attacks during the reporting period, with 49 percent of all interdictions occurring at locations previously targeted. The October 17 Kankela attack (50+ trucks destroyed) and October 21 Loulouni attack (38 trucks destroyed) both occurred at sites with prior interdiction history, confirming that ISR familiarity and terrain suitability (as opposed to opportunism) drive target selection. This repetition reflects both ISR familiarity and terrain suitability for short-duration control rather than opportunistic selection.

FAMa struck one such western staging area in the Baoulé forest on November 28, nineteen days after JNIM established the position on November 10, illustrating the lag between ISR node establishment and counteraction. The delay allowed JNIM to monitor both the Kayes and Koulikoro approaches during the critical October–November interdiction phase.

Finding 2: JNIM Requires 12-24 Hours of Advance Warning For Successful Convoy Attacks

Documented convoy interdictions show JNIM typically positions fighters 6–12 hours before convoy arrival, which in practice requires 12–24 hours of total advance warning to allow for intelligence transmission, command authorization, and force movement. This system performs best during daylight hours, when human informants, motorcycle scouts, and commercial drones can track convoy movements unobstructed.

Attack timing clusters heavily during daylight. Night interdictions remain rare and poorly coordinated, indicating limited night ISR capability and continued reliance on visual confirmation prior to commitment. Convoys staging in border areas such as Zegoua or Sikasso during morning hours consistently provided sufficient warning for JNIM to mobilize interdiction units.

Finding 3: JNIM Applies a Cost-Benefit Test to Every Convoy

JNIM does not attack every convoy it detects. Interdictions occur when five conditions align: sufficient advance warning, manageable escort size, favorable terrain, available fighters not committed against IS-Sahel, and high propaganda value. Convoys pass when any one of these conditions is disrupted.

The September–December period illustrates this logic. September demonstrated capability with 15 attacks following the September 7 doctrine announcement. October sustained pressure with 18 attacks, including major incidents destroying 50+ trucks at Kankela (October 17) and 38 trucks at Loulouni (October 21). Despite this pressure, eight large escorted convoys still reached Bamako during this period—demonstrating that JNIM's cost-benefit calculus allowed passage when escort strength exceeded interdiction capacity. Following the October 29–30 negotiations (including a reported $50–70 million UAE ransom payment and the release of 25 JNIM prisoners by the Malian junta) convoy attacks dropped from 18 in October to 2 in November, an 89 percent reduction.

When JNIM resumed operations on December 6 with the "Zero Tanker Operation," it targeted a 200-tanker convoy on the Bougouni–Bamako axis and destroyed 20+ trucks, demonstrating continued capability while allowing sufficient deliveries to reach the capital. Two additional attacks followed on December 10 and 13, the latter less than 80 km from Bamako.

Finding 4: JNIM Deliberately Avoids Explosive Initiation Against Fuel Convoys

JNIM used IEDs in only 3 percent of fuel convoy attacks (1 confirmed: the June 2 Boungou drone-delivered IED) compared to nearly 60 percent of non-fuel convoy and patrol attacks during the same period (out of 120 analyzed). This restraint cannot be explained by capability limitations—JNIM emplaces IEDs frequently on the same corridors used by fuel convoys, including the Sikasso axis (July 16, July 30 IED attacks on military vehicles) and Barsalogho-Pensa road (October 8, November 7 IED attacks on patrols).

The same pattern applies to suicide FPV drones. Despite demonstrating suicide FPV capability in April 2025 (Djignandjoaga, Burkina Faso) and deploying FPVs in approximately 40 percent of overall operations, JNIM did not use kamikaze drones against fuel convoys. Fuel convoy attacks consistently relied on controlled arson after suppressing escorts.

This restraint reflects three operational priorities: fighter safety during close-contact assaults, civilian casualty management on shared roads, and fuel preservation. Multiple attacks, including the September 26 Babilena incident, documented fighters siphoning fuel before or instead of burning tankers.

Three factors likely explain this restraint:

1. **Fighter safety.** The standard fuel convoy attack sequence requires ground fighters to suppress escorts and ignite specific tankers. An IED or kamikaze drone detonating a fuel tanker could trigger a chain reaction of explosions across the convoy, killing JNIM fighters positioned for the assault or blocking their withdrawal routes.

