

THE BRITISH ARMY REVIEW

ISSN 2977-9596

AUTUMN 2026 / ISSUE #200



THE JOURNAL OF
BRITISH MILITARY THOUGHT



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ISSUE #200 / AUTUMN 2026

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The British Army Review, Robertson House, Royal Military Academy Sandhurst, Camberley GU15 4NP

Email: editorBAR@chacr.org.uk



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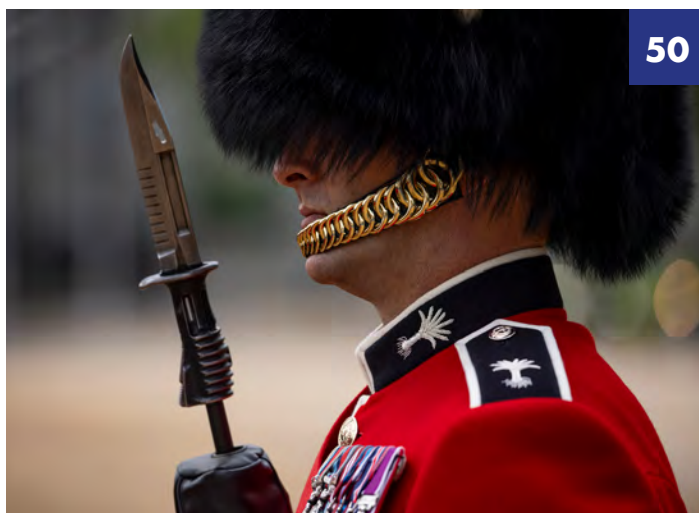
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'TRANSFORMATION IS NO LONGER A FUTURE ASPIRATION'

FOR decades, we have prepared for a world in which we enjoyed military advantage. That world is changing rapidly. The return of great power competition, the lessons of Ukraine, the demands of NATO and advances in technology all point in the same direction: we must adapt at pace and with urgency.

Some may focus on the headline numbers within the Defence Investment Plan. To my mind, the more important point is what that plan represents: a clear statement of national intent. At a time of competing pressures across government, the United Kingdom has chosen to strengthen Defence, honour its NATO commitments and invest in national security. We should recognise that reality with both humility and determination.

The Strategic Defence Review gave us the mandate. The Defence Investment Plan provides additional momentum. What matters now is what we do with it.

For the Army, our ambition remains unchanged. To field fifth-generation land forces that set the integrated force up for the unfair fight, filled with the best soldiers in the world, doubling fighting power by 2027, tripling it by 2030 and increasing it tenfold by 2035. The big bold bet remains adopting an abundance of emerging and disruptive technologies, increasingly orchestrated by astonishing developments in autonomy and the power of frontier artificial intelligence. To generate urgency, that ambition is driven



by a pre-mortem question I continue to ask: if we knew now that our land forces would be involved in large-scale combat operations in 2027, what would we be doing differently today? Why aren't we doing it already?

These questions drive five imperatives for the Army Command Group: to prioritise NATO's warplans and Supreme Allied Commander Europe's priorities; to go 'all in' on getting the Allied Rapid Reaction Corps match fit; to aggressively pivot to the 20:40:40 fighting system – recce strike at every echelon; to scale Taskforce Rapstone; and to flow hundreds of millions of pounds through them to help build a national arsenal.

This edition of *The British Army Review* explores how investment, innovation and transformation are being turned into military advantage. Most importantly, it demonstrates that transformation is no longer a future aspiration. It is already happening. – General Sir Roly Walker, Chief of the General Staff



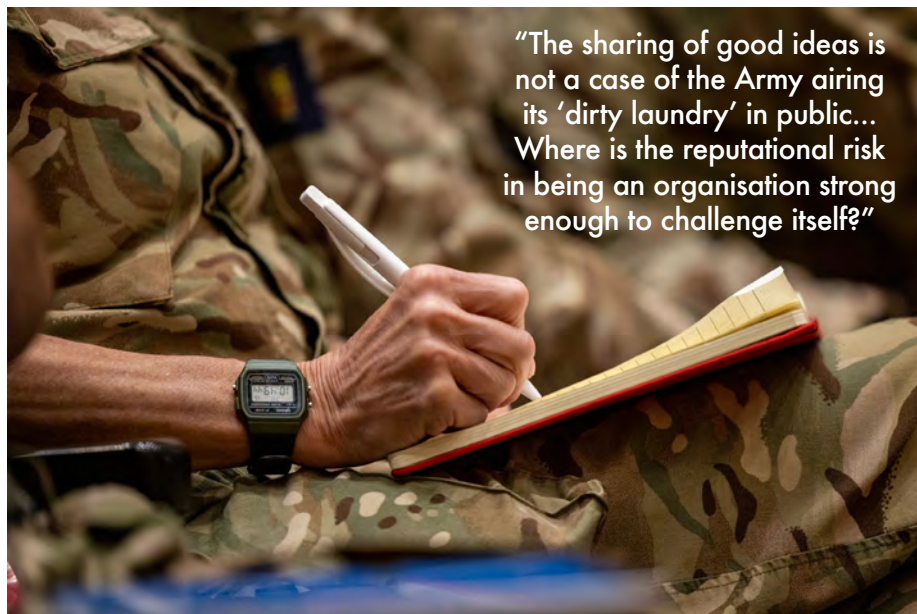
"The big bold bet remains adopting an abundance of emerging and disruptive technologies, increasingly orchestrated by astonishing developments in autonomy and the power of frontier artificial intelligence."

200 NOT OUT, NO DECLARATION

As the Army reassesses its direction of travel (post proverbial 'DIP' in the road), it is right that the lion's share of this issue is monopolised by talk of modernisation, transformation and digitalisation. The world is changing and, out of necessity, so too is the force charged with protecting the United Kingdom by being ready to fight and win wars on and from the land. Horizon scanning is an integral aspect of that mission and is deserving of the column inches dedicated to it, however, as the current editor of *The British Army Review*, it would be amiss of me not to dwell – just for a few hundred words and with minimal fanfare – on the publication in which this reasoned forecasting features. A 200th edition is, after all, a milestone worthy of some reflection, especially as it is being passed by a practice that must be preserved.

The title's history stretches back more than seven decades to 1949 and Field Marshal 'Bill' Slim's launch of the *British Army Journal*. Rebadged – undoubtedly to the exasperation of the *Boxer* of the day (pages 56-57) – as the *British Army Review* in September 1955, Slim's intent was that the publication should be "for every officer and NCO to read and contribute [to]", with a remit to help leadership at every level. In brief, to champion and encourage the conceptual component through professional discourse and considered challenge of accepted thinking – an 'ask', in the context of an inherently hierarchical institution, that is perhaps easier to articulate than it is to execute. Mission Command may empower subordinate commanders, promote initiative and freedom of action on operations, but it is a philosophy far less frequently evident in land's publishing domain. While certainly not true across the board (an email inbox overflowing with submissions is testament to that), there remains a reluctance in some quarters of the Service to put pen to paper or finger to keyboard.

There are likely myriad mitigations for this silent plurality (lengthy to-do-lists and competing priorities, chief among them) but the Army would be wise to ensure nil returns cannot be attributable to a sense of trepidation over would-be writers putting their heads above the proverbial parapet. Peeking over a literary parapet should not demand the same demonstration of fortitude from our people as approaching a literal parapet. Proffering



"The sharing of good ideas is not a case of the Army airing its 'dirty laundry' in public... Where is the reputational risk in being an organisation strong enough to challenge itself?"

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a professional opinion or airing a novel take should never be viewed as subordination or dissent; and doing so in the correct manner – through prose devoid of rants and gripes without suggested remedial steps – should be considered as normal jogging rather than extraordinary feats of courage and encouraged rather than deterred.

The sharing of good ideas through a publication intended to provide a forum for the discussion of all matters of professional interest to the soldier is not a case of the Army airing its 'dirty laundry' in public or cause for the drafting of lines to take in the event that the media misconstrues alternative thinking as an article knocking the chain of command. Where is the reputational risk in being an organisation strong enough to challenge itself?

Without such words, there is no open-to-all sense check of the status quo. In recent years, the US Army has made a concerted effort to ensure their ranks do not fall silent in this regard through The Harding Project (named after Edwin 'Forrest' Harding, who as a major in the mid 1930s served as editor of the *Infantry Journal* and led efforts to stimulate debate and reinvigorate the publication in the interwar years). A Chief of Staff of the Army initiative, The Harding Project is at the spearhead of a drive to renew professional military writing to link leaders with the knowledge needed to win wars, to impact policy, share lessons and forge thinking on emerging concepts. Across the Pond there is a

renewed understanding that writing helps the US Army to harness its profession, helping it to think harder without incurring significant costs.

Although this author needed little convincing of the value of professional discourse, one story shared by a senior non-commissioned officer at the Project's inaugural workshop – held at West Point's Modern War Institute in November 2023 – hammered home its importance. As a junior soldier the individual in question had read, by chance rather than design, a 'lessons learnt' essay on the conduct of urban combat, in *Infantry*. He had, by his own admission, quickly consigned the content to the back of his mind, only for it to come flooding back to the fore when he found himself under heavy fire on the streets of Fallujah. The advice he gleaned from an article on the pages of a magazine, he was adamant, meant his return journey to the US from Iraq – and those of the men under his command that day – was not made in a body bag. The pen may no longer be mightier than the sword, but it can save lives and provide all those who lead others with a competitive advantage.

So, as *The British Army Review* marks its 200th edition, my message to all contributors (and those still hesitating to hit send and share their thoughts) is to march on. Continue to be brave with your examination of the institution in which you serve and shut any huffing and puffing from those who believe silence is golden from your mind. To decide without debate is folly. – **Andrew Simms**

PORTFOLIOS, ACQUISITION, INTEGRATION AND INDUSTRIAL DELIVERY: THE CHALLENGE

AUTHOR

Lieutenant Colonel Steven Bee (RTR),
Land Capability Portfolio

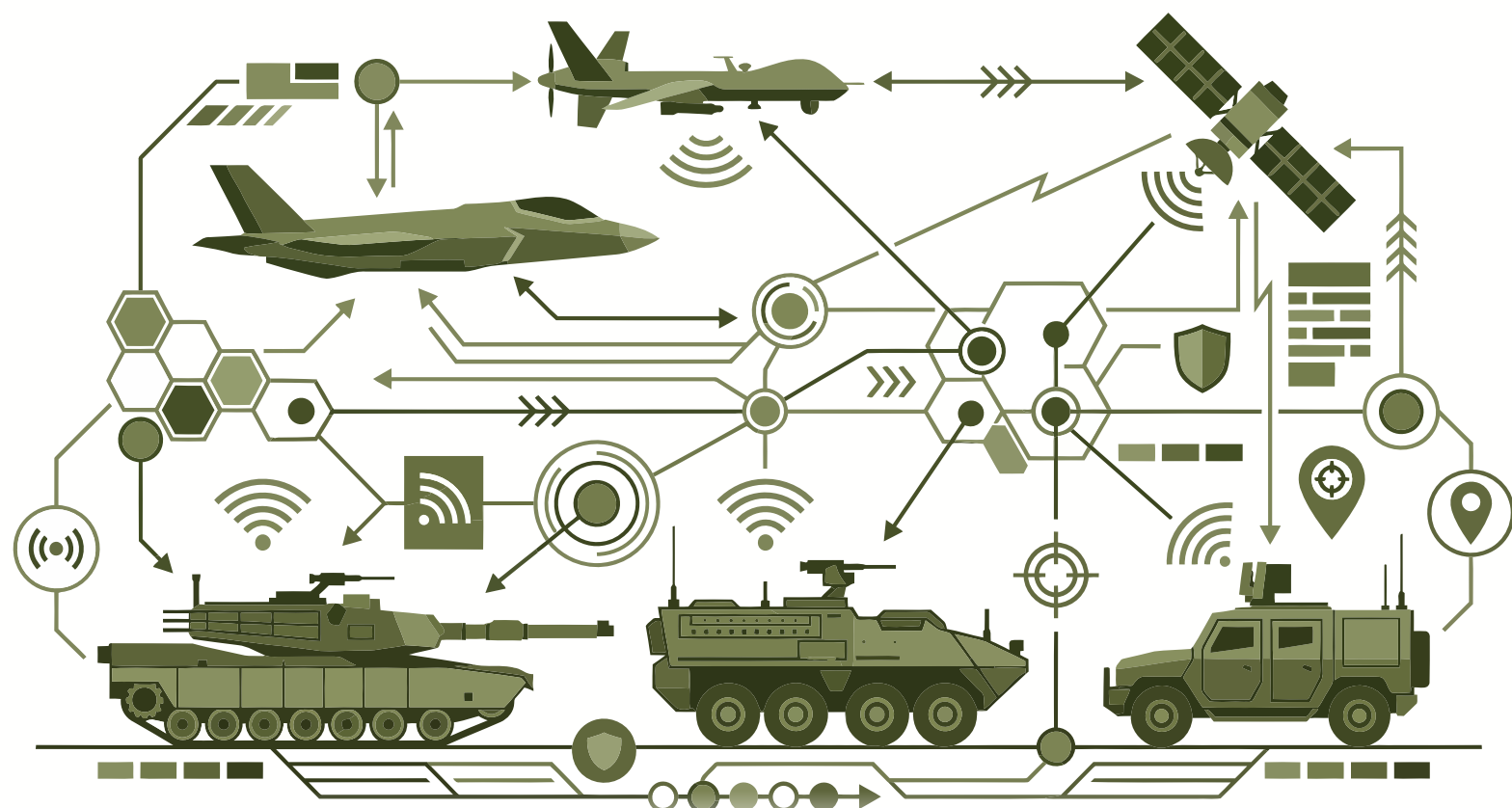
THE publication of the Defence Investment Plan (DIP) marks a significant moment in the modernisation of UK Defence. More than a funding document, it provides the mechanism through which the Strategic Defence Review and Defence Reform are translated into tangible capability outcomes to support the integrated force strategic cycle. The DIP establishes a long-term investment framework intended to deliver a more lethal, integrated and technologically-enabled force while strengthening the resilience of the UK's defence industrial base. Defence has explicitly linked capability investment, industrial strategy and transformation into a single enterprise approach.

For the Army, success will not be measured solely by the delivery of platforms, equipment or programmes. Rather, it will be determined by our ability to generate integrated fighting systems that combine people, equipment, data, logistics, infrastructure and industrial support into coherent operational capability. The emergence of the National Armaments Director (NAD) Group provides an opportunity

to achieve this ambition by bringing together acquisition, innovation, industrial strategy, logistics, digital delivery and support under a single organisation. This article examines these challenges and proposes how the Army can overcome them in partnership with the NAD.

FROM PLATFORMS TO FIGHTING SYSTEMS

Historically, defence acquisition has often been organised around individual programmes and platforms. Tanks, artillery, communications systems and aircraft have each been developed, governed and delivered largely within their own boundaries. While this approach produced many outstanding capabilities, it is increasingly insufficient in an era where operational advantage is derived from the interaction of systems rather than the performance of a single piece of equipment. The DIP reinforces Defence's ambition to deliver an integrated force supported by a common digital foundation and software-defined warfare. For the Army, this requires a fundamental shift in mindset. The future fighting system is not merely a collection of vehicles, sensors and weapons. It is an interconnected



network that links reconnaissance, decision-making, fires, logistics, communications and autonomous systems. Success depends on the ability of these components to operate seamlessly together.

The challenge is therefore organisational as much as technical. Army structures, governance and funding mechanisms have traditionally been optimised to manage discrete capabilities. Delivering the outcomes envisaged by the DIP requires the Army to act as an integrator, ensuring that capability decisions are made with the performance of the overall system in mind rather than simply delivering individual programmes on time and budget. This integration challenge is arguably the single most important issue facing Army capability delivery over the next decade.

THE DIGITAL FOUNDATION

If integration is the target, then digital enablement is the sighting system that delivers the round on target. The DIP places considerable emphasis on establishing a shared digital and data foundation across the integrated force. Likewise, Defence Reform has created the National Armaments Digital and Data organisation to provide common standards, architectures and digital services across Defence. For the Army, digital technologies can no longer be treated as supporting functions. They must be considered part of the capability itself.

The Army's '20:40:40' construct captures this reality. While discussion often focuses on autonomous systems and novel technologies, the construct is fundamentally about creating the right lethality mix through the integration of traditional platforms, autonomous capabilities and the digital systems that connect them. As some Army planning work has already identified, the '20' only succeeds if the supporting '40:40' is properly integrated and enabled. The challenge is that integration cannot be bolted-on at the end of acquisition programmes. Digital architectures, data standards, security requirements and interoperability arrangements must be established at the outset.

This demands closer collaboration between Army capability sponsors, NAD digital authorities, programme teams and industry partners. It also requires the Army to invest in digital skills and digital leadership so that future capability decisions are informed by a genuine understanding of software, data and systems integration – the formation and growth of the Digital, Security and Intelligence Directorate under Army Reform is a clear signal of intent and response to this challenge.

"The future fighting system is not merely a collection of vehicles, sensors and weapons. It is an interconnected network that links reconnaissance, decision-making, fires, logistics, communications and autonomous systems. Success depends on the ability of these components to operate seamlessly together."

DELIVERING CAPABILITY AT THE PACE OF RELEVANCE

Technological change is occurring faster than traditional acquisition cycles can accommodate. The Army faces a paradox. On one hand, it must deliver major complex programmes with long development times and substantial industrial investment. On the other, it must exploit rapidly evolving technologies such as autonomy, artificial intelligence, counter-uncrewed systems and advanced sensing capabilities that may change significantly within months. The challenge is therefore not simply acquisition speed, it is acquisition agility.

Defence Reform seeks to address this by enabling portfolio-based delivery and by creating acquisition organisations better aligned to operational outcomes rather than organisational boundaries. For the Army, the answer is unlikely to be found in a single acquisition pathway. Future capability delivery will require multiple speeds and will be a central tenet to Defence Reform which is reciprocated in Army Reform.

Major platforms will continue to follow deliberate acquisition processes appropriate to their complexity and cost. Alongside these programmes, the Army must create pathways that allow experimentation, rapid fielding and iterative development of emerging technologies. The objective should be to move capability development from years to months, and where possible from months to weeks. Within the Army, Task Force Rapstone has emerged as a key mechanism for rapidly translating operational demand into capability outcomes, providing a bridge between users, force development, acquisition and industrial delivery. This is an approach which is championed within Rapstone, growing it to the scale the Army requires demands a coherent 'dual-speed acquisition process'. This offers reciprocal benefits, enabling us to iteratively deliver effective capabilities into the hands of the user more quickly.

This does not mean abandoning governance or safety. Rather, it requires proportionality. Approval processes should reflect risk and operational need. Experimentation should be encouraged within clearly defined boundaries. Most importantly, mechanisms must exist to transition successful experiments into enduring capability rather than leaving innovation stranded in demonstration phases.

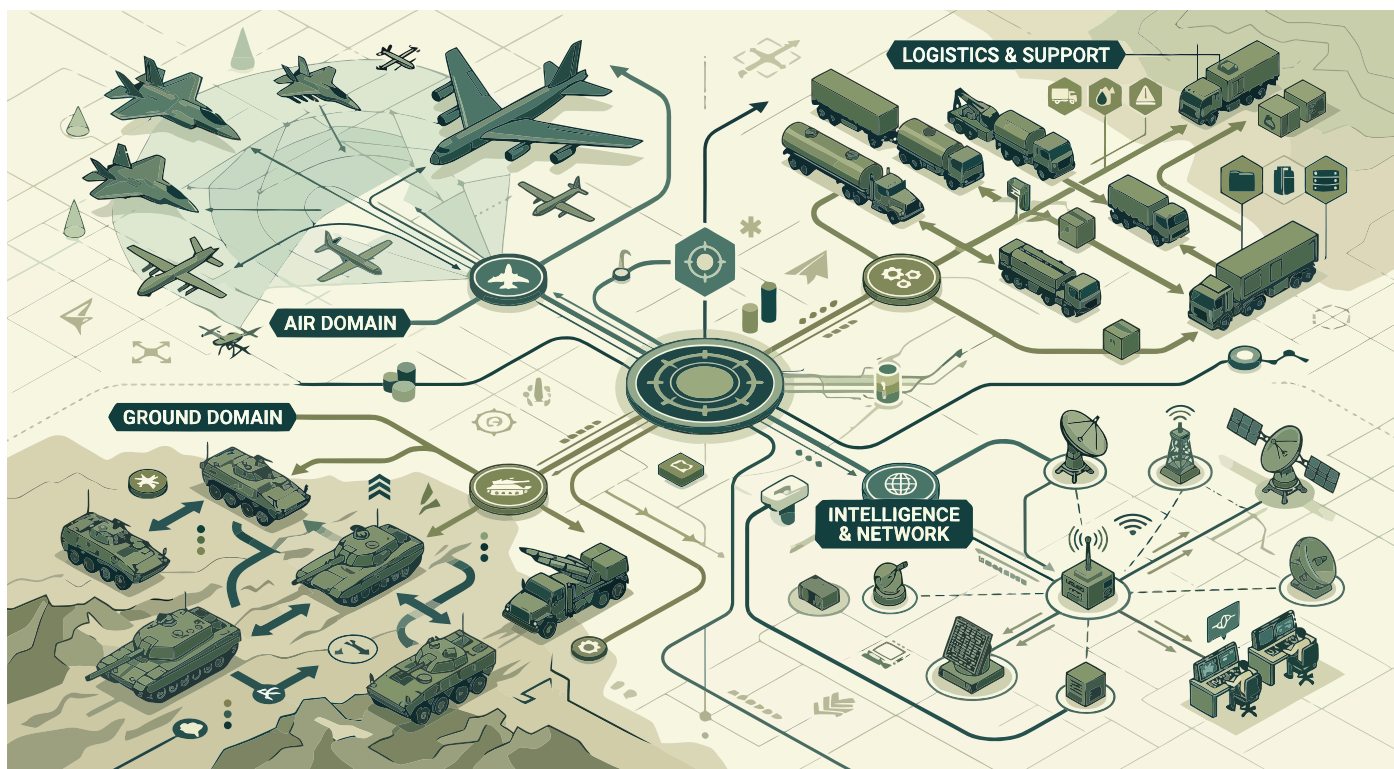
PORTFOLIO MANAGEMENT AND ENTERPRISE DELIVERY

The creation of portfolio-based acquisition may prove one of the most significant outcomes of Defence Reform. The NADG is designed to organise delivery through portfolios that align resources and activity against Defence priorities. Army planning has already identified the potential advantages of portfolio approaches for areas such as ground combat systems and mobility. For decades, programmes have often competed for resources within a constrained financial environment. Portfolio management allows Defence to optimise capability outcomes across interconnected systems rather than maximising individual programme performance. However, the transition will not be straightforward. Portfolio management requires different skills, different governance and different behaviours. It demands greater transparency over priorities and acceptance that some individual programme optimisations may be sacrificed to achieve better enterprise outcomes. The Army will need to develop a cadre of leaders who understand the relationships between capability, performance, affordability, industrial capacity and operational risk. Equally, the Army must become comfortable operating within Defence-wide portfolios rather than considering land capabilities as a separate entity.

INDUSTRIAL DELIVERY AS A STRATEGIC CAPABILITY

The Defence Industrial Strategy explicitly places delivery, resilience and implementation at its core, with the National Armaments Director responsible for driving progress and strengthening the relationship between Defence and industry. For the Army, industrial delivery cannot be viewed solely as a commercial matter. Recent conflicts have demonstrated that military power depends not only on what can be fielded today, but also on what can be repaired, replenished and produced at scale during crisis and conflict. The industrial base is therefore part of the fighting system.

The challenge for the Army is to become a more intelligent customer. Requirements must be stable enough to create confidence for investment



while remaining adaptable to technological change. Long-term demand signals are required to encourage industrial investment in skills, infrastructure and supply chains. Several Army initiatives have already highlighted the importance of sustained industrial planning over five, ten and 20-year horizons, particularly in relation to armoured vehicles, munitions, autonomy and digital technologies.

Industrial resilience will therefore become a routine consideration in capability decisions. Questions of sovereign capacity, supply chain security, export potential and international collaboration must be considered alongside traditional performance measures.

THE CHALLENGE OF INTEGRATION

Perhaps the greatest risk to delivery lies in integration itself. Defence Reform provides new structures, while the DIP provides investment. Neither automatically guarantees integrated outcomes. Integration requires ownership.

The Army must be clear about who is responsible for ensuring that the components of a fighting system work together operationally, technically and organisationally. Equally, the Army must understand how this responsibility interfaces with the NAD Group and Military Strategic Headquarters. Recent Defence Reform work has highlighted precisely this issue: the need to ensure coherent integration between force design, capability sponsors, functional authorities and delivery organisations. A practical example is autonomy. Delivering autonomous systems is relatively straightforward compared to

integrating them into command structures, data architectures, logistics chains and operational concepts. Similar challenges apply to digital technologies, long-range fires, sensors and targeting systems. Therefore, future success demands dedicated integration expertise alongside traditional programme and acquisition disciplines. The Army must become proficient not simply in buying capabilities, but in integrating capabilities.

PARTNERING WITH THE NATIONAL ARMAMENTS DIRECTOR

Partnership with the NAD is not a supporting activity; it is central to delivery. The NAD Group has been specifically designed to bring together innovation, industry, commercial, digital, infrastructure, support and acquisition functions as a coherent enterprise. The Army's role within this construct is to articulate operational needs, define military outcomes, ensure that land domain expertise informs Defence-wide decisions and to ensure that new capabilities are integrated into broader land forces capabilities and formations.

The relationship should therefore be viewed as a partnership between operational demand and delivery expertise. Army requirements must remain grounded in operational reality. Equally, Army leaders must understand industrial realities, technological opportunities and affordability constraints. Continuous dialogue between the Army, NAD portfolios, industry and allies will therefore be essential.

Success will depend less on organisational charts and more on behaviours: trust,

transparency, shared accountability and a willingness to make enterprise decisions rather than parochial ones.

CONCLUSION

The DIP represents more than an investment programme. It signals a new way of delivering military capability. For the Army, the challenge is not simply to spend more money or deliver more equipment. It is to transform how capability is conceived, acquired, integrated and sustained. The future battlefield will reward those able to combine platforms, data, autonomy, logistics and industrial capacity into coherent fighting systems.

The National Armaments Director Group provides an unprecedented opportunity to achieve that ambition through integrated portfolios, stronger industrial partnerships, enhanced digital capability and more agile acquisition approaches. Yet structures alone will not deliver success.

The Army must embrace system-of-systems thinking. It must place digital enablement at the heart of capability design. It must accelerate delivery whilst maintaining assurance. It must engage industry as a strategic partner rather than merely a supplier. Above all, it must become an expert integrator.

If we can achieve those outcomes, the Defence Investment Plan will deliver more than modern equipment. It will provide the integrated, adaptable and resilient fighting force that the nation requires and that the future operating environment demands.



THE DIP: ENHANCING THE BRITISH ARMY'S CONTRIBUTION TO NATO DETERRENCE

AUTHOR

Colonel David Butt is the Deputy Assistant Chief of Staff G5 Mil Strat Plans in Army HQ, principally responsible for leading the activity design for Land Forces.

WHEN the British Government published its Defence Investment Plan (DIP) in the summer of 2026, it framed the document as a response to a transformed strategic environment: persistent Russian aggression in Ukraine, mounting concern that Moscow could further threaten NATO directly before the end of the decade, and American pressure on Europeans to carry more of the weight of their own defence. Read narrowly, the DIP is a plan to re-equip the British Army. Read with a broader mindset, it is something larger: a contribution to the collective military power upon which NATO's deterrence posture rests. This article argues that credible deterrence in Europe today cannot rest on the threat of cost alone. It must rest equally on the demonstrated ability to deny an aggressor's objectives on the ground, in real time, at the point of attack. The war in Ukraine has shown precisely what kind of land power is required: persistent, forward-postured, massed, ready and technologically current. The DIP's commitment to multiplying the British Army's lethality, through investment in long-range fires, autonomous systems and munitions stockpiles, and its explicit alignment with NATO's warfighting concepts on the Eastern Flank make it a strategic investment in the Alliance's collective defence, not merely a national one.

PUNISHMENT DETERRENCE THEORY

Cold War deterrence in Europe rested heavily on the threat of unacceptable cost, principally nuclear retaliation, backed by conventional forces that existed as much to signal resolve and to act as a 'tripwire' as to physically halt a Warsaw Pact advance. That model was always uncomfortable, since it implied NATO territory might have to be temporarily lost before punishment was inflicted. After what happened in Crimea in 2014, and again in Ukraine in 2022, that discomfort has become strategically unaffordable. Given Russian preparedness to absorb enormous costs in Ukraine, with hundreds of thousands of casualties, extensive economic sanctions and diplomatic isolation, we cannot assume they will be deterred by the threat of cost alone. Deterrence by punishment depends on the aggressor believing the costs will outweigh the gains; deterrence by denial removes the gains altogether by making the objective unachievable in the first place. This logic is driving NATO's landward posture. The Alliance's Eastern Flank Deterrence Initiative is designed to offset Russian mass and deny objectives from the outset, reinforcing collective defence.¹ It rests on a distributed architecture combining persistent sensing, AI-accelerated decision-making and distributed precision fires from attritable platforms, an approach designed to invert the cost curve that has historically favoured a mass-mobilising adversary. The associated concept promoted

¹Missile Defence Advocacy Alliance (2026) MDAA Alert: Eastern Flank Deterrence Initiative. Available at: missiledefenseadvocacy.org/alerts/mdaa-alert-eastern-flank-deterrence-initiative

by NATO's land planners, the Eastern Flank Deterrence Line, reinforces this: it aims to halt a hostile advance at the border itself. This will be achieved by utilising a dense, technologically-enabled system that blends sensors, automation, forward-deployed matériel and permanently stationed troops.² The concept is not a punishment strategy. Both are architectures of denial, and both depend on land forces as their load-bearing element. This is the theoretical foundation on which the DIP's strategic significance focuses. This plan makes British land forces more lethal, more persistent and better networked. It is not simply modernising the national army; it is reinforcing the specific mechanism – deterrence through geographical denial.

UKRAINE LESSONS: MASS, PERSISTENCE AND THE PRIMACY OF LAND FORCES

Ukraine has supplied NATO planners with the most intricate and high-frequency dataset on high-intensity land warfare available since 1945, and its central lessons have reshaped Western thinking about what land power must look like to deter, and if necessary defeat, a peer or near-peer aggressor.

First, mass still matters, but mass must be married to precision and persistence. Ukraine demonstrated that a numerically-inferior force could blunt a larger invader through networked reconnaissance-strike systems. But it also demonstrated the punishing cost of insufficient depth in munitions stocks, in trained personnel and in armoured and artillery reserves when a war of attrition extends over years rather than weeks. NATO's land planners have absorbed this directly: the same operational approach that allowed Ukraine to blunt and fracture a numerically superior Russian army is now being adopted deliberately and institutionally across the Alliance through the Eastern Flank Deterrence Initiative.³ The DIP mirrors this lesson in its own structure, committing to fund enhancements to Army lethality as well as munitions, addressing severe concerns over stockpile fragility; a reality exposed by the Ukraine conflict that is shared by many European countries and their armies.

Second, persistent forward presence deters in a way that the promise of reinforcement does not. A central finding from the war has been that ambiguity about whether and how quickly an alliance would intervene is itself something an adversary is willing to test. NATO's answer has been to thicken its forward land presence continuously since 2014, starting with the UK Enhanced Forward Presence in Estonia under Op Cabrit. It is now continuing growth across the Alliance's north-eastern flank; part of a



“Ukraine’s battlefield has been transformed by drones, loitering munitions and AI-assisted targeting. As a result, NATO planners along the Eastern Flank now envisage an ‘autonomous zone’ in which uncrewed systems, linked sensors and long-range fires detect and engage invading forces from the opening moments of a conflict.”

decade-long build-up that has produced more combat-ready forces in Eastern Europe and the most comprehensive defence plans since the end of the Cold War.⁴ The credibility of these forward deployments depends on the national

²*Baltic Sentinel* (2026) *Eastern Flank Deterrence: German General Explains How NATO Is Rewriting Baltic Defence*. Available at: balticsentinel.eu/8412027/eastern-flank-deterrence-german-general-explains-how-nato-is-rewriting-baltic-defence

³*Resilience Media* (2026) *How NATO’s Eastern Flank Deterrence Initiative Is Turning Rhetoric into Real Capability*. Available at: resiliencemedia.co/how-natos-eastern-flank-deterrence-initiative-is-turning-rhetoric-into-real-capability

⁴*NATO* (2026) *Strengthening NATO’s Eastern Flank*. Available at: nato.int/en/what-we-do/deterrence-and-defence/strengthening-natos-eastern-flank

⁵*Defense News* (2026) *NATO Eastern Deterrence Strategy Takes Shape Around ‘Autonomous Zone’*. Available at: defensenews.com/global/europe/2026/05/20/nato-eastern-deterrence-strategy-takes-shape-around-autonomous-zone

⁶*ADS Advance* (2026) *What the Defence Investment Plan means for the British Army*. Available at: adsadvance.co.uk/defence-investment-plan-british-army

Rise in activity: A single drone hovers over a training ground in Slovakia, where NATO troops have been testing emerging capabilities in support of the Alliance’s Task Force X Eastern Flank Deterrence Initiative.

contribution and the sustainment of rotational commitments. The DIP funds precisely that sustainment: through modernised capability, enhanced lethality measures and uplifted munitions stocks, which contribute to the development and expansion of the warfighting capability of the Strategic Reserve Corps.

