

**SPECIAL REPORT · UKRAINE / RUSSIA / DEFENCE TECHNOLOGY**

Russian Strike Adaptation: Faster Drones, Glide Bombs and Ukraine's Narrowing Defence Window

Author: Benjamin Traunecker

Executive summary

Russia's strike campaign is becoming harder for Ukraine to absorb because the pressure is no longer coming from one system. Faster one-way attack drones, guided glide bombs and limited ballistic-missile defence are compressing Kyiv's air-defence decision window at the same time. The immediate military effect is not a single breakthrough weapon. It is a layered adaptation cycle that forces Ukraine to spend scarce interceptors on more targets while Russian systems become cheaper, faster or harder to jam.

Mark Montgomery's latest FDD-linked assessment is useful because it frames the problem in operational rather than political terms. He argued that Ukraine can no longer assume the very high drone-interception rates seen earlier in the war will hold against newer Geran variants and glide-bomb pressure. That claim is consistent with the broader open-source picture: ISW has assessed that Russia is prioritising long-range strike systems that can more reliably penetrate Ukrainian defences; Reuters has reported Russian use of fibre-optic drones against Ukrainian electrical substations; and Atlantic Council analysis describes fibre-optic drones as an effectively unjammable battlefield tool now used by both sides.

The risk for organisations is indirect but real. More successful Russian strikes against energy infrastructure, defence-industrial sites, transport nodes and urban areas can shorten warning times, disrupt movement, reduce power reliability and increase the chance that planned travel or site work in Ukraine changes at short notice. For European security planners, the same adaptation cycle also matters because some strike vehicles have already crossed or crashed beyond Ukraine's borders, and Russia's production choices are designed to stress not only Ukrainian air defence but the Western resupply model behind it.

What matters now

- **Air-defence arithmetic is tightening.** Ukraine does not need to lose air superiority for Russian strikes to impose strategic cost. It only needs a growing share of missiles, drones and glide bombs to get through at the same time as Patriot stocks, interceptor availability and mobile defence crews are stretched.
- **Drones are splitting into different threat families.** Conventional Shahed/Geran systems, faster jet-powered variants, fibre-optic FPVs and loitering munitions create different detection and defeat problems. A defence that works against one family may not work against another.
- **Glide bombs keep the pressure close to the front.** Even when long-range strike waves dominate headlines, guided bombs remain a practical tool for destroying positions, logistics points and civilian infrastructure around cities such as Sumy and Kharkiv.
- **Infrastructure is the operational centre of gravity.** The strike campaign is designed to damage resilience: power systems, substations, repair capacity, industrial sites, railway nodes and the confidence that movement can be planned days in advance.

Current operating picture

Montgomery's FDD-linked remarks focused on three mechanisms: limited ballistic-missile defence, newer Geran drones and Russian glide bombs. His central point was that Ukraine faces a different intercept problem from Israel and U.S. forces during the Iran exchange he referenced. Ukraine cannot engage every inbound weapon with high-end interceptors. On some nights, according to his assessment, incoming ballistic threats have been allowed to impact because available systems were insufficient or had to be preserved for other targets.

Open-source reporting supports the broader mechanism even where exact interception percentages remain battlefield-sensitive. ISW's August 2026 campaign assessments described Russia as reorienting parts of its long-range strike production toward systems that can better penetrate Ukrainian air defences, including faster Geran variants and additional launch infrastructure near Ukraine and Belarus. The same reporting stream noted that Russia accepts cross-border spillover risk as it increases strike volume and reach.

Reuters separately reported in July that Russia used fibre-optic drones to bypass Ukrainian defences and damage high-voltage electrical substations in Sumy region. That matters because fibre-optic drones are not defeated by normal radio-frequency jamming. Atlantic Council analysis published in February assessed that fibre-optic drones have moved from a niche Kursk-era capability to a wider battlefield tool, with ranges above 30 kilometres and a physical control link that gives operators reliable video and guidance in jammed environments.

The glide-bomb problem is different. These weapons are not primarily a strategic deep-strike tool. They create persistent pressure on fixed positions, troop concentrations, logistical sites and urban edges near the front. Montgomery specifically pointed to areas such as Sumy and Kharkiv. The operational effect is cumulative: local defences must absorb repeated heavy impacts while also preparing for drones and missiles aimed at deeper infrastructure.