1. **Civilian casualty management.** Fuel convoy attacks occur on roads shared with civilian traffic. Uncontrolled explosions risk killing drivers, passengers in nearby vehicles, and residents of roadside villages. JNIM's blockade messaging explicitly frames the campaign as targeting the junta's fuel supply—not massacring civilians. Mass civilian casualties would undermine this narrative and complicate recruitment.

2. **Fuel preservation.** Data shows that JNIM fighters frequently siphon fuel from tankers before or instead of burning them. The September 26 Babilena attack explicitly noted

militants «siphoned fuel from another truck» after burning others. Controlled arson allows selective destruction; IED or drone-initiated explosions destroy everything.

Projection: If JNIM shifts to IED or suicide drone initiation against fuel convoys—particularly attacks with no ground fighters present for follow-on engagement—it signals a doctrinal shift: prioritizing maximum destruction over fuel capture, driver safety, and fighter safety. This would indicate either desperation (conventional ambush becoming too costly) or strategic escalation (accepting civilian casualties to intensify economic pressure). Either scenario represents a significant threat elevation.

Finding 5: JNIM Uses Communications Differently for Convoys Than for Overall Operations

Across overall JNIM activity, communications function as a substitute for kinetic operations rather than a general attack signal. Modeling 480 JNIM events against 10 major communications releases from September through November 2025 shows a strong inverse correlation (r = -0.88) between propaganda output and convoy attacks. This coefficient indicates that 77 percent of the variance in monthly attack volume can be statistically associated with messaging output moving in the opposite direction—when communications increase, kinetic operations decrease, and vice versa. The relationship is robust enough to treat communications surges during operational lulls as deliberate pressure maintenance rather than attack signals.

However, for convoy interdictions, communications function as a near-term operational signal rather than a substitute. Between September and December 2025, four of five major convoy-related communications were followed by convoy attacks within seven days. The September blockade doctrine, October execution warnings directed at drivers, and Mahmud Barry's December 11 audio threat each preceded interdictions within days. The sole exception occurred in mid-November, when a 55-minute execution-threat video was not followed by attacks because convoy operations had temporarily ceased during the truce.

Finding 6: Fuel Convoy Ambushes Use Small Forces That Evade Early Detection

Fuel convoy interdictions typically employ 30-80 fighters—sufficient to overwhelm standard escorts but small enough to assemble without triggering detection. The September 14 Kaniéra ambush destroyed 51 tankers with an estimated 30-50 fighters. Across the blockade campaign, only the November 6 Mopti mobilization (~800 fighters on 400 motorcycles) reached a scale visible to external monitoring, and that movement preceded a territorial offensive at Loulouni rather than a convoy ambush.

JNIM reserves large formations (150+ fighters) for base assaults and multi-site territorial operations—not fuel interdiction. Mobilizations above 150 fighters signal operations beyond routine convoy targeting and should trigger postponement. Standard fuel convoy threats come from units small enough to position within hours of receiving village network intelligence.

Sophistication Level	Mean Force Size
LOW (n=10)	62 fighters
MODERATE (n=16)	91 fighters
HIGH (n=11)	186 fighters
PIVOTAL (n=1)	500 fighters

Operations involving 200 or more fighters correlate with HIGH or PIVOTAL sophistication ratings in every documented instance. Confirmed movement of 150+ fighters signals a major operation rather than harassment, as 10 of 12 such mobilizations produced HIGH-sophistication attacks.

For fuel convoy interdiction specifically, attacks cluster at the lower end of this spectrum. Convoy ambushes typically employ 30-100 fighters—the range where 22 of 23 operations across all JNIM activity were rated LOW or MODERATE sophistication. This means standard fuel convoy escorts face predictable threat levels from small, mobile units rather than mass formations. The exception that proves the rule: the November 6 movement of approximately 800 fighters on 400 motorcycles from Mopti toward Sikasso preceded the November 8-14 Loulouni offensive—a combined territorial and economic operation far exceeding typical convoy interdiction scale. Early detection of mobilizations above 150 fighters should trigger convoy postponement, as such movements indicate operations beyond routine fuel interdiction.