Third, uncrewed and networked systems have not replaced conventional land forces, they have made them essential in a different way. Ukraine’s battlefield has been transformed by drones, loitering munitions and AI-assisted targeting. As a result, NATO planners along the Eastern Flank now envisage an ‘autonomous zone’ in which uncrewed systems, linked sensors and long-range fires detect and engage invading forces from the opening moments of a conflict.⁵ Crucially, this is not a substitute for land power; it is an extension of it, requiring the crewed formations, command structures, logistics and manoeuvre forces of a conventional army to exploit the openings that reconnaissance-strike networks create. Investment in Asgard reflects this fusion directly. The DIP itself describes the intended outcome as a “complete reimagination” of British land warfare, in which autonomous systems become ubiquitous across the battlefield while operating alongside crewed vehicles rather than replacing them,⁶ language that closely tracks the doctrine now being written into NATO’s own Eastern Flank concepts.

Finally, industrial depth and readiness for prolonged operations are as decisive as opening moves. Ukraine’s war has not been short and NATO’s planning assumption has shifted accordingly from short, decisive engagements to protracted, resource-intensive campaigns in which the side that can sustain production and replace losses prevails. This is the logic behind the DIP’s emphasis on long-range fires, drones, artificial intelligence, digital targeting and the industrial capacity needed to sustain prolonged operations. Operational endurance – the capacity to fight, to reconstitute and to fight again – has become as central to deterrence as (initial) combat power because an aggressor calculating the odds of victory must now weigh NATO’s staying power, not merely its initial posture.

LAND POWER IN NATO’S PLANS

As trailed, since 2022 NATO has moved from generic reassurance to detailed regional defence plans that specify which forces defend

which terrain, under what command and on what timeline. Land forces are the backbone of these plans in a way that naval and air power, for all their importance, cannot replicate: only ground forces can physically occupy and hold terrain, and it is the credible promise of holding terrain, not merely contesting it from the air or sea, that persuades a potential aggressor that territorial conquest is not achievable at an acceptable cost.

The British Army's specific contribution sits within this architecture as the basis for a Strategic Reserve Corps available to NATO, a formation whose credibility depends on the readiness, equipment currency and munitions depth that the DIP is designed to deliver. This is reinforced by the DIP's explicit multinational orientation: Britain intends to accelerate deep precision-strike weapons and close support artillery jointly with Germany,⁷ deepen integration with the Netherlands and expand the Joint Expeditionary Force framework in the High North. All such initiatives weave British capabilities directly into Allied force generation rather than treating it as a national asset held in reserve. The UK Government has been explicit that its ambition extends beyond hardware: it wants defence investment itself to function as part of the strength of both national and NATO deterrence,⁸ and it has committed to a new National Armaments Director Group with a strong international emphasis, enabling exactly the kind of collaborative, portfolio-based procurement that allied interoperability at scale requires.

DEEP STRIKE, DENIAL AND ENDURANCE

Deep strike capability performs a distinct but complementary function within a denial-based deterrence posture. Where forward-deployed

land forces deny an aggressor the ability to seize and hold ground cheaply, deep strike denies the aggressor's ability to mass, resupply and command that assault from the rear, compressing the window in which any offensive could be sustained. The Eastern Flank Deterrence Initiative's design deliberately links these functions, combining persistent sensing, AI-accelerated decision-making and distributed precision fires from exquisite (M270 Multiple Launch Rocket System [pictured below]) and attritable platforms (one-way effectors). Any concentration of adversary forces can be detected and struck before it reaches the line of contact, something enabled by the British Army's investment in the Land Targeting Enterprise and enhanced integration with pan-domain intelligence, surveillance and reconnaissance. NATO land commanders have stressed that ground-based systems are now central to defeating anti-access/area denial threats across the land and maritime domains. The DIP commitment to fund munitions and accelerated joint deep-precision-strike programmes with partners addresses what NATO planners identify as the "cost curve" problem, in which an alliance that cannot sustain a prolonged exchange of precision fires cedes the initiative to an adversary willing to expend munitions at scale.

Deterrence by denial only functions if the denying force can endure. An aggressor who believes NATO's forward land forces will be strong in the opening days of a conflict but exhausted within weeks has not been denied an objective, merely delayed from achieving one. This is why the DIP's emphasis on industrial capacity and munitions stockpiles matters as much as its investment in new platforms. Operational endurance is not merely a capability to be purchased once,

but something that must be sustained year on year, which is precisely why the DIP frames its investment across a multi-year trajectory toward 3.5 per cent of gross domestic product by 2035, therein enabling endurance as a point of deterrence.

CONCLUSION

The war in Ukraine has settled an argument that NATO planners debated for much of the post-Cold War period: deterrence in Europe cannot rest on the threat of cost to a determined and casualty-tolerant aggressor. It must rest on the credible, demonstrated ability to deny that aggressor's objectives at the point of attack, sustained over a protracted campaign rather than a single opening battle. Modern land forces are the instrument through which that denial is delivered, through persistent forward presence, mass married to precision, integration of autonomous and crewed systems, and the industrial depth to endure. Britain's Defence Investment Plan multiplies the lethality of the Army, rebuilds munitions stocks, fields autonomous systems alongside conventional formations and binds British land capability with partners and wider NATO force structures. It should be considered not just as a national re-equipment programme incidentally useful to allies, but as a direct and substantial contribution to the collective land power on which NATO's deterrence now depends.

⁷Forces News (2026) *Armed Forces Funding Announced at Last – Here's Everything You Need to Know*. Available at: forcesnews.com/services/tri-service/live-defence-investment-plan-announcements-what-they-mean-uks-military

⁸UK Ministry of Defence (2026) *The Defence Investment Plan: Equipping Our Forces, Defending Our Future*. Available at: assets.publishing.service.gov.uk/media/6a44e989167a99cf0018da38/The_Defence_Investment_Plan.pdf



DIGITAL FIRST OR DEFEAT BY DESIGN?



AUTHOR

Brigadier Tim Cooper is responsible for Army digital integration, C4I coherence and the digital foundations that underpin the Land contribution to the Integrated Force.



CONFIRMED Defence investment comes at a decisive moment for land warfare. The Army must respond to strategic competition, the return of large-scale war in Europe and a battlefield on which decisions must be made faster than ever. That investment rightly focuses on long-range precision fires, integrated air and missile defence, advanced sensing, autonomous systems, logistics modernisation, command and control, and the need to operate as part of a wider integrated force. But there is a harder question beneath those investment choices: what if we are still putting the visible before the decisive?

Military organisations, and our political masters, naturally focus on things that can be counted, photographed and displayed. Missiles, vehicles, radars and drones are easy to see. Digital architecture is not. No commander poses beside a data standard. No minister visits a formation to inspect an application programming interface. No capability announcement is built around clearing old technical debt. Yet these less visible elements increasingly decide whether modern equipment works together on the battlefield.

Issue 190 of *The British Army Review* framed the digital age of defence clearly. Major General Mark Purves argued that data, digital integration, intelligence, surveillance, target acquisition and reconnaissance, and networks are now necessities, not optional extras. Dave Williams made the case for integrating at pace. Brigadier Stefan

Crossfield showed why data is the fuel of advantage. Colonel Nat Haden explained why intelligence, surveillance, target acquisition and reconnaissance must become a connected system of systems. Colonel Pete Brunton exposed the technical debt in the Army's tactical networks. Taken together, those articles make one point hard to avoid: future advantage will belong to the force that connects best, not simply the force that buys the most.

This article therefore argues that Defence funding must treat digital as the foundation and force multiplier of the integrated force. Not because digital is fashionable. Not because artificial intelligence is attracting attention. But because the Army's future lethality, survivability, productivity and relevance now depend on it.

THE PLATFORM FALLACY

The Army has a platform bias. This is understandable. Platforms are the traditional grammar of military capability. They provide visible assurance to ministers, commanders and the public. They also matter. The argument here is not that platforms are irrelevant, rather that platforms are increasingly insufficient.

A deep sensor has limited value if its information cannot reach the people and systems that need it. A long-range weapon is constrained if targeting data cannot move securely across networks, security boundaries and applications at the speed of battle. An autonomous system becomes a local experiment if it cannot share what it sees with

the wider force. A logistics system cannot improve readiness if its data remains trapped in disconnected applications. A headquarters cannot make better decisions if the information it needs is spread across unconnected systems, spreadsheets and inboxes. The key point is blunt: without digital coherence, much of confirmed Defence investment risks buying disconnected excellence.

That is the platform fallacy. It assumes that the principal route to future combat power is the acquisition of better individual things. But the character of modern warfare is moving in the opposite direction. Advantage increasingly comes from the system that connects these things. The most important question therefore is not simply whether a new capability is good. It is whether it can be integrated, updated, secured, exploited and connected to the rest of the increasingly integrated force. This is why *The British Army Review* 190 matters. Asgard, Zodiac, McBride, Tiquila, Coeus, Serpens and Iris are not just programme names. They show a wider shift away from buying isolated platforms and towards building connected operational systems. Defence funding must now follow that logic. It must fund the architecture, standards, software, data and people that turn equipment investment into real combat power.

FROM YESTERDAY'S NEWS TO TOMORROW'S DISCIPLINE

Some will argue that none of this is new. They are right. The Army has known for years that digital matters. Defence has written strategies on data, digital transformation, artificial intelligence and integration. The problem is not that the argument has not been made. The problem is that it has not yet been made hard enough to change investment behaviour.

It is no longer enough to say that digital may help. Digital will dictate future advantage. A well-connected Army can find, decide and act faster than a better-equipped Army whose systems cannot talk to each other. In many cases, digital does not simply add value to a platform. It decides whether that platform has real operational value at all. This needs to be stated plainly. A long-range fires programme without a resilient targeting system is not a true long-range fires capability. It is an expensive launcher. A sensor programme without agreed data standards and usable routes for sharing information is not an intelligence advantage. It is a collection system. An artificial intelligence project without trusted data, identity, security and workflow integration is not transformation. It is nothing more than theatre. The Army therefore must move from digital advocacy to digital discipline. The test should be simple: every major Defence-funded investment



“The Army has known for years that digital matters. Defence has written strategies on data, digital transformation, artificial intelligence and integration. The problem is not that the argument has not been made. The problem is that it has not yet been made hard enough to change investment behaviour.”

should be required to explain how it will connect, what data it will use, what standards it will comply with, how it will be assured, how it will operate when degraded, and how it will be updated after fielding. If these questions cannot be answered, the capability is not ready to be treated as operationally coherent.

THE AI ILLUSION

Artificial intelligence has captured the military imagination. This is understandable. It promises faster planning, accelerated intelligence analysis, better knowledge management, improved logistics, reduced administrative burden and enhanced decision support. Agentic artificial intelligence¹ goes further by offering systems that can execute workflows, coordinate tasks and support staff activity at scale. The opportunity is real. But there is a sequencing problem.

The Army does not have an artificial intelligence problem. It has a digital foundations problem. Artificial intelligence

¹Agentic AI is a system that can plan, decide and execute multi-step actions towards a designated goal or objective with little or no human interaction once the parameters and objectives have been set.

depends on good data, secure access and systems that work together. If the data is poor, the outputs will be poor. If systems are fragmented, artificial intelligence will be hard to use. If standards are inconsistent, people will not trust the results. If security and releasability are not designed early, operational use will be slow.

In simple terms, artificial intelligence will not fail because the models are not clever enough. It will fail if the Army cannot give them trusted data, secure access, usable workflows and operationally relevant integration.

This matters because it changes the investment answer. The critical path to military artificial intelligence does not start with the algorithm. It starts with data management, software ownership, application rationalisation, digital identity, cloud and edge hosting, assurance, standards and architecture. These are not glamorous. But without them, artificial intelligence remains a slide rather than a capability. That is also why workforce productivity must be part of the argument. The Army is unlikely to become significantly larger. Demand will continue to increase. Headquarters are already stretched. Specialist digital, data and technology skills are scarce. Agentic artificial intelligence offers one of the few realistic ways to release capacity, reduce repetitive staff work and allow smaller teams to produce better outputs. But this will only happen if the digital foundation is fit for purpose.

The productivity argument therefore strengthens, rather than weakens, the warfighting argument. The Army needs digital because it has to fight faster. It also needs digital because it has to work smarter.

ARCHITECTURE IS NOT ELEGANCE, IT IS SURVIVAL

Architecture can sound abstract. It is not. In this article, architecture simply means how the Army's digital systems fit together. It is the difference between a force that can adapt under pressure and a force that has to stitch its systems together by hand during operations.

The Army should avoid worshipping elegant architecture for its own sake. The measure of success is not architectural beauty. It is whether the force can exchange data securely, connect applications, integrate allies, protect itself, update software and continue operating when networks are contested. But that does not make architecture less important. It makes effective architecture our vital ground.

The warfighting test is straightforward: can the digital environment work when dispersed,

degraded, contested and under electronic attack? If the answer is no, the architecture is not operational enough. If it only works in fixed headquarters, on reliable networks or in demonstration conditions, it is not yet a warfighting capability. The deployed digital environment must be designed for friction: patchy connectivity, electronic attack, cyber threat, security boundaries, coalition releasability, limited bandwidth and rapid reconfiguration. It must support operational tempo, not just pass a compliance check.

This is where the lessons from issue 190 of *The British Army Review* align closely. Project Iris argued for standards-based, incremental and iterative network modernisation. Zodiac and McBride point towards connected intelligence, surveillance, target acquisition and reconnaissance and cross-domain information flows. Coeus reflects the need to transform data holdings into usable operational assets. Asgard should be understood not as a magic answer, but as a forcing function for the Army to confront the reality of deployed digital integration. That distinction is important. Asgard should not be oversold. It is making progress and has become a practical pathfinder for digital decision support, targeting integration and the Army's contribution to the Digital Targeting Web. But it has not yet delivered everything the Army needs, and readers will rightly be cautious about claims that run ahead of evidence. Its value in this argument is not that it proves the final answer. Its value is that it exposes the problem: modern targeting, decision support and sensor-to-effector integration depend on digital services

that are assured, connected, resilient and operationally owned.

INNOVATION THEATRE AND THE COST OF FRAGMENTATION

The Army does not lack innovation. It has plenty of it. The problem is that too much innovation remains fragmented, duplicated or disconnected from an enterprise route to scale. This is not a criticism of experimentation. The Army needs tactical experimentation, user-driven development and rapid learning at the edge. *The British Army Review* 190 makes that clear, and Ukraine reinforces it daily. The danger is different: isolated digital activity that looks impressive locally but does not create lasting value for the wider Army. If experiments do not use common standards, expose data properly, address security early and have a route into service, they risk becoming innovation theatre. The test is not whether an experiment looks impressive. The test is whether it can scale, connect and survive contact with Defence reality.

Recent internal discussions on digital demand, application choice and operational requirements reinforce this point. The issue is not simply which application should be used. The real issue is whether the Army can define the function required, align that demand to an agreed architecture, prioritise scarce digital resources and then provide a coherent service to users across current, next and future operations. That is very different from allowing every formation or programme to solve the same problem separately.

This is where the Army Digital Authority

matters. Its purpose should not be to slow innovation. It should make innovation usable. It does so by setting standards, guardrails and demand signals that allow experimentation to compound rather than fragment. It must help the Army move from local heroics to repeatable advantage. This will mean the Army terminating experiments that are non-compliant.

SOFTWARE OWNERSHIP AND THE LAND DOMAIN SOFTWARE FACTORY

A sharper digital argument also needs to say more about software. The future force cannot remain dependent on slow, externally controlled change cycles for the software on which operational advantage depends. If software defines how systems adapt, integrate and improve, which it must, then software ownership becomes a warfighting issue. The Army therefore needs much greater control of the software it depends on. That does not mean doing everything internally. It means understanding which software functions are operationally critical, owning or controlling the intellectual property where necessary, maintaining the ability to update at pace, and ensuring industry relationships support adaptation rather than vendor lock-in.

This is where the Land Domain Software Factory, Army Software House and System of Systems Integration Lab become critical. The Army needs the ability to build, integrate, test, assure and continuously improve software in direct response to the operational demand. These initiatives should be presented as connected parts of the answer, not as competing labels. Their purpose is to turn

"Agentic artificial intelligence offers one of the few realistic ways to release capacity, reduce repetitive staff work and allow smaller teams to produce better outputs... The Army needs digital because it has to fight faster. It also needs digital because it has to work smarter."



digital ambition into practical delivery.

The point is simple. If the Army wants to adapt faster than our adversaries, it cannot treat software as a procurement by-product. It must treat software as a form of manoeuvre.

THE WORKFORCE CONSTRAINT

Digital transformation is often described as a technology challenge. It is also a workforce challenge. Defence is asking digital teams to deliver more, integrate more, assure more and respond faster, while the number of people with the right skills remains limited. The Army should not treat this as someone else's problem. If digital is now a warfighting foundation, the Army must resource it as such. This means three things: firstly, digital, data and technology roles must be seen as operationally critical, not back-office support. Secondly, military and civilian workforce allocation must reflect the centrality of digital to the future force. Thirdly, AI-enabled productivity should be used to reduce burden, but not as an excuse to under-resource the specialist teams required to build and govern the digital environment.

There is a hard truth here. The Army cannot claim that digital is decisive while staffing it as a secondary function. If confirmed Defence investment depends on digital, then workforce planning must follow the investment logic.

WHAT DEFENCE FUNDING MUST DO

Defence funding should be judged not only by what it buys, but by what it connects. To make digital a real warfighting advantage, five actions are required.

1. Fund the digital backbone as a warfighting requirement. Digital infrastructure, data services, deployable cloud, identity management, assurance, software delivery and network modernisation must be treated as core combat enablers. They must be prioritised above everything else.
2. Make integration a condition of investment. Every major capability should be required to show how it connects to the wider force, what standards it uses, what data it produces and consumes, how it will be assured, and how it will operate in degraded conditions.
3. Prioritise data before artificial intelligence. Artificial intelligence investment must be built on trusted data, common standards, clear ownership and usable workflows. Without this, artificial intelligence activity will remain fragmented and over-promised.



"The central argument is deliberately simple. Digital is not a supporting line of development. It is the fundamental foundation that allows the integrated force to function."

4. Build sovereign software adaptation. The Army needs the ability to own, modify, integrate and improve operational software at pace. The Land Domain Software Factory, Army Software House and the System of Systems Integration Lab should be aligned as part of one coherent software operating model.

5. Use the Army Digital Authority to scale, not smother, innovation. The Army Digital Authority should set guardrails, standards and demand signals. Its success should be measured by whether it helps experiments become enterprise capability, not by the volume of governance it produces.

None of this should be read as a counsel of despair. The Army is not starting from a blank sheet of paper. A credible plan is already in motion. TACCIS [Tactical Communication and Information Systems] optimisation is sustaining and improving the existing BCIP [Bowman Combat Infrastructure and Platform] baseline where it matters most; Land Domain Command, Control, Compute and Communication is providing the route to a more coherent, architecture-led land command, control, communications, computers and intelligence portfolio; Asgard is proving practical patterns for deployed digital decision support; and TACNET [Tactical Network] is already giving soldiers a simpler, more flexible and more modern tactical communications system. The early user reaction to TACNET is powerful. The message from the field is that it feels like the most significant improvement in tactical communications for a generation. This is therefore not just a problem statement. It is a delivery argument. The Army has begun the journey; the system must now help it deliver

TACCIS optimisation, TACNET, Asgard and the wider digital plan as one coherent operational capability, not as a series of disconnected activities.

CONCLUSION

Confirmed Defence investment will deliver new platforms, sensors, weapons and technologies. But its success will be decided by something less visible: whether those investments can operate as a connected, resilient and adaptable system.

The central argument is deliberately simple. Digital is not a supporting line of development. It is the fundamental foundation that allows the integrated force to function. Without it, long-range fires are under-connected, sensors are under-used, artificial intelligence is under-powered, autonomy is isolated, logistics remain fragmented and headquarters remain overmatched. With it, every major investment decisions becomes more valuable.

By connecting land forces to joint, multinational and NATO partners, the Army's digital foundation will help turn individual investments into collective deterrence, operational tempo and enduring strategic effect.

The British Army Review 190 has already made the intellectual case for defence in the digital age. The next step is to make that case bite in investment, governance and delivery. The Army should stop asking whether digital is important. That debate is over. The question now is whether we are prepared to fund and govern digital as if it is decisive. Because it is. If the Army gets this right, digital will multiply the force. If it does not, it will discover that modern equipment is no substitute for a coherent digital backbone.

THE GROUND TRUTH: WHY INVESTMENT IN LAND AMPLIFIES EVERY DOMAIN

AUTHOR

Colonel Perry Bishop (top) and **Lieutenant Colonel Pete Hockley** serve in the British Army's Concept Team, where they are leading the Conceptual Land Force 2040 project, which seeks to understand what capabilities, structures and doctrine will be required for the future character of conflict.



THE Defence Investment Plan (DIP) is not an Army bid dressed as strategy. It is the moment Defence stopped buying platforms and started designing an integrated warfighting system. In that system, land forces are not the pre-eminent component. They are the physical layer through which the integrated force reaches the ground on which wars are settled – and the adaptive layer that keeps generating options when the rest of the system is degraded. Investment in land should therefore be judged not as a single-Service claim, but as a force multiplier for the whole integrated force.

FROM JOINTERY TO INTEGRATED DESIGN

The 2025 Strategic Defence Review changed the unit of force development currency. For three decades, British defence reviews measured themselves in platforms: hulls, airframes, battalions. The 2010 iteration balanced the books, 2015 restored some ambition, while the 2021 Integrated Review named the threats. Yet each expressed its conclusions as platform numbers by Service.¹ They spoke of 'jointery' but too often meant coordination after the fact: Services building capability to their own logic, then asking

Defence to connect it at the point of use. The 2025 Review changed that approach. It judged military power not by the inventory we hold, but by the warfighting system we can generate – people, platforms, autonomous systems, data and networks connected across every domain.² Defence Reform gives that judgement teeth: the Chief of Defence Staff for the first time holds force design authority across the integrated force.³

That is more than jointery. It is integration as design rather than integration as coordination. Confronting the Levene legacy, it changes what an investment argument must look like. The 2011 reforms sought to restore financial discipline through devolved Service budgets,⁴ but a consequence was that it entrenched single-

¹House of Commons Library, *A brief guide to previous British defence reviews*, CBP-7313.

²Ministry of Defence, *The Strategic Defence Review 2025: Making Britain Safer – Secure at Home, Strong Abroad* (London: HMSO, June 2025).

³Ministry of Defence, *The Defence Investment Plan: Equipping Our Forces, Defending Our Future* (London: HMSO, 30 June 2026), ch. 2, para. 1.

⁴Lord Levene, *Defence Reform: An Independent Report into the Structure and Management of the Ministry of Defence* (London: MOD, June 2011).



Service optimisation. A capability bought by one Service but principally feeding another's kill chain was invisible to the budget that paid for it. If the force is a single designed system, then the value of any component is what it does for the rest; the money must follow that logic.

The DIP is the first Defence programme built on that premise. It allocates £298 billion over four years, directs £19.2 billion at the land domain, and puts £7.5 billion into the digital backbone and targeting web binding it together.⁵ The question is not whether the Army deserves its share, but what the rest of the integrated force gets for it. The Chief of the General Staff has put the same discipline in plainer terms: "Define the 5th Generation Land Force not by what we expect others to do for us, but by what we can do for others."⁶

COMBAT POWER AS A SYSTEM PROPERTY

The wars in Ukraine and the Middle East show why this shift was necessary: modern military success depends less on individual platforms than on systems connected across every domain. The question is no longer how good a tank, aircraft or ship is, but whether the whole system can sense, decide, strike, protect and regenerate while an adversary works to break it.

This is systems warfare and its consequence is uncomfortable: a system is defeated at its joints, not at its strongest point. The logic that makes the Digital Targeting Web the DIP's most strategic capability – £1.8 billion over four years to connect sensors, deciders and effectors – is also the logic an adversary will apply to us. A force that concentrates advantage in a network concentrates vulnerability there too.

This is where the argument about land power usually goes wrong: the temptation to assert that land forces are the biggest contributor to this network. The Chief of the General Staff declined that argument at RUSI in June, seeing no merit in ranking domains when everyone has a part to play.⁷ He was right to decline it: the ranking argument is unwinnable and the wrong shape. The stronger claim is narrower: land forces are the part of the system that reaches the geography on which wars are settled, and the part that keeps functioning when the overall system is degraded.

⁵Defence Investment Plan, Executive Summary and ch. 2, Table 2.

⁶⁻⁸General Sir Roly Walker, Chief of the General Staff, keynote address to the RUSI Land Warfare Conference 2026, London, 23 June 2026.

"The logic that makes the Digital Targeting Web the Defence Investment Plan's most strategic capability – £1.8 billion over four years to connect sensors, deciders and effectors – is also the logic an adversary will apply to us. A force that concentrates advantage in a network concentrates vulnerability there too."



WHY LAND IS THE PHYSICAL LAYER OF THE INTEGRATED FORCE

Wars are fought across domains but won through political outcomes. Political settlements concern people, homes, territory, sovereignty and governance. None are delivered by Defence alone. The land domain is usually where the mass of military effect meets diplomacy most starkly – it is also where the bulk of cross-government effect is delivered in a contested theatre. Whether territory is taken, held, defended or restored eventually remains a land question. Deterrence by denial is tested by whether an adversary believes they can seize and hold ground at an acceptable price.

That is the ground truth. The integrated force is digitally connected but politically realised on land, through NATO. Allied soldiers on the Eastern Flank, not the network behind them, ultimately make Article V legible to Moscow. Land power is the layer at which integration becomes most politically visible – to populations, allies and adversaries. Four advantages follow from occupying ground:

Persistence. Conventional air and maritime presence in theatre is periodic – platforms transit, refuel, rotate; land presence is continuous. Soldiers make the UK's contribution to NATO persistent. On the Eastern Flank it is now permanent; a standing campaigning framework, holding host-nation relationships and rehearsing the reinforcement of Europe. Persistence converts capability into deterrence, and deterrence is not a snapshot but a claim about tomorrow.

Access and protected geography. The integrated force is digitally connected, but it is assembled, launched and sustained from physical places. Headquarters, communications nodes, logistics hubs, airfields, ports and movement corridors must be operated, connected and protected before cross-domain effect can be generated at scale. Land power's claim is not ownership of that architecture, but its role in making it usable. Ports, airheads, reception areas, host-nation relationships and protected routes turn an integrated force from a network into a campaign.

Human understanding. The central problem for the integrated force in Europe is not an abstract contest of domains, but the defeat of Russian combined arms armies on NATO soil. They will not be beaten by data alone. They will be beaten when their command relationships, fires, sensors, logistics, air defence, reserves and morale are understood as a fighting system, then attacked in ways that make it lose coherence faster than it can recover. That is why the Land Targeting Enterprise matters to the whole force: it combines allied sensors, intelligence, joint effects and judgement against the Russian warfighting system NATO must defeat on the terrain where Article V matters most politically.

Conflict settlement. Wars end, when they end well, in a political statement written in territorial terms: who holds what ground, under whose sovereignty, protected by whose forces. Only land forces can seize terrain and hold it, and when the guns fall silent it is land forces

that remain to defend what was won.⁸ Air and maritime power can make a settlement possible. Only land power makes it real.

FROM THE LAND, NOT JUST ON THE LAND

The traditional five-domain model remains useful for organising Defence, but it can obscure where new tactical options are now being generated. Persistent sensing, targeting and long-range fires that once depended on ships, aircraft or satellites can increasingly be delivered from land. Armies are no longer useful only for what they can do *on the ground*; they are increasingly useful for what they can do *from the ground*.

The significance is not just that the British Army is acquiring greater reach, but that land-based reach is now increasingly cheaper, more persistent and more survivable than platforms in other domains that must transit contested space. Every target serviced from land is potentially one less sortie to fly, a magazine not expended or an exquisite platform not consumed by routine demand. Land forces holding sensors forward depend less on someone else's availability. Both come out ahead: burden-sharing, not competition for relevance.

The DIP funds this directly. Project Asgard, now aligning to Cyber & Specialist Operations Command, binds land surveillance, artillery, long-range missiles, aircraft and uncrewed systems into the Digital Targeting Web, improving strike decisions for the joint force as much as for land manoeuvre. Corvus, Precision Strike Missile and ground-based air defence extend the same logic: land-based sensing, strike and protection that raise theatre output rather than simply equipping the Army.

Army force structure follows the same logic. The Strategic Defence Review commits two divisions and a corps headquarters to NATO's Strategic Reserve Corps, placed under the UK-led Allied Rapid Reaction Corps (ARRC) and described as the Supreme Allied Commander Europe's most credible warfighting land force.⁹ Targeting webs do not float above geography. They need formations forward enough to sense, close enough to understand and resilient enough to survive and act. The ARRC provides that anchoring interface: it creates data, tests it against reality, turns it into

"Every target serviced from land is potentially one less sortie to fly, a magazine not expended or an exquisite platform not consumed by routine demand. Land forces holding sensors forward depend less on someone else's availability."

judgement and converts it into action at the edge on the terrain where NATO must beat the Russian Army.

Consequently, air power gains a land layer that helps hold at reach the bases from which it flies and absorbs some of the routine deep strike, preserving scarce aircraft for the tasks only air power can do. Maritime power gains the secure ports and resilient homeland base through which the Alliance reinforces. Space and cyber gain a force that turns collection into action and exploits windows before they close – and, reciprocally, one whose own manoeuvre depends on the positioning, timing and satellite communications that they provide. Other government departments gain a partner able to operate where they cannot. And the joint force gains the theatre-setting capabilities – engineers, logisticians, medics, headquarters and communications – without which no domain operates for long.

None of this makes land power decisive; that is the point. The measure of this investment is not what the Army receives, but what the integrated force can now do because the Army is there.

LAND AS THE INTEGRATED FORCE'S ADAPTIVE LAYER

Integration creates a tension Defence cannot avoid. The integrated force needs common standards, shared data and central coherence; war then attacks each of them. Networks degrade, headquarters are disrupted, assumptions collapse and commanders at the edge still have to act. The Army's answer is mission command: shared intent, authority delegated, initiative preserved. That is why land is not just the integrated force's most physical layer, but its most adaptive one: built around distributed human judgement at scale, and able to keep fighting and learning when centralised control fails. Ukraine shows why this matters: endurance depends less on having the best equipment than on adapting faster than the enemy.

The DIP recognises this in practice. Aksha and Rapstone are not simply equipment routes. They are attempts to make adaptation continuous. They move the Army from episodic experimentation to wartime learning: identifying a battlefield problem, fielding a usable answer, improving it in soldiers' hands and scaling what works. The point is not the individual drone, radio or sensor. It is



⁹House of Commons Library, 'Strategic Defence Review 2025: The British Army', CBP-10435, 12 December 2025. The Minister for the Armed Forces has described the Strategic Reserve Corps as SACEUR's 'most credible warfighting land force'.

"The answer will not necessarily come from more drones, but from whatever restores manoeuvre under drone threat: agile electronic warfare, affordable counter-drone systems, and autonomous ground systems that draw fire and enable other systems to exploit the gap."



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the institutional habit: to learn faster than the enemy can break the system.

The Strategic Defence Review's answer is a deliberate hedge: fight in NATO, contribute to coalitions and operate alone when required.¹⁰ That demands integration that works with allied systems but does not depend on them. The UK must plug into the Alliance, yet still act when NATO networks are unavailable, disrupted or politically constrained. Land forces are perhaps the most likely part of the system to keep generating options when the targeting web is degraded because they are built for graceful degradation: processing information at the edge, using reversionary methods and fighting under decentralised command when the network fails. Connected when possible; independent when necessary.

DRONES MAKE MANOEUVRE HARDER, NOT OBSOLETE

None of this survives contact if we are dishonest about the difficulty. Battlefield transparency is increasingly unforgiving.¹¹ Drones have made manoeuvre harder; the fashionable reading is that they have made it obsolete. The better question is what drones still cannot do: seize ground, hold it or compel a population to submit.¹² Ukraine is the test case: the most intensive drone laboratory yet, where the line still moves in hundreds of metres, because after every strike someone must move to occupy the next treeline. Drones have made

manoeuvre more costly, not less necessary, and that distinction is everything.

An historical parallel should discipline our investment choices. In 1914 the machine gun stopped the Western Front and persuaded serious observers that offensive ground warfare was finished. They were wrong: the machine gun was not the future but the problem, and within four years an unreliable iron box on tracks, alongside other tactical changes, began to restore the manoeuvre it had stolen.¹³ The drone is analogous: not a new theory of victory but a new problem for manoeuvre forces to solve.

The answer will not necessarily come from more drones, but from whatever restores manoeuvre under drone threat: agile electronic warfare, affordable counter-drone systems, and autonomous ground systems that draw fire and enable other systems to exploit the gap. The DIP begins to fund each line, alongside the Army's 20:40:40 construct. The harder task is making the Army's force-development engine, and National Armaments, evolve these capabilities at the speed of relevance. This is a challenge the Army continues to address; framing it otherwise would be the boosterism this argument can least afford.

CONCLUSION

The case for the 5th Generation Land Force is not that the Army is the most important

part of the integrated force, but that it is no longer merely a consumer of joint enablers. It is a net contributor to cross-domain effect: the presence that converts capability into deterrence by denial, the geography that relieves scarce platforms of routine demand, the judgement that tells the network which nodes matter and the adaptive capacity that keeps options open when the system degrades.

Land is where integration becomes real. In systems warfare, the test is not how Defence divides investment between domains, but which force-design choices increase the fighting power of the whole. Judged by that test, land-facing DIP measures are not a single-Service bid for relevance, they are a means of making the integrated force more credible in war. Land anchors deterrence in geography, sustains presence over time, adapts under pressure and converts cross-domain activity into political effect on decisive terrain. That is the ground truth: the integrated force is only as credible as its ability to turn connection into consequence on land.