Key risk mechanisms

Faster and smarter one-way drones

Russia's Geran family is evolving from a cheap saturation tool into a more varied strike system. Montgomery referred to faster Geran 3 and Geran 5 variants that are harder for aircraft, helicopters and ground-based systems to defeat. ISW's August reporting is consistent with that direction, noting Russian prioritisation of systems that can penetrate air defences more reliably. The precise performance of each variant remains hard to verify from open sources, but the trend is clear enough for planning: Ukraine faces a drone threat that is no longer static.

Fibre-optic drones and the jamming problem

Fibre-optic FPV drones reduce the value of electronic warfare by removing the radio link that jammers attack. Atlantic Council analysis describes the result as effectively unjammable within the limits of the tether, with clear video and useful range. Reuters reporting on substations in Sumy region shows why this is not just a tactical trench problem. If drones can bypass jamming and reach energy nodes or repair teams, the protective perimeter around critical infrastructure becomes harder to define.

Glide bombs around fortress cities

Guided glide bombs allow Russian aircraft to hit tactical and urban targets while staying farther from Ukrainian short-range air defences. Accuracy varies, and Russian employment has often been destructive rather than discriminating. The risk is less about precision and more about mass. Repeated heavy impacts can damage defensive positions, housing, utilities and access routes around cities that already sit close to the line of contact.

Interceptor scarcity and triage

The most important constraint is not only technical. It is inventory. Patriot missiles, mobile air-defence teams, radar coverage, aircraft availability and local power resilience all interact. When Russia increases the number and type of incoming threats, Ukraine must triage what to engage. That creates the opening Russia wants: some targets will be hit not because Ukraine lacks skill, but because the defensive system cannot cover every priority at once.

Early warning indicators

- Larger Russian strike packages combining ballistic missiles, faster drones and decoys in the same night.
- Additional reporting on Geran 3, Geran 4 or Geran 5 production, deployment or strike effects.
- Increased use of fibre-optic drones against substations, repair crews, rail nodes or logistics roads rather than only frontline vehicles.
- Repeated glide-bomb strikes around Sumy, Kharkiv, Pokrovsk or other exposed urban areas.
- Ukrainian or allied statements highlighting Patriot, NASAMS, IRIS-T, Gepard or interceptor stock shortages.
- Strike vehicles or debris reported in Moldova, Poland, Romania or other neighbouring states.

Implications for organisations

Organisations with staff, contractors or partners in Ukraine should treat air-defence alerts and infrastructure disruption as operating constraints, not background noise. A higher leak-through rate can change power availability, route timing, hotel suitability and evacuation options within hours. Travel plans should assume that a city with functioning infrastructure in the morning may face outages, road disruption or curfew pressure by evening.

For executive movement, the main exposure is predictability. Russian strike cycles often target infrastructure and urban areas at night or early morning, but secondary disruption can affect daylight movement. Drivers, close-protection teams and local coordinators should have alternate pickup points, power-independent communications, verified shelter options and a decision rule for cancelling non-essential movement after major overnight strikes.

For European security teams outside Ukraine, the lesson is that cheap or adapted strike systems can stress expensive defence architectures. Airports, ports, power substations and symbolic sites near NATO's eastern flank do not need to be primary targets to be affected. Spillover, debris, GPS interference and heightened alert states can still disrupt business travel and crisis planning.

Recommended actions

1. **Update movement triggers.** Treat major overnight missile/drone waves as a formal go/no-go input for same-day travel, not just an information item.
2. **Map infrastructure dependencies.** Identify which hotels, offices, routes and safe locations depend on single substations, bridges or communications nodes.
3. **Pre-brief drivers and local teams.** Require alternate routes, fuel status, shelter locations and communications fallback before movement begins.
4. **Reduce fixed-pattern exposure.** Avoid repeated arrival/departure times and predictable route use during periods of elevated strike activity.
5. **Separate Ukraine planning from generic Europe planning.** Cross-border spillover matters, but Ukraine operating procedures must remain more conservative than ordinary regional travel guidance.

Selected sources

- Foundation for Defense of Democracies / Foreign Policy, Mark Montgomery remarks on Russian drones, glide bombs and Ukrainian air-defence pressure, source item reviewed 24 August 2026.
- Institute for the Study of War, Russian Offensive Campaign Assessments, August 2026, including reporting on Russian long-range strike adaptation and launch-site expansion.
- Reuters, reporting on Russian fibre-optic drones used against Ukrainian electrical substations in Sumy region, 10 July 2026.
- Atlantic Council, "Fiber-optic drones have emerged as critical kit for both Russia and Ukraine," 24 February 2026.

Method note

This report is based on open-source material reviewed up to 2026-08-24 and analytical assessment by SF Custos Global. It does not replace legal, insurance, sanctions, medical or country-specific professional advice.