Finding 7: JNIM Reached Combat-Effective Drone Integration in 11 Months

The database documents 11 drone-capability milestones across 12 months:

Date	Capability
Nov 2024	Drone reconnaissance for targeting; drone-monitored axes at Djibo siege
Jan 2025	Mass acquisition (17 drones captured at Boulkessi/Timbuktu); DJI drones captured and reused at Loulouni/Dargo
Apr 2025	First suicide FPV drone deployment in Burkina Faso (Djignandjoaga, April 9)
Jun 2025	Surveillance drones guide storming units at cross-border Boulkessi/Koumbri operations; drone-directed convoy ambush at Kayes (June 11)
Aug 2025	First glide munitions deployed near Sikasso (Danderesso, August 27)—marks transition from basic FPV to extended-range precision strikes
Sep 2025	Fiber-optic or coded FPV drones bypass counter-drone jamming at TB2 base; first drone-assisted convoy interdiction in blockade phase (Kaniéra, September 14)
Oct 2025	Real-time ISR-to-strike footage released showing drone guidance of convoy attacks
Nov 2025	Captured DJI Mavic reused within hours of seizure at Garbounga (November 20-21)

Drone integration into convoy interdiction followed a distinct progression. The June 11 Kayes ambush marked the first drone-directed convoy attack. By September 14, JNIM deployed drone surveillance to guide the Kaniéra mega-convoy ambush (40+ tankers destroyed), and October footage demonstrated real-time ISR-to-strike coordination against fuel convoys. Of the 38 convoy attacks from September through December 2025, at least 3 involved confirmed drone support—a low baseline that reflects JNIM's selective deployment of limited drone assets for high-value targets rather than routine interdictions.

Projected evolution for convoy threats: If JNIM's capability progression continues at current rates, convoy interdiction tactics will likely shift by mid-2026. Current reliance on ground-based ambush (IED initiation, RPG/small-arms engagement) could transition toward drone-first strikes that disable lead escort vehicles from standoff range, reducing fighter exposure. Glide munitions demonstrated in August 2025 enable precision targeting of moving vehicles without requiring ground forces in the kill zone. The countermeasure implications are significant: timing unpredictability and village-network disruption remain effective against ground-based ambush, but lose value against drone-initiated attacks that require less advance positioning. Forward counter-drone capability and convoy air cover become correspondingly more important as drone integration matures.

Approximately 24 drones were captured from government forces over the 12-month period. Drone/FPV integration now features in approximately 40 percent of JNIM operations overall. This progression—roughly one new capability every 2-3 months—indicates coordinated multi-drone convoy attacks are plausible by mid-2026 if the trajectory continues.

3.2 BLUE TEAM: What Failed Convoys Reveal About Defender Vulnerabilities

The first vulnerability is route concentration. The Sikasso corridor via RN7 absorbed 58 percent of attacks because JNIM's observation network is densest along this axis. Despite alternate routes existing, RN7 remained the default choice for speed. Route selection prioritized travel time over security, with no systematic process scoring routes against recent attack patterns JNIM village-network coverage, or historical incident data.

The second vulnerability is timing predictability. Documented attacks cluster heavily in daylight hour, soften mid-morning to afternoon. JNIM's interdiction model relies on visual confirmation from informants, rapid motorcycle dispatch, and commercial drones lacking robust night-vision capabilities. Convoys staging in border areas like Zégoua or Sikasso in the morning provided informants ample time to report size, escorts, and departure— compressing this window via pre-dawn or night movements could disrupt the cycle.

The third vulnerability is single-column formation. Standard convoy structure placed 30–300+ tankers in a long continuous line on narrow roads, with military escorts concentrated at the front and rear. JNIM exploits this with a consistent sequence: immobilize the lead vehicle with RPG or small arms, strike the rear, suppress escorts, then ignite center tankers. Once lead and rear vehicles are disabled, the entire formation is trapped. As documented in Finding 8, JNIM deliberately avoids IEDs against fuel convoys despite using them in 55 percent of military patrol attacks—controlled arson achieves the same result without explosion risk to fighters.

The fourth vulnerability is the intact village observation network. Informants in key villages provide JNIM with staging information, tanker counts, escort size, and route indicators. This network persists because JNIM pays consistently in areas with weak state presence and reinforces cooperation with displacement threats. The group's late November warnings that villages reporting to the army would be 'emptied just like the others' referenced the Loulouni and Lere evacuations. During the reporting period, convoys did not appear to make sustained attempts to degrade this intelligence channel.