¹⁰ Strategic Defence Review 2025; House of Commons Library, 'Strategic Defence Review 2025: Key points and paper series', CBP-10406, 24 November 2025.

¹¹ Defence Investment Plan, §2.5, para. 59.

¹²⁻¹³ Eric Wesley, 'Drones Are Not the Future of War – They Are the Problem to Be Solved', Modern War Institute at West Point, 23 June 2026.



DEVELOPING NATO'S WARFIGHTING PLANS

THE return of large-scale war to Europe has transformed NATO's approach to deterrence and defence. Russia's invasion of Ukraine demonstrated that collective defence can no longer rely on assumptions of strategic warning, gradual mobilisation or uncontested reinforcement. Instead, the Alliance must be prepared to deter, defend and, if necessary, fight immediately against a peer adversary. To provide context for this edition's examination of the Defence Investment Plan (DIP), this article will: explore the origins of NATO's current warfighting plans; consider how the plans are realised both now and in the future; and look to the emerging Eastern Flank Deterrence Initiative which will help shape how NATO delivers land deterrence and defence going forward.

Continued Russian aggression in Ukraine has driven the most significant revision of NATO defence planning since the Cold War. It also led to the accession of Finland and Sweden into the Alliance – a significant development that brought an additional 1,300 kilometre land border with Russia into the mix. The result has been the operationalisation of the concept for Deterrence and Defence of the Euro-Atlantic Area (DDA), first approved in 2020, and development of its Family of Plans: a

AUTHOR

Lieutenant Colonel
Chloe O'Brien is
the military assistant
to the UK's Military
Representative to
NATO and the EU
UK Joint Delegation.



coherent set of strategic, regional warfighting plans designed to underpin deterrence in peacetime and enable the coordinated defence of Allied territory in crisis or conflict. More than contingency plans, they translate strategic ambition into force, readiness and capability requirements, shaping how nations contribute to NATO's collective defence mission. Their purpose is aligned with the Supreme Allied Commander Europe's Theory of Victory: creating an Alliance capable of deterring aggression through credible readiness, while also generating the depth and resilience necessary to prevail in a protracted conflict, should deterrence fail.

For the UK these developments are particularly significant. As one of NATO's principal military powers, a framework nation in Estonia and a provider of high-readiness formations across the Alliance, the UK sits at the centre

of NATO's evolving deterrence and defence posture. Consequently, understanding how NATO's warfighting plans are developed is not simply a planning issue; it is fundamental to understanding how the British Army contributes to NATO's collective defence, which is the foundation that underpins NATO's approach to deterrence and defence.

THE ORIGINS OF THE PLANS

At the Madrid Summit in 2022 NATO leaders agreed a new Strategic Concept, informed by the 2019 NATO Military Strategy, which re-established collective defence as the Alliance's foremost priority. Adopted in the aftermath of Russia's invasion of Ukraine, it reaffirmed the Alliance's purpose of defending Allied territory and populations while preserving transatlantic unity. However, strategy alone cannot generate deterrence. Strategic ambition must be translated into military requirements, operational plans and ultimately deployable forces. It is this requirement that links the Strategic Concept to NATO's Military Strategy and, subsequently, to the concept for DDA.

DDA provides the operational framework through which NATO contests, deters and defends across the Euro-Atlantic Area. Unlike previous approaches that were heavily influenced by expeditionary operations, DDA

is focused on large-scale collective defence against all domain threats. Its importance lies not simply in describing how NATO intends to fight, but in defining the forces, readiness levels and capabilities required to do so.

The introduction of the DDA Family of Plans in 2023 represented a decisive shift from contingency planning to detailed warfighting preparation. The architecture comprises strategic domain and functional plans, alongside three geographically focused Regional Plans covering the North-West, Centre and South-East regions of the Alliance. Together, these plans provide a coherent framework for achieving deterrence in competition and coordinated defence in crisis or conflict. More importantly, they transform strategic objectives into specific military requirements, which presents the opportunity for an increasingly effects-based approach.

The significance of the Regional Plans is that they are force-driving. They identify the scale, readiness and capability requirements needed to execute NATO's defence mission and thus influence everything from force structure and readiness policy to capability development and investment decisions. This creates a direct connection between NATO plans and national defence planning. Allowing the Alliance to move from simply assessing what nations possess to instead defining what nations must provide. This relationship is most visible through the NATO Force Model and the NATO Defence Planning Process (NDPP).

REALISING THE PLANS

The NATO Force Model provides the mechanism through which Allied nations assign forces to support NATO plans at defined readiness levels. For the Supreme Allied Commander Europe, understanding what forces are genuinely available to fight is fundamental to credible deterrence. As a result, allies are expected to provide realistic and credible force declarations that allow commanders to assess combat power and risk. The UK's contribution encompasses almost the entirety of its Armed Forces across NATO Force Model commitments, operations, missions, activities and standby responsibilities. The UK is the third largest contributor and additionally provides circa ten per cent of the staff in the NATO Command Structure. The NATO Force Model has enabled a shift in emphasis onto readiness to underpin the Supreme Allied Commander Europe's Theory of Victory.

The Theory of Victory is founded upon a simple but powerful proposition: armies must "win up front, fast and big or be prepared to win a long industrial fight". The challenge for planners

"NATO's plans demand forces that are ready to fight tonight, capable of achieving advantage early and resilient enough to endure in a prolonged conflict."

is that both conditions must be addressed simultaneously, requiring immediate readiness while also building long-term resilience. The war in Ukraine has reinforced this assessment. Precision effects, integrated targeting and rapid decision-making can generate early military advantage, but prolonged conflict ultimately places extraordinary demands on nations' industrial capacity, logistics systems and ability to replace losses. Victory therefore depends not only on combat formations, but on the capacity to sustain those formations over time and access to a strong industrial base – a focus of the recent Ankara Summit. Therefore, how we view readiness should be broadened.

Readiness should no longer only be viewed as troops held at notice to move or the number of vehicles ready to deploy. It should also include a nations' ammunition stockpiles, their defence industrial capability, strategic logistics and national resilience. These are factors that cannot be generated at the outbreak of conflict and must instead be developed in advance. Consequently, NATO's warfighting plans are driving renewed emphasis on defence investment and capability development across the Alliance, reflected through the NDPP.

The NDPP is the Alliance's mechanism for translating strategic ambition into national capability requirements, and drives alignment with the warfighting plans. Through the establishment of political guidance, capability targets and subsequent review, the NDPP provides the framework through which allies generate the effects and capabilities required to execute NATO's warfighting plans. Those requirements are increasingly aligned with and shaped directly by the demands of the DDA Family of Plans. For the UK, this creates both an opportunity and an obligation. The DIP places significant emphasis on innovation, technology and industrial resilience, all of which align closely with NATO's evolving requirements. This gives the UK the opportunity to demonstrate our NATO First agenda by translating the DIP into military effect. Emerging initiatives on NATO's eastern flank provide a useful illustration of how those military effects may be employed in future conflict.

EMERGING INITIATIVES

The Eastern Flank Deterrence Initiative demonstrates how NATO is applying lessons from Ukraine to strengthen deterrence. By integrating autonomous systems, artificial intelligence, advanced sensing and digital targeting, it seeks to counter mass through speed, precision and networked effects. Therefore, using emerging technologies to enhance NATO's ability to deter aggression and defend Allied territory. The UK contributes across a broad range of projects, including Project Asgard. The initiative highlights a wider trend: NATO's warfighting plans are becoming more dynamic and able to continuously learn from operational lessons, technological developments and changes in the threat environment. For the British Army, the challenge is therefore not whether adaptation is required, but how to prioritise resources while balancing readiness and modernisation.

NATO now faces a dual challenge: maintaining the readiness required to deter and, if necessary, fight tonight, while simultaneously modernising to counter the threats of warfare anticipated tomorrow and reflecting this through the NDPP. Allies must continue to provide credible combat mass to NATO whilst integrating emerging technologies that are reshaping the application of combat power. NATO's new planning construct makes clear that readiness, modernisation and resilience are not sequential tasks, but parallel demands upon which the allies can generate enduring advantage for NATO and their own respective nations.

CONCLUSION

Driven by DDA, informed by the Supreme Allied Commander Europe's Theory of Victory, delivered through the NATO Force Model and enabled by NDPP, the Alliance's warfighting plans seek to ensure that NATO possesses both the readiness to win early and the resilience to endure should deterrence fail. For the UK, and particularly for the British Army, the challenge is to ensure that national capability development directly supports the Theory of Victory. NATO's plans demand forces that are ready to fight tonight, capable of achieving advantage early and resilient enough to endure in a prolonged conflict. Readiness, modernisation, technological adaptation and industrial resilience should therefore be viewed not as competing priorities, but as mutually reinforcing components of a single warfighting requirement. The effectiveness of this approach will ultimately be judged by NATO's ability to deter aggression through credible capability and, if required, translate that capability into sustained operational success.

LAND FORCES AS THE INTEGRATED FORCE MULTIPLIER

AUTHORS

Major General Neil Grant is Chief of Staff of the Allied Rapid Reaction Corps and previously served as Assistant Chief of Staff Land Special Operations Forces between 2024 and 2025.



Major Laurence Thomson is currently Military Assistant to Chief of Staff of the Headquarters Allied Rapid Reaction Corps and is a former CGS Visiting Fellow at RUSI.



THE Allied Rapid Reaction Corps (ARRC) lies at the heart of the British Army's contribution to NATO's warfighting ecosystem as one of two strategic reserve corps. As a corps headquarters it is designed to command multinational forces at scale and integrate multi-domain effects; it is central to Defence's "more lethal and agile" integrated force model.¹ As the Defence Investment Plan (DIP) accelerates modernisation across the land domain, the ARRC's journey to Exercise Steadfast Defender 2027 (STDE 27) offers a lens through which to examine how targeted investment will translate directly into warfighting advantage. Ultimately, a modernised Corps HQ resourced and empowered with accelerated, machine-enhanced decision-making will catalyse Alliance deterrence and strengthen the United Kingdom's operational contribution to NATO.²

The battlefields of the Russo-Ukrainian War have reaffirmed the "land as a hub connecting other domains... a gateway to effects in air, sea, cyberspace and space".³ Contemporary conflict has become ever more defined by speed, complexity and cross-domain convergence. Yet the ability of land power to amplify joint and multinational effect depends upon the quality of command. A corps headquarters must orchestrate the full panoply of modern war to generate decision advantage. It has to synchronise sensors, fires, manoeuvre, sustainment, information activity and multinational formations across considerable physical and electromagnetic battlefields whilst remaining survivable, adaptable and resilient.⁴ During Exercise Arcade Strike earlier this year, HQ ARRC deployed a prototype agentic corps headquarters enabled by Asgard Decide and successfully demonstrated the planning and execution of deep recce-strike operations.⁵ The exercise proved the concept of a corps HQ fusing sensors, digital targeting networks, long-range fires and AI-enabled decision support into a coherent operational system. Rather than exploring future possibilities, Arcade Strike demonstrated that many of the conceptual components of the future corps are already achievable. The challenge now is turning a successful prototype into a deployable, resilient and fully integrated warfighting capability.

The journey to STDE 27 demonstrates that modern deterrence depends as much upon resilient multinational command as upon combat formations themselves. It also represents a critical milestone in HQ ARRC's

¹Ministry of Defence, *Strategic Defence Review*, (OGL, 2025), p. 45.

²Ministry of Defence, *The Defence Investment Plan*, (OGL, 2026), p. 40.

³Benjamin Jensen, *The Evolution of Landpower*, (CSIS, September 2025).

⁴Lt Col Beagle, *Brig Slider and Lt Col Arrol, The Graveyard of Command Posts*, (*Military Review*, May-Jun 23), pp. 10-24.

⁵Brig Rob Alston, 'On Track and On Time', *British Army Review* 198, (CHACR, Summer 2026), pp. 37-39.

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progression towards full mission capability through NATO's combat readiness evaluation process at the end of 2027.

ARRC AS THE LAND COMPONENT'S 'ORGANISING PRINCIPLE' WITHIN THE INTEGRATED FORCE

Within the integrated force, land power – “the foundation of deterrence” – provides the enduring framework through which joint, multinational and sovereign cross-government capabilities are cohered.⁶ The ARRC is that framework's ‘organising principle’ by tactically sequencing disparate cross-domain capabilities within a coherent plan, synchronising in time and space across a multi-dimensional battlespace. The integrated force's core purpose is to be the sum of its parts, not domains fighting in isolation. Outwith the land component providing a command framework, land forces also contribute their ability to endure, hold positional advantage and impose control over terrain and populations: no other domain in the integrated force can do these and they are decisive.⁷

Recent wars in Ukraine and Iran have demonstrated how difficult it is achieving a strategic victory without land forces delivering decisive advantage. Russia's overwhelming advantage in size and destructive reach across the country has been held in check by Ukrainian front-line defences.⁸ Likewise, in Operation Epic Fury, America's “remarkable display of deep strike, naval control, and the rapid suppression of Iranian capabilities with airstrikes and sea-launched weapons” has so far failed to secure stated political goals.⁹ In conflict, land forces are needed to consolidate tactical successes into decisive operational gains and eventually strategic victory. Through the broad spectrum of peace, competition and crisis they serve to synchronise deterrence by providing persistent command architecture through which other domains achieve aggregated impact.¹⁰ The ARRC's value is as a land command with integrating staff functions, bringing together individual domain capabilities and forming them into a coherent operational design. Linking sensors to platforms, manoeuvre to fires, and strategic levers of power to Alliance plans and tactical formations on the ground.

Amongst the DIP's investment pledges there are ambitions to modernise digital and autonomous systems, long-range fires and command systems which will all work to catalyse what the ARRC can do. Though Ukrainian echelons and battlefield frameworks do not match Britain's, they have the same functional logic that “the brigade should fight the contact battle, the division the middle

“Divisions can win battles; corps are needed to synchronise their activities and sequence their battles into operations for a campaign... a corps headquarters integrates deep fires, operational sustainment, information activities and multinational manoeuvre into a coherent design capable of achieving operational objectives.”

battle, and the corps the deep battle”.¹¹ HQ ARRC must increasingly incorporate a growing array of complex capabilities as it fuses joint fires with manoeuvre to break the defender's advantage on the battlefield and strike at second echelon forces. In this sense, the ARRC is both the height and edge of the British Army: the height because it provides the operational vantage point from which the land campaign is understood, planned and directed; the edge because it is the headquarters that connects the full weight of Britain's Armed Forces from the farthest forward position to NATO's regional plans. Ultimately, the ARRC enables, underpins and amplifies the integrated force.

CONTEMPORARY CONFLICT AND THE CHALLENGE FOR CORPS HQ COMMAND AND CONTROL

Modern war is increasingly defined by compression.¹² Compression in time, decision space and thresholds between

peace, competition, crisis and conflict. The return of large-scale combat operations has reasserted the importance of the corps echelon. Divisions can win battles; corps are needed to synchronise their activities and sequence their battles into operations for a campaign. Operating across hundreds of kilometres and commanding multiple divisions, a corps headquarters integrates deep fires, operational sustainment, information activities and multinational manoeuvre into a coherent design capable of achieving operational objectives. As the scale and complexity of modern warfare increases so too does the requirement for an echelon able to connect tactical actions to theatre outcomes. The goal, as the Chief of the General Staff said at RUSI, is to remake the ARRC as an agentic AI-enabled headquarters using Asgard Decide to reduce planning cycles from 72 hours to one.¹³ This creates two acute challenges set against the backdrop of an enduring consideration. These collectively define HQ ARRC's journey to becoming digitally integrated, interoperable, resilient and capable of commanding at the speed and scale of contemporary conflict:

The first challenge is that the scale and density of the battlespace demands unprecedented levels of situational awareness and analytical processing power. Corps HQs must integrate data from myriad sensors and multiple echelons across land, air, maritime, cyber and space domains to fuse them together into a coherent operational picture that can be shared across the span of the corps. This requires digital architectures and data standards with the analytic tools necessary for commanders to make decisions quickly.

The second being, as Ukraine has shown with Russia, how the fight has “extended beyond the battlefield” to be fought across the electromagnetic spectrum, cyberspace, information environment and physical domain simultaneously.¹⁴ The traditional model of a static, centralised command post is no longer viable. Therefore, corps HQs must operate dispersed, mobile and survivable whilst maintaining connectivity. All command headquarters must function as distributed networks of nodes capable of reconstituting, relocating and adapting under persistent attack.

Each challenge must be confronted within the multinational nature of NATO operations, an enduring consideration that is both a force multiplier and (unavoidably) an added complexity. Corps HQs must integrate sovereign systems, national caveats, varying levels of digital maturity and diverse doctrinal approaches.¹⁵ This requires robust procedural interoperability, shared planning frameworks,

⁶General Sir Roly Walker, CGS' RUSI Land Warfare Conference 2026, (army.mod.uk, 23 Jun 26).

⁷Jack Watling, *The Utility of Land Power to, Whitehall Report 2-22*, (RUSI, February 2022), p. 98.

⁸George Barros, *The Importance of Ukraine's Fortress Belt: Geospatial Intelligence Terrain Analysis*, (ISW, 14 April 2026).

⁹John Spencer, *What does Landpower bring to an Air and Naval Fight?*, (MWT, 23 April 2026).

¹⁰Jack Watling, ‘Supporting Command and Control for Land Forces on a Data-rich Battlefields’, *Occasional Paper*, (RUSI, 2023), p. 6.

¹¹Jack Watling, ‘Emergent Approaches to Combined Arms Manoeuvre in Ukraine’, *Insights Papers*, (RUSI, October 2025), p. 22.

¹²Daniel McCauley, *Strategic Depth Reimagined: Expanding Decision Time in 21st Century War*, (Small Wars Journal, December 2025).

¹³General Roly Walker, *Chief of the General Staff: Land Power and the Foundation of Deterrence*, (army.mod.uk, June 2026).

¹⁴Nysret Buzhala, *Assessing Russian Network Warfare Through the Lens of the Ukraine Conflict*, (Small Wars Journal, May 2026).

and human relationships that enable trust and tempo. NATO's Allied Command Transformation has been explicit that this depends as much on people and nations trusting each other's decision-making processes and judgements as on compatible technology.¹⁶

JOURNEY TO STDE 27

STDE 27 will test the headquarters in its ability to command a multinational corps during a high-intensity, multi-domain fight. To do so it must cultivate a culture of tempo, adaptability and disciplined initiative; staff processes must be streamlined, well-rehearsed and digitally enabled. Finally, command post survivability is non-negotiable. The ARRC must operate under persistent electromagnetic, cyber and physical threat. This requires dispersed command post architectures, mobile forward nodes, emission control and the ability to reconstitute command and control rapidly. STDE 27 is the proving ground for a headquarters designed for contemporary conflict. The journey to STDE 27 is therefore focused on building five interlocking capabilities:

1. Data-centric command. The backbone of a modern corps-level command is data integration. The ARRC must be able to fuse data from sensors, fires, manoeuvre, logistics, cyber and space assets into a single operational picture. This requires investment in digital foundations: networks, data standards, software and analytic tools. The DIP's digital programmes – including Asgard and wider Army digital modernisation – provide the architecture through which the ARRC can command at speed.

2. Corps Recce Strike. A defining feature of the future corps is its ability to execute recce-strike operations across the battlefield. Arrcade Strike demonstrated how credible organic corps recce-strike can work when enabled by 9 Deep Recce Strike Brigade, UAS platforms, Project Zodiac and long-range fires systems. The exercise digitally connected sensors, analysts, targeteers and launchers – proving the concept of a corps joint all-domain information and coordination architecture. STDE 27 must now demonstrate that this capability can be built and fought at larger scale, under contested conditions and from a multinational force.

3. Sovereign and multinational interoperability. As a NATO corps, the ARRC will have to integrate formations from across NATO with varying levels of digital maturity, national caveats and doctrinal approaches. Interoperability must be built across three layers: human, technical and procedural. Failure in any one dimension risks undermining



“Even with the integration of increasing autonomous data-enabled decision support systems, warfare will remain inherently a human endeavour.”

the effectiveness of the other two and STDE 27 will test all three. The ARRC must demonstrate that it can command multinational divisions, integrate joint fires and operate seamlessly with NATO's theatre-level structures.

4. Human performance, HQ culture and staff process. Even with the integration of increasing autonomous data-enabled decision support systems, warfare will remain inherently a human endeavour. The challenge for future headquarters will not be obtaining information but analysing it to inform commanders under conditions of uncertainty, ambiguity and constant disruption.¹⁷ The fog of war has been replaced by information overabundance. Human performance therefore encompasses cognitive endurance and making decisions under pressure. Its effectiveness depends on culture, tempo, cognitive endurance and disciplined initiative. The ARRC's transformation emphasises streamlined staff processes, flatter decision structures, empowered planners, rehearsed battle rhythms and cognitive resilience. Ultimately, AI-enabled systems will enhance the speed and scale of analysis but accountability and responsibility depend on rigorous human assurance.

5. Command post survivability and command and control resilience. Modern adversaries target headquarters relentlessly. Academic analysis has shown that Russian forces “succeeded in engaging 75% of static [Ukrainian] defence sites within the first 48 hours of invasion”.¹⁸ The ARRC must therefore operate as a dispersed, mobile, low-signature network of command nodes. Survivability requires electromagnetic discipline, mobile command post architectures, rapid displacement, hardened digital networks, redundant command and control pathways and the ability to reconstitute command under attack. Command and control resilience is central to deterrence. For the ARRC it is about

being able continue commanding through repeated strikes.

WHAT STDE 27 MEANS FOR THE INTEGRATED FORCE AND OPERATION VIGILANT SPEAR

STDE 27 is a critical milestone for the emerging integrated force and the ARRC's warfighting readiness programme to combat readiness evaluation in 2027. It will demonstrate that HQ ARRC can command a multinational corps in a high-intensity fight, integrate joint effects and operate as a resilient node within the Alliance's warfighting architecture. It provides assurance that land power should and can underpin NATO's plans, amplify joint capabilities and provide the persistent command structures required for deterrence and defence against Russia. Fundamentally, an integrated force must integrate around something – that will almost certainly be on land.

However, beyond this, the exercise is a core component of Operation Vigilant Spear. This operation is the newly established ARRC campaign support plan that represents the British Army's contribution to NATO deterrence and defence across the Euro-Atlantic Area. Through it HQ ARRC will plan, synchronise and control land activity across the continent. STDE 27 will be one step of many that will demonstrate the ARRC's transformation into an AI-enabled, data-centric corps capable of commanding at the speed and scale of modern conflict. It will prove that investment in land power multiplies the effectiveness of the integrated force. A corps that cannot command cannot deter; credible deterrence demands command, capability and communication.

¹⁵Tristan Kreetz, Rebecca Lucas, Ondrej Palicka, Jacob Parakilas & Paul Van Hoof, *Learning and remembering under fire*, (RAND, November 2025), p. 11.

¹⁶NATO, *Interoperability is the Human and Digital Foundation of NATO's Military Power*, (NSO, May 2026).

ARMY REFORM: BUILDING A SYSTEM TO PROVIDE THE GOVERNANCE OF DELIVERY

THE Strategic Defence Review (SDR) and Defence Investment Plan (DIP) set a clear ambition for a Defence organisation that can deter, fight and win in a more dangerous and rapidly changing world. Delivering that ambition requires more than investment in military capability. It demands fundamental reform of how Defence is organised, governed and managed. Defence Reform and the implementation of the new Defence Operating Model seek to provide the framework to make Defence simpler, clearer, better and more integrated, enabling faster decisions, stronger accountability and more effective delivery.

While these reforms span the whole Defence enterprise, their success depends on implementation within military commands. For the Army, this is not simply an activity to align interfaces, processes and structures; it is an opportunity to strengthen how we generate readiness, manage resources and support the wider integrated force. As a key contributor to Defence outputs, the Army plays a critical role in enabling, underpinning and amplifying Defence outcomes.

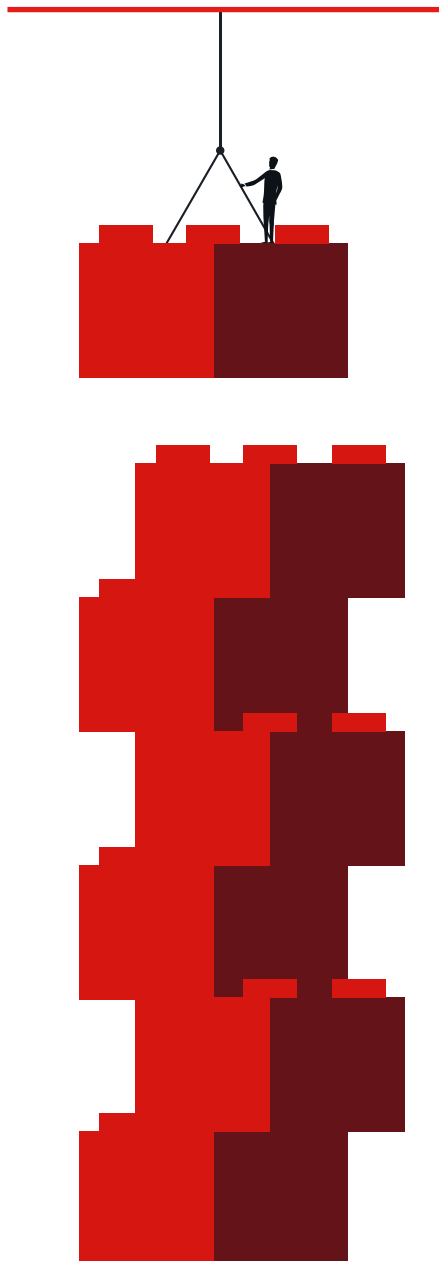
The 1st of April 2026 marked the shift from design of the reformed model to making it work in practice through implementation. New structures, responsibilities and governance arrangements are being embedded across Defence, supported by better management information, digital tools and simplified processes. In the Army this is being driven by a reformed Army Headquarters configured to deliver warfighting priorities and to operate in this new Defence system. The challenge is to ensure that these changes lead to measurable improvements in performance, decision-making and delivery.

This article explores how the Army is helping to build the governance system needed to realise the ambitions of both the SDR and DIP. It examines how clearer accountabilities, improved performance management and better use of data can strengthen Army delivery while contributing to a more effective 'One Defence' approach. In doing so, it highlights how Army Reform is not only

AUTHORS

Colonel Alexander Rivett is Assistant Head Army Reform in the Army Headquarters.

Hazel Stone is Deputy Head Army Design Authority in the Army Headquarters.



supporting Defence transformation but creating the conditions such that the land domain remains a decisive component of the integrated force.

ACCOUNTABILITY AND DECISION-MAKING

At the heart of Defence Reform is the principle that accountability drives structure. The Defence Operating Model addresses one of Defence's long-standing weaknesses: fragmented responsibility and unclear decision-making. The new model establishes clear lines of authority and accountability from the Defence Board through the Executive Committee, the four Defence areas, strategic cycles and delivery organisations. Decisions are taken at the lowest appropriate level, but accountability remains traceable to an individual rather than a committee or forum. The RAPID [Recommended, Agree, Perform, Input, Decide] decision framework ensures that decision rights, responsibilities and escalation routes are explicit, reducing duplication and accelerating delivery.

This is critical to delivering the DIP because it aligns responsibility directly with outcomes and resources. The strategic planning cycle fuses strategy, policy and resource decisions, ensuring investment decisions remain aligned to Defence priorities rather than organisational interests. At its core is a system that ensures Defence operates as a single enterprise rather than a collection of competing institutions.

Within the Army, these principles are mirrored through reforms to headquarters structures and responsibilities. The establishment of a single Army headquarters that combines the levers of activity and force design with the control and balance functions drives clear accountability and decision-making. This construct ensures that the Commander Land Forces, Deputy Chief of the General Staff, Assistant Chief of the General Staff and Director Resources are directly aligned to the Military Strategic Headquarters and the wider Defence system through the strategic cycles. The Army headquarters model ensures that the distinct but mutually supporting outputs that underpin the Army strategic objectives are appropriately considered as one system better configured

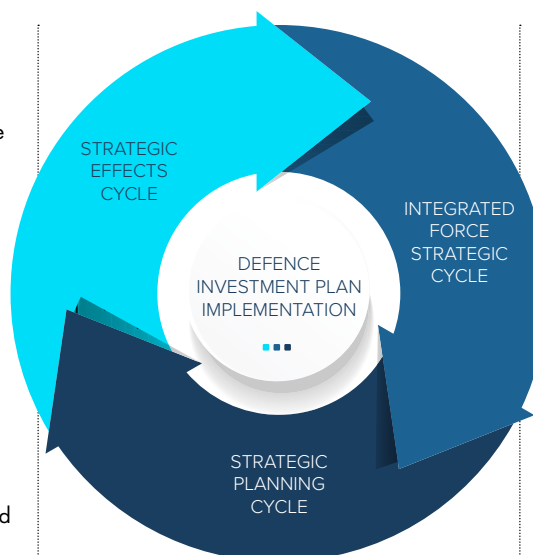
to draw together all available levers to deliver strategic advantage. This is driven by the Army strategy and campaign plan that provide the critical path for delivery and drive better-prioritised decision making. Across the Defence system clear accountability for delivery across an integrated enterprise system seeks to create the conditions for faster decisions, better prioritisation and more effective implementation of land domain contributions to the DIP.

FORCE DEVELOPMENT

Force development is the fundamental mechanism by which strategic advantage is generated and maintained. The SDR's demand for a more lethal, integrated and adaptable force requires a system capable of rapidly converting operational need into delivered capability. The integrated force strategic cycle provides that system. By bringing together Military Strategic Headquarters, National Armaments Director Group, industry, science, users and policy teams, the integrated force strategic cycle intends to create a coherent process that links force design, capability planning and capability delivery.

Central to this approach is the National Armaments Directorate construct, portfolio management and spiral development. This places delivery to the warfighter as the driving principle. Rather than pursuing linear capability programmes, portfolios enable Defence to prioritise investment dynamically and exploit innovation at the pace of relevance. Spiral development allows capability to be delivered iteratively, placing adaptive capability into the hands of the user earlier while continuing to evolve against changing threats. The portfolio system is specifically designed to increase agility, accelerate innovation pull-through, improve interoperability with NATO allies and ensure capability remains operationally relevant.

For the Army, force development is driven by operational design and threat assessment. The threat and the mission threads to address it are the pre-eminent drivers of force design. Army force development therefore considers simultaneously the Army in the field, the Army of the near future and the Army of the future, creating a coherent pathway from adaptation and warfighting development today to a fifth-generation land force as part of the integrated force. A shift in the responsibilities across the force development system to a more centralised approach requires a fundamental adjustment to the operating model to support it. Crucially, the military commands, as the users, are central to this process. Their role in identifying operational need, driving



experimentation and informing force design ensures capability development remains grounded in the operational imperative.

The force development system being delivered through Defence Reform, and specifically the National Armaments Directorate, represents the most significant change brought about through Defence Reform. It is fundamental to the delivery of the DIP and specifically to generating a fighting system that appropriately harnesses survivable, attritable and consumable capabilities at a pace of relevance.

GOVERNANCE: STRATEGIC CYCLES

Governance is the engine that enables Defence structures, processes and systems to function. The strategic cycles established under Defence Reform provide the practical mechanism through which strategy, resource, force development and activity are integrated and governed across Defence.

The interaction between the strategic planning cycle, integrated force strategic cycle and strategic effects cycle is fundamental to implementing the DIP. Together they create a repeatable think-plan-do-review framework that integrates policy, resources, capability and operational activity into a single enterprise system.

The strategic planning cycle translates the SDR, Defence Strategy and Defence Plan into prioritised outcomes and resources. This is where strategy and policy are fused with financial decision-making to ensure that investment remains aligned with Defence priorities. The Army's strategy and emerging ten-year campaign plan will operate within and contribute to this framework. Led by the Assistant Chief of the General Staff and Director Resources in the Army Strategic Centre, supported by the Army Plans and

Resources Committee, this will dynamically manage priorities.

The strategic effects cycle develops and governs Defence activity through the Global Integrated Plan. For the Army, the Army operational estimate provides the critical input that links strategic ambition with operational activity, ensuring the full range of land domain levers are coordinated to generate strategic effect. The establishment of Land Forces within the Army Headquarters drives this coherence and ensures that all areas are contributing their efforts towards the pursuit of strategic advantage.

The integrated force strategic cycle delivers the integrated force. It translates strategic direction into force design, capability planning and delivery. Importantly, it enables continuous adaptation through quarterly reviews, annual planning cycles and the ability to respond dynamically to strategic shocks. For the Army Operating Model it is critical that the land domain input happens at the right points and in the right places to best harness the benefits of the enterprise system that is being developed. This will ensure that the land domain voice is fully integrated seamlessly across military commands, Military Strategic Headquarters and National Armaments Directorate in the delivery of the capabilities the Army needs.

Work continues to ensure that military commands are fully embedded within all three strategic cycles. Through force development, activity planning and operational design they provide the essential user voice that ensures strategy and the supporting resource and policy envelopes remain connected to delivery. This integration represents a significant shift from previous approaches with the intent of enabling more coherent governance and faster decision-making across Defence.

STRUCTURES

The other component of reform considered here is the structural alignment that will facilitate the delivery of the model. The Defence Operating Model is founded on an enterprise approach, where outcomes take precedence over organisational boundaries. This is particularly important for delivering the DIP, where success depends upon multiple organisations working together around capability and output-focused 'battlegroups' rather than traditional institutional silos.

The Army is also evolving to a model configured for warfighting and adaptation

rather than peacetime business as usual. In practice, this means operating as a team of teams, with expertise moving fluidly across organisational boundaries in support of areas that retain clear accountability for outputs.