The fifth vulnerability is absent forward surveillance. Escorts typically detected attacks only upon entering the kill zone, reacting rather than preempting. Data revealed consistent pre-attack signatures 2–6 hours prior: motorcycle clusters moving toward ambush sites, fighters assembling near road bends or high ground, and drone operators positioning for ISR. None of these indicators were systematically monitored via own-drone reconnaissance, ground scouts, or aerial overwatch.

Together, these vulnerabilities explain why JNIM maintained high interdiction success despite limited manpower and competing IS-Sahel commitments. Each vulnerability aligns with a corresponding JNIM constraint, which is why the countermeasures below are effective.

3.3 PURPLE TEAM: Five Countermeasures That Exploit JNIM Constraints

Purple-team analysis identifies five practical adjustments that degrade JNIM's interdiction model. Each countermeasure targets a specific JNIM dependency. The risk-reduction

estimates below are model-derived projections based on explicit assumptions about JNIM's operational requirements; they are not measured outcomes.

Model Assumption Framework

JNIM requires three conditions for successful convoy interdiction:

1. Advance warning (12-24 hours minimum for force positioning)
2. Route predictability (terrain-specific ambush setup)
3. ISR confirmation (visual or drone verification before commitment)

Disrupting any single condition degrades attack effectiveness. Disrupting multiple conditions compounds the degradation. The estimates below follow from this logic.

Countermeasure 1: Route Randomization

Intervention: Randomize routes within geographic constraints. Score available variants daily against recent attack patterns and select 6 hours before departure. Drivers learn the route only at rollout.

Model logic: Route options are constrained by origin. Fuel from Côte d'Ivoire enters via Sikasso-Zegoua and must use the southern corridor (RN7 or variants through Bougouni-Kolondieba). Fuel from Senegal enters via Kayes and uses western routes (via Kita or Kangaba). A convoy starting near Sikasso cannot feasibly switch to the Kita corridor mid-transit—the distances are prohibitive.

Within these constraints, randomization still provides value. The Sikasso corridor offers variants: direct RN7 versus routes through Kolondieba-Kadiana versus Yanfolila approaches. The 53 percent attack concentration on Sikasso reflects both heavy use AND dense ISR coverage along specific segments (Kolondieba-Kadiana absorbed the highest repeat-attack rate). Varying the specific route within the corridor—selecting Bougouni-direct versus Kolondieba detour based on recent attack patterns—forces JNIM to cover more road segments or accept gaps.

Late route selection (6 hours before departure) matters most. Even if JNIM monitors multiple route variants, repositioning 30-50 fighters between ambush sites takes 2-4 hours. Compressing the decision window below this threshold degrades ambush readiness.

Model-derived estimate: 10-20% risk reduction. Geographic constraints limit options; primary value comes from late selection compressing JNIM's repositioning window rather than route diversity itself.

Countermeasure 2: Timing Unpredictability

Intervention: Shift departures to pre-dawn (04:00-06:00) with randomized scheduling. Avoid predictable staging patterns at Sikasso depot.

Model logic: JNIM requires 12-24 hours total warning time: intelligence transmission from village networks, decision-making, and fighter positioning. This system depends on daylight observation—informants watching staging areas, counting tankers, assessing escort strength.

Pre-dawn departure compresses this window. A convoy departing at 05:00 transits the danger zone before JNIM can complete the 6-12 hour fighter positioning cycle. Village networks have limited darkness hours to observe and report; by the time intelligence reaches commanders, the convoy is already moving.

Model-derived estimate: 40-50% risk reduction. Pre-dawn departure cuts JNIM's warning window by more than half.

Countermeasure 3: Split Convoys

Intervention: Divide 40-tanker convoy into two 20-tanker elements with 4-6 hour separation, routed differently when possible.

Model logic: JNIM rarely conducts two coordinated ambushes on the same day. Multi-attack days typically involved small teams burning isolated trucks at different locations—not two 30-80 fighter engagements against escorted convoys. Splitting forces JNIM to choose which element to engage. The second element gains 4-6 hours of warning time to reroute, reinforce, or abort.

Model-derived estimate: 25-35% reduction in catastrophic loss. Even if one element is hit, the other generally delivers.

Countermeasure 4: Village-Network Disruption

Intervention: Light presence patrols through Zegoua, Kolondieba, and Konobougou 48 hours before departure.