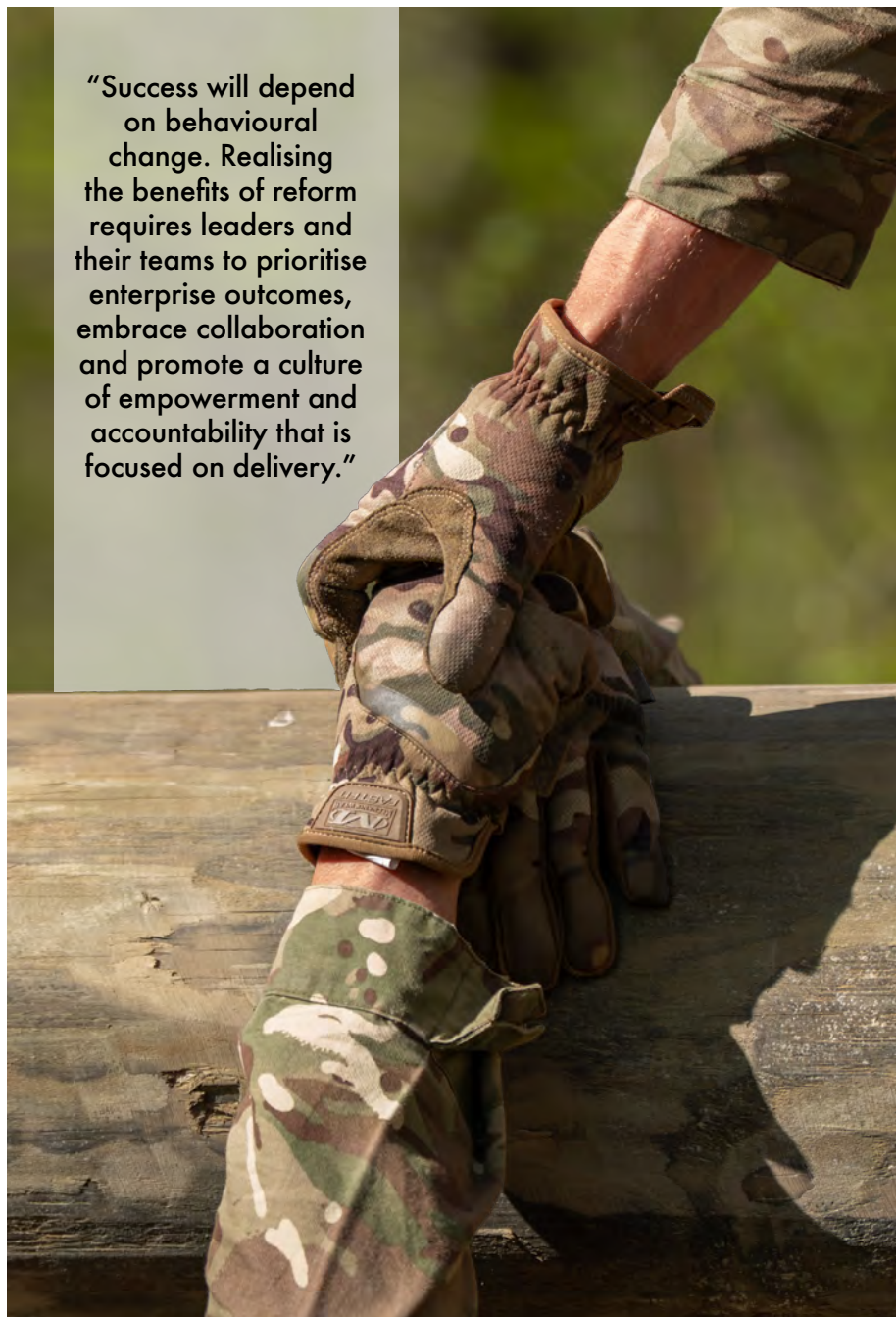
Army Reform supports this through the establishment of a single Army Headquarters construct, supported by cross-cutting service provision for efficiency and singular functional accountability for delivery. This is also delivering a stronger vertical alignment between Army Headquarters, Military Strategic Headquarters, Department of State and the National Armaments Director Group, and commonality with the other military command HQ models. This alignment improves coherence between strategy, operational prioritisation, force development, capability management and delivery. Rather than operating through disconnected functional communities, Army headquarters structures increasingly support integrated delivery teams capable of responding rapidly to changing priorities. This new paradigm is dependent on cross-boundary collaboration and crucially an organisational culture of high trust that the wider enterprise will deliver – our ability to resource the model with our people and to deliver at the pace necessary to defeat our adversaries depends on this.

Supportive of the function and form described is digitalisation as a critical enabler. Common data environments, digitised capability management plans and improved management information create a shared understanding of performance, readiness, capability and resource. This common sight picture supports accelerated decision-making while enabling governance and accountability to operate effectively.

WHAT NEXT: REALISING THE BENEFITS

For Defence Reform and Army Reform the emphasis has shifted from design to rapid implementation, testing and consolidation. The announcement of the DIP is a critical forcing function to accelerate this process through a learn-by-doing approach to its implementation. The foundations have been established through new governance arrangements, clearer accountabilities, strategic cycles and force development processes. However, organisational change alone will not deliver the ambitions of the SDR and DIP. Success will be measured by whether the system produces better outcomes: faster decisions, improved readiness, accelerated capability delivery, threat driven adaptation, modernisation and investment, all contributing to a more integrated force able to deter, fight and win.

“Success will depend on behavioural change. Realising the benefits of reform requires leaders and their teams to prioritise enterprise outcomes, embrace collaboration and promote a culture of empowerment and accountability that is focused on delivery.”



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The next phase is therefore focused on embedding, testing and refining the model through practical application. As Defence continues to learn from implementation, the operating model will evolve through experience, performance measurement and continuous improvement. The key design principle endures: to build a system that is simpler, clearer, better and more integrated, while maintaining the agility required to respond to a rapidly changing threat environment.

For the Army, this means rapidly maturing the new Army Headquarters model within the evolving Defence Reform model as it is established by April 2027. The changes brought forward on 1 April 2026 have ensured that the Army continues to be a fast follower to these reforms and is well placed to drive through implementation.

The transition to portfolio-based capability delivery, the establishment of the strategic cycles as the One Defence governance regime, and the increasing functionality and responsibilities associated with the Military Strategic Headquarters, Department of State and National Armaments operating models are the most significant areas that the Army will need to align and integrate to over the coming months. Most importantly, success will depend on behavioural change. Realising the benefits of reform requires leaders and their teams to prioritise enterprise outcomes, embrace collaboration and promote a culture of empowerment and accountability that is focused on delivery. A One Defence approach is not just a strapline but the critical path for a Defence programme of reform that is essential to being able to deliver the SDR level of ambition set out in the DIP.



HOW LAND POWER CAN HELP REBUILD THE UK'S STRATEGIC BASE

AUTHOR

Colonel Rupert Kitching is Assistant Head Army Strategy London and has cohered Army inputs into the Strategic Defence Review and Defence Investment Plan over the last three years.



THE Defence Investment Plan (DIP) is more than another phase of military modernisation or a mechanism for prioritising equipment. It recognises that defence investment must strengthen military capability and national security while reinforcing the foundations of national power: industrial capacity, technological edge, human capital, sovereign supply chains, regional growth, resilience and the ability to act independently, in coalition or through alliance in a more dangerous world. In an era of strategic competition, disrupted supply chains and accelerating technological change, defence is not simply a cost of security; it is an investment in national strength and renewal.

This is especially true of the Army and the land domain. Land power is often viewed narrowly through force structure, yet land capability sits at the intersection of systems, data, people, technology and industry, drawing on a broad base, and can generate value well beyond the delivery of military capability alone. Investment in modern land forces stimulates British manufacturing, supports advanced engineering, drives digital transformation, sustains skilled jobs, develops human capital and anchors sovereign capability in the UK industrial base. Properly designed, Army investment can catalyse reindustrialisation and technological advantage rather than merely feed a procurement pipeline.

The Army's emerging role as an engine

for national strength captures this wider purpose. It is not only a fighting force held at readiness for deterrence, crisis and war, but a national institution that contributes to growth, supply chains, talent, technical skills, community resilience, industrial partnership and operational innovation. Where economic security, technological sovereignty and military readiness are inseparable, the Army should be judged not only by what it can deploy as part of the integrated force and NATO, but by the resilience and prosperity it helps to build.

DEFENCE INVESTMENT AND THE NEW STRATEGIC CONTEXT

The UK's strategic context has changed decisively. Persistent competition, war in Europe and the Middle East, long-range precision fires, drones, contested supply chains and the race for technological advantage all show that deterrence depends on industrial and national depth as much as force design. Armed forces cannot deter credibly without magazine depth, resilient supply chains, secure communications, sovereign repair capacity, assured critical components and the ability to regenerate at scale. The Strategic Defence Review places greater emphasis on resilience, industrial mobilisation and the integration of defence with wider national policy and whole-of-society effort; the DIP provides the framework for executing it.

COVID-19 exposed the fragility of global supply chains and just-in-time procurement.

Ukraine has shown that land warfare remains intensely material and that peacetime production models are inadequate for high-intensity consumption rates. Sustained operations depend not only on advanced systems, but on industrial capacity: the ability to manufacture, replenish and adapt faster than an adversary. Adaptation cycles are shortening; technologies are tested, modified and fielded in weeks. Drones, AI, satellite communications, additive manufacturing, autonomy and open-source intelligence are critical to decisive advantage. Industrial endurance is a strategic capability, strengthening security, resilience and prosperity. Defence investment should therefore be treated as a principal instrument of economic policy, not as its competitor.

UK over-the-shoulder support to Ukraine has provided unique access, vital lessons and generated tempo, capability and invaluable intellectual property. The UK has become a market leader in uncrewed systems, but others are closing fast. The DIP must leverage this clear competitive edge and first mover advantage to create a self-perpetuating cycle of innovation, UK intellectual property, private investment, high-end skills, industrial and economic growth. Further, it can rebuild national capacity where sovereign capability is essential, while using Defence demand to energise the wider economy. The Army is central to that opportunity because of the scale, diversity, market potential and industrial intensity of land capability.

LAND POWER AS AN INDUSTRIAL MULTIPLIER

The Defence Industrial Strategy recognises ground combat systems as a national security priority, and land force modernisation as an economic growth priority. Land investment has a distinctive economic profile, drawing on a broad ecosystem – heavy engineering, vehicle design, armour, propulsion, energetics, sensors, communications, robotics, munitions, logistics, software, training systems, simulation, data infrastructure, cyber protection, power generation, construction and sustainment. This breadth allows Army investment to generate value across regions and sectors.

Land capabilities are embedded in the nation's industrial, manufacturing and engineering base. They depend on engineers, systems integrators, welders, software developers, data scientists, project managers, specialist trades, technicians and sustainment teams. They also require through-life support: maintenance, upgrades, spares, software refresh, sensor integration, training support and life extension. Structured around strategic

partnerships, this can create long-term relationships between Defence, industry and local workforces, support apprenticeships, protect specialist skills and give companies confidence to invest in plant, tooling, research and people.

This is where the DIP can stimulate innovation, reinforce sovereignty and support modern 21st century reindustrialisation: a digitally enabled, exportable, resilient and technologically sophisticated industrial base. Land domain investment can help build advanced factories, flexible production lines, sovereign repair hubs, digital engineering environments, modular manufacturing and supply chains able to scale under pressure. A nation with strong manufacturing, innovative research institutions and a skilled workforce has the foundations for enduring military advantage.

Defence investment stimulates domestic supply chains and encourages private-sector investment and research and development. Its demand reaches far beyond the prime contractor, supporting small- and medium-sized enterprises that provide specialist components. Reduced uncertainty gives industry confidence to invest in technologies, advanced manufacturing and expanded capacity that may otherwise be commercially unviable. It helps retain specialist workforces and technical expertise that are costly to regenerate if lost. Defence procurement can therefore function as, and help derive, industrial policy – shaping innovation ecosystems, stimulating complementary private investment (as envisaged in the nascent Defence Finance and Investment Strategy) and creating high-value employment across sectors. In doing so, it supports national productivity and long-term competitiveness.

SOVEREIGN CAPABILITY AND STRATEGIC INDEPENDENCE

Sovereign capability is the practical ability to design, produce, integrate, maintain, adapt and regenerate critical capabilities without being wholly dependent on others. In peacetime, dependence can appear efficient; in crisis, it can become strategic vulnerability; a strong industrial base cannot be improvised. If a nation cannot replenish munitions, repair or replace equipment, protect networks or adapt systems to changing threats, its freedom of action is constrained. For the Army, sovereignty matters most in munitions and energetics, secure communications, tactical networks, cryptography, battlefield management tools, electronic warfare, counter-drone systems, protected mobility, robotics, sensors and command systems.



FORGING AHEAD: STRENGTHENING A CRITICAL CAPABILITY

Industrial capability cannot be taken for granted. Once specialist facilities, skills and supply chains have been lost, recreating them can take years. Sheffield Forgemasters illustrates how sustained public investment can restore a strategically important capability while creating wider benefits for the national industrial base.

In July 2026, the government announced the return of forged artillery-barrel production to the UK after an absence of almost two decades. Under a £61 million contract awarded to BAE Systems, Sheffield Forgemasters is producing the forgings required for a programme to supply Ukraine with 150 105mm and 155mm barrels. The first four were shipped as development forgings, enabling Ukraine to test its finishing and integration processes, while production in Sheffield had reached eight forgings a month. The programme supports hundreds of jobs, and more than 60 UK supply-chain businesses stand to benefit.

This work sits within a much larger programme of renewal. The Ministry of Defence-owned company is undergoing a £1.3 billion recapitalisation, including construction of a new 13,000-tonne forging line and a 30,000-square-metre machining hall. These facilities will underpin future UK defence manufacturing, while Forgemasters' underlying steelmaking capabilities also have applications in civil nuclear and offshore energy.

The broader lesson is that industrial resilience requires long-term commitment. By investing in facilities and skills before they disappear, government can preserve strategically important options, rebuild productive capacity and create an industrial base able to respond when demand increases.

The UK does not need to produce everything domestically. Sovereignty is not a retreat from international collaboration or global trade. But the UK must distinguish between areas suited to trusted collaboration and those requiring national control. Sovereignty lies not only in intellectual property or final assembly, but in supply-chain depth: materials, sub-components, software, integration skills, testing facilities, certification authorities and specialist labour. Defence investment should map operational risk onto industrial risk, then use military requirements to build resilience where capabilities cannot be reliably outsourced in crisis.

The UK must retain domestic expertise and production capacity where external dependence would create unacceptable strategic risk, particularly the ability to upgrade and update previously procured capabilities. The objective is resilience, not autarky: ensuring the nation is resilient and self-sufficient when supply chains are contested or disrupted. Land-domain missions must be translated into industrial priorities linked to UK strengths and gaps. Where the UK has advantage, investment should scale it; where it has vulnerability, investment should rebuild it; where allies offer complementary strengths, partnership should secure mutual resilience rather than one-way dependency.

A robust domestic industrial base enhances credibility in international markets. Sovereign capability provides the confidence to develop and market British-designed systems overseas. Exports reduce unit costs through efficiencies and scale, sustain jobs and innovation, and deepen strategic relationships. Export success depends on credibility. British Army adoption of modern, properly supported capabilities signals confidence to partners, making the Army both customer, reference user and ambassador for UK technology. In an increasingly competitive global defence market, domestic procurement and export performance are indivisible.

DEFENCE AS A CATALYST FOR INNOVATION AND DUAL-USE TECHNOLOGY

Defence has long catalysed innovation, and the DIP should exploit that role deliberately. Innovation should not be a decorative layer added to procurement, but a core mechanism for advantage. Innovation only matters if successful ideas can transition into funded capability through clearer routes from trial to adoption. The land domain is especially fertile. The Army operates in the most demanding, complex, contested and human environment, providing an exacting testbed for technologies

with wider national application: autonomous logistics, resilient communications, human-machine teaming, advanced batteries, deployable energy, data-driven maintenance, medical technologies, synthetic training, cyber-resilient systems and advanced manufacturing. Land systems are often cheaper and faster to deliver than exquisite platforms requiring marinisation or airborne integration. Many wider defence capabilities, including deep precision strike, long-range precision fires, directed energy weapons and air defence, are initially developed and tested on and from the land.

Many technologies central to future land power are dual-use and transferable: AI, autonomy, robotics, secure cloud architectures, digital twins, advanced communications, quantum technologies, additive manufacturing, energy storage and space-enabled services. Civilian innovation often leads development, but Defence can accelerate adoption by acting as a demanding first customer, providing scale and real-world environments in which technologies are tested, refined and

validated at pace. The military problem set can become a powerful driver of innovation, adoption and industrial modernisation.

Realising this requires a different acquisition approach. Traditional procurement is too slow for rapidly evolving technologies. Defence must match commercial and technological tempo: reducing bureaucracy, expanding permissions, experimenting, buying in smaller quantities, learning quickly and scaling success while maintaining discipline, safety and value for money. Speed itself is a capability in autonomy, drones, electronic warfare, software, AI-enabled decision support and counter-crewed systems. Defence must also become a better customer: clearer about problems, faster in decisions, open to modular solutions and willing to share risk where national advantage is at stake. Rapstone, working with Director Integrate and National Armaments, is making good progress in this sphere.

Through the Land Training System (and projects such as the Defence Uncrewed Systems Centre and associated Joint



BOXING CLEVER: PARTNERSHIP AS A ROUTE TO NATIONAL CAPABILITY

Strategic partnership should offer more than a conventional relationship between customer and supplier. The UK Boxer programme illustrates how sustained cooperation between government, industry and international partners can deliver military capability while strengthening national freedom of action.

The UK rejoined the multinational Boxer programme in 2018 as a project partner. Managed through OCCAR [Organisation for Joint Armament Co-operation], that status restored rights arising from the UK's original role in the vehicle's design, development and testing. It also gave the UK access to the necessary intellectual-property rights and greater influence over the allocation of supply-chain work, including the option to build and export Boxer from the UK. Delivery brings together the Ministry of Defence, OCCAR, the ARTEC consortium, Rheinmetall BAE Systems Land in Telford, KNDS UK in Stockport and suppliers across the country. In 2025, the first Boxer manufactured entirely in the UK was unveiled. The Ministry of Defence reported that around 75 per cent of its components were sourced domestically, with production supporting approximately 400 jobs in Telford and Stockport and 1,000 across the wider supply chain.

Boxer is not a model of national self-sufficiency. Rather, it demonstrates the value of purposeful partnership: combining allied knowledge and experience with sufficient domestic rights, skills and productive capacity to give the UK a meaningful role in the capability's development. Strategic partnerships work when Defence and industry are aligned around enduring capability, rather than simply the delivery of equipment.

Task Force) and close industry partnership, experimentation, exercises, operational analysis and user feedback can create a continuous innovation cycle. Soldiers identify problems, industry proposes solutions, prototypes are tested, data is gathered and capability improves. Operational pressure becomes technological momentum, creating demanding use cases that benefit the wider economy.

Successful integration depends on stronger collaboration between government, industry, Defence growth deals, universities, investors, small- and medium-sized enterprises and technology firms that may not naturally see themselves as Defence suppliers. The DIP can support national technological advantage by connecting Defence requirements to the UK innovation ecosystem. The Army, acting as convener, can broaden the industrial base by creating accessible pathways to test environments, intellectual property protection, security accreditation and routes from prototype to contract, reinforcing its role as an engine for national strength.

SKILLS, TALENT AND THE NATIONAL WORKFORCE

The Army's contribution to national strength is also human. Its people are the point of difference in fighting power and a significant national asset. The Army People Plan – join well, develop well, leave well – positions the Service as a lighthouse in the national skills landscape: recruiting widely, training deeply, developing through-career, assuring standards and returning skilled people into the wider economy during and after service. It is a proven model of skills at scale, generating recognised competence in volume while widening access to opportunity.

Fifth-generation land forces need soldiers and civilians able to operate digital systems, manage data, maintain advanced platforms, integrate sensors, understand electronic warfare, exploit robotics and AI, and lead and sustain forces in demanding environments. Technological advantage therefore depends not only on equipment, but on people with the skills, confidence and judgement to operate, adapt, sustain and improve it. DIP investment in equipment must be balanced by investment in national skills and talent; otherwise Defence risks buying technology faster than it can generate the workforce to employ, maintain, improve and export it.

The Army's contribution begins with access. It recruits people with low or no formal qualifications and gives them structured development through functional skills, targeted support, apprenticeships, STEM [Science,



“The Army People Plan positions the Service as a lighthouse in the national skills landscape: recruiting widely, training deeply, developing through-career, assuring standards and returning skilled people into the wider economy.”

Technology, Engineering and Mathematics] pathways, nationally recognised qualifications and clear progression routes. This is not simply welfare or education; it is a productivity intervention. Functional skills underpin training effectiveness, operational safety, employability and progression. They enable soldiers to complete training, operate in technical roles, exploit apprenticeships, pass promotion gateways and contribute to the labour market after service.

The Army can strengthen a national skills pipeline by aligning workforce development with industrial strategy: vehicle programmes with advanced manufacturing; communications with digital and cyber skills; robotics with software and systems engineering; medical capabilities with life sciences; and logistics with data analytics and supply-chain management. Veterans and reservists move expertise between Defence, industry, public services and communities. This has regional significance where advanced manufacturing and technical skills matter. Many Defence sites, depots, training establishments and industrial partners sit outside London and the South East, where long-term Army investment can sustain skilled employment and build local ecosystems of units, contractors, colleges, innovation centres, testing facilities and supply-chain firms.

The Army should therefore be understood as a national skills institution as well as a

fighting force. It recruits talent from every part of society and uses education, training and progression to unlock potential that might otherwise remain unrealised. This creates military value through capable soldiers and leaders; social value by accelerating mobility beyond traditional educational pathways; welfare value through improved physical and mental health; and economic value as soldiers carry recognised qualifications, discipline, leadership, resilience and technical competence into the wider economy. The DIP should protect and enhance the skills ecosystem as part of the same national endeavour as platforms, munitions, infrastructure and industry.

FROM MODERNISATION TO NATIONAL RENEWAL

Framing the Army as an engine for national strength is a strategic proposition. It recognises that the Army draws on a broad national base and generates national value in five mutually reinforcing ways:

- By providing military capability for deterrence, crisis response and warfighting;
- By stimulating economic and industrial activity through demand;
- By building resilience and sovereign capability, expanding collaboration and enhancing export opportunities;
- By accelerating innovation by turning operational problems into technological challenges;
- By developing people and skills whose value extends beyond Defence.

The potential is significant, but not automatic. Defence investment will generate wider national strength only if designed to do so. This requires:

- Clarity of strategic demand;
- Procurement that balances speed, value and sovereignty;
- Defence that experiments, procures and scales more effectively;
- Strategic partnership with industry, building an ecosystem rather than a narrow supplier relationship;
- Talent and skills treated as a strategic resource, linked to apprenticeships, technical education, veteran transition, reserve expertise and workforce planning;
- The Army communicating its national value more effectively.

A stronger industrial base improves readiness; experimentation accelerates innovation and dual-use technologies; skilled people increase productivity; resilient supply chains strengthen deterrence; and exportable technology enhances influence. Properly invested in, land power generates compound national value and growth.



DEATH BY A THOUSAND COMPETITIONS

COMPETITION has an important place in public procurement. Used well, it can challenge incumbents, stimulate innovation and maintain pressure on performance and cost. But it is a tool, not a strategy, and the UK has come to rely on it almost regardless of the outcome required.

That matters in sectors such as defence, energy, transport and critical infrastructure, where government is not simply buying a product or service. It is relying on an industrial base that must retain specialist skills, facilities, technologies and supply chains over decades. These capabilities cannot be switched on when a contract is awarded and switched off when it ends. They must be deliberately built and sustained.

Yet the cumulative effect of repeated competitions is to make long-term investment increasingly difficult. Each procurement may appear reasonable in isolation, but together they create uncertainty about future demand, fragment programmes and make the return

AUTHOR

Louise Atkinson is CEO Land and Mission Systems at Babcock International Group and an Associate Fellow at the Centre for Historical Analysis and Conflict Research.



on investment harder to predict. Companies respond rationally: they delay facilities, recruit more cautiously, reduce investment ahead of contract and preserve flexibility rather than build capacity.

Government then asks why industry lacks the people, infrastructure or resilience needed to respond at pace. The answer, at least in part, is that the procurement system has made investing in them too risky.

No single competition causes this damage. It is the accumulation of hundreds of

individually defensible decisions that gradually weakens the industrial base. It is death by a thousand competitions.

COMPETITION DOES NOT CREATE CAPABILITY

National capability is not built through a succession of procurement events. It is built through sustained investment in people, infrastructure, technology and supply chains.

Skills take years to develop. Specialist facilities require patient capital. Supply chains mature through stable demand. Businesses commit resources when they can reasonably expect that the capability they create will be valued and used over time.

The UK's procurement model often creates precisely the opposite conditions. Companies are expected to invest ahead of demand while facing uncertain pipelines, repeated recompetitions and limited visibility of future opportunities. The rational response is greater caution. Recruitment slows, facilities are deferred and long-term capability

development gives way to preserving flexibility.

Government then finds itself concerned about shortages of critical skills, industrial resilience and national capacity. Yet these outcomes are not separate from procurement policy. In many cases, they are a consequence of it. A system that repeatedly introduces uncertainty into the market should not be surprised when the market reduces its willingness to make long-term investments.

THE VALUE-FOR-MONEY FALLACY

The central assumption underpinning the current model is that competition produces value for money. Sometimes it does. But a competitive process is not proof of value, and the lowest evaluated price is not necessarily the lowest long-term cost.

The system tends to reward organisations that are best able to navigate its rules. Successful bidders must understand the scoring methodology, optimise written responses, price against assumptions and make commitments that score well at the point of evaluation. Those are necessary procurement disciplines, but they do not necessarily identify the supplier most likely to deliver the best outcome over the life of a programme.

The distinction is important. Government may believe it has selected the best solution when it has, in fact, selected the bid best adapted to the evaluation framework. A capable supplier with a better long-term proposition can lose because its advantages do not convert neatly into points. An apparently cheaper offer can win even if it transfers cost, risk or dependency into the future.

This does not mean that procurement professionals are acting improperly. It means that even a well-run process can assess only what it has been designed to measure. If the model gives insufficient weight to resilience, delivery confidence, future upgradeability, domestic skills or freedom of action, good administration cannot recover those factors afterwards. A competition can be conducted impeccably and still produce the wrong strategic outcome. Process compliance should never be mistaken for value.

WHEN PROCESS REPLACES JUDGEMENT

This problem is clearest when government attempts to account for sovereignty. Sovereignty is not a label attached to the location of a factory. It is the practical ability to understand, control, modify, support and deploy a capability when national circumstances demand it. It includes access

"A competition can be conducted impeccably and still produce the wrong strategic outcome. Process compliance should never be mistaken for value."

to skills and intellectual property, control of critical decisions, security of supply and the ability to act without requiring the permission or commercial co-operation of another nation.

These considerations are difficult to reduce to a procurement score. Price, delivery dates and contractual commitments are relatively easy to compare. The future value of retained engineering knowledge, assured supply during a crisis or the ability to modify a system at speed is not. What is easiest to measure can therefore outweigh what is most important.

This can produce outcomes that are entirely compliant but strategically unsound. A foreign-controlled solution might achieve the highest score and offer the lowest initial price while leaving key design authority, upgrade decisions or supply-chain dependencies outside UK control. Every rule may have been followed, yet the UK could emerge with less freedom of action, fewer domestic skills and greater exposure during a crisis.

Imagine a competition in which the selected solution meets every technical requirement and offers an attractive initial price. Several years later, an urgent operational need requires the system to be modified. The relevant intellectual property and engineering authority sit overseas, export approval is required and the original supply chain is no longer available at the necessary pace. The procurement process has delivered exactly what was specified, but not what the country ultimately needed: control, adaptability and assured access.

The failure is not corruption or incompetence. It is the substitution of process for judgement. Good government requires both. Ministers and officials must be able to recognise that some considerations are too important to be treated as marginal adjustments within a generic scoring model.

THE EROSION OF TRUST AND PARTNERSHIP

Government rightly expects suppliers to behave as strategic partners. It asks industry to share costs, risks, technology plans, workforce challenges and investment intentions. It wants early transparency and, increasingly, investment ahead of formal demand.

However, the relationship is often one-sided. A supplier may invest in skills, facilities and supply chains over many years, while government retains the ability to recompute the work or change direction with limited regard for those commitments. Industry is asked to offer the openness and loyalty of a partner, while government preserves the freedom of a transactional customer.

That imbalance has consequences. Trust cannot deepen if one party is expected to expose its position fully while the other can walk away at any point. Suppliers protect themselves, investment is limited to secured contractual horizons and discussions become shaped by the next competition rather than the shared mission.

This is not an argument for unconditional commitments or protection from poor performance. Long-term relationships must be demanding, transparent and accountable. But government cannot reasonably expect partnership behaviours from industry unless it is prepared to offer partnership behaviours in return.

WHY SMALLER FIRMS NEED STRONG PRIMES AND NATIONAL CHAMPIONS

More competition is also often presented as the route to greater small and medium-sized enterprise (SME) participation. In practice, complex and repeated procurements can make public markets less accessible.

Large businesses can maintain bidding teams, absorb lengthy procurement costs and survive unsuccessful competitions. Many SMEs cannot. Their scarce technical leaders are pulled away from product development and delivery to interpret requirements, complete compliance returns and navigate processes with no certainty of revenue. For an innovative small business, the burden of participation may be enough to prevent participation altogether.

Strong sovereign primes can provide a better route into the market. They can identify promising technologies, integrate them into larger systems, help smaller companies meet demanding assurance requirements and provide access to programmes and export opportunities that SMEs could not reach alone.

The choice is therefore not between primes and SMEs. The strongest industrial model needs both. Sovereign primes provide scale, integration, accountability and endurance. SMEs contribute specialist expertise, pace and innovation. Government gains more choice when these firms operate as part

of a healthy ecosystem than when each is expected to navigate complex public procurement independently.

OTHER INDUSTRIES HAVE ALREADY MOVED BEYOND COMPETITION-AT-ALL-COSTS

Other mature industries have recognised that perpetual recompetition can destroy more value than it creates. Automotive manufacturers build enduring relationships with key suppliers to improve quality, productivity and innovation over time. Infrastructure programmes increasingly use strategic delivery partnerships to preserve knowledge and encourage continuous improvement. Pharmaceutical development relies on sustained collaboration between governments, researchers and manufacturers because investment and capability cannot be rebuilt for every individual requirement.

Competition remains present in each of these sectors, but it is applied selectively. Organisations may compete to enter an ecosystem, achieve a strategic role or demonstrate a new capability. Once relationships are established, performance is driven through transparent benchmarking, open-book arrangements, demanding outcomes and continuous challenge, rather than automatically rebuilding the commercial structure every few years. Defence and other sovereign sectors should have the confidence to adopt the same maturity.

A BETTER MODEL: GROWING CAPABILITY THROUGH STRATEGIC PARTNERSHIP

The alternative is not to abolish competition or protect incumbents from challenge. It is to

start with the outcome the country needs and choose the commercial model most likely to deliver it.

Open competition should remain the default where markets are healthy, requirements are genuinely contestable and switching suppliers would not damage critical capability. Where sovereignty, operational freedom or national resilience is at stake, government should instead identify the capabilities it needs to retain and establish long-term strategic partnerships with organisations able to sustain them.

Sovereign primes should sit at the centre of this approach, not as protected beneficiaries, but as accountable custodians of national capability. In return for greater confidence and longer-term visibility, they should be required to invest in UK skills, facilities, technology and supply chains; open meaningful opportunities to SMEs; support exports; improve productivity; and demonstrate value through transparent costs and measurable performance.

These arrangements must be demanding. Poor delivery should have consequences. Investment commitments should be tracked. Supply-chain access should be visible. Costs should be benchmarked and challenged. Competition can still be used at defined points, particularly for technologies, subsystems and new entrants, without destabilising the sovereign capability that integrates and sustains the whole.

This model would give industry the confidence to invest while giving government stronger levers over performance, resilience and national value. It would also create a more

accessible market for SMEs by giving them clearer routes into funded programmes through established primes.

The outcome would not be less competition, but better-directed competition. Not less accountability, but accountability for what ultimately matters. Not a closed market, but a deliberately constructed national ecosystem capable of evolving, innovating and responding in a crisis.

CONCLUSION: CAPABILITY MUST BECOME THE OBJECTIVE

The UK does not need to choose between competition and complacency. It needs to choose between indiscriminate competition and intelligent procurement.

The correct test is not whether a programme has been competed, but whether the chosen approach will deliver capability, resilience, innovation and whole-life value. If competition supports those outcomes, government should use it. If it fragments skills, deters investment, weakens sovereignty or undermines partnership, government should be prepared to use a better model.

Capability requires investment. Investment requires confidence. Confidence requires a relationship that extends beyond the next procurement cycle. The UK should therefore stop measuring success by the number of competitions it runs and start measuring the strength of the industrial base those decisions leave behind.

Competition should serve national capability. National capability should never be sacrificed in service of competition.

"Large businesses can maintain bidding teams, absorb lengthy procurement costs and survive unsuccessful competitions. Many SMEs cannot. For an innovative small business, the burden of participation may be enough to prevent participation altogether."





MINDING THE SHOP: BRAVE DEFENDER 1985

AUTHOR

Professor Andrew Stewart is Head of Conflict Research at the CHACR.