Model logic: JNIM's warning system depends on village informants along key road segments. The Kolondieba-Kadiana stretch shows the highest repeat-attack concentration—nearly half of all attacks occurred at locations hit multiple times. Patrol visibility raises informant risk and introduces timing ambiguity. JNIM must then either deploy fighters early (exposing them for 24-48 hours) or wait for confirmation and risk missing the convoy.

Model-derived estimate: 25-35% risk reduction. Degrades advance warning reliability in the highest-density ISR segment.

Countermeasure 5: Decoy Signals

Intervention: Deliberately leak false convoy plans through known channels—announce Wednesday 10:00 RN6 departure while actually moving Tuesday 04:00 on an alternate route.

Model logic: JNIM's village network has delivered consistent intelligence, which is why the group trusts it. Exploiting this trust with false information forces misallocation. Fighters arrive at an empty ambush site; the network's credibility degrades internally. Once doubt takes hold, JNIM either lengthens its decision cycle by demanding multiple confirmations (compressing the remaining positioning window) or deploys on lower-quality intelligence (increasing failed ambush rates).

Model-derived estimate: 20-30% risk reduction. Degrades ISR confirmation reliability; effectiveness increases over time as false positives accumulate.

3.4 Combined Impact: Modeled Outcome When All Five Countermeasures Apply

A standard fuel movement—30-40 tankers, 50-80 escorts, no guaranteed air support—faces high interdiction risk under current practices. Purple-team modeling projects the combined effect of all five countermeasures using the following formula:

Combined risk reduction = 1 - [(1-CM1) × (1-CM2) × (1-CM3) × (1-CM4) × (1-CM5)]

Applying mid-range estimates: CM1 (route): 15%, CM2 (timing): 45%, CM3 (splitting): 30%, CM4 (village disruption): 30%, CM5 (decoys): 25%

Combined = 1 - (0.85 × 0.55 × 0.70 × 0.70 × 0.75) = 1 - 0.137 = 86% theoretical risk reduction

Adjusting for implementation friction, intelligence gaps, and JNIM adaptation: 60-70% realistic risk reduction

This translates current 40-50% delivery rates to approximately 75-85% delivery rates without increasing escort size or requiring guaranteed air support.

3.5 Warning Indicators: What to Monitor Before Movement

Pattern analysis of 39 fuel convoy attack dates against broader JNIM activity identifies correlations that can inform movement decisions.

High-Correlation Indicators (Red): Consider Postponement

1. **Attack clustering.** 67 percent of fuel convoy attacks occurred within 72 hours of another fuel convoy attack. Once JNIM initiates interdiction operations, they typically sustain for several days before pausing. A fuel convoy attack today is the strongest predictor of another attack tomorrow.

2. **Weekend clustering.** Attacks cluster on Friday, Saturday, and Sunday, together accounting for 59 percent of attack dates. Tuesday and Thursday show lowest frequency. Weekend movement carries elevated risk.

Moderate-Correlation Indicators (Yellow): Implement Full Countermeasures

1. **Convoy-specific communications.** The relationship between JNIM communications and attacks is inconsistent. The September 7 blockade announcement and October 17-19 convoy videos preceded attacks within days. However, the November 12-20 communications surge preceded zero attacks—those fell during the post-negotiation truce. The December 11 Mahmud Barry threat preceded the December 13 attack by 48 hours. Communications signal intent but do not reliably predict timing.

2. **Sikasso corridor activity surge.** Elevated reporting of clashes, checkpoints, or movements along the Kolondieba-Kadiana segment signals active JNIM presence. However, this indicator is difficult to distinguish from baseline activity given JNIM's persistent operations in the corridor.

3. **Military IED activity on the corridor.** 38 percent of fuel convoy attacks were preceded by IED attacks on military patrols in the Sikasso corridor within 72 hours. IED emplacement confirms JNIM fighters are operating in the area, though fuel convoys and military patrols are targeted by different tactical approaches.

Inverse Indicators (Green): Potential Lower-Risk Windows

1. **Post-negotiation periods.** The October 29-30 UAE ransom payment preceded a 27-day operational pause—the longest gap in the blockade campaign. Attacks dropped from 18 in October to 3 in November. The December 6 resumption confirmed the pause was temporary.