B RITISH home defence policy since the beginning of the Cold War represents an ongoing effort to balance the competing strategic priorities of domestic security, continental NATO commitments and peacetime financial constraints.¹ Within this often challenging historical construct, successive British governments have relied on national and regional exercises to validate operational concepts, evaluate civil-military coordination and test state resilience under war conditions.² The latest iteration of this, Operation Albiston Shadow, which is planned for 2027, will be the largest home defence exercise since the end of the Cold War.³ Led by the Cabinet Office, and with an accompanying public awareness campaign, the multi-day drill will reportedly involve ministers and hundreds of officials testing readiness against sub-threshold hybrid threats including cyberattacks, sabotage and critical infrastructure disruption.⁴

In the post-Second World War era, British home defence was reconstituted under the 1948 Civil Defence Act, establishing the Civil Defence Corps and Royal Observer Corps.⁵

These would have to deal with a new type of warfare, demonstrated by the attacks on the Japanese cities of Hiroshima and Nagasaki, but the secret 1955 Strath Report made clear that no adequate civil protection existed against a nuclear attack.⁶ During the 1960s,

¹British Home Defence Policy and Forces Since 1945', *Historical Note, Historical Branch (Army)*, 2001, 1; Lorna Arnold, *Civil Defence and Nuclear War Planning in Post-War Britain* (London: Palgrave Macmillan, 2012), 12; Steve Fox, *Strath to Square Leg: The Secret History of British Civil Defence and Continuity of Government Planning* (London: Routledge, 2018), 15.

²Beatrice Heuser et al (eds.), 'Military Exercises: Political Messaging and Strategic Impact', *NDC Forum Paper 26*, NATO Defense College Research Division, 2018, 301.

³'Britain Plans Largest Home-Defence Exercise in Decades to Test Hybrid-Attack Readiness', *Defence Matters*, 15 Jul. 2026; Louisa Brooke-Holland, 'Home defence: What is the War Book?', *Research Briefing, House of Commons Library*, 2 Sept. 2026.

⁴Deborah Haynes, 'UK will run the biggest home defence exercise in decades next year', *Sky News*, 15 Jul. 2026; Charlie Parker and Larisa Brown, 'Stockpile food, water and medicine to prepare for war, Britons to be told', *The Times*, 15 Jul. 2026.

⁵Arnold, 'Civil Defence and Nuclear War Planning...', 40.

⁶*Ibid.*, 67; Fox, 'Strath to Square Leg', 42.

as NATO command post exercises such as Fallex 62 and Fallex 66 simulated massive nuclear exchanges which appeared to confirm total administrative breakdown, Whitehall War Book exercises (Felsted and Invaluable) reached similar outcomes.⁷ Nonetheless, in 1968 the Wilson government stood down the Civil Defence Corps and placed civil defence on a 'care and maintenance' footing.⁸ By the late 1970s and early 1980s, rising superpower tensions and NATO's adoption of its Flexible Response doctrine (MC 14/3) revitalised domestic security planning.⁹ In September 1980 the Home Office-led Exercise Square Leg simulated a 132-bomb nuclear attack with 29 million casualties and harsh assumptions, such as enforcing a 'stay-put' policy and denying medical care to radiation casualties.¹⁰ This triggered a massive political backlash and over 140 municipal councils declared themselves 'nuclear-free zones', refusing to allocate funds for civil defence planning and forcing the cancellation, in July 1982, of Exercise Hard Rock just weeks after the successful conclusion of the Falklands conflict.¹¹ This prompted the Thatcher government to pass the Civil Defence Regulations the following year to legally compel municipal compliance.¹²

This was the background to Exercise Brave Defender, conducted from 2-13 September 1985, and the Cold War's largest home defence exercise. It represented a shift in thinking and purpose to those which had been conducted before and sought to resolve a fundamental strategic paradox: how to secure the domestic home base against

conventional sabotage while shipping the vast majority of regular military forces to mainland Europe.¹³ By the late 1970s, NATO strategy acknowledged an extended conventional phase preceding nuclear escalation.¹⁴ Under its General Defence Plan, Britain occupied an indispensable position as the primary European rear-area staging post and logistics hub.¹⁵ With the classified US-UK Lines of Communication (USUKLOC) Agreement, more than 100,000 American reinforcements, heavy armour, ammunition and fuel were scheduled to transit through British ports and airfields to reinforce West Germany within 48 to 72 hours of mobilisation. Concurrently, the British Army was obligated to transport the 1st British Corps (British Army of the Rhine) reinforcements comprising over 60,000 Territorial Army and regular personnel across the Channel and North Sea.¹⁶ At the same time, Soviet strategy emphasised deep conventional operations using special forces (Spetsnaz) to disrupt NATO's rear area and Western intelligence assessments revealed an intention of paralysing the reinforcement pipeline without immediately resorting to nuclear weapons.¹⁷ Supported by KGB covert agents and locally organised Fifth Column subversives, and inserted prior to or during the Transition To War phase via civilian trawlers, midget submarines, commercial airliners and parachute, Spetsnaz troops were to launch asymmetric attacks on high-value military installations, radar nodes, telephone exchanges, nuclear power facilities and embarkation ports.¹⁸

Rather than simulating an immediate nuclear exchange like Square Leg, Brave Defender was, therefore, designed as a high-intensity, conventional rear-area security exercise.¹⁹ Supported by colleagues across government who believed it would show the government was "taking its Home Defence responsibilities seriously", Defence Secretary Michael Heseltine determined a national stress-test was needed to check remaining home-based troops, Territorial Army reserves and civil police could successfully "mind the shop" and protect against the saboteurs.²⁰ For this, the British Army served as the exercise's central pillar and primary operational component.²¹ Out of approximately 65,000 total participants mobilised across Great Britain, over 55,000 were British Army personnel, comprising regular army infantry units, home-based logistics corps, the Territorial Army (TA) and the newly created Home Service Force (HSF).²² Operational command was exercised by General Sir Nigel Bagnall (and later General Sir John Akehurst) as Commander-in-Chief, United Kingdom Land Forces (CINCUKLF), operating from the subterranean Joint Headquarters at Wilton, near Salisbury.²³ The UKLF exercised command

⁷Arnold, 'Civil Defence and Nuclear War Planning...', 75; Ian Klink, 'Simulating Doomsday: NATO Exercises Fallex and the Politics of West German and British Emergency Law', *Journal of Cold War Studies* (Vol.20, No.3; 2018), 412; Fox, 'Strath to Square Leg', 44, 253, 270.

⁸Arnold, 'Civil Defence and Nuclear War Planning...', 140; 'British Home Defence Policy and Forces Since 1945', 4.

⁹Prof. Sir Lawrence Freedman, 'Beyond Deterrence', *Comment is Freed*, 4 Dec. 2024.

¹⁰Fox, 'Strath to Square Leg', 224, 226; Arnold, 'Civil Defence and Nuclear War Planning...', 189-190.

¹¹*Ibid.*, 247; John Munnion and Philip Bolsover (eds.), *CND - Now More Than Ever: The Story of a Peace Movement* (London: Allison & Busby, 1983), 112.

¹²Arnold, 'Civil Defence and Nuclear War Planning...', 250; William Whitelaw to Margaret Thatcher, 26 Feb. 1982, *National Archives, London* (hereafter 'TNA'), PREM 19/689.

¹³'Statement on the Defence Estimates 1986', *Command Paper Cmnd 9763* (London: HMSO, 1986), 30; 'Memorandum by the Secretary of State for Defence on the 1985 Defence Estimates', *Cabinet Paper C(85)8*, 25 Mar. 1985, 9-10, *Margaret Thatcher Papers, Churchill College Cambridge*.

¹⁴Roger Facer, 'Staff College Studies in NATO Crisis Management: The WINTEX-CIMEX Exercises', *Defence Studies Monograph* (London: Ministry of Defence, 1991), 15; Kenton White, 'Mearnsheimer's Folly: NATO's Cold War Capability and Credibility', *Infinity Journal* (Vol.6, No.4; Summer 2017), 22-31; 'How Soviet Red Berets Target Britain's Nuclear Heartlands', *The Sunday Times*, 25 Aug. 1985; Ilana Kass, 'Soviet Special Purpose Forces (Spetsnaz) and Rear Area Sabotage', *Orbis (A Journal of World Affairs)* (Vol.30, No.4; 1987), 88.

¹⁵Nuclear Information Service, 'UK Home Defence, US Lines of Communication and Emergency Powers', *Special Report* (Reading: NIS, 1986), 413.

¹⁶'Memorandum by the Secretary of State for Defence on the 1985 Defence Estimates', 9-10; 'Statement on the Defence Estimates 1989', *Command Paper Cm 675* (London: HMSO, 1989), 12.

¹⁷Kass, 'Soviet Special Purpose Forces...', 112.

¹⁸Headquarters United Kingdom Land Forces, 'Exercise Brave Defender 85: UKLF Standard Operating Procedures', *Military Doctrine Manual* (Wilton: HQ UKLF, 1985), 4; 'Mock Red Saboteurs Repelled at Radar Sites', *The Daily Telegraph*, 5 Sept. 1985; 'Spetsnaz Threat Prompts Overhaul of Home Defence Reserves', *The Daily Telegraph*, 29 Dec. 1986.

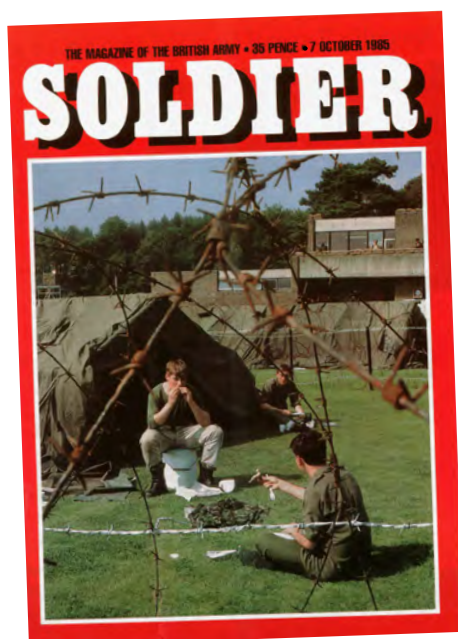
¹⁹'Exercise Brave Defender 85: Post Exercise Report (PXR)', *Ministry of Defence Director of Military Operations, 1986*; 'Massive Home Defence Exercise Announced for Autumn', *The Daily Telegraph*, 23 Mar. 1985; 'Statement on the Defence Estimates 1986', 30.

²⁰'Memorandum by the Secretary of State...', 25 Mar. 1985; Leon Brittan (Home Secretary) to Heseltine, 25 Jul. 1984, HO322/1038, TNA; '65,000 Troops to Test Homeland Security in Operation Brave Defender', *The Daily Telegraph*, 9 Aug. 1985.

²¹'Post Exercise Report (PXR)', 'The British Army's Cold War Defence Test: Exercise Brave Defender 1985', YouTube, <https://www.youtube.com/watch?v=3sGk1UOz3-g>

²²'Statement on the Defence Estimates 1986', 30; '65,000 Troops to Test Homeland Security in Operation Brave Defender'.

²³'UKLF Standard Operating Procedures', 2.



Cover story: A photo of a simulated 'prisoner of war' camp at Blackdown, part of Exercise Brave Defender, took lead billing on the front cover of *Soldier* on the 7th October 1985.

across nine geographic Army Districts, each under a 2* lead who assumed tactical control of all military, naval, air force and civil police assets within their boundaries.²⁴ The exercise offered the definitive operational test of the Army's 'One Army' concept, fully integrating regular and volunteer reserve formations into a single fighting force.²⁵ For the exercise, the Army coordinated tri-service integration alongside Royal Navy shore establishments, Royal Marines Reserve units and Royal Air Force Regiment squadrons defending RAF airfields.²⁶ It also managed civil-military liaison, deploying joint regional liaison officers to police headquarters to coordinate vehicle check points and traffic controls under 'police primacy'.²⁷

²⁴Ibid., 3; Headquarters United Kingdom Land Forces, 'UKLF Formation Standard Operating Procedures: Part 1 - Military Home Defence' (Wilton: HQ UKLF, 1989), 2.

²⁵Michael Heseltine to Thatcher, 24 Mar. 1983, PREM 19/2534, TNA; George Stein, 'The Home Service Force: Auxiliary Manpower and British Homeland Security in the 1980s', *Journal of Strategic Studies* (Vol.10, No.4; 1987), 440; 'Statement on the Defence Estimates 1986', 31.

²⁶'Post Exercise Report (PXR)'.

²⁷'Statement on the Defence Estimates 1986', 31; 'Police and Military Test Joint Checkpoints as Brave Defender Begins', *The Daily Telegraph*, 30 Aug. 1985.

²⁸'Brave Defender Exposes Strengths and Vulnerabilities in Reserve Logistics', *The Times*, 7 Sept. 1985; 'War Games on the Home Front: Evaluating Operation Brave Defender', *Sunday Times*, 8 Sept. 1985.

²⁹Stein, 'The Home Service Force...', 438, 443-444; 'The British Army's Cold War Defence Test: Exercise Brave Defender 1985', 'Guarding the Doomsday Keys: Home Service Force in Action', *Daily Mail*, 5 Sept. 1985.

³⁰Ibid., 442; 'Minute to Prime Minister's Office regarding Exercise Brave Defender and Home Service Force Expansion', 22 Mar. 1985, PREM 19/1442, TNA.

³¹'UKLF Standard Operating Procedures', 4; 'United Kingdom Home Defence Plan: Parts 1 and 2', Joint Doctrine Centre, 1989 (amended 1991), Chapter 4.

³²Stein, 'The Home Service Force...', 444; 'Dad's Army Proves Its Mettle in Midnight Skirmishes', *Daily Mail*, 6 Sept. 1985; House of Commons, 'Debate on the Army and Reserve Forces Expansion', Hansard Official Report, Vol.108, Col.374, 13 Jan. 1987.

³³'UKLF Standard Operating Procedures', 6-7; 'Post Exercise Report (PXR)'; Stein, 'The Home Service Force...', 445; 'Operation Brave Defender Ends with Mass Airborne Assault in Norfolk', *Daily Telegraph*, 14 Sept. 1985.

³⁴'Post Exercise Report (PXR)'.

³⁵'UKLF Standard Operating Procedures', 2.

³⁶'Spetsnaz Infiltration Threat Dominates Home Defence Scenario', *Daily Telegraph*, 2 Sept. 1985.

³⁷'Mobilisation Orders Issued Across Britain for Brave Defender', *The Times*, 3 Sept. 1985.

³⁸R.L. Galloway, 'Defending the Realm on the Ground: Tactical Experiences of 300 Squadron HSF in Exercise Brave Defender', *Military History Journal* (Vol.12, No.2; 1986), 419.



In addition to TA home defence infantry battalions (such as 5th Battalion, Royal Regiment of Fusiliers and 4th Battalion, Green Howards), mobilised from civilian life and moved to assigned defensive sectors within 24 hours, were personnel from the HSF.²⁸ Conceived in 1982 by Defence Secretary John Nott, and expanded under Heseltine, recruitment was strictly restricted to former regular, TA or police veterans with a minimum of two to three years of prior service. This meant volunteers brought pre-existing weapons proficiency, fieldcraft and discipline, eliminating the need for basic training.²⁹ As an auxiliary branch of the TA, the HSF was specifically designed for static guard duties at Key Points (KP).³⁰ The Ministry of Defence (MoD) had established a national registry of critical installations, categorised into four tiers. Type I KPs were high-priority military command nodes, RAF strike bases (Coningsby, Marham and Coltishall), US Air Force nuclear facilities (Greenham Common, Fairford, Upper Heyford and Mildenhall) and submarine bases. Next were primary civil/military telecommunications nodes, main switching centres, British Telecom microwave towers and military fuel pipelines. Type III KPs were the major sea embarkation ports (Southampton, Portsmouth, Felixstowe and Dover), railway marshalling yards, regional oil refineries and grid control centres. And finally, Type IV KPs were civil administration centres, regional food buffer depots, municipal water processing plants and secondary transport nodes.³¹

The HSF sat at the top of the Army's three-tier home defence operational hierarchy. Tier 1 (Static Key Point Defence) was formed by its

companies, along with static TA platoons, deployed directly to conduct perimeter watch, guard entry gates and provide immediate point defence against initial sabotage attempts.³² Tier 2 mobile reaction forces, formed by regular and TA infantry companies equipped with soft-skinned Bedford four-tonne trucks and Land Rovers, were stationed at central tactical hubs and tasked with patrolling assigned Ground Defence Areas (GDAs) and rapidly reinforcing any KP under active attack. Finally, Tier 3 was the Strategic Reserve, high-readiness regular formations, primarily 5 Airborne Brigade (including 2 and 3 PARA) and 1st Infantry Brigade, which were held under direct CINCUKLF control. Their role was to conduct rapid air-mobile or parachute counter-attacks against major enemy airborne or amphibious penetrations.³³

In terms of how the exercise was conducted, there were three distinct operational phases testing home defence procedures from initial mobilisation to tactical engagement and strategic counter-attack.³⁴ The exercise commenced on 2 September with the simulated escalation of international tension in Europe (codenamed Red Rum).³⁵ This was Phase I – Mobilisation, Deployment and Alert – and across Great Britain, HQ UKLF issued mobilisation orders.³⁶ Reserve personnel, including 2,800 HSF volunteers, reported to local drill halls, were issued standard SLR rifles, combat uniforms and equipment and were transported by road convoy to assigned defensive sectors.³⁷ Military commanders established joint cells at local police stations, deployed vehicle check points on major trunk roads and established physical perimeters around hundreds of KP.³⁸

Phase II, from 5-12 September, represented the main field exercise, during which active tactical engagements commenced.³⁹ The defenders executed the new GDA doctrine, rather than remaining passively inside facility fences, and military patrols pushed outward to dominate a 2,000-metre zone surrounding each KP.⁴⁰ To provide a realistic, unscripted test for defenders, an Opposing Force (OPFOR) of up to 3,000 troops was created to simulate Soviet Spetsnaz saboteurs.⁴¹ Under the tactical direction of Major General Anthony Farrar-Hockley, this was drawn from elite units including 3 PARA, the Special Air Service (SAS), Special Boat Squadron and Royal Marine Commandos. The OPFOR employed asymmetric, covert tactics. Dressed in civilian clothes, driving unmarked commercial delivery vans or wearing stolen British military uniforms, their teams infiltrated defensive zones under cover of darkness and launched surprise raids breaching perimeters, planting mock limpet mines on radar dishes and cutting telephone lines.⁴² At RAF Biggin Hill, defenders from the Welsh Guards repelled five separate night attacks by SAS teams attempting to disable air defence radars.⁴³ HSF veterans also ambushed infiltrators attempting to cross drainage dykes, successfully capturing several of them and demonstrating the value of local terrain knowledge.⁴⁴ However, elsewhere OPFOR units achieved notable penetrations using 'Trojan Horse' subterfuge.⁴⁵ At a high-level district command centre, a team successfully breached security by arriving in 'official' staff cars, one dressed as a lieutenant general with an aide-de-camp and an apparent police escort. Once inside the operations room, simulated charges were produced and the headquarters was declared destroyed.

The final 24-hour Phase III saw the exercise culminate in East Anglia with a large counter-attack demonstration executed by the Strategic Reserve. Simulating a major enemy airborne drop designed to capture a strategic airfield, 5 Airborne Brigade launched a rapid tactical air assault. RAF Hercules transport aircraft dropped 1,000 paratroopers from 2 PARA alongside light armour and artillery over Stanford Training Area in Norfolk, successfully assaulting and destroying the simulated enemy force.⁴⁶ Following this last action, CINCUKLF issued the stand-down order on the 13th of September, ending the exercise.⁴⁷

Brave Defender generated extensive media coverage and intense public debate, exposing deep divisions across British society regarding defence policy, civil liberties and nuclear strategy.⁴⁸ Media reporting was starkly polarised. Tabloids like the *Daily Mail*, which had been amongst the first to dub the HSF as 'The New Dad's Army', covered the exercise with great enthusiasm.⁴⁹ Front-page features included images of middle-aged veterans dusting off uniforms to defend village telephone exchanges, with the accompanying text emphasising their high morale. In contrast, broadsheets such as *The Daily Telegraph*, *The Times* and *The Sunday Times* provided much more rigorous assessments.⁵⁰ Correspondents highlighted severe operational vulnerabilities, including acute manpower shortages, soft-skinned Bedford trucks bogged down off-road and an alarming military reliance on unencrypted civilian telephone networks, all of which would be noted in post-exercise reviews.⁵¹

Public opposition was actively organised by peace groups, notably the Campaign for

Nuclear Disarmament and the Greenham Common Women's Peace Camp who rebranded the exercise 'Grave Defender', arguing that conventional home defence exercises were a deceptive propaganda trick designed to condition the public into accepting nuclear war.⁵² Protesters infiltrated GDAs, established mock peace camps outside perimeters and painted white human silhouettes on pavements to represent nuclear victims.⁵³ Internationally, the Soviet state news agency Pravda published an official condemnation, denouncing the exercise as a provocative, anti-Soviet war game.⁵⁴ Following exposés published in the *New Statesman*, there was also political controversy in Whitehall. These reports revealed that, as

³⁹ 'Night Raids and Mock Attacks Challenge Home Defenders', *The Times*, 6 Sept. 1985.

⁴⁰Galloway, 'Defending the Realm...', 418, 421; 'Statement on the Defence Estimates 1986', 31; Public Safety Canada, *Comparative Analysis of NATO Allied Home Defence and Key Point Protection Architectures* (Ottawa: Government of Canada, 1988), 72.

⁴¹ 'Post Exercise Report (PXR)'; 'The Phantoms in Plain Clothes: How 3 PARA Played Soviet Saboteurs', *The Sunday Times*, 8 Sept. 1985.

⁴²Galloway, *Defending the Realm...*, 420; 'Battle for Biggin Hill: Guards Repel SAS Infiltrators', *Daily Mail*, 6 Sept. 1985.

⁴³*'The British Army's Cold War Defence Test: Exercise Brave Defender 1985'.*

⁴⁴Galloway, 'Defending the Realm...', 422; 'Behind the Wire: Night Operations with the Home Service Force', *Sunday Times*, 8 Sept. 1985.

⁴⁵ 'Trojan Horse Tactics Challenge Military Checkpoints', *The Times*, 9 Sept. 1985; 'The British Army's Cold War Defence Test: Exercise Brave Defender 1985'.

⁴⁶*Mass Parachute Drop Closes Exercise Brave Defender*, *The Times*, 14 Sept. 1985.

⁴⁷ 'Ministers Praise Success of Military Home Defence Test', *Daily Telegraph*, 14 Sept. 1985.

⁴⁸Minnion and Bolsover (eds.), 'CND - Now More Than Ever...', 108.

⁴⁹ 'New Dad's Army to Guard Britain's Secret War Hubs', *Daily Mail*, 22 Mar. 1985; *ibid.*, 'Praise for the Veterans Who Guarded Britain's Realm', 3 Oct. 1985.

⁵⁰'65,000 Troops to Test Homeland Security in Operation Brave Defender', *Daily Telegraph*, 9 Aug. 1985.

⁵¹ 'Lack of Night-Vision Sights Handicaps Home Defence Guards', *Daily Telegraph*, 10 Sept. 1985.

⁵²Minnion and Bolsover (eds.), 'CND - Now More Than Ever...', 110.

⁵³Galloway, 'Defending the Realm...', 419.

⁵⁴ 'Moscow Denounces British Home Defence Exercise as Anti-Soviet Provocation', *The Times*, 26 Aug. 1985.

⁵⁵ Arnold, 'Civil Defence and Nuclear War Planning...', 140; Fox, 'Strath to Square Leg', 273, 308; 'Parliamentary Debate Sparked by Exposés of Emergency Powers Bills', *The Times*, 18 Sept. 1985.



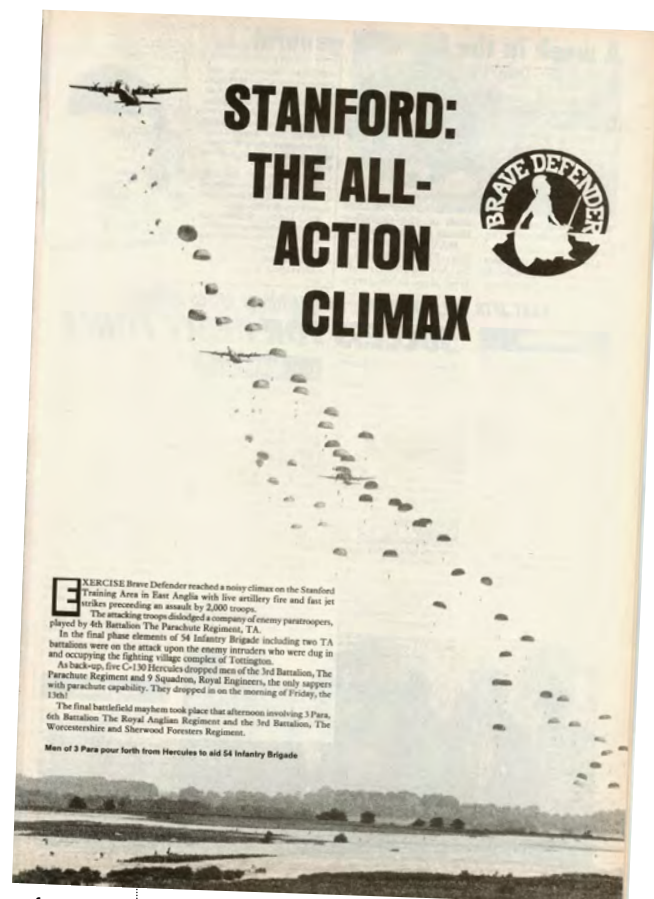
part of the exercise, the Home Office was secretly testing draft Emergency Powers Bills designed to transition the country during any future crisis into “an autocratic state”.⁵⁵ These disclosures sparked fierce debate in Parliament, with opposition MPs accusing the government of preparing for domestic military dictatorship.⁵⁶ Military commanders operating within GDAs were reportedly granted sweeping draft authorities to forcibly evict homeowners, demolish private houses to clear firing lanes around KPs, requisition civilian transport and fuel and activate the secret ‘Everest List’, a classified Home Office registry of political subversives and peace activists marked for pre-emptive internment without trial.

Brave Defender provided critical operational lessons that fundamentally reshaped British military doctrine, force structures and national resilience planning up to the end of the Cold

War and into the contemporary era.⁵⁷ It conclusively validated the active GDA concept, the MoD’s official post-exercise report concluded that defending a KP solely from behind its boundary fence was fatal as saboteurs equipped with stand-off weapons could easily destroy vital targets from a distance.⁵⁸ The lesson taken forward mandated that defending forces must actively dominate a 2,000-metre radial zone around every vital installation through continuous foot and vehicle patrols.⁵⁹ There was also recognition of the HSF, their performance proving that restricting recruitment to prior-service personnel yielded a highly capable auxiliary force at a fraction of the cost of regular units (£575 per HSF volunteer annually versus £12,000 per regular soldier).⁶⁰ An expansion from 2,800 to a target establishment of 5,000 personnel across 47 companies was immediately authorised.⁶¹ However, the post-exercise report also established strict limits, concluding they were unsuitable for mobile reaction roles and had to remain strictly restricted to static KP guarding.⁶²

The operational shortcomings identified triggered major organisational and equipment reforms.⁶³ To eliminate civil-military boundary confusion, the Executive Committee of the Army Board executed a radical reorganisation of UKLF Army Districts in July 1990, merging legacy military boundaries to align perfectly with civilian police force areas and civil protection regions.⁶⁴ Concurrently, 77 county-level tactical areas of responsibility were established, each commanded by a County Military Headquarters co-located with county police headquarters.⁶⁵ Equipment deficits were addressed by issuing the new SA80 assault rifle with SUSAT [Sight Unit, Small Arms, Trilux] optical sights, procuring four-wheeled Saxon armoured personnel carriers for TA mobile reaction forces and deploying the MOULD encrypted VHF radio network to bypass insecure civilian telephone lines.⁶⁶ These lessons were tested in subsequent exercises – Drake’s Drum, Torchlight, Strong Link – held over the next few years.⁶⁷ A planned national follow-up exercise, Brave Defender II, was scheduled for September 1993 but the collapse of the Soviet Union and the 1990 ‘Options for Change’ defence review led to its cancellation and the HSF’s disbandment.⁶⁸

With a strategic environment increasingly



“With a strategic environment increasingly fixed by the continuing conflict in Ukraine and a rapid increase in suspected state-level hybrid warfare in Europe, including sabotage against undersea cables, energy pipelines and transport networks, thinking pioneered during Brave Defender more than four decades ago seems, once again, increasingly relevant.”

fixed by the continuing conflict in Ukraine and a rapid increase in suspected state-level hybrid warfare in Europe, including sabotage against undersea cables, energy pipelines and transport networks, thinking pioneered during Brave Defender more than four decades ago seems, once again, increasingly relevant.⁶⁹ The Strategic Defence Review 2025 and National Risk Register 2026 both draw upon explicitly ‘Whole Force’ principles, GDA active defence concepts and reserve mobilisation. Now, however, they are referred to as homeland resilience, securing critical infrastructure protection and whole-of-society approaches.⁷⁰ Nonetheless, these Cold War core lessons remain central to British strategic security and Albiston Shadow will provide a critically important opportunity to once again stress test them.

⁵⁵ See, ‘Emergency Planning Legislation – New Statesman Article 5th Sept 1985’, HO322/1107, TNA.

⁵⁷ ‘Post Exercise Report (PXR)’; Headquarters United Kingdom Land Forces, ‘Post Exercise Report of Military Home Defence Field Training Exercises 1988-1989’; House of Commons Library, ‘Research Briefing: UK National Resilience and Civil Contingencies Frameworks’, 14 Jul. 2026, 14.

⁵⁸ ‘Post Exercise Report (PXR)’; ‘Statement on the Defence Estimates 1986’, 31; ‘Comparative Analysis of NATO...’, 72.

⁵⁹ Galloway, ‘Defending the Realm...’, 421.

⁶⁰ ‘Statement on the Defence Estimates 1986’, 32; Stein, ‘The Home Service Force...’, 444, 446.

⁶¹ Ibid., 444; ‘Debate on the Army and Reserve Forces Expansion’, 13 Jan. 1987.

⁶² ‘Post Exercise Report (PXR)’; Heseltine to Caspar Weinberger, 18 Nov. 1985, FCO46/4322, TNA.

⁶³ ‘Statement on the Defence Estimates 1986’, 32; ‘Post Exercise Report of Military Home Defence...’.

⁶⁴ Executive Committee of the Army Board, ‘Reorganisation of United Kingdom Land Forces Army Districts’, 1990, 3; Army Field Manual, Volume V: Operations, Part 4 – Military Home Defence’, No.71433, 1990, Chapter 2.

⁶⁵ ‘Post Exercise Report of Military Home Defence Field Training Exercises 1988-1989’.

⁶⁶ ‘Statement on the Defence Estimates 1986’, 32; ‘Post Exercise Report of Military Home Defence...’; Fox, ‘Strath to Square Leg’, 205.

⁶⁷ ‘Post Exercise Report of Military Home Defence...’.

⁶⁸ ‘The British Army’s Cold War Defence Test: Exercise Brave Defender 1985’; ‘British Home Defence Policy and Forces Since 1945’, 7.

⁶⁹ The Strategic Defence Review 2025: Making Britain Safer – Secure at Home, Strong Abroad (London: HMSO, 2025), 2.

⁷⁰ Ibid., 8; National Risk Register 2026 Edition (London: Cabinet Office, 2026), 12.

UNCOMMITTED – A DISCUSSION OF THE RESERVE FROM CORPS TO PLATOON



AUTHOR

William F. Owen

(Wilf) served for 12 years in the British Army in regular and reserve infantry and intelligence units. He co-founded and is the editor of *Military Strategy Magazine*. His book, *Euclid's Army: Preparing Land Forces for Warfare Today* (Howgate Publishing), is out now.



CLAUSEWITZ opined that reserves had only two broad purposes. The first was to prolong or renew combat, and the second was to counter any unforeseen circumstance.¹ As with most of what Clausewitz wrote, he tends towards simple statements disguising far deeper and more complex issues, and it is that further discussion that tends to confuse readers. In Rupert Smith's *Fighting Instructions Version 5*, he more simply states: "Forces deployed in Depth are echeloned. Reserves are held in echelon. However, the two are not synonymous. Forces in echelon will have a mission, the details of which may not be known but their purpose will be part of the plan or manoeuvre. A Reserve is held to deal with the unexpected and for that reason cannot, as such, be part of the Plan. If forces who are in echelon are used to deal with the enemy's unexpected blow, the commander who commits them has, by his own actions, destroyed his plan. He has surrendered the initiative."²

This succinctly highlights the problem of conflating an echelon force with a reserve. The conceptual framework to separate them exists in British Army doctrine as of 2010, with the description that outlines a covering Force, a manoeuvre force, an echelon force, and

an uncommitted force "to act as a reserve".³ This is somewhat debatably described as "the Principle of 4," which is a concept of limited utility and possibly misleading unless based on deep understanding and training.

It would be easy to fill the following pages with doctrinal definitions, quotes and debates, but this does not render much utility to the reader. To get people upset and taking notes, it pays to put a few markers in the ground. We shall proceed with the idea that a battalion or battlegroup keeps a platoon or troop in reserve, a brigade a company, and a division a battlegroup. It can be conjectured that this might mean a corps holds a brigade in reserve, which means, if your divisions are only composed of two brigades, you are holding a quarter of your forces in reserve. We can also assert that if the reserve is not part of the plan, the relevant commanders need not attend the orders group. Why should they? Because, fairly obviously, they need to understand the plan better than anyone else, because the scope of the mission is what will drive all preparatory efforts. The speed needed to commit a reserve means they will be committed using no more than a mission statement. That mission may be unavoidably vague and imprecise. In an ideal world, the relevant commander should direct the reserve commander on what they are most concerned about, but not to the extent that it places any extraneous constraints on their freedom of action.

In very broad terms, what has been stated

¹ On War Book 3, Chapter 13.

² Smith, Rupert, *Fighting Instructions V5*, para 65.

³ ADP Land Ops – Operations para 0411, 2010.



so far should outline all the necessary discussion of a reserve, except for the issue of its proximity to the tactical action, which depends on threat, terrain and the nature of the action. However, detailed discussion of these factors strikes at the very core of modern land warfare from a professional military education perspective. Examination of the role of reserves in the 1918 Megiddo Campaign and the 1944 defence of Kohima and Imphal provides a rich seam of contrast that should, in an ideal world, occupy the minds of those who are professionally curious. Space negates that examination here, but that does not impugn its utility. Suffice it to say that most major UK operations in the First and Second World War focused on finding and defeating the enemy reserve as the thing that enabled all else, with the Normandy Campaign, Operation Crusader and the initial plan for El Alamein as additional examples.

NO PLAN, NO MISSION

More than any other aspect, the nature of being uncommitted speaks to the true nature of the reserve. Extrapolated to perhaps an absurd level, it speaks to the true readiness of an army as in what commitments impinge on the nature of a force being available for action, but this is more in the realm of policy than is appropriate for this readership.

The reserve platoon of the battlegroup is not generated only during attack or defence, but maintained constantly during all phases of an operation. A platoon should always be at high readiness and, in some sense, considered a Quick Reaction Force (QRF). Most practitioners can conceive of the need for a QRF, and its need for high readiness and no task or mission. The moment that the QRF is stood by for action, it ceases to be a QRF if that means it is no longer available for other tasks. Logic therefore dictates that, if possible, once a reserve is committed, another one has to be generated. In terms of a defensive operation, a covering force, once it has broken clean and regenerated, can provide a sound basis for a reserve, which would release the element held as a reserve up until that point. That said, the idea that the covering force will be unmolested enough to provide that reserve should not be taken for granted. It needs to be planned but cannot be part of the plan. That can probably best be addressed by the covering force commander having a fairly flexible set of 'go, no go' criteria to report being able to form a reserve. There is also the issue that it seems unlikely that the whole of the covering force will break clean at the same time, and in a prolonged engagement, regenerated elements may need to relieve those who have been forward longer than

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planned. For those convinced the covering force of the future is mostly uncrewed aircraft systems (UAS) and uncrewed ground vehicles, then the nuances of how those forces get regenerated and redeployed may not have gained sufficient attention to date.

As this implies, there are degrees to which the concept of an uncommitted force becomes degraded. If orders instruct the reserve to 'be prepared to' (a BPT task), then it might technically no longer be a true reserve, as that BPT might dictate a degree of reorganisation and positioning which renders it no longer a pure reserve. This is not a needlessly philosophical complication, as echelons have missions which they plan or are prepared to conduct. A force with a foreseen mission or task is not a force free to react to unforeseen circumstances or conditions. If you have a plan to employ the reserve, it is no longer a reserve. This may seem like a doctrinal or semantic knife-edge to fascinate academics and the armchair dwellers of the front row, but a lack of clarity on this point is already halfway down a slippery slope. An acid test might be that if you write your plan with a designated reserve and you are suddenly deprived of that reserve, does your plan have to be altered?

An anti-armour reserve is by definition primed to counter enemy armour and is committed with that mission in mind. It is specifically organised for that mission, including the attachment of engineering assets that are now unavailable to the rest of the force. In defensive operations, it will be positioned to be both secure from enemy detection and to move to block any enemy armour breaking through. It could rightly be observed that if the enemy possesses armour, then any reserve has to be capable of the anti-armour mission, thus the potential primacy of attack helicopters in any divisional or corps level defensive plan.

So far and across most discussion of reserves,

the shadow of the British Army of the Rhine and defensive operations in the 1BR Corps area loom large. Given a decade of Operation Cabrit, it might be hoped that this is where the collective wisdom of this issue has come to lie, but we should be wary of attaching doctrine and concepts to one conflict, or threat and terrain. This speaks to a wider point where commanders become experts at fighting battles they rehearse and are unprepared to train or command a force removed from their expectations. For anyone finding such an assertion unacceptable, it is very easy to test. That aside, very little about terrain, or threat, strikes at the nature of a truly pure reserve. In desert or open terrain, that role can probably best be fulfilled by main battle tanks. In fact, using armour as a reserve makes good sense given communications, manoeuvre, speed and firepower.

PLAN LARGE RESERVES

The age-old critique of 'two up, one back, bags of smoke' should be rendered less humorous by some knowledge of how to manoeuvre given that basic configuration of platoons or sub-units. It is, in fact, sound advice. The problem occurs when the assumption is that the 'one back' is a reserve and not an echeloned force with the mission to exploit the conditions created by the first echelon. If re-stated as 'two up, one back, one section/platoon in reserve and bags of smoke', then while neither imaginative nor without fault, it is the basis for something simple having merit if done very well. 'One back' is not your reserve. If one back was your reserve, then you are holding 30 per cent of your combat power back because you think the plan needs it.

It is both obvious and banal to point out that the officer commanding or commanding officer concerned should command the reserve at the sub-unit or unit level. Who commands the reserve, as in the one individual with the authority to commit it, becomes less obvious as the level of command increases. The following are things to consider.

First, a reserve is not held only for the duration of a planned operation. Unforeseen circumstances can occur when least expected. Even in a formation or divisional assembly area, some element should always be held at immediate notice to move. That requires planning, especially regarding regeneration and maintenance. Secondly, that reserve might not be held within the assembly area itself as traffic patterns and boundaries constrain its rapid and effective employment. This foreshadows the issue of a brigade held as a corps reserve, though, as previously

mentioned, in a corps of only four brigades this is more likely to be a battlegroup. A corps frontage might well be 100 kilometres or more. Where that battlegroup is positioned becomes something requiring the commanders' and the plans teams' attention, even though the reserve should not be part of the plan. The composition of that battlegroup and its attachments is also something requiring detailed attention. For example, in terms of multinational operations, this may involve providing liaison officers and resolving command authorities or national caveats. There might also be the requirement to be able to move across boundaries, use safe lanes in minefields and obstacle belts and even airspace control issues with the wider advent of UAS. None of these should be a concern if highly experienced staff routinely exercise, consider and anticipate them. If the reserve is an airmobile reserve, this obviously means holding support helicopters, as they are excluded from other missions. This might be eye-rollingly obvious until the condition where the support helicopters are required for an unforeseen condition or circumstance, but the troops in the reserve are not, meaning that once the helicopters are tasked, the reserve ceases to exist.

This, of course, limits the view to seeing the reserve as just an infantry or armour entity. As already mentioned, attack aviation exists and has its roots in a corps-level anti-armour plan, but is limited to that specific mission so the fact that you may have 24 Apaches in reserve does not absolve anyone of holding the appropriate reserve at the appropriate levels, but removed from the traditional extant context, the concept of 'reserve' may have to be widened. Do you hold an intelligence, surveillance, target acquisition and reconnaissance reserve? What if you suddenly lose your coverage of a particular section because Iranian '358s' have killed all your large UAS? Likewise, air defence in the context of the supposedly expanding air defence mission. The Royal Artillery never hold guns in reserve, and that does not seem likely to change, but the idea that the 'reserves' is something only relevant to combat arms is a limiting belief.

UNCOMMITTED BUT FIXED

The sine qua non of the reserve concept is the decision of when, where, why and how to commit it. While possibly apocryphal, men have apparently died in the desert with water still in their water bottles because to drink all your water and to have none left was to seal your

fate. Do you want to conclude a battle or engagement with your whole force, threaders and in dog order, but retain your well-rested and shiny reserves? Would you have suffered fewer casualties had you committed your reserve at the right time and place? Did the unforeseen circumstance never arrive or become apparent, meaning you never needed to commit the reserve? All of these point to the criticality of the decision to commit. Sometimes it will be painfully obvious that the reserve needs to be committed, but that circumstance does not need much discussion or examination.

The method of commitment is also not as simple as it seems because, on a dispersed battlefield, this may mean the reserve being given a mission entirely distinct and separate from the wider action. This contrasts with merely transferring command of the reserve to a hard-pressed subordinate unit. The point to consider is that we have already agreed the reserve is not part of the plan, but it is not excluded from having to plan itself and co-ordinate those plans with the relevant command and staff. This is especially true if tasked with an independent mission in a wide area of operation, where the combat support and combat service support are not well positioned to provide the necessary assistance. It of course holds that you never disperse outside fires or communications range, but then the conditions of the emergency and enemy action may not respect that doctrinal touchstone.

There is also the condition where a reserve is committed to enable a wider action or maintain contact with the enemy as it retreats, attempts to bypass or goes firm in close terrain to mount a rear guard. For example, this might mean mounting a battlegroup attack against an enemy in some sort of prepared defence with far less time to prepare or without supporting fires than training to date might have encompassed. Reserves may well need reserves of staff and command horsepower to mitigate those conditions, and command of reserves should only be given to the brightest and very best in the full knowledge that the action may conclude without them having done anything.

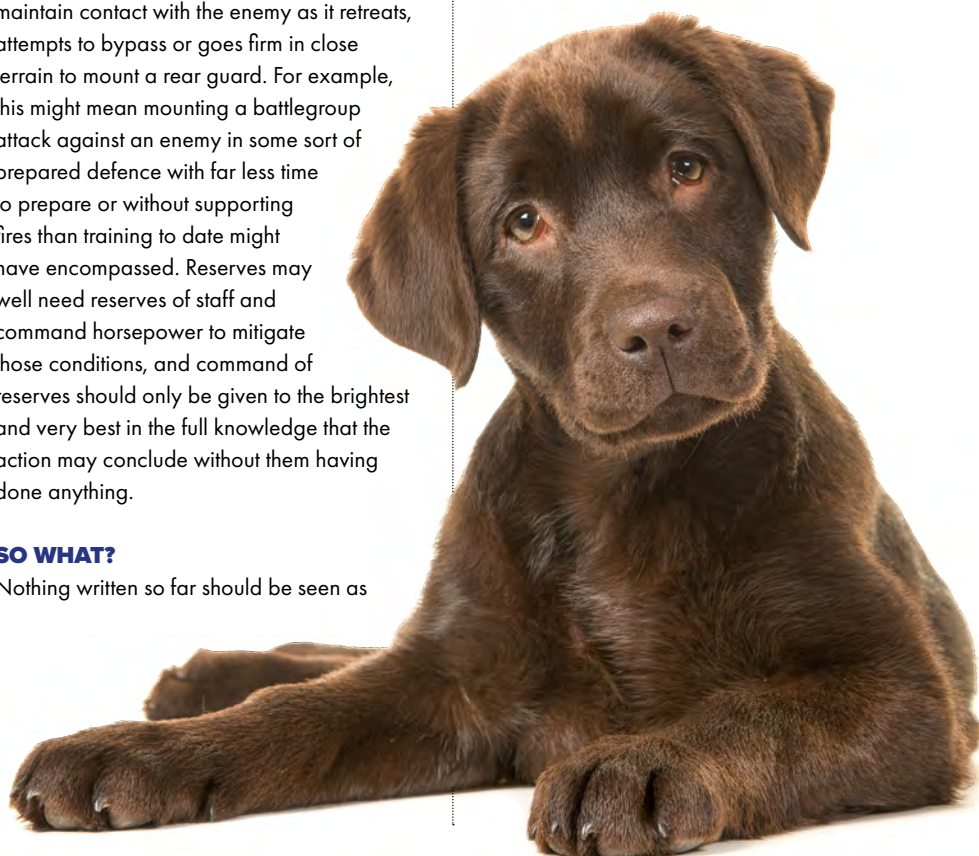
SO WHAT?

Nothing written so far should be seen as

a catalogue of 'what if, what if' problems. The thesis is simply that a true reserve is nothing more than a force ready for anything and with no orders. That stupendously simple condition opens a Pandora's box of possibilities, the antidote to which is repeated hard, rigorous training to both physically and intellectually callous the force against fear of uncertainty and regard it as normal. Given a competent command, anyone designated to command a reserve should be confident that they are being trusted with the most important command appointment their superior had to make and that while not part of the plan, they have to know the plan better than anyone and have studied the ground beyond their boundaries and be across the composition and actions of the flanking units.

It would also be true that as a commander, you should not be allocating command of the reserve to the officer who is still debating buying a Labrador versus getting engaged as the greatest dichotomy he or she has yet faced; to do so would be very wrong – commanders of the reserve need to be decisive actors.

While accepting the obvious primacy of Labrador ownership, it might be that this was not about reserves at all. It might be that this was about plain, simple English used to impart plain, simple ideas. Reserve, counterattack and screening are some of the words used with alacrity, and everyone claims to understand them. Something to think about when you're out with the Labrador.



ADAPTIVE VELOCITY: SPEED OF RESPONSE TO 'TECHNOLOGY SURPRISE' IS IN THE ARMY'S CONTROL



AUTHOR

Major Keith Brooks

is a retired Artillery officer and former doctrine writer in Military Strategic Headquarters. There, he researched the challenges of a technologically amorphous battlespace and how UK Defence might consider technology advantage in an increasingly multipolar world. He is studying for a War Studies PhD, exploring responses to technology surprise in NATO armies.



THE British Army should not assume that it will deploy on operations with technological superiority. Changes in US force availability, rapid adversary innovation and the diffusion of increasingly capable technologies make technological parity or disadvantage a more credible feature of future operations. If a side does not achieve victory within the opening phases of a conflict, protracted warfare necessitates a continuous process of adaptation and counter-adaptation between the parties.¹ So how can the British Army improve its response to technology surprise when we are out-innovated? While the technology race is non-discretionary, the challenge of prompt countermeasures through adaptation is foundational, comparatively low-cost, but comparatively under-emphasised.

BLOCKBUSTER VIDEO

This challenge is not unique to the military, for example, in 2000, Blockbuster Video had money, infrastructure, customers and market dominance, yet failed to respond quickly enough to the shift towards online distribution. Its smaller competitor, Netflix, possessed fewer

resources but converted them into operational change fast enough to capture the streaming market first. Blockbuster had adaptive capacity; Netflix had adaptive velocity.

CAPACITY AND VELOCITY

Adaptive capacity is the combination of resources, structures and freedoms that permit adaptation. Examples of the UK Ministry of Defence having an abundance of adaptive capacity include the Defence contribution to resilience,² counter-insurgency operations – such as Op Enduring Freedom (2002–2014) – and in combined arms operations such as Op Granby (1991). These examples do not represent responses to technological surprise; rather, they demonstrate that Defence possesses substantial adaptive capacity to reorganise people, processes and capabilities when circumstances demand. The adaptive capacity existed, but its conversion into action relied upon deliberate institutional processes.

UK Defence is not alone in this regard; the post-Cold War transformation of the United States Army and the modernisation of the French Army have been challenged



¹ Watling and Reynolds. *Tactical Developments During the Third Year of the Russo–Ukrainian War. RUSI.* (2025).

² Joint Doctrine Publication 02, *UK Operations: The Defence Contribution to Resilience* (2021).

by the interplay between interest, ideas, individuals and operational experience.³

Adaptive velocity is determined by the cumulative latency across recognising a problem, understanding it, deciding upon a response, implementing that response and, where successful, scaling it across the force. Consequently, adaptive velocity is measurable as the time taken from the recognition of a problem to the fielding of an effective response (and its subsequent scaling). Defence already possesses a well-established 'slow-twitch', top-down lessons process; technology surprise demands a refreshed 'fast-twitch', bottom-up capability. The Ukrainian experience suggests that the challenge for Western militaries may lie less in recognising lessons and re-writing doctrine than in improving adaptive velocity.

Path dependency. Paul Pierson's work on organisational change⁴ emphasises how past decisions and events lock-in key behaviours, a concept known as path dependence. His analysis highlights the influence of historical context and tradition in templating organisational behaviour and doctrinal persistence. For military organisations, path dependency therefore matters because inherited structures, processes

"The significance of FV430 is not simply its longevity, but that simplicity, not sophistication, provided sufficient adaptive capacity for successive modifications without requiring an entirely new platform."

and assumptions increase the time and cost required to change direction. Furthermore, the wider defence industry is subject to the same path-dependent pressures.

Adaptive capacity by design. By contrast, requirements that privilege simplicity, modularity and ease of modification can create adaptive capacity by design. An example of this is the FV430 series of armoured vehicles which entered service in 1963, with multiple variants in the family, and remains on duty today in the guise of the (much-upgraded) Bulldog armoured fighting vehicle. The significance of FV430 is not simply its longevity, but that simplicity, not sophistication, provided sufficient adaptive capacity for successive modifications without

requiring an entirely new platform. Such design characteristics can reduce the time required to respond to changing operational requirements and therefore contribute to adaptive velocity.

Running with the Red Queen. In his theory of evolutionary biology,⁵ Van Valen drew on Lewis

Carroll's character of the Red Queen, who took Alice with her, running across a moving chessboard just to hold their position. Van Valen suggests that animal species must continuously evolve to survive, as they face ever-evolving predators. In this analogy, the pace of technological innovation determines how quickly the chessboard moves; adaptive velocity maintains relative position. The UK cannot match the absolute scale of US defence innovation spending, while our potential adversaries are able to concentrate national resources on military priorities to a degree that Western democracies may find politically or economically difficult. Returning to the analogy, the Army cannot control the speed of the chessboard, but it can increase how quickly it 'runs'. Increasing adaptive velocity requires the Army to exploit characteristics and capabilities that already exist, but which the current structures and processes do not consistently employ.

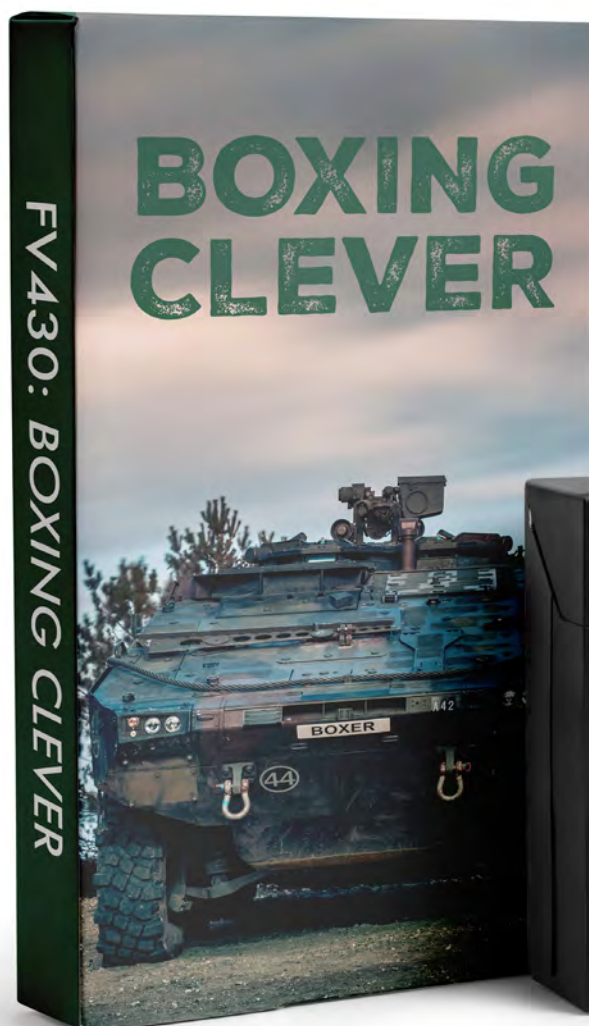
Adaptive velocity from training. Nowhere is adaptive velocity more starkly visible than in the reconnaissance-strike contest in the Russia-Ukraine war. Both belligerents possess adaptive capacity in abundance – procurement systems, engineering talent, doctrine writers – but the war has become a contest of rate, not resource. Innovation cycles once measured in years, tied to formal

³Farrell, Rynning and Terriff. *Transforming Military Power since the Cold War*. Cambridge (2013).

⁴Pierson, P. *Increasing returns, path dependence, and the study of politics*. *American political science review* (2000).

⁵Van Valen, L. *A New Evolutionary Law*, <https://www.mn.uio.no/cees/english/services/van-valen/>, (1973).

⁶Zabrodskiy, Watling, Danylyuk, and Reynolds, N., *Preliminary Lessons in Conventional Warfighting from Russia's Invasion of Ukraine*, *RUSI Special Report* (2022).



acquisition programmes, now run in weeks: a tactic that defeats enemy countermeasures on Monday can be neutralised by Friday, and answered again by the following Monday.⁶ Russia, widely judged to be sluggish in the first year of the war, has now launched Rubicon, a dedicated centre for unmanned systems innovation, and a purpose-built brigade reporting directly to the General Staff. The lesson for NATO militaries is not that Ukraine or Russia possesses superior technology, but that whoever most compresses the recognition-to-response latency sets the tempo. Adaptive capacity without velocity is a warehouse of good ideas arriving too late to matter.

RECOMMENDATIONS

Adaptive velocity concerns responsiveness and improvements here require further examination of possible interventions across three areas of institutional activity.

Strategic activity. Sensing weak signals, early indications that an adversary capability or technology is changing the operational problem, drives responsiveness. Getting this right means connecting the security services, the science and technology base, the defence industry and the warfighter around a shared picture of what change is required right now, and what is likely to be required next. This should not remain the preserve of a slow-moving periodic technology net assessment; it needs a standing mechanism that pulls signals from operations, exercises and open-source technology tracking into decision-makers' hands. Signals should not simply be passed

upwards for resolution and then filtered down through successive layers of approval. Adaptive velocity might require parallel communication, delegated authority and the ability to respond as close as possible to the point of recognition.

Doctrine and training. The Army could prepare now, through targeted training and exercises, to treat technical parity or disadvantage as the expected case, not the exception.⁷ This changes the emphasis away from the drill-book approach of 'getting it right' to developing skills of intervention for 'putting it right'. Exercises should periodically disable or degrade a key technology: intelligence, surveillance and reconnaissance; GPS; communications; uncrewed aircraft systems; precision fires or digital command systems, and measure how rapidly the issue is recognised, mitigated and scaled. The UK's command philosophy and professional culture potentially permit faster horizontal information sharing and challenge than more centralised command systems, but that advantage is wasted unless doctrine and training are designed to exploit it. Doctrine should build a culture of problem-solving, not adherence to dogma, towards a framework for human judgement rather than a checklist for compliance. Training should reward active listening, and prompt decisions under uncertainty, rather than fidelity to the last lesson learned. Training and experimentation could tolerate intelligent failure where it generates shared learning, while rewarding initiative, rapid problem-solving and the early

identification of unsuccessful approaches, so that the organisation's cultural advantage in communication is matched by a doctrinal and training environment that lets it be used.

Force development. Breaking path dependence requires an approach to force development that treats platforms and organisational structures as transitory. Long-programme, high-sophistication platforms always carry a degree of lock-in; the answer is not to abandon them, but to balance them with capabilities designed around modularity, open architectures and rapid modification. Force development could extend beyond equipment deliberations and consider the workforce, deliberately developing officers who can recognise emerging anomalies and are institutionally rewarded for challenging established assumptions.

CONCLUSION

The UK Defence 'Netflix moment' will not be announced in advance. The Army should prepare its people and processes to reduce the latency between recognising technological surprise and fielding an effective response at every level of command. Adaptive velocity can reduce the duration and operational cost of technological disadvantage, frustrate adversary planning and improve the Army's ability to retain or recover operational advantage. Adaptive velocity may offer the next revolution in military affairs.

⁷Tollast and Watling (May 2026) *Winning Without Technology Advantage*. RUSI Occasional Paper.

"The Army cannot control the speed of the chessboard, but it can increase how quickly it 'runs'. Increasing adaptive velocity requires the Army to exploit characteristics and capabilities that already exist, but which the current structures and processes do not consistently employ."





URBAN COMBAT: CAN THE WEST WIN WARS IN CITIES?

AUTHOR

Captain Jonathan Burden has served in a variety of regimental and operational roles, most recently at 16 Air Assault Brigade. He is the author of *Burned and Blasted: Strategy, Violence and Ideology in Urban Warfare*, which will be published by Casemate on 1 November 2026.

RECENT editions of *The British Army Review* have focussed on the threat and opportunities presented by uncrewed systems, the future of artillery, training, magazine depths and the implications of the Russian-Ukrainian War. And rightly so. The unavoidable reality of great power confrontation and the uncrewed tactical (r)evolution of the first quarter of the 21st century has forced the military intelligentsia to reconsider almost every aspect of how a modern force is equipped, organised, supplied and trained.

Yet as the former Chief of the General Staff, General Sir Patrick Sanders reminds us, the core purpose of the Army is “to protect the nation by being ready to fight and win wars on land”.¹ Victory in war is a condition reached when military force has been used to compel novel and desired forms of political order. Beyond achieving tactical success and orchestrating prolonged campaigns, effective military practice therefore requires that strategy is placed first and foremost in the minds of commanders. How military activity is linked to obtaining durable political success is an enduring challenge – the nature of which remains unchanged.²

Critical evaluations of British and American military performance during the long campaigns in Iraq and Afghanistan are close to unanimous on the assessment of the practice

of strategy, arguing that the major protagonists did not possess a coherent theory of victory that would guide military action towards political success.³ As one scholar concludes, one of the key failures of the interventions in Iraq and Afghanistan was the “tendency in the militaries of both the US and the UK to assume that achieving political effects was the responsibility of politicians”.⁴ Yet there has been no corresponding revolution in strategic thought within the military akin to how the British Army has orientated itself around ‘recce-strike’ in response to the prevailing conditions of the contemporary battlefield.⁵

STRATEGY IN URBAN CONFLICT

Burned and Blasted makes the case that the nature of cities makes all warfare in this environment inherently strategic. As the American urbanist Lewis Mumford argues, cities are simultaneously “a geographic plexus, an economic organization, an institutional process, a theater of social action, and an aesthetic symbol of collective unity”, which forces militaries to be hyper-conscious of how organised violent activity shapes the political context in which war is fought for, and within – the history of cities makes this clear on political, social, economic and cultural dimensions.⁶

Urban warfare is therefore markedly different to other operating environments when the issue of politics and strategy is considered. Israel’s war with Hamas perfectly illustrates

¹Emphasis added, General Sir Patrick Sanders, ‘General Sir Patrick Sanders DSEI 2023 Keynote Speech’, 12 September 2023.

²Murray Williamson and Richard Hart Sinnreich (eds.), *Successful Strategies: Triumphant in War and Peace from Antiquity to the Present*, Cambridge University Press, 2014.

³Donald Stoker, *Why America Loses Wars: Limited War and US Strategy from the Korean War to the Present*, Cambridge University Press, 2019; Edward N. Luttwak ‘On the Meaning of Victory’, *The Washington Quarterly* (Vol 5, Issue 4; 1982), 17–24; Colin S. Gray, *The Strategy Bridge: Theory for Practice*, Oxford University Press, 2010; Andrew Sharpe, ‘Conclusion: So What is Winning?’, 277. *In Winning Wars: The Enduring Nature and Changing Character of Victory from Antiquity to the 21st Century*, edited by Matthias Strohn, Casemate Publishers, 2020.

⁴Ben Barry, *Blood, Metal and Dust: How Victory Turned into Defeat in Afghanistan and Iraq*, Osprey, 2020.

the point; whatever military success the Israel Defense Forces achieved in Gaza, it almost suffered a strategic defeat because of the scenes of utterly destroyed settlements beamed to every television and smart phone, which seemed to be out of all proportion for the aims under consideration. From the images of shattered cities, evocative and cutting narratives can be crafted and, like a John Martin painting, they create a sense of sublime and apocalyptic doom that agitates Western audiences who expect wars to be cleaner. Or as the Marxist philosopher Marshall Berman noted “myths of urban ruin grow at our culture’s root”, forming the backdrop to a wide variety of film, television, literature and video games. War in cities is therefore difficult to win for liberal states.

COMPLEXITY AND URBAN WARFARE

How can commanders craft strategies for winning wars that occur in cities, given this recognition? The first consideration is to comprehend the nature of war itself. Clausewitz’s formulation of war as formed by a ‘wondrous trinity’ comprised of the desired policy aims formed from the ‘province of pure intelligence’ (instrumentally deployed by the state), ‘primordial violence, hatred, and enmity’ (associated with the people) and the ‘play of chance and probability within which the creative spirit is free to roam’ (which relates to the military).

This model of war becomes even more relevant for cities when viewed from a neo-Clausewitzian perspective that treats the trinity as an open, complex system that is interactive,

which exhibits non-linearity and is driven by the force of violence which manifests as the struggle between two opposing wills. It is the presence of complexity that led Colin Gray to argue that the “subject of strategy and revolutions in military affairs necessarily always stands on the edge of chaos”.⁷ In urban warfare, the density of interactions between the military, civilians and political institutions are especially dense – a fact recognised by the US Marine General Charles Krulak, who famously demanded that his troops prepare for the “three block war”.⁸ The concept of emergence is crucial here, which contends that the overall behaviour of a system cannot be understood by looking at a subsection.

A similar analytical lens can be applied to cities themselves. The great urbanist Jane Jacobs argues that they exhibit “organized complexity ... [which] present situations in which a half-dozen or even several dozen quantities are all varying simultaneously and in subtly interconnected ways”.⁹ The interaction of people, goods, energy, ideas and the environment displays all the same properties of non-linearity and emergence that exists within conflict.

There are therefore two interacting complex systems during urban warfare. The first is war itself, made up of the three interacting elements of the trinity. The second is the complex social, political, physical and economic systems that constitute urban life. When this is scaled to conflict in large and mega-cities which contain a multitude of competing factions, in a physical and social environment that is constantly being

reshaped by violence, chance and policy, then emergent and unpredictable outcomes are inevitable. There is therefore a question as to whether Western militaries can comprehend cities.¹⁰ Harder still, the ability to directly translate military power into desired political outcomes is further restricted by the small size of most contemporary militaries in comparison with the urban terrain, which means that the control over movement of enemy forces, material, people and ideas within cities is difficult.¹¹

MANIFESTATION OF COMPLEXITY IN URBAN WARFARE

Complexity in contemporary urban warfare manifests in four major ways. First, they are densely networked. Cities are constituted by flows and networks that transmit and store information, channel wealth and trade,

⁵General Sir Colin Weir, ‘How We Will Fight in 2026’, *British Army Review*, (Summer 2023, Issue 183), 6-10.

⁶See Chapter Two of *Burned and Blasted*.

⁷Colin S. Gray, *Strategy for Chaos: Revolutions in Military Affairs and the Evidence of History*, Frank Cass, 2002.

⁸Charles Krulak, ‘The Strategic Corporal: Leadership in the Three Block War’, *Marines Magazine*, January 1999.

⁹Jane Jacobs, *The Death and Life of Great American Cities*, Random House, 1961.

¹⁰For a discussion on how complex adaptive systems can be applied to understanding the urban operating environment, see Colin Papushak, ‘Intelligence Preparation of the Urban Environment: Adopting A Complex Adaptive Systems Approach’, *The Canadian Army Journal* (Vol 21, Issue 1; 2021), 22-35.

¹¹Anthony King, *Urban Warfare in the Twenty-First Century*, Polity, 2021.



“From the images of shattered cities, evocative and cutting narratives can be crafted and, like a John Martin painting, they create a sense of sublime and apocalyptic doom that agitates Western audiences who expect wars to be cleaner.”

and act as social environments in which political action occurs, and through which ideology, ideas and militaries can flourish or be constrained.¹² Crucially, these networks are constituted, shaped and mediated by political, economic and social relationships through which purposeful agents seek their own objectives. Cities also function as vital connections for the movement of goods, ideas and people across countries and continents. It is from this recognition that port cities gain their strategic significance as they act as nodes within globally spanning trade routes and as projectors of naval power.

The second parameter is symbolism. Whilst cities sit at the nexus of global economic and communication activity, they also serve a distinct cultural and political role. Cities fulfil this symbolic role because they are an expression and source of cultural and political identity. Perceptions and iconography of military triumph and defeat are routinely bound up with urban destruction. The extermination of Carthage in 149 BCE, the raising of the Hammer and Sickle over the Reichstag in Berlin, and the mushroom clouds over Hiroshima and Nagasaki in 1945 are three iconic moments in world history that marked the end of epoch-defining conflicts.

Cities are also critical locations for religious and national symbolism. The sovereignty of Jerusalem is perhaps the paramount example of urban conflict achieving global notoriety due to its sacral dimension. This is because of the indivisibility, overlapping boundaries and non-fungibility of its holy sites. The Temple Mount in Jerusalem, home to sacred sites in Christianity, Islam and Judaism fulfils all these criteria.¹³ For this reason, the sovereignty of Jerusalem remains a knotty issue of regional and global significance which is infused with religious and ideological meaning.

More interestingly, a process of 'emergent symbolism' can be observed within urban conflict where sites of battle quickly gain cultural and spiritual resonance for the

¹²Simon Curtis, *Global Cities and Global Order*, Oxford University Press, 2016.

¹³Ron E. Hassner, 'To Halve and to Hold' Conflicts over Sacred Space and the Problem of Indivisibility', *Security Studies* (Vol 12, Issue 4; 2003), 1-33.

¹⁴Amos Fox, 'On Sieges', *The RUSI Journal* (Vol 166, Issue 2; 2021), 18-28.

¹⁵Alice Hills, *Policing Post-Conflict Cities*, Zed Books, 2009.