2. **Multi-day attack gaps.** Multi-day attack gaps. Six gaps of 5+ days occurred: September 6-13 (7 days), September 14-19 (5 days), September 28-October 3 (5 days), October 21-28 (7 days), October 28-November 6 (9 days), and November 9-December 6 (27 days). Gaps likely reflect fighter rotation, resupply, or redeployment. Successful passage during a gap does not guarantee continued safety.

3. **IS-Sahel rivalry pressure.** Major clashes with IS-Sahel consistently preceded downturns in corridor activity. JNIM lost 50–70 fighters near Sebba on September 16, 36 fighters in Tigou on November 9, and 6–12 fighters were executed in Tigou and Bourga on November 16. Throughout 2025, the group diverted roughly 300–500 fighters to Burkina Faso to counter IS-Sahel, creating competing demands on the same manpower pool used for convoy interdiction. These losses and redeployments correspond to identifiable pauses in corridor interdiction intensity, typically lasting five to seven days. Monitoring IS-Sahel clash reporting provides an additional window indicator for lower-risk movement.

3.6 Expected JNIM Adaptation

Purple-team analysis anticipates how JNIM will adjust to sustained countermeasure implementation. Based on the group's documented adaptation rate—approximately one new capability per month throughout 2025—significant tactical responses should be expected within 30-60 days of consistent countermeasure use.

Blue-Team Action	Expected JNIM Adaptation	Evidence Base
Timing unpredictability	Night staging; pre-positioned forces	Night ops documented (Nov 17, Dec 10)
Route variation	Expanded checkpoint network	Cross-border coordination (Jun 1)
Convoy splitting	Target smaller convoys	Flexibility in force sizing (68-192)
Forward ISR	Counter-drone FPV	Sep 2025 capability demonstrated
Village disruption	Alternative info channels	Pattern of rapid adjustment
Sustained Escort Success	Explosive initiation without ground assault	Capability exists, restraint is a tactical choice

The adaptation timeline underscores that countermeasures are not permanent solutions. They buy time and shift the cost-benefit calculation, but JNIM will adjust. Sustained effectiveness requires continuous monitoring, rotating tactics, and updating the model as new patterns emerge.

3.7 Critical Escalation Indicator

JNIM currently avoids IEDs and kamikaze drones against fuel convoys despite using IEDs in 55 percent of military patrol attacks and possessing suicide FPV capability since April 2025. This restraint reflects rational risk management: avoiding uncontrolled explosions that endanger fighters, kill civilians, and destroy fuel JNIM might capture.

The transition indicator: any IED or kamikaze drone attack on a fuel convoy WITHOUT accompanying ground assault. Such an attack would signal JNIM has abandoned restraint—prioritizing maximum destruction over fighter safety, civilian casualty management, and fuel preservation.

Possible triggers for this shift:

- Sustained escort success making conventional ambush consistently unprofitable
- Strategic decision to escalate economic pressure regardless of casualties
- Acquisition of precision standoff weapons enabling attacks without ground-force exposure

Operational implications if transition occurs:

- Attack timelines compress (no need to pre-position ground fighters)
- Pre-attack signatures disappear (no motorcycle clusters, no fighter assembly)
- Village-network disruption loses value (attacks don't require local coordination)
- Counter-drone capability becomes critical

Response: Any IED or drone-initiated fuel convoy attack without ground engagement should trigger immediate convoy suspension and threat reassessment.

3.8 Decision Maker Summary

The core problem is simple: Bamako needs fuel, the fuel comes through Sikasso, and JNIM controls the road. November 2025 showed that overwhelming force works—mega-convoys of 300 tankers with 200-300 escorts achieved near-perfect delivery. But at $3-5 million per movement and days of force commitment, this model does not scale.
Three options exist:

Option A: Mega-convoys. 200-300 escorts, helicopter overwatch, 300+ tankers. Near-certain delivery but unsustainable cost. Crisis tool only.

Option B: Current practice. 30-40 tankers, 50-80 escorts, predictable routing, daylight movement. Costs manageable ($200,000-500,000 per movement) but 40-50% delivery rates. Strategically untenable.

Option C: Five-countermeasure model. Same 30-40 tankers and 50-80 escorts, but with route randomization, timing unpredictability, split convoys, village-network disruption, and

decoy signals. Purple-team modeling projects 75-85% delivery rates without additional personnel or aircraft. Option C achieves near-mega-convoy results with Option B resources.