¹⁶Anthony James Joes, *Urban Guerilla Warfare*, University Press of Kentucky; Norman Davies, *Rising '44: The Battle for Warsaw*, Pan, 2004.



participants. Amos Fox notes how the Ukrainian defenders of Donetsk Airport in 2014 were eulogised as 'cyborgs' in the face of the Russian onslaught.¹⁴ This phenomenon was repeated, at a much larger scale during the resolute defence of Mariupol and the Azovstal Steelworks in 2022, and attracted significant media attention to the plight of the civilian population and helped consolidate the narrative of Russia's naked and inexcusable aggression against Ukraine, bolstering Western support.

Third, and perhaps significantly for military practitioners, is the tendency of cities to fragment. This can occur due to socio-economic reasons (a fact recognised by Plato) and which has created enclaves of extreme wealth inequality, demarcated by physical barriers in cities as diverse as Los Angeles, Lagos, Buenos Aires, Cairo, Mumbai and Johannesburg. The application of violence to an urban system, either through the imposition of state policy or during a civil war, is also liable to divide cities. Under these conditions, sovereignty dissolves and is replaced (at least temporarily) by alternative forms of political order. This phenomena of fragmentation occurred in Belfast during the 'Troubles' era, in Karachi over successive decades since the establishment of Pakistan, in Baghdad during the brutal Sunni-Shia civil war of 2006, in Mogadishu in the early 1990s, in Beirut leading to Hezbollah firmly establishing a power base in the district of Harat Hurayk in southern Beirut, and in the poorer districts of Medellín in Colombia in the 1980s and 1990s.

Under such conditions, varied forms of non-traditional or Weberian forms of political order, at odds with Western norms, can emerge.¹⁵ Urban political life is surprisingly resilient under conditions of fragmentation violence and there is a tendency for new political orders to emerge when incumbent practices of governance are destroyed by conflict. Even in the darkest days of the

Warsaw Uprising (1944) the Polish resistance re-established some of the typical institutions of urban life.¹⁶ The emergence of these alternative forms of political order is almost inevitable in prolonged urban conflict. The most important strategic decision that a Western power has to make is whether to work with or against the prevailing fragmented landscape. Unpalatable compromises with local stakeholders who may be violent, engaged in criminal activity or representative of nakedly anti-liberal politics might be necessary to achieve strategic effect. As political systems evolve within mega-cities, these new forms of power might even become more influential than their container states, with a corresponding shift in the patterns of international order within which military strategy takes place.

Fourth and finally, cities have deep revolutionary potential with all the accompanying risks of violence and war. At moments of crisis, urban space can be transformed into a political theatre, where crowds and demonstrations can rapidly appear under the noses of elites, and be amplified in the glare of domestic and international media. If conflict breaks out, they also offer favourable terrain to insurgents. Cities therefore hold the latent prospect for revolution which is defined as bottom-up, violent political activity, which seeks to radically alter the character or behaviour of the state.

The digital dimension has become increasingly important to modern revolt and revolution. Social media and instant communications have accelerated the speed at which revolutionary information can spread through a domestic or international system. Yet it is the fact that this occurs within densely populated cities that allows viral internet footage to be gathered. The relationship is therefore symbiotic. Urban-political processes interact with crowds to create imagery of repression, which in turn creates its own political reality, which is then

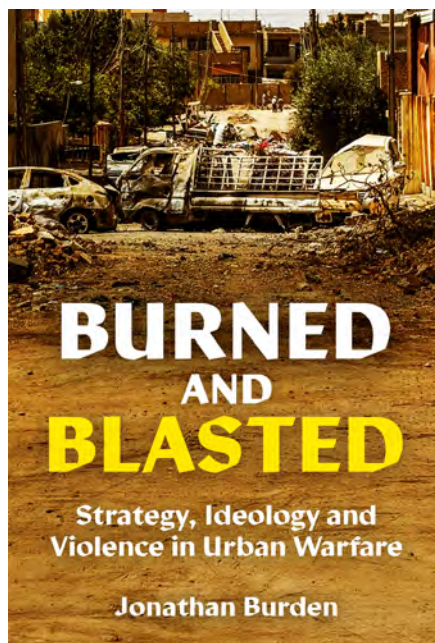
fed into the digital space, encouraging others to take to the streets.

Taken together, these four features of contemporary urban conflict form the basis of a framework for conceptualising urban conflict. Along with the concepts of urban resilience, feral cities and sensor-soaked 'smart' cities, this framework should provide a foundational understanding for commanders and their staff to comprehend and therefore shape the strategic dimension of urban warfare.

LIBERAL AND NON-LIBERAL PERFORMANCE IN URBAN WARFARE

Equipped with an understanding of how organised violence interacts with cities to produce novel forms of political order, the extent to which different forms of political order can be obtained can be addressed. *Burned and Blasted* considers two clusters of case-studies, dividing actors into liberal and non-liberal. In the first group is the Italian resistance in the Second World War, from the spontaneous liberation of Naples to the organised resistance in the northern industrial heartland who handed over functioning cities to the advancing Allies in 1945. Less successful, the French attempt to quell the Algerian independence movement from 1954-62 highlights some of the dynamics inherent to urban conflict. The political and military results of this conflict boomeranged back to the metropole and led to the overthrow of the Fourth Republic. Urban conflict was therefore more significant than is recognised when analysis focuses on the relatively short but infamous 'Battle of the Casbah' (1957). The British occupation of Basra (2003-9) merits a close examination, for which the central thesis I make is that the British strategic establishment was unable to recognise the reality of insurgency in the city and correspondingly unwilling to use the right type of military action to achieve stated goals – a failure of strategy. Finally, the subject of proxy warfare as it pertains to urban strategy is considered via the American-backed liberation of Raqqa (2017), after the Islamic State had made the city the spiritual capital of its Caliphate.

The third part of the book addresses a broad set of 'non-liberal' powers. I begin by considering how Nazi Germany brutalised Warsaw as it put down the uprising in 1944, but place this battle in the context of the attempt to annihilate the very idea of the Polish nation across the entirety of the Second World War. Next, I identify a specific 'Russian Way of Urban Warfare' (from 1945-2022) which has two core features – it is unusually destructive, but it is accompanied by calibrated political action which has been mostly successful in delivering strategic success. Consequently, the



Soviet Union/Russia have been remarkably successful in achieving policy in Berlin, Grozny and Mariupol, even if it has generally fought poorly and sustained extraordinary casualties. The Islamic State's takeover of Mosul is typically only addressed through the prism of the collapse of the Iraqi Security Forces in six days in June 2014 but my own argument makes more of how radical Sunni groups, including their earlier iterations, had deep roots in the city and had skilfully manipulated its politics over a longer period since the 2003 invasion. The final chapter spreads the net further and considers how militias, pirates and drug cartels have used violence instrumentally to achieve control over cities which have furthered their own causes.

FUTURE OF URBAN WARFARE

Most relevantly to the reader of *The British Army Review*, the Russian way of urban war presents a dual military and political challenge. From Berlin, Grozny and Mariupol it is apparent that the Russian culture of war is comfortable with flattening cities, whilst sustaining casualties well beyond the level the West would accept in any operation. More troubling on the strategic dimension is the Russian success in achieving political success in urban warfare. Largely, this is because of an embodied strategy where conventional military activity is partnered with decisive political action. In the Second World War, the swift descent of the NKVD onto Berlin set the scene for the communist domination of Berlin and East Germany, whilst carefully calibrated political action in Grozny turned one of Moscow's most obstinate foes into one of its most reliable allies in the war in Ukraine. In Mariupol, a seemingly slow and clumsy military operation has paved the way for tighter Russian control of the highly significant port-city where the foundations

of Ukrainian national identity have been systematically erased.

The uncomfortable truth for contemporary liberal states is therefore that strategic success has been historically achieved when the full potential of this violence has been unleashed on the city. The destruction of Warsaw, Berlin, Grozny, Mariupol and Raqqa were all successful. To these cases, we could add the highly successful Allied strategic bombing campaign of the Second World War where Germany's cities would 'reap the whirlwind' of their aggression in 1939-41.¹⁷ After the war in the Pacific was concluded by dropping the hydrogen bombs on Hiroshima and Nagasaki, the entire balance of power between the Soviet Union and the emerging American-led Liberal International Order was maintained by the fear of what nuclear weapons would do to the cities and people of America, Europe and the Soviet Union if they were used in anger.

The problem for liberal powers involved in modern urban conflict is that they will most likely have engaged in war for the promise of a better, more stable, just and prosperous peace. If they are seen to be unleashing wanton destruction on a city then the legitimacy of that moral claim will almost certainly be destroyed, and the international system is likely to reorganise and renegotiate into less desired patterns of order. Even worse, it may be that the Western desire to reduce the brutality of urban warfare by differentiating between combatants and civilians may introduce more violence, as an unscrupulous enemy is incentivised to position itself as close to civilians as possible, for its own protection.

As I argue throughout *Burned and Blasted*, the practise of military strategy in cities is everywhere and always complex in the most fundamental way because of the emergent qualities of urban processes and the nature of Clausewitz's trinity, through which violence contorts and reshapes political order. The liberal way of war has found occasion to circumvent or ignore these violent tendencies, but they are unavoidable. For this reason, democratic states must be extremely cautious before choosing to engage in urban warfare. If it is foisted upon them, then they must be prepared to manage the destructive and violent extremes that are inherent to this form of warfare, lest the legitimacy of the democratic state itself comes under threat.

¹⁷ It is estimated that by 1945 Allied bombing had killed over 300,000 civilians, destroyed 40 per cent of the seventy largest towns and cities and annihilated Germany's industrial capacity. Estimates of casualties taken from David Betz, *The Fortified Age: Fortification in the Twenty-First Century*, Polity, 2023.



THE UNIFORM IS BORROWED: CHARACTER, LEADERSHIP AND SERVICE IN THE OFFICER CORPS

AUTHOR

Brigadier Chris Davies is Brigadier General Staff in Army Headquarters.



The Army asks much of its officers. It should never require them to become someone they are not.

EVERY officer should remember one simple truth. The uniform is borrowed. Character is owned. Looking back over a military career, it is tempting to remember it through the milestones: commissioning, first command, promotion, operational tours, staff appointments, further command, retirement. They provide a convenient structure, a narrative that makes sense of years that often felt anything but orderly. Yet I have come to believe that careers are seldom defined by the moments that appear most significant on paper. More often they are shaped quietly, almost unnoticed, in the choices we make when no appraisal is being written, no superior officer is watching and no recognition is likely to follow. They are shaped in the conversation where we choose honesty over convenience; in the decision to stand by a subordinate when it would have been easier to remain silent; in the restraint shown when criticism

would have been justified but kindness more useful. Those moments rarely appear on a career profile, yet they are often the ones that determine the officer we become.

Perhaps that is because the Army is exceptionally good at developing professional competence. It teaches us to lead, to decide, to endure and to serve. It places us alongside remarkable people and entrusts us with responsibilities that few professions offer so early in life. It gives us purpose, identity and belonging. These are among its greatest strengths. They also contain one of its greatest risks. The Army should shape your profession; it should never wholly define your identity. That distinction may appear philosophical when you are young. It becomes profoundly practical as your career unfolds. The institution is capable of absorbing almost everything you are willing to give it. Its demands are legitimate, its mission compelling and its culture all-encompassing. If you are not careful, the uniform ceases to be something you wear and becomes the only way you understand yourself.

Almost everything an officer values is borrowed. We borrow rank. We borrow authority. We borrow appointments. We borrow the trust of soldiers. We borrow regiments that were built long before we arrived and will endure long after we have left. Even command itself is only ever held in stewardship. Others carried it before us; others will carry it after us. Stewardship, not ownership, is therefore the proper mindset of service. The only thing we ever truly own is our character. It is the one possession we bring into every appointment and the only one we carry away when the uniform finally comes off. That truth deserves reflection because military careers have an extraordinary way of tempting us to confuse professional success with personal worth. Promotions matter. They should matter. Responsibility should be entrusted to those best prepared to carry it. The Army owes that much to its people and to the nation it serves. Yet there is a danger in allowing the institution's opinion of us to become the measure of who we are.

Most of the time, the Army gets promotion more right than wrong. Across thousands of decisions made over generations, it has identified, developed and entrusted remarkable men and women with extraordinary responsibility. No human system will ever be perfect, but ours is generally wiser than its critics sometimes admit. Most officers who are promoted deserve to be.

That should give us confidence in the institution. It should also give us humility. For merit is never the whole story. Timing matters. Opportunity matters. Luck matters. The operational deployment that arrives unexpectedly, the commanding officer who notices potential, the mentor who quietly opens a door, an organisational restructure, a family circumstance, an illness avoided, an injury sustained, a geopolitical event that transforms an entire generation's experience of service – careers are shaped by these as much as they are by talent alone. Recognising the role of fortune should never diminish ambition. It should deepen gratitude. And it should protect us from the oldest danger in leadership: hubris.

Hubris rarely announces itself. It arrives quietly, disguised as confidence. It persuades us that success confirms every judgement, that promotion validates every opinion and that experience has somehow removed the need to listen. The finest officers I have known retained a quiet curiosity throughout their careers. Rank increased their responsibility, not their certainty. They asked questions long after others expected them to have all the answers. They listened carefully to the youngest soldier in the



“Military life often sits in the top-right corner of a demanding equation: reduced time and resource on one axis, and high ambiguity and uncertainty on the other. These conditions are inherent to our profession; as US Professor Jon Kabat-Zinn reminds us, ‘you can’t stop the waves, but you can learn to surf’.”

room because they understood that wisdom and rank are related far less often than we sometimes imagine. Humility is not thinking less of yourself. It is thinking of yourself accurately.

There is also a practical discipline to leadership that sits quietly beneath philosophy, yet determines whether any of it is realised in practice. At every level, you are not simply a participant in the organisation – you are one of its shapers. You arrive into systems that already exist, with identities forged long before you and traditions that will endure long after you. Your responsibility is not to impose yourself upon them, but to understand, steady and enhance them. At different moments you will be a custodian, an architect, a climate controller and, when required, a captain. The most effective officers do not seek to make organisations look like themselves; they create conditions in which others can perform at their best. Success, in the end, is measured less by what you personally achieve and more by what your people are enabled to achieve in your presence.

Leadership also demands clarity of thought in environments that rarely reward it easily. Information is incomplete, time is constrained and competing perspectives are inevitable. The temptation is either to delay decisions in pursuit of certainty or to act too quickly on partial understanding. Neither serves well. Good leaders learn to think clearly in complexity – to test assumptions, seek challenge, draw on diverse perspectives and decide when the moment demands it. They communicate complexity simply to multiple audiences (from

private to Prime Minister), align intent up and down the chain and recognise that events will still intervene. When they do, you will not be judged on your intentions but on your judgement: your willingness to be transparent, to own decisions and to lead through uncertainty rather than retreat from it.

There is, however, a harder truth about the environment in which we operate. Military life often sits in the top-right corner of a demanding equation: reduced time and resource on one axis, and high ambiguity and uncertainty on the other. These conditions are inherent to our profession; as US Professor Jon Kabat-Zinn reminds us, “you can’t stop the waves, but you can learn to surf”. Under such pressure, even strong character can become strained. Good people can become impatient, directive or overly rigid; high standards can drift into intolerance; urgency can crowd out empathy. In quieter moments these tendencies would be checked, but under pressure they can take hold and, if left unguarded, become normalised – creating the conditions for toxicity. Recognise this for what it is. It is not a personal failing so much as an occupational hazard. The responsibility, therefore, is twofold: to understand the conditions you are operating in, and to guard your character deliberately when they tighten around you. Step back when needed, draw on the team, allow challenge and resist the slow seep of darker instincts. All large organisations can feel like this at times; the difference in the best teams is not the absence of pressure, but how consciously they choose to behave within it. In sum, you cannot remove pressure – but you can decide what you will allow to change.

This perspective becomes particularly important when the system disappoints us. Every generation of officers can recall individuals whose promotion puzzled those who served with them – triggering what might be described as the ‘tilted head’ effect. Equally, outstanding officers are sometimes overlooked despite exceptional service, intellect and leadership prowess. When that happens, resist three temptations: cynicism, bitterness and imitation. One disappointing decision should never persuade you that the institution itself is fundamentally broken. Cynicism corrodes trust and weakens teams. Bitterness is equally corrosive, tempting us to measure our worth against the outcomes of others. Promotion is an outcome; character is a choice. The third temptation is imitation – modelling behaviour on those who appear successful for the wrong reasons. Do not do so. If you are fortunate enough one day to sit on a promotion board, remember these moments. Look beyond presentation. Seek truth.

Institutions improve because each generation leaves them wiser than it found them.

The Army's journey over time is less a straight line than a sine wave, rising and falling with the clarity of its purpose, the capability of its people and equipment, and the credibility of its readiness. At its high points, threat is well understood, effort is aligned and the force is confident in its ability to deliver; at its lower points, those elements can erode, often subtly, as time, resource and focus disperse. It is worth stepping back to recognise where the Army sits on that wave at any given moment. Suddenly, decisions that once seemed opaque begin to make sense – why some opportunities emerge, why particular skills are in demand and why certain individuals are selected over others. Meeting the requirements of a role on paper is one thing; possessing what is needed to succeed in that role, at that moment on the Army's journey, is another. The difference is often narrow, but it matters at the margins. Team sheets are rarely accidental – they reflect where the institution is on its wave. The sage officer seeks to understand that context and to place themselves where they can best contribute within it. Wisdom lies not just in understanding your own strengths, but in recognising when and where they matter most.

If there is one constant across command at every level, it is that your primary responsibility always lies with your people. Organisations naturally encourage upward focus – seeking direction, influence and recognition – but leadership must always remain rooted in those

you lead. Your subordinates, your peers, your wider community and their families form the true centre of gravity. The challenge is not simply to direct them, but to understand, develop and protect them. Create an environment in which individuals feel valued and included. Listen to concerns before they become problems. Build trust deliberately, because trust – more than control – is what sustains performance over time. The culture of any organisation will reflect you, whether you intend it to or not.

There are two games available to every officer. One is the game of career management. The other is the quieter, slower – and more important – work of becoming a leader worthy of trust. The fortunate few achieve both. If ever you are forced to choose, choose the second. Careers end. Reputations endure. Character outlives them both.

Leadership, in the end, is a profoundly human endeavour. Plans, processes and structures matter, but they are only ever enablers. It is relationships that determine whether organisations succeed. Get the chemistry right – between commanders and subordinates, between peers, within teams – and performance will follow. Get it wrong and no amount of process will compensate. That requires presence, engagement and moral courage: the willingness to challenge poor behaviour, resist sycophantic flattery and maintain standards even when inconvenient. In the end, leadership is not measured by how busy you were, but by whether your people became stronger, more capable and more confident because you led them.

There is another habit that separates those who enjoy long and satisfying careers from those who are forever searching for validation. Become your own witness. Know what you have done, even when nobody else does. Know when you chose integrity over convenience. Know when you defended someone who could offer you nothing in return. There is extraordinary freedom in that. Over time, the judgement that matters most is the one you meet in the mirror each morning.

As careers progress, there is a subtle danger of spending increasing time managing upwards while spending less time leading downwards. The calendar fills with meetings and correspondence, and the centre of gravity shifts. Resist it. Few people remember every decision taken in headquarters. Many remember forever the leader who believed in them before they believed in themselves. Recognition costs little. Its return is immeasurable.

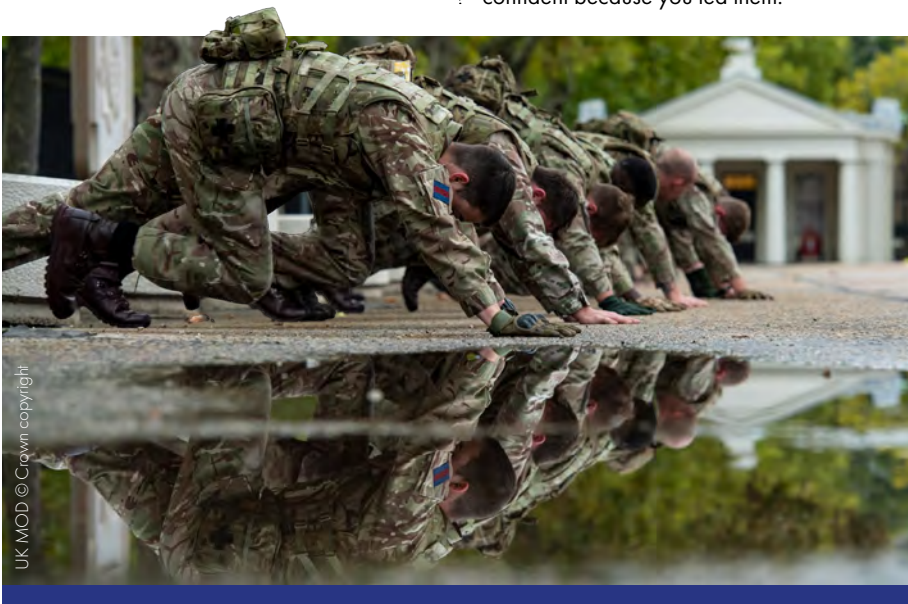
The Army is capable of consuming everything we are willing to offer – time, energy, attention and ambition. One of leadership's least appreciated virtues is perspective. The birthday you missed, the conversation you postponed, the friend you meant to call – those are remembered far longer than most professional milestones. If you have a spouse or partner, love them more than you love the Army. That is not disloyalty – it is wisdom. The Army will replace your appointment quickly. Those who love you cannot replace you nearly so easily.

Eventually, every military career ends. Some leave early; some serve for decades. Some choose the moment; others have it chosen for them. That is neither failure nor loss. It is the nature of service. Leave without guilt. Leave with gratitude. Leave ready to serve in a different way. The purpose of service is not to remain in uniform indefinitely; it is to contribute when needed and to continue contributing, in whatever form that may take, when your time in uniform ends.

One day you will hang your uniform up for the final time. The Army will carry on without you, exactly as it should. If, in that quiet moment, you discover that the best parts of yourself remain – your integrity, humility, curiosity, compassion and loyalty – then you will have understood the purpose of service all along. You served the Army. You never surrendered yourself to it.

Every officer should remember one simple truth. The uniform is borrowed. Character is owned. When the uniform comes off, ensure your character still fits.

Serve to lead – for the nation and NATO.



"Become your own witness. Know what you have done, even when nobody else does. Know when you chose integrity over convenience. There is extraordinary freedom in that. Over time, the judgement that matters most is the one you meet in the mirror each morning."



STRENGTH OF THE ALLIANCE

AUTHOR

Lieutenant General
John Mead is
Deputy Commander
Joint Force
Command Brunssum.



Pictured: A British soldier watches his AR3 Evolution reconnaissance drone come in for landing during Exercise Spring Storm 26, which tested the leadership and combat readiness of the Estonian Army, Air Force, Navy and Cyber Command, as well as the Estonian Defence League. Forces from NATO's multinational battlegroup in Estonia participated in the exercise, ensuring that, should Estonia need to defend its territory, its troops will be ready to seamlessly integrate Allied combat power. NATO

On the 1st of August this year, a Presidential decree took effect to grow the Russian Army's strength to 2,426,000 personnel, with 1,535,000 regulars in that number. Russia is also modernising and fighting differently, institutionalising unmanned systems forces (VBS) and creating the secretive 'Rubicon' centre for advanced uncrewed technologies. Simultaneously, Russia wages a hybrid campaign against Allied countries to deter support for Ukraine, with the extraordinary North Atlantic Council meeting of the 12th of August warning about Russia's "increasing tolerance for risk". The Polish Foreign Minister, Radek Sikorski, reinforced this point on the 27th of August writing: "Today, as in the past, Russia is testing the West by force. Soviet military doctrine called this tactic *razvedka boyem* – reconnaissance by combat."¹ Against this backdrop, General Alex Grynkeiwich, Supreme Allied Commander Europe (SACEUR), made clear during a recent visit to Allied Air Command, "the most important thing we do each and every day is to deter and defend every square inch of Alliance territory," and "that requires relentless focus on warfighting readiness". He reiterated the necessity to "adapt while we deter". The purpose of this article is to give

an operational level update as to how the Alliance is adapting to counter these threats. I will make three main points: firstly, NATO has transformed under DDA² over the last seven years I can bear direct witness to; secondly, we need to move faster yet in coming to terms with revolutionary changes to the character of warfare; and finally, the UK's NATO First feels tangible in word and deed, but further boldness is vital in counter threats and to retain our current level of influence within the Alliance.

To unpack these issues, I will lean on a phrase I used to hear from a former SACEUR, General Christopher Cavoli. He would say, "we do three things – we deter adversaries, we build readiness and we strengthen the Alliance". On General Cavoli's first point, the judgement on how effective NATO is doing at deterring Russia is notoriously difficult to assess, but ever more in focus noting growing hybrid threats, airspace violations and with acute concerns over escalation as the deadlock in Ukraine continues. This leads to boiling the

¹*The Economist, Standing Up to Putin, Europe Cannot Protect Russia from Itself* dated 27 Aug 2026.

²*The Concept for Deterrence and Defence of the Euroatlantic Area*, 2019.

frog analogies aimed at NATO at one end of the spectrum and, at the other, including from many learned academics (among them those at the CHACR),³ the concern that NATO's more assertive approach is escalating the risk of conflict. Finding the right deterrence line (which moves) is the judgement for SACEUR and the North Atlantic Council and is dependent on the capability and credibility of the warfighting system. At the operational level, the warfighting system has completely changed during my time in NATO. Whether the trajectory is fast enough is the key question and one equally for nations and NATO.

Firstly, 'you've got to have a plan' and we've now got those. The plans are also not static – the Regional Plan revisions now with SACEUR signal big changes in how we fight with a great deal of the magic lying below in our ever more impressive tactical plans. The NATO Detailed Planning Process⁴ has also shifted significantly in terms of capability thinking biased towards rapid adoption and innovation. In the 'fight tonight' timeframe, the Eastern Flank Deterrence Initiative (EFDI), the new Standing Defence Plan 12000 for Air Defence, and our work in both Baltic Sentry and Arctic Sentry demonstrate what good can look like. This means not just alignment, but deeper integration and synchronisation with 32 nations across five domains (adding Special Operations Forces and enablement really makes seven) within the peace-crisis-conflict continuum. The scale and scope of this change is something to be believed and a constant surprise to the British contingent I talk to coming into Alliance appointments. And often to me.

NATO now has a deterrence framework based on a clear and credible ability to defend, albeit stocks and the defence industrial base need, and are getting, more urgent attention. The other way round, deterrence based more on soft power and thought leadership while taking risk on defence, is not a recipe for success with Russia.⁵ That said, we do need nations to constantly use their cleverness and wider freedoms to enhance SACEUR's strategic effects. Alignment within one, SACEUR's, strategic effects cycle is also crucial if we are to achieve those two most vital of military principles – unity of effort and concentration of force. It's been hard work, but I feel optimistic on this unity of effort point in the day to day, Joint Operations Centre (JOC) to JOC links are now evident, through nations growing integration within SACEUR's strategic framework (where Transfer of Authority⁶ force and flags matter), and in the way nations are now embracing 'campaigning through training' within NATO exercises. Training

feels to me the most important of all the initiatives. All Allied Command Operations (ACO – the command and control under SACEUR) and all the nations under SACEUR's direct orchestration are training twice a year, rehearsing the actual plans to deter and, if necessary, defend, is a game changer.

In terms of building readiness, and I include interoperability in this point, the scorecard is more mixed, especially as the data is often problematic in our fight tonight planning. In the coming year nations should expect more scrutiny and verification from NATO on actual readiness levels and stocks, with a necessity to use the functional systems such as LOGFAS⁷ routinely to maintain visibility. In terms of equipment, the energy and innovation in the defence sector is something which is impossible not to be impressed with, as anyone who visited Paris Eurosatory recently can attest. Scaling up innovation seems the constant challenge and is reliant on the primes and national capability architectures which struggle to keep up. We must do so if we are to be ready for the right threat, one which evolves rapidly before our eyes in Ukraine. On the 4th of August this year, the Ukrainian Ambassador to the UK, Valerii Zaluzhnyi, described NATO doctrine as obsolete, based more on Second World War fighting and well behind the requirements for how Russia now fights. It's a really important challenge, highlighting the gaps between nations adapting while at war and those 32 which are not. There is also increasing evidence, such as 2nd (US) Cavalry Regiment's recent harsh lessons from an exercise against Ukrainian drone operators, that more profound change is needed. Returning to SACEUR's earlier point about adapting while deterring, there's not an either-or choice and the time horizons for capability development are far shorter than during the Cold War. It's a different paradigm.

³The Centre for Historical Analysis and Conflict Research is increasing its support to NATO and aims to have the team reinforce Exercise Steadfast Deterrence 2027, focusing on their work on deception.

⁴NATO Detailed Planning Process translates the operational requirement into Defence planning for Nations – including capability and stocks targets. Criticised for its rigidity, we are now seeing a more flexible, innovative approach to delivering on capability codes if evidenced and interoperable.

⁵What deters Russia?, Chatham House 2021 remains one of the best reads I have seen on the subject, although brings to mind the Churchill quote that Russia is, 'a riddle, wrapped in a mystery, inside an enigma'.

⁶Transfer of Authority from Nation to NATO, once relatively rare outside of crisis, now routine.

⁷Logistic Functional Application System is the focus, but the wider data set which NATO holds is an incredible asset as we now adopt AI and Maven Smart Systems.

The way NATO over classifies its work doesn't help in showing just how much the Alliance has achieved. I would commend the new classified Standing Defence Plan 12000 Air Defence plan to military readers as a very joined up response to the escalating risk of drones, missiles and related effectors. It's now all about the resourcing. EFDI also directly pushes nations to get to capability targets differently and quicker, with developments in the digital backbone being especially significant when tied into the NATO cloud. Both initiatives take Ukraine as their foundational evidence base. The British Army's Project Asgard should also take credit for exploiting Ukraine lessons and directly influencing how EFDI has developed. The British Army's 20:40:40 mix of survivable, attritable and consumable capabilities has also generated a lot of interest and imitation. NATO 3.0 needs to be 2030 not 2035 and this means many of the big muscle moves will have to occur over the next two years – NATO cloud, HQ dispersibility, burden shifting, enablement, targeting, data and data links, AI and Maven Smart System exploitation. Those are just some of the initiatives off the top of my head which we focus on in our campaign plan. Exercise Steadfast Defender next March to May will also be a highly important waypoint and mission rehearsal to test just how far we have come. While the information environment during this exercise will be contested, with NATO accused of escalation, the risk of never properly proving our logistics and early defensive deployments seems, to me at least, a much higher risk.

In terms of General Cavoli's final point on the strength of the Alliance, I recall Albanian Prime Minister Edi Rama's speech at the opening of a NATO Airfield in Kuçova in March 2024, which began with "the one thing you must remember, is that NATO is first and foremost about values". I also recall looking out at the snow-capped mountains with deep regret for moving into summer Service Dress early, but I digress. Those values – individual liberty, democracy, human rights and the rule of law – are very much under threat. The war in Ukraine is our daily reminder on this vital point as I reflect on just how the NATO team has come together. Routine interaction and collaboration has built trust and broken down many of the former bureaucratic barriers. It all reminds me somewhat of being a part of 7th Armoured Brigade (the Desert Rats) in Germany in terms of sense of purpose (ours was then Afghanistan) and unity, but just on a much grander scale.

The Eisenhower adage that "plans are nothing, planning is everything" has certainly been a big factor in ACO's progression

– collaboration builds consensus. Having aligned NATO and national plans is part of the genius of DDA, but it's a deeper point about moving from 'them and us' to just 'us'. We have not wasted a crisis; the threat has galvanised NATO command and force structures and, crucially, the links with the nations are completely altered. In this context, Britain's NATO First policy feels tangible across defence lines of development and, in some respects class leading by explicitly being NATO by design. Our nation's support to Ukraine has also been first in class in so many respects and something we are all extremely proud of. And yet, we are starting to fall down the spending list of nations and will need to be bolder yet to retain our (remarkable) influence in NATO but, even more importantly, to provide the expected leadership in more dangerous times, for which I offer a few thoughts.

The UK is driving to have an 'integrated force' – everyone likes integration – especially when it adds to national resilience, but a NATO First policy surely must place the premium

"The scope and scale of change [in the Alliance] is humbling to be a part of. But there's always a but. Are we going fast enough and countering hybrid threats sufficiently? Probably not, albeit the sense of urgency is there."

on integration under SACEUR at the military strategic level and the NATO Joint Force Commands regionally? Too much national integration of forces risks disintegration when forces are assigned and have their authority transferred to SACEUR and then Joint Force Commands. I make this point because the bold option is even further integration under NATO, including looking at where the competency wins really are (NATO surely?) and by asking across defence lines of development, 'does this need to be sovereign?' given resource constraints. Transfer of Authority also really matters – it's the only way to learn the hard

interoperability lessons, while being the easiest way to accrue influence in the Alliance as I look at the flags arrayed to deterrence effects on SACEUR's weekly updates. A free gift, easily reversed and not exploited nor understood sufficiently in the UK. And while I am banging the boldness drum, surely it's a good time to assess more of a forward Allied Rapid Reaction Corps presence in Sennelager (something we experimented with when I was chief of staff) and to accelerate the conversation as to Reserves. In our operational area, Germany's cabinet approved the Reserve Strengthening Act to expand the Bundeswehr reserve force to 200,000 personnel by 2035. Poland is overhauling its military reserve system to build a high-readiness volunteer force, targeting a total armed forces strength of 500,000 personnel by 2039. France is expanding its military reserves and introducing a new ten-month voluntary national service for 18 and 19-year-olds beginning in mid-2026. Reserves are vital to credible deterrence and the ability to properly defend. The resulting conversation with society is equally important and is often the first conversation in the many NATO countries I routinely visit, but not in the UK.