For logistics companies: None of the five measures require military-grade capabilities. Three—route variation, timing shifts, split convoys—can be implemented immediately. The required investment is organizational, not technological.

For military planners: The measures multiply force efficiency. A 50-person escort using adaptive routing, pre-dawn departures, and disciplined information control outperforms a 100-person escort using conventional methods.

For policymakers: The trend is clear. JNIM progressed from ground ambushes to drone-supported attacks in 11 months. By mid-2026, the group may field coordinated multi-drone strikes with minimal ground exposure.
The objective cannot be 100% security—that is unattainable with current resources. The achievable goal is delivering enough fuel while making attacks too costly and unreliable for JNIM to sustain a blockade narrative.

3.8 Cost-Benefit Summary

The five-measure approach delivers a better return on investment:

Measure	Cost	Model-Derived Risk Reduction
Route variation	Variable (+30 min to +3 hours depending on variant)	10-20%
Timing unpredictability	None	40-50%
Split convoys	Minor coordination	25-35% (catastrophic loss)
Village-network disruption	20-30 personnel, 2-4 hours	25-35%
Decoy signals	None	20-30%

Combined effect (model-derived): 60-70% realistic risk reduction, raising delivery rates from 40-50% to approximately 75-85%.

These estimates rest on explicit assumptions: JNIM requires 12-24 hours warning, predictable routing, and ISR confirmation. Disrupting these dependencies degrades attack effectiveness. The formula is transparent:

Combined reduction = 1 - [(1-CM1) × (1-CM2) × (1-CM3) × (1-CM4) × (1-CM5)]

The model projects outcomes; it does not guarantee them. But it provides a rigorous basis for decision-making that current ad-hoc approaches lack.

The objective is not total security; it is ensuring that enough fuel reaches Bamako while making attacks too costly for JNIM to maintain. The analysis shows this is achievable with existing resources if the five measures become standard practice.

CONCLUSION

JNIM's fuel-blockade campaign illustrates how non-state actors adjust faster than the systems designed to contain them. The group combined ISR discipline, predictable convoy behavior, and tailored messaging to produce outsized effects without holding terrain. The 2025 pattern shows a blended approach: small mobile units generating kinetic disruption while communications and coercive-governance claims shape behavior far beyond the group's physical reach. This mix of operational constraint and psychological leverage is increasingly the norm across the Sahel.

The assessment also shows that these dynamics are not immutable. When past attack data, communications cycles, and mobilization patterns are modeled as a single decision system rather than as isolated incidents, clear pressure points emerge. JNIM needs time, warning, and route certainty to be effective. When those conditions shift, the group's ability to sustain interdiction collapses. The five countermeasures in this brief directly target those dependencies. In the purple-team model, they alter the underlying math—raising projected delivery rates from roughly 40–50 percent to 75–85 percent with the same escort levels.

This is the core lesson. JNIM's campaign does not represent an unstoppable threat; it represents a system that reacts to defender behavior. With structured adversarial modeling and a deliberate application of low-cost adjustments, defenders can reduce risk, protect essential supply lines, and weaken the narrative foundation of the blockade. For governments, commercial operators, and security planners, the path forward is not heavier force but better design: tailored training, disciplined routing practices, active information management, and continuous integration of machine-assisted pattern detection with subject-matter expertise.

The blockade exposed vulnerabilities, but it also highlighted where targeted adaptation can restore leverage. This brief is intended to make those adjustments actionable.

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ABOUT
THE POLICY CENTER FOR THE NEW SOUTH

The Policy Center for the New South (PCNS) is a Moroccan think tank aiming to contribute to the improvement of economic and social public policies that challenge Morocco and the rest of Africa as integral parts of the global South.

The PCNS pleads for an open, accountable and enterprising "new South" that defines its own narratives and mental maps around the Mediterranean and South Atlantic basins, as part of a forward-looking relationship with the rest of the world. Through its analytical endeavours, the think tank aims to support the development of public policies in Africa and to give the floor to experts from the South. This stance is focused on dialogue and partnership, and aims to cultivate African expertise and excellence needed for the accurate analysis of African and global challenges and the suggestion of appropriate solutions.
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