So, as to the strength of the Alliance, I think it's in a remarkably good place militarily – the scope and scale of change is humbling to be a part of. But there's always a but. Are we going fast enough and countering hybrid threats sufficiently? Probably not, albeit the sense of urgency is there. We also need to realise we are in a revolutionary period for military affairs and translate operational evidence into capability at far greater speed. EFDI points towards a more integrated mix of crewed, attritable and consumable systems and the ability to sense, decide and strike in a heavily-contested electromagnetic environment. Standing Defence Plan 12000 similarly demonstrates the need for layered air and missile defence and affordable counter-UAS solutions that reverse the current cost imbalance. These lessons are already informing a more responsive NATO Detailed Planning Process, enabling capability targets to be refined, tested through experimentation and exercises, and delivered by nations more quickly. The UK's NATO First policy is a leading light as a clear organising idea, but big choices remain ahead with the UK's place in the NATO command structure at stake – "the jewel in the Crown of British Defence" to quote Lord Peach. British leadership in the Alliance is taken as a given and the more significant point is the Alliance needs our country's innovation and fulsome integration more than ever given what confronts us. Boldness, not hedging our bets, would seem the only option.



US and British troops tested counter-drone tech in Poland during Project Flytrap last summer.

'FLASHES' OF REFORM AND LOSING THE TECH THREAD

ON a baking hot Friday in September, Captain Tom Weeves, adjutant of the 3rd Battalion for a little over two years, had two vital tasks to achieve. As was surely the case for all adjutants, MAs, bag-carriers and other military servants of greater men and women, Weeves lived by 'The To Do List'. At the start of every day The List was consulted and jobs carefully categorised, annotated and evaluated to allow them to be prioritised, recorded and, importantly, ticked off (done), crossed off (overtaken by events, no longer needed to be done) or transferred to tomorrow's List (still needs to be done), according to their importance (asterisk), urgency (exclamation mark), simplicity/complexity (allowing swift resolution: arrow/needs lots of time and effort: reverse arrow) or risk to Weeves if left uncompleted (underline). Of course there were also those tasks that looked straightforward, but, experience had taught Weeves, may be more complicated and trap-filled than he had originally thought (question mark). Once the List had been considered each morning a heavy scribble could be placed in the margin against those tasks that would be the day's top priority so that they could be dealt with before the rest of The List was worked through according to their asterisk count. He was, however, more than a little underwhelmed that the two tasks – to be prioritised above all others – were to ensure everyone on camp was wearing the new, green, tactical recognition flash (asterisk, asterisk, exclamation mark, arrow, double underline... and question mark) and to log into the Army's recently launched talent management system app and update his skills profile (asterisk,

AUTHOR

The Boxer is a serving British Army officer who floats around the Service like a butterfly and whose words *can* sting like a bee.



exclamation mark, arrow and double underline... and question mark). Needless to say, his 'mission critical' objectives were some distance from the command and leadership challenges he assumed he'd one day be tackling when he joined the Service a little over eight years ago, but as they were both asterisked and arrowed for swift resolution he remained confident that the other 27 items (variously annotated) on the day's List were likely well within reach of achievement.

As far as Weeves could tell, the new flash, identical to the old one, but now in tactical green, was the only tangible thing to have come out of the Army Reform programme. But, 'theirs is not to reason why, theirs is just to do and dye', so the 3rd Battalion now had a new-coloured badge and everyone needed it sown on to all their uniforms, preferably by yesterday.

Key to this was the RSM. The

backbone and bedrock of the Battalion, the warrant officer was also Weeves' 'go-to fixer' and confidante. Keen to make quick progress with The List, Weeves jumped up out of his chair and walked over to the RSM's office, just down the corridor in Battalion HQ. The sergeants' mess manager, Sergeant Cascarino, was just leaving as he got to the RSM's door.

"Cheers, Tony, thanks for letting me know, just make sure you rub it out," the RSM told his departing visitor.

"What was that about?" asked Weeves.

"Some scamp has written 'plan twice' on a poster in the mess bog asking 'what would you do with more time for planning?'."

Suppressing a smile, Weeves quickly got to the point.

"I'm getting heat and light from brigade about these badges. Apparently, the new brigadier is energised by it and wants every soldier to have them sown on every uniform asap."

"I'm all over it, sir, but the tailor is only in for two hours every other Wednesday when there's an 'r' in the month. And he's put his prices up from £4 to £5 a badge – says the hike in cost is because Iran is blockading the Strait of Hormuz. Oh, and with only two badges per person being issued, I'm struggling with the 'every person, every uniform' concept – but the QM's working on it."

"They'll just have to sow them on themselves,"



said Weeves (wondering briefly whether to put 'more badges' on The List and how that might be annotated, then deciding that this was safest if left uniquely on the QM's List).

The RSM briefly closed one eye and tilted his head, suggesting that he thought nothing good could come from the soldiers being let loose with a needle and thread. Nevertheless, he reflected, if ten-year-old Cub Scouts could do it, so could the fine men and women of the 3rd Battalion. "Leave it with me, sir, we'll do a 100 per cent muster parade and it'll be sorted by the end of the day." (Weeves mentally added 'Attend RSM's Muster Parade' to The List.)

"Legend," replied Weeves, turning on his heel and returning to his office enthused with the prospect of putting a tentative (pencil) tick against item 1 and thus now only having to get an app to play ball before getting on with his actual work. His optimism for a return to productivity was punctured by the thought that the Army didn't have the best record when it came to digitisation. He had been close to phoning Dignitas when the Battalion SharePoint site was launched. For some reason he had needed to get permission from the 'system administrator' to access it, a hurdle made all the harder to clear by the absence of any detail as to who that individual might be. And even if a name had been divulged, seeking permission involved completing a form – an admin gem only available via the SharePoint he couldn't access.

So, mindful his second task may take a while (question mark), Weeves nervously eyed the commanding officer, Lieutenant Colonel Jooster, walking through from his office holding a single page of A4 paper covered in Post-it notes.

"Blumin hot, Weeves, has someone turned the heating on?" queried the CO.

"Comes on automatically on the 1st of September, sir, I've opened all the windows though, and every office has a fan going," replied Weeves, glancing at Item 12 on the List, 'Complete battalion energy-saving return for Bde DCOS' (asterisk, reverse arrow; and carried over from yesterday's List several times already).

"Right-o," fired back Jooster, mercifully getting straight down to business. "I've been working with the padre on the order of service for the Battalion church service. It's all here but I'll need you to type it up and then print 300 copies, double-sided and then folded into a kind of booklet thingy for him. He said he'd do it himself



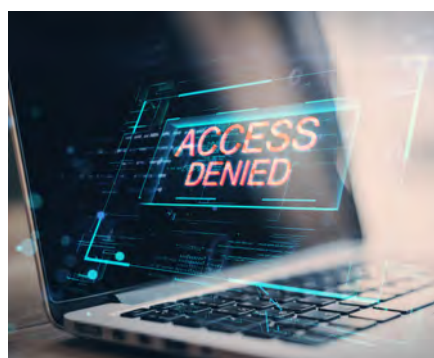
but the last time the line spacing was all out and he'd used Calibri as the font throughout."

Aware that the commanding officer despised Calibri as much as he hated Third-World debt, Weeves could see why he'd been trusted with this additional task, but before he could query its deadline, the CO qualified the 'ask'.

"Padre's got a wedding in Chester tomorrow so needs them by close of play today. Oh, and make sure the text on page four is in colour."

Mouth slightly open, Weeves realised this wasn't a five-minute job – not least because the printer in his office was broken and the only other capable of printing in colour was located on the ground floor. His pen automatically started writing a new line on the List: 'Order of Service' (asterisk, asterisk, double underline, exclamation mark, exclamation mark). Fortunately, the random collection of Post-it notes did not take long to type up, and he was able to send a test to the printer in question in relatively short order. Predictably, the page orientation was wrong on the first attempt but, walking back downstairs, Weeves was confident the second version would be spot on, and he'd be able to put the posh paper into the printer and set the 300 copies running.

"What's this, Corporal Flynn?" asked Weeves



as he picked up page ii of JSP 757 from the printer tray.

"Sorry sir, I accidentally sent the whole JSP to the printer. I tried my best to cancel it, but it won't let me."

"How many pages is it?"

"It says 987 but I'm not quite sure if that includes the annexes."

Realising there was very little point in getting agitated, adding another mental 'reverse arrow' to the 'Order of Service' task, and sensing a window of opportunity to focus on his skills profile, Weeves replied: "Right, well when it's finished can you just let me know and bring me some of the posh printer paper, please."

Content he couldn't do any more about progressing the order of service until Flynn's tome was finished, Weeves dashed upstairs and began to log into the talent management app. Apparently, the next jobs' board would be decided by a 'skills match' so he'd have to make sure he'd banked and validated all his experience if he was going to land a 'good' role next (treble asterisk, heavy double underline).

Access denied. Your LUMS account has expired. Please contact your IT systems administrator.

"Son of a..." blurted out Weeves, just as someone stamped their feet and knocked loudly on his door.

Corporal Flynn, known by everyone as 'Cow Eyes', saluted and marched smartly into Weeves' office, carrying the box of posh paper like it was the Bible. Instinctively Weeves looked at his left arm, relieved to see a shiny, new, green badge. The flash was upside down and looked like it'd been sown on during a choppy Channel crossing but, thought Weeves, when you work for an organisation that drives with its lights on during the day, and turns them off at night, that would have to do for the time being. Looking down he crossed off the newly added 'Attend RSM's Muster Parade' and decided also to take a risk and turn the pencil tick against 'New Green Tac Flashes' into an ink tick.

Weeves looked at his watch, then back at The List. "***** *****!!!!!! <<<<," he thought to himself.

The Boxer will be back in the next issue of The British Army Review...



Published by Helion & Company, Hardback, ISBN: 978-1806723706

TITLE

The Ukrainian Army: A Military History 1991-2025

AUTHOR

Adrien Fontanellaz

REVIEWER

Professor Andrew Stewart, Head of Conflict Research, CHACR

WAR ANALYSIS FORGED IN THE HEAT OF BATTLE

Writing the history of an ongoing conflict is an inherently fraught intellectual exercise. As Adrien Fontanellaz acknowledges in the introduction to *The Ukrainian Army: A Military History 1991-2025*, works of “immediate history” rely on contemporary sources that are “partial and almost inevitably biased”. Yet, he successfully navigates this historiographical challenge, synthesising official communications, academic reports and open-source intelligence to deliver a comprehensive analysis of the Ukrainian Armed Forces (ZSU). The result is a meticulous institutional and operational history that traces Ukraine’s military evolution from a bloated, decaying post-Soviet apparatus into one of the most battle-tested, technologically innovative – yet structurally strained – fighting forces in the modern world.

The book’s opening chapters provide essential context by examining the ZSU’s post-1991 genesis. Inheriting a colossal but utterly disproportionate Soviet military footprint – including 780,000 personnel and the world’s third-largest nuclear arsenal – the newly independent Ukrainian state faced rapid economic collapse and Western pressure to demilitarise. Fontanellaz reveals the 1990s and 2000s to have been a dark age of chronic underfunding during which the ZSU devolved into an “army of paupers”. Budgets were so anaemic that military exercises ceased entirely, corruption became endemic and morale plummeted; the institutional despair was perhaps best captured by a young lieutenant who committed suicide in 1999, leaving a note stating that Ukrainian officers “do not live, but exist”, condemned to an “animal existence”. This systemic decay meant that when the Yanukovich regime fell during the 2014 Revolution of Dignity, Ukraine was functionally defenceless.

The strategic shock of 2014 serves as the catalyst for the ZSU’s first major transformation. Fontanellaz provides a clinical autopsy

of Russia’s annexation of Crimea and the subsequent Donbas war. Faced with the infiltration of Russian regular forces and proxies, the Ukrainian Army initially found itself paralysed, with commanders noting they were “unprepared to fire on our own people”. This vacuum was rapidly filled by a remarkable mobilisation of civil society, giving rise to volunteer militias and crowd-sourced logistics. However, the limits of ad hoc militia warfare were brutally exposed when conventional Russian Battalion Tactical Groups intervened, leading to the Ukrainian operational disasters and encirclements at Ilovaisk and Debaltseve.

One of the book’s most compelling analytical threads is its examination of Ukraine’s

subsequent doctrinal evolution. As Kyiv pivoted towards NATO integration, it attempted to adopt Western mission command and empower a professional non-commissioned officer corps. Yet, this transformation was highly uneven and Fontanellaz does not shy away from exposing the cultural friction within the ZSU. He quotes a British officer observing in 2021 that the Ukrainian military’s “bones and flesh remain consistently Soviet, both in approach and methods”, characterised by pervasive secrecy and an aversion to initiative. Even General Valerii

Zaluzhnyi, the architect of Ukraine’s 2022 defence, candidly admitted his admiration for Russian Chief of the General Staff Valery Gerasimov, noting, “I was brought up on Russian military doctrine”.

This hybrid institutional identity defined Ukraine’s performance during the full-scale Russian invasion of February 2022. Fontanellaz critically deconstructs the Battle of Kyiv, demonstrating how extreme decentralisation saved the capital. Operating under a collapsed communication network, junior Ukrainian officers fought in highly autonomous, mobile combined-arms detachments and leveraged local intelligence and civil resistance to channel Russian mechanised columns into kill zones “before

“The author effectively details how software innovations from the Ukrainian tech sector acted as significant force multipliers that outperformed Russian equivalents.”

cutting them off from their rear and then pulverising them". The author effectively details how software innovations from the Ukrainian tech sector, such as the Kropyva tactical mapping system (often dubbed an 'Uber for artillery'), acted as significant force multipliers that outperformed Russian equivalents.

As the conflict transitioned from the fluid manoeuvre warfare of 2022 – highlighted by the stunning Ukrainian operational successes in Kharkiv and Kherson – to the gruelling, positional attrition of 2023 and 2024, Fontanellaz shifts his focus to the strategic and political frictions constraining the ZSU. He meticulously outlines the civil-military divide, particularly the tension between the military logic of the General Staff and the political imperatives of the Stavka (the supreme command led by President Volodymyr Zelensky). The defence of Bakhmut against the Wagner Group's brutal 'meat grinder' tactics serves as a prime example. While the military sought to preserve forces, the political leadership demanded the city be held, conscious that Western arms deliveries were contingent on narratives of unbroken resistance. As Zelensky starkly noted, "as cynical as it may sound, everyone wants to be on the winning side".

Fontanellaz also excels in chronicling the technological revolution spurred by the war, particularly the maturation of asymmetric drone warfare. He analyses the Black Sea campaign, where the Ukrainian military, bereft of a conventional navy, embraced the doctrines of the 19th-century French *Jeune École*. Utilising indigenously developed uncrewed surface vessels, such as the *Magura* and *Sea Baby*, alongside Western cruise missiles, Ukraine successfully sank or damaged a significant portion of the Russian Black Sea Fleet, breaking the naval blockade. Similarly, the writer unpacks the 'quadcopter revolution' and charts how the mass deployment of first-person view drones fundamentally altered the morphology of the battlefield, making concentration of armoured vehicles nearly impossible and forcing units to disperse into small, highly vulnerable infantry assault groups. Crucially, he links this technological agility directly to civil society, noting that "the Ukrainian army is unique in its self-financing efforts", with grassroots crowd-funding bypassing bureaucratic bottlenecks to supply front-line units directly.

Despite these tactical and technological triumphs, the book's concluding chapters paint a sombre picture of an army increasingly bled dry by attrition. Fontanellaz is highly critical of the West's hesitancy, characterising allied



"The writer unpacks the 'quadcopter revolution' and charts how the mass deployment of first-person view drones fundamentally altered the morphology of the battlefield, making concentration of armoured vehicles nearly impossible and forcing units to disperse into small, highly vulnerable infantry assault groups."

military aid as perpetually "too little, too late". The failure of the highly anticipated 2023 Melitopol counter-offensive is attributed both to the formidable Russian 'Surovikin Line' defences and the delayed delivery of vital Western armour and demining equipment. The subsequent suspension of US military aid in late 2023 left Ukrainian artillery severely outgunned, forcing the ZSU to rely on first-person view drones as a desperate stopgap. The author also critically assesses Ukraine's own systemic failures, pointing to a chaotic force generation system, chronic infantry shortages, an aging combat force and a delayed mobilisation policy that, by 2024, combined to create a spike in desertions.

This is a most valuable text both for those interested in contemporary defence and security and military historians. By avoiding triumphalism and grounding its analysis in operational realities, logistical constraints and civil-military dynamics, Fontanellaz has produced an important, albeit provisional, history of what may already be viewed as the defining conflict of the 21st century. In his final assessment, he concludes that while Ukraine has achieved an historic strategic victory simply by preserving its statehood and sovereignty against a vastly superior foe, its military remains caught in a perilous limbo. Western support has provided "barely enough to hold out, but certainly not enough to win". Nonetheless, events still ongoing may well dictate the need for an early updating of this account and the addition of another chapter outlining how the ZSU ultimately prevailed.

Facing similar historiographical challenges, in his detailed and illuminating study of the Battle of Chernihiv, Mykhailo Zhirokhov also successfully bridges the gap between immediate journalism and rigorous military analysis. The head of the Chernihiv Military

History Museum and a historian specialising in post-Soviet conflicts, he leverages his localised expertise to deliver a meticulous operational autopsy of the Russian Armed Forces' (VSRF) failed decapitation strike through northern Ukraine. Tracing the geopolitical escalation from the spring of 2021, the author explains how Russia masked its invasion preparations behind the facade of large-scale military exercises. When the invasion commenced on 24 February 2022, the Russian General Staff's operational blueprint relied heavily on hubris. As Zhirokhov notes, the plan "closely resembled Soviet operations in Czechoslovakia in 1968, and Afghanistan in 1979", premised on the assumption that Russian columns would rapidly bypass or drive through urban centres unmolested, ultimately isolating Kyiv. The Russian 41st Combined Arms Army and the 2nd Guards Combined Arms Army were ordered to advance down primary highways, expecting to be greeted by a pliant population.

Part of the publisher's larger *War in Ukraine* series, Zhirokhov's most significant analytical contribution lies in his deconstruction of the Russian Battalion Tactical Groups and their catastrophic failure. He argues compellingly that the VSRF did not conduct a conventional offensive, but rather a poorly coordinated 'raid'. Because the muddy terrain of the Chernihiv region – characterised by dense forests and an abundance of rivers – rendered off-road movement impossible, the heavily mechanised Russian forces were entirely road-bound. The text exposes the fatal flaws of the Battalion Tactical Group structure in this environment: "They had too few tanks, infantry, and artillery" and lacked the combined-arms cohesion required to break through fortified positions. Consequently, when Russian spearheads encountered resistance, they were incapable of transitioning from marching



Published by Helion & Company, Paperback, £19.95, ISBN: 9781804519677

TITLE

War in Ukraine Volume 11: The Battle of Chernihiv, February-March 2022

AUTHOR

Mykhailo Zhirokhov

REVIEWER

Professor Andrew Stewart, Head of Conflict Research, CHACR

columns to deployed combat formations, leaving their exposed flanks and logistical tails vulnerable to systematic destruction.

In stark contrast, Zhirokhov details the ZSU's institutional adaptation and tactical agility. Forewarned by intelligence and pre-invasion exercises, local Ukrainian units, particularly the elite 1st Separate Tank Brigade, dispersed their assets and prepared for mobile, asymmetric defence. There are gripping accounts of early engagements, such as the ambush at Khalyavyn, where a small detachment of Ukrainian T-64 tanks and infantry armed with rocket-propelled grenades decimated the spearhead of the Russian 74th Guards Motor Rifle Brigade. The author highlights the critical role of Ukrainian artillery, particularly the 27th Rocket Artillery Brigade, which utilised BM-27 multiple rocket launchers and OTR-21 Tochka ballistic missiles to obliterate Russian bridging operations over the Desna River at Makoshyne and Shestovystya, repeatedly denying the VSRF operational depth.

Crucially, the book elevates the narrative beyond conventional military history by documenting the profound impact of the civilian resistance movement. Arguing similar to Fontanellaz, Zhirokhov reveals how everyday citizens operated as a vast, decentralised intelligence network coordinated by the ZSU, the Security Service of Ukraine and military intelligence. As one resistance coordinator

noted: "A member of the resistance movement was an average inhabitant... The work is structured in such a way that there were several of these people in each settlement, and they, of course, did not know each other at all." This crowd-sourced intelligence enabled precise artillery strikes on Russian logistics and pontoon crossings, effectively breaking the back of the enemy's supply chain and stalling the advance of tens of thousands of troops. Furthermore, unarmed civilians actively engaged in physical resistance, blocking highways with felled trees to trap Russian fuel trucks.

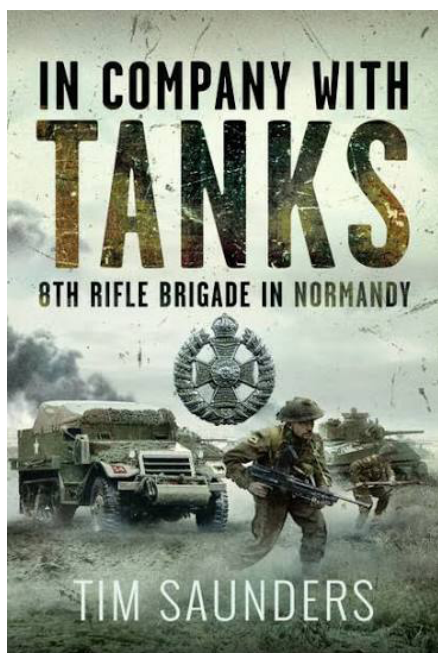
"[Zhirokhov] identifies the Battle of Chernihiv as a paradigm of modern defensive success.

The Russian withdrawal in early April 2022 was not a 'good-will gesture', as Moscow's propaganda claimed, but a forced retreat dictated by unsustainable losses."

With his local knowledge, access to first-hand sources and historian training, the author has produced a well evidenced account of the opening salvos of the Russo-Ukrainian War. His access to primary combatant testimonies, precise orders of battle and intimate knowledge of the region's geography gives it real value. In his concluding assessment, he identifies the Battle of Chernihiv as a paradigm of modern defensive success. The Russian withdrawal in early April 2022 was not a 'good-will gesture', as Moscow's propaganda claimed, but a forced retreat dictated by unsustainable losses – estimated at 85-90 per cent of the combat effectiveness of the initial invasion force in that sector. The combination of Ukrainian "resilience and active defence",

non-standard tactical decisions and absolute societal mobilisation shattered Vladimir Putin's strategic objective of seizing the capital.





Published by Pen & Sword,
Hardback, £23,99, 312 pages,
ISBN: 9781036135928

TITLE

In Company with Tanks: 8th Rifle Brigade in Normandy

AUTHOR

Tim Saunders

REVIEWER

Major Paul Knight, Lessons
Exploitation Centre, Land Warfare
Centre

A DOCTRINAL DEAD END?

Tim Saunders is a retired British Army officer, battlefield guide and prolific author on the Peninsular War and North West Europe, 1944-5. His latest offering, *In Company with Tanks: 8th Rifle Brigade in Normandy*, follows a 'motor battalion' from its formation through the Normandy campaign as far as Amiens in late 1944.

The book focuses on a Territorial Army (TA) battalion raised as part of the duplication of the TA in 1939, and allocated the role of a motor battalion within a mechanised infantry division, which was itself a new establishment in 1938. In 1941, the battalion transferred to the newly raised 11th Armoured Division, under Major General Sir Percy Hobart of 'Hobart's Funnies' fame.

Once in France, 8th Rifle Brigade participated in Operations Epsom, Goodwood and Bluecoat, the first battle for Hill 112, and 'The Great Swan' following the breakout from Normandy. Chronologically, this places the battalion in the major operations following the initial landings. The author skilfully employs a mixture of war diaries and operational staff work, interwoven with first-hand accounts from the participants, including, importantly, those of Germans to include "the other side of the wire".

Part of the narrative is the impact of equipment and personnel on how the battalion operated, trained and fought. Motor vehicles were naturally essential to enable the battalion to perform its role. Improved performance was provided by an evolution from a four-by-four lorry to White Scout Car and finally the M5 half-track [pictured below], the latter being able to outperform its German equivalents. In terms of manpower, after some four years of training in the UK and a relatively stable establishment, battlefield casualty replacements were inadequate to replace all the losses, and replacements took time to be brought up to standard.

Despite being raised by one of the great British armour commanders of the war, Hobart, and commanded throughout the Normandy Campaign by another experienced armoured commander from the Western Desert, Major General 'Pip' Roberts, it is clear that the division undertook doctrinal revisions. As early as the 17th of June 1944, it was evident that tanks required more infantry support than could be provided by a motor battalion, especially in country where snipers and machine gunners 'laid low' until the tanks had passed. A month later, tactics for capturing villages or strong points were reviewed.

Saunders successfully combines all of these factors – narrative, equipment, personnel and doctrine – to provide a well-rounded account. The focus on a single unit allows the intimate examination of that unit and its conduct in operations, while also expanding to explore that unit's role in the context of divisional and corps-level actions.

Where *In Company with Tanks* has real value to the British Army and current training and operational considerations is the role of a motor (read 'armoured' for the modern equivalent) battalion in an armoured division in the early years of the concept's evolution. The division intended to fight a combined arms manoeuvre campaign in Normandy using the lessons learnt from the Western Desert. The reality was a long, slow series of slogging battles against a determined enemy in close country which favoured the defender. Losses amongst men and materiel were high, advances disappointingly limited and the lessons learning process was conducted while in contact with the enemy. There are striking parallels with the current conflict in Ukraine. For anyone planning a Normandy battlefield study, this book is highly recommended. It will introduce the planner to actions which offer relevant lessons to contemporary issues, well away from the invasion beaches.



AMERICAN OVERTHROW



MOSCOW'S ENDGAME IN ITS
LONG WAR WITH WASHINGTON

KEIR GILES

AUTHOR OF WHO WILL DEFEND EUROPE?



Published by Hurst, Hardback,
£18.99, 384 pages,
ISBN: 9781805266716

TITLE

American Overthrow: Moscow's Endgame in its Long War with Washington

AUTHOR

Keir Giles

REVIEWER

Major Luke Turrell, Directing Staff,
Land Command and Staff College

AN EXPOSE OF AN UNWELCOME UNION

Keir Giles once told an audience of British Army officers studying at the UK Command and Staff College that if he hadn't scared them to death by the end of his lecture, he would not have done his job properly. Giles, a former senior fellow with Chatham House's Russia and Eurasia Programme and adviser to governments worldwide, has deliberately made a career of instilling fear in people about the threat from Russia. And for good reason. For decades European nations have allowed themselves to institutionally succumb to normalcy bias, whereby threat warnings are disbelieved or minimised and disaster risks are underestimated on the naïve assumption life will continue as usual, because the alternative is unthinkable, inconvenient, expensive, or all three. Giles' previous book, *Who Will Defend Europe? An Awakened Russia and a Sleeping Continent*, was fundamentally based on two elements: Russia's strongly held grievances and Western timidity, characterised by half promises, broken pledges and, in the case of America, a pathological reluctance to confront Russia. The author's latest offering, *American Overthrow: Moscow's Endgame in its Long War with Washington*, takes its predecessor's latter element a stage further.

At times, *American Overthrow* reads like a well-formulated conspiracy theory, aided pictorially by a front cover that places the Russian state coat of arms in the centre of the Seal of the US President. However, whilst Giles is thinly veiled in suggesting Russia possess leverage over President Trump, the book is an expose of the political, cultural and psychological direction that America is taking under the second term of Donald Trump's presidency. Amusingly, Giles highlights "...if one or more of them [Trump and those around him] were consciously working for Russia, and their real objective were to hasten the decline of the United States and its global power, what would they have done differently?". The real strength of the title though is that it looks at America through the lens of the Kremlin, and does so through the eyes of someone who knows Moscow's machinations well. The result is a painting of the world in which Russia benefits from America becoming more like it... and the world suffers.

Most striking are the similarities Giles draws out between the vision of 'spheres of influence',

advocated in the US National Security Strategy (NSS), and the long-standing Russian ambitions for unimpeded dominance in its immediate neighbourhood. He highlights how the NSS mirrors what Aleksandr Dugin, a Russian political philosopher, referred to as 'Putin's brain' – a thinking he recommended Washington should be steered towards 30 years ago.

Giles, in essence, makes three interrelated but separate points. First, Russia appears to be influencing the direction of US policy, although clearly this could be coincidental, and reflective of Trump's well-publicised admiration for Putin's political philosophy and leadership. Second, America is becoming more like the autocratic, authoritarian Russia of President Putin. And third, this process will make America and the world less safe. Interestingly, Giles points out that if the USA follows through on its published strategy, it will achieve the status of a 'regional power', the slur used by President Barack Obama to describe Russia in 2014.

On this final point, Giles is clear "[t]he harm to trust in America as a reliable partner is likely to be long-term, if not permanent". This is because countries around the world are asking themselves "if they have a Trump problem, or an America problem", dispelling the thought, common in Europe during the first Trump administration, that countries simply needed to wait out four years of chaos before returning to normality. In a way this concept mirrors a discussion around whether the removal of President Putin would have a positive impact on relations with Russia. Giles is unequivocal, "Putinism and the threat to the world that comes with it, is a deeper, longer-term phenomenon" and that, even when Trump leaves office, 'Trumpism' is likely to live on. Regardless, he points out, European nations still need to react to the reality of a Trump presidency for the next two and a half years.

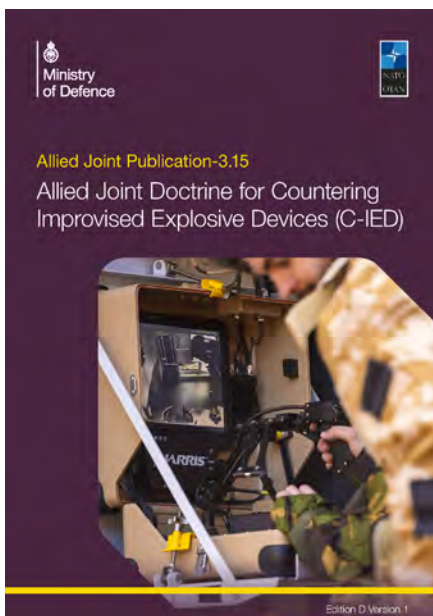
Here Giles calls on his expert knowledge of Russia to draw parallels between what he has seen in America and what already exists in Russia. With echoes throughout of Russia's recent past, Giles explores America's rapidly changing relationship with its intelligence agencies, military and allies alongside 'Russian style' societal corruption, political purges, a war on 'truth and facts', and the rule of law.

Fundamentally, the book makes the point that Trump has proved “the [US] political system turned out to have no guard rails”. Moreover, if Americans wish to remain living in the ‘land of the free’ “they need to find a way of diverting their country from its current trajectory” and away from a President with no regard for the norms and principles that underpin the US Constitution. As a warning to the American people, Giles emphasises: “When power is asserted for its own sake, and military actions and territorial ambitions serve as expressions of that power, there is little that stands between America and the definition of a rogue state.” He’s clear Trump will use American military power again, but that, far from making America

great again, it may trigger the strategic defeat that ultimately sets the boundaries of American power for a generation.

I concluded my review of Giles’ previous book, *Who Will Defend Europe?*, with a quote from some of the author’s work in 2008 – “history demonstrates the enormous cost of failing to recognise, and invest in containing, the danger posed by a European power which is turbulent, truculent, confident and heavily armed”. Having read *American Overthrow*, I fear the truculent power that is heavily armed and needs containing may be the United States of America. Let’s hope the ‘land of the brave’ lives up to its name.

DOCTRINE



AJP-3.15, Allied Joint Doctrine for Countering Improvised Explosive Devices

(Edition D Version 1) issues guidance and principles needed to plan, synchronise, execute and assess actions and activities on C-IED within a joint, inter-agency, and multinational framework. The doctrine emphasises intelligence-led operations, technical exploitation, human network analysis and interagency cooperation to understand, disrupt and degrade IED networks while protecting forces and maintaining freedom of action across the operational environment. It also expands guidance on force preparation, capability development, host nation capacity building and legal considerations, reinforcing that effective C-IED is a commander’s responsibility at all levels and must be integrated throughout operational planning, execution and assessment.

AJP-3.15 is intended as guidance for joint North Atlantic Treaty Organization staff and provides a useful framework for operations conducted by a coalition of mission participants. Additionally, this publication offers a reference for civilian actors such as non-governmental organisations and international organisations.



The Land Forces Command Doctrine Branch has recently published **Doctrine Note 26/02:**

Theory of Close Battle. The publication explains how brigades and battlegroups could fight in contemporary warfare, in a battlespace dominated by persistent surveillance, uncrewed systems and precision strike. At its core is the integration of recce-strike and combined arms manoeuvre. The publication argues that manoeuvre remains decisive, but success now depends on first degrading the enemy’s ability to sense, target and strike. Brigades therefore fight as system integrators, creating opportunities that battlegroups exploit through decisive action.

A key innovation is the introduction of the close battle framework, comprising the disruption, contested and protection zones. Together, these provide commanders with a practical way to understand how combat power is protected, opportunities are created, and decisive actions are delivered across the battlespace. The publication also highlights the growing importance of controlling the near surface: the layer occupied by uncrewed systems, sensors and short-range strike capabilities. Success requires commanders to continuously contest enemy observation and targeting through counter-UAS, electronic warfare, deception and precision effects.

Overall, the doctrine note concludes that while many of the fundamentals of land warfare remain unchanged, brigades and battlegroups must now fight as part of a continuous, networked recce-strike system, generating and exploiting fleeting opportunities to defeat a peer adversary in large-scale warfighting.

"THE PURPOSE OF THE BRITISH
ARMY IS TO PROTECT THE UNITED
KINGDOM BY BEING READY TO
FIGHT AND WIN WARS ON AND
FROM THE LAND."